**Protection and Control Relay**

# 615 GRID AUTOMATION SERIES

## IEC 61850 ed2 Model Implementation Conformance Statement (MICS) for 615 GA SERIES

ABB

# Table of Contents

**1 About this manual ... 14**
1.1 Read it first! ... 14
1.2 Document information ... 14
1.3 Safety Information ... 14
**2 Abbreviations and Definitions ... 16**
2.1 Abbreviations ... 16
2.2 Definitions ... 16
**3 References ... 17**
**4 Introduction ... 17**
**5 615 GA SERIES Model Implementation ... 18**
5.1.1 LN: PHSVPR2 Name: SVPR (ED2) ... 18
5.1.2 3.1.2 LN: LINF1 Name: LINF (ED2) ... 19
5.1.3 3.1.3 LN: LDEV1 Name: LDEV (ED2) ... 20
5.1.4 3.1.4 LN: GSELPRT1 Name: LPRT (ED2) ... 23
5.1.5 3.1.5 LN: MMSLPRT1 Name: LPRT (ED2) ... 24
5.1.6 3.1.6 LN: FLO1RFRC1 Name: RFRC (ED2) ... 25
5.1.7 3.1.7 LN: SEQSPVC1 Name: SPVC (ED2) ... 26
5.1.8 3.1.8 LN: PHSVPR1 Name: SVPR (ED2) ... 28
5.1.9 3.1.9 LN: FLTRFRC1 Name: RFRC (ED2) ... 29
5.1.10 3.1.10 LN: SEQSPVC2 Name: SPVC (ED2) ... 36
5.1.11 3.1.11 LN: EFPADM1 Name: PADM (ED2) ... 38
5.1.12 3.1.12 LN: EFPADM2 Name: PADM (ED2) ... 40
5.1.13 3.1.13 LN: EFPADM3 Name: PADM (ED2) ... 42
5.1.14 3.1.14 LN: QVV1RQRC1 Name: RQRC (ED2) ... 44
5.1.15 3.1.15 LN: QVV2RQRC1 Name: RQRC (ED2) ... 44
5.1.16 3.1.16 LN: QVV3RQRC1 Name: RQRC (ED2) ... 46
5.1.17 3.1.17 LN: QVU1RQRC1 Name: RQRC (ED2) ... 47
5.1.18 3.1.18 LN: QVU2RQRC1 Name: RQRC (ED2) ... 47
5.1.19 3.1.19 LN: QVU3RQRC1 Name: RQRC (ED2) ... 47
5.1.20 3.1.20 LN: MBSLPRT1 Name: LPRT (ED2) ... 48
5.1.21 3.1.21 LN: MBSLPRT2 Name: LPRT (ED2) ... 50
5.1.22 3.1.22 LN: MBSLPRT3 Name: LPRT (ED2) ... 52
5.1.23 3.1.23 LN: MBSLPRT4 Name: LPRT (ED2) ... 54

5.1.24 3.1.24 LN: MBSLPRT5 Name: LPRT (ED2) ..... 56
5.1.25 3.1.25 LN: DNPLPRT1 Name: LPRT (ED2) ..... 59
5.1.26 3.1.26 LN: DNPLPRT2 Name: LPRT (ED2) ..... 62
5.1.27 3.1.27 LN: DNPLPRT3 Name: LPRT (ED2) ..... 65
5.1.28 3.1.28 LN: DNPLPRT4 Name: LPRT (ED2) ..... 68
5.1.29 3.1.29 LN: DNPLPRT5 Name: LPRT (ED2) ..... 71
5.1.30 3.1.30 LN: I5CLPRT1 Name: LPRT (ED2) ..... 74
5.1.31 3.1.31 LN: I5CLPRT2 Name: LPRT (ED2) ..... 77
5.1.32 3.1.32 LN: LDPRLRC1 Name: RLRC (ED2) ..... 80
5.2 3.2 Extented Logical Nodes..... 81
5.2.1 3.2.1 LN: SECRSYN1 Name: RSYN (ED2) ..... 81
5.2.2 3.2.2 LN: VMMXU2 Name: MMXU (ED2) ..... 84
5.2.3 3.2.3 LN: FMMXU2 Name: MMXU (ED2) ..... 84
5.2.4 3.2.4 LN: LLN0 Name: LLN0 (ED2) ..... 85
5.2.5 3.2.5 LN: GSAL1 Name: GSAL (ED2) ..... 86
5.2.6 3.2.6 LN: IHMI1 Name: IHMI (ED2)..... 87
5.2.7 3.2.7 LN: XGGIO100 Name: GGIO (ED2)..... 87
5.2.8 3.2.8 LN: LEDGGIO1 Name: GGIO (ED2)..... 88
5.2.9 3.2.9 LN: LEDPTRC1 Name: PTRC (ED2) ..... 91
5.2.10 3.2.10 LN: GNRLLTMS1 Name: LTMS (ED2) ..... 92
5.2.11 3.2.11 LN: GNRLLTIM1 Name: LTIM (ED2) ..... 94
5.2.12 3.2.12 LN: PHIPTOC1 Name: PTOC (ED2)..... 94
5.2.13 3.2.13 LN: DPHLPTOC1 Name: PTOC (ED2) ..... 95
5.2.14 3.2.14 LN: DPHLRDIR1 Name: RDIR (ED2) ..... 97
5.2.15 3.2.15 LN: DPHLPTOC2 Name: PTOC (ED2) ..... 98
5.2.16 3.2.16 LN: DPHLRDIR2 Name: RDIR (ED2) ..... 99
5.2.17 3.2.17 LN: DPHHPTOC1 Name: PTOC (ED2) ..... 100
5.2.18 3.2.18 LN: DPHHRDIR1 Name: RDIR (ED2) ..... 101
5.2.19 3.2.19 LN: DPHHPTOC2 Name: PTOC (ED2) ..... 102
5.2.20 3.2.20 LN: DPHHRDIR2 Name: RDIR (ED2) ..... 104
5.2.21 3.2.21 LN: EFIPTOC1 Name: PTOC (ED2)..... 105
5.2.22 3.2.22 LN: DEFLPTOC1 Name: PTOC (ED2) ..... 105
5.2.23 3.2.23 LN: DEFLRDIR1 Name: RDIR (ED2) ..... 107
5.2.24 3.2.24 LN: DEFLPTOC2 Name: PTOC (ED2) ..... 108

5.2.25 3.2.25 LN: DEFLRDIR2 Name: RDIR (ED2) ..... 110
5.2.26 3.2.26 LN: DEFHPTOC1 Name: PTOC (ED2) ..... 111
5.2.27 3.2.27 LN: DEFHRDIR1 Name: RDIR (ED2)..... 112
5.2.28 3.2.28 LN: DEFHPTOC2 Name: PTOC (ED2) ..... 113
5.2.29 3.2.29 LN: DEFHRDIR2 Name: RDIR (ED2)..... 115
5.2.30 3.2.30 LN: MFADPSDE1 Name: PSDE (ED2) ..... 116
5.2.31 3.2.31 LN: MFADRDIR1 Name: RDIR (ED2) ..... 117
5.2.32 3.2.32 LN: PDNSPTOC1 Name: PTOC (ED2)..... 118
5.2.33 3.2.33 LN: ROVPTOV1 Name: PTOV (ED2) ..... 119
5.2.34 3.2.34 LN: PHPTUV1 Name: PTUV (ED2) ..... 119
5.2.35 3.2.35 LN: PHPTOV1 Name: PTOV (ED2)..... 121
5.2.36 3.2.36 LN: FRPTRC1 Name: PTRC (ED2) ..... 122
5.2.37 3.2.37 LN: FRPTOF1 Name: PTOF (ED2) ..... 123
5.2.38 3.2.38 LN: FRPTUF1 Name: PTUF (ED2)..... 123
5.2.39 3.2.39 LN: FRPFRC1 Name: PFRC (ED2)..... 124
5.2.40 3.2.40 LN: T1PTTR1 Name: PTTR (ED2) ..... 124
5.2.41 3.2.41 LN: CCBRBRF1 Name: RBRF (ED2) ..... 126
5.2.42 3.2.42 LN: INRPHAR1 Name: PHAR (ED2)..... 128
5.2.43 3.2.43 LN: TRPPTRC1 Name: PTRC (ED2) ..... 128
5.2.44 3.2.44 LN: TRPPTRC2 Name: PTRC (ED2) ..... 129
5.2.45 3.2.45 LN: MAPGAPC1 Name: GAPC (ED2) ..... 130
5.2.46 3.2.46 LN: MAPGAPC2 Name: GAPC (ED2) ..... 131
5.2.47 3.2.47 LN: LSHDPTRC1 Name: PTRC (ED2) ..... 132
5.2.48 3.2.48 LN: LSHDPTOF1 Name: PTOF (ED2) ..... 132
5.2.49 3.2.49 LN: SCEFRFLO1 Name: RFLO (ED2) ..... 133
5.2.50 3.2.50 LN: DARREC1 Name: RREC (ED2) ..... 135
5.2.51 3.2.51 LN: ATSABTC1 Name: ABTC (ED2)..... 143
5.2.52 3.2.52 LN: SSCBR1 Name: SCBR (ED2) ..... 145
5.2.53 3.2.53 LN: SPH1SCBR1 Name: SCBR (ED2)..... 150
5.2.54 3.2.54 LN: SPH2SCBR1 Name: SCBR (ED2)..... 151
5.2.55 3.2.55 LN: SPH3SCBR1 Name: SCBR (ED2)..... 151
5.2.56 3.2.56 LN: SSIMG1 Name: SIMG (ED2)..... 151
5.2.57 3.2.57 LN: SSOPM1 Name: SOPM (ED2) ..... 152
5.2.58 3.2.58 LN: TCSSCBR1 Name: SCBR (ED2) ..... 152

5.2.59 3.2.59 LN: TCSSCBR2 Name: SCBR (ED2) ..... 153
5.2.60 3.2.60 LN: CMMXU1 Name: MMXU (ED2) ..... 154
5.2.61 3.2.61 LN: RESCMMXU1 Name: MMXU (ED2) ..... 154
5.2.62 3.2.62 LN: VMMXU1 Name: MMXU (ED2) ..... 155
5.2.63 3.2.63 LN: PEMMXU1 Name: MMXU (ED2)..... 155
5.2.64 3.2.64 LN: PEMMTR1 Name: MMTR (ED2)..... 156
5.2.65 3.2.65 LN: SPEMMXU1 Name: MMXU (ED2)..... 157
5.2.66 3.2.66 LN: SPE1MMTR1 Name: MMTR (ED2)..... 158
5.2.67 3.2.67 LN: SPE2MMTR1 Name: MMTR (ED2)..... 159
5.2.68 3.2.68 LN: SPE3MMTR1 Name: MMTR (ED2)..... 160
5.2.69 3.2.69 LN: FMMXU1 Name: MMXU (ED2)..... 160
5.2.70 3.2.70 LN: TPGAPC1 Name: GAPC (ED2)..... 161
5.2.71 3.2.71 LN: TPGAPC2 Name: GAPC (ED2)..... 161
5.2.72 3.2.72 LN: TPSGAPC1 Name: GAPC (ED2)..... 161
5.2.73 3.2.73 LN: TPMGAPC1 Name: GAPC (ED2)..... 162
5.2.74 3.2.74 LN: PTGAPC1 Name: GAPC (ED2)..... 162
5.2.75 3.2.75 LN: PTGAPC2 Name: GAPC (ED2)..... 163
5.2.76 3.2.76 LN: TOFGAPC1 Name: GAPC (ED2) ..... 164
5.2.77 3.2.77 LN: TOFGAPC2 Name: GAPC (ED2) ..... 165
5.2.78 3.2.78 LN: TONGAPC1 Name: GAPC (ED2) ..... 166
5.2.79 3.2.79 LN: TONGAPC2 Name: GAPC (ED2) ..... 167
5.2.80 3.2.80 LN: SRGAPC1 Name: GAPC (ED2)..... 167
5.2.81 3.2.81 LN: SRGAPC2 Name: GAPC (ED2)..... 169
5.2.82 3.2.82 LN: SPCGAPC1 Name: GAPC (ED2)..... 170
5.2.83 3.2.83 LN: SPCGAPC2 Name: GAPC (ED2)..... 171
5.2.84 3.2.84 LN: SPCRGAPC1 Name: GAPC (ED2) ..... 173
5.2.85 3.2.85 LN: SPCLGAPC1 Name: GAPC (ED2)..... 174
5.2.86 3.2.86 LN: UDFCNT1 Name: FCNT (ED2)..... 175
5.2.87 3.2.87 LN: UDFCNT2 Name: FCNT (ED2)..... 176
5.2.88 3.2.88 LN: UDFCNT3 Name: FCNT (ED2)..... 177
5.2.89 3.2.89 LN: SCA4GAPC1 Name: GAPC (ED2) ..... 177
5.2.90 3.2.90 LN: SCA4GAPC2 Name: GAPC (ED2) ..... 178
5.2.91 3.2.91 LN: SCA4GAPC3 Name: GAPC (ED2) ..... 179
5.2.92 3.2.92 LN: SCA4GAPC4 Name: GAPC (ED2) ..... 180

5.2.93 3.2.93 LN: SCA4GAPC5 Name: GAPC (ED2) ..... 181
5.2.94 3.2.94 LN: SCA4GAPC6 Name: GAPC (ED2) ..... 181
5.2.95 3.2.95 LN: SCA4GAPC7 Name: GAPC (ED2) ..... 182
5.2.96 3.2.96 LN: SCA4GAPC8 Name: GAPC (ED2) ..... 183
5.2.97 3.2.97 LN: SCA4GAPC9 Name: GAPC (ED2) ..... 184
5.2.98 3.2.98 LN: SCA4GAPC10 Name: GAPC (ED2) ..... 185
5.2.99 3.2.99 LN: SCA4GAPC11 Name: GAPC (ED2) ..... 186
5.2.100 3.2.100 LN: SCA4GAPC12 Name: GAPC (ED2) ..... 186
5.2.101 3.2.101 LN: MVI4GAPC1 Name: GAPC (ED2) ..... 187
5.2.102 3.2.102 LN: MVI4GAPC2 Name: GAPC (ED2) ..... 188
5.2.103 3.2.103 LN: FKEY4GGIO1 Name: GGIO (ED2) ..... 188
5.2.104 3.2.104 LN: DPSRDIR1 Name: RDIR (ED2) ..... 189
5.2.105 3.2.105 LN: DTMGAPC1 Name: GAPC (ED2) ..... 190
5.2.106 3.2.106 LN: DTMGAPC2 Name: GAPC (ED2) ..... 192
5.2.107 3.2.107 LN: PHIPTOC2 Name: PTOC (ED2) ..... 195
5.2.108 3.2.108 LN: MFADPSDE2 Name: PSDE (ED2) ..... 195
5.2.109 3.2.109 LN: MFADRDIR2 Name: RDIR (ED2) ..... 197
5.2.110 3.2.110 LN: ROVPTOV2 Name: PTOV (ED2) ..... 198
5.2.111 3.2.111 LN: PHPTUV2 Name: PTUV (ED2) ..... 198
5.2.112 3.2.112 LN: PHPTOV2 Name: PTOV (ED2) ..... 200
5.2.113 3.2.113 LN: FRPTRC2 Name: PTRC (ED2) ..... 201
5.2.114 3.2.114 LN: FRPTOF2 Name: PTOF (ED2) ..... 202
5.2.115 3.2.115 LN: FRPTUF2 Name: PTUF (ED2) ..... 202
5.2.116 3.2.116 LN: FRPFRC2 Name: PFRC (ED2) ..... 203
5.2.117 3.2.117 LN: CCBRBRF2 Name: RBRF (ED2) ..... 203
5.2.118 3.2.118 LN: LSHDPTRC2 Name: PTRC (ED2) ..... 205
5.2.119 3.2.119 LN: LSHDPTOF2 Name: PTOF (ED2) ..... 205
5.2.120 3.2.120 LN: SSCBR2 Name: SCBR (ED2) ..... 206
5.2.121 3.2.121 LN: SPH1SCBR2 Name: SCBR (ED2) ..... 211
5.2.122 3.2.122 LN: SPH2SCBR2 Name: SCBR (ED2) ..... 212
5.2.123 3.2.123 LN: SPH3SCBR2 Name: SCBR (ED2) ..... 212
5.2.124 3.2.124 LN: SSIMG2 Name: SIMG (ED2) ..... 212
5.2.125 3.2.125 LN: SSOPM2 Name: SOPM (ED2) ..... 213
5.2.126 3.2.126 LN: DARREC2 Name: RREC (ED2) ..... 213

5.2.127 3.2.127 LN: CMMXU2 Name: MMXU (ED2) ..... 221
5.2.128 3.2.128 LN: PEMMXU2 Name: MMXU (ED2)..... 222
5.2.129 3.2.129 LN: PEMMTR2 Name: MMTR (ED2)..... 223
5.2.130 3.2.130 LN: SPEMMXU2 Name: MMXU (ED2)..... 224
5.2.131 3.2.131 LN: SPE1MMTR2 Name: MMTR (ED2)..... 224
5.2.132 3.2.132 LN: SPE2MMTR2 Name: MMTR (ED2)..... 225
5.2.133 3.2.133 LN: SPE3MMTR2 Name: MMTR (ED2)..... 226
5.2.134 3.2.134 LN: DPHLPTOC3 Name: PTOC (ED2) ..... 227
5.2.135 3.2.135 LN: DPHLRDIR3 Name: RDIR (ED2) ..... 229
5.2.136 3.2.136 LN: DPHLPTOC4 Name: PTOC (ED2) ..... 229
5.2.137 3.2.137 LN: DPHLRDIR4 Name: RDIR (ED2) ..... 231
5.2.138 3.2.138 LN: DPHHPTOC3 Name: PTOC (ED2) ..... 232
5.2.139 3.2.139 LN: DPHHRDIR3 Name: RDIR (ED2) ..... 233
5.2.140 3.2.140 LN: DPHHPTOC4 Name: PTOC (ED2) ..... 234
5.2.141 3.2.141 LN: DPHHRDIR4 Name: RDIR (ED2) ..... 236
5.2.142 3.2.142 LN: DEFLPTOC3 Name: PTOC (ED2) ..... 236
5.2.143 3.2.143 LN: DEFLRDIR3 Name: RDIR (ED2) ..... 238
5.2.144 3.2.144 LN: DEFLPTOC4 Name: PTOC (ED2) ..... 239
5.2.145 3.2.145 LN: DEFLRDIR4 Name: RDIR (ED2) ..... 240
5.2.146 3.2.146 LN: DEFHPTOC3 Name: PTOC (ED2) ..... 242
5.2.147 3.2.147 LN: DEFHRDIR3 Name: RDIR (ED2) ..... 243
5.2.148 3.2.148 LN: DEFHPTOC4 Name: PTOC (ED2) ..... 244
5.2.149 3.2.149 LN: DEFHRDIR4 Name: RDIR (ED2) ..... 246
5.2.150 3.2.150 LN: PHPTUC1 Name: PTUC (ED2) ..... 247
5.2.151 3.2.151 LN: PHPTUC2 Name: PTUC (ED2) ..... 248
5.2.152 3.2.152 LN: DPSRDIR2 Name: RDIR (ED2)..... 248
5.2.153 3.2.153 LN: FDPHLPTOC1 Name: PTOC (ED2) ..... 250
5.2.154 3.2.154 LN: FDPHLRDIR1 Name: RDIR (ED2) ..... 251
5.2.155 3.2.155 LN: FDPHLPTOC2 Name: PTOC (ED2) ..... 252
5.2.156 3.2.156 LN: FDPHLRDIR2 Name: RDIR (ED2) ..... 254
5.2.157 3.2.157 LN: FDEFLPTOC1 Name: PTOC (ED2) ..... 254
5.2.158 3.2.158 LN: FDEFLRDIR1 Name: RDIR (ED2)..... 256
5.2.159 3.2.159 LN: FDEFLPTOC2 Name: PTOC (ED2) ..... 257
5.2.160 3.2.160 LN: FDEFLRDIR2 Name: RDIR (ED2)..... 258

5.2.161 3.2.161 LN: INTRPTEF1 Name: PTEF (ED2) ..... 260
5.2.162 3.2.162 LN: WPSDE1 Name: PSDE (ED2) ..... 261
5.2.163 3.2.163 LN: WRDIR1 Name: RDIR (ED2) ..... 262
5.2.164 3.2.164 LN: WPSDE2 Name: PSDE (ED2) ..... 262
5.2.165 3.2.165 LN: WRDIR2 Name: RDIR (ED2) ..... 264
5.2.166 3.2.166 LN: WPSDE3 Name: PSDE (ED2) ..... 264
5.2.167 3.2.167 LN: WRDIR3 Name: RDIR (ED2) ..... 265
5.2.168 3.2.168 LN: HAEFPTOC1 Name: PTOC (ED2)..... 266
5.2.169 3.2.169 LN: PHLPTOC1 Name: PTOC (ED2)..... 267
5.2.170 3.2.170 LN: FPHLPTOC1 Name: PTOC (ED2) ..... 268
5.2.171 3.2.171 LN: PHHPTOC1 Name: PTOC (ED2)..... 270
5.2.172 3.2.172 LN: EFLPTOC1 Name: PTOC (ED2)..... 271
5.2.173 3.2.173 LN: EFHPTOC1 Name: PTOC (ED2)..... 272
5.2.174 3.2.174 LN: FEFLPTOC1 Name: PTOC (ED2) ..... 273
5.2.175 3.2.175 LN: PHPTUV3 Name: PTUV (ED2) ..... 274
5.2.176 3.2.176 LN: PHPTOV3 Name: PTOV (ED2)..... 276
5.2.177 3.2.177 LN: NSPTOV1 Name: PTOV (ED2)..... 277
5.2.178 3.2.178 LN: PSPTUV1 Name: PTUV (ED2)..... 278
5.2.179 3.2.179 LN: CMHAI1 Name: MHAI (ED2)..... 279
5.2.180 3.2.180 LN: VMHAI1 Name: MHAI (ED2)..... 280
5.2.181 3.2.181 LN: PH1QVVR1 Name: QVVR (ED2)..... 281
5.2.182 3.2.182 LN: PH2QVVR1 Name: QVVR (ED2)..... 285
5.2.183 3.2.183 LN: PH3QVVR1 Name: QVVR (ED2)..... 286
5.2.184 3.2.184 LN: VSQVUB1 Name: QVUB (ED2)..... 286
5.2.185 3.2.185 LN: IL1TCTR1 Name: TCTR (ED2) ..... 288
5.2.186 3.2.186 LN: RESTCTR1 Name: TCTR (ED2)..... 289
5.2.187 3.2.187 LN: XGGIO120 Name: GGIO (ED2)..... 290
5.2.188 3.2.188 LN: UL1TVTR1 Name: TVTR (ED2) ..... 291
5.2.189 3.2.189 LN: XSGGIO130 Name: GGIO (ED2)..... 291
5.2.190 3.2.190 LN: UL1TVTR2 Name: TVTR (ED2) ..... 292
5.2.191 3.2.191 LN: RESTVTR1 Name: TVTR (ED2)..... 292
5.2.192 3.2.192 LN: RESVMMXU1 Name: MMXU (ED2) ..... 293
5.2.193 3.2.193 LN: XAGGIO130 Name: GGIO (ED2) ..... 293
5.2.194 3.2.194 LN: XARGGIO130 Name: GGIO (ED2)..... 294

5.2.195 3.2.195 LN: IL1TCTR2 Name: TCTR (ED2) ..... 295
5.2.196 3.2.196 LN: XAGGIO120 Name: GGIO (ED2) ..... 296
5.2.197 3.2.197 LN: XGGIO110 Name: GGIO (ED2)..... 296
5.2.198 3.2.198 LN: XGGIO130 Name: GGIO (ED2)..... 298
5.2.199 3.2.199 LN: XGGIO90 Name: GGIO (ED2)..... 300
5.2.200 3.2.200 LN: SERLCCH1 Name: LCCH (ED2)..... 300
5.2.201 3.2.201 LN: SERLCCH2 Name: LCCH (ED2)..... 301
5.2.202 3.2.202 LN: RCHLCCH1 Name: LCCH (ED2) ..... 302
5.2.203 3.2.203 LN: SCHLCCH1 Name: LCCH (ED2)..... 303
5.2.204 3.2.204 LN: SCHLCCH2 Name: LCCH (ED2)..... 303
5.2.205 3.2.205 LN: SCHLCCH3 Name: LCCH (ED2)..... 303
5.2.206 3.2.206 LN: LLN0 Name: LLN0 (ED2) ..... 304
5.2.207 3.2.207 LN: CBCSWI1 Name: CSWI (ED2)..... 304
5.2.208 3.2.208 LN: CBXCBR1 Name: XCBR (ED2) ..... 305
5.2.209 3.2.209 LN: DCCILO1 Name: CILO (ED2) ..... 306
5.2.210 3.2.210 LN: DCCSWI1 Name: CSWI (ED2) ..... 306
5.2.211 3.2.211 LN: DCXSWI1 Name: XSWI (ED2) ..... 307
5.2.212 3.2.212 LN: DCCILO2 Name: CILO (ED2) ..... 307
5.2.213 3.2.213 LN: DCCSWI2 Name: CSWI (ED2) ..... 308
5.2.214 3.2.214 LN: DCXSWI2 Name: XSWI (ED2) ..... 308
5.2.215 3.2.215 LN: DCCILO3 Name: CILO (ED2) ..... 309
5.2.216 3.2.216 LN: DCCSWI3 Name: CSWI (ED2) ..... 309
5.2.217 3.2.217 LN: DCXSWI3 Name: XSWI (ED2) ..... 310
5.2.218 3.2.218 LN: DCCILO4 Name: CILO (ED2) ..... 310
5.2.219 3.2.219 LN: DCCSWI4 Name: CSWI (ED2) ..... 310
5.2.220 3.2.220 LN: DCXSWI4 Name: XSWI (ED2) ..... 311
5.2.221 3.2.221 LN: DCSXSWI1 Name: XSWI (ED2) ..... 312
5.2.222 3.2.222 LN: DCSCSWI1 Name: CSWI (ED2) ..... 312
5.2.223 3.2.223 LN: ESSXSWI1 Name: XSWI (ED2) ..... 312
5.2.224 3.2.224 LN: ESSCSWI1 Name: CSWI (ED2) ..... 313
5.2.225 3.2.225 LN: ESSXSWI2 Name: XSWI (ED2) ..... 313
5.2.226 3.2.226 LN: ESSCSWI2 Name: CSWI (ED2) ..... 313
5.2.227 3.2.227 LN: ESSXSWI3 Name: XSWI (ED2) ..... 314
5.2.228 3.2.228 LN: ESSCSWI3 Name: CSWI (ED2) ..... 314

5.2.229 3.2.229 LN: ESSXSWI4 Name: XSWI (ED2) ..... 314
5.2.230 3.2.230 LN: ESSCSWI4 Name: CSWI (ED2) ..... 315
5.2.231 3.2.231 LN: CBCSWI2 Name: CSWI (ED2)..... 315
5.2.232 3.2.232 LN: CBXCBR2 Name: XCBR (ED2) ..... 316
5.2.233 3.2.233 LN: DCCILO5 Name: CILO (ED2)..... 317
5.2.234 3.2.234 LN: DCCSWI5 Name: CSWI (ED2) ..... 317
5.2.235 3.2.235 LN: DCXSWI5 Name: XSWI (ED2) ..... 318
5.2.236 3.2.236 LN: DCCILO6 Name: CILO (ED2)..... 318
5.2.237 3.2.237 LN: DCCSWI6 Name: CSWI (ED2) ..... 318
5.2.238 3.2.238 LN: DCXSWI6 Name: XSWI (ED2) ..... 319
5.2.239 3.2.239 LN: DCCILO7 Name: CILO (ED2)..... 319
5.2.240 3.2.240 LN: DCCSWI7 Name: CSWI (ED2) ..... 320
5.2.241 3.2.241 LN: DCXSWI7 Name: XSWI (ED2) ..... 320
5.2.242 3.2.242 LN: DCCILO8 Name: CILO (ED2)..... 321
5.2.243 3.2.243 LN: DCCSWI8 Name: CSWI (ED2) ..... 321
5.2.244 3.2.244 LN: DCXSWI8 Name: XSWI (ED2) ..... 322
5.2.245 3.2.245 LN: DCSXSWI2 Name: XSWI (ED2) ..... 322
5.2.246 3.2.246 LN: DCSCSWI2 Name: CSWI (ED2) ..... 323
5.2.247 3.2.247 LN: ESSXSWI5 Name: XSWI (ED2) ..... 323
5.2.248 3.2.248 LN: ESSCSWI5 Name: CSWI (ED2) ..... 323
5.2.249 3.2.249 LN: ESSXSWI6 Name: XSWI (ED2) ..... 324
5.2.250 3.2.250 LN: ESSCSWI6 Name: CSWI (ED2) ..... 324
5.2.251 3.2.251 LN: ESSXSWI7 Name: XSWI (ED2) ..... 324
5.2.252 3.2.252 LN: ESSCSWI7 Name: CSWI (ED2) ..... 325
5.2.253 3.2.253 LN: ESSXSWI8 Name: XSWI (ED2) ..... 325
5.2.254 3.2.254 LN: ESSCSWI8 Name: CSWI (ED2) ..... 326
5.2.255 3.2.255 LN: RDRE1 Name: RDRE (ED2)..... 326
5.2.256 3.2.256 LN: RBDR1 Name: RBDR (ED2) ..... 327
5.2.257 3.2.257 LN: RADR1 Name: RADR (ED2)..... 328

**6 4. Common Data Class Extensions..... 328**

6.1 4.1 New common data classes..... 328

6.2 4.2 Extented data classes ED1 ..... 328

**7 5. Enum type extensions ..... 328**

7.1 5.1 New Enum types ... 328
7.1.1 5.1.1 ABBIED600_Rev1_OpModSC ... 328
7.1.2 5.1.2 ABBIED600_Rev2_OpModCtrl ... 328
7.1.3 5.1.3 ABBIED600_Rev1_EnergSt ... 329
7.1.4 5.1.4 ABBIED600_Rev5_TestCtlKind ... 329
7.1.5 5.1.5 ABBIED600_Rev1_CtlModelKind_StatusDirect ... 332
7.1.6 5.1.6 ABBIED600_Rev2_MeasMod ... 332
7.1.7 5.1.7 ABBIED600_Rev2_StrPhSel ... 332
7.1.8 5.1.8 ABBIED600_Rev1_DefHzSel ... 333
7.1.9 5.1.9 ABBIED600_Rev1_OpModSG ... 333
7.1.10 5.1.10 ABBIED600_Rev1_CpySG ... 333
7.1.11 5.1.11 ABBIED600_Rev1_CtlModelKind_Status ... 333
7.1.12 5.1.12 ABBIED600_Rev1_SetSvMaxDl ... 333
7.1.13 5.1.13 ABBIED600_Rev1_BlkMod ... 334
7.1.14 5.1.14 ABBIED600_Rev1_HzSet ... 334
7.1.15 5.1.15 ABBIED600_Rev1_PhRotSet ... 334
7.1.16 5.1.16 ABBIED600_Rev1_PhOrdSet ... 334
7.1.17 5.1.17 ABBIED600_Rev1_DmdAvMod ... 335
7.1.18 5.1.18 ABBIED600_Rev1_dmdItrv ... 335
7.1.19 5.1.19 ABBIED600_Rev1_ModRemCtl ... 335
7.1.20 5.1.20 ABBIED600_Rev4_Languages ... 335
7.1.21 5.1.21 ABBIED600_Rev4_LanguageFiles ... 336
7.1.22 5.1.22 ABBIED600_Rev1_FormatTime ... 338
7.1.23 5.1.23 ABBIED600_Rev1_FormatDate ... 338
7.1.24 5.1.24 ABBIED600_Rev1_NamingConvention ... 338
7.1.25 5.1.25 ABBIED600_Rev3_DefaultView ... 338
7.1.26 5.1.26 ABBIED600_Rev2_WhmiMod ... 339
7.1.27 5.1.27 ABBIED600_Rev1_SLDSymbolFormat ... 339
7.1.28 5.1.28 ABBIED600_Rev1_InUseMod ... 339
7.1.29 5.1.29 ABBIED600_Rev1_SetVsb ... 339
7.1.30 5.1.30 ABBIED600_Rev8_AuthAcs ... 339
7.1.31 5.1.31 ABBIED600_Rev1_AuthAcsLev ... 340
7.1.32 5.1.32 ABBIED600_Rev1_AlmLedSt ... 340
7.1.33 5.1.33 ABBIED600_Rev2_LedMode ... 341

7.1.34 5.1.34 ABBIED600_Rev2_LedColor ..... 341
7.1.35 5.1.35 ABBIED600_Rev5_SyncSrc ..... 341
7.1.36 5.1.36 ABBIED600_Rev3_TmSrc ..... 341
7.1.37 5.1.37 ABBIED600_Rev1_PTPTmSrc ..... 342
7.1.38 5.1.38 ABBIED600_Rev1_PTPClkAcc ..... 343
7.1.39 5.1.39 ABBIED600_Rev1_PTPAnncMod ..... 343
7.1.40 5.1.40 ABBIED600_Rev2_TestProKind ..... 343
7.1.41 5.1.41 ABBIED600_Rev1_AResSigSel ..... 348
7.1.42 5.1.42 ABBIED600_Rev1_OpModEF ..... 348
7.1.43 5.1.43 ABBIED600_Rev1_VResSigSel ..... 348
7.1.44 5.1.44 ABBIED600_Rev2_OpModTEF ..... 348
7.1.45 5.1.45 ABBIED600_Rev1_OpQtySel ..... 348
7.1.46 5.1.46 ABBIED600_Rev2_VSel ..... 348
7.1.47 5.1.47 ABBIED600_Rev1_TypTmRs ..... 349
7.1.48 5.1.48 ABBIED600_Rev1_OpModProHz ..... 349
7.1.49 5.1.49 ABBIED600_Rev1_buTripMode ..... 349
7.1.50 5.1.50 ABBIED600_Rev1_StrLtcMod ..... 349
7.1.51 5.1.51 ABBIED600_Rev1_TrOutMod ..... 350
7.1.52 5.1.52 ABBIED600_Rev1_OpModComp ..... 350
7.1.53 5.1.53 ABBIED600_Rev1_AutoManMod ..... 350
7.1.54 5.1.54 ABBIED600_Rev1_EFAlg ..... 350
7.1.55 5.1.55 ABBIED600_Rev1_EFAlgASel ..... 350
7.1.56 5.1.56 ABBIED600_Rev6_TestProRlKind ..... 350
7.1.57 5.1.57 ABBIED600_Rev1_PhVMeas ..... 352
7.1.58 5.1.58 ABBIED600_Rev1_RecOp ..... 352
7.1.59 5.1.59 ABBIED600_Rev1_TermPrio ..... 353
7.1.60 5.1.60 ABBIED600_Rev1_ProCrdMod ..... 353
7.1.61 5.1.61 ABBIED600_Rev1_AutoIniCnd ..... 353
7.1.62 5.1.62 ABBIED600_Rev1_BusPrio ..... 353
7.1.63 5.1.63 ABBIED600_Rev3_TestSpvnKind ..... 353
7.1.64 5.1.64 ABBIED600_Rev1_TrvClcMod ..... 356
7.1.65 5.1.65 ABBIED600_Rev1_DirMod2 ..... 356
7.1.66 5.1.66 ABBIED600_Rev1_PwrMeasMod ..... 356
7.1.67 5.1.67 ABBIED600_Rev1_TestOthKind ..... 356

7.1.68 5.1.68 ABBIED600_Rev1_OpModPh ..... 357
7.1.69 5.1.69 ABBIED600_Rev1_DmdWinMod ..... 357
7.1.70 5.1.70 ABBIED600_Rev2_PhSv..... 357
7.1.71 5.1.71 ABBIED600_Rev2_VVaTyp ..... 358
7.1.72 5.1.72 ABBIED600_Rev1_TrgModPQ ..... 358
7.1.73 5.1.73 ABBIED600_Rev1_ObsPerSel..... 358
7.1.74 5.1.74 ABBIED600_Rev1_ARtgSec..... 359
7.1.75 5.1.75 ABBIED600_Rev2_ConnType..... 359
7.1.76 5.1.76 ABBIED600_Rev1_AnInpType..... 359
7.1.77 5.1.77 ABBIED600_Rev1_SenInMod..... 359
7.1.78 5.1.78 ABBIED600_Rev1_FibMod..... 360
7.1.79 5.1.79 ABBIED600_Rev1_SerMod ..... 360
7.1.80 5.1.80 ABBIED600_Rev1_BaudRate..... 360
7.1.81 5.1.81 ABBIED600_Rev2_EthPortMod ..... 360
7.1.82 5.1.82 ABBIED600_Rev3_CmdRsp..... 360
7.1.83 5.1.83 ABBIED600_Rev3_LocKeyHMI..... 361
7.1.84 5.1.84 ABBIED600_Rev1_LocRemMod..... 362
7.1.85 5.1.85 ABBIED600_Rev1_StaLevSet..... 362
7.1.86 5.1.86 ABBIED600_Rev1_EStoRte..... 362
7.1.87 5.1.87 ABBIED600_Rev1_EStoMod ..... 362
7.1.88 5.1.88 ABBIED600_Rev4_RadrChNum ..... 362
7.2 5.2 Extented Enum types..... 364
7.2.1 5.2.1 ABBIED600_Rev1_HealthKind ..... 364
7.2.2 5.2.2 ABBIED600_Rev1_LiveDeadModeKind ..... 365
7.2.3 5.2.3 ABBIED600_Rev1_PhaseFaultDirectionKind ..... 365
7.2.4 5.2.4 ABBIED600_Rev20_TstOutKind ..... 365
7.2.5 5.2.5 ABBIED600_Rev1_CurveCharKind ..... 374
7.2.6 5.2.6 ABBIED600_Rev1_PolarizingQuantityKind ..... 377
7.2.7 5.2.7 ABBIED600_Rev2_FaultLoopKind..... 377
7.2.8 5.2.8 ABBIED600_Rev2_AutoReclosingKind ..... 378
7.2.9 5.2.9 ABBIED600_Rev2_cmdQual..... 378
7.2.10 5.2.10 ABBIED600_RECRER61520_Rev34_ProFcn..... 378

# 1 About this manual

## 1.1 Read it first!

Before attempting any operation with IED from 615 GA series, read carefully the IED documentation first.

This document is addressed to anyone who needs to interact with 615 GA series and its IEC 61850 features in more detail.

## 1.2 Document information

**Revision History**

| Revision | Date | Note |
|---|---|---|
| A | 15 Aug. 2018 | 615 GA series v2.0 |

**Applicability**

This manual is applicable to 615 GA series Protection and Control IED versions mentioned in document Revision History above or newer versions if document update is not required.

## 1.3 Safety Information

There are safety warnings and notes in the following text. They are in a different format to distinguish them from normal text.

**Safety warning**

The safety warnings should always be observed. Non-observance can result in death, personal injury or substantial damages to property. Guarantee claims might not be accepted when safety warnings are not respected. They look like below:

**Do not make any changes to the 615 GA series configurations unless you are familiar with the 615 GA series and its configuration tool. This might result in disoperation and loss of warranty.**

ABB

**ABB Oy Medium Voltage Products,**
Distribution Automation
P.O. Box 699
FI-65101 Vaasa
FINLAND
Tel. +358 10 22 11
Fax. +358 10 224 1094
www.abb.com/substationautomation

**Note**

A note contains additional information worth noting in the specific context, and looks like below:

The selection of this control mode requires caution, because operations are allowed both from the HMI and remotely.

# 2 Abbreviations and Definitions

## 2.1 Abbreviations

| | |
|---|---|
| FTP | **F**ile **T**ransfer **P**rotocol |
| GOOSE | **G**eneric **O**bject **O**riented **S**ubstation **E**vent |
| GPS | **G**lobal **P**ositioning **S**ystem |
| GSE | **G**eneric **S**ubstation **E**vent |
| GSSE | **G**eneric **S**ubstation **S**tatus **E**vent |
| HMI | **H**uman **M**achine **I**nterface |
| IED | **I**ntelligent **E**lectronic **D**evice |
| LED | **L**ight **E**mitting **D**iode |
| MAC | **M**edia **A**ccess **C**ontrol |
| MICS | **M**odel **I**mplementation **C**onformance **S**tatement |
| MMS | **M**anufacturing **M**essage **S**pecification |
| M/O | **M**andatory/**O**ptional |
| N | **N**o |
| PICS | **P**rotocol **I**mplementation **C**onformance **S**tatement |
| PIXIT | **P**rotocol **I**mplementation e**X**tra **I**nformation for **T**esting |
| SCADA | **S**upervision, **C**ontrol **a**nd **D**ata **A**cquisition |
| SLD | **S**ingle **L**ine **D**iagram |
| XML | e**X**tensible **M**arkup **L**anguage |
| Y | **Y**es |

## 2.2 Definitions

| | |
|---|---|
| Operational State | the unit is active and it is protecting and controlling the switchgear. |
| Stand-alone | the unit is not connected to a SCADA system. |

# 3 References

| Ref | Document id | Rev | Document title |
|---|---|---|---|
| [1] | 61850-8-1<br>First edition<br>2004-05 | | Communication networks and systems in substations Part 8-1: Specific communication service mapping (SCSM) – Map-pings to MMS (ISO/IEC 9506 Part 1 and Part 2) and to ISO/IEC 8802-3 |
| [2] | 61850-10<br>First edition<br>2005-05 | | Communication networks and systems in substations – Part 10: Conformance testing |
| [3] | IEC61850-7-2<br>First edition<br>2003-05 | | Communication networks and systems in substations – Part 7-2: Basic communication structure for substation and feeder equipment – Abstract communication service interface (ACSI) |
| [4] | IEC61850-6<br>First edition<br>2004-03 | | Communication networks and systems in substations - Part 6: Configuration description language for communi-cation in electrical substations related to IEDs |
| [5] | IEC61850-7-3<br>First edition<br>2003-05 | | Communication networks and systems in substations – Part 7-3: Basic communication structure for substation and feeder equipment – Common data classes |
| [6] | IEC61850-7-4<br>First Edition<br>2003-05 | | Communication networks and systems in substations – Part 7-4: |

# 4 Introduction

This document specifies the model implementation conformance statement (MICS) of the IEC 61850 communication for 615 GA Series,Edition 2.

Together with the PICS and the PIXIT the MICS forms the basis for a conformance test according to IEC 61850-10.

In this document all Logical Nodes with additional Data Objects are listed with intended use for extensions. In these cases dataNs refers to this document. Also Data Objects with different namespace as standard CDC describes are listed. In these cases cdcNs data attribute refers to this document. Extended data classes' new Data Attributes are introduced.

# 5 615 GA SERIES Model Implementation

### 5.1.1 LN: PHSVPR2 Name: SVPR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD_e | Mode | E | REx615:2014,status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh_e | Behaviour | E | REx615:2014 |
| NamPlt | ABBIED600_Rev1_LPL_lnNs_1_e | Name plate | E | REx615:2014 |
| Blk | ABBIED600_Rev1_SPS_simple_e | Block signal for all binary outputs | E | REx615:2014 |
| LivLinVal | ABBIED600_Rev3_ASG_SP_i_e | Voltage live value | E | REx615:2014 |
| DeaLinVal | ABBIED600_Rev3_ASG_SP_i_e | Voltage dead value | E | REx615:2014 |
| TestSpvn | ABBIED600_Rev3_ENC_TestSpvn | Test control for outputs | | status-only,direct-with-normal-security |
| VLivTmms | ABBIED600_Rev1_ING_SP_1 | Voltage live time | | |
| VDeaTmms | ABBIED600_Rev1_ING_SP_1 | Voltage dead time | | |
| VSel | ABBIED600_Rev3_ENG_SP_VSel | Parameter to select phase or phase-to-phase voltages | | |
| PhSpvn | ABBIED600_Rev2_ENG_SP_PhSv | Monitored phase | | |
| NumPh | ABBIED600_Rev3_ENG_SP_StrPhSel | Number of phases required for live and dead voltage supervision | | |
| VLiv | ABBIED600_Rev1_SPS_simple | Voltage live | | |
| VLivPhsA | ABBIED600_Rev1_SPS_simple | Voltage live A or AB | | |

| | | | | |
|---|---|---|---|---|
| VLivPhsB | ABBIED600_Rev1_SPS_simple | Voltage live B or BC | | |
| VLivPhsC | ABBIED600_Rev1_SPS_simple | Voltage live C or CA | | |
| VDea | ABBIED600_Rev1_SPS_simple | Voltage dead | | |
| VDeaPhsA | ABBIED600_Rev1_SPS_simple | Voltage dead A or AB | | |
| VDeaPhsB | ABBIED600_Rev1_SPS_simple | Voltage dead B or BC | | |
| VDeaPhsC | ABBIED600_Rev1_SPS_simple | Voltage dead C or CA | | |
| HysRl | ABBIED600_Rev3_ASG_SP_i | Relative hystere-sis for voltage supervision | | |

### 5.1.2 3.1.2 LN: LINF1 Name: LINF (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Beh | ABBIED600_Rev4_ENS_beh_e | Behaviour | E | IEC 61850-7-4:2007 |
| NamPlt | ABBIED600_Rev5_LPL_LD0_LINF_ED2_e | Name plate | E | IEC 61850-7-4:2007 |
| BayNam | ABBIED600_Rev3_VSG_2_20_e | Name of the bay | E | ABBIED600:2014 |
| CfgNam | ABBIED600_Rev2_VSG_1_20_e | IED configuration name | E | ABBIED600:2014 |
| DevRev | ABBIED600_Rev2_VSG_1_64_e | Product version number | E | ABBIED600:2014 |
| CstNam | ABBIED600_Rev1_VSG_2_64_e | Name of the cus-tomer | E | ABBIED600:2014 |
| CstStNam | ABBIED600_Rev1_VSG_2_64_e | Name of the state | E | ABBIED600:2014 |
| CstStreNam | ABBIED600_Rev1_VSG_2_64_e | Name of the street | E | ABBIED600:2014 |
| CstHouNum | ABBIED600_Rev1_VSG_2_64_e | Number of the house | E | ABBIED600:2014 |
| CstZip | ABBIED600_Rev3_VSG_2_20_e | ZIP/Postal code | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| CstCityNam | ABBIED600_Rev1_VSG_2_64_e | City/Province | E | ABBIED600:2014 |
| CstCntyNam | ABBIED600_Rev1_VSG_2_64_e | Name of the country | E | ABBIED600:2014 |
| CardNam | ABBIED600_Rev8_DPL_eeprom_2_ED2_e | Card information | E | ABBIED600:2014 |
| TestStaId | ABBIED600_Rev1_LPL_VSS_dU_20_e | Testing | E | ABBIED600:2014 |
| HwId | ABBIED600_Rev1_LPL_VSS_1_20_e | HW module | E | ABBIED600:2014 |

### 5.1.3 3.1.3 LN: LDEV1 Name: LDEV (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Beh | ABBIED600_Rev4_ENS_beh_e | Behaviour | E | IEC 61850-7-4:2007 |
| NamPlt | ABBIED600_Rev2_LPL_LD0_LDEV_ED2_e | Name plate | E | IEC 61850-7-4:2007 |
| IPAddr | ABBIED600_Rev3_VSG_2_20_e | IP address for rear port(s) | E | ABBIED600:2014 |
| IPAddrSub-Ntw | ABBIED600_Rev3_VSG_2_20_e | Subnet mask for rear port(s) | E | ABBIED600:2014 |
| IPAddrGtw | ABBIED600_Rev3_VSG_2_20_e | Default gateway for rear port(s) | E | ABBIED600:2014 |
| IPAddrFrt | ABBIED600_Rev2_VSG_1_20_e | IP address for front port (fixed) | E | ABBIED600:2014 |
| Mac1 | ABBIED600_Rev2_VSG_1_20_e | Mac address for rear port(s) | E | ABBIED600:2014 |
| Mac2 | ABBIED600_Rev2_VSG_1_20_e | Mac address for front port | E | ABBIED600:2014 |
| SwrNum | ABBIED600_Rev1_LPL_VSS_1_20 | SW | | |
| OrdrNum | ABBIED600_Rev1_LPL_VSS_1_20 | Order number | | |
| WrmStrDet | ABBIED600_Rev1_SPS | Warm start detected | | |

| | | | | |
|---|---|---|---|---|
| WacTrgDet | ABBIED600_Rev1_SPS | Watchdog reset detected | | |
| DevWrn | ABBIED600_Rev8_ENS_warning | Warning | | |
| DevFail | ABBIED600_Rev11_ENS_error | Internal Fault | | |
| StLstOv | ABBIED600_Rev1_SPS_e | Status overflow | E | ABBIED600:2014 |
| MeasLstOv | ABBIED600_Rev1_SPS_e | Meas overflow | E | ABBIED600:2014 |
| ChgAckCnt | ABBIED600_Rev1_INS_retain_e | Number of composition changes | E | ABBIED600:2014 |
| ChgFlg | ABBIED600_Rev2_INC_control_int_e | Composition has changed | E | ABBIED600:2014,status-only,direct-with-normal-security |
| WrmStrCmd | ABBIED600_Rev2_SPC_control_e | Reset device | E | ABBIED600:2014,status-only,direct-with-normal-security |
| FailTest | ABBIED600_Rev2_SPC_control_e | Internal fault test | E | ABBIED600:2014,status-only,direct-with-normal-security |
| BlkMod | ABBIED600_Rev2_ENG_SP_BlkMod_e | Global blocking mode selection | E | ABBIED600:2014 |
| HzSetSel | ABBIED600_Rev2_ENG_SP_HzSet_e | Rated frequency | E | ABBIED600:2014 |
| PhRotSet | ABBIED600_Rev2_ENG_SP_PhRotSet_e | Phase rotation order | E | ABBIED600:2014 |
| DiVThres | ABBIED600_Rev1_ING_SP_e | Threshold voltage | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| DiOscThres | ABBIED600_Rev1_ING_SP_1_e | Input osc. level | E | ABBIED600:2014 |
| DiOscHys | ABBIED600_Rev1_ING_SP_1_e | Input osc. hyst | E | ABBIED600:2014 |
| SetSeld | ABBIED600_Rev1_SPS_e | Settings reservation | E | ABBIED600:2014 |
| SetChg | ABBIED600_Rev1_SPS_e | Settings change | E | ABBIED600:2014 |
| PhOrdMod | ABBIED600_Rev2_ENG_SP_PhOrdSet_e | Phase connection order | E | ABBIED600:2014 |
| ACrvSatPnt | ABBIED600_Rev1_ASG_SP_f_e | Overcurrent IDMT saturation point | E | ABBIED600:2014 |
| ADmdAvMod | ABBIED600_Rev2_ENG_SP_DmdAvMod_e | A demand Av mode | E | ABBIED600:2014 |
| MtrDmdItrv | ABBIED600_Rev2_ENG_SP_dmdItrv_e | Demand interval | E | ABBIED600:2014 |
| HzAdpEna | ABBIED600_Rev1_SPG_SP_e | Frequency adaptivity | E | ABBIED600:2014 |
| ModRemCtl | ABBIED600_Rev2_ENG_SP_ModRemCtrl_e | Authority for remote activation of test mode | E | ABBIED600:2014 |
| LangSel | ABBIED600_Rev5_ENG_SP_Languages_e | Language selection | E | ABBIED600:2014 |
| Contr | ABBIED600_Rev1_ING_SP_1_e | Contrast selection | E | ABBIED600:2014 |
| NumFrm | ABBIED600_Rev1_ING_SP_1_e | NUMf | E | ABBIED600:2014 |
| LgtLivTm | ABBIED600_Rev1_ING_SP_1_e | Backligth timeout | E | ABBIED600:2014 |
| TmFrm | ABBIED600_Rev2_ENG_SP_FormatTime_e | Time format | E | ABBIED600:2014 |
| DateFrm | ABBIED600_Rev2_ENG_SP_FormatDate_e | Date for- | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| | | mat | | |
| NamConvn | AB-BIED600_Rev2_ENG_SP_NamingConvention_e | FB naming convention | E | ABBIED600:2014 |
| DftVw | ABBIED600_Rev4_ENG_SP_DefaultView_e | Default view | E | ABBIED600:2014 |
| AcsMod | ABBIED600_Rev2_ENG_SP_WhmiMod_e | Web HMI mode | E | ABBIED600:2014 |
| ConnExpTm | ABBIED600_Rev1_ING_SP_1_e | Web HMI timeout | E | ABBIED600:2014 |
| EvtLstClr | ABBIED600_Rev2_SPC_control_e | Event clear | E | AB-BIED600:2014,status-only,direct-with-normal-security |
| SLDSymFrm | AB-BIED600_Rev2_ENG_SP_SLDSymbolFormat_e | SLD symbol format | E | ABBIED600:2014 |
| ScrDlTms | ABBIED600_Rev1_ING_SP_1_e | Autoscroll delay | E | ABBIED600:2014 |
| ClsDlMod | ABBIED600_Rev2_ENG_SP_InUse_e | CB close delay mode | E | ABBIED600:2014 |
| ClsDlTms | ABBIED600_Rev1_ING_SP_1_e | CB close delay | E | ABBIED600:2014 |
| SetVsb | ABBIED600_Rev2_ENG_SP_SetVsb_e | Setting vis-ibility | E | ABBIED600:2014 |
| HzAdpFail | ABBIED600_Rev1_SPS_e | Frequency adaptivity status | E | ABBIED600:2014 |

### 5.1.4 3.1.4 LN: GSELPRT1 Name: LPRT (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Beh | ABBIED600_Rev4_ENS_beh_e | Behaviour | E | IEC 61850-7-4:2007 |
| NamPlt | ABBIED600_Rev1_LPL_lnNs_1_e | Name plate | E | IEC 61850-7-4:2007 |
| FrRxCnt | ABBIED600_Rev1_INS | Received msgs | | |
| FrTxCnt | ABBIED600_Rev1_INS | Transmitted Messages | | |

| | | | | |
|---|---|---|---|---|
| RxStCnt | ABBIED600_Rev1_INS | Received State Changes | | |
| RxSeqCnt | ABBIED600_Rev1_INS | Received Sequence Number | | |
| RxTestCnt | ABBIED600_Rev1_INS | Received frames with Test bit | | |
| StWrnCnt | ABBIED600_Rev1_INS | State warnings | | |
| SeqWrnCnt | ABBIED600_Rev1_INS | Sequence warnings | | |
| RxTmOutCnt | ABBIED600_Rev1_INS | Receiver Timeouts | | |
| ConfErrCnt | ABBIED600_Rev1_INS | Received ConfRev mismatches | | |
| NdsComCnt | ABBIED600_Rev1_INS | Received frames with NeedsCommissioning bit | | |
| DSErrCnt | ABBIED600_Rev1_INS | Errors in received dataset | | |
| Alm | ABBIED600_Rev1_SPS_e | Alarm | E | IEC 61850-7-4:2007 |
| CntRs | ABBIED600_Rev2_SPC_control_e | Goose counters reset | E | ABBIED600:2014,status-only,direct-with-normal-security |

### 5.1.5 3.1.5 LN: MMSLPRT1 Name: LPRT (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Beh | ABBIED600_Rev4_ENS_beh_e | Behaviour | E | IEC 61850-7-4:2007 |
| NamPlt | ABBIED600_Rev3_LPL_mms_e | Name plate | E | IEC 61850-7-4:2007 |
| SucConn | ABBIED600_Rev1_INS | Successful Connections | | |
| FailConn | ABBIED600_Rev1_INS | Failed Connections | | |
| ConcCnt | ABBIED600_Rev1_INS | Concludes | | |
| TxAbtCnt | ABBIED600_Rev1_INS | Sent Aborts | | |
| RxAbtCnt | ABBIED600_Rev1_INS | Received Aborts | | |
| TxRejCnt | ABBIED600_Rev1_INS | Sent Rejects | | |
| RxRqCnt | ABBIED600_Rev1_INS | Received Request | | |

| | | | | |
|---|---|---|---|---|
| FailRqCnt | ABBIED600_Rev1_INS | Failed Requests | | |
| SucReaCnt | ABBIED600_Rev1_INS | Successful Reads | | |
| FailReaCnt | ABBIED600_Rev1_INS | Failed Reads | | |
| SucWrCnt | ABBIED600_Rev1_INS | Successful Writes | | |
| FailWrCnt | ABBIED600_Rev1_INS | Failed Writes | | |
| InfRpCnt | ABBIED600_Rev1_INS | Information Reports | | |
| ActConnCnt | ABBIED600_Rev1_INS | Active Connections | | |
| UnitMod | ABBIED600_Rev2_ENG_SP_UnitMod | Unit mode | | |
| SetCnfMod | ABBIED600_Rev2_SPC_technical | Setting group editing mode | | status-only,direct-with-normal-security |
| CntRs | ABBIED600_Rev2_SPC_control | Communication status | | status-only,direct-with-normal-security |
| StdConf1 | ABBIED600_Rev1_SPG_SP | Standard conformance | | |
| StdConf2 | ABBIED600_Rev1_SPG_SP | Standard conformance | | |
| ChLiv | ABBIED600_Rev1_SPS_e | MMS Communication status | E | IEC 61850-7-4:2007 |
| CliIP1 | ABBIED600_Rev1_LPL_VSS_1_20 | Client 1 IP address | | |
| CliIP2 | ABBIED600_Rev1_LPL_VSS_1_20 | Client 2 IP address | | |
| CliIP3 | ABBIED600_Rev1_LPL_VSS_1_20 | Client 3 IP address | | |
| CliIP4 | ABBIED600_Rev1_LPL_VSS_1_20 | Client 4 IP address | | |
| CliIP5 | ABBIED600_Rev1_LPL_VSS_1_20 | Client 5 IP address | | |

### 5.1.6 3.1.6 LN: FLO1RFRC1 Name: RFRC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On_e | Mode | E | IEC 61850-7-4:2007,status-only |
| Beh | ABBIED600_Rev4_ENS_beh_e | Behaviour | E | IEC 61850-7-4:2007 |
| NamPlt | ABBIED600_Rev1_LPL_lnNs_1_e | Name plate | E | IEC 61850-7-4:2007 |
| FltLoop | ABBIED600_Rev5_ENS_FltLoop_e | Fault loop | E | IEC 61850-7-4:2007 |
| FltDiskm | ABBIED600_Rev3_MV_simple_i_e | Fault distance | E | IEC 61850-7-4:2007 |

| | | | | |
|---|---|---|---|---|
| FltPtR | ABBIED600_Rev3_MV_simple_i_e | Fault point resistance | E | ABBIED600:2014 |
| FltDisQ | ABBIED600_Rev1_INS_e | Fault distance quality | E | ABBIED600:2014 |
| FltR | ABBIED600_Rev3_MV_simple_i_e | Fault loop resistance | E | ABBIED600:2014 |
| FltX | ABBIED600_Rev3_MV_simple_i_e | Fault loop reactance | E | ABBIED600:2014 |
| PhReact | ABBIED600_Rev3_MV_simple_i_e | Fault phase reactance | E | ABBIED600:2014 |
| RatFltALod | ABBIED600_Rev3_MV_simple_i_e | Fault to load current ratio | E | ABBIED600:2014 |
| EqDisLod | ABBIED600_Rev3_MV_simple_i_e | Estimated equivalent load distance | E | ABBIED600:2014 |
| PhGndCapac | ABBIED600_Rev3_MV_simple_i_e | Estimated PE capacitive reactance of the line | E | ABBIED600:2014 |
| APreFltPhA | ABBIED600_Rev3_CMV_S_1_e | A Pre Flt Phs A | E | ABBIED600:2014 |
| APreFltPhB | ABBIED600_Rev3_CMV_S_1_e | A Pre Flt Phs B | E | ABBIED600:2014 |
| APreFltPhC | ABBIED600_Rev3_CMV_S_1_e | A Pre Flt Phs C | E | ABBIED600:2014 |
| VPreFltPhA | ABBIED600_Rev3_CMV_S_1_e | V Pre Flt Phs A | E | ABBIED600:2014 |
| VPreFltPhB | ABBIED600_Rev3_CMV_S_1_e | V Pre Flt Phs B | E | ABBIED600:2014 |
| VPreFltPhC | ABBIED600_Rev3_CMV_S_1_e | V Pre Flt Phs C | E | ABBIED600:2014 |
| AFltPhA | ABBIED600_Rev3_CMV_S_1_e | A Flt Phs A | E | ABBIED600:2014 |
| AFltPhB | ABBIED600_Rev3_CMV_S_1_e | A Flt Phs B | E | ABBIED600:2014 |
| AFltPhC | ABBIED600_Rev3_CMV_S_1_e | A Flt Phs C | E | ABBIED600:2014 |
| VFltPhA | ABBIED600_Rev3_CMV_S_1_e | V Flt Phs A | E | ABBIED600:2014 |
| VFltPhB | ABBIED600_Rev3_CMV_S_1_e | V Flt Phs B | E | ABBIED600:2014 |
| VFltPhC | ABBIED600_Rev3_CMV_S_1_e | V Flt Phs C | E | ABBIED600:2014 |

### 5.1.7 3.1.7 LN: SEQSPVC1 Name: SPVC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD_e | Mode | E | IEC 61850-7-4:2007,status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh_e | Behaviour | E | IEC 61850-7-4:2007 |
| NamPlt | ABBIED600_Rev1_LPL_lnNs_1_e | Name plate | E | IEC 61850-7-4:2007 |

| | | | | |
|---|---|---|---|---|
| Blk | ABBIED600_Rev1_SPS_simple_e | Block signal for all binary outputs | E | IEC 61850-7-4:2007 |
| Str | ABBIED600_Rev1_ACD_simple_e | General start of function | E | IEC 61850-7-4:2007 |
| Str3Ph | ABBIED600_Rev1_ACD_simple | Three-phase start of function | | |
| InPosCls | ABBIED600_Rev1_SPS | Active when circuit breaker is closed | | |
| InDCPosOpn | ABBIED600_Rev1_SPS | Active when line disconnector is open | | |
| InMCBPsOpn | ABBIED600_Rev1_SPS | Active when external MCB opens protected Volt. circuit | | |
| BlkValA | ABBIED600_Rev3_ASG_SP_i_e | Minimum operate level of phase current for delta calculation | E | IEC 61850-7-4:2007 |
| NgSeqLevA | ABBIED600_Rev3_ASG_SP_i | Operate level of neg seq undercurrent element | | |
| ChgRteA | ABBIED600_Rev3_ASG_SP_i | Operate level of change in phase current | | |
| ChgRteEna | ABBIED600_Rev1_SPG_SP | Enabling operation of change based function | | |
| ChgRteV | ABBIED600_Rev3_ASG_SP_i | Operate level of change in phase voltage | | |
| EnaSealIn | ABBIED600_Rev1_SPG_SP | Enabling seal in functionality | | |
| BlkValV | ABBIED600_Rev3_ASG_SP_i_e | Minimum operate level of phase voltage for delta | E | IEC 61850-7-4:2007 |

| | | | | |
|---|---|---|---|---|
| | | calculation | | |
| SealInV | ABBIED600_Rev3_ASG_SP_i | Operate level of seal-in phase voltage | | |
| NgSeqLevV | ABBIED600_Rev3_ASG_SP_i | Operate level of neg seq overvoltage element | | |
| TestSpvn | ABBIED600_Rev3_ENC_TestSpvn | SEQSPVC1 | | status-only,direct-with-normal-security |
| DeaLinValA | ABBIED600_Rev3_ASG_SP_i | Operate level for open phase current detection | | |

### 5.1.8 3.1.8 LN: PHSVPR1 Name: SVPR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD_e | Mode | E | REx615:2014,status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh_e | Behaviour | E | REx615:2014 |
| NamPlt | ABBIED600_Rev1_LPL_lnNs_1_e | Name plate | E | REx615:2014 |
| Blk | ABBIED600_Rev1_SPS_simple_e | Block signal for all binary outputs | E | REx615:2014 |
| LivLinVal | ABBIED600_Rev3_ASG_SP_i_e | Voltage live value | E | REx615:2014 |
| DeaLinVal | ABBIED600_Rev3_ASG_SP_i_e | Voltage dead value | E | REx615:2014 |
| TestSpvn | ABBIED600_Rev3_ENC_TestSpvn | Test control for outputs | | status-only,direct-with-normal-security |
| VLivTmms | ABBIED600_Rev1_ING_SP_1 | Voltage live time | | |
| VDeaTmms | ABBIED600_Rev1_ING_SP_1 | Voltage dead time | | |
| VSel | ABBIED600_Rev3_ENG_SP_VSel | Parameter to se- | | |

| | | | | |
|---|---|---|---|---|
| | | lect phase or phase-to-phase voltages | | |
| PhSpvn | ABBIED600_Rev2_ENG_SP_PhSv | Monitored phase | | |
| NumPh | ABBIED600_Rev3_ENG_SP_StrPhSel | Number of phases required for live and dead voltage supervi-sion | | |
| VLiv | ABBIED600_Rev1_SPS_simple | Voltage live | | |
| VLivPhsA | ABBIED600_Rev1_SPS_simple | Voltage live A or AB | | |
| VLivPhsB | ABBIED600_Rev1_SPS_simple | Voltage live B or BC | | |
| VLivPhsC | ABBIED600_Rev1_SPS_simple | Voltage live C or CA | | |
| VDea | ABBIED600_Rev1_SPS_simple | Voltage dead | | |
| VDeaPhsA | ABBIED600_Rev1_SPS_simple | Voltage dead A or AB | | |
| VDeaPhsB | ABBIED600_Rev1_SPS_simple | Voltage dead B or BC | | |
| VDeaPhsC | ABBIED600_Rev1_SPS_simple | Voltage dead C or CA | | |
| HysRl | ABBIED600_Rev3_ASG_SP_i | Relative hystere-sis for voltage supervision | | |

### 5.1.9 3.1.9 LN: FLTRFRC1 Name: RFRC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD_e | Mode | E | IEC 61850-7-4:2007,status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh_e | Behaviour | E | IEC 61850-7- |

| | | | | |
|---|---|---|---|---|
| | | | | 4:2007 |
| NamPlt | ABBIED600_Rev1_LPL_lnNs_1_e | Name plate | E | IEC 61850-7-4:2007 |
| Hz | ABBIED600_Rev3_MV_simple_i_e | Frequency | E | IEC 61850-7-4:2007 |
| FltPtR | ABBIED600_Rev3_MV_simple_i | Fault resistance | | |
| PhReact | ABBIED600_Rev3_MV_simple_i | Fault phase reactance | | |
| FltDiskm | ABBIED600_Rev3_MV_simple_i_e | Distance to fault measured in pu | E | IEC 61850-7-4:2007 |
| OpCnt | ABBIED600_Rev1_INS_e | time | E | IEC 61850-7-4:2007 |
| Blk | ABBIED600_Rev1_SPS_simple_e | Block signal for all binary outputs | E | IEC 61850-7-4:2007 |
| InOp | ABBIED600_Rev1_SPS | Operate input for triggering | | |
| InStr | ABBIED600_Rev1_SPS | Start input for triggering | | |
| RcdRs | ABBIED600_Rev2_SPC_control | Reset fault records | | status-only,direct-with-normal-security |
| SelRow | ABBIED600_Rev2_INC_all_rights | Select recording | | status-only,direct-with-normal-security |
| TrgSet | ABBIED600_Rev2_ENG_SP_TrgSet | Triggering mode | | |
| AMeasMod | ABBIED600_Rev3_ENG_SP_MeasMod | A measurement mode | | |
| ProFcn | ABBIED600_RECRER61520_Rev34_ENS_ProFcn | Protection function | | |
| StrDur | ABBIED600_Rev3_MV_2 | Maximum start | | |

| | | | | |
|---|---|---|---|---|
| | | duration of all stages during the fault | | |
| StrOpTm | ABBIED600_Rev3_MV_simple_i | Operate time | | |
| ActSetGr | ABBIED600_Rev1_INC_simple_int | Active setting group | | status-only |
| ShotPntr | ABBIED600_Rev1_INS_d | Shot pointer | | |
| Max50DifAA | ABBIED600_Rev3_MV_simple_i | Maximum differential current phase A | | |
| Max50DifAB | ABBIED600_Rev3_MV_simple_i | Maximum differential current phase B | | |
| Max50DifAC | ABBIED600_Rev3_MV_simple_i | Maximum differential current phase C | | |
| Max50RstAA | ABBIED600_Rev3_MV_simple_i | Maximum bias current phase A | | |
| Max50RstAB | ABBIED600_Rev3_MV_simple_i | Maximum bias current phase B | | |
| Max50RstAC | ABBIED600_Rev3_MV_simple_i | Maximum bias current phase C | | |
| DifAPhsA | ABBIED600_Rev3_MV_simple_i | Differential current phase A | | |
| DifAPhsB | ABBIED600_Rev3_MV_simple_i | Differential current phase B | | |
| DifAPhsC | ABBIED600_Rev3_MV_simple_i | Differential current phase C | | |
| RstAPhsA | ABBIED600_Rev3_MV_simple_i | Bias current phase A | | |
| RstAPhsB | ABBIED600_Rev3_MV_simple_i | Bias current phase B | | |
| RstAPhsC | ABBIED600_Rev3_MV_simple_i | Bias current phase C | | |
| DifARes | ABBIED600_Rev3_MV_simple_i | Differential cur- | | |

| | | | | |
|---|---|---|---|---|
| | | rent residual | | |
| RstARes | ABBIED600_Rev3_MV_simple_i | Bias current residual | | |
| Max50APhsA1 | ABBIED600_Rev3_MV_simple_i | Maximum phase A current | | |
| Max50APhsB1 | ABBIED600_Rev3_MV_simple_i | Maximum phase B current | | |
| Max50APhsC1 | ABBIED600_Rev3_MV_simple_i | Maximum phase C current | | |
| Max50ARes1 | ABBIED600_Rev3_MV_simple_i | Maximum residual current | | |
| APhsA1 | ABBIED600_Rev3_MV_simple_i | Phase A current | | |
| APhsB1 | ABBIED600_Rev3_MV_simple_i | Phase B current | | |
| APhsC1 | ABBIED600_Rev3_MV_simple_i | Phase C current | | |
| ARes1 | ABBIED600_Rev3_MV_simple_i | Residual current | | |
| AResClc1 | ABBIED600_Rev3_MV_simple_i | Calculated residual current | | |
| APsSeq1 | ABBIED600_Rev3_MV_simple_i | Positive sequence current | | |
| ANgSeq1 | ABBIED600_Rev3_MV_simple_i | Negative sequence current | | |
| Max50APhsA2 | ABBIED600_Rev3_MV_simple_i | Maximum phase A current (b) | | |
| Max50APhsB2 | ABBIED600_Rev3_MV_simple_i | Maximum phase B current (b) | | |
| Max50APhsC2 | ABBIED600_Rev3_MV_simple_i | Maximum phase C current (b) | | |
| Max50ARes2 | ABBIED600_Rev3_MV_simple_i | Maximum residual current (b) | | |
| APhsA2 | ABBIED600_Rev3_MV_simple_i | Phase A current | | |

| | | | | |
|---|---|---|---|---|
| | | (b) | | |
| APhsB2 | ABBIED600_Rev3_MV_simple_i | Phase B current (b) | | |
| APhsC2 | ABBIED600_Rev3_MV_simple_i | Phase C current (b) | | |
| ARes2 | ABBIED600_Rev3_MV_simple_i | Residual current (b) | | |
| AResClc2 | ABBIED600_Rev3_MV_simple_i | Calculated residual current (b) | | |
| APsSeq2 | ABBIED600_Rev3_MV_simple_i | Positive sequence current (b) | | |
| ANgSeq2 | ABBIED600_Rev3_MV_simple_i | Negative sequence current (b) | | |
| Max50APhsA3 | ABBIED600_Rev3_MV_simple_i | Maximum phase A current (c) | | |
| Max50APhsB3 | ABBIED600_Rev3_MV_simple_i | Maximum phase B current (c) | | |
| Max50APhsC3 | ABBIED600_Rev3_MV_simple_i | Maximum phase C current (c) | | |
| Max50ARes3 | ABBIED600_Rev3_MV_simple_i | Maximum residual current (c) | | |
| APhsA3 | ABBIED600_Rev3_MV_simple_i | Phase A current (c) | | |
| APhsB3 | ABBIED600_Rev3_MV_simple_i | Phase B current (c) | | |
| APhsC3 | ABBIED600_Rev3_MV_simple_i | Phase C current (c) | | |
| ARes3 | ABBIED600_Rev3_MV_simple_i | Residual cur- | | |

| | | | | |
|---|---|---|---|---|
| | | rent (c) | | |
| AResClc3 | ABBIED600_Rev3_MV_simple_i | Calculated residual current (c) | | |
| APsSeq3 | ABBIED600_Rev3_MV_simple_i | Positive sequence current (c) | | |
| ANgSeq3 | ABBIED600_Rev3_MV_simple_i | Negative sequence current (c) | | |
| PhVPhsA1 | ABBIED600_Rev3_MV_simple_i | Phase A voltage | | |
| PhVPhsB1 | ABBIED600_Rev3_MV_simple_i | Phase B voltage | | |
| PhVPhsC1 | ABBIED600_Rev3_MV_simple_i | Phase C voltage | | |
| PPVPhsAB1 | ABBIED600_Rev3_MV_simple_i | Phase A to phase B voltage | | |
| PPVPhsBC1 | ABBIED600_Rev3_MV_simple_i | Phase B to phase C voltage | | |
| PPVPhsCA1 | ABBIED600_Rev3_MV_simple_i | Phase C to phase A voltage | | |
| VRes1 | ABBIED600_Rev3_MV_simple_i | Residual voltage | | |
| VZro1 | ABBIED600_Rev3_MV_simple_i | Zero sequence voltage | | |
| VPsSeq1 | ABBIED600_Rev3_MV_simple_i | Positive sequence voltage | | |
| VNgSeq1 | ABBIED600_Rev3_MV_simple_i | Negative sequence voltage | | |
| PhVPhsA2 | ABBIED600_Rev3_MV_simple_i | Phase A voltage (b) | | |
| PhVPhsB2 | ABBIED600_Rev3_MV_simple_i | Phase B voltage | | |

| | | | | |
|---|---|---|---|---|
| | | (b) | | |
| PhVPhsC2 | ABBIED600_Rev3_MV_simple_i | Phase C voltage (b) | | |
| PPVPhsAB2 | ABBIED600_Rev3_MV_simple_i | Phase A to phase B voltage (b) | | |
| PPVPhsBC2 | ABBIED600_Rev3_MV_simple_i | Phase B to phase C voltage (b) | | |
| PPVPhsCA2 | ABBIED600_Rev3_MV_simple_i | Phase C to phase A voltage (b) | | |
| VRes2 | ABBIED600_Rev3_MV_simple_i | Residual voltage (b) | | |
| VZro2 | ABBIED600_Rev3_MV_simple_i | Zero sequence voltage (b) | | |
| VPsSeq2 | ABBIED600_Rev3_MV_simple_i | Positive sequence voltage (b) | | |
| VNgSeq2 | ABBIED600_Rev3_MV_simple_i | Negative sequence voltage (b) | | |
| MaxTmpRl | ABBIED600_Rev3_MV_simple_i | PTTR thermal level | | |
| AMaxNgPs | ABBIED600_Rev3_MV_simple_i | PDNSPTOC1 rat. I2/I1 | | |
| DifANAngVN1 | ABBIED600_Rev3_MV_simple_i | Angle residual voltage - residual current | | |
| DifAAAngVBC1 | ABBIED600_Rev3_MV_simple_i | Angle phase B to phase C voltage - phase A current | | |
| DifABAngVCA1 | ABBIED600_Rev3_MV_simple_i | Angle phase C to phase A voltage - phase | | |

| | | | | |
|---|---|---|---|---|
| | | B current | | |
| DifACAngVAB1 | ABBIED600_Rev3_MV_simple_i | Angle phase A to phase B voltage - phase C current | | |
| DifANAngVN2 | ABBIED600_Rev3_MV_simple_i | Angle residual voltage - residual current (b) | | |
| DifAAAngVBC2 | ABBIED600_Rev3_MV_simple_i | Angle phase B to phase C voltage - phase A current (b) | | |
| DifABAngVCA2 | ABBIED600_Rev3_MV_simple_i | Angle phase C to phase A voltage - phase B current (b) | | |
| DifACAngVAB2 | ABBIED600_Rev3_MV_simple_i | Angle phase A to phase B voltage - phase C current (b) | | |
| HzRteChg | ABBIED600_Rev3_MV_simple_i | Frequency gradient | | |
| CondNeut | ABBIED600_Rev3_MV_simple_i | Conductance Yo | | |
| SusNeut | ABBIED600_Rev3_MV_simple_i | Susceptance Yo | | |
| PPLoopRis | ABBIED600_Rev3_MV_simple_i | Fault loop resistance | | |
| PPLoopReact | ABBIED600_Rev3_MV_simple_i | Fault loop reactance | | |
| InCBClr | ABBIED600_Rev1_SPS | Breaker open status | | |
| CBClrTm | ABBIED600_Rev3_MV_simple_i | Breaker clear time | | |

### 5.1.10 3.1.10 LN: SEQSPVC2 Name: SPVC (ED2)

| Attribute | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| name | | | | |
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| NamPlt | ABBIED600_Rev1_LPL_lnNs_1 | Name plate | | |
| Blk | ABBIED600_Rev1_SPS_simple_e | Block signal for all binary outputs | E | IEC 61850-7-4:2007 |
| Str | ABBIED600_Rev1_ACD_simple_e | General start of function | E | IEC 61850-7-4:2007 |
| Str3Ph | ABBIED600_Rev1_ACD_simple | Three-phase start of function | | |
| InPosCls | ABBIED600_Rev1_SPS | Active when circuit breaker is closed | | |
| InDCPosOpn | ABBIED600_Rev1_SPS | Active when line disconnector is open | | |
| InMCBPsOpn | ABBIED600_Rev1_SPS | Active when external MCB opens protected Volt. circuit | | |
| BlkValA | ABBIED600_Rev3_ASG_SP_i_e | Minimum operate level of phase current for delta calculation | E | IEC 61850-7-4:2007 |
| NgSeqLevA | ABBIED600_Rev3_ASG_SP_i | Operate level of neg seq undercurrent element | | |
| ChgRteA | ABBIED600_Rev3_ASG_SP_i | Operate level of change in phase current | | |
| ChgRteEna | ABBIED600_Rev1_SPG_SP | Enabling operation of change based function | | |
| ChgRteV | ABBIED600_Rev3_ASG_SP_i | Operate level of change in phase voltage | | |
| EnaSealIn | ABBIED600_Rev1_SPG_SP | Enabling seal in functionality | | |

| | | | | |
|---|---|---|---|---|
| BlkValV | ABBIED600_Rev3_ASG_SP_i_e | Minimum operate level of phase voltage for delta calculation | E | IEC 61850-7-4:2007 |
| SealInV | ABBIED600_Rev3_ASG_SP_i | Operate level of seal-in phase voltage | | |
| NgSeqLevV | ABBIED600_Rev3_ASG_SP_i | Operate level of neg seq overvoltage element | | |
| TestSpvn | ABBIED600_Rev3_ENC_TestSpvn | SEQSPVC2 | | status-only,direct-with-normal-security |
| DeaLinValA | ABBIED600_Rev3_ASG_SP_i | Operate level for open phase current detection | | |

### 5.1.11 3.1.11 LN: EFPADM1 Name: PADM (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD_e | Mode | E | IEC 61850-7-4:2007,status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh_e | Behaviour | E | IEC 61850-7-4:2007 |
| NamPlt | ABBIED600_Rev1_LPL_lnNs_1_e | Name plate | E | IEC 61850-7-4:2007 |
| Blk | ABBIED600_Rev1_SPS_simple_e | Block signal for all binary outputs | E | IEC 61850-7-4:2007 |
| Str | ABBIED600_Rev1_ACD_simple_e | Start | E | IEC 61850-7-4:2007 |
| Op | ABBIED600_Rev1_ACT_simple_e | Operate | E | IEC 61850-7-4:2007 |
| VStr | ABBIED600_Rev3_ASG_SG_i_e | Voltage Start Value | E | IEC 61850-7-4:2007 |
| OpDlTmms | ABBIED600_Rev1_ING_SG_e | Operate Delay Time | E | IEC 61850-7-4:2007 |
| StrDur | ABBIED600_Rev3_MV_2 | Ratio of start time / operate | | |

| | | | | |
|---|---|---|---|---|
| | | time | | |
| TstOutCmd | ABBIED600_Rev20_ENC_TstOut | Test control for outputs | | status-only,direct-with-normal-security |
| DirMod | ABBIED600_Rev3_ENG_SG_DirMod_e | Directional Mode | E | IEC 61850-7-4:2007 |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1_e | Reset Delay Time | E | IEC 61850-7-4:2007 |
| OpModAdm | ABBIED600_Rev2_ENG_SG_OpModAdm | Operation mode | | |
| BlkValA | ABBIED600_Rev3_ASG_SP_i_e | Minimum operating current | E | IEC 61850-7-4:2007 |
| BlkValV | ABBIED600_Rev3_ASG_SP_i_e | Minimum operating voltage | E | IEC 61850-7-4:2007 |
| CondTiltAng | ABBIED600_Rev3_ASG_SG_i | Conductance tilt angle | | |
| CondFwd | ABBIED600_Rev3_ASG_SG_i | Conductance forward | | |
| CondRv | ABBIED600_Rev3_ASG_SG_i | Conductance reverse | | |
| SusTiltAng | ABBIED600_Rev3_ASG_SG_i | Susceptance tilt angle | | |
| SusFwd | ABBIED600_Rev3_ASG_SG_i | Susceptance forward | | |
| SusRv | ABBIED600_Rev3_ASG_SG_i | Susceptance reverse | | |
| CirclRd | ABBIED600_Rev3_ASG_SG_i | Circle radius | | |
| CirclCond | ABBIED600_Rev3_ASG_SG_i | Circle conductance | | |
| CirclSus | ABBIED600_Rev3_ASG_SG_i | Circle susceptance | | |
| RevPol | ABBIED600_Rev1_SPG_SP | Rotate polarizing quantity | | |
| Cond | ABBIED600_Rev3_MV_simple_i | Measured neutral conductance | | |
| Sus | ABBIED600_Rev3_MV_simple_i | Measured neutral susceptance | | |

| | | | | |
|---|---|---|---|---|
| TrgSt | ABBIED600_Rev1_SPS | Signal indicating function trigger-ing | | |
| AResSigSel | ABBIED600_Rev2_ENG_SP_AResSigSel | Selection for used Io signal | | |
| VResSigSel | ABBIED600_Rev2_ENG_SP_VResSigSel | Selection for used Uo signal | | |
| AdmClcMod | ABBIED600_Rev2_ENG_SP_AdmClcMod | Admittance cal-culation mode | | |

### 5.1.12 3.1.12 LN: EFPADM2 Name: PADM (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD_e | Mode | E | IEC 61850-7-4:2007,status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh_e | Behaviour | E | IEC 61850-7-4:2007 |
| NamPlt | ABBIED600_Rev1_LPL_lnNs_1_e | Name plate | E | IEC 61850-7-4:2007 |
| Blk | ABBIED600_Rev1_SPS_simple_e | Block signal for all binary out-puts | E | IEC 61850-7-4:2007 |
| Str | ABBIED600_Rev1_ACD_simple_e | Start | E | IEC 61850-7-4:2007 |
| Op | ABBIED600_Rev1_ACT_simple_e | Operate | E | IEC 61850-7-4:2007 |
| VStr | ABBIED600_Rev3_ASG_SG_i_e | Voltage Start Value | E | IEC 61850-7-4:2007 |
| OpDlTmms | ABBIED600_Rev1_ING_SG_e | Operate Delay Time | E | IEC 61850-7-4:2007 |
| StrDur | ABBIED600_Rev3_MV_2 | Ratio of start time / operate time | | |
| TstOutCmd | ABBIED600_Rev20_ENC_TstOut | Test control for outputs | | status-only,direct-with-normal-security |
| DirMod | ABBIED600_Rev3_ENG_SG_DirMod_e | Directional Mode | E | IEC 61850-7-4:2007 |

| | | | | |
|---|---|---|---|---|
| RsDlTmms | ABBIED600_Rev1_ING_SP_1_e | Reset Delay Time | E | IEC 61850-7-4:2007 |
| OpModAdm | ABBIED600_Rev2_ENG_SG_OpModAdm | Operation mode | | |
| BlkValA | ABBIED600_Rev3_ASG_SP_i_e | Minimum operating current | E | IEC 61850-7-4:2007 |
| BlkValV | ABBIED600_Rev3_ASG_SP_i_e | Minimum operating voltage | E | IEC 61850-7-4:2007 |
| CondTiltAng | ABBIED600_Rev3_ASG_SG_i | Conductance tilt angle | | |
| CondFwd | ABBIED600_Rev3_ASG_SG_i | Conductance forward | | |
| CondRv | ABBIED600_Rev3_ASG_SG_i | Conductance reverse | | |
| SusTiltAng | ABBIED600_Rev3_ASG_SG_i | Susceptance tilt angle | | |
| SusFwd | ABBIED600_Rev3_ASG_SG_i | Susceptance forward | | |
| SusRv | ABBIED600_Rev3_ASG_SG_i | Susceptance reverse | | |
| CirclRd | ABBIED600_Rev3_ASG_SG_i | Circle radius | | |
| CirclCond | ABBIED600_Rev3_ASG_SG_i | Circle conductance | | |
| CirclSus | ABBIED600_Rev3_ASG_SG_i | Circle susceptance | | |
| RevPol | ABBIED600_Rev1_SPG_SP | Rotate polarizing quantity | | |
| Cond | ABBIED600_Rev3_MV_simple_i | Measured neutral conductance | | |
| Sus | ABBIED600_Rev3_MV_simple_i | Measured neutral susceptance | | |
| TrgSt | ABBIED600_Rev1_SPS | Signal indicating function triggering | | |
| AResSigSel | ABBIED600_Rev2_ENG_SP_AResSigSel | Selection for used Io signal | | |

| | | | | |
|---|---|---|---|---|
| VResSigSel | ABBIED600_Rev2_ENG_SP_VResSigSel | Selection for used Uo signal | | |
| AdmClcMod | ABBIED600_Rev2_ENG_SP_AdmClcMod | Admittance calculation mode | | |

### 5.1.13 3.1.13 LN: EFPADM3 Name: PADM (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD_e | Mode | E | IEC 61850-7-4:2007,status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh_e | Behaviour | E | IEC 61850-7-4:2007 |
| NamPlt | ABBIED600_Rev1_LPL_lnNs_1_e | Name plate | E | IEC 61850-7-4:2007 |
| Blk | ABBIED600_Rev1_SPS_simple_e | Block signal for all binary outputs | E | IEC 61850-7-4:2007 |
| Str | ABBIED600_Rev1_ACD_simple_e | Start | E | IEC 61850-7-4:2007 |
| Op | ABBIED600_Rev1_ACT_simple_e | Operate | E | IEC 61850-7-4:2007 |
| VStr | ABBIED600_Rev3_ASG_SG_i_e | Voltage Start Value | E | IEC 61850-7-4:2007 |
| OpDlTmms | ABBIED600_Rev1_ING_SG_e | Operate Delay Time | E | IEC 61850-7-4:2007 |
| StrDur | ABBIED600_Rev3_MV_2 | Ratio of start time / operate time | | |
| TstOutCmd | ABBIED600_Rev20_ENC_TstOut | Test control for outputs | | status-only,direct-with-normal-security |
| DirMod | ABBIED600_Rev3_ENG_SG_DirMod_e | Directional Mode | E | IEC 61850-7-4:2007 |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1_e | Reset Delay Time | E | IEC 61850-7-4:2007 |
| OpModAdm | ABBIED600_Rev2_ENG_SG_OpModAdm | Operation mode | | |
| BlkValA | ABBIED600_Rev3_ASG_SP_i_e | Minimum operating current | E | IEC 61850-7-4:2007 |
| BlkValV | ABBIED600_Rev3_ASG_SP_i_e | Minimum oper- | E | IEC 61850-7-4:2007 |

| | | | | |
|---|---|---|---|---|
| | | ating voltage | | |
| CondTiltAng | ABBIED600_Rev3_ASG_SG_i | Conductance tilt angle | | |
| CondFwd | ABBIED600_Rev3_ASG_SG_i | Conductance forward | | |
| CondRv | ABBIED600_Rev3_ASG_SG_i | Conductance reverse | | |
| SusTiltAng | ABBIED600_Rev3_ASG_SG_i | Susceptance tilt angle | | |
| SusFwd | ABBIED600_Rev3_ASG_SG_i | Susceptance forward | | |
| SusRv | ABBIED600_Rev3_ASG_SG_i | Susceptance reverse | | |
| CirclRd | ABBIED600_Rev3_ASG_SG_i | Circle radius | | |
| CirclCond | ABBIED600_Rev3_ASG_SG_i | Circle conductance | | |
| CirclSus | ABBIED600_Rev3_ASG_SG_i | Circle susceptance | | |
| RevPol | ABBIED600_Rev1_SPG_SP | Rotate polarizing quantity | | |
| Cond | ABBIED600_Rev3_MV_simple_i | Measured neutral conductance | | |
| Sus | ABBIED600_Rev3_MV_simple_i | Measured neutral susceptance | | |
| TrgSt | ABBIED600_Rev1_SPS | Signal indicating function triggering | | |
| AResSigSel | ABBIED600_Rev2_ENG_SP_AResSigSel | Selection for used Io signal | | |
| VResSigSel | ABBIED600_Rev2_ENG_SP_VResSigSel | Selection for used Uo signal | | |
| AdmClcMod | ABBIED600_Rev2_ENG_SP_AdmClcMod | Admittance calculation mode | | |

### 5.1.14 3.1.14 LN: QVV1RQRC1 Name: RQRC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On_e | Mode | E | IEC 61850-7-4:2007,status-only |
| Beh | ABBIED600_Rev4_ENS_beh_e | Behaviour | E | IEC 61850-7-4:2007 |
| NamPlt | ABBIED600_Rev1_LPL_lnNs_1_e | Name plate | E | IEC 61850-7-4:2007 |
| VVaTyp | ABBIED600_Rev3_ENS_VVaTyp_e | Voltage variation type | E | ABBIED600:2014 |
| VVaPhsA | ABBIED600_Rev3_MV_simple_i_e | VVa Magn phase A of the newest completed event | E | ABBIED600:2014 |
| VVaPhsB | ABBIED600_Rev3_MV_simple_i_e | VVa Magn phase B of the newest completed event | E | ABBIED600:2014 |
| VVaPhsC | ABBIED600_Rev3_MV_simple_i_e | VVa Magn phase C of the newest completed event | E | ABBIED600:2014 |
| VVaTmPhsA | ABBIED600_Rev3_MV_simple_i_e | VVa Phase A Dur of the newest completed event | E | ABBIED600:2014 |
| VVaTmPhsB | ABBIED600_Rev3_MV_simple_i_e | VVa Phase B Dur of the newest completed event | E | ABBIED600:2014 |
| VVaTmPhsC | ABBIED600_Rev3_MV_simple_i_e | VVa Phase C Dur of the newest completed event | E | ABBIED600:2014 |
| APreVaPhsA | ABBIED600_Rev3_MV_simple_i_e | I_A preceding Va start of the newest completed event | E | ABBIED600:2014 |
| APreVaPhsB | ABBIED600_Rev3_MV_simple_i_e | I_B preceding Va start of the newest completed event | E | ABBIED600:2014 |
| APreVaPhsC | ABBIED600_Rev3_MV_simple_i_e | I_C preceding Va start of the newest completed event | E | ABBIED600:2014 |

### 5.1.15 3.1.15 LN: QVV2RQRC1 Name: RQRC (ED2)

| Attribute | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| name | | | | |
| Mod | ABBIED600_Rev1_ENC_Mod_On_e | Mode | E | IEC 61850-7-4:2007,status-only |
| Beh | ABBIED600_Rev4_ENS_beh_e | Behaviour | E | IEC 61850-7-4:2007 |
| NamPlt | ABBIED600_Rev1_LPL_lnNs_1_e | Name plate | E | IEC 61850-7-4:2007 |
| VVaTyp | ABBIED600_Rev3_ENS_VVaTyp_e | Voltage variation type | E | ABBIED600:2014 |
| VVaPhsA | ABBIED600_Rev3_MV_simple_i_e | VVa Magn phase A of the second newest completed event | E | ABBIED600:2014 |
| VVaPhsB | ABBIED600_Rev3_MV_simple_i_e | VVa Magn phase B of the second newest completed event | E | ABBIED600:2014 |
| VVaPhsC | ABBIED600_Rev3_MV_simple_i_e | VVa Magn phase C of the second newest completed event | E | ABBIED600:2014 |
| VVaTmPhsA | ABBIED600_Rev3_MV_simple_i_e | VVa Phase A Dur of the second newest completed event | E | ABBIED600:2014 |
| VVaTmPhsB | ABBIED600_Rev3_MV_simple_i_e | VVa Phase B Dur of the second newest completed event | E | ABBIED600:2014 |
| VVaTmPhsC | ABBIED600_Rev3_MV_simple_i_e | VVa Phase C Dur of the second newest completed event | E | ABBIED600:2014 |
| APreVaPhsA | ABBIED600_Rev3_MV_simple_i_e | I_A preceding Va start of the 2nd newest completed event | E | ABBIED600:2014 |
| APreVaPhsB | ABBIED600_Rev3_MV_simple_i_e | I_B preceding Va start of the 2nd newest completed event | E | ABBIED600:2014 |
| APreVaPhsC | ABBIED600_Rev3_MV_simple_i_e | I_C preceding Va start of the 2nd newest completed event | E | ABBIED600:2014 |

### 5.1.16 3.1.16 LN: QVV3RQRC1 Name: RQRC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On_e | Mode | E | IEC 61850-7-4:2007,status-only |
| Beh | ABBIED600_Rev4_ENS_beh_e | Behaviour | E | IEC 61850-7-4:2007 |
| NamPlt | ABBIED600_Rev1_LPL_lnNs_1_e | Name plate | E | IEC 61850-7-4:2007 |
| VVaTyp | ABBIED600_Rev3_ENS_VVaTyp_e | Voltage variation type | E | ABBIED600:2014 |
| VVaPhsA | ABBIED600_Rev3_MV_simple_i_e | VVa Magn phase A of the third newest completed event | E | ABBIED600:2014 |
| VVaPhsB | ABBIED600_Rev3_MV_simple_i_e | VVa Magn phase B of the third newest completed event | E | ABBIED600:2014 |
| VVaPhsC | ABBIED600_Rev3_MV_simple_i_e | VVa Magn phase C of the third newest completed event | E | ABBIED600:2014 |
| VVaTmPhsA | ABBIED600_Rev3_MV_simple_i_e | VVa Phase A Dur of the third newest completed event | E | ABBIED600:2014 |
| VVaTmPhsB | ABBIED600_Rev3_MV_simple_i_e | VVa Phase B Dur of the third newest completed event | E | ABBIED600:2014 |
| VVaTmPhsC | ABBIED600_Rev3_MV_simple_i_e | VVa Phase C Dur of the third newest completed event | E | ABBIED600:2014 |
| APreVaPhsA | ABBIED600_Rev3_MV_simple_i_e | I_A preceding Va start of the 3rd newest completed event | E | ABBIED600:2014 |
| APreVaPhsB | ABBIED600_Rev3_MV_simple_i_e | I_B preceding Va start of the 3rd newest completed event | E | ABBIED600:2014 |
| APreVaPhsC | ABBIED600_Rev3_MV_simple_i_e | I_C preceding Va start of the 3rd newest completed event | E | ABBIED600:2014 |

### 5.1.17 3.1.17 LN: QVU1RQRC1 Name: RQRC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On_e | Mode | E | IEC 61850-7-4:2007,status-only |
| Beh | ABBIED600_Rev4_ENS_beh_e | Behaviour | E | IEC 61850-7-4:2007 |
| NamPlt | ABBIED600_Rev1_LPL_lnNs_1_e | Name Plate | E | IEC 61850-7-4:2007 |
| MaxVVa | ABBIED600_Rev3_MV_simple_i_e | Maximum unbalance deviation value | E | IEC 61850-7-4:2007 |
| VVaTm | ABBIED600_Rev3_MV_simple_i_e | Duration of newest high mean unbalance voltage alarm | E | IEC 61850-7-4:2007 |

### 5.1.18 3.1.18 LN: QVU2RQRC1 Name: RQRC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On_e | Mode | E | IEC 61850-7-4:2007,status-only |
| Beh | ABBIED600_Rev4_ENS_beh_e | Behaviour | E | IEC 61850-7-4:2007 |
| NamPlt | ABBIED600_Rev1_LPL_lnNs_1_e | Name Plate | E | IEC 61850-7-4:2007 |
| MaxVVa | ABBIED600_Rev3_MV_simple_i_e | Maximum unbalance deviation value | E | IEC 61850-7-4:2007 |
| VVaTm | ABBIED600_Rev3_MV_simple_i_e | Duration of second newest high mean unbalance Volt alarm | E | IEC 61850-7-4:2007 |

### 5.1.19 3.1.19 LN: QVU3RQRC1 Name: RQRC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On_e | Mode | E | IEC 61850-7-4:2007,status-only |
| Beh | ABBIED600_Rev4_ENS_beh_e | Behaviour | E | IEC 61850-7-4:2007 |
| NamPlt | ABBIED600_Rev1_LPL_lnNs_1_e | Name Plate | E | IEC 61850-7-4:2007 |
| MaxVVa | ABBIED600_Rev3_MV_simple_i_e | Maximum unbalance devia- | E | IEC 61850-7-4:2007 |

| | | | | |
|---|---|---|---|---|
| | | tion value | | |
| VVaTm | ABBIED600_Rev3_MV_simple_i_e | Duration of third newest high mean unbalance Volt alarm | E | IEC 61850-7-4:2007 |

### 5.1.20 3.1.20 LN: MBSLPRT1 Name: LPRT (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD_e | Mode | E | IEC 61850-7-4:2007,status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh_e | Behaviour | E | IEC 61850-7-4:2007 |
| NamPlt | ABBIED600_Rev7_LPL_MBS_ED2_e | Name plate | E | IEC 61850-7-4:2007 |
| BufBkOff | ABBIED600_Rev1_ING_SP_1 | Event buffer backoff value | | |
| TCPPort | ABBIED600_Rev1_ING_SP_1 | TCP listening port | | |
| MapSel | ABBIED600_Rev1_ING_SP_1 | Mapping selection | | |
| UnitAddr | ABBIED600_Rev1_ING_SP_1 | Slave Address | | |
| StrFrDl | ABBIED600_Rev1_ING_SP_1 | Response start delay for serial clients | | |
| EndFrDl | ABBIED600_Rev1_ING_SP_1 | Message end delay for serial client | | |
| FrRxCnt | ABBIED600_Rev1_INS | Number of received frames | | |
| ChkErrCnt | ABBIED600_Rev1_INS | Number of checksum errors | | |
| FrTxCnt | ABBIED600_Rev1_INS | Number of transmitted frames | | |
| TxExcpCnt1 | ABBIED600_Rev1_INS | Number of transmitted exception responses 01 and | | |

| | | | | |
|---|---|---|---|---|
| | | 02 | | |
| TxExcpCnt2 | ABBIED600_Rev1_INS | Number of transmitted exception responses 03 | | |
| ChLiv | ABBIED600_Rev1_SPS_e | Communication status (True = OK, False = Not connected) | E | IEC 61850-7-4:2007 |
| CommIntnOv | ABBIED600_Rev1_SPS | Internal Overflow indication | | |
| ConnRejSck | ABBIED600_Rev1_INS | Connection rejected due to no socket available | | |
| ConnRejRg | ABBIED600_Rev1_INS | Connection rejected due to unregistered client | | |
| CtlPwd1 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 1 | | |
| CtlPwd2 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 2 | | |
| CtlPwd3 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 3 | | |
| CtlPwd4 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 4 | | |
| CtlPwd5 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 5 | | |
| CtlPwd6 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 6 | | |
| CtlPwd7 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 7 | | |
| CtlPwd8 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 8 | | |
| CommPort | ABBIED600_Rev3_ENG_SP_CommPort_ED2 | Port selection | | |
| LnkMod | ABBIED600_Rev2_ENG_SP_LnkMod | Link mode | | |
| MBWrAuth | ABBIED600_Rev2_ENG_SP_MBWrAuth | Write authority | | |

| | | | | |
|---|---|---|---|---|
| EvtIdSel | ABBIED600_Rev2_ENG_SP_MBSEventID | Event ID selection | | |
| EvtBufMod | ABBIED600_Rev2_ENG_SP_MBEvtBufMod | Event buffering mode | | |
| CRCOrdr | ABBIED600_Rev2_ENG_SP_CRCOrd | CRC order | | |
| TmFrm | ABBIED600_Rev2_ENG_SP_MBSTimeFormat | Time format | | |
| CliIP | ABBIED600_Rev3_VSG_2_20 | Client IP address | | |
| SerPty | ABBIED600_Rev2_ENG_SP_SerPty | Serial parity | | |
| CntRs | ABBIED600_Rev2_SPC_control | Diagnostic counters reset | | status-only,direct-with-normal-security |

### 5.1.21 3.1.21 LN: MBSLPRT2 Name: LPRT (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD_e | Mode | E | IEC 61850-7-4:2007,status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh_e | Behaviour | E | IEC 61850-7-4:2007 |
| NamPlt | ABBIED600_Rev7_LPL_MBS_ED2_e | Name plate | E | IEC 61850-7-4:2007 |
| BufBkOff | ABBIED600_Rev1_ING_SP_1 | Event buffer backoff value | | |
| TCPPort | ABBIED600_Rev1_ING_SP_1 | TCP listening port | | |
| MapSel | ABBIED600_Rev1_ING_SP_1 | Mapping selection | | |
| UnitAddr | ABBIED600_Rev1_ING_SP_1 | Slave Address | | |
| StrFrDl | ABBIED600_Rev1_ING_SP_1 | Response start delay for serial clients | | |
| EndFrDl | ABBIED600_Rev1_ING_SP_1 | Message end delay for serial client | | |
| FrRxCnt | ABBIED600_Rev1_INS | Number of received frames | | |

| | | | | |
|---|---|---|---|---|
| ChkErrCnt | ABBIED600_Rev1_INS | Number of check-sum errors | | |
| FrTxCnt | ABBIED600_Rev1_INS | Number of trans-mitted frames | | |
| TxExcpCnt1 | ABBIED600_Rev1_INS | Number of trans-mitted exception responses 01 and 02 | | |
| TxExcpCnt2 | ABBIED600_Rev1_INS | Number of trans-mitted exception responses 03 | | |
| ChLiv | ABBIED600_Rev1_SPS_e | Communication status (True = OK, False = Not con-nected) | E | IEC 61850-7-4:2007 |
| CommIntnOv | ABBIED600_Rev1_SPS | Internal Overflow indication | | |
| ConnRejSck | ABBIED600_Rev1_INS | Connection reject-ed due to no socket available | | |
| ConnRejRg | ABBIED600_Rev1_INS | Connection reject-ed due to unregis-tered client | | |
| CtlPwd1 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 1 | | |
| CtlPwd2 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 2 | | |
| CtlPwd3 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 3 | | |
| CtlPwd4 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 4 | | |
| CtlPwd5 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 5 | | |
| CtlPwd6 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 6 | | |

| | | | | |
|---|---|---|---|---|
| CtlPwd7 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 7 | | |
| CtlPwd8 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 8 | | |
| CommPort | ABBIED600_Rev3_ENG_SP_CommPort_ED2 | Port selection | | |
| LnkMod | ABBIED600_Rev2_ENG_SP_LnkMod | Link mode | | |
| MBWrAuth | ABBIED600_Rev2_ENG_SP_MBWrAuth | Write authority | | |
| EvtIdSel | ABBIED600_Rev2_ENG_SP_MBSEventID | Event ID selection | | |
| EvtBufMod | ABBIED600_Rev2_ENG_SP_MBEvtBufMod | Event buffering mode | | |
| CRCOrdr | ABBIED600_Rev2_ENG_SP_CRCOrd | CRC order | | |
| TmFrm | ABBIED600_Rev2_ENG_SP_MBSTimeFormat | Time format | | |
| CliIP | ABBIED600_Rev3_VSG_2_20 | Client IP address | | |
| SerPty | ABBIED600_Rev2_ENG_SP_SerPty | Serial parity | | |
| CntRs | ABBIED600_Rev2_SPC_control | Diagnostic counters reset | | status-only,direct-with-normal-security |

### 5.1.22 3.1.22 LN: MBSLPRT3 Name: LPRT (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD_e | Mode | E | IEC 61850-7-4:2007,status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh_e | Behaviour | E | IEC 61850-7-4:2007 |
| NamPlt | ABBIED600_Rev7_LPL_MBS_ED2_e | Name plate | E | IEC 61850-7-4:2007 |
| BufBkOff | ABBIED600_Rev1_ING_SP_1 | Event buffer backoff value | | |
| TCPPort | ABBIED600_Rev1_ING_SP_1 | TCP listening port | | |
| MapSel | ABBIED600_Rev1_ING_SP_1 | Mapping selection | | |
| UnitAddr | ABBIED600_Rev1_ING_SP_1 | Slave Address | | |

| | | | | |
|---|---|---|---|---|
| StrFrDl | ABBIED600_Rev1_ING_SP_1 | Response start delay for serial clients | | |
| EndFrDl | ABBIED600_Rev1_ING_SP_1 | Message end delay for serial client | | |
| FrRxCnt | ABBIED600_Rev1_INS | Number of received frames | | |
| ChkErrCnt | ABBIED600_Rev1_INS | Number of checksum errors | | |
| FrTxCnt | ABBIED600_Rev1_INS | Number of transmitted frames | | |
| TxExcpCnt1 | ABBIED600_Rev1_INS | Number of transmitted exception responses 01 and 02 | | |
| TxExcpCnt2 | ABBIED600_Rev1_INS | Number of transmitted exception responses 03 | | |
| ChLiv | ABBIED600_Rev1_SPS_e | Communication status (True = OK, False = Not connected) | E | IEC 61850-7-4:2007 |
| CommIntnOv | ABBIED600_Rev1_SPS | Internal Overflow indication | | |
| ConnRejSck | ABBIED600_Rev1_INS | Connection rejected due to no socket available | | |
| ConnRejRg | ABBIED600_Rev1_INS | Connection rejected due to unregistered client | | |
| CtlPwd1 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 1 | | |
| CtlPwd2 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 2 | | |
| CtlPwd3 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 3 | | |

| | | | | |
|---|---|---|---|---|
| CtlPwd4 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 4 | | |
| CtlPwd5 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 5 | | |
| CtlPwd6 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 6 | | |
| CtlPwd7 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 7 | | |
| CtlPwd8 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 8 | | |
| CommPort | ABBIED600_Rev3_ENG_SP_CommPort_ED2 | Port selection | | |
| LnkMod | ABBIED600_Rev2_ENG_SP_LnkMod | Link mode | | |
| MBWrAuth | ABBIED600_Rev2_ENG_SP_MBWrAuth | Write authority | | |
| EvtIdSel | ABBIED600_Rev2_ENG_SP_MBSEventID | Event ID selection | | |
| EvtBufMod | ABBIED600_Rev2_ENG_SP_MBEvtBufMod | Event buffering mode | | |
| CRCOrdr | ABBIED600_Rev2_ENG_SP_CRCOrd | CRC order | | |
| TmFrm | ABBIED600_Rev2_ENG_SP_MBSTimeFormat | Time format | | |
| CliIP | ABBIED600_Rev3_VSG_2_20 | Client IP address | | |
| SerPty | ABBIED600_Rev2_ENG_SP_SerPty | Serial parity | | |
| CntRs | ABBIED600_Rev2_SPC_control | Diagnostic counters reset | | status-only,direct-with-normal-security |

### 5.1.23 3.1.23 LN: MBSLPRT4 Name: LPRT (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD_e | Mode | E | IEC 61850-7-4:2007,status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh_e | Behaviour | E | IEC 61850-7-4:2007 |
| NamPlt | ABBIED600_Rev7_LPL_MBS_ED2_e | Name plate | E | IEC 61850-7- |

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|---|---|---|---|---|
| | | | | 4:2007 |
| BufBkOff | ABBIED600_Rev1_ING_SP_1 | Event buffer backoff value | | |
| TCPPort | ABBIED600_Rev1_ING_SP_1 | TCP listening port | | |
| MapSel | ABBIED600_Rev1_ING_SP_1 | Mapping selection | | |
| UnitAddr | ABBIED600_Rev1_ING_SP_1 | Slave Address | | |
| StrFrDl | ABBIED600_Rev1_ING_SP_1 | Response start delay for serial clients | | |
| EndFrDl | ABBIED600_Rev1_ING_SP_1 | Message end delay for serial client | | |
| FrRxCnt | ABBIED600_Rev1_INS | Number of received frames | | |
| ChkErrCnt | ABBIED600_Rev1_INS | Number of checksum errors | | |
| FrTxCnt | ABBIED600_Rev1_INS | Number of transmitted frames | | |
| TxExcpCnt1 | ABBIED600_Rev1_INS | Number of transmitted exception responses 01 and 02 | | |
| TxExcpCnt2 | ABBIED600_Rev1_INS | Number of transmitted exception responses 03 | | |
| ChLiv | ABBIED600_Rev1_SPS_e | Communication status (True = OK, False = Not connected) | E | IEC 61850-7-4:2007 |
| CommIntnOv | ABBIED600_Rev1_SPS | Internal Overflow indication | | |
| ConnRejSck | ABBIED600_Rev1_INS | Connection rejected due to no socket available | | |
| ConnRejRg | ABBIED600_Rev1_INS | Connection rejected due to unregis- | | |

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|---|---|---|---|---|
| | | tered client | | |
| CtlPwd1 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 1 | | |
| CtlPwd2 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 2 | | |
| CtlPwd3 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 3 | | |
| CtlPwd4 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 4 | | |
| CtlPwd5 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 5 | | |
| CtlPwd6 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 6 | | |
| CtlPwd7 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 7 | | |
| CtlPwd8 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 8 | | |
| CommPort | ABBIED600_Rev3_ENG_SP_CommPort_ED2 | Port selection | | |
| LnkMod | ABBIED600_Rev2_ENG_SP_LnkMod | Link mode | | |
| MBWrAuth | ABBIED600_Rev2_ENG_SP_MBWrAuth | Write authority | | |
| EvtIdSel | ABBIED600_Rev2_ENG_SP_MBSEventID | Event ID selection | | |
| EvtBufMod | ABBIED600_Rev2_ENG_SP_MBEvtBufMod | Event buffering mode | | |
| CRCOrdr | ABBIED600_Rev2_ENG_SP_CRCOrd | CRC order | | |
| TmFrm | ABBIED600_Rev2_ENG_SP_MBSTimeFormat | Time format | | |
| CliIP | ABBIED600_Rev3_VSG_2_20 | Client IP address | | |
| SerPty | ABBIED600_Rev2_ENG_SP_SerPty | Serial parity | | |
| CntRs | ABBIED600_Rev2_SPC_control | Diagnostic counters reset | | status-only,direct-with-normal-security |

### 5.1.24 3.1.24 LN: MBSLPRT5 Name: LPRT (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|

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|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD_e | Mode | E | IEC 61850-7-4:2007,status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh_e | Behaviour | E | IEC 61850-7-4:2007 |
| NamPlt | ABBIED600_Rev7_LPL_MBS_ED2_e | Name plate | E | IEC 61850-7-4:2007 |
| BufBkOff | ABBIED600_Rev1_ING_SP_1 | Event buffer backoff value | | |
| TCPPort | ABBIED600_Rev1_ING_SP_1 | TCP listening port | | |
| MapSel | ABBIED600_Rev1_ING_SP_1 | Mapping selection | | |
| UnitAddr | ABBIED600_Rev1_ING_SP_1 | Slave Address | | |
| StrFrDl | ABBIED600_Rev1_ING_SP_1 | Response start delay for serial clients | | |
| EndFrDl | ABBIED600_Rev1_ING_SP_1 | Message end delay for serial client | | |
| FrRxCnt | ABBIED600_Rev1_INS | Number of received frames | | |
| ChkErrCnt | ABBIED600_Rev1_INS | Number of checksum errors | | |
| FrTxCnt | ABBIED600_Rev1_INS | Number of transmitted frames | | |
| TxExcpCnt1 | ABBIED600_Rev1_INS | Number of transmitted exception responses 01 and 02 | | |
| TxExcpCnt2 | ABBIED600_Rev1_INS | Number of transmitted exception responses 03 | | |
| ChLiv | ABBIED600_Rev1_SPS_e | Communication status (True = OK, False = Not connected) | E | IEC 61850-7-4:2007 |

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|---|---|---|---|---|
| CommIntnOv | ABBIED600_Rev1_SPS | Internal Overflow indication | | |
| ConnRejSck | ABBIED600_Rev1_INS | Connection rejected due to no socket available | | |
| ConnRejRg | ABBIED600_Rev1_INS | Connection rejected due to unregistered client | | |
| CtlPwd1 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 1 | | |
| CtlPwd2 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 2 | | |
| CtlPwd3 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 3 | | |
| CtlPwd4 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 4 | | |
| CtlPwd5 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 5 | | |
| CtlPwd6 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 6 | | |
| CtlPwd7 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 7 | | |
| CtlPwd8 | ABBIED600_Rev3_VSG_2_20 | Control Struct Password 8 | | |
| CommPort | ABBIED600_Rev3_ENG_SP_CommPort_ED2 | Port selection | | |
| LnkMod | ABBIED600_Rev2_ENG_SP_LnkMod | Link mode | | |
| MBWrAuth | ABBIED600_Rev2_ENG_SP_MBWrAuth | Write authority | | |
| EvtIdSel | ABBIED600_Rev2_ENG_SP_MBSEventID | Event ID selection | | |
| EvtBufMod | ABBIED600_Rev2_ENG_SP_MBEvtBufMod | Event buffering mode | | |
| CRCOrdr | ABBIED600_Rev2_ENG_SP_CRCOrd | CRC order | | |
| TmFrm | ABBIED600_Rev2_ENG_SP_MBSTimeFormat | Time format | | |
| CliIP | ABBIED600_Rev3_VSG_2_20 | Client IP address | | |
| SerPty | ABBIED600_Rev2_ENG_SP_SerPty | Serial parity | | |

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|---|---|---|---|---|
| CntRs | ABBIED600_Rev2_SPC_control | Diagnostic counters reset | | status-only,direct-with-normal-security |

### 5.1.25 3.1.25 LN: DNPLPRT1 Name: LPRT (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD_e | Mode | E | IEC 61850-7-4:2007,status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh_e | Behaviour | E | IEC 61850-7-4:2007 |
| NamPlt | ABBIED600_Rev1_LPL_lnNs_1_e | Name plate | E | IEC 61850-7-4:2007 |
| CommPort | ABBIED600_Rev3_ENG_SP_CommPort_ED2 | Port selection | | |
| UnitAddr | ABBIED600_Rev1_ING_SP_1 | Unit address | | |
| MstrAddr | ABBIED600_Rev1_ING_SP_1 | Master address | | |
| MapSel | ABBIED600_Rev1_ING_SP_1 | Mapping selection | | |
| SynIntvTmm | ABBIED600_Rev1_ING_SP_1 | Need time interval | | |
| TmFrm | ABBIED600_Rev2_ENG_SP_MBSTimeFormat | Time format | | |
| CROBSelTms | ABBIED600_Rev1_ING_SP_1 | CROB select timeout | | |
| LnkCnf | ABBIED600_Rev2_ENG_SP_DataLinkConfirm | Data link confirm | | |
| LnkCnfTmms | ABBIED600_Rev1_ING_SP_1 | Data link confirm TO | | |
| LnkReLim | ABBIED600_Rev1_ING_SP_1 | Data link retries | | |
| RxTxDlTmms | ABBIED600_Rev1_ING_SP_1 | Data link Rx to Tx delay | | |
| CharDl | ABBIED600_Rev1_ING_SP_1 | Data link inter char delay | | |
| AplLayCnf | ABBIED600_Rev2_ENG_SP_Enable | App layer confirm | | |

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|---|---|---|---|---|
| AplCnfTmms | ABBIED600_Rev1_ING_SP_1 | App confirm TO | | |
| AplLayFrg | ABBIED600_Rev1_ING_SP_1 | App layer fragment | | |
| URMod | ABBIED600_Rev2_ENG_SP_Enable | UR mode | | |
| URRe | ABBIED600_Rev1_ING_SP_1 | UR retries | | |
| URReTmms | ABBIED600_Rev1_ING_SP_1 | UR TO | | |
| UROfTm | ABBIED600_Rev4_ING_SP_Unit | UR offline interval | | |
| URCla1 | ABBIED600_Rev1_ING_SP_1 | UR Class 1 Min events | | |
| URCla1Tmms | ABBIED600_Rev1_ING_SP_1 | UR Class 1 TO | | |
| URCla2 | ABBIED600_Rev1_ING_SP_1 | UR Class 2 Min events | | |
| URCla2Tmms | ABBIED600_Rev1_ING_SP_1 | UR Class 2 TO | | |
| URCla3 | ABBIED600_Rev1_ING_SP_1 | UR Class 3 Min events | | |
| URCla3Tmms | ABBIED600_Rev1_ING_SP_1 | UR Class 3 TO | | |
| URLgcyMod | ABBIED600_Rev2_ENG_SP_Enable | Legacy master UR | | |
| SBOLgcyMod | ABBIED600_Rev2_ENG_SP_Enable | Legacy master SBO | | |
| DftVa1 | ABBIED600_Rev1_ENG_SP_DNPDefVari01 | Default Var Obj 01 | | |
| DftVa2 | ABBIED600_Rev1_ENG_SP_DNPDefVari02 | Default Var Obj 02 | | |
| DftVa3 | ABBIED600_Rev1_ENG_SP_DNPDefVari03 | Default Var Obj 03 | | |
| DftVa4 | ABBIED600_Rev1_ENG_SP_DNPDefVari04 | Default Var Obj 04 | | |
| DftVa20 | ABBIED600_Rev1_ENG_SP_DNPDefVari20 | Default Var Obj 20 | | |
| DftVa21 | ABBIED600_Rev2_ENG_SP_DNPDefVari21 | Default Var Obj 21 | | |

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|---|---|---|---|---|
| DftVa22 | ABBIED600_Rev1_ENG_SP_DNPDefVari22 | Default Var Obj 22 | | |
| DftVa23 | ABBIED600_Rev1_ENG_SP_DNPDefVari23 | Default Var Obj 23 | | |
| DftVa30 | ABBIED600_Rev1_ENG_SP_DNPDefVari30 | Default Var Obj 30 | | |
| DftVa32 | ABBIED600_Rev1_ENG_SP_DNPDefVari32 | Default Var Obj 32 | | |
| DftVa40 | ABBIED600_Rev1_ENG_SP_DNPDefVari40 | Default Var Obj 40 | | |
| DftVa42 | ABBIED600_Rev1_ENG_SP_DNPDefVari42 | Default Var Obj 42 | | |
| VldAddr | ABBIED600_Rev2_ENG_SP_Enable | Validate Master Addr | | |
| SelfAddr | ABBIED600_Rev2_ENG_SP_Enable | Self Address Support | | |
| ChLivTms | ABBIED600_Rev1_ING_SP_1_e | Link keep-alive TO | E | IEC 61850-7-4:2007 |
| TCPAuth | ABBIED600_Rev1_ENG_SP_TCPAuth | TCP control authority | | |
| TCPPort | ABBIED600_Rev1_ING_SP_1 | TCP port | | |
| ChLiv | ABBIED600_Rev1_SPS_e | Status | E | IEC 61850-7-4:2007 |
| CommIntnOv | ABBIED600_Rev1_SPS | Internal Overflow | | |
| IntnOvCnt | ABBIED600_Rev1_INS | Internal Overflow Counter | | |
| FrRxCnt | ABBIED600_Rev1_INS | Received frames | | |
| FrTxCnt | ABBIED600_Rev1_INS | Transmitted frames | | |
| LnkErrCnt | ABBIED600_Rev1_INS | Link errors | | |
| PhyErrCnt | ABBIED600_Rev1_INS | Physical errors | | |
| TranErrCnt | ABBIED600_Rev1_INS | Transport errors | | |

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|---|---|---|---|---|
| MapErrCnt | ABBIED600_Rev1_INS | Mapping errors | | |
| CliIP | ABBIED600_Rev3_VSG_2_20 | Client IP address | | |
| CntRs | ABBIED600_Rev2_SPC_control | Diagnostic counters reset | | status-only,direct-with-normal-security |
| LnkFrLen | ABBIED600_Rev1_ING_SP_1 | Data link layer maximum frame length | | |

### 5.1.26 3.1.26 LN: DNPLPRT2 Name: LPRT (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD_e | Mode | E | IEC 61850-7-4:2007,status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh_e | Behaviour | E | IEC 61850-7-4:2007 |
| NamPlt | ABBIED600_Rev1_LPL_lnNs_1_e | Name plate | E | IEC 61850-7-4:2007 |
| CommPort | ABBIED600_Rev3_ENG_SP_CommPort_ED2 | Port selection | | |
| UnitAddr | ABBIED600_Rev1_ING_SP_1 | Unit address | | |
| MstrAddr | ABBIED600_Rev1_ING_SP_1 | Master address | | |
| MapSel | ABBIED600_Rev1_ING_SP_1 | Mapping selection | | |
| SynIntvTmm | ABBIED600_Rev1_ING_SP_1 | Need time interval | | |
| TmFrm | ABBIED600_Rev2_ENG_SP_MBSTimeFormat | Time format | | |
| CROBSelTms | ABBIED600_Rev1_ING_SP_1 | CROB select timeout | | |
| LnkCnf | ABBIED600_Rev2_ENG_SP_DataLinkConfirm | Data link confirm | | |
| LnkCnfTmms | ABBIED600_Rev1_ING_SP_1 | Data link confirm TO | | |
| LnkReLim | ABBIED600_Rev1_ING_SP_1 | Data link retries | | |

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|---|---|---|---|---|
| RxTxDlTmms | ABBIED600_Rev1_ING_SP_1 | Data link Rx to Tx delay | | |
| CharDl | ABBIED600_Rev1_ING_SP_1 | Data link inter char delay | | |
| AplLayCnf | ABBIED600_Rev2_ENG_SP_Enable | App layer confirm | | |
| AplCnfTmms | ABBIED600_Rev1_ING_SP_1 | App confirm TO | | |
| AplLayFrg | ABBIED600_Rev1_ING_SP_1 | App layer fragment | | |
| URMod | ABBIED600_Rev2_ENG_SP_Enable | UR mode | | |
| URRe | ABBIED600_Rev1_ING_SP_1 | UR retries | | |
| URReTmms | ABBIED600_Rev1_ING_SP_1 | UR TO | | |
| UROfTm | ABBIED600_Rev4_ING_SP_Unit | UR offline interval | | |
| URCla1 | ABBIED600_Rev1_ING_SP_1 | UR Class 1 Min events | | |
| URCla1Tmms | ABBIED600_Rev1_ING_SP_1 | UR Class 1 TO | | |
| URCla2 | ABBIED600_Rev1_ING_SP_1 | UR Class 2 Min events | | |
| URCla2Tmms | ABBIED600_Rev1_ING_SP_1 | UR Class 2 TO | | |
| URCla3 | ABBIED600_Rev1_ING_SP_1 | UR Class 3 Min events | | |
| URCla3Tmms | ABBIED600_Rev1_ING_SP_1 | UR Class 3 TO | | |
| URLgcyMod | ABBIED600_Rev2_ENG_SP_Enable | Legacy master UR | | |
| SBOLgcyMod | ABBIED600_Rev2_ENG_SP_Enable | Legacy master SBO | | |
| DftVa1 | ABBIED600_Rev1_ENG_SP_DNPDefVari01 | Default Var Obj 01 | | |
| DftVa2 | ABBIED600_Rev1_ENG_SP_DNPDefVari02 | Default Var Obj 02 | | |
| DftVa3 | ABBIED600_Rev1_ENG_SP_DNPDefVari03 | Default Var Obj 03 | | |

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|---|---|---|---|---|
| DftVa4 | ABBIED600_Rev1_ENG_SP_DNPDefVari04 | Default Var Obj 04 | | |
| DftVa20 | ABBIED600_Rev1_ENG_SP_DNPDefVari20 | Default Var Obj 20 | | |
| DftVa21 | ABBIED600_Rev2_ENG_SP_DNPDefVari21 | Default Var Obj 21 | | |
| DftVa22 | ABBIED600_Rev1_ENG_SP_DNPDefVari22 | Default Var Obj 22 | | |
| DftVa23 | ABBIED600_Rev1_ENG_SP_DNPDefVari23 | Default Var Obj 23 | | |
| DftVa30 | ABBIED600_Rev1_ENG_SP_DNPDefVari30 | Default Var Obj 30 | | |
| DftVa32 | ABBIED600_Rev1_ENG_SP_DNPDefVari32 | Default Var Obj 32 | | |
| DftVa40 | ABBIED600_Rev1_ENG_SP_DNPDefVari40 | Default Var Obj 40 | | |
| DftVa42 | ABBIED600_Rev1_ENG_SP_DNPDefVari42 | Default Var Obj 42 | | |
| VldAddr | ABBIED600_Rev2_ENG_SP_Enable | Validate Master Addr | | |
| SelfAddr | ABBIED600_Rev2_ENG_SP_Enable | Self Address Support | | |
| ChLivTms | ABBIED600_Rev1_ING_SP_1_e | Link keep-alive TO | E | IEC 61850-7-4:2007 |
| TCPAuth | ABBIED600_Rev1_ENG_SP_TCPAuth | TCP control au-thority | | |
| TCPPort | ABBIED600_Rev1_ING_SP_1 | TCP port | | |
| ChLiv | ABBIED600_Rev1_SPS_e | Status | E | IEC 61850-7-4:2007 |
| FrRxCnt | ABBIED600_Rev1_INS | Received frames | | |
| FrTxCnt | ABBIED600_Rev1_INS | Transmitted frames | | |
| LnkErrCnt | ABBIED600_Rev1_INS | Link errors | | |
| PhyErrCnt | ABBIED600_Rev1_INS | Physical errors | | |

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|---|---|---|---|---|
| TranErrCnt | ABBIED600_Rev1_INS | Transport errors | | |
| MapErrCnt | ABBIED600_Rev1_INS | Mapping errors | | |
| CliIP | ABBIED600_Rev3_VSG_2_20 | Client IP address | | |
| CntRs | ABBIED600_Rev2_SPC_control | Diagnostic counters reset | | status-only,direct-with-normal-security |
| LnkFrLen | ABBIED600_Rev1_ING_SP_1 | Data link layer maximum frame length | | |

### 5.1.27 3.1.27 LN: DNPLPRT3 Name: LPRT (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD_e | Mode | E | IEC 61850-7-4:2007,status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh_e | Behaviour | E | IEC 61850-7-4:2007 |
| NamPlt | ABBIED600_Rev1_LPL_lnNs_1_e | Name plate | E | IEC 61850-7-4:2007 |
| CommPort | ABBIED600_Rev3_ENG_SP_CommPort_ED2 | Port selection | | |
| UnitAddr | ABBIED600_Rev1_ING_SP_1 | Unit address | | |
| MstrAddr | ABBIED600_Rev1_ING_SP_1 | Master address | | |
| MapSel | ABBIED600_Rev1_ING_SP_1 | Mapping selection | | |
| SynIntvTmm | ABBIED600_Rev1_ING_SP_1 | Need time interval | | |
| TmFrm | ABBIED600_Rev2_ENG_SP_MBSTimeFormat | Time format | | |
| CROBSelTms | ABBIED600_Rev1_ING_SP_1 | CROB select timeout | | |
| LnkCnf | ABBIED600_Rev2_ENG_SP_DataLinkConfirm | Data link confirm | | |
| LnkCnfTmms | ABBIED600_Rev1_ING_SP_1 | Data link confirm TO | | |

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|---|---|---|---|---|
| LnkReLim | ABBIED600_Rev1_ING_SP_1 | Data link re-tries | | |
| RxTxDlTmms | ABBIED600_Rev1_ING_SP_1 | Data link Rx to Tx delay | | |
| CharDl | ABBIED600_Rev1_ING_SP_1 | Data link inter char delay | | |
| AplLayCnf | ABBIED600_Rev2_ENG_SP_Enable | App layer con-firm | | |
| AplCnfTmms | ABBIED600_Rev1_ING_SP_1 | App confirm TO | | |
| AplLayFrg | ABBIED600_Rev1_ING_SP_1 | App layer fragment | | |
| URMod | ABBIED600_Rev2_ENG_SP_Enable | UR mode | | |
| URRe | ABBIED600_Rev1_ING_SP_1 | UR retries | | |
| URReTmms | ABBIED600_Rev1_ING_SP_1 | UR TO | | |
| UROfTm | ABBIED600_Rev4_ING_SP_Unit | UR offline in-terval | | |
| URCla1 | ABBIED600_Rev1_ING_SP_1 | UR Class 1 Min events | | |
| URCla1Tmms | ABBIED600_Rev1_ING_SP_1 | UR Class 1 TO | | |
| URCla2 | ABBIED600_Rev1_ING_SP_1 | UR Class 2 Min events | | |
| URCla2Tmms | ABBIED600_Rev1_ING_SP_1 | UR Class 2 TO | | |
| URCla3 | ABBIED600_Rev1_ING_SP_1 | UR Class 3 Min events | | |
| URCla3Tmms | ABBIED600_Rev1_ING_SP_1 | UR Class 3 TO | | |
| URLgcyMod | ABBIED600_Rev2_ENG_SP_Enable | Legacy master UR | | |
| SBOLgcyMod | ABBIED600_Rev2_ENG_SP_Enable | Legacy master SBO | | |
| DftVa1 | ABBIED600_Rev1_ENG_SP_DNPDefVari01 | Default Var Obj 01 | | |
| DftVa2 | ABBIED600_Rev1_ENG_SP_DNPDefVari02 | Default Var Obj 02 | | |

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|---|---|---|---|---|
| DftVa3 | ABBIED600_Rev1_ENG_SP_DNPDefVari03 | Default Var Obj 03 | | |
| DftVa4 | ABBIED600_Rev1_ENG_SP_DNPDefVari04 | Default Var Obj 04 | | |
| DftVa20 | ABBIED600_Rev1_ENG_SP_DNPDefVari20 | Default Var Obj 20 | | |
| DftVa21 | ABBIED600_Rev2_ENG_SP_DNPDefVari21 | Default Var Obj 21 | | |
| DftVa22 | ABBIED600_Rev1_ENG_SP_DNPDefVari22 | Default Var Obj 22 | | |
| DftVa23 | ABBIED600_Rev1_ENG_SP_DNPDefVari23 | Default Var Obj 23 | | |
| DftVa30 | ABBIED600_Rev1_ENG_SP_DNPDefVari30 | Default Var Obj 30 | | |
| DftVa32 | ABBIED600_Rev1_ENG_SP_DNPDefVari32 | Default Var Obj 32 | | |
| DftVa40 | ABBIED600_Rev1_ENG_SP_DNPDefVari40 | Default Var Obj 40 | | |
| DftVa42 | ABBIED600_Rev1_ENG_SP_DNPDefVari42 | Default Var Obj 42 | | |
| VldAddr | ABBIED600_Rev2_ENG_SP_Enable | Validate Master Addr | | |
| SelfAddr | ABBIED600_Rev2_ENG_SP_Enable | Self Address Support | | |
| ChLivTms | ABBIED600_Rev1_ING_SP_1_e | Link keep-alive TO | E | IEC 61850-7-4:2007 |
| TCPAuth | ABBIED600_Rev1_ENG_SP_TCPAuth | TCP control authority | | |
| TCPPort | ABBIED600_Rev1_ING_SP_1 | TCP port | | |
| ChLiv | ABBIED600_Rev1_SPS_e | Status | E | IEC 61850-7-4:2007 |
| FrRxCnt | ABBIED600_Rev1_INS | Received frames | | |
| FrTxCnt | ABBIED600_Rev1_INS | Transmitted frames | | |

| | | | | |
|---|---|---|---|---|
| LnkErrCnt | ABBIED600_Rev1_INS | Link errors | | |
| PhyErrCnt | ABBIED600_Rev1_INS | Physical errors | | |
| TranErrCnt | ABBIED600_Rev1_INS | Transport errors | | |
| MapErrCnt | ABBIED600_Rev1_INS | Mapping errors | | |
| CliIP | ABBIED600_Rev3_VSG_2_20 | Client IP address | | |
| CntRs | ABBIED600_Rev2_SPC_control | Diagnostic counters reset | | status-only,direct-with-normal-security |
| LnkFrLen | ABBIED600_Rev1_ING_SP_1 | Data link layer maximum frame length | | |

### 5.1.28 3.1.28 LN: DNPLPRT4 Name: LPRT (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD_e | Mode | E | IEC 61850-7-4:2007,status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh_e | Behaviour | E | IEC 61850-7-4:2007 |
| NamPlt | ABBIED600_Rev1_LPL_lnNs_1_e | Name plate | E | IEC 61850-7-4:2007 |
| CommPort | ABBIED600_Rev3_ENG_SP_CommPort_ED2 | Port selection | | |
| UnitAddr | ABBIED600_Rev1_ING_SP_1 | Unit address | | |
| MstrAddr | ABBIED600_Rev1_ING_SP_1 | Master address | | |
| MapSel | ABBIED600_Rev1_ING_SP_1 | Mapping selection | | |
| SynIntvTmm | ABBIED600_Rev1_ING_SP_1 | Need time interval | | |
| TmFrm | ABBIED600_Rev2_ENG_SP_MBSTimeFormat | Time format | | |
| CROBSelTms | ABBIED600_Rev1_ING_SP_1 | CROB select timeout | | |
| LnkCnf | ABBIED600_Rev2_ENG_SP_DataLinkConfirm | Data link con- | | |

| | | | | |
|---|---|---|---|---|
| | | firm | | |
| LnkCnfTmms | ABBIED600_Rev1_ING_SP_1 | Data link confirm TO | | |
| LnkReLim | ABBIED600_Rev1_ING_SP_1 | Data link retries | | |
| RxTxDlTmms | ABBIED600_Rev1_ING_SP_1 | Data link Rx to Tx delay | | |
| CharDl | ABBIED600_Rev1_ING_SP_1 | Data link inter char delay | | |
| AplLayCnf | ABBIED600_Rev2_ENG_SP_Enable | App layer confirm | | |
| AplCnfTmms | ABBIED600_Rev1_ING_SP_1 | App confirm TO | | |
| AplLayFrg | ABBIED600_Rev1_ING_SP_1 | App layer fragment | | |
| URMod | ABBIED600_Rev2_ENG_SP_Enable | UR mode | | |
| URRe | ABBIED600_Rev1_ING_SP_1 | UR retries | | |
| URReTmms | ABBIED600_Rev1_ING_SP_1 | UR TO | | |
| UROfTm | ABBIED600_Rev4_ING_SP_Unit | UR offline interval | | |
| URCla1 | ABBIED600_Rev1_ING_SP_1 | UR Class 1 Min events | | |
| URCla1Tmms | ABBIED600_Rev1_ING_SP_1 | UR Class 1 TO | | |
| URCla2 | ABBIED600_Rev1_ING_SP_1 | UR Class 2 Min events | | |
| URCla2Tmms | ABBIED600_Rev1_ING_SP_1 | UR Class 2 TO | | |
| URCla3 | ABBIED600_Rev1_ING_SP_1 | UR Class 3 Min events | | |
| URCla3Tmms | ABBIED600_Rev1_ING_SP_1 | UR Class 3 TO | | |
| URLgcyMod | ABBIED600_Rev2_ENG_SP_Enable | Legacy master UR | | |
| SBOLgcyMod | ABBIED600_Rev2_ENG_SP_Enable | Legacy master SBO | | |
| DftVa1 | ABBIED600_Rev1_ENG_SP_DNPDefVari01 | Default Var Obj | | |

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|---|---|---|---|---|
| | | 01 | | |
| DftVa2 | ABBIED600_Rev1_ENG_SP_DNPDefVari02 | Default Var Obj 02 | | |
| DftVa3 | ABBIED600_Rev1_ENG_SP_DNPDefVari03 | Default Var Obj 03 | | |
| DftVa4 | ABBIED600_Rev1_ENG_SP_DNPDefVari04 | Default Var Obj 04 | | |
| DftVa20 | ABBIED600_Rev1_ENG_SP_DNPDefVari20 | Default Var Obj 20 | | |
| DftVa21 | ABBIED600_Rev2_ENG_SP_DNPDefVari21 | Default Var Obj 21 | | |
| DftVa22 | ABBIED600_Rev1_ENG_SP_DNPDefVari22 | Default Var Obj 22 | | |
| DftVa23 | ABBIED600_Rev1_ENG_SP_DNPDefVari23 | Default Var Obj 23 | | |
| DftVa30 | ABBIED600_Rev1_ENG_SP_DNPDefVari30 | Default Var Obj 30 | | |
| DftVa32 | ABBIED600_Rev1_ENG_SP_DNPDefVari32 | Default Var Obj 32 | | |
| DftVa40 | ABBIED600_Rev1_ENG_SP_DNPDefVari40 | Default Var Obj 40 | | |
| DftVa42 | ABBIED600_Rev1_ENG_SP_DNPDefVari42 | Default Var Obj 42 | | |
| VldAddr | ABBIED600_Rev2_ENG_SP_Enable | Validate Master Addr | | |
| SelfAddr | ABBIED600_Rev2_ENG_SP_Enable | Self Address Support | | |
| ChLivTms | ABBIED600_Rev1_ING_SP_1_e | Link keep-alive TO | E | IEC 61850-7-4:2007 |
| TCPAuth | ABBIED600_Rev1_ENG_SP_TCPAuth | TCP control au-thority | | |
| TCPPort | ABBIED600_Rev1_ING_SP_1 | TCP port | | |
| ChLiv | ABBIED600_Rev1_SPS_e | Status | E | IEC 61850-7-4:2007 |
| FrRxCnt | ABBIED600_Rev1_INS | Received | | |

| | | | | |
|---|---|---|---|---|
| | | frames | | |
| FrTxCnt | ABBIED600_Rev1_INS | Transmitted frames | | |
| LnkErrCnt | ABBIED600_Rev1_INS | Link errors | | |
| PhyErrCnt | ABBIED600_Rev1_INS | Physical errors | | |
| TranErrCnt | ABBIED600_Rev1_INS | Transport errors | | |
| MapErrCnt | ABBIED600_Rev1_INS | Mapping errors | | |
| CliIP | ABBIED600_Rev3_VSG_2_20 | Client IP address | | |
| CntRs | ABBIED600_Rev2_SPC_control | Diagnostic counters reset | | status-only,direct-with-normal-security |
| LnkFrLen | ABBIED600_Rev1_ING_SP_1 | Data link layer maximum frame length | | |

### 5.1.29 3.1.29 LN: DNPLPRT5 Name: LPRT (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD_e | Mode | E | IEC 61850-7-4:2007,status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh_e | Behaviour | E | IEC 61850-7-4:2007 |
| NamPlt | ABBIED600_Rev1_LPL_lnNs_1_e | Name plate | E | IEC 61850-7-4:2007 |
| CommPort | ABBIED600_Rev3_ENG_SP_CommPort_ED2 | Port selection | | |
| UnitAddr | ABBIED600_Rev1_ING_SP_1 | Unit address | | |
| MstrAddr | ABBIED600_Rev1_ING_SP_1 | Master address | | |
| MapSel | ABBIED600_Rev1_ING_SP_1 | Mapping selection | | |
| SynIntvTmm | ABBIED600_Rev1_ING_SP_1 | Need time interval | | |
| TmFrm | ABBIED600_Rev2_ENG_SP_MBSTimeFormat | Time format | | |

| | | | | |
|---|---|---|---|---|
| CROBSelTms | ABBIED600_Rev1_ING_SP_1 | CROB select timeout | | |
| LnkCnf | ABBIED600_Rev2_ENG_SP_DataLinkConfirm | Data link confirm | | |
| LnkCnfTmms | ABBIED600_Rev1_ING_SP_1 | Data link confirm TO | | |
| LnkReLim | ABBIED600_Rev1_ING_SP_1 | Data link retries | | |
| RxTxDlTmms | ABBIED600_Rev1_ING_SP_1 | Data link Rx to Tx delay | | |
| CharDl | ABBIED600_Rev1_ING_SP_1 | Data link inter char delay | | |
| AplLayCnf | ABBIED600_Rev2_ENG_SP_Enable | App layer confirm | | |
| AplCnfTmms | ABBIED600_Rev1_ING_SP_1 | App confirm TO | | |
| AplLayFrg | ABBIED600_Rev1_ING_SP_1 | App layer fragment | | |
| URMod | ABBIED600_Rev2_ENG_SP_Enable | UR mode | | |
| URRe | ABBIED600_Rev1_ING_SP_1 | UR retries | | |
| URReTmms | ABBIED600_Rev1_ING_SP_1 | UR TO | | |
| UROfTm | ABBIED600_Rev4_ING_SP_Unit | UR offline interval | | |
| URCla1 | ABBIED600_Rev1_ING_SP_1 | UR Class 1 Min events | | |
| URCla1Tmms | ABBIED600_Rev1_ING_SP_1 | UR Class 1 TO | | |
| URCla2 | ABBIED600_Rev1_ING_SP_1 | UR Class 2 Min events | | |
| URCla2Tmms | ABBIED600_Rev1_ING_SP_1 | UR Class 2 TO | | |
| URCla3 | ABBIED600_Rev1_ING_SP_1 | UR Class 3 Min events | | |
| URCla3Tmms | ABBIED600_Rev1_ING_SP_1 | UR Class 3 TO | | |
| URLgcyMod | ABBIED600_Rev2_ENG_SP_Enable | Legacy master UR | | |

| | | | | |
|---|---|---|---|---|
| SBOLgcyMod | ABBIED600_Rev2_ENG_SP_Enable | Legacy master SBO | | |
| DftVa1 | ABBIED600_Rev1_ENG_SP_DNPDefVari01 | Default Var Obj 01 | | |
| DftVa2 | ABBIED600_Rev1_ENG_SP_DNPDefVari02 | Default Var Obj 02 | | |
| DftVa3 | ABBIED600_Rev1_ENG_SP_DNPDefVari03 | Default Var Obj 03 | | |
| DftVa4 | ABBIED600_Rev1_ENG_SP_DNPDefVari04 | Default Var Obj 04 | | |
| DftVa20 | ABBIED600_Rev1_ENG_SP_DNPDefVari20 | Default Var Obj 20 | | |
| DftVa21 | ABBIED600_Rev2_ENG_SP_DNPDefVari21 | Default Var Obj 21 | | |
| DftVa22 | ABBIED600_Rev1_ENG_SP_DNPDefVari22 | Default Var Obj 22 | | |
| DftVa23 | ABBIED600_Rev1_ENG_SP_DNPDefVari23 | Default Var Obj 23 | | |
| DftVa30 | ABBIED600_Rev1_ENG_SP_DNPDefVari30 | Default Var Obj 30 | | |
| DftVa32 | ABBIED600_Rev1_ENG_SP_DNPDefVari32 | Default Var Obj 32 | | |
| DftVa40 | ABBIED600_Rev1_ENG_SP_DNPDefVari40 | Default Var Obj 40 | | |
| DftVa42 | ABBIED600_Rev1_ENG_SP_DNPDefVari42 | Default Var Obj 42 | | |
| VldAddr | ABBIED600_Rev2_ENG_SP_Enable | Validate Master Addr | | |
| SelfAddr | ABBIED600_Rev2_ENG_SP_Enable | Self Address Support | | |
| ChLivTms | ABBIED600_Rev1_ING_SP_1_e | Link keep-alive TO | E | IEC 61850-7-4:2007 |
| TCPAuth | ABBIED600_Rev1_ENG_SP_TCPAuth | TCP control authority | | |
| TCPPort | ABBIED600_Rev1_ING_SP_1 | TCP port | | |

| | | | | |
|---|---|---|---|---|
| ChLiv | ABBIED600_Rev1_SPS_e | Status | E | IEC 61850-7-4:2007 |
| FrRxCnt | ABBIED600_Rev1_INS | Received frames | | |
| FrTxCnt | ABBIED600_Rev1_INS | Transmitted frames | | |
| LnkErrCnt | ABBIED600_Rev1_INS | Link errors | | |
| PhyErrCnt | ABBIED600_Rev1_INS | Physical errors | | |
| TranErrCnt | ABBIED600_Rev1_INS | Transport errors | | |
| MapErrCnt | ABBIED600_Rev1_INS | Mapping errors | | |
| CliIPAddr | ABBIED600_Rev3_VSG_2_20 | Client IP address | | |
| CntRs | ABBIED600_Rev2_SPC_control | Diagnostic counters reset | | status-only,direct-with-normal-security |
| LnkFrLen | ABBIED600_Rev1_ING_SP_1 | Data link layer maximum frame length | | |

### 5.1.30 3.1.30 LN: I5CLPRT1 Name: LPRT (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD_e | Mode | E | IEC 61850-7-4:2007,status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh_e | Behaviour | E | IEC 61850-7-4:2007 |
| NamPlt | ABBIED600_Rev1_LPL_lnNs_1_e | Name plate | E | IEC 61850-7-4:2007 |
| CommIntnOv | ABBIED600_Rev1_SPS | Internal Overflow | | |
| CommPort | ABBIED600_Rev3_ENG_SP_CommPort_ED2 | Port selection | | |
| StrFrDl | ABBIED600_Rev1_ING_SP_1 | Start delay | | |
| EndFrDl | ABBIED600_Rev1_ING_SP_1 | End delay | | |

| | | | | |
|---|---|---|---|---|
| FrRxCnt | ABBIED600_Rev1_INS | Received frames | | |
| LnkErrCnt | ABBIED600_Rev1_INS | Link errors | | |
| PhyErrCnt | ABBIED600_Rev1_INS | Physical errors | | |
| TranErrCnt | ABBIED600_Rev1_INS | Transport errors | | |
| FrTxCnt | ABBIED600_Rev1_INS | Transmitted frames | | |
| ChLiv | ABBIED600_Rev1_SPS_e | Status | E | IEC 61850-7-4:2007 |
| ITotFrz | ABBIED600_Rev2_SPC_control | IT Freeze | | status-only,direct-with-normal-security |
| DevAddr | ABBIED600_Rev1_ING_SP_1 | Device link address | | |
| ASDUAddr | ABBIED600_Rev1_ING_SP_1 | ASDU address | | |
| TCPPort | ABBIED600_Rev1_ING_SP_1 | TCP Port | | |
| LnkMod | ABBIED600_Rev2_ENG_SP_I5CLinkMode | Link Mode | | |
| COTLen | ABBIED600_Rev1_ING_SP_1 | Cause of transmission length in bytes | | |
| IOALen | ABBIED600_Rev1_ING_SP_1 | Information Object Address length in bytes | | |
| LnkAddrLen | ABBIED600_Rev1_ING_SP_1 | Link Address length in bytes | | |
| ASDUAddrLen | ABBIED600_Rev1_ING_SP_1 | ASDU Address length in bytes | | |
| SglCharRsp | ABBIED600_Rev1_SPG_SP | Single character response | | |
| IndBadTmQ | ABBIED600_Rev1_SPG_SP | Indicate bad time | | |
| TmFrmSel | ABBIED600_Rev2_ENG_SP_I5CTimeFormat | Timestamp mode | | |
| EvtTmMod | ABBIED600_Rev2_ENG_SP_I5CTimeMode | Event time | | |
| EvtBufMod | ABBIED600_Rev2_ENG_SP_MBEvtBufMod | Overflow Mode | | |

| | | | | |
|---|---|---|---|---|
| CntRpMod | ABBIED600_Rev2_ENG_SP_I5CCnRepMode | Counter Reporting | | |
| CntFrzMod | ABBIED600_Rev2_ENG_SP_I5CPrCnMode | Freeze Mode | | |
| TxWinWid | ABBIED600_Rev1_ING_SP_1 | IEC60870-5-104 transmit window (k) | | |
| RxWinWid | ABBIED600_Rev1_ING_SP_1 | IEC60870-5-104 receive window (w) | | |
| Tm1Tmms | ABBIED600_Rev1_ING_SP_1 | IEC60870-5-104 transmit timeout (t1) in milliseconds | | |
| Tm2Tmms | ABBIED600_Rev1_ING_SP_1 | IEC60870-5-104 receive timeout (t2) in milliseconds | | |
| Tm3Tmms | ABBIED600_Rev1_ING_SP_1 | IEC60870-5-104 link test interval (t3) in milliseconds | | |
| OvIndAddrGI | ABBIED600_Rev1_ING_SP_1 | Overflow indication address for interrogated data | | |
| OvIndAddr | ABBIED600_Rev1_ING_SP_1 | Overflow indication address for non-interrogated data | | |
| EvtOrdMod | ABBIED600_Rev2_ENG_SP_I5CTStampMode | Event order | | |
| SelTms | ABBIED600_Rev1_ING_SP_1 | Select timeout | | |
| CycPer | ABBIED600_Rev1_ING_SP_1 | Cyclic period | | |
| InvDIR | ABBIED600_Rev1_SPG_SP | Inverted DIR bit | | |
| ConnRejSck | ABBIED600_Rev1_INS | Connection rejected due to no | | |

| | | | | |
|---|---|---|---|---|
| | | socket available | | |
| ConnRejRg | ABBIED600_Rev1_INS | Connection rejected due to unregistered client | | |
| CliIP | ABBIED600_Rev3_VSG_2_20 | Client IP address | | |
| CntRs | ABBIED600_Rev2_SPC_control | Diagnostic counters reset | | status-only,direct-with-normal-security |

### 5.1.31 3.1.31 LN: I5CLPRT2 Name: LPRT (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD_e | Mode | E | IEC 61850-7-4:2007,status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh_e | Behaviour | E | IEC 61850-7-4:2007 |
| NamPlt | ABBIED600_Rev1_LPL_InNs_1_e | Name plate | E | IEC 61850-7-4:2007 |
| CommIntnOv | ABBIED600_Rev1_SPS | Internal Overflow | | |
| CommPort | ABBIED600_Rev3_ENG_SP_CommPort_ED2 | Port selection | | |
| StrFrDl | ABBIED600_Rev1_ING_SP_1 | Start delay | | |
| EndFrDl | ABBIED600_Rev1_ING_SP_1 | End delay | | |
| FrRxCnt | ABBIED600_Rev1_INS | Received frames | | |
| LnkErrCnt | ABBIED600_Rev1_INS | Link errors | | |
| PhyErrCnt | ABBIED600_Rev1_INS | Physical errors | | |
| TranErrCnt | ABBIED600_Rev1_INS | Transport errors | | |
| FrTxCnt | ABBIED600_Rev1_INS | Transmitted frames | | |
| ChLiv | ABBIED600_Rev1_SPS_e | Status | E | IEC 61850-7-4:2007 |

| | | | | |
|---|---|---|---|---|
| ITotFrz | ABBIED600_Rev2_SPC_control | IT Freeze | | status-only,direct-with-normal-security |
| DevAddr | ABBIED600_Rev1_ING_SP_1 | Device link address | | |
| ASDUAddr | ABBIED600_Rev1_ING_SP_1 | ASDU address | | |
| TCPPort | ABBIED600_Rev1_ING_SP_1 | TCP Port | | |
| LnkMod | ABBIED600_Rev2_ENG_SP_I5CLinkMode | Link Mode | | |
| COTLen | ABBIED600_Rev1_ING_SP_1 | Cause of transmission length in bytes | | |
| IOALen | ABBIED600_Rev1_ING_SP_1 | Information Object Address length in bytes | | |
| LnkAddrLen | ABBIED600_Rev1_ING_SP_1 | Link Address length in bytes | | |
| ASDUAddrLen | ABBIED600_Rev1_ING_SP_1 | ASDU Address length in bytes | | |
| SglCharRsp | ABBIED600_Rev1_SPG_SP | Single character response | | |
| IndBadTmQ | ABBIED600_Rev1_SPG_SP | Indicate bad time | | |
| TmFrmSel | ABBIED600_Rev2_ENG_SP_I5CTimeFormat | Timestamp mode | | |
| EvtTmMod | ABBIED600_Rev2_ENG_SP_I5CTimeMode | Event time | | |
| EvtBufMod | ABBIED600_Rev2_ENG_SP_MBEvtBufMod | Overflow Mode | | |
| CntRpMod | ABBIED600_Rev2_ENG_SP_I5CCnRepMode | Counter Reporting | | |
| CntFrzMod | ABBIED600_Rev2_ENG_SP_I5CPrCnMode | Freeze Mode | | |
| TxWinWid | ABBIED600_Rev1_ING_SP_1 | IEC60870-5-104 transmit window (k) | | |
| RxWinWid | ABBIED600_Rev1_ING_SP_1 | IEC60870-5-104 receive window (w) | | |

| | | | | |
|---|---|---|---|---|
| Tm1Tmms | ABBIED600_Rev1_ING_SP_1 | IEC60870-5-104 transmit timeout (t1) in millisec-onds | | |
| Tm2Tmms | ABBIED600_Rev1_ING_SP_1 | IEC60870-5-104 receive timeout (t2) in millisec-onds | | |
| Tm3Tmms | ABBIED600_Rev1_ING_SP_1 | IEC60870-5-104 link test interval (t3) in millisec-onds | | |
| OvIndAddrGI | ABBIED600_Rev1_ING_SP_1 | Overflow indica-tion address for interrogated da-ta | | |
| OvIndAddr | ABBIED600_Rev1_ING_SP_1 | Overflow indica-tion address for non-interrogated da-ta | | |
| EvtOrdMod | ABBIED600_Rev2_ENG_SP_I5CTStampMode | Event order | | |
| SelTms | ABBIED600_Rev1_ING_SP_1 | Select timeout | | |
| CycPer | ABBIED600_Rev1_ING_SP_1 | Cyclic period | | |
| InvDIR | ABBIED600_Rev1_SPG_SP | Inverted DIR bit | | |
| ConnRejSck | ABBIED600_Rev1_INS | Connection re-jected due to no socket available | | |
| ConnRejRg | ABBIED600_Rev1_INS | Connection re-jected due to unregistered cli-ent | | |
| CliIP | ABBIED600_Rev3_VSG_2_20 | Client IP address | | |
| CntRs | ABBIED600_Rev2_SPC_control | Diagnostic counters reset | | status-only,direct-with-normal-security |

### 5.1.32 3.1.32 LN: LDPRLRC1 Name: RLRC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD_e | Mode | E | IEC 61850-7-4:2007,status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh_e | Behaviour | E | IEC 61850-7-4:2007 |
| NamPlt | ABBIED600_Rev1_LPL_lnNs_1_e | Name plate | E | IEC 61850-7-4:2007 |
| RcdRs | ABBIED600_Rev2_SPC_control | Reset load profile rec. | | status-only,direct-with-normal-security |
| QtySel1 | ABBIED600_Rev3_ENG_SP_QtySel | Quantity selection 1 | | |
| QtySel2 | ABBIED600_Rev3_ENG_SP_QtySel | Quantity selection 2 | | |
| QtySel3 | ABBIED600_Rev3_ENG_SP_QtySel | Quantity selection 3 | | |
| QtySel4 | ABBIED600_Rev3_ENG_SP_QtySel | Quantity selection 4 | | |
| QtySel5 | ABBIED600_Rev3_ENG_SP_QtySel | Quantity selection 5 | | |
| QtySel6 | ABBIED600_Rev3_ENG_SP_QtySel | Quantity selection 6 | | |
| QtySel7 | ABBIED600_Rev3_ENG_SP_QtySel | Quantity selection 7 | | |
| QtySel8 | ABBIED600_Rev3_ENG_SP_QtySel | Quantity selection 8 | | |
| QtySel9 | ABBIED600_Rev3_ENG_SP_QtySel | Quantity selection 9 | | |
| QtySel10 | ABBIED600_Rev3_ENG_SP_QtySel | Quantity selection 10 | | |
| QtySel11 | ABBIED600_Rev3_ENG_SP_QtySel | Quantity selection 11 | | |
| QtySel12 | ABBIED600_Rev3_ENG_SP_QtySel | Quantity selection 12 | | |

| | | | | |
|---|---|---|---|---|
| MemUsed | ABBIED600_Rev1_INS_e | Rec. memory used | E | IEC 61850-7-4:2007 |
| MemWrn | ABBIED600_Rev1_SPS_simple | Memory warning | | |
| MemAlm | ABBIED600_Rev1_SPS_simple | Memory alarm | | |
| MemWrnLev | ABBIED600_Rev1_ING_SP_1 | Mem. warn-ing level | | |
| MemAlmLev | ABBIED600_Rev1_ING_SP_1 | Mem. alarn level | | |

## 5.2 3.2 Extented Logical Nodes

### 5.2.1 3.2.1 LN: SECRSYN1 Name: RSYN (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Rel | ABBIED600_Rev1_SPS | Release | | |
| VInd | ABBIED600_Rev1_SPS | Voltage Dif-ference Indi-cator | | |
| AngInd | ABBIED600_Rev1_SPS | Angle Differ-ence Indicator | | |
| HzInd | ABBIED600_Rev1_SPS | Frequency dif-ference Indi-cator | | |
| SynPrg | ABBIED600_Rev1_SPC_simple | Synchronising in progress | | status-only |
| DifVClc | ABBIED600_Rev3_MV_simple_i | Calculated Dif-ference in Voltage | | |

| | | | | |
|---|---|---|---|---|
| DifHzClc | ABBIED600_Rev3_MV_simple_i | Calculated Difference in Frequency | | |
| DifAngClc | ABBIED600_Rev3_MV_simple_i | Calculated Difference of Phase Angle | | |
| DifV | ABBIED600_Rev3_ASG_SG_i | Difference Voltage | | |
| DifHz | ABBIED600_Rev3_ASG_SG_i | Difference Frequency | | |
| DifAng | ABBIED600_Rev3_ASG_SG_i | Difference Phase Angle | | |
| LivDeaMod | ABBIED600_Rev3_ENG_SG_LivDeaMod | Live Dead Mode | | |
| DeaLinVal | ABBIED600_Rev3_ASG_SP_i | Dead Line Value | | |
| LivLinVal | ABBIED600_Rev3_ASG_SP_i | Live Line Value | | |
| DeaBusVal | ABBIED600_Rev3_ASG_SP_i | Dead Bus Value | | |
| LivBusVal | ABBIED600_Rev3_ASG_SP_i | Live Bus Value | | |
| PlsTmms | ABBIED600_Rev1_ING_SP_e | Close Pulse Time | E | ABBIED600:2014 |
| CBTmms | ABBIED600_Rev1_ING_SP_e | Closing time of the breaker | E | IEC 61850-7-4:2007 |
| FailCmd | ABBIED600_Rev1_SPS_e | CB closing request failed | E | ABBIED600:2014 |
| FailSyn | ABBIED600_Rev1_SPS_e | CB closing failed | E | ABBIED600:2014 |
| ClsRq | ABBIED600_Rev1_SPS_e | External closing request | E | ABBIED600:2014 |
| Byps | ABBIED600_Rev1_SPS_e | Request to bypass synchronism check and voltage check | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| LLDBInd | ABBIED600_Rev1_SPS_e | Live Line, Dead Bus | E | ABBIED600:2014 |
| LLLBInd | ABBIED600_Rev1_SPS_e | Live Line, Live Bus | E | ABBIED600:2014 |
| DLLBInd | ABBIED600_Rev1_SPS_e | Dead Line, Live Bus | E | ABBIED600:2014 |
| DLDBInd | ABBIED600_Rev1_SPS_e | Dead Line, Dead Bus | E | ABBIED600:2014 |
| OpModSC | ABBIED600_Rev2_ENG_SP_OpModSC_e | Synchrocheck mode | E | ABBIED600:2014 |
| OpModCtl | ABBIED600_Rev3_ENG_SP_OpModCtrl_e | Selection of synchro check command or Continuous control mode | E | ABBIED600:2014 |
| EnSt | ABBIED600_Rev2_ENS_EnergSt_e | Energization state of Line and Bus | E | ABBIED600:2014 |
| MaxVEn | ABBIED600_Rev3_ASG_SP_i_e | Maximum voltage for energizing | E | ABBIED600:2014 |
| PhSht | ABBIED600_Rev3_ASG_SP_i_e | Correction of phase differ-ence between measured U_BUS and U_LINE | E | ABBIED600:2014 |
| EnTmms | ABBIED600_Rev1_ING_SP_e | Time delay for energizing check | E | ABBIED600:2014 |
| MaxSynTmms | ABBIED600_Rev1_ING_SP_e | Maximum time to accept synchronizing | E | ABBIED600:2014 |
| MinSynTmms | ABBIED600_Rev1_ING_SP_e | Minimum time to accept syn-chronizing | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| TestCtl | ABBIED600_Rev5_ENC_TestCtl_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| VSrcSw | ABBIED600_Rev1_SPG_SP_e | Voltage source switch | E | ABBIED600:2014 |

### 5.2.2 3.2.2 LN: VMMXU2 Name: MMXU (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Operation | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| PPV | ABBIED600_Rev3_DEL_threephase_full_i | Phase to phase voltages | | |
| PhV | ABBIED600_Rev3_WYE_4 | Phase to ground voltages | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| VMeasMod | ABBIED600_Rev3_ENG_SP_MeasMod_e | Selects used measurement mode | E | ABBIED600:2014 |
| NumPh | ABBIED600_Rev3_ENG_SP_StrPhSel_e | Num of phases | E | ABBIED600:2014 |
| HiAlm | ABBIED600_Rev1_SPS_e | High alarm | E | ABBIED600:2014 |
| HiWrn | ABBIED600_Rev1_SPS_e | High warning | E | ABBIED600:2014 |
| LoWrn | ABBIED600_Rev1_SPS_e | Low warning | E | ABBIED600:2014 |
| LoAlm | ABBIED600_Rev1_SPS_e | Low alarm | E | ABBIED600:2014 |

### 5.2.3 3.2.3 LN: FMMXU2 Name: MMXU (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Operation | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Hz | ABBIED600_Rev4_MV_5 | Frequency | | |

| | | | | |
|---|---|---|---|---|
| DefHzSel | ABBIED600_Rev1_ENG_SP_DefHzSel_e | Default frequency selection | E | ABBIED600:2014 |

### 5.2.4 3.2.4 LN: LLN0 Name: LLN0 (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_OnTestBlock | Test mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Health | ABBIED600_Rev4_ENS_health | Health | | |
| NamPlt | ABBIED600_Rev8_LPL_LD0_LNN0_ED2 | Name plate | | |
| IndLEDRs | ABBIED600_Rev2_SPC_indications_e | Indications and LEDs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| ProgLEDRs | ABBIED600_Rev2_SPC_indications_e | Programmable LEDs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| MeasStatRs | ABBIED600_Rev2_SPC_control_e | Reset minimum and maximum demands | E | ABBIED600:2014,status-only,direct-with-normal-security |
| PQRs | ABBIED600_Rev2_SPC_control_e | Reset all power quality data | E | ABBIED600:2014,status-only,direct-with-normal-security |
| OpModSetGr | ABBIED600_Rev2_ENG_SP_OpModSG_e | Operation mode for setting group change | E | ABBIED600:2014 |
| ActSetGr | ABBIED600_Rev2_INC_control_int_e | Active setting group | E | ABBIED600:2014,status-only,direct-with-normal-security |
| Act1SetGr | ABBIED600_Rev1_SPC_simple_e | Active setting group 1 | E | ABBIED600:2014,status-only |
| Act2SetGr | ABBIED600_Rev1_SPC_simple_e | Active setting group 2 | E | ABBIED600:2014,status-only |

| | | | | |
|---|---|---|---|---|
| Act3SetGr | ABBIED600_Rev1_SPC_simple_e | Active setting group 3 | E | ABBIED600:2014,status-only |
| Act4SetGr | ABBIED600_Rev1_SPC_simple_e | Active setting group 4 | E | ABBIED600:2014,status-only |
| Act5SetGr | ABBIED600_Rev1_SPC_simple_e | Active setting group 5 | E | ABBIED600:2014,status-only |
| Act6SetGr | ABBIED600_Rev1_SPC_simple_e | Active setting group 6 | E | ABBIED600:2014,status-only |
| LgcSelSetGr | ABBIED600_Rev1_SPC_simple_e | Logic selection for setting group | E | ABBIED600:2014,status-only |
| SetSvMaxDl | ABBIED600_Rev1_ENG_SP_SetSvMaxDl_e | SMV Max Delay | E | ABBIED600:2014,order code dependent |
| SvMaxDl | ABBIED600_Rev3_MV_simple_i_e | Max Delay | E | ABBIED600:2014,order code dependent |
| SvAvDl | ABBIED600_Rev3_MV_simple_i_e | Average delay | E | ABBIED600:2014,order code dependent |
| FcnSt | ABBIED600_Rev1_VSG_2_e | Configuration information | E | ABBIED600:2014 |
| ParChgCnt | ABBIED600_Rev1_INS_retain_e | Number of setting changes | E | ABBIED600:2014 |

### 5.2.5 3.2.5 LN: GSAL1 Name: GSAL (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| OpCntRs | ABBIED600_Rev1_INC_simple_int | Resetable Security Violations counter | | status-only |
| NumCntRs | ABBIED600_Rev1_INS | Number of counter resets | | |
| AuthFail | ABBIED600_Rev1_SEC | Authorization failures detected | | |
| AcsCtlFail | ABBIED600_Rev1_SEC | Access control failures detected | | |

| | | | | |
|---|---|---|---|---|
| SvcViol | ABBIED600_Rev1_SEC | Service privilege violations | | |
| Ina | ABBIED600_Rev1_SEC | Inactive associations | | |
| AuthRem | ABBIED600_Rev3_SPG_SP_authority_ED2_e | Remote authorization | E | ABBIED600:2014 |
| AuthAcsVw | ABBIED600_Rev10_ENS_AuthAcs_e | Viewer access | E | REx615:2014 |
| AuthAcsOpr | ABBIED600_Rev10_ENS_AuthAcs_e | Operator access | E | REx615:2014 |
| AuthAcsEng | ABBIED600_Rev10_ENS_AuthAcs_e | Engineer access | E | REx615:2014 |
| AuthAcsAdm | ABBIED600_Rev10_ENS_AuthAcs_e | Administrator access | E | REx615:2014 |
| AuthAcsLev | ABBIED600_Rev2_ENG_SP_AuthAcsLev_e | Logging level | E | REx615:2014 |
| RemUpdEna | ABBIED600_Rev1_SPG_SP_AccessAdmW_e | Remote Update Enable | E | ABBIED600:2014 |
| AuthRemAdm | ABBIED600_Rev1_VSG_2_64_e | Remote authorization (administrator) | E | ABBIED600:2014 |
| AuthRemEng | ABBIED600_Rev1_VSG_2_64_e | Remote authorization (engineer) | E | ABBIED600:2014 |
| AuthRemOpr | ABBIED600_Rev1_VSG_2_64_e | Remote authorization (operator) | E | ABBIED600:2014 |
| AuthRemVw | ABBIED600_Rev1_VSG_2_64_e | Remote authorization (viewer) | E | ABBIED600:2014 |

### 5.2.6 3.2.6 LN: IHMI1 Name: IHMI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| CardNam | ABBIED600_Rev8_DPL_eeprom_2_ED2_e | Card information | E | ABBIED600:2014 |
| TestStaId | ABBIED600_Rev1_LPL_VSS_dU_20_e | Testing | E | ABBIED600:2014 |
| HwId | ABBIED600_Rev1_LPL_VSS_1_20_e | HW module | E | ABBIED600:2014 |

### 5.2.7 3.2.7 LN: XGGIO100 Name: GGIO (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_OnOff_NoBlk | Mode | | status-only,direct-with- |

| | | | | |
|---|---|---|---|---|
| | | | | normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| SPCSO1 | ABBIED600_Rev2_SPC_control | X100-Output 1 | | status-only,direct-with-normal-security |
| SPCSO2 | ABBIED600_Rev2_SPC_control | X100-Output 2 | | status-only,direct-with-normal-security |
| SPCSO3 | ABBIED600_Rev2_SPC_control | X100-Output 3 | | status-only,direct-with-normal-security |
| SPCSO4 | ABBIED600_Rev2_SPC_control | X100-Output 4 | | status-only,direct-with-normal-security |
| SPCSO5 | ABBIED600_Rev2_SPC_control | X100-Output 5 | | status-only,direct-with-normal-security |
| SPCSO6 | ABBIED600_Rev2_SPC_control | X100-Output 6 | | status-only,direct-with-normal-security |
| CardNam | ABBIED600_Rev8_DPL_eeprom_2_ED2_e | Card information | E | ABBIED600:2014 |
| HwId | ABBIED600_Rev1_LPL_VSS_1_20_e | HW module | E | ABBIED600:2014 |
| TestStaId | ABBIED600_Rev1_LPL_VSS_dU_20_e | Testing | E | ABBIED600:2014 |

### 5.2.8 3.2.8 LN: LEDGGIO1 Name: GGIO (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Alm1 | ABBIED600_Rev1_SPS_simple | Alarm input for LED 1 | | |
| Alm2 | ABBIED600_Rev1_SPS_simple | Alarm input for LED 2 | | |
| Alm3 | ABBIED600_Rev1_SPS_simple | Alarm input for LED 3 | | |
| Alm4 | ABBIED600_Rev1_SPS_simple | Alarm input for LED 4 | | |
| Alm5 | ABBIED600_Rev1_SPS_simple | Alarm input for LED 5 | | |

| | | | | |
|---|---|---|---|---|
| Alm6 | ABBIED600_Rev1_SPS_simple | Alarm input for LED 6 | | |
| Alm7 | ABBIED600_Rev1_SPS_simple | Alarm input for LED 7 | | |
| Alm8 | ABBIED600_Rev1_SPS_simple | Alarm input for LED 8 | | |
| Alm9 | ABBIED600_Rev1_SPS_simple | Alarm input for LED 9 | | |
| Alm10 | ABBIED600_Rev1_SPS_simple | Alarm input for LED 10 | | |
| Alm11 | ABBIED600_Rev1_SPS_simple | Alarm input for LED 11 | | |
| Ind1 | ABBIED600_Rev1_SPS_simple | Ok input for LED 1 | | |
| Ind2 | ABBIED600_Rev1_SPS_simple | Ok input for LED 2 | | |
| Ind3 | ABBIED600_Rev1_SPS_simple | Ok input for LED 3 | | |
| Ind4 | ABBIED600_Rev1_SPS_simple | Ok input for LED 4 | | |
| Ind5 | ABBIED600_Rev1_SPS_simple | Ok input for LED 5 | | |
| Ind6 | ABBIED600_Rev1_SPS_simple | Ok input for LED 6 | | |
| Ind7 | ABBIED600_Rev1_SPS_simple | Ok input for LED 7 | | |
| Ind8 | ABBIED600_Rev1_SPS_simple | Ok input for LED 8 | | |
| Ind9 | ABBIED600_Rev1_SPS_simple | Ok input for LED 9 | | |
| Ind10 | ABBIED600_Rev1_SPS_simple | Ok input for LED 10 | | |
| Ind11 | ABBIED600_Rev1_SPS_simple | Ok input for LED 11 | | |
| LEDSt1 | ABBIED600_Rev4_ENC_control_led_e | LED 1 | E | ABBIED600:2014,status- |

| | | | | |
|---|---|---|---|---|
| | | | | only,direct-with-normal-security |
| LEDSt2 | ABBIED600_Rev4_ENC_control_led_e | LED 2 | E | ABBIED600:2014,status-only,direct-with-normal-security |
| LEDSt3 | ABBIED600_Rev4_ENC_control_led_e | LED 3 | E | ABBIED600:2014,status-only,direct-with-normal-security |
| LEDSt4 | ABBIED600_Rev4_ENC_control_led_e | LED 4 | E | ABBIED600:2014,status-only,direct-with-normal-security |
| LEDSt5 | ABBIED600_Rev4_ENC_control_led_e | LED 5 | E | ABBIED600:2014,status-only,direct-with-normal-security |
| LEDSt6 | ABBIED600_Rev4_ENC_control_led_e | LED 6 | E | ABBIED600:2014,status-only,direct-with-normal-security |
| LEDSt7 | ABBIED600_Rev4_ENC_control_led_e | LED 7 | E | ABBIED600:2014,status-only,direct-with-normal-security |
| LEDSt8 | ABBIED600_Rev4_ENC_control_led_e | LED 8 | E | ABBIED600:2014,status-only,direct-with-normal-security |
| LEDSt9 | ABBIED600_Rev4_ENC_control_led_e | LED 9 | E | ABBIED600:2014,status-only,direct-with-normal-security |
| LEDSt10 | ABBIED600_Rev4_ENC_control_led_e | LED 10 | E | ABBIED600:2014,status-only,direct-with-normal-security |
| LEDSt11 | ABBIED600_Rev4_ENC_control_led_e | LED 11 | E | ABBIED600:2014,status-only,direct-with-normal-security |
| LEDSeq1 | ABBIED600_Rev3_ENG_SP_LedMode_e | Alarm mode | E | ABBIED600:2014 |
| LEDSeq2 | ABBIED600_Rev3_ENG_SP_LedMode_e | Alarm mode | E | ABBIED600:2014 |
| LEDSeq3 | ABBIED600_Rev3_ENG_SP_LedMode_e | Alarm mode | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| LEDSeq4 | ABBIED600_Rev3_ENG_SP_LedMode_e | Alarm mode | E | ABBIED600:2014 |
| LEDSeq5 | ABBIED600_Rev3_ENG_SP_LedMode_e | Alarm mode | E | ABBIED600:2014 |
| LEDSeq6 | ABBIED600_Rev3_ENG_SP_LedMode_e | Alarm mode | E | ABBIED600:2014 |
| LEDSeq7 | ABBIED600_Rev3_ENG_SP_LedMode_e | Alarm mode | E | ABBIED600:2014 |
| LEDSeq8 | ABBIED600_Rev3_ENG_SP_LedMode_e | Alarm mode | E | ABBIED600:2014 |
| LEDSeq9 | ABBIED600_Rev3_ENG_SP_LedMode_e | Alarm mode | E | ABBIED600:2014 |
| LEDSeq10 | ABBIED600_Rev3_ENG_SP_LedMode_e | Alarm mode | E | ABBIED600:2014 |
| LEDSeq11 | ABBIED600_Rev3_ENG_SP_LedMode_e | Alarm mode | E | ABBIED600:2014 |
| InRsLED1 | ABBIED600_Rev1_SPS_simple_e | Reset input for LED 1 | E | ABBIED600:2014 |
| InRsLED2 | ABBIED600_Rev1_SPS_simple_e | Reset input for LED 2 | E | ABBIED600:2014 |
| InRsLED3 | ABBIED600_Rev1_SPS_simple_e | Reset input for LED 3 | E | ABBIED600:2014 |
| InRsLED4 | ABBIED600_Rev1_SPS_simple_e | Reset input for LED 4 | E | ABBIED600:2014 |
| InRsLED5 | ABBIED600_Rev1_SPS_simple_e | Reset input for LED 5 | E | ABBIED600:2014 |
| InRsLED6 | ABBIED600_Rev1_SPS_simple_e | Reset input for LED 6 | E | ABBIED600:2014 |
| InRsLED7 | ABBIED600_Rev1_SPS_simple_e | Reset input for LED 7 | E | ABBIED600:2014 |
| InRsLED8 | ABBIED600_Rev1_SPS_simple_e | Reset input for LED 8 | E | ABBIED600:2014 |
| InRsLED9 | ABBIED600_Rev1_SPS_simple_e | Reset input for LED 9 | E | ABBIED600:2014 |
| InRsLED10 | ABBIED600_Rev1_SPS_simple_e | Reset input for LED 10 | E | ABBIED600:2014 |
| InRsLED11 | ABBIED600_Rev1_SPS_simple_e | Reset input for LED 11 | E | ABBIED600:2014 |
| AlmColr | ABBIED600_Rev3_ENG_SP_LedColor_e | Alarm colour | E | ABBIED600:2014 |

### 5.2.9 3.2.9 LN: LEDPTRC1 Name: PTRC (ED2)

| Attribute | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| name | | | | |
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Op | ABBIED600_Rev1_ACT_full | Operate | | |
| Str | ABBIED600_Rev1_ACD_full | Start | | |
| InRs | ABBIED600_Rev1_SPS_simple_e | Reset | E | ABBIED600:2014 |
| InOp | ABBIED600_Rev2_SPS_dU_e | Input operate | E | ABBIED600:2014 |
| InStr | ABBIED600_Rev2_SPS_dU_e | Input start | E | ABBIED600:2014 |

### 5.2.10 3.2.10 LN: GNRLLTMS1 Name: LTMS (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| TmAcc | ABBIED600_Rev1_INS | Number of significant bits in the Fraction Of Second in the time accuracy part of the time stamp. | | |
| TmSrc | ABBIED600_Rev1_LPL_VSS_1_64 | Current time source | | |
| TmSyn | ABBIED600_Rev1_ENS_TmSyn | Time synchronized according to IEC 61850-9-2 | | order code dependent |
| TmChSt1 | ABBIED600_Rev1_SPS | Time channel status (up/down) | | |
| TmSrcSel1 | ABBIED600_Rev6_ENG_SP_SyncSrc_e | Time source setting ( “ 1588 ” in case the time | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| | | source is a IEEE 1588 source or dotted IP-address) | | |
| TmSrcSt | ABBIED600_Rev4_ENS_TmSrc_e | Current time source | E | ABBIED600:2014 |
| DomId | ABBIED600_Rev1_ING_SP_1_e | The domain is identified by an integer, the domain-Number, in the range of 0 to 255. | E | AB-BIED600:2014,order code dependent |
| Alm | ABBIED600_Rev1_SPS_e | Alarm | E | IEC 61850-7-4:2007 |
| Wrn | ABBIED600_Rev1_SPS_e | Warning | E | IEC 61850-7-4:2007 |
| PTPTmSrc | ABBIED600_Rev2_ENS_PTPTmSrc_e | GrandMaster timeSource enum accord-ing to PTPv2 | E | AB-BIED600:2014,order code dependent |
| PTPClkAcc | ABBIED600_Rev2_ENS_PTPClkAcc_e | Grandmaster clockAccuracy enum accord-ing to PTPv2 | E | AB-BIED600:2014,order code dependent |
| LocClkAcc | ABBIED600_Rev1_INS_e | Local clock ac-curacy (master + IED synch ac-curacy)[us] | E | AB-BIED600:2014,order code dependent |
| MaxDevAcc | ABBIED600_Rev1_INS_e | Maximum devi-ation of the Lo-cal synch accu-racy [us] | E | AB-BIED600:2014,order code dependent |
| PTPPrio1 | ABBIED600_Rev1_ING_SP_1_e | PTP priority 1, in the range of 0 to 255. | E | AB-BIED600:2014,order code dependent |
| PTPPrio2 | ABBIED600_Rev1_ING_SP_1_e | PTP priority 2, in the range of 0 to 255. | E | AB-BIED600:2014,order code dependent |

| | | | | |
|---|---|---|---|---|
| MstrId | ABBIED600_Rev2_VSG_1_20_e | Grandmaster Identity octet string according to PTPv2 | E | AB-BIED600:2014,order code dependent |
| IPAd-drSNTP1 | ABBIED600_Rev3_VSG_2_20_e | IP address for SNTP primary server | E | ABBIED600:2014 |
| IPAd-drSNTP2 | ABBIED600_Rev3_VSG_2_20_e | IP address for SNTP secondary server | E | ABBIED600:2014 |
| PTPAnnc-Mod | AB-BIED600_Rev1_ENG_SP_PTPAnncMod_e | PTP Announce Mode | E | AB-BIED600:2014,order code dependent |

### 5.2.11 3.2.11 LN: GNRLLTIM1 Name: LTIM (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| TmDT | ABBIED600_Rev1_SPS | Indicating if DST is in effect | | |
| TmOfsTmm | ABBIED600_Rev1_ING_SP_1 | Offset of local time from UTC in minutes | | |
| TmUseDT | ABBIED600_Rev1_SPG_SP | DST in use setting | | |
| TmChgDT | ABBIED600_Rev3_TSG_SP_setCal | Local time of next change to daylight saving time | | |
| TmChgST | ABBIED600_Rev3_TSG_SP_setCal | Local time of next change to standard time | | |
| TmSys | ABBIED600_Rev3_VSG_2_20_e | System time | E | ABBIED600:2014 |
| DateSys | ABBIED600_Rev3_VSG_2_20_e | System date | E | ABBIED600:2014 |
| TmOfsDT | ABBIED600_Rev1_ING_SP_1_e | Daylight saving time offset | E | ABBIED600:2014 |

### 5.2.12 3.2.12 LN: PHIPTOC1 Name: PTOC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |

| | | | | |
|---|---|---|---|---|
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_threephase | Start | | |
| Op | ABBIED600_Rev1_ACT_threephase | Operate | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| InEnaMult | ABBIED600_Rev1_SPS_e | Enable signal for current multiplier | E | ABBIED600:2014 |
| NumPh | ABBIED600_Rev3_ENG_SP_StrPhSel_e | Number of phases required for operate activation | E | ABBIED600:2014 |
| StrValMult | ABBIED600_Rev3_ASG_SG_i_e | Multiplier for scaling the start value | E | ABBIED600:2014 |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| TstOutCmd | ABBIED600_Rev20_ENC_TstOut_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |

### 5.2.13 3.2.13 LN: DPHLPTOC1 Name: PTOC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal | | |

| | | | | |
|---|---|---|---|---|
| | | for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_threephase | Start | | |
| Op | ABBIED600_Rev1_ACT_threephase | Operate | | |
| TmACrv | ABBIED600_Rev2_CURVE_SG | Operating Curve Type | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| TmMult | ABBIED600_Rev3_ASG_SG_i | Time Dial Multiplier | | |
| MinOpTmms | ABBIED600_Rev1_ING_SP_1 | Minimum Operate Time | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| TypRsCrv | ABBIED600_Rev3_ENG_SG_TypRsCrv | Type of Reset Curve | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| DirMod | ABBIED600_Rev3_ENG_SG_DirMod | Directional Mode | | |
| InEnaMult | ABBIED600_Rev1_SPS_e | Enable signal for current multiplier | E | ABBIED600:2014 |
| NumPh | ABBIED600_Rev3_ENG_SP_StrPhSel_e | Number of phases required for operate activation | E | ABBIED600:2014 |
| StrValMult | ABBIED600_Rev3_ASG_SG_i_e | Multiplier for scaling the start value | E | ABBIED600:2014 |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| AMeasMod | ABBIED600_Rev3_ENG_SP_MeasMod_e | Measuring mode | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| TestPro | ABBIED600_Rev2_ENC_TestPro_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| AllwNonDir | ABBIED600_Rev1_SPG_SP_e | Allows prot activation as non-dir when dir info is in-valid | E | ABBIED600:2014 |
| NonDir | ABBIED600_Rev1_SPS_e | Forces protec-tion to non-directional | E | ABBIED600:2014 |

### 5.2.14 3.2.14 LN: DPHLRDIR1 Name: RDIR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Dir | ABBIED600_Rev1_ACD_threephase | Direction | | |
| ChrAng | ABBIED600_Rev3_ASG_SG_i | Characteristic angle | | |
| MinFwdAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in forward direction | | |
| MinRvAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in reverse direction | | |
| MaxFwdAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in forward direction | | |
| MaxRvAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in reverse direction | | |
| BlkValA | ABBIED600_Rev3_ASG_SP_i | Min operate current | | |
| BlkValV | ABBIED600_Rev3_ASG_SP_i | Min operate voltage | | |
| PolQty | ABBIED600_Rev3_ENG_SG_PolQty | Polarising Quantity | | |
| VMemTmms | ABBIED600_Rev1_ING_SG_e | Voltage memory time | E | ABBIED600:2014 |
| OpChrAngPhsA | ABBIED600_Rev3_MV_simple_i_e | Calc angle difference phase A | E | ABBIED600:2014 |
| OpChrAngPhsB | ABBIED600_Rev3_MV_simple_i_e | Calc angle difference phase B | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| OpChrAngPhsC | ABBIED600_Rev3_MV_simple_i_e | Calc angle difference phase C | E | ABBIED600:2014 |
| VMemUsedSt | ABBIED600_Rev1_SPS_e | Voltage memory in use status | E | ABBIED600:2014 |

### 5.2.15 3.2.15 LN: DPHLPTOC2 Name: PTOC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_threephase | Start | | |
| Op | ABBIED600_Rev1_ACT_threephase | Operate | | |
| TmACrv | ABBIED600_Rev2_CURVE_SG | Operating Curve Type | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| TmMult | ABBIED600_Rev3_ASG_SG_i | Time Dial Multiplier | | |
| MinOpTmms | ABBIED600_Rev1_ING_SP_1 | Minimum Operate Time | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| TypRsCrv | ABBIED600_Rev3_ENG_SG_TypRsCrv | Type of Reset Curve | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| DirMod | ABBIED600_Rev3_ENG_SG_DirMod | Directional Mode | | |
| InEnaMult | ABBIED600_Rev1_SPS_e | Enable signal for current multiplier | E | ABBIED600:2014 |
| NumPh | ABBIED600_Rev3_ENG_SP_StrPhSel_e | Number of | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| | | phases required for operate activation | | |
| StrValMult | ABBIED600_Rev3_ASG_SG_i_e | Multiplier for scaling the start value | E | ABBIED600:2014 |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| AMeasMod | ABBIED600_Rev3_ENG_SP_MeasMod_e | Measuring mode | E | ABBIED600:2014 |
| TestPro | ABBIED600_Rev2_ENC_TestPro_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| AllwNonDir | ABBIED600_Rev1_SPG_SP_e | Allows prot activation as non-dir when dir info is invalid | E | ABBIED600:2014 |
| NonDir | ABBIED600_Rev1_SPS_e | Forces protection to non-directional | E | ABBIED600:2014 |

### 5.2.16 3.2.16 LN: DPHLRDIR2 Name: RDIR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Dir | ABBIED600_Rev1_ACD_threephase | Direction | | |
| ChrAng | ABBIED600_Rev3_ASG_SG_i | Characteristic angle | | |
| MinFwdAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in forward direction | | |
| MinRvAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in reverse direction | | |
| MaxFwdAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in | | |

| | | | | |
|---|---|---|---|---|
| | | forward direction | | |
| MaxRvAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in reverse direction | | |
| BlkValA | ABBIED600_Rev3_ASG_SP_i | Min operate current | | |
| BlkValV | ABBIED600_Rev3_ASG_SP_i | Min operate voltage | | |
| PolQty | ABBIED600_Rev3_ENG_SG_PolQty | Polarising Quantity | | |
| VMemTmms | ABBIED600_Rev1_ING_SG_e | Voltage memory time | E | ABBIED600:2014 |
| OpChrAngPhsA | ABBIED600_Rev3_MV_simple_i_e | Calc angle difference phase A | E | ABBIED600:2014 |
| OpChrAngPhsB | ABBIED600_Rev3_MV_simple_i_e | Calc angle difference phase B | E | ABBIED600:2014 |
| OpChrAngPhsC | ABBIED600_Rev3_MV_simple_i_e | Calc angle difference phase C | E | ABBIED600:2014 |
| VMemUsedSt | ABBIED600_Rev1_SPS_e | Voltage memory in use status | E | ABBIED600:2014 |

### 5.2.17 3.2.17 LN: DPHHPTOC1 Name: PTOC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary out-puts | | |
| Str | ABBIED600_Rev1_ACD_threephase | Start | | |
| Op | ABBIED600_Rev1_ACT_threephase | Operate | | |
| TmACrv | ABBIED600_Rev2_CURVE_SG | Operating Curve Type | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| TmMult | ABBIED600_Rev3_ASG_SG_i | Time Dial Mul-tiplier | | |
| MinOpTmms | ABBIED600_Rev1_ING_SP_1 | Minimum Op-erate Time | | |

| | | | | |
|---|---|---|---|---|
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| TypRsCrv | ABBIED600_Rev3_ENG_SG_TypRsCrv | Selection of reset curve type | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| DirMod | ABBIED600_Rev3_ENG_SG_DirMod | Directional Mode | | |
| InEnaMult | ABBIED600_Rev1_SPS_e | Enables current multiplier | E | ABBIED600:2014 |
| NumPh | ABBIED600_Rev3_ENG_SP_StrPhSel_e | Number of phases required for operate activation | E | ABBIED600:2014 |
| StrValMult | ABBIED600_Rev3_ASG_SG_i_e | Multiplier for scaling the start value | E | ABBIED600:2014 |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| AMeasMod | ABBIED600_Rev3_ENG_SP_MeasMod_e | Selects used measurement mode | E | ABBIED600:2014 |
| TestPro | ABBIED600_Rev2_ENC_TestPro_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| AllwNonDir | ABBIED600_Rev1_SPG_SP_e | Allows prot activation as non-dir when dir info is invalid | E | ABBIED600:2014 |
| NonDir | ABBIED600_Rev1_SPS_e | Forces protection to non-directional | E | ABBIED600:2014 |

### 5.2.18 3.2.18 LN: DPHHRDIR1 Name: RDIR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Dir | ABBIED600_Rev1_ACD_threephase | DIR | | |
| ChrAng | ABBIED600_Rev3_ASG_SG_i | Characteristic angle | | |
| MinFwdAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in forward direction | | |
| MinRvAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in reverse direction | | |
| MaxFwdAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in forward direction | | |
| MaxRvAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in reverse direction | | |
| BlkValA | ABBIED600_Rev3_ASG_SP_i | Min operate current | | |
| BlkValV | ABBIED600_Rev3_ASG_SP_i | Min operate voltage | | |
| PolQty | ABBIED600_Rev3_ENG_SG_PolQty | Polarizing quantity | | |
| VMemTmms | ABBIED600_Rev1_ING_SG_e | Voltage memory time | E | ABBIED600:2014 |
| OpChrAngPhsA | ABBIED600_Rev3_MV_simple_i_e | Calc angle difference phase A | E | ABBIED600:2014 |
| OpChrAngPhsB | ABBIED600_Rev3_MV_simple_i_e | Calc angle difference phase B | E | ABBIED600:2014 |
| OpChrAngPhsC | ABBIED600_Rev3_MV_simple_i_e | Calc angle difference phase C | E | ABBIED600:2014 |
| VMemUsedSt | ABBIED600_Rev1_SPS_e | Voltage memory in use status | E | ABBIED600:2014 |

### 5.2.19 3.2.19 LN: DPHHPTOC2 Name: PTOC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary out-puts | | |

| | | | | |
|---|---|---|---|---|
| Str | ABBIED600_Rev1_ACD_threephase | Start | | |
| Op | ABBIED600_Rev1_ACT_threephase | Operate | | |
| TmACrv | ABBIED600_Rev2_CURVE_SG | Operating Curve Type | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| TmMult | ABBIED600_Rev3_ASG_SG_i | Time Dial Multiplier | | |
| MinOpTmms | ABBIED600_Rev1_ING_SP_1 | Minimum Operate Time | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| TypRsCrv | ABBIED600_Rev3_ENG_SG_TypRsCrv | Selection of reset curve type | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| DirMod | ABBIED600_Rev3_ENG_SG_DirMod | Directional Mode | | |
| InEnaMult | ABBIED600_Rev1_SPS_e | Enables current multiplier | E | ABBIED600:2014 |
| NumPh | ABBIED600_Rev3_ENG_SP_StrPhSel_e | Number of phases required for operate activation | E | ABBIED600:2014 |
| StrValMult | ABBIED600_Rev3_ASG_SG_i_e | Multiplier for scaling the start value | E | ABBIED600:2014 |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| AMeasMod | ABBIED600_Rev3_ENG_SP_MeasMod_e | Selects used measurement mode | E | ABBIED600:2014 |
| TestPro | ABBIED600_Rev2_ENC_TestPro_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |

| | | | | |
|---|---|---|---|---|
| AllwNonDir | ABBIED600_Rev1_SPG_SP_e | Allows prot activation as non-dir when dir info is invalid | E | ABBIED600:2014 |
| NonDir | ABBIED600_Rev1_SPS_e | Forces protection to non-directional | E | ABBIED600:2014 |

### 5.2.20 3.2.20 LN: DPHHRDIR2 Name: RDIR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Dir | ABBIED600_Rev1_ACD_threephase | DIR | | |
| ChrAng | ABBIED600_Rev3_ASG_SG_i | Characteristic angle | | |
| MinFwdAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in forward direction | | |
| MinRvAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in reverse direction | | |
| MaxFwdAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in forward direction | | |
| MaxRvAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in reverse direction | | |
| BlkValA | ABBIED600_Rev3_ASG_SP_i | Min operate current | | |
| BlkValV | ABBIED600_Rev3_ASG_SP_i | Min operate voltage | | |
| PolQty | ABBIED600_Rev3_ENG_SG_PolQty | Polarizing quantity | | |
| VMemTmms | ABBIED600_Rev1_ING_SG_e | Voltage memory time | E | ABBIED600:2014 |
| OpChrAngPhsA | ABBIED600_Rev3_MV_simple_i_e | Calc angle difference phase A | E | ABBIED600:2014 |
| OpChrAngPhsB | ABBIED600_Rev3_MV_simple_i_e | Calc angle difference phase B | E | ABBIED600:2014 |
| OpChrAngPhsC | ABBIED600_Rev3_MV_simple_i_e | Calc angle difference phase C | E | ABBIED600:2014 |
| VMemUsedSt | ABBIED600_Rev1_SPS_e | Voltage memory in use status | E | ABBIED600:2014 |

### 5.2.21 3.2.21 LN: EFIPTOC1 Name: PTOC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| StrValMult | ABBIED600_Rev3_ASG_SG_i_e | Multiplier for operate current level | E | ABBIED600:2014 |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| InEnaMult | ABBIED600_Rev1_SPS_e | Enable current multiplier | E | ABBIED600:2014 |
| TstOutCmd | ABBIED600_Rev20_ENC_TstOut_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| AResSigSel | ABBIED600_Rev2_ENG_SP_AResSigSel_e | Selection for used Io signal | E | ABBIED600:2014 |

### 5.2.22 3.2.22 LN: DEFLPTOC1 Name: PTOC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with- |

| | | | | |
|---|---|---|---|---|
| | | | | normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| TmACrv | ABBIED600_Rev2_CURVE_SG | Curve parameter E | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| TmMult | ABBIED600_Rev3_ASG_SG_i | Time Dial Multiplier | | |
| MinOpTmms | ABBIED600_Rev1_ING_SP_1 | Minimum Operate Time | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| TypRsCrv | ABBIED600_Rev3_ENG_SG_TypRsCrv | Selection of reset curve type | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| DirMod | ABBIED600_Rev3_ENG_SG_DirMod | Directional Mode | | |
| VStr | ABBIED600_Rev3_ASG_SG_i_e | Voltage start value | E | IEC 61850-7-4:2007 |
| StrValMult | ABBIED600_Rev3_ASG_SG_i_e | Multiplier for scaling the start value | E | ABBIED600:2014 |
| AllwNonDir | ABBIED600_Rev1_SPG_SP_e | Allows prot activation as non-dir when dir info is invalid | E | ABBIED600:2014 |
| AMeasMod | ABBIED600_Rev3_ENG_SP_MeasMod_e | Selects used measurement | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| | | mode | | |
| InEnaMult | ABBIED600_Rev1_SPS_e | Enables current multiplier | E | ABBIED600:2014 |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| EnaVLim | ABBIED600_Rev1_SPG_SG_e | Enable voltage limit | E | ABBIED600:2014 |
| TestPro | ABBIED600_Rev2_ENC_TestPro_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| AResSigSel | ABBIED600_Rev2_ENG_SP_AResSigSel_e | Selection for used Io signal | E | ABBIED600:2014 |

### 5.2.23 3.2.23 LN: DEFLRDIR1 Name: RDIR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Dir | ABBIED600_Rev1_ACD_simple | Direction | | |
| ChrAng | ABBIED600_Rev3_ASG_SG_i | Characteristic angle | | |
| MinFwdAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in forward direction | | |
| MinRvAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in reverse direction | | |
| MaxFwdAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in forward direction | | |
| MaxRvAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in reverse direction | | |
| BlkValA | ABBIED600_Rev3_ASG_SP_i | Minimum operating current | | |
| BlkValV | ABBIED600_Rev3_ASG_SP_i | Minimum operating voltage | | |
| PolQty | ABBIED600_Rev1_ENG_SP_PolQty | Polarizing quantity | | |

| | | | | |
|---|---|---|---|---|
| InRcaCtl | ABBIED600_Rev1_SPS_e | Relay characteristic angle control | E | ABBIED600:2014 |
| OpModEF | ABBIED600_Rev2_ENG_SG_OpModEF_e | Operation criteria | E | ABBIED600:2014 |
| CorAng | ABBIED600_Rev3_ASG_SP_i_e | Correction angle | E | ABBIED600:2014 |
| RevPol | ABBIED600_Rev1_SPG_SP_e | Rotate polarizing quantity | E | ABBIED600:2014 |
| OpAEF | ABBIED600_Rev3_MV_simple_i_e | Operating current for EF protection | E | ABBIED600:2014 |
| OpPolAng | ABBIED600_Rev3_MV_simple_i_e | Angle between operating and polarizing quantity | E | ABBIED600:2014 |
| OpChrAng | ABBIED600_Rev3_MV_simple_i_e | Angle between operating angle and characteristic angle | E | ABBIED600:2014 |
| VResSigSel | ABBIED600_Rev2_ENG_SP_VResSigSel_e | Selection for used Uo signal | E | ABBIED600:2014 |

### 5.2.24 3.2.24 LN: DEFLPTOC2 Name: PTOC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| TmACrv | ABBIED600_Rev2_CURVE_SG | Curve parameter E | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| TmMult | ABBIED600_Rev3_ASG_SG_i | Time Dial Multiplier | | |
| MinOpTmms | ABBIED600_Rev1_ING_SP_1 | Minimum Operate Time | | |

| | | | | |
|---|---|---|---|---|
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| TypRsCrv | ABBIED600_Rev3_ENG_SG_TypRsCrv | Selection of reset curve type | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| DirMod | ABBIED600_Rev3_ENG_SG_DirMod | Directional Mode | | |
| VStr | ABBIED600_Rev3_ASG_SG_i_e | Voltage start value | E | IEC 61850-7-4:2007 |
| StrValMult | ABBIED600_Rev3_ASG_SG_i_e | Multiplier for scaling the start value | E | ABBIED600:2014 |
| AllwNonDir | ABBIED600_Rev1_SPG_SP_e | Allows prot activation as non-dir when dir info is invalid | E | ABBIED600:2014 |
| AMeasMod | ABBIED600_Rev3_ENG_SP_MeasMod_e | Selects used measurement mode | E | ABBIED600:2014 |
| InEnaMult | ABBIED600_Rev1_SPS_e | Enables current multiplier | E | ABBIED600:2014 |
| StrDur | ABBIED600_Rev3_MV_simple_i_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| EnaVLim | ABBIED600_Rev1_SPG_SG_e | Enable voltage limit | E | ABBIED600:2014 |
| TestPro | ABBIED600_Rev2_ENC_TestPro_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| AResSigSel | ABBIED600_Rev2_ENG_SP_AResSigSel_e | Selection for used Io signal | E | ABBIED600:2014 |

### 5.2.25 3.2.25 LN: DEFLRDIR2 Name: RDIR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Dir | ABBIED600_Rev1_ACD_simple | Direction | | |
| ChrAng | ABBIED600_Rev3_ASG_SG_i | Characteristic angle | | |
| MinFwdAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in forward direction | | |
| MinRvAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in reverse direction | | |
| MaxFwdAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in forward direction | | |
| MaxRvAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in reverse direction | | |
| BlkValA | ABBIED600_Rev3_ASG_SP_i | Minimum operating current | | |
| BlkValV | ABBIED600_Rev3_ASG_SP_i | Minimum operating voltage | | |
| PolQty | ABBIED600_Rev1_ENG_SP_PolQty | Polarizing quantity | | |
| InRcaCtl | ABBIED600_Rev1_SPS_e | Relay characteristic angle control | E | ABBIED600:2014 |
| OpModEF | ABBIED600_Rev2_ENG_SG_OpModEF_e | Operation criteria | E | ABBIED600:2014 |
| CorAng | ABBIED600_Rev3_ASG_SP_i_e | Correction angle | E | ABBIED600:2014 |
| RevPol | ABBIED600_Rev1_SPG_SP_e | Rotate polarizing quantity | E | ABBIED600:2014 |
| OpAEF | ABBIED600_Rev3_MV_simple_i_e | Operating current for EF protection | E | ABBIED600:2014 |
| OpPolAng | ABBIED600_Rev3_MV_simple_i_e | Angle between operating and polarizing quantity | E | ABBIED600:2014 |
| OpChrAng | ABBIED600_Rev3_MV_simple_i_e | Angle between operating angle and characteristic angle | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| VResSigSel | ABBIED600_Rev2_ENG_SP_VResSigSel_e | Selection for used Uo signal | E | ABBIED600:2014 |

### 5.2.26 3.2.26 LN: DEFHPTOC1 Name: PTOC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| TmACrv | ABBIED600_Rev2_CURVE_SG | Operating Curve Type | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| TmMult | ABBIED600_Rev3_ASG_SG_i | Time Dial Multiplier | | |
| MinOpTmms | ABBIED600_Rev1_ING_SP_1 | Minimum Operate Time | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| TypRsCrv | ABBIED600_Rev3_ENG_SG_TypRsCrv | Selection of reset curve type | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| DirMod | ABBIED600_Rev3_ENG_SG_DirMod | Directional Mode | | |
| VStr | ABBIED600_Rev3_ASG_SG_i_e | Voltage start value | E | IEC 61850-7-4:2007 |
| StrValMult | ABBIED600_Rev3_ASG_SG_i_e | Multiplier for scaling the start value | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| AllwNonDir | ABBIED600_Rev1_SPG_SP_e | Allows prot activation as non-dir when dir info is invalid | E | ABBIED600:2014 |
| AMeasMod | ABBIED600_Rev3_ENG_SP_MeasMod_e | Selects used measurement mode | E | ABBIED600:2014 |
| InEnaMult | ABBIED600_Rev1_SPS_e | Enables current multiplier | E | ABBIED600:2014 |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| EnaVLim | ABBIED600_Rev1_SPG_SG_e | Enable voltage limit | E | ABBIED600:2014 |
| TestPro | ABBIED600_Rev2_ENC_TestPro_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| AResSigSel | ABBIED600_Rev2_ENG_SP_AResSigSel_e | Selection for used Io signal | E | ABBIED600:2014 |

### 5.2.27 3.2.27 LN: DEFHRDIR1 Name: RDIR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Dir | ABBIED600_Rev1_ACD_simple | Direction | | |
| ChrAng | ABBIED600_Rev3_ASG_SG_i | Characteristic angle | | |
| MinFwdAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in forward direction | | |
| MinRvAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in reverse direction | | |
| MaxFwdAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in forward direction | | |
| MaxRvAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle | | |

| | | | | |
|---|---|---|---|---|
| | | in reverse direction | | |
| BlkValA | ABBIED600_Rev3_ASG_SP_i | Minimum operating current | | |
| BlkValV | ABBIED600_Rev3_ASG_SP_i | Minimum operating voltage | | |
| PolQty | ABBIED600_Rev1_ENG_SP_PolQty | Polarizing quantity | | |
| InRcaCtl | ABBIED600_Rev1_SPS_e | Relay characteristic angle control | E | ABBIED600:2014 |
| OpModEF | ABBIED600_Rev2_ENG_SG_OpModEF_e | Operation criteria | E | ABBIED600:2014 |
| CorAng | ABBIED600_Rev3_ASG_SP_i_e | Correction angle | E | ABBIED600:2014 |
| RevPol | ABBIED600_Rev1_SPG_SP_e | Rotate polarizing quantity | E | ABBIED600:2014 |
| OpAEF | ABBIED600_Rev3_MV_simple_i_e | Operating current for EF protection | E | ABBIED600:2014 |
| OpPolAng | ABBIED600_Rev3_MV_simple_i_e | Angle between operating and polarizing quantity | E | ABBIED600:2014 |
| OpChrAng | ABBIED600_Rev3_MV_simple_i_e | Angle between operating angle and characteristic angle | E | ABBIED600:2014 |
| VResSigSel | ABBIED600_Rev2_ENG_SP_VResSigSel_e | Selection for used Uo signal | E | ABBIED600:2014 |

### 5.2.28 3.2.28 LN: DEFHPTOC2 Name: PTOC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |

| | | | | |
|---|---|---|---|---|
| TmACrv | ABBIED600_Rev2_CURVE_SG | Operating Curve Type | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| TmMult | ABBIED600_Rev3_ASG_SG_i | Time Dial Multiplier | | |
| MinOpTmms | ABBIED600_Rev1_ING_SP_1 | Minimum Operate Time | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| TypRsCrv | ABBIED600_Rev3_ENG_SG_TypRsCrv | Selection of reset curve type | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| DirMod | ABBIED600_Rev3_ENG_SG_DirMod | Directional Mode | | |
| VStr | ABBIED600_Rev3_ASG_SG_i_e | Voltage start value | E | IEC 61850-7-4:2007 |
| StrValMult | ABBIED600_Rev3_ASG_SG_i_e | Multiplier for scaling the start value | E | ABBIED600:2014 |
| AllwNonDir | ABBIED600_Rev1_SPG_SP_e | Allows prot activation as non-dir when dir info is invalid | E | ABBIED600:2014 |
| AMeasMod | ABBIED600_Rev3_ENG_SP_MeasMod_e | Selects used measurement mode | E | ABBIED600:2014 |
| InEnaMult | ABBIED600_Rev1_SPS_e | Enables current multiplier | E | ABBIED600:2014 |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| EnaVLim | ABBIED600_Rev1_SPG_SG_e | Enable voltage | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| | | limit | | |
| TestPro | ABBIED600_Rev2_ENC_TestPro_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| AResSigSel | ABBIED600_Rev2_ENG_SP_AResSigSel_e | Selection for used Io signal | E | ABBIED600:2014 |

### 5.2.29 3.2.29 LN: DEFHRDIR2 Name: RDIR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Dir | ABBIED600_Rev1_ACD_simple | Direction | | |
| ChrAng | ABBIED600_Rev3_ASG_SG_i | Characteristic angle | | |
| MinFwdAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in forward direction | | |
| MinRvAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in reverse direction | | |
| MaxFwdAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in forward direction | | |
| MaxRvAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in reverse direction | | |
| BlkValA | ABBIED600_Rev3_ASG_SP_i | Minimum operating current | | |
| BlkValV | ABBIED600_Rev3_ASG_SP_i | Minimum operating voltage | | |
| PolQty | ABBIED600_Rev1_ENG_SP_PolQty | Polarizing quantity | | |
| InRcaCtl | ABBIED600_Rev1_SPS_e | Relay characteristic angle control | E | ABBIED600:2014 |
| OpModEF | ABBIED600_Rev2_ENG_SG_OpModEF_e | Operation criteria | E | ABBIED600:2014 |
| CorAng | ABBIED600_Rev3_ASG_SP_i_e | Correction angle | E | ABBIED600:2014 |
| RevPol | ABBIED600_Rev1_SPG_SP_e | Rotate polarizing quantity | E | ABBIED600:2014 |
| OpAEF | ABBIED600_Rev3_MV_simple_i_e | Operating current for | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| | | EF protection | | |
| OpPolAng | ABBIED600_Rev3_MV_simple_i_e | Angle between operating and polarizing quantity | E | ABBIED600:2014 |
| OpChrAng | ABBIED600_Rev3_MV_simple_i_e | Angle between operating angle and characteristic angle | E | ABBIED600:2014 |
| VResSigSel | ABBIED600_Rev2_ENG_SP_VResSigSel_e | Selection for used Uo signal | E | ABBIED600:2014 |

### 5.2.30 3.2.30 LN: MFADPSDE1 Name: PSDE (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| GndStr | ABBIED600_Rev3_ASG_SG_i | Voltage start value | | |
| StrDlTmms | ABBIED600_Rev1_ING_SP_1 | Start delay time | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| DirMod | ABBIED600_Rev3_ENG_SG_DirMod | Directional Mode | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1_e | Reset Delay Time | E | IEC 61850-7-4:2007 |
| ItmEFInd | ABBIED600_Rev1_SPS_e | Intermittent earth-fault indication | E | ABBIED600:2014 |
| InhEF | ABBIED600_Rev1_SPS_e | Block EF | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| PkInd | ABBIED600_Rev1_SPS_e | Current transi-ent detection indication | E | ABBIED600:2014 |
| TrgSt | ABBIED600_Rev1_SPS_simple_e | Signal indicat-ing function triggering | E | ABBIED600:2014 |
| PkCntLim | ABBIED600_Rev1_ING_SP_1_e | Min require-ment for peak counter before start in IEF mode | E | ABBIED600:2014 |
| TestPro | ABBIED600_Rev2_ENC_TestPro_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| OpModTEF | ABBIED600_Rev3_ENG_SP_OpModTEF_e | Operation mode for func-tion | E | ABBIED600:2014 |
| AResSigSel | ABBIED600_Rev2_ENG_SP_AResSigSel_e | Selection for used Io signal | E | ABBIED600:2014 |
| VResSigSel | ABBIED600_Rev2_ENG_SP_VResSigSel_e | Selection for used Uo signal | E | ABBIED600:2014 |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |

### 5.2.31 3.2.31 LN: MFADRDIR1 Name: RDIR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Dir | ABBIED600_Rev1_ACD_simple | Direction | | |
| BlkValA | ABBIED600_Rev3_ASG_SG_i | Minimum operat-ing current | | |
| RevPol | ABBIED600_Rev1_SPG_SP_e | Rotate polarizing quantity | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| OpPolAng | ABBIED600_Rev3_MV_simple_i_e | Angle between polarizing and operating quantity | E | ABBIED600:2014 |
| TiltAng | ABBIED600_Rev3_ASG_SG_i_e | Characteristic tilt angle | E | ABBIED600:2014 |
| OpQtySel | ABBIED600_Rev1_ENG_SP_OpQtySel_e | Operating quantity selection: resistive, amplitude | E | ABBIED600:2014 |
| DirRs | ABBIED600_Rev1_SPC_simple_e | Direction calculation reset | E | ABBIED600:2014,status-only |

### 5.2.32 3.2.32 LN: PDNSPTOC1 Name: PTOC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| ImbNgA | ABBIED600_Rev3_MV_simple_i_e | Measured current ratio I2 / I1 | E | IEC 61850-7-4:2007 |
| MinPhA | ABBIED600_Rev3_ASG_SP_i_e | Minimum phase current | E | ABBIED600:2014 |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| TstOutCmd | ABBIED600_Rev20_ENC_TstOut_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |

### 5.2.33 3.2.33 LN: ROVPTOV1 Name: PTOV (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Residual Over Voltage start value | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| TstOutCmd | ABBIED600_Rev20_ENC_TstOut_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| VResSigSel | ABBIED600_Rev2_ENG_SP_VResSigSel_e | Selection for used Uo signal | E | ABBIED600:2014 |

### 5.2.34 3.2.34 LN: PHPTUV1 Name: PTUV (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_threephase | Start | | |
| Op | ABBIED600_Rev1_ACT_threephase | Operate | | |
| TmVCrv | ABBIED600_Rev2_CURVE_SG | Operating Curve Type | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| TmMult | ABBIED600_Rev3_ASG_SG_i | Time Dial Multiplier | | |
| MinOpTmms | ABBIED600_Rev1_ING_SP_1 | Minimum Operate Time | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| TypRsCrv | ABBIED600_Rev3_ENG_SG_TypRsCrv_e | Type of Reset Curve | E | IEC 61850-7-4:2007 |
| BlkVal | ABBIED600_Rev3_ASG_SP_i_e | Voltage block value | E | IEC 61850-7-4:2007 |
| NumPh | ABBIED600_Rev3_ENG_SP_StrPhSel_e | Number of phases required for operate activation | E | ABBIED600:2014 |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| TestPro | ABBIED600_Rev2_ENC_TestPro_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| CrvSatRl | ABBIED600_Rev1_ASG_SP_f_e | Tuning parameter to avoid | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| | | curve discontinuities | | |
| VSel | ABBIED600_Rev3_ENG_SP_VSel_e | Parameter to select phase or phase-to-phase voltages | E | ABBIED600:2014 |
| EnaBlkVal | ABBIED600_Rev1_SPG_SP_e | Enable block value | E | ABBIED600:2014 |
| HysRl | ABBIED600_Rev3_ASG_SP_i_e | Relative hysteresis for operation | E | ABBIED600:2014 |
| TypTmRs | ABBIED600_Rev2_ENG_SG_TypTmRs_e | Type of time reset | E | ABBIED600:2014 |

### 5.2.35 3.2.35 LN: PHPTOV1 Name: PTOV (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_threephase | Start | | |
| Op | ABBIED600_Rev1_ACT_threephase | Operate | | |
| TmVCrv | ABBIED600_Rev2_CURVE_SG | Operating Curve Type | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| TmMult | ABBIED600_Rev3_ASG_SG_i | Time Dial Multiplier | | |
| MinOpTmms | ABBIED600_Rev1_ING_SP_1 | Minimum Operate Time | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay | | |

| | | | | |
|---|---|---|---|---|
| | | Time | | |
| TypRsCrv | ABBIED600_Rev3_ENG_SG_TypRsCrv_e | Type of Reset Curve | E | IEC 61850-7-4:2007 |
| NumPh | ABBIED600_Rev3_ENG_SP_StrPhSel_e | Number of phases required for operate activation | E | ABBIED600:2014 |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| TestPro | ABBIED600_Rev2_ENC_TestPro_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| CrvSatRl | ABBIED600_Rev1_ASG_SP_f_e | Tuning parameter to avoid curve discontinuities | E | ABBIED600:2014 |
| VSel | ABBIED600_Rev3_ENG_SP_VSel_e | Parameter to select phase or phase-to-phase voltages | E | ABBIED600:2014 |
| HysRl | ABBIED600_Rev3_ASG_SP_i_e | Relative hysteresis for operation | E | ABBIED600:2014 |
| TypTmRs | ABBIED600_Rev2_ENG_SG_TypTmRs_e | Type of time reset | E | ABBIED600:2014 |

### 5.2.36 3.2.36 LN: FRPTRC1 Name: PTRC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |

| | | | | |
|---|---|---|---|---|
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| TestPro | ABBIED600_Rev2_ENC_TestPro_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| OpModProHz | ABBIED600_Rev2_ENG_SG_OpModProHz_e | Operation mode | E | ABBIED600:2014 |

### 5.2.37 3.2.37 LN: FRPTOF1 Name: PTOF (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Str | ABBIED600_Rev1_ACD_simple | Start, overfrequency | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate, overfrequency | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time, overfrequency | E | ABBIED600:2014 |

### 5.2.38 3.2.38 LN: FRPTUF1 Name: PTUF (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Str | ABBIED600_Rev1_ACD_simple | Start, underfrequency | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate, underfrequency | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |

| | | | | |
|---|---|---|---|---|
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time, underfrequency | E | ABBIED600:2014 |

### 5.2.39 3.2.39 LN: FRPFRC1 Name: PFRC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Str | ABBIED600_Rev1_ACD_simple | Start, frequency gradient | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate, frequency gradient | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value df/dt | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time, frequency gradient | E | ABBIED600:2014 |

### 5.2.40 3.2.40 LN: T1PTTR1 Name: PTTR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary out-puts | | |
| Tmp | ABBIED600_Rev3_MV_simple_i | TEMP | | |
| TmpRl | ABBIED600_Rev3_MV_simple_i | TEMP_RL | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| AlmThm | ABBIED600_Rev1_SPS | Thermal Alarm | | |
| TmpMax | ABBIED600_Rev3_ASG_SG_i | Operate level temperature | | |
| ConsTms1 | ABBIED600_Rev1_ING_SG | Time constant | | |

| | | | | |
|---|---|---|---|---|
| | | for thermal model | | |
| AlmVal | ABBIED600_Rev3_ASG_SG_i | Alarm level temperature | | |
| RsTmp | ABBIED600_Rev2_SPC_control_e | Reset temperature | E | ABBIED600:2014,status-only,direct-with-normal-security |
| InEnaMult | ABBIED600_Rev1_SPS_e | Enable multiplier for reference setting | E | ABBIED600:2014 |
| BlkThm | ABBIED600_Rev1_SPS | Block reclose signal | | |
| TmpUsed | ABBIED600_Rev3_MV_simple_i_e | The ambient temperature used in the calculation | E | ABBIED600:2014 |
| TmpAmb | ABBIED600_Rev3_MV_simple_i_e | Ambient temperature | E | ABBIED600:2014 |
| OpTm | ABBIED600_Rev3_INS_Unit_e | Estimated time to operate | E | ABBIED600:2014 |
| BlkThmRsTm | ABBIED600_Rev3_INS_Unit_e | Estimated time to deactivate BLK_CLOSE | E | ABBIED600:2014 |
| AMult | ABBIED600_Rev1_ING_SG_e | Current reference multiplier for thermal model | E | ABBIED600:2014 |
| ARef | ABBIED600_Rev3_ASG_SG_i_e | Current reference for thermal model | E | ABBIED600:2014 |
| EnvTmpSet | ABBIED600_Rev3_ASG_SG_i_e | Ambient temperature | E | ABBIED600:2014 |
| IniTmp | ABBIED600_Rev3_ASG_SP_i_e | Temperature calculation initial value | E | ABBIED600:2014 |
| RecTmpSet | ABBIED600_Rev3_ASG_SG_i_e | Temperature | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| | | for reset of BLK_CLOSE after operate | | |
| TmpR | ABBIED600_Rev3_ASG_SG_i_e | Temperature rise | E | ABBIED600:2014 |
| TstOutCmd | ABBIED600_Rev20_ENC_TstOut_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |

### 5.2.41 3.2.41 LN: CCBRBRF1 Name: RBRF (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Str | ABBIED600_Rev1_ACD_simple | Delayed CB failure alarm | | |
| OpEx | ABBIED600_Rev1_ACT_simple | Breaker failure trip (external trip) | | |
| OpIn | ABBIED600_Rev1_ACT_simple | Operate, retrip (internal trip) | | |
| FailMod | ABBIED600_Rev2_ENG_SP_FailMod | Breaker Failure Detection Mode (current, breaker status, both, other) | | |
| FailTmms | ABBIED600_Rev1_ING_SP | Breaker Failure Time Delay for bus bar trip | | |
| TPTrTmms | ABBIED600_Rev1_ING_SP_e | Three Pole Retrip Time Delay | E | IEC 61850-7-4:2007 |
| DetValA | ABBIED600_Rev3_ASG_SP_i | Current De- | | |

| | | | | |
|---|---|---|---|---|
| | | tector Value | | |
| ReTrMod | ABBIED600_Rev2_ENG_SP_ReTrMod | Retrip Mode | | |
| TrPlsTmms | ABBIED600_Rev1_ING_SP_e | Trip pulse time | E | IEC 61850-7-4:2007 |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| DetValARes | ABBIED600_Rev3_ASG_SP_i_e | Current Detector Value for residual current | E | ABBIED600:2014 |
| AMeasMod | ABBIED600_Rev3_ENG_SP_MeasMod_e | Measurement mode selection (current): 2= DFT; 3= Peak-to-Peak | E | ABBIED600:2014 |
| CBAlmTmms | ABBIED600_Rev1_ING_SP_e | Circuit breaker faulty alarm delay | E | ABBIED600:2014 |
| OpExMod | ABBIED600_Rev2_ENG_SP_buTripMode_e | Select type of backup trip logic | E | ABBIED600:2014 |
| InStr | ABBIED600_Rev1_SPS_e | CBFP start command | E | ABBIED600:2014 |
| InPosCls | ABBIED600_Rev1_SPS_e | CB in closed poisition | E | ABBIED600:2014 |
| InCBFlt | ABBIED600_Rev1_SPS_e | CB faulty and unable to trip | E | ABBIED600:2014 |
| TstOutCmd | ABBIED600_Rev20_ENC_TstOut_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| StrLtcMod | ABBIED600_Rev2_ENG_SP_StrLtcMod_e | Start reset delayed or immediately | E | ABBIED600:2014 |

### 5.2.42 3.2.42 LN: INRPHAR1 Name: PHAR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_threephase | Start | | |
| PhStr | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| TstOutCmd | ABBIED600_Rev20_ENC_TstOut_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |

### 5.2.43 3.2.43 LN: TRPPTRC1 Name: PTRC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | BLOCK | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Tr | ABBIED600_Rev1_ACT_simple_dU | General trip output signal | | |
| Op | ABBIED600_Rev1_ACT_simple_dU | Operate input signal | | |
| TrPlsTmms | ABBIED600_Rev1_ING_SP_1 | Minimum duration of trip output signal | | |

| | | | | |
|---|---|---|---|---|
| TrOutMod | ABBIED600_Rev2_ENG_SP_TrOutMod_e | Trip output mode | E | ABBIED600:2014 |
| LORs | ABBIED600_Rev2_SPC_indications_e | RST_LKOUT | E | ABBIED600:2014,status-only,direct-with-normal-security |
| TrRs | ABBIED600_Rev2_SPC_indications_e | Reset latched trip | E | ABBIED600:2014,status-only,direct-with-normal-security |
| ClsLO | ABBIED600_Rev1_SPS_e | Circuit breaker lockout output (set until reset) | E | ABBIED600:2014 |

### 5.2.44 3.2.44 LN: TRPPTRC2 Name: PTRC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | BLOCK | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Tr | ABBIED600_Rev1_ACT_simple_dU | General trip output signal | | |
| Op | ABBIED600_Rev1_ACT_simple_dU | Operate input signal | | |
| TrPlsTmms | ABBIED600_Rev1_ING_SP_1 | Minimum duration of trip output signal | | |
| TrOutMod | ABBIED600_Rev2_ENG_SP_TrOutMod_e | Trip output mode | E | ABBIED600:2014 |
| LORs | ABBIED600_Rev2_SPC_indications_e | RST_LKOUT | E | ABBIED600:2014,status-only,direct-with-normal-security |
| TrRs | ABBIED600_Rev2_SPC_indications_e | Reset latched trip | E | ABBIED600:2014,status-only,direct-with-normal-security |

| | | | | |
|---|---|---|---|---|
| ClsLO | ABBIED600_Rev1_SPS_e | Circuit breaker lockout output (set until reset) | E | ABBIED600:2014 |

### 5.2.45 3.2.45 LN: MAPGAPC1 Name: GAPC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG_e | Operate delay time | E | IEC 61850-7-4:2007 |
| RsDlTmms | ABBIED600_Rev1_ING_SP_e | Reset delay time | E | IEC 61850-7-4:2007 |
| AnIn | ABBIED600_Rev3_MV_2_e | Analogue input | E | IEC 61850-7-4:2007 |
| OpModCom | ABBIED600_Rev2_ENG_SP_OpModComp_e | Operation mode | E | ABBIED600:2014 |
| TstOutCmd | ABBIED600_Rev20_ENC_TstOut_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| HysAbs | ABBIED600_Rev3_ASG_SP_i_e | Absolute hysteresis for operation | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| StrValAdd | ABBIED600_Rev3_ASG_SG_i_e | Start value Add | E | ABBIED600:2014 |
| InEnaAdd | ABBIED600_Rev1_SPS_e | Enable start with added start value | E | ABBIED600:2014 |

### 5.2.46 3.2.46 LN: MAPGAPC2 Name: GAPC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG_e | Operate de-lay time | E | IEC 61850-7-4:2007 |
| RsDlTmms | ABBIED600_Rev1_ING_SP_e | Reset delay time | E | IEC 61850-7-4:2007 |
| AnIn | ABBIED600_Rev3_MV_2_e | Analogue input | E | IEC 61850-7-4:2007 |
| OpModCom | ABBIED600_Rev2_ENG_SP_OpModComp_e | Operation mode | E | ABBIED600:2014 |
| TstOutCmd | ABBIED600_Rev20_ENC_TstOut_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| HysAbs | ABBIED600_Rev3_ASG_SP_i_e | Absolute hysteresis | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| | | for operation | | |
| StrValAdd | ABBIED600_Rev3_ASG_SG_i_e | Start value Add | E | ABBIED600:2014 |
| InEnaAdd | ABBIED600_Rev1_SPS_e | Enable start with added start value | E | ABBIED600:2014 |

### 5.2.47 3.2.47 LN: LSHDPTRC1 Name: PTRC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Time delay to restore | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| TstOutCmd | ABBIED600_Rev20_ENC_TstOut_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| LodShdMod | ABBIED600_Rev2_ENG_SG_OpModProHz_e | Operation mode | E | ABBIED600:2014 |

### 5.2.48 3.2.48 LN: LSHDPTOF1 Name: PTOF (ED2)

| Attribute | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| name | | | | |
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Str | ABBIED600_Rev1_ACD_simple | Start of restore | | |
| Op | ABBIED600_Rev1_ACT_simple | Restore the load | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Restore frequency | | |
| ManRest | ABBIED600_Rev2_SPC_control_e | Manual restore command | E | ABBIED600:2014,status-only,direct-with-normal-security |
| RestMod | ABBIED600_Rev2_ENG_SG_AutoManMod_e | Restore mode | E | ABBIED600:2014 |
| BlkRest | ABBIED600_Rev2_SPC_control_e | Cancel restore | E | ABBIED600:2014,status-only,direct-with-normal-security |

### 5.2.49 3.2.49 LN: SCEFRFLO1 Name: RFLO (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| FltZ | ABBIED600_Rev3_CMV_S_1 | Fault loop impedance | | |
| FltDiskm | ABBIED600_Rev3_MV_simple_i | Fault distance | | |
| FltLoop | ABBIED600_Rev5_ENS_FltLoop | Fault loop | | |
| RcdBlk | ABBIED600_Rev1_SPS_simple_e | Signal for blocking the triggering | E | ABBIED600:2014 |
| Alm | ABBIED600_Rev1_SPS_e | Alarm | E | IEC 61850-7-4:2007 |
| TrgSt | ABBIED600_Rev1_SPS_e | Triggered | E | ABBIED600:2014 |
| FltPtR | ABBIED600_Rev3_MV_simple_i_e | Fault point re- | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| | | sistance | | |
| FltR | ABBIED600_Rev3_MV_simple_i_e | Fault loop resistance | E | ABBIED600:2014 |
| FltX | ABBIED600_Rev3_MV_simple_i_e | Fault loop reactance | E | ABBIED600:2014 |
| PhReact | ABBIED600_Rev3_MV_simple_i_e | Fault phase reactance | E | ABBIED600:2014 |
| RatFltALod | ABBIED600_Rev3_MV_simple_i_e | Fault to load current ratio | E | ABBIED600:2014 |
| EqDisLod | ABBIED600_Rev3_MV_simple_i_e | Estimated equivalent load distance | E | ABBIED600:2014 |
| PhGndCapac | ABBIED600_Rev3_MV_simple_i_e | Estimated PE capacitive reactance of the line | E | ABBIED600:2014 |
| Trg | ABBIED600_Rev2_SPC_control_e | Triggering signal for distance calculation | E | ABBIED600:2014,status-only,direct-with-normal-security |
| TrgXC0F | ABBIED600_Rev2_SPC_control_e | Triggering signal for XC0F calculation | E | ABBIED600:2014,status-only,direct-with-normal-security |
| RcdRs | ABBIED600_Rev2_SPC_control_e | Recorded data reset | E | ABBIED600:2014,status-only,direct-with-normal-security |
| FltDisQ | ABBIED600_Rev1_INS_e | Fault distance quality | E | ABBIED600:2014 |
| ZMaxLod | ABBIED600_Rev3_ASG_SG_i_e | Maximum load impedance | E | ABBIED600:2014 |
| PhLeakRis | ABBIED600_Rev3_ASG_SG_i_e | Line PE leakage resistance | E | ABBIED600:2014 |
| PhLinCapac | ABBIED600_Rev3_ASG_SG_i_e | Line PE capacitive reactance | E | ABBIED600:2014 |
| EqLodDis | ABBIED600_Rev3_ASG_SG_i_e | Equivalent load distance | E | ABBIED600:2014 |

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|---|---|---|---|---|
| TrgMod | ABBIED600_Rev1_ENG_SP_TrgMod_e | Trigger mode for distance calculation | E | IEC 61850-7-4:2007 |
| HiLimSpt | ABBIED600_Rev3_ASG_SG_i | High alarm limit | | |
| LoLimSpt | ABBIED600_Rev3_ASG_SG_i | Low alarm limit | | |
| EFAlgSel | ABBIED600_Rev2_ENG_SP_EFAlg_e | PE-loop calculation algorithm | E | ABBIED600:2014 |
| EFAlgASel | ABBIED600_Rev2_ENG_SP_EFAlgASel_e | Earth fault current model | E | ABBIED600:2014 |
| EnaLodComp | ABBIED600_Rev1_SPG_SP_e | Enable load compensation | E | ABBIED600:2014 |
| SimpMod | ABBIED600_Rev1_SPG_SP_e | Enable simple model | E | ABBIED600:2014 |
| TestProRl | ABBIED600_Rev6_ENC_TestProRl_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| DisEstVa | ABBIED600_Rev3_ASG_SP_i_e | Allowed variation of short circuit distance estimate | E | ABBIED600:2014 |
| PhVMeas | ABBIED600_Rev2_ENG_SP_PhVMeas_e | Phase voltage measurement principle | E | ABBIED600:2014 |

### 5.2.50 3.2.50 LN: DARREC1 Name: RREC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| OpCntRs | ABBIED600_Rev1_INC_simple_int_e | Resetable operation counter (all shots) | E | IEC 61850-7-4:2007,status-only |

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|---|---|---|---|---|
| RecCyc | ABBIED600_Rev1_INS | Actual reclose cycle (number between 1 and UseCyc) | | |
| OpCls | ABBIED600_Rev1_ACT_threephase | Operate (close command to XCBR) | | |
| AutoRecSt | ABBIED600_Rev3_ENS_AutoRecSt | Auto Reclosing Status | | |
| Rec1Tmms1 | ABBIED600_Rev1_ING_SP | First reclose time | | |
| Rec1Tmms2 | ABBIED600_Rev1_ING_SP | Second reclose time | | |
| Rec1Tmms3 | ABBIED600_Rev1_ING_SP | Third reclose time | | |
| Rec1Tmms4 | ABBIED600_Rev1_ING_SP | Fourth reclose time | | |
| Rec1Tmms5 | ABBIED600_Rev1_ING_SP | Fifth reclose time | | |
| Rec1Tmms6 | ABBIED600_Rev1_ING_SP | Sixth reclose time | | |
| Rec1Tmms7 | ABBIED600_Rev1_ING_SP | Seventh reclose time | | |
| Rec3Tmms1 | ABBIED600_Rev1_ING_SP | First reclose time | | |
| Rec3Tmms2 | ABBIED600_Rev1_ING_SP | Second reclose time | | |
| Rec3Tmms3 | ABBIED600_Rev1_ING_SP | Third reclose time | | |
| Rec3Tmms4 | ABBIED600_Rev1_ING_SP | Fourth reclose time | | |
| Rec3Tmms5 | ABBIED600_Rev1_ING_SP | Fifth reclose time | | |
| Rec3Tmms6 | ABBIED600_Rev1_ING_SP | Sixth reclose time | | |

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|---|---|---|---|---|
| Rec3Tmms7 | ABBIED600_Rev1_ING_SP | Seventh reclose time | | |
| RclTmms | ABBIED600_Rev1_ING_SP | Reclaim time | | |
| OpOpn | ABBIED600_Rev1_ACT_threephase_e | Operate (open command to XCBR) | E | IEC 61850-7-4:2007 |
| BlkRec | ABBIED600_Rev2_SPC_control_e | Block reclose | E | AB-BIED600:2014,status-only,direct-with-normal-security |
| RecCnt1 | ABBIED600_Rev1_INS_e | Operation counter (1st shot) | E | ABBIED600:2014 |
| RecCnt2 | ABBIED600_Rev1_INS_e | Operation counter (2nd shot) | E | ABBIED600:2014 |
| RecCnt3 | ABBIED600_Rev1_INS_e | Operation counter (3rd shot) | E | ABBIED600:2014 |
| RecCnt4 | ABBIED600_Rev1_INS_e | Operation counter (4th shot) | E | ABBIED600:2014 |
| RecCnt5 | ABBIED600_Rev1_INS_e | Operation counter (5th shot) | E | ABBIED600:2014 |
| AutoIni | ABBIED600_Rev1_ING_SP_1_e | Auto init | E | ABBIED600:2014 |
| RecOp | ABBIED600_Rev2_ENG_SP_recOp_e | Reclosing op-eration | E | ABBIED600:2014 |
| ManClsMod | ABBIED600_Rev1_SPG_SP_e | Manual close mode | E | ABBIED600:2014 |
| WtClsTmms | ABBIED600_Rev1_ING_SP_e | Wait close time | E | ABBIED600:2014 |
| MaxWtTmms | ABBIED600_Rev1_ING_SP_e | Max wait time | E | ABBIED600:2014 |
| MaxBlkTmms | ABBIED600_Rev1_ING_SP_e | Max Thm block time | E | ABBIED600:2014 |
| CutOutTmms | ABBIED600_Rev1_ING_SP_e | Cut-out time | E | ABBIED600:2014 |

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|---|---|---|---|---|
| DsrTmms1 | ABBIED600_Rev1_ING_SP_e | Dsr time shot 1 | E | ABBIED600:2014 |
| DsrTmms2 | ABBIED600_Rev1_ING_SP_e | Dsr time shot 2 | E | ABBIED600:2014 |
| DsrTmms3 | ABBIED600_Rev1_ING_SP_e | Dsr time shot 3 | E | ABBIED600:2014 |
| DsrTmms4 | ABBIED600_Rev1_ING_SP_e | Dsr time shot 4 | E | ABBIED600:2014 |
| TermPrio | ABBIED600_Rev2_ENG_SP_termPrio_e | Terminal priori-ty | E | ABBIED600:2014 |
| SynSet | ABBIED600_Rev1_ING_SP_1_e | Synchronisa-tion set | E | ABBIED600:2014 |
| AutoWtT-mms | ABBIED600_Rev1_ING_SP_e | Auto wait time | E | ABBIED600:2014 |
| AutoLORs | ABBIED600_Rev1_SPG_SP_e | Auto lockout reset | E | ABBIED600:2014 |
| ProCrdLim | ABBIED600_Rev1_ING_SP_1_e | Protection crd limit | E | ABBIED600:2014 |
| ProCrdMod | AB-BIED600_Rev2_ENG_SP_proCrdMod_e | Protection crd mode | E | ABBIED600:2014 |
| AutoIniCnd | ABBIED600_Rev2_ENG_SP_autoIniCnd_e | Auto initiation cnd | E | ABBIED600:2014 |
| TrLin | ABBIED600_Rev1_ING_SP_1_e | Tripping line | E | ABBIED600:2014 |
| CtlLin | ABBIED600_Rev1_ING_SP_1_e | Control line | E | ABBIED600:2014 |
| EnaShotJmp | ABBIED600_Rev1_SPG_SP_e | Enable shot jump | E | ABBIED600:2014 |
| CBClsPosSt | ABBIED600_Rev1_SPG_SP_e | CB closed Pos status | E | ABBIED600:2014 |
| Ena4DlSOF | ABBIED600_Rev1_SPG_SP_e | Fourth delay in SOTF | E | ABBIED600:2014 |
| IniSigCBB1 | ABBIED600_Rev1_ING_SP_1_e | Init signals CBB1 | E | ABBIED600:2014 |
| IniSigCBB2 | ABBIED600_Rev1_ING_SP_1_e | Init signals CBB2 | E | ABBIED600:2014 |
| IniSigCBB3 | ABBIED600_Rev1_ING_SP_1_e | Init signals CBB3 | E | ABBIED600:2014 |
| IniSigCBB4 | ABBIED600_Rev1_ING_SP_1_e | Init signals CBB4 | E | ABBIED600:2014 |

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|---|---|---|---|---|
| IniSigCBB5 | ABBIED600_Rev1_ING_SP_1_e | Init signals CBB5 | E | ABBIED600:2014 |
| IniSigCBB6 | ABBIED600_Rev1_ING_SP_1_e | Init signals CBB6 | E | ABBIED600:2014 |
| IniSigCBB7 | ABBIED600_Rev1_ING_SP_1_e | Init signals CBB7 | E | ABBIED600:2014 |
| BlkSigCBB1 | ABBIED600_Rev1_ING_SP_1_e | Blk signals CBB1 | E | ABBIED600:2014 |
| BlkSigCBB2 | ABBIED600_Rev1_ING_SP_1_e | Blk signals CBB2 | E | ABBIED600:2014 |
| BlkSigCBB3 | ABBIED600_Rev1_ING_SP_1_e | Blk signals CBB3 | E | ABBIED600:2014 |
| BlkSigCBB4 | ABBIED600_Rev1_ING_SP_1_e | Blk signals CBB4 | E | ABBIED600:2014 |
| BlkSigCBB5 | ABBIED600_Rev1_ING_SP_1_e | Blk signals CBB5 | E | ABBIED600:2014 |
| BlkSigCBB6 | ABBIED600_Rev1_ING_SP_1_e | Blk signals CBB6 | E | ABBIED600:2014 |
| BlkSigCBB7 | ABBIED600_Rev1_ING_SP_1_e | Blk signals CBB7 | E | ABBIED600:2014 |
| ShotNum1 | ABBIED600_Rev1_ING_SP_1_e | Shot number CBB1 | E | ABBIED600:2014 |
| ShotNum2 | ABBIED600_Rev1_ING_SP_1_e | Shot number CBB2 | E | ABBIED600:2014 |
| ShotNum3 | ABBIED600_Rev1_ING_SP_1_e | Shot number CBB3 | E | ABBIED600:2014 |
| ShotNum4 | ABBIED600_Rev1_ING_SP_1_e | Shot number CBB4 | E | ABBIED600:2014 |
| ShotNum5 | ABBIED600_Rev1_ING_SP_1_e | Shot number CBB5 | E | ABBIED600:2014 |
| ShotNum6 | ABBIED600_Rev1_ING_SP_1_e | Shot number CBB6 | E | ABBIED600:2014 |
| ShotNum7 | ABBIED600_Rev1_ING_SP_1_e | Shot number CBB7 | E | ABBIED600:2014 |
| Str2Tmms1 | ABBIED600_Rev1_ING_SP_e | Str 2 delay shot | E | ABBIED600:2014 |

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| Str2Tmms2 | ABBIED600_Rev1_ING_SP_e | Str 2 delay shot 2 | E | ABBIED600:2014 |
| Str2Tmms3 | ABBIED600_Rev1_ING_SP_e | Str 2 delay shot 3 | E | ABBIED600:2014 |
| Str2Tmms4 | ABBIED600_Rev1_ING_SP_e | Str 2 delay shot 4 | E | ABBIED600:2014 |
| Str3Tmms1 | ABBIED600_Rev1_ING_SP_e | Str 3 delay shot 1 | E | ABBIED600:2014 |
| Str3Tmms2 | ABBIED600_Rev1_ING_SP_e | Str 3 delay shot 2 | E | ABBIED600:2014 |
| Str3Tmms3 | ABBIED600_Rev1_ING_SP_e | Str 3 delay shot 3 | E | ABBIED600:2014 |
| Str3Tmms4 | ABBIED600_Rev1_ING_SP_e | Str 3 delay shot 4 | E | ABBIED600:2014 |
| Str4Tmms1 | ABBIED600_Rev1_ING_SP_e | Str 4 delay shot 1 | E | ABBIED600:2014 |
| Str4Tmms2 | ABBIED600_Rev1_ING_SP_e | Str 4 delay shot 2 | E | ABBIED600:2014 |
| Str4Tmms3 | ABBIED600_Rev1_ING_SP_e | Str 4 delay shot 3 | E | ABBIED600:2014 |
| Str4Tmms4 | ABBIED600_Rev1_ING_SP_e | Str 4 delay shot 4 | E | ABBIED600:2014 |
| FrqCntLim | ABBIED600_Rev1_ING_SP_1_e | Frq Op counter limit | E | ABBIED600:2014 |
| FrqCntTmm | ABBIED600_Rev1_ING_SP_1_e | Frq Op counter time | E | ABBIED600:2014 |
| FrqRcvTmm | ABBIED600_Rev1_ING_SP_1_e | Frq Op recov-ery time | E | ABBIED600:2014 |
| PlsTmms | ABBIED600_Rev1_ING_SP_e | Close pulse time | E | ABBIED600:2014 |
| MaxTrTmms | ABBIED600_Rev1_ING_SP_e | Max trip time | E | ABBIED600:2014 |
| InInhRec | ABBIED600_Rev1_SPS_e | Inhibit reclose (status) | E | ABBIED600:2014 |

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|---|---|---|---|---|
| InBlkThm | ABBIED600_Rev1_SPS_e | Thermal block (status) | E | ABBIED600:2014 |
| LO | ABBIED600_Rev1_SPS_e | Lockout status | E | ABBIED600:2014 |
| RdyRec | ABBIED600_Rev1_SPS_e | Ready reclose status | E | ABBIED600:2014 |
| ActRec | ABBIED600_Rev1_SPS_e | Active reclose status | E | ABBIED600:2014 |
| SucRec | ABBIED600_Rev1_SPS_e | Successful reclose status | E | ABBIED600:2014 |
| UnsRec | ABBIED600_Rev1_SPS_e | Unsuccessful reclose status | E | ABBIED600:2014 |
| PrgRec | ABBIED600_Rev1_SPS_e | In progress status | E | ABBIED600:2014 |
| UnsCBCls | ABBIED600_Rev1_SPS_e | Unsuccessful CB closing status | E | ABBIED600:2014 |
| WtMstr | ABBIED600_Rev1_SPS_e | Master signal to follower | E | ABBIED600:2014 |
| PrgRec1 | ABBIED600_Rev1_SPS_e | In progress 1st reclose | E | ABBIED600:2014 |
| PrgRec2 | ABBIED600_Rev1_SPS_e | In progress 2nd reclose | E | ABBIED600:2014 |
| PrgRec3 | ABBIED600_Rev1_SPS_e | In progress 3rd reclose | E | ABBIED600:2014 |
| PrgRec4 | ABBIED600_Rev1_SPS_e | In progress 4th reclose | E | ABBIED600:2014 |
| PrgRec5 | ABBIED600_Rev1_SPS_e | In progress 5th reclose | E | ABBIED600:2014 |
| PrgDsr | ABBIED600_Rev1_SPS_e | Discrimination time in progress | E | ABBIED600:2014 |
| PrgCutOut | ABBIED600_Rev1_SPS_e | Cutout time in progress | E | ABBIED600:2014 |
| FrqOpCnt | ABBIED600_Rev1_INS_e | Frequent operation counter | E | ABBIED600:2014 |

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| FrqOpAlm | ABBIED600_Rev1_SPS_e | Frequent operation counter alarm | E | ABBIED600:2014 |
| RecRs | ABBIED600_Rev2_SPC_control_e | DARREC1 reset | E | ABBIED600:2014,status-only,direct-with-normal-security |
| CntRs | ABBIED600_Rev2_SPC_control_e | DARREC1 counters | E | ABBIED600:2014,status-only,direct-with-normal-security |
| DsaCnt | ABBIED600_Rev2_SPC_control_e | Signal for counter disabling | E | ABBIED600:2014,status-only,direct-with-normal-security |
| RclTmStr | ABBIED600_Rev1_SPS_e | Reclaim time started | E | ABBIED600:2014 |
| ProCrd | ABBIED600_Rev1_SPS_e | Protection coordination | E | ABBIED600:2014 |
| CBManCls | ABBIED600_Rev1_SPS_e | CB manually closed | E | ABBIED600:2014 |
| AutoRecOn | ABBIED600_Rev1_SPS_e | AR switched On | E | ABBIED600:2014 |
| ShotPntr | ABBIED600_Rev1_INS_e | Shot pointer value | E | ABBIED600:2014 |
| InRecOn | ABBIED600_Rev1_SPS_e | AR on/off control signal status | E | ABBIED600:2014 |
| InBlkRclTm | ABBIED600_Rev1_SPS_e | Block reclaim time | E | ABBIED600:2014 |
| InCBPos | ABBIED600_Rev1_SPS_e | CB position input | E | ABBIED600:2014 |
| InCBRdy | ABBIED600_Rev1_SPS_e | CB ready for reclosing | E | ABBIED600:2014 |
| InSynChk | ABBIED600_Rev1_SPS_e | Synchro check fulfilled | E | ABBIED600:2014 |

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|---|---|---|---|---|
| InIncrPntr | ABBIED600_Rev1_SPS_e | Shot pointer increment by one | E | ABBIED600:2014 |
| InIni1 | ABBIED600_Rev1_SPS_e | No 1 operate signal | E | ABBIED600:2014 |
| InIni2 | ABBIED600_Rev1_SPS_e | No 2 operate signal | E | ABBIED600:2014 |
| InIni3 | ABBIED600_Rev1_SPS_e | No 3 operate signal | E | ABBIED600:2014 |
| InIni4 | ABBIED600_Rev1_SPS_e | No 4 operate signal | E | ABBIED600:2014 |
| InIni5 | ABBIED600_Rev1_SPS_e | No 5 operate signal | E | ABBIED600:2014 |
| InIni6 | ABBIED600_Rev1_SPS_e | No 6 operate signal | E | ABBIED600:2014 |
| InDlIni2 | ABBIED600_Rev1_SPS_e | No 2 start signal | E | ABBIED600:2014 |
| InDlIni3 | ABBIED600_Rev1_SPS_e | No 3 start signal | E | ABBIED600:2014 |
| InDlIni4 | ABBIED600_Rev1_SPS_e | No 4 start signal | E | ABBIED600:2014 |
| RclTmEla | ABBIED600_Rev1_SPS_e | Reclaim time elapsed | E | ABBIED600:2014 |
| InBlkRecTm | ABBIED600_Rev1_SPS_e | Blocks and resets dead time | E | ABBIED600:2014 |
| SOF | ABBIED600_Rev1_SPS_e | Switch on the fault | E | ABBIED600:2014 |
| TestCtl | ABBIED600_Rev5_ENC_TestCtl_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |

### 5.2.51 3.2.51 LN: ATSABTC1 Name: ABTC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple_e | Block signal for all binary outputs | E | IEC 61850-7-4:2007 |
| OpOpn1 | ABBIED600_Rev1_ACT_simple_e | Circuit breaker open command for bus 1 | E | ABBIED600:2014 |
| OpCls1 | ABBIED600_Rev1_ACT_simple_e | Circuit breaker close command for bus 1 | E | ABBIED600:2014 |
| OpOpn2 | ABBIED600_Rev1_ACT_simple_e | Circuit breaker open command for bus 2 | E | ABBIED600:2014 |
| OpCls2 | ABBIED600_Rev1_ACT_simple_e | Circuit breaker close command for bus 2 | E | ABBIED600:2014 |
| TrnBlkAlm | ABBIED600_Rev1_SPS_simple_e | Automatic transfer switch blocked alarm | E | ABBIED600:2014 |
| PrgAuto | ABBIED600_Rev1_SPS_simple_e | In progress status | E | ABBIED600:2014 |
| InVLo1 | ABBIED600_Rev1_SPS_e | Transfer initiation based on under voltage on bus 1 | E | ABBIED600:2014 |
| InVLo2 | ABBIED600_Rev1_SPS_e | Transfer initiation based on under voltage on bus 2 | E | ABBIED600:2014 |
| TrDlTmms | ABBIED600_Rev1_ING_SP_e | Circuit breaker | E | ABBIED600:2014 |

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| | | trip command delay | | |
| RecDlTmms | ABBIED600_Rev1_ING_SP_e | Automatic re-connection delay | E | ABBIED600:2014 |
| TrnDeaTmms | ABBIED600_Rev1_ING_SP_e | Transfer dead time for clos-ing of circuit breaker | E | ABBIED600:2014 |
| BusPrio | ABBIED600_Rev2_ENG_SP_busPrio_e | Main bus pri-ority | E | ABBIED600:2014 |
| TestCtl | ABBIED600_Rev5_ENC_TestCtl_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |

### 5.2.52 3.2.52 LN: SSCBR1 Name: SCBR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mod | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| ColOpn | ABBIED600_Rev1_SPS_simple | Open com-mand of trip coil | | |
| OpCntAlm | ABBIED600_Rev1_SPS | Number of CB opera-tions exceeds alarm limit | | |
| OpTmOpn | ABBIED600_Rev3_MV_simple_i | Travel time of the CB during opening op-eration | | |
| OpTmCls | ABBIED600_Rev3_MV_simple_i | Travel time of | | |

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|---|---|---|---|---|
| | | the CB during closing operation | | |
| OpTmAlm | ABBIED600_Rev1_SPS_simple | Switch operating time exceeded | | |
| OpAlmNum | ABBIED600_Rev1_ING_SP_1 | Setting of alarm for number of CB operations. | | |
| OpCntRs | ABBIED600_Rev1_INC_simple_int | Number of CB operation cycle | | status-only |
| InPosOpn | ABBIED600_Rev1_SPS_e | POSOPEN | E | ABBIED600:2014 |
| InPosCls | ABBIED600_Rev1_SPS_e | POSCLOSE | E | ABBIED600:2014 |
| ColCls | ABBIED600_Rev1_SPS_simple_e | Close command status | E | ABBIED600:2014 |
| PosOpn | ABBIED600_Rev1_SPS_e | CB position is open | E | ABBIED600:2014 |
| PosIvd | ABBIED600_Rev1_SPS_e | INVALIDPOS | E | ABBIED600:2014 |
| PosCls | ABBIED600_Rev1_SPS_e | CB position is closed | E | ABBIED600:2014 |
| OpnAlm | ABBIED600_Rev1_SPS_e | CB open travel time exceeded set value | E | ABBIED600:2014 |
| ClsAlm | ABBIED600_Rev1_SPS_e | CB close travel time exceeded set value | E | ABBIED600:2014 |
| OpCntLO | ABBIED600_Rev1_SPS_e | Number of CB operations exceeds lockout limit | E | ABBIED600:2014 |
| LonTmAlm | ABBIED600_Rev1_SPS_e | CB 'not oper- | E | ABBIED600:2014 |

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|---|---|---|---|---|
| | | ated for long time' alarm | | |
| APwrAlm | ABBIED600_Rev1_SPS_e | Accumulated currents power (lyt),exceeded alarm limit | E | ABBIED600:2014 |
| APwrLO | ABBIED600_Rev1_SPS_e | Accumulated currents power (lyt),exceeded lockout limit | E | ABBIED600:2014 |
| RmnNumO-pAlm | ABBIED600_Rev1_SPS_e | Remaining life of CB ex-ceeded alarm limit | E | ABBIED600:2014 |
| OpnAlmTmms | ABBIED600_Rev1_ING_SP_1_e | Setting of alarm level for open travel time in ms | E | ABBIED600:2014 |
| CorOpnTmms | ABBIED600_Rev1_ING_SP_1_e | Correction factor for open travel time in ms | E | ABBIED600:2014 |
| ClsAlmTmms | ABBIED600_Rev1_ING_SP_1_e | Setting of alarm level for close travel time in ms | E | ABBIED600:2014 |
| CorClsTmms | ABBIED600_Rev1_ING_SP_1_e | Correction factor for CB close travel time in ms | E | ABBIED600:2014 |
| CorDifTmms | ABBIED600_Rev1_ING_SP_1_e | Corr. factor for time dif in | E | ABBIED600:2014 |

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|---|---|---|---|---|
| | | aux. and main contacts open time | | |
| OpLONum | ABBIED600_Rev1_ING_SP_1_e | Setting to block operation when number of operation is more. | E | ABBIED600:2014 |
| OpNumRtg | ABBIED600_Rev1_ING_SP_1_e | Number of operations possible at rated current | E | ABBIED600:2014 |
| NumOpAlmLev | ABBIED600_Rev1_ING_SP_1_e | Alarm level for CB remaining life | E | ABBIED600:2014 |
| OpNumFlt | ABBIED600_Rev1_ING_SP_1_e | Number of operations possible at rated fault current | E | ABBIED600:2014 |
| CntIniVal | ABBIED600_Rev1_ING_SP_1_e | The operation numbers counter initialization value | E | ABBIED600:2014 |
| InaAlmTmd | ABBIED600_Rev1_ING_SP_1_e | Alarm limit value of the inactive days counter | E | ABBIED600:2014 |
| IniInaTmd | ABBIED600_Rev1_ING_SP_1_e | Initial value of the inactive days counter | E | ABBIED600:2014 |
| InaAlmTmh | ABBIED600_Rev1_ING_SP_1_e | Alarm time of the inactive | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| | | days counter in hours | | |
| InaTmdCnt | ABBIED600_Rev1_INS_e | The number of days CB has been inactive | E | ABBIED600:2014 |
| RsAccmAPwr | ABBIED600_Rev2_SPC_control_e | Reset accumulation energy | E | ABBIED600:2014,status-only,direct-with-normal-security |
| RsCBWear | ABBIED600_Rev2_SPC_control_e | Reset input for CB remaining life and operation counter | E | ABBIED600:2014,status-only,direct-with-normal-security |
| RsTrvTm | ABBIED600_Rev2_SPC_control_e | SSCBR1 travel t | E | ABBIED600:2014,status-only,direct-with-normal-security |
| TestSpvn | ABBIED600_Rev3_ENC_TestSpvn_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| TrvClcMod | ABBIED600_Rev2_ENG_SP_TrvClcMod_e | Travel time calculation mode | E | ABBIED600:2014 |
| DirCff | ABBIED600_Rev1_ASG_SP_f_e | Directional coefficient for CB life calculation | E | ABBIED600:2014 |
| IniRmnNumOp | ABBIED600_Rev1_ASG_SP_f_e | Initial value for the CB remaining life estimates | E | ABBIED600:2014 |
| AlmAccmAPwr | ABBIED600_Rev3_ASG_SP_i_e | Setting of alarm level for accumu- | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| | | lated currents power, lyt | | |
| AccmStopA | ABBIED600_Rev3_ASG_SP_i_e | Setting of the RMS current below which engy acm stops | E | ABBIED600:2014 |
| LOAccmAPwr | ABBIED600_Rev3_ASG_SP_i_e | Setting of lockout level for accumulated currents power, lyt | E | ABBIED600:2014 |
| AExpn | ABBIED600_Rev1_ASG_SP_f_e | Current exponent setting for energy calculation | E | ABBIED600:2014 |
| AOpRtg | ABBIED600_Rev3_ASG_SP_i_e | Rated operating current of the breaker | E | ABBIED600:2014 |
| AFltRtg | ABBIED600_Rev3_ASG_SP_i_e | Rated fault current of the breaker | E | ABBIED600:2014 |
| IniAccmAPwr | ABBIED600_Rev3_ASG_SP_i_e | Initial value for accumulation energy (lyt) | E | ABBIED600:2014 |

### 5.2.53 3.2.53 LN: SPH1SCBR1 Name: SCBR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| ColOpn | ABBIED600_Rev1_SPS_simple | Open command of trip coil | | |
| RmnNumOp | ABBIED600_Rev1_INS_d_e | CB Remaining life phase A | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| AccmAPwr | ABBIED600_Rev3_MV_simple_i_e | Accumulated currents power (Iyt), phase A | E | ABBIED600:2014 |

### 5.2.54 3.2.54 LN: SPH2SCBR1 Name: SCBR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| ColOpn | ABBIED600_Rev1_SPS_simple | Open command of trip coil | | |
| RmnNumOp | ABBIED600_Rev1_INS_d_e | CB Remaining life phase B | E | ABBIED600:2014 |
| AccmAPwr | ABBIED600_Rev3_MV_simple_i_e | Accumulated currents power (Iyt), phase B | E | ABBIED600:2014 |

### 5.2.55 3.2.55 LN: SPH3SCBR1 Name: SCBR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| ColOpn | ABBIED600_Rev1_SPS_simple | Open command of trip coil | | |
| RmnNumOp | ABBIED600_Rev1_INS_d_e | CB Remaining life phase C | E | ABBIED600:2014 |
| AccmAPwr | ABBIED600_Rev3_MV_simple_i_e | Accumulated currents power (Iyt), phase C | E | ABBIED600:2014 |

### 5.2.56 3.2.56 LN: SSIMG1 Name: SIMG (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| InsAlm | ABBIED600_Rev1_SPS | Pressure below alarm level | | |
| InsBlk | ABBIED600_Rev1_SPS | Pressure below lockout level | | |
| PresAlm | ABBIED600_Rev1_SPS | Binary pressure input for alarm | | |
| PresBlk | ABBIED600_Rev1_SPS_e | Binary pressure input for lock-out indication | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| InsAlmTmms | ABBIED600_Rev1_ING_SP_1_e | Time delay for gas pressure alarm. | E | ABBIED600:2014 |
| InsBlkTmms | ABBIED600_Rev1_ING_SP_e | Time delay for gas pressure lockout. | E | ABBIED600:2014 |

### 5.2.57 3.2.57 LN: SSOPM1 Name: SOPM (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| SprChaAlm | ABBIED600_Rev1_SPS_e | Spring charging time has crossed the set value | E | ABBIED600:2014 |
| SprChaStr | ABBIED600_Rev1_SPS_e | CB spring charg-ing started input | E | ABBIED600:2014 |
| SprChaStop | ABBIED600_Rev1_SPS_e | CB spring charged input | E | ABBIED600:2014 |
| SprChaTmms | ABBIED600_Rev1_ING_SP_e | Setting of alarm for spring charg-ing time of CB in ms. | E | ABBIED600:2014 |
| TmsSprCha | ABBIED600_Rev3_MV_simple_i_e | The charging time of the CB spring | E | ABBIED600:2014 |
| RsSprChaTm | ABBIED600_Rev2_SPC_control_e | SSCBR1 spr.charge t | E | ABBIED600:2014,status-only,direct-with-normal-security |

### 5.2.58 3.2.58 LN: TCSSCBR1 Name: SCBR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary | | |

| | | | | |
|---|---|---|---|---|
| | | outputs | | |
| OpDlTmms | ABBIED600_Rev1_ING_SP_1_e | Operate Delay Time | E | IEC 61850-7-4:2007 |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1_e | Reset Delay Time | E | IEC 61850-7-4:2007 |
| CircAlm | ABBIED600_Rev1_SPS_e | Alarm | E | ABBIED600:2014 |
| TstOutCmd | ABBIED600_Rev20_ENC_TstOut_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| ColOpn | ABBIED600_Rev1_SPS_simple | Open com-mand of trip coil | | |

### 5.2.59 3.2.59 LN: TCSSCBR2 Name: SCBR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| OpDlTmms | ABBIED600_Rev1_ING_SP_1_e | Operate Delay Time | E | IEC 61850-7-4:2007 |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1_e | Reset Delay Time | E | IEC 61850-7-4:2007 |
| CircAlm | ABBIED600_Rev1_SPS_e | Alarm | E | ABBIED600:2014 |
| TstOutCmd | ABBIED600_Rev20_ENC_TstOut_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| ColOpn | ABBIED600_Rev1_SPS_simple | Open com-mand of trip coil | | |

## 5.2.60 3.2.60 LN: CMMXU1 Name: MMXU (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Operation | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| A | ABBIED600_Rev3_WYE_threephase_full_i | Phase currents | | |
| AMeasMod | ABBIED600_Rev3_ENG_SP_MeasMod_e | Selects used measurement mode | E | ABBIED600:2014 |
| NumPh | ABBIED600_Rev3_ENG_SP_StrPhSel_e | Number of phases required by limit supervision | E | ABBIED600:2014 |
| HiAlm | ABBIED600_Rev1_SPS_e | High alarm | E | ABBIED600:2014 |
| HiWrn | ABBIED600_Rev1_SPS_e | High warning | E | ABBIED600:2014 |
| LoWrn | ABBIED600_Rev1_SPS_e | Low warning | E | ABBIED600:2014 |
| LoAlm | ABBIED600_Rev1_SPS_e | Low alarm | E | ABBIED600:2014 |
| RcdRs | ABBIED600_Rev2_SPC_control_e | CMMXU1 demands | E | ABBIED600:2014,status-only,direct-with-normal-security |

## 5.2.61 3.2.61 LN: RESCMMXU1 Name: MMXU (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Operation | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |

| | | | | |
|---|---|---|---|---|
| A | ABBIED600_Rev3_WYE_res_full_i | Residual current | | |
| AMeasMod | ABBIED600_Rev3_ENG_SP_MeasMod_e | Selects used measurement mode | E | ABBIED600:2014 |
| HiAlm | ABBIED600_Rev1_SPS_e | High alarm | E | ABBIED600:2014 |
| HiWrn | ABBIED600_Rev1_SPS_e | High warning | E | ABBIED600:2014 |
| RcdRs | ABBIED600_Rev2_SPC_control_e | RESCMMXU1 demands | E | ABBIED600:2014,status-only,direct-with-normal-security |

### 5.2.62 3.2.62 LN: VMMXU1 Name: MMXU (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Operation | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| PPV | ABBIED600_Rev3_DEL_threephase_full_i | Phase to phase voltages | | |
| PhV | ABBIED600_Rev3_WYE_4 | Phase to ground voltages | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| VMeasMod | ABBIED600_Rev3_ENG_SP_MeasMod_e | Selects used measurement mode | E | ABBIED600:2014 |
| NumPh | ABBIED600_Rev3_ENG_SP_StrPhSel_e | Num of phases | E | ABBIED600:2014 |
| HiAlm | ABBIED600_Rev1_SPS_e | High alarm | E | ABBIED600:2014 |
| HiWrn | ABBIED600_Rev1_SPS_e | High warning | E | ABBIED600:2014 |
| LoWrn | ABBIED600_Rev1_SPS_e | Low warning | E | ABBIED600:2014 |
| LoAlm | ABBIED600_Rev1_SPS_e | Low alarm | E | ABBIED600:2014 |

### 5.2.63 3.2.63 LN: PEMMXU1 Name: MMXU (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| TotW | ABBIED600_Rev4_MV_3 | Total Active Power (Total P) | | |
| TotVAr | ABBIED600_Rev4_MV_3 | Total Reactive Power (Total Q) | | |
| TotVA | ABBIED600_Rev4_MV_3 | Total Apparent Power (Total S) | | |
| TotPF | ABBIED600_Rev4_MV_4 | Average Power factor (Total PF) | | |
| WhDir | ABBIED600_Rev2_ENG_SP_DirMod2_e | Active power Dir | E | ABBIED600:2014 |
| VArhDir | ABBIED600_Rev2_ENG_SP_DirMod2_e | Reactive power Dir | E | ABBIED600:2014 |
| RcdRs | ABBIED600_Rev2_SPC_control_e | PEMMXU1 demands | E | ABBIED600:2014,status-only,direct-with-normal-security |
| PwrMeasMod | ABBIED600_Rev3_ENG_SP_PwrMeasMod_e | Measurement mode for power calculation | E | ABBIED600:2014 |

### 5.2.64 3.2.64 LN: PEMMTR1 Name: MMTR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| SupWh | ABBIED600_Rev4_BCR_2 | EA_RV_ACM | | |
| SupVArh | ABBIED600_Rev4_BCR_2 | ER_RV_ACM | | |

| | | | | |
|---|---|---|---|---|
| DmdWh | ABBIED600_Rev4_BCR_2 | EA_FWD_ACM | | |
| DmdVArh | ABBIED600_Rev4_BCR_2 | ER_FWD_ACM | | |
| IniDmdWh | ABBIED600_Rev1_ING_SP_1_e | Preset Initial value for forward active energy | E | ABBIED600:2014 |
| IniSupWh | ABBIED600_Rev1_ING_SP_1_e | Preset Initial value for reverse active energy | E | ABBIED600:2014 |
| IniDmdVArh | ABBIED600_Rev1_ING_SP_1_e | Preset Initial value for forward reac-tive energy | E | ABBIED600:2014 |
| IniSupVArh | ABBIED600_Rev1_ING_SP_1_e | Preset Initial value for reverse reactive energy | E | ABBIED600:2014 |
| SupDmdRs | ABBIED600_Rev2_SPC_control_e | Reset of accumu-lated energy read-ings | E | ABBIED600:2014,status-only,direct-with-normal-security |

### 5.2.65 3.2.65 LN: SPEMMXU1 Name: MMXU (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| W | ABBIED600_Rev3_WYE_3_1 | Phase active power (P) | | |
| VAr | ABBIED600_Rev3_WYE_3_1 | Phase reactive power (Q) | | |
| VA | ABBIED600_Rev3_WYE_3_1 | Phase appar-ent power (S) | | |
| PF | ABBIED600_Rev3_WYE_3_1 | Average pow-er factor (PF) | | |
| WhDir | ABBIED600_Rev2_ENG_SP_DirMod2_e | Active power direction | E | ABBIED600:2014 |
| VArhDir | ABBIED600_Rev2_ENG_SP_DirMod2_e | Reactive | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| | | power direction | | |
| RcdRs | ABBIED600_Rev2_SPC_control_e | Demands | E | ABBIED600:2014,status-only,direct-with-normal-security |

### 5.2.66 3.2.66 LN: SPE1MMTR1 Name: MMTR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| SupWh | ABBIED600_Rev4_BCR_2 | SPE1MMTR1 real energy supply | | |
| SupVArh | ABBIED600_Rev4_BCR_2 | SPE1MMTR1 reactive energy supply | | |
| DmdWh | ABBIED600_Rev4_BCR_2 | SPE1MMTR1 real energy demand | | |
| DmdVArh | ABBIED600_Rev4_BCR_2 | SPE1MMTR1 reactive energy demand | | |
| IniDmdWh | ABBIED600_Rev1_ING_SP_1_e | SPE1MMTR1 preset initial value for forward active energy | E | ABBIED600:2014 |
| IniSupWh | ABBIED600_Rev1_ING_SP_1_e | SPE1MMTR1 preset initial value for reverse active energy | E | ABBIED600:2014 |
| IniDmdVArh | ABBIED600_Rev1_ING_SP_1_e | SPE1MMTR1 preset initial value for forward reactive energy | E | ABBIED600:2014 |
| IniSupVArh | ABBIED600_Rev1_ING_SP_1_e | SPE1MMTR1 preset initial value for reverse reactive energy | E | ABBIED600:2014 |
| EnValRs | ABBIED600_Rev2_SPC_control_e | SPE1MMTR1 reset | E | ABBIED600:2014,status- |

| | | | | |
|---|---|---|---|---|
| | | of accumulated energy readings | | only,direct-with-normal-security |

## 5.2.67 3.2.67 LN: SPE2MMTR1 Name: MMTR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| SupWh | ABBIED600_Rev4_BCR_2 | SPE2MMTR1 real energy supply | | |
| SupVArh | ABBIED600_Rev4_BCR_2 | SPE2MMTR1 reactive energy supply | | |
| DmdWh | ABBIED600_Rev4_BCR_2 | SPE2MMTR1 real energy demand | | |
| DmdVArh | ABBIED600_Rev4_BCR_2 | SPE2MMTR1 reactive energy demand | | |
| IniDmdWh | ABBIED600_Rev1_ING_SP_1_e | SPE2MMTR1 preset initial value for forward active energy | E | ABBIED600:2014 |
| IniSupWh | ABBIED600_Rev1_ING_SP_1_e | SPE2MMTR1 preset initial value for reverse active energy | E | ABBIED600:2014 |
| IniDmdVArh | ABBIED600_Rev1_ING_SP_1_e | SPE2MMTR1 preset initial value for forward reactive energy | E | ABBIED600:2014 |
| IniSupVArh | ABBIED600_Rev1_ING_SP_1_e | SPE2MMTR1 preset initial value for reverse reactive energy | E | ABBIED600:2014 |
| EnValRs | ABBIED600_Rev2_SPC_control_e | SPE2MMTR1 reset of accumulated energy readings | E | ABBIED600:2014,status-only,direct-with-normal-security |

### 5.2.68 3.2.68 LN: SPE3MMTR1 Name: MMTR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| SupWh | ABBIED600_Rev4_BCR_2 | SPE3MMTR1 real energy supply | | |
| SupVArh | ABBIED600_Rev4_BCR_2 | SPE3MMTR1 reactive energy supply | | |
| DmdWh | ABBIED600_Rev4_BCR_2 | SPE3MMTR1 real energy demand | | |
| DmdVArh | ABBIED600_Rev4_BCR_2 | SPE3MMTR1 reactive energy demand | | |
| IniDmdWh | ABBIED600_Rev1_ING_SP_1_e | SPE3MMTR1 preset initial value for forward active energy | E | ABBIED600:2014 |
| IniSupWh | ABBIED600_Rev1_ING_SP_1_e | SPE3MMTR1 preset initial value for reverse active energy | E | ABBIED600:2014 |
| IniDmdVArh | ABBIED600_Rev1_ING_SP_1_e | SPE3MMTR1 preset initial value for forward reactive energy | E | ABBIED600:2014 |
| IniSupVArh | ABBIED600_Rev1_ING_SP_1_e | SPE3MMTR1 preset initial value for reverse reactive energy | E | ABBIED600:2014 |
| EnValRs | ABBIED600_Rev2_SPC_control_e | SPE3MMTR1 reset of accumulated energy readings | E | ABBIED600:2014,status-only,direct-with-normal-security |

### 5.2.69 3.2.69 LN: FMMXU1 Name: MMXU (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Operation | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Hz | ABBIED600_Rev4_MV_5 | Frequency | | |
| DefHzSel | ABBIED600_Rev1_ENG_SP_DefHzSel_e | Default frequency selection | E | ABBIED600:2014 |

### 5.2.70 3.2.70 LN: TPGAPC1 Name: GAPC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Ind1 | ABBIED600_Rev1_SPS | IN1 | | |
| Ind2 | ABBIED600_Rev1_SPS | IN2 | | |
| SPCSO1 | ABBIED600_Rev1_SPC_simple | Q1 | | status-only |
| SPCSO2 | ABBIED600_Rev1_SPC_simple | Q2 | | status-only |
| PlsTmms | ABBIED600_Rev1_ING_SP_1_e | Minimum pulse time | E | ABBIED600:2014 |

### 5.2.71 3.2.71 LN: TPGAPC2 Name: GAPC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Ind1 | ABBIED600_Rev1_SPS | IN1 | | |
| Ind2 | ABBIED600_Rev1_SPS | IN2 | | |
| SPCSO1 | ABBIED600_Rev1_SPC_simple | Q1 | | status-only |
| SPCSO2 | ABBIED600_Rev1_SPC_simple | Q2 | | status-only |
| PlsTmms | ABBIED600_Rev1_ING_SP_1_e | Minimum pulse time | E | ABBIED600:2014 |

### 5.2.72 3.2.72 LN: TPSGAPC1 Name: GAPC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Ind1 | ABBIED600_Rev1_SPS | IN1 | | |
| Ind2 | ABBIED600_Rev1_SPS | IN2 | | |

| | | | | |
|---|---|---|---|---|
| SPCSO1 | ABBIED600_Rev1_SPC_simple | Q1 | | status-only |
| SPCSO2 | ABBIED600_Rev1_SPC_simple | Q2 | | status-only |
| PlsTms | ABBIED600_Rev1_ING_SP_1_e | Minimum pulse time | E | ABBIED600:2014 |

### 5.2.73 3.2.73 LN: TPMGAPC1 Name: GAPC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Ind1 | ABBIED600_Rev1_SPS | IN1 | | |
| Ind2 | ABBIED600_Rev1_SPS | IN2 | | |
| SPCSO1 | ABBIED600_Rev1_SPC_simple | Q1 | | status-only |
| SPCSO2 | ABBIED600_Rev1_SPC_simple | Q2 | | status-only |
| PlsTmm | ABBIED600_Rev1_ING_SP_1_e | Minimum pulse time | E | ABBIED600:2014 |

### 5.2.74 3.2.74 LN: PTGAPC1 Name: GAPC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Ind1 | ABBIED600_Rev1_SPS | Input 1 | | |
| Ind2 | ABBIED600_Rev1_SPS | Input 2 | | |
| Ind3 | ABBIED600_Rev1_SPS | Input 3 | | |
| Ind4 | ABBIED600_Rev1_SPS | Input 4 | | |
| Ind5 | ABBIED600_Rev1_SPS | Input 5 | | |
| Ind6 | ABBIED600_Rev1_SPS | Input 6 | | |
| Ind7 | ABBIED600_Rev1_SPS | Input 7 | | |
| Ind8 | ABBIED600_Rev1_SPS | Input 8 | | |
| SPCSO1 | ABBIED600_Rev1_SPC_simple | Output 1 | | status-only |
| SPCSO2 | ABBIED600_Rev1_SPC_simple | Output 2 | | status-only |
| SPCSO3 | ABBIED600_Rev1_SPC_simple | Output 3 | | status-only |
| SPCSO4 | ABBIED600_Rev1_SPC_simple | Output 4 | | status-only |
| SPCSO5 | ABBIED600_Rev1_SPC_simple | Output 5 | | status-only |
| SPCSO6 | ABBIED600_Rev1_SPC_simple | Output 6 | | status-only |

| | | | | |
|---|---|---|---|---|
| SPCSO7 | ABBIED600_Rev1_SPC_simple | Output 7 | | status-only |
| SPCSO8 | ABBIED600_Rev1_SPC_simple | Output 8 | | status-only |
| PlsTmms1 | ABBIED600_Rev1_ING_SP_e | Pulse time 1 | E | ABBIED600:2014 |
| PlsTmms2 | ABBIED600_Rev1_ING_SP_e | Pulse time 2 | E | ABBIED600:2014 |
| PlsTmms3 | ABBIED600_Rev1_ING_SP_e | Pulse time 3 | E | ABBIED600:2014 |
| PlsTmms4 | ABBIED600_Rev1_ING_SP_e | Pulse time 4 | E | ABBIED600:2014 |
| PlsTmms5 | ABBIED600_Rev1_ING_SP_e | Pulse time 5 | E | ABBIED600:2014 |
| PlsTmms6 | ABBIED600_Rev1_ING_SP_e | Pulse time 6 | E | ABBIED600:2014 |
| PlsTmms7 | ABBIED600_Rev1_ING_SP_e | Pulse time 7 | E | ABBIED600:2014 |
| PlsTmms8 | ABBIED600_Rev1_ING_SP_e | Pulse time 8 | E | ABBIED600:2014 |

### 5.2.75 3.2.75 LN: PTGAPC2 Name: GAPC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Ind1 | ABBIED600_Rev1_SPS | Input 1 | | |
| Ind2 | ABBIED600_Rev1_SPS | Input 2 | | |
| Ind3 | ABBIED600_Rev1_SPS | Input 3 | | |
| Ind4 | ABBIED600_Rev1_SPS | Input 4 | | |
| Ind5 | ABBIED600_Rev1_SPS | Input 5 | | |
| Ind6 | ABBIED600_Rev1_SPS | Input 6 | | |
| Ind7 | ABBIED600_Rev1_SPS | Input 7 | | |
| Ind8 | ABBIED600_Rev1_SPS | Input 8 | | |
| SPCSO1 | ABBIED600_Rev1_SPC_simple | Output 1 | | status-only |
| SPCSO2 | ABBIED600_Rev1_SPC_simple | Output 2 | | status-only |
| SPCSO3 | ABBIED600_Rev1_SPC_simple | Output 3 | | status-only |
| SPCSO4 | ABBIED600_Rev1_SPC_simple | Output 4 | | status-only |
| SPCSO5 | ABBIED600_Rev1_SPC_simple | Output 5 | | status-only |
| SPCSO6 | ABBIED600_Rev1_SPC_simple | Output 6 | | status-only |
| SPCSO7 | ABBIED600_Rev1_SPC_simple | Output 7 | | status-only |
| SPCSO8 | ABBIED600_Rev1_SPC_simple | Output 8 | | status-only |
| PlsTmms1 | ABBIED600_Rev1_ING_SP_e | Pulse time 1 | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| PlsTmms2 | ABBIED600_Rev1_ING_SP_e | Pulse time 2 | E | ABBIED600:2014 |
| PlsTmms3 | ABBIED600_Rev1_ING_SP_e | Pulse time 3 | E | ABBIED600:2014 |
| PlsTmms4 | ABBIED600_Rev1_ING_SP_e | Pulse time 4 | E | ABBIED600:2014 |
| PlsTmms5 | ABBIED600_Rev1_ING_SP_e | Pulse time 5 | E | ABBIED600:2014 |
| PlsTmms6 | ABBIED600_Rev1_ING_SP_e | Pulse time 6 | E | ABBIED600:2014 |
| PlsTmms7 | ABBIED600_Rev1_ING_SP_e | Pulse time 7 | E | ABBIED600:2014 |
| PlsTmms8 | ABBIED600_Rev1_ING_SP_e | Pulse time 8 | E | ABBIED600:2014 |

### 5.2.76 3.2.76 LN: TOFGAPC1 Name: GAPC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Ind1 | ABBIED600_Rev1_SPS | Input 1 | | |
| Ind2 | ABBIED600_Rev1_SPS | Input 2 | | |
| Ind3 | ABBIED600_Rev1_SPS | Input 3 | | |
| Ind4 | ABBIED600_Rev1_SPS | Input 4 | | |
| Ind5 | ABBIED600_Rev1_SPS | Input 5 | | |
| Ind6 | ABBIED600_Rev1_SPS | Input 6 | | |
| Ind7 | ABBIED600_Rev1_SPS | Input 7 | | |
| Ind8 | ABBIED600_Rev1_SPS | Input 8 | | |
| SPCSO1 | ABBIED600_Rev1_SPC_simple | Output 1 | | status-only |
| SPCSO2 | ABBIED600_Rev1_SPC_simple | Output 2 | | status-only |
| SPCSO3 | ABBIED600_Rev1_SPC_simple | Output 3 | | status-only |
| SPCSO4 | ABBIED600_Rev1_SPC_simple | Output 4 | | status-only |
| SPCSO5 | ABBIED600_Rev1_SPC_simple | Output 5 | | status-only |
| SPCSO6 | ABBIED600_Rev1_SPC_simple | Output 6 | | status-only |
| SPCSO7 | ABBIED600_Rev1_SPC_simple | Output 7 | | status-only |
| SPCSO8 | ABBIED600_Rev1_SPC_simple | Output 8 | | status-only |
| OffDlTmms1 | ABBIED600_Rev1_ING_SP_e | Off delay time 1 | E | ABBIED600:2014 |
| OffDlTmms2 | ABBIED600_Rev1_ING_SP_e | Off delay time 2 | E | ABBIED600:2014 |
| OffDlTmms3 | ABBIED600_Rev1_ING_SP_e | Off delay time 3 | E | ABBIED600:2014 |
| OffDlTmms4 | ABBIED600_Rev1_ING_SP_e | Off delay time 4 | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| OffDlTmms5 | ABBIED600_Rev1_ING_SP_e | Off delay time 5 | E | ABBIED600:2014 |
| OffDlTmms6 | ABBIED600_Rev1_ING_SP_e | Off delay time 6 | E | ABBIED600:2014 |
| OffDlTmms7 | ABBIED600_Rev1_ING_SP_e | Off delay time 7 | E | ABBIED600:2014 |
| OffDlTmms8 | ABBIED600_Rev1_ING_SP_e | Off delay time 8 | E | ABBIED600:2014 |

### 5.2.77 3.2.77 LN: TOFGAPC2 Name: GAPC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Ind1 | ABBIED600_Rev1_SPS | Input 1 | | |
| Ind2 | ABBIED600_Rev1_SPS | Input 2 | | |
| Ind3 | ABBIED600_Rev1_SPS | Input 3 | | |
| Ind4 | ABBIED600_Rev1_SPS | Input 4 | | |
| Ind5 | ABBIED600_Rev1_SPS | Input 5 | | |
| Ind6 | ABBIED600_Rev1_SPS | Input 6 | | |
| Ind7 | ABBIED600_Rev1_SPS | Input 7 | | |
| Ind8 | ABBIED600_Rev1_SPS | Input 8 | | |
| SPCSO1 | ABBIED600_Rev1_SPC_simple | Output 1 | | status-only |
| SPCSO2 | ABBIED600_Rev1_SPC_simple | Output 2 | | status-only |
| SPCSO3 | ABBIED600_Rev1_SPC_simple | Output 3 | | status-only |
| SPCSO4 | ABBIED600_Rev1_SPC_simple | Output 4 | | status-only |
| SPCSO5 | ABBIED600_Rev1_SPC_simple | Output 5 | | status-only |
| SPCSO6 | ABBIED600_Rev1_SPC_simple | Output 6 | | status-only |
| SPCSO7 | ABBIED600_Rev1_SPC_simple | Output 7 | | status-only |
| SPCSO8 | ABBIED600_Rev1_SPC_simple | Output 8 | | status-only |
| OffDlTmms1 | ABBIED600_Rev1_ING_SP_e | Off delay time 1 | E | ABBIED600:2014 |
| OffDlTmms2 | ABBIED600_Rev1_ING_SP_e | Off delay time 2 | E | ABBIED600:2014 |
| OffDlTmms3 | ABBIED600_Rev1_ING_SP_e | Off delay time 3 | E | ABBIED600:2014 |
| OffDlTmms4 | ABBIED600_Rev1_ING_SP_e | Off delay time 4 | E | ABBIED600:2014 |
| OffDlTmms5 | ABBIED600_Rev1_ING_SP_e | Off delay time 5 | E | ABBIED600:2014 |
| OffDlTmms6 | ABBIED600_Rev1_ING_SP_e | Off delay time 6 | E | ABBIED600:2014 |
| OffDlTmms7 | ABBIED600_Rev1_ING_SP_e | Off delay time 7 | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| OffDlTmms8 | ABBIED600_Rev1_ING_SP_e | Off delay time 8 | E | ABBIED600:2014 |

### 5.2.78 3.2.78 LN: TONGAPC1 Name: GAPC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Ind1 | ABBIED600_Rev1_SPS | IN1 | | |
| Ind2 | ABBIED600_Rev1_SPS | IN2 | | |
| Ind3 | ABBIED600_Rev1_SPS | IN3 | | |
| Ind4 | ABBIED600_Rev1_SPS | IN4 | | |
| Ind5 | ABBIED600_Rev1_SPS | IN5 | | |
| Ind6 | ABBIED600_Rev1_SPS | IN6 | | |
| Ind7 | ABBIED600_Rev1_SPS | IN7 | | |
| Ind8 | ABBIED600_Rev1_SPS | IN8 | | |
| SPCSO1 | ABBIED600_Rev1_SPC_simple | Q1 | | status-only |
| SPCSO2 | ABBIED600_Rev1_SPC_simple | Q2 | | status-only |
| SPCSO3 | ABBIED600_Rev1_SPC_simple | Q3 | | status-only |
| SPCSO4 | ABBIED600_Rev1_SPC_simple | Q4 | | status-only |
| SPCSO5 | ABBIED600_Rev1_SPC_simple | Q5 | | status-only |
| SPCSO6 | ABBIED600_Rev1_SPC_simple | Q6 | | status-only |
| SPCSO7 | ABBIED600_Rev1_SPC_simple | Q7 | | status-only |
| SPCSO8 | ABBIED600_Rev1_SPC_simple | Q8 | | status-only |
| OnDlTmms1 | ABBIED600_Rev1_ING_SP_e | On delay time 1 | E | ABBIED600:2014 |
| OnDlTmms2 | ABBIED600_Rev1_ING_SP_e | On delay time 2 | E | ABBIED600:2014 |
| OnDlTmms3 | ABBIED600_Rev1_ING_SP_e | On delay time 3 | E | ABBIED600:2014 |
| OnDlTmms4 | ABBIED600_Rev1_ING_SP_e | On delay time 4 | E | ABBIED600:2014 |
| OnDlTmms5 | ABBIED600_Rev1_ING_SP_e | On delay time 5 | E | ABBIED600:2014 |
| OnDlTmms6 | ABBIED600_Rev1_ING_SP_e | On delay time 6 | E | ABBIED600:2014 |
| OnDlTmms7 | ABBIED600_Rev1_ING_SP_e | On delay time 7 | E | ABBIED600:2014 |
| OnDlTmms8 | ABBIED600_Rev1_ING_SP_e | On delay time 8 | E | ABBIED600:2014 |

## 5.2.79 3.2.79 LN: TONGAPC2 Name: GAPC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Ind1 | ABBIED600_Rev1_SPS | IN1 | | |
| Ind2 | ABBIED600_Rev1_SPS | IN2 | | |
| Ind3 | ABBIED600_Rev1_SPS | IN3 | | |
| Ind4 | ABBIED600_Rev1_SPS | IN4 | | |
| Ind5 | ABBIED600_Rev1_SPS | IN5 | | |
| Ind6 | ABBIED600_Rev1_SPS | IN6 | | |
| Ind7 | ABBIED600_Rev1_SPS | IN7 | | |
| Ind8 | ABBIED600_Rev1_SPS | IN8 | | |
| SPCSO1 | ABBIED600_Rev1_SPC_simple | Q1 | | status-only |
| SPCSO2 | ABBIED600_Rev1_SPC_simple | Q2 | | status-only |
| SPCSO3 | ABBIED600_Rev1_SPC_simple | Q3 | | status-only |
| SPCSO4 | ABBIED600_Rev1_SPC_simple | Q4 | | status-only |
| SPCSO5 | ABBIED600_Rev1_SPC_simple | Q5 | | status-only |
| SPCSO6 | ABBIED600_Rev1_SPC_simple | Q6 | | status-only |
| SPCSO7 | ABBIED600_Rev1_SPC_simple | Q7 | | status-only |
| SPCSO8 | ABBIED600_Rev1_SPC_simple | Q8 | | status-only |
| OnDlTmms1 | ABBIED600_Rev1_ING_SP_e | On delay time 1 | E | ABBIED600:2014 |
| OnDlTmms2 | ABBIED600_Rev1_ING_SP_e | On delay time 2 | E | ABBIED600:2014 |
| OnDlTmms3 | ABBIED600_Rev1_ING_SP_e | On delay time 3 | E | ABBIED600:2014 |
| OnDlTmms4 | ABBIED600_Rev1_ING_SP_e | On delay time 4 | E | ABBIED600:2014 |
| OnDlTmms5 | ABBIED600_Rev1_ING_SP_e | On delay time 5 | E | ABBIED600:2014 |
| OnDlTmms6 | ABBIED600_Rev1_ING_SP_e | On delay time 6 | E | ABBIED600:2014 |
| OnDlTmms7 | ABBIED600_Rev1_ING_SP_e | On delay time 7 | E | ABBIED600:2014 |
| OnDlTmms8 | ABBIED600_Rev1_ING_SP_e | On delay time 8 | E | ABBIED600:2014 |

## 5.2.80 3.2.80 LN: SRGAPC1 Name: GAPC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Ind1 | ABBIED600_Rev1_SPS | S1 | | |
| Ind2 | ABBIED600_Rev1_SPS | S2 | | |
| Ind3 | ABBIED600_Rev1_SPS | S3 | | |
| Ind4 | ABBIED600_Rev1_SPS | S4 | | |
| Ind5 | ABBIED600_Rev1_SPS | S5 | | |
| Ind6 | ABBIED600_Rev1_SPS | S6 | | |
| Ind7 | ABBIED600_Rev1_SPS | S7 | | |
| Ind8 | ABBIED600_Rev1_SPS | S8 | | |
| SPCSO1 | ABBIED600_Rev1_SPC_simple | Q1 | | status-only |
| SPCSO2 | ABBIED600_Rev1_SPC_simple | Q2 | | status-only |
| SPCSO3 | ABBIED600_Rev1_SPC_simple | Q3 | | status-only |
| SPCSO4 | ABBIED600_Rev1_SPC_simple | Q4 | | status-only |
| SPCSO5 | ABBIED600_Rev1_SPC_simple | Q5 | | status-only |
| SPCSO6 | ABBIED600_Rev1_SPC_simple | Q6 | | status-only |
| SPCSO7 | ABBIED600_Rev1_SPC_simple | Q7 | | status-only |
| SPCSO8 | ABBIED600_Rev1_SPC_simple | Q8 | | status-only |
| Rs1 | ABBIED600_Rev2_SPC_control_e | R1 | E | ABBIED600:2014,status-only,direct-with-normal-security |
| Rs2 | ABBIED600_Rev2_SPC_control_e | R2 | E | ABBIED600:2014,status-only,direct-with-normal-security |
| Rs3 | ABBIED600_Rev2_SPC_control_e | R3 | E | ABBIED600:2014,status-only,direct-with-normal-security |
| Rs4 | ABBIED600_Rev2_SPC_control_e | R4 | E | ABBIED600:2014,status-only,direct-with-normal-security |
| Rs5 | ABBIED600_Rev2_SPC_control_e | R5 | E | ABBIED600:2014,status-only,direct-with-normal-security |
| Rs6 | ABBIED600_Rev2_SPC_control_e | R6 | E | ABBIED600:2014,status-only,direct-with-normal-security |
| Rs7 | ABBIED600_Rev2_SPC_control_e | R7 | E | ABBIED600:2014,status-only,direct-with-normal-security |
| Rs8 | ABBIED600_Rev2_SPC_control_e | R8 | E | ABBIED600:2014,status-only,direct- |

| | | | | |
|---|---|---|---|---|
| | | | | with-normal-security |

### 5.2.81 3.2.81 LN: SRGAPC2 Name: GAPC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Ind1 | ABBIED600_Rev1_SPS | S1 | | |
| Ind2 | ABBIED600_Rev1_SPS | S2 | | |
| Ind3 | ABBIED600_Rev1_SPS | S3 | | |
| Ind4 | ABBIED600_Rev1_SPS | S4 | | |
| Ind5 | ABBIED600_Rev1_SPS | S5 | | |
| Ind6 | ABBIED600_Rev1_SPS | S6 | | |
| Ind7 | ABBIED600_Rev1_SPS | S7 | | |
| Ind8 | ABBIED600_Rev1_SPS | S8 | | |
| SPCSO1 | ABBIED600_Rev1_SPC_simple | Q1 | | status-only |
| SPCSO2 | ABBIED600_Rev1_SPC_simple | Q2 | | status-only |
| SPCSO3 | ABBIED600_Rev1_SPC_simple | Q3 | | status-only |
| SPCSO4 | ABBIED600_Rev1_SPC_simple | Q4 | | status-only |
| SPCSO5 | ABBIED600_Rev1_SPC_simple | Q5 | | status-only |
| SPCSO6 | ABBIED600_Rev1_SPC_simple | Q6 | | status-only |
| SPCSO7 | ABBIED600_Rev1_SPC_simple | Q7 | | status-only |
| SPCSO8 | ABBIED600_Rev1_SPC_simple | Q8 | | status-only |
| Rs1 | ABBIED600_Rev2_SPC_control_e | R1 | E | ABBIED600:2014,status-only,direct-with-normal-security |
| Rs2 | ABBIED600_Rev2_SPC_control_e | R2 | E | ABBIED600:2014,status-only,direct-with-normal-security |
| Rs3 | ABBIED600_Rev2_SPC_control_e | R3 | E | ABBIED600:2014,status-only,direct-with-normal-security |
| Rs4 | ABBIED600_Rev2_SPC_control_e | R4 | E | ABBIED600:2014,status-only,direct-with-normal-security |
| Rs5 | ABBIED600_Rev2_SPC_control_e | R5 | E | ABBIED600:2014,status-only,direct-with-normal-security |

| | | | | |
|---|---|---|---|---|
| Rs6 | ABBIED600_Rev2_SPC_control_e | R6 | E | ABBIED600:2014,status-only,direct-with-normal-security |
| Rs7 | ABBIED600_Rev2_SPC_control_e | R7 | E | ABBIED600:2014,status-only,direct-with-normal-security |
| Rs8 | ABBIED600_Rev2_SPC_control_e | R8 | E | ABBIED600:2014,status-only,direct-with-normal-security |

### 5.2.82 3.2.82 LN: SPCGAPC1 Name: GAPC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Ind1 | ABBIED600_Rev1_SPS | IN1 | | |
| Ind2 | ABBIED600_Rev1_SPS | IN2 | | |
| Ind3 | ABBIED600_Rev1_SPS | IN3 | | |
| Ind4 | ABBIED600_Rev1_SPS | IN4 | | |
| Ind5 | ABBIED600_Rev1_SPS | IN5 | | |
| Ind6 | ABBIED600_Rev1_SPS | IN6 | | |
| Ind7 | ABBIED600_Rev1_SPS | IN7 | | |
| Ind8 | ABBIED600_Rev1_SPS | IN8 | | |
| Ind9 | ABBIED600_Rev1_SPS | IN9 | | |
| Ind10 | ABBIED600_Rev1_SPS | IN10 | | |
| Ind11 | ABBIED600_Rev1_SPS | IN11 | | |
| Ind12 | ABBIED600_Rev1_SPS | IN12 | | |
| Ind13 | ABBIED600_Rev1_SPS | IN13 | | |
| Ind14 | ABBIED600_Rev1_SPS | IN14 | | |
| Ind15 | ABBIED600_Rev1_SPS | IN15 | | |
| Ind16 | ABBIED600_Rev1_SPS | IN16 | | |
| SPCSO1 | ABBIED600_Rev6_SPC_pulse | Output 1 | | status-only,direct-with-normal-security |
| SPCSO2 | ABBIED600_Rev6_SPC_pulse | Output 2 | | status-only,direct-with- |

| | | | | |
|---|---|---|---|---|
| | | | | normal-security |
| SPCSO3 | ABBIED600_Rev6_SPC_pulse | Output 3 | | status-only,direct-with-normal-security |
| SPCSO4 | ABBIED600_Rev6_SPC_pulse | Output 4 | | status-only,direct-with-normal-security |
| SPCSO5 | ABBIED600_Rev6_SPC_pulse | Output 5 | | status-only,direct-with-normal-security |
| SPCSO6 | ABBIED600_Rev6_SPC_pulse | Output 6 | | status-only,direct-with-normal-security |
| SPCSO7 | ABBIED600_Rev6_SPC_pulse | Output 7 | | status-only,direct-with-normal-security |
| SPCSO8 | ABBIED600_Rev6_SPC_pulse | Output 8 | | status-only,direct-with-normal-security |
| SPCSO9 | ABBIED600_Rev6_SPC_pulse | Output 9 | | status-only,direct-with-normal-security |
| SPCSO10 | ABBIED600_Rev6_SPC_pulse | Output 10 | | status-only,direct-with-normal-security |
| SPCSO11 | ABBIED600_Rev6_SPC_pulse | Output 11 | | status-only,direct-with-normal-security |
| SPCSO12 | ABBIED600_Rev6_SPC_pulse | Output 12 | | status-only,direct-with-normal-security |
| SPCSO13 | ABBIED600_Rev6_SPC_pulse | Output 13 | | status-only,direct-with-normal-security |
| SPCSO14 | ABBIED600_Rev6_SPC_pulse | Output 14 | | status-only,direct-with-normal-security |
| SPCSO15 | ABBIED600_Rev6_SPC_pulse | Output 15 | | status-only,direct-with-normal-security |
| SPCSO16 | ABBIED600_Rev6_SPC_pulse | Output 16 | | status-only,direct-with-normal-security |
| LocRemRst | ABBIED600_Rev1_SPG_SP_e | Loc Rem restriction | E | ABBIED600:2014 |

### 5.2.83 3.2.83 LN: SPCGAPC2 Name: GAPC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |

| | | | | |
|---|---|---|---|---|
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Ind1 | ABBIED600_Rev1_SPS | IN1 | | |
| Ind2 | ABBIED600_Rev1_SPS | IN2 | | |
| Ind3 | ABBIED600_Rev1_SPS | IN3 | | |
| Ind4 | ABBIED600_Rev1_SPS | IN4 | | |
| Ind5 | ABBIED600_Rev1_SPS | IN5 | | |
| Ind6 | ABBIED600_Rev1_SPS | IN6 | | |
| Ind7 | ABBIED600_Rev1_SPS | IN7 | | |
| Ind8 | ABBIED600_Rev1_SPS | IN8 | | |
| Ind9 | ABBIED600_Rev1_SPS | IN9 | | |
| Ind10 | ABBIED600_Rev1_SPS | IN10 | | |
| Ind11 | ABBIED600_Rev1_SPS | IN11 | | |
| Ind12 | ABBIED600_Rev1_SPS | IN12 | | |
| Ind13 | ABBIED600_Rev1_SPS | IN13 | | |
| Ind14 | ABBIED600_Rev1_SPS | IN14 | | |
| Ind15 | ABBIED600_Rev1_SPS | IN15 | | |
| Ind16 | ABBIED600_Rev1_SPS | IN16 | | |
| SPCSO1 | ABBIED600_Rev6_SPC_pulse | Output 1 | | status-only,direct-with-normal-security |
| SPCSO2 | ABBIED600_Rev6_SPC_pulse | Output 2 | | status-only,direct-with-normal-security |
| SPCSO3 | ABBIED600_Rev6_SPC_pulse | Output 3 | | status-only,direct-with-normal-security |
| SPCSO4 | ABBIED600_Rev6_SPC_pulse | Output 4 | | status-only,direct-with-normal-security |
| SPCSO5 | ABBIED600_Rev6_SPC_pulse | Output 5 | | status-only,direct-with-normal-security |
| SPCSO6 | ABBIED600_Rev6_SPC_pulse | Output 6 | | status-only,direct-with-normal-security |
| SPCSO7 | ABBIED600_Rev6_SPC_pulse | Output 7 | | status-only,direct-with-normal-security |

| | | | | |
|---|---|---|---|---|
| SPCSO8 | ABBIED600_Rev6_SPC_pulse | Output 8 | | status-only,direct-with-normal-security |
| SPCSO9 | ABBIED600_Rev6_SPC_pulse | Output 9 | | status-only,direct-with-normal-security |
| SPCSO10 | ABBIED600_Rev6_SPC_pulse | Output 10 | | status-only,direct-with-normal-security |
| SPCSO11 | ABBIED600_Rev6_SPC_pulse | Output 11 | | status-only,direct-with-normal-security |
| SPCSO12 | ABBIED600_Rev6_SPC_pulse | Output 12 | | status-only,direct-with-normal-security |
| SPCSO13 | ABBIED600_Rev6_SPC_pulse | Output 13 | | status-only,direct-with-normal-security |
| SPCSO14 | ABBIED600_Rev6_SPC_pulse | Output 14 | | status-only,direct-with-normal-security |
| SPCSO15 | ABBIED600_Rev6_SPC_pulse | Output 15 | | status-only,direct-with-normal-security |
| SPCSO16 | ABBIED600_Rev6_SPC_pulse | Output 16 | | status-only,direct-with-normal-security |
| LocRemRst | ABBIED600_Rev1_SPG_SP_e | Loc Rem restriction | E | ABBIED600:2014 |

### 5.2.84 3.2.84 LN: SPCRGAPC1 Name: GAPC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| SPCSO1 | ABBIED600_Rev6_SPC_pulse | Output 1 | | status-only,direct-with-normal-security |
| SPCSO2 | ABBIED600_Rev6_SPC_pulse | Output 2 | | status-only,direct-with-normal-security |
| SPCSO3 | ABBIED600_Rev6_SPC_pulse | Output 3 | | status-only,direct-with-normal-security |
| SPCSO4 | ABBIED600_Rev6_SPC_pulse | Output 4 | | status-only,direct-with-normal-security |

| | | | | |
|---|---|---|---|---|
| SPCSO5 | ABBIED600_Rev6_SPC_pulse | Output 5 | | status-only,direct-with-normal-security |
| SPCSO6 | ABBIED600_Rev6_SPC_pulse | Output 6 | | status-only,direct-with-normal-security |
| SPCSO7 | ABBIED600_Rev6_SPC_pulse | Output 7 | | status-only,direct-with-normal-security |
| SPCSO8 | ABBIED600_Rev6_SPC_pulse | Output 8 | | status-only,direct-with-normal-security |
| SPCSO9 | ABBIED600_Rev6_SPC_pulse | Output 9 | | status-only,direct-with-normal-security |
| SPCSO10 | ABBIED600_Rev6_SPC_pulse | Output 10 | | status-only,direct-with-normal-security |
| SPCSO11 | ABBIED600_Rev6_SPC_pulse | Output 11 | | status-only,direct-with-normal-security |
| SPCSO12 | ABBIED600_Rev6_SPC_pulse | Output 12 | | status-only,direct-with-normal-security |
| SPCSO13 | ABBIED600_Rev6_SPC_pulse | Output 13 | | status-only,direct-with-normal-security |
| SPCSO14 | ABBIED600_Rev6_SPC_pulse | Output 14 | | status-only,direct-with-normal-security |
| SPCSO15 | ABBIED600_Rev6_SPC_pulse | Output 15 | | status-only,direct-with-normal-security |
| SPCSO16 | ABBIED600_Rev6_SPC_pulse | Output 16 | | status-only,direct-with-normal-security |
| LocRemRst | ABBIED600_Rev1_SPG_SP_e | Loc Rem restriction | E | ABBIED600:2014 |

### 5.2.85 3.2.85 LN: SPCLGAPC1 Name: GAPC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| SPCSO1 | ABBIED600_Rev6_SPC_pulse | Output 1 | | status-only,direct-with-normal-security |

| | | | | |
|---|---|---|---|---|
| SPCSO2 | ABBIED600_Rev6_SPC_pulse | Output 2 | | status-only,direct-with-normal-security |
| SPCSO3 | ABBIED600_Rev6_SPC_pulse | Output 3 | | status-only,direct-with-normal-security |
| SPCSO4 | ABBIED600_Rev6_SPC_pulse | Output 4 | | status-only,direct-with-normal-security |
| SPCSO5 | ABBIED600_Rev6_SPC_pulse | Output 5 | | status-only,direct-with-normal-security |
| SPCSO6 | ABBIED600_Rev6_SPC_pulse | Output 6 | | status-only,direct-with-normal-security |
| SPCSO7 | ABBIED600_Rev6_SPC_pulse | Output 7 | | status-only,direct-with-normal-security |
| SPCSO8 | ABBIED600_Rev6_SPC_pulse | Output 8 | | status-only,direct-with-normal-security |
| SPCSO9 | ABBIED600_Rev6_SPC_pulse | Output 9 | | status-only,direct-with-normal-security |
| SPCSO10 | ABBIED600_Rev6_SPC_pulse | Output 10 | | status-only,direct-with-normal-security |
| SPCSO11 | ABBIED600_Rev6_SPC_pulse | Output 11 | | status-only,direct-with-normal-security |
| SPCSO12 | ABBIED600_Rev6_SPC_pulse | Output 12 | | status-only,direct-with-normal-security |
| SPCSO13 | ABBIED600_Rev6_SPC_pulse | Output 13 | | status-only,direct-with-normal-security |
| SPCSO14 | ABBIED600_Rev6_SPC_pulse | Output 14 | | status-only,direct-with-normal-security |
| SPCSO15 | ABBIED600_Rev6_SPC_pulse | Output 15 | | status-only,direct-with-normal-security |
| SPCSO16 | ABBIED600_Rev6_SPC_pulse | Output 16 | | status-only,direct-with-normal-security |
| LocRemRst | ABBIED600_Rev1_SPG_SP_e | Loc Rem restriction | E | ABBIED600:2014 |

### 5.2.86 3.2.86 LN: UDFCNT1 Name: FCNT (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| CntLodVal | ABBIED600_Rev1_ING_SP_1_e | Preset counter value | E | ABBIED600:2014 |
| CntVal | ABBIED600_Rev2_BCR_1 | Output of counter value | | |
| UpCntSt | ABBIED600_Rev1_SPS_e | Status output of up counting | E | ABBIED600:2014 |
| DnCntSt | ABBIED600_Rev1_SPS_e | Status output of down counting | E | ABBIED600:2014 |
| CntRs | ABBIED600_Rev2_SPC_control_e | Resets the counter value | E | ABBIED600:2014,status-only,direct-with-normal-security |
| LodCnt | ABBIED600_Rev2_SPC_control_e | Load the counter to preset value | E | ABBIED600:2014,status-only,direct-with-normal-security |

### 5.2.87 3.2.87 LN: UDFCNT2 Name: FCNT (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| CntLodVal | ABBIED600_Rev1_ING_SP_1_e | Preset counter value | E | ABBIED600:2014 |
| CntVal | ABBIED600_Rev2_BCR_1 | Output of counter value | | |
| UpCntSt | ABBIED600_Rev1_SPS_e | Status output of up counting | E | ABBIED600:2014 |
| DnCntSt | ABBIED600_Rev1_SPS_e | Status output of down counting | E | ABBIED600:2014 |
| CntRs | ABBIED600_Rev2_SPC_control_e | Resets the | E | ABBIED600:2014,status- |

| | | | | |
|---|---|---|---|---|
| | | counter value | | only,direct-with-normal-security |
| LodCnt | ABBIED600_Rev2_SPC_control_e | Load the counter to preset value | E | ABBIED600:2014,status-only,direct-with-normal-security |

## 5.2.88 3.2.88 LN: UDFCNT3 Name: FCNT (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| CntLodVal | ABBIED600_Rev1_ING_SP_1_e | Preset counter value | E | ABBIED600:2014 |
| CntVal | ABBIED600_Rev2_BCR_1 | Output of counter value | | |
| UpCntSt | ABBIED600_Rev1_SPS_e | Status output of up counting | E | ABBIED600:2014 |
| DnCntSt | ABBIED600_Rev1_SPS_e | Status output of down counting | E | ABBIED600:2014 |
| CntRs | ABBIED600_Rev2_SPC_control_e | Resets the counter value | E | ABBIED600:2014,status-only,direct-with-normal-security |
| LodCnt | ABBIED600_Rev2_SPC_control_e | Load the counter to preset value | E | ABBIED600:2014,status-only,direct-with-normal-security |

## 5.2.89 3.2.89 LN: SCA4GAPC1 Name: GAPC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |

| | | | | |
|---|---|---|---|---|
| AnIn1 | ABBIED600_Rev3_MV_2_e | Analog input 1 | E | IEC 61850-7-4:2007 |
| AnIn2 | ABBIED600_Rev3_MV_2_e | Analog input 2 | E | IEC 61850-7-4:2007 |
| AnIn3 | ABBIED600_Rev3_MV_2_e | Analog input 3 | E | IEC 61850-7-4:2007 |
| AnIn4 | ABBIED600_Rev3_MV_2_e | Analog input 4 | E | IEC 61850-7-4:2007 |
| AnValOut1 | ABBIED600_Rev3_MV_2_e | Analog value 1 after scaling | E | ABBIED600:2014 |
| AnValOut2 | ABBIED600_Rev3_MV_2_e | Analog value 2 after scaling | E | ABBIED600:2014 |
| AnValOut3 | ABBIED600_Rev3_MV_2_e | Analog value 3 after scaling | E | ABBIED600:2014 |
| AnValOut4 | ABBIED600_Rev3_MV_2_e | Analog value 4 after scaling | E | ABBIED600:2014 |
| ScaleAnIn1 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 1 | E | ABBIED600:2014 |
| ScaleAnIn2 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 2 | E | ABBIED600:2014 |
| ScaleAnIn3 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 3 | E | ABBIED600:2014 |
| ScaleAnIn4 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 4 | E | ABBIED600:2014 |

### 5.2.90 3.2.90 LN: SCA4GAPC2 Name: GAPC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| AnIn1 | ABBIED600_Rev3_MV_2_e | Analog input 1 | E | IEC 61850-7-4:2007 |
| AnIn2 | ABBIED600_Rev3_MV_2_e | Analog input 2 | E | IEC 61850-7-4:2007 |
| AnIn3 | ABBIED600_Rev3_MV_2_e | Analog input 3 | E | IEC 61850-7-4:2007 |

| | | | | |
|---|---|---|---|---|
| AnIn4 | ABBIED600_Rev3_MV_2_e | Analog input 4 | E | IEC 61850-7-4:2007 |
| AnValOut1 | ABBIED600_Rev3_MV_2_e | Analog value 1 after scaling | E | ABBIED600:2014 |
| AnValOut2 | ABBIED600_Rev3_MV_2_e | Analog value 2 after scaling | E | ABBIED600:2014 |
| AnValOut3 | ABBIED600_Rev3_MV_2_e | Analog value 3 after scaling | E | ABBIED600:2014 |
| AnValOut4 | ABBIED600_Rev3_MV_2_e | Analog value 4 after scaling | E | ABBIED600:2014 |
| ScaleAnIn1 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 1 | E | ABBIED600:2014 |
| ScaleAnIn2 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 2 | E | ABBIED600:2014 |
| ScaleAnIn3 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 3 | E | ABBIED600:2014 |
| ScaleAnIn4 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 4 | E | ABBIED600:2014 |

### 5.2.91 3.2.91 LN: SCA4GAPC3 Name: GAPC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| AnIn1 | ABBIED600_Rev3_MV_2_e | Analog input 1 | E | IEC 61850-7-4:2007 |
| AnIn2 | ABBIED600_Rev3_MV_2_e | Analog input 2 | E | IEC 61850-7-4:2007 |
| AnIn3 | ABBIED600_Rev3_MV_2_e | Analog input 3 | E | IEC 61850-7-4:2007 |
| AnIn4 | ABBIED600_Rev3_MV_2_e | Analog input 4 | E | IEC 61850-7-4:2007 |
| AnValOut1 | ABBIED600_Rev3_MV_2_e | Analog value 1 after scaling | E | ABBIED600:2014 |
| AnValOut2 | ABBIED600_Rev3_MV_2_e | Analog value 2 after scaling | E | ABBIED600:2014 |
| AnValOut3 | ABBIED600_Rev3_MV_2_e | Analog value 3 after scaling | E | ABBIED600:2014 |
| AnValOut4 | ABBIED600_Rev3_MV_2_e | Analog value 4 after scaling | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| ScaleAnIn1 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 1 | E | ABBIED600:2014 |
| ScaleAnIn2 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 2 | E | ABBIED600:2014 |
| ScaleAnIn3 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 3 | E | ABBIED600:2014 |
| ScaleAnIn4 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 4 | E | ABBIED600:2014 |

### 5.2.92 3.2.92 LN: SCA4GAPC4 Name: GAPC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| AnIn1 | ABBIED600_Rev3_MV_2_e | Analog input 1 | E | IEC 61850-7-4:2007 |
| AnIn2 | ABBIED600_Rev3_MV_2_e | Analog input 2 | E | IEC 61850-7-4:2007 |
| AnIn3 | ABBIED600_Rev3_MV_2_e | Analog input 3 | E | IEC 61850-7-4:2007 |
| AnIn4 | ABBIED600_Rev3_MV_2_e | Analog input 4 | E | IEC 61850-7-4:2007 |
| AnValOut1 | ABBIED600_Rev3_MV_2_e | Analog value 1 after scaling | E | ABBIED600:2014 |
| AnValOut2 | ABBIED600_Rev3_MV_2_e | Analog value 2 after scaling | E | ABBIED600:2014 |
| AnValOut3 | ABBIED600_Rev3_MV_2_e | Analog value 3 after scaling | E | ABBIED600:2014 |
| AnValOut4 | ABBIED600_Rev3_MV_2_e | Analog value 4 after scaling | E | ABBIED600:2014 |
| ScaleAnIn1 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 1 | E | ABBIED600:2014 |
| ScaleAnIn2 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 2 | E | ABBIED600:2014 |
| ScaleAnIn3 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 3 | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| ScaleAnIn4 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 4 | E | ABBIED600:2014 |

### 5.2.93 3.2.93 LN: SCA4GAPC5 Name: GAPC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| AnIn1 | ABBIED600_Rev3_MV_2_e | Analog input 1 | E | IEC 61850-7-4:2007 |
| AnIn2 | ABBIED600_Rev3_MV_2_e | Analog input 2 | E | IEC 61850-7-4:2007 |
| AnIn3 | ABBIED600_Rev3_MV_2_e | Analog input 3 | E | IEC 61850-7-4:2007 |
| AnIn4 | ABBIED600_Rev3_MV_2_e | Analog input 4 | E | IEC 61850-7-4:2007 |
| AnValOut1 | ABBIED600_Rev3_MV_2_e | Analog value 1 after scaling | E | ABBIED600:2014 |
| AnValOut2 | ABBIED600_Rev3_MV_2_e | Analog value 2 after scaling | E | ABBIED600:2014 |
| AnValOut3 | ABBIED600_Rev3_MV_2_e | Analog value 3 after scaling | E | ABBIED600:2014 |
| AnValOut4 | ABBIED600_Rev3_MV_2_e | Analog value 4 after scaling | E | ABBIED600:2014 |
| ScaleAnIn1 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 1 | E | ABBIED600:2014 |
| ScaleAnIn2 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 2 | E | ABBIED600:2014 |
| ScaleAnIn3 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 3 | E | ABBIED600:2014 |
| ScaleAnIn4 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 4 | E | ABBIED600:2014 |

### 5.2.94 3.2.94 LN: SCA4GAPC6 Name: GAPC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| AnIn1 | ABBIED600_Rev3_MV_2_e | Analog input 1 | E | IEC 61850-7-4:2007 |
| AnIn2 | ABBIED600_Rev3_MV_2_e | Analog input 2 | E | IEC 61850-7-4:2007 |
| AnIn3 | ABBIED600_Rev3_MV_2_e | Analog input 3 | E | IEC 61850-7-4:2007 |
| AnIn4 | ABBIED600_Rev3_MV_2_e | Analog input 4 | E | IEC 61850-7-4:2007 |
| AnValOut1 | ABBIED600_Rev3_MV_2_e | Analog value 1 after scaling | E | ABBIED600:2014 |
| AnValOut2 | ABBIED600_Rev3_MV_2_e | Analog value 2 after scaling | E | ABBIED600:2014 |
| AnValOut3 | ABBIED600_Rev3_MV_2_e | Analog value 3 after scaling | E | ABBIED600:2014 |
| AnValOut4 | ABBIED600_Rev3_MV_2_e | Analog value 4 after scaling | E | ABBIED600:2014 |
| ScaleAnIn1 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 1 | E | ABBIED600:2014 |
| ScaleAnIn2 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 2 | E | ABBIED600:2014 |
| ScaleAnIn3 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 3 | E | ABBIED600:2014 |
| ScaleAnIn4 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 4 | E | ABBIED600:2014 |

### 5.2.95 3.2.95 LN: SCA4GAPC7 Name: GAPC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| AnIn1 | ABBIED600_Rev3_MV_2_e | Analog input 1 | E | IEC 61850-7-4:2007 |

| | | | | |
|---|---|---|---|---|
| AnIn2 | ABBIED600_Rev3_MV_2_e | Analog input 2 | E | IEC 61850-7-4:2007 |
| AnIn3 | ABBIED600_Rev3_MV_2_e | Analog input 3 | E | IEC 61850-7-4:2007 |
| AnIn4 | ABBIED600_Rev3_MV_2_e | Analog input 4 | E | IEC 61850-7-4:2007 |
| AnValOut1 | ABBIED600_Rev3_MV_2_e | Analog value 1 after scaling | E | ABBIED600:2014 |
| AnValOut2 | ABBIED600_Rev3_MV_2_e | Analog value 2 after scaling | E | ABBIED600:2014 |
| AnValOut3 | ABBIED600_Rev3_MV_2_e | Analog value 3 after scaling | E | ABBIED600:2014 |
| AnValOut4 | ABBIED600_Rev3_MV_2_e | Analog value 4 after scaling | E | ABBIED600:2014 |
| ScaleAnIn1 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 1 | E | ABBIED600:2014 |
| ScaleAnIn2 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 2 | E | ABBIED600:2014 |
| ScaleAnIn3 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 3 | E | ABBIED600:2014 |
| ScaleAnIn4 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 4 | E | ABBIED600:2014 |

### 5.2.96 3.2.96 LN: SCA4GAPC8 Name: GAPC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| AnIn1 | ABBIED600_Rev3_MV_2_e | Analog input 1 | E | IEC 61850-7-4:2007 |
| AnIn2 | ABBIED600_Rev3_MV_2_e | Analog input 2 | E | IEC 61850-7-4:2007 |
| AnIn3 | ABBIED600_Rev3_MV_2_e | Analog input 3 | E | IEC 61850-7-4:2007 |
| AnIn4 | ABBIED600_Rev3_MV_2_e | Analog input 4 | E | IEC 61850-7-4:2007 |

| | | | | |
|---|---|---|---|---|
| AnValOut1 | ABBIED600_Rev3_MV_2_e | Analog value 1 after scaling | E | ABBIED600:2014 |
| AnValOut2 | ABBIED600_Rev3_MV_2_e | Analog value 2 after scaling | E | ABBIED600:2014 |
| AnValOut3 | ABBIED600_Rev3_MV_2_e | Analog value 3 after scaling | E | ABBIED600:2014 |
| AnValOut4 | ABBIED600_Rev3_MV_2_e | Analog value 4 after scaling | E | ABBIED600:2014 |
| ScaleAnIn1 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 1 | E | ABBIED600:2014 |
| ScaleAnIn2 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 2 | E | ABBIED600:2014 |
| ScaleAnIn3 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 3 | E | ABBIED600:2014 |
| ScaleAnIn4 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 4 | E | ABBIED600:2014 |

### 5.2.97 3.2.97 LN: SCA4GAPC9 Name: GAPC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| AnIn1 | ABBIED600_Rev3_MV_2_e | Analog input 1 | E | IEC 61850-7-4:2007 |
| AnIn2 | ABBIED600_Rev3_MV_2_e | Analog input 2 | E | IEC 61850-7-4:2007 |
| AnIn3 | ABBIED600_Rev3_MV_2_e | Analog input 3 | E | IEC 61850-7-4:2007 |
| AnIn4 | ABBIED600_Rev3_MV_2_e | Analog input 4 | E | IEC 61850-7-4:2007 |
| AnValOut1 | ABBIED600_Rev3_MV_2_e | Analog value 1 after scaling | E | ABBIED600:2014 |
| AnValOut2 | ABBIED600_Rev3_MV_2_e | Analog value 2 after scaling | E | ABBIED600:2014 |
| AnValOut3 | ABBIED600_Rev3_MV_2_e | Analog value 3 after scaling | E | ABBIED600:2014 |
| AnValOut4 | ABBIED600_Rev3_MV_2_e | Analog value 4 after scaling | E | ABBIED600:2014 |
| ScaleAnIn1 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 1 | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| ScaleAnIn2 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 2 | E | ABBIED600:2014 |
| ScaleAnIn3 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 3 | E | ABBIED600:2014 |
| ScaleAnIn4 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 4 | E | ABBIED600:2014 |

### 5.2.98 3.2.98 LN: SCA4GAPC10 Name: GAPC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| AnIn1 | ABBIED600_Rev3_MV_2_e | Analog input 1 | E | IEC 61850-7-4:2007 |
| AnIn2 | ABBIED600_Rev3_MV_2_e | Analog input 2 | E | IEC 61850-7-4:2007 |
| AnIn3 | ABBIED600_Rev3_MV_2_e | Analog input 3 | E | IEC 61850-7-4:2007 |
| AnIn4 | ABBIED600_Rev3_MV_2_e | Analog input 4 | E | IEC 61850-7-4:2007 |
| AnValOut1 | ABBIED600_Rev3_MV_2_e | Analog value 1 after scaling | E | ABBIED600:2014 |
| AnValOut2 | ABBIED600_Rev3_MV_2_e | Analog value 2 after scaling | E | ABBIED600:2014 |
| AnValOut3 | ABBIED600_Rev3_MV_2_e | Analog value 3 after scaling | E | ABBIED600:2014 |
| AnValOut4 | ABBIED600_Rev3_MV_2_e | Analog value 4 after scaling | E | ABBIED600:2014 |
| ScaleAnIn1 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 1 | E | ABBIED600:2014 |
| ScaleAnIn2 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 2 | E | ABBIED600:2014 |
| ScaleAnIn3 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 3 | E | ABBIED600:2014 |
| ScaleAnIn4 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 4 | E | ABBIED600:2014 |

### 5.2.99 3.2.99 LN: SCA4GAPC11 Name: GAPC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| AnIn1 | ABBIED600_Rev3_MV_2_e | Analog input 1 | E | IEC 61850-7-4:2007 |
| AnIn2 | ABBIED600_Rev3_MV_2_e | Analog input 2 | E | IEC 61850-7-4:2007 |
| AnIn3 | ABBIED600_Rev3_MV_2_e | Analog input 3 | E | IEC 61850-7-4:2007 |
| AnIn4 | ABBIED600_Rev3_MV_2_e | Analog input 4 | E | IEC 61850-7-4:2007 |
| AnValOut1 | ABBIED600_Rev3_MV_2_e | Analog value 1 after scaling | E | ABBIED600:2014 |
| AnValOut2 | ABBIED600_Rev3_MV_2_e | Analog value 2 after scaling | E | ABBIED600:2014 |
| AnValOut3 | ABBIED600_Rev3_MV_2_e | Analog value 3 after scaling | E | ABBIED600:2014 |
| AnValOut4 | ABBIED600_Rev3_MV_2_e | Analog value 4 after scaling | E | ABBIED600:2014 |
| ScaleAnIn1 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 1 | E | ABBIED600:2014 |
| ScaleAnIn2 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 2 | E | ABBIED600:2014 |
| ScaleAnIn3 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 3 | E | ABBIED600:2014 |
| ScaleAnIn4 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 4 | E | ABBIED600:2014 |

### 5.2.100 3.2.100 LN: SCA4GAPC12 Name: GAPC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |

| | | | | |
|---|---|---|---|---|
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| AnIn1 | ABBIED600_Rev3_MV_2_e | Analog input 1 | E | IEC 61850-7-4:2007 |
| AnIn2 | ABBIED600_Rev3_MV_2_e | Analog input 2 | E | IEC 61850-7-4:2007 |
| AnIn3 | ABBIED600_Rev3_MV_2_e | Analog input 3 | E | IEC 61850-7-4:2007 |
| AnIn4 | ABBIED600_Rev3_MV_2_e | Analog input 4 | E | IEC 61850-7-4:2007 |
| AnValOut1 | ABBIED600_Rev3_MV_2_e | Analog value 1 after scaling | E | ABBIED600:2014 |
| AnValOut2 | ABBIED600_Rev3_MV_2_e | Analog value 2 after scaling | E | ABBIED600:2014 |
| AnValOut3 | ABBIED600_Rev3_MV_2_e | Analog value 3 after scaling | E | ABBIED600:2014 |
| AnValOut4 | ABBIED600_Rev3_MV_2_e | Analog value 4 after scaling | E | ABBIED600:2014 |
| ScaleAnIn1 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 1 | E | ABBIED600:2014 |
| ScaleAnIn2 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 2 | E | ABBIED600:2014 |
| ScaleAnIn3 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 3 | E | ABBIED600:2014 |
| ScaleAnIn4 | ABBIED600_Rev3_ASG_SP_i_e | Scale ratio for analog input value 4 | E | ABBIED600:2014 |

### 5.2.101 3.2.101 LN: MVI4GAPC1 Name: GAPC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| ISCSO1 | ABBIED600_Rev1_INC_simple_int | Integer output value 1 | | status-only |
| ISCSO2 | ABBIED600_Rev1_INC_simple_int | Integer output value 2 | | status-only |
| ISCSO3 | ABBIED600_Rev1_INC_simple_int | Integer output value 3 | | status-only |
| ISCSO4 | ABBIED600_Rev1_INC_simple_int | Integer output value 4 | | status-only |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |

| | | | | |
|---|---|---|---|---|
| IntIn1 | ABBIED600_Rev1_INS_e | Integer input value 1 | E | IEC 61850-7-4:2007 |
| IntIn2 | ABBIED600_Rev1_INS_e | Integer input value 2 | E | IEC 61850-7-4:2007 |
| IntIn3 | ABBIED600_Rev1_INS_e | Integer input value 3 | E | IEC 61850-7-4:2007 |
| IntIn4 | ABBIED600_Rev1_INS_e | Integer input value 4 | E | IEC 61850-7-4:2007 |

### 5.2.102 3.2.102 LN: MVI4GAPC2 Name: GAPC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| ISCSO1 | ABBIED600_Rev1_INC_simple_int | Integer output value 1 | | status-only |
| ISCSO2 | ABBIED600_Rev1_INC_simple_int | Integer output value 2 | | status-only |
| ISCSO3 | ABBIED600_Rev1_INC_simple_int | Integer output value 3 | | status-only |
| ISCSO4 | ABBIED600_Rev1_INC_simple_int | Integer output value 4 | | status-only |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| IntIn1 | ABBIED600_Rev1_INS_e | Integer input value 1 | E | IEC 61850-7-4:2007 |
| IntIn2 | ABBIED600_Rev1_INS_e | Integer input value 2 | E | IEC 61850-7-4:2007 |
| IntIn3 | ABBIED600_Rev1_INS_e | Integer input value 3 | E | IEC 61850-7-4:2007 |
| IntIn4 | ABBIED600_Rev1_INS_e | Integer input value 4 | E | IEC 61850-7-4:2007 |

### 5.2.103 3.2.103 LN: FKEY4GGIO1 Name: GGIO (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| SPCSO1 | ABBIED600_Rev1_SPC_simple_dU | Function key 1 | | status-only |
| SPCSO2 | ABBIED600_Rev1_SPC_simple_dU | Function key 2 | | status-only |
| SPCSO3 | ABBIED600_Rev1_SPC_simple_dU | Function key 3 | | status-only |
| SPCSO4 | ABBIED600_Rev1_SPC_simple_dU | Function key 4 | | status-only |
| Ind1 | ABBIED600_Rev1_SPS | LED 1 | | |
| Ind2 | ABBIED600_Rev1_SPS | LED 2 | | |

| | | | | |
|---|---|---|---|---|
| Ind3 | ABBIED600_Rev1_SPS | LED 3 | | |
| Ind4 | ABBIED600_Rev1_SPS | LED 4 | | |
| Ind5 | ABBIED600_Rev2_SPS_dU | Function key 1 off text | | |
| Ind6 | ABBIED600_Rev2_SPS_dU | Function key 2 off text | | |
| Ind7 | ABBIED600_Rev2_SPS_dU | Function key 3 off text | | |
| Ind8 | ABBIED600_Rev2_SPS_dU | Function key 4 off text | | |
| FKeyTxtEna | ABBIED600_Rev1_SPG_SP_e | Function key text enable | E | ABBIED600:2014 |

### 5.2.104 3.2.104 LN: DPSRDIR1 Name: RDIR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary out-puts | | |
| Dir | ABBIED600_Rev1_ACD_simple | Direction | | |
| ChrAng | ABBIED600_Rev3_ASG_SG_i | Characteristic angle | | |
| MinFwdAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in for-ward direction | | |
| MinRvAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in reverse direction | | |
| MaxFwdAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in forward direc-tion | | |

| | | | | |
|---|---|---|---|---|
| MaxRvAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in reverse direction | | |
| BlkValA | ABBIED600_Rev3_ASG_SP_i | Min operate current | | |
| BlkValV | ABBIED600_Rev3_ASG_SP_i | Min operate voltage | | |
| DirMod | ABBIED600_Rev3_ENG_SG_DirMod_e | Directional Mode | E | IEC 61850-7-4:2007 |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1_e | Reset Delay Time | E | IEC 61850-7-4:2007 |
| OpChrAng | ABBIED600_Rev3_MV_simple_i_e | Angle between operating angle and characteristic angle | E | ABBIED600:2014 |
| RelDlTmms | ABBIED600_Rev1_ING_SG_e | Release Delay Time | E | ABBIED600:2014 |
| TstOutCmd | ABBIED600_Rev20_ENC_TstOut_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |

### 5.2.105 3.2.105 LN: DTMGAPC1 Name: GAPC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| Frz | ABBIED600_Rev1_SPS_simple_e | Freeze signal for binary output | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| ActEna1 | ABBIED600_Rev1_SPG_SP_e | Activation / deactivation need on Monday | E | ABBIED600:2014 |
| ActTm1 | ABBIED600_Rev1_TSG_SP_setCal_hrmn_e | Activation time for Monday | E | ABBIED600:2014 |
| OffDlTm1 | ABBIED600_Rev4_ING_SP_Unit_e | Activation duration for Monday | E | ABBIED600:2014 |
| ActEna2 | ABBIED600_Rev1_SPG_SP_e | Activation / deactivation need on Tuesday | E | ABBIED600:2014 |
| ActTm2 | ABBIED600_Rev1_TSG_SP_setCal_hrmn_e | Activation time for Tuesday | E | ABBIED600:2014 |
| OffDlTm2 | ABBIED600_Rev4_ING_SP_Unit_e | Activation duration for Tuesday | E | ABBIED600:2014 |
| ActEna3 | ABBIED600_Rev1_SPG_SP_e | Activation / deactivation need on Wednesday | E | ABBIED600:2014 |
| ActTm3 | ABBIED600_Rev1_TSG_SP_setCal_hrmn_e | Activation time for Wednesday | E | ABBIED600:2014 |
| OffDlTm3 | ABBIED600_Rev4_ING_SP_Unit_e | Activation duration for Wednesday | E | ABBIED600:2014 |
| ActEna4 | ABBIED600_Rev1_SPG_SP_e | Activation / deactivation need on Thursday | E | ABBIED600:2014 |
| ActTm4 | ABBIED600_Rev1_TSG_SP_setCal_hrmn_e | Activation time for Thursday | E | ABBIED600:2014 |
| OffDlTm4 | ABBIED600_Rev4_ING_SP_Unit_e | Activation duration for Thursday | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| ActEna5 | ABBIED600_Rev1_SPG_SP_e | Activation / deactivation need on Friday | E | ABBIED600:2014 |
| ActTm5 | ABBIED600_Rev1_TSG_SP_setCal_hrmn_e | Activation time for Friday | E | ABBIED600:2014 |
| OffDlTm5 | ABBIED600_Rev4_ING_SP_Unit_e | Activation duration for Friday | E | ABBIED600:2014 |
| ActEna6 | ABBIED600_Rev1_SPG_SP_e | Activation / deactivation need on Saturday | E | ABBIED600:2014 |
| ActTm6 | ABBIED600_Rev1_TSG_SP_setCal_hrmn_e | Activation time for Saturday | E | ABBIED600:2014 |
| OffDlTm6 | ABBIED600_Rev4_ING_SP_Unit_e | Activation duration for Saturday | E | ABBIED600:2014 |
| ActEna7 | ABBIED600_Rev1_SPG_SP_e | Activation / deactivation need on Sunday | E | ABBIED600:2014 |
| ActTm7 | ABBIED600_Rev1_TSG_SP_setCal_hrmn_e | Activation time for Sunday | E | ABBIED600:2014 |
| OffDlTm7 | ABBIED600_Rev4_ING_SP_Unit_e | Activation duration for Sunday | E | ABBIED600:2014 |
| TestOth | ABBIED600_Rev1_ENC_TestOth_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |

### 5.2.106 3.2.106 LN: DTMGAPC2 Name: GAPC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |

| | | | | |
|---|---|---|---|---|
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| Frz | ABBIED600_Rev1_SPS_simple_e | Freeze signal for binary output | E | ABBIED600:2014 |
| ActEna1 | ABBIED600_Rev1_SPG_SP_e | Activation / deactivation need on Monday | E | ABBIED600:2014 |
| ActTm1 | ABBIED600_Rev1_TSG_SP_setCal_hrmn_e | Activation time for Monday | E | ABBIED600:2014 |
| OffDlTm1 | ABBIED600_Rev4_ING_SP_Unit_e | Activation duration for Monday | E | ABBIED600:2014 |
| ActEna2 | ABBIED600_Rev1_SPG_SP_e | Activation / deactivation need on Tuesday | E | ABBIED600:2014 |
| ActTm2 | ABBIED600_Rev1_TSG_SP_setCal_hrmn_e | Activation time for Tuesday | E | ABBIED600:2014 |
| OffDlTm2 | ABBIED600_Rev4_ING_SP_Unit_e | Activation duration for Tuesday | E | ABBIED600:2014 |
| ActEna3 | ABBIED600_Rev1_SPG_SP_e | Activation / deactivation need on Wednesday | E | ABBIED600:2014 |
| ActTm3 | ABBIED600_Rev1_TSG_SP_setCal_hrmn_e | Activation time for Wednesday | E | ABBIED600:2014 |
| OffDlTm3 | ABBIED600_Rev4_ING_SP_Unit_e | Activation duration for Wednesday | E | ABBIED600:2014 |
| ActEna4 | ABBIED600_Rev1_SPG_SP_e | Activation / deactivation | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| | | need on Thursday | | |
| ActTm4 | ABBIED600_Rev1_TSG_SP_setCal_hrmn_e | Activation time for Thursday | E | ABBIED600:2014 |
| OffDlTm4 | ABBIED600_Rev4_ING_SP_Unit_e | Activation duration for Thursday | E | ABBIED600:2014 |
| ActEna5 | ABBIED600_Rev1_SPG_SP_e | Activation / deactivation need on Friday | E | ABBIED600:2014 |
| ActTm5 | ABBIED600_Rev1_TSG_SP_setCal_hrmn_e | Activation time for Friday | E | ABBIED600:2014 |
| OffDlTm5 | ABBIED600_Rev4_ING_SP_Unit_e | Activation duration for Friday | E | ABBIED600:2014 |
| ActEna6 | ABBIED600_Rev1_SPG_SP_e | Activation / deactivation need on Saturday | E | ABBIED600:2014 |
| ActTm6 | ABBIED600_Rev1_TSG_SP_setCal_hrmn_e | Activation time for Saturday | E | ABBIED600:2014 |
| OffDlTm6 | ABBIED600_Rev4_ING_SP_Unit_e | Activation duration for Saturday | E | ABBIED600:2014 |
| ActEna7 | ABBIED600_Rev1_SPG_SP_e | Activation / deactivation need on Sunday | E | ABBIED600:2014 |
| ActTm7 | ABBIED600_Rev1_TSG_SP_setCal_hrmn_e | Activation time for Sunday | E | ABBIED600:2014 |
| OffDlTm7 | ABBIED600_Rev4_ING_SP_Unit_e | Activation duration for Sunday | E | ABBIED600:2014 |
| TestOth | ABBIED600_Rev1_ENC_TestOth_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |

### 5.2.107 3.2.107 LN: PHIPTOC2 Name: PTOC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary out-puts | | |
| Str | ABBIED600_Rev1_ACD_threephase | Start | | |
| Op | ABBIED600_Rev1_ACT_threephase | Operate | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| InEnaMult | ABBIED600_Rev1_SPS_e | Enable signal for current multiplier | E | ABBIED600:2014 |
| NumPh | ABBIED600_Rev3_ENG_SP_StrPhSel_e | Number of phases re-quired for op-erate activation | E | ABBIED600:2014 |
| StrValMult | ABBIED600_Rev3_ASG_SG_i_e | Multiplier for scaling the start value | E | ABBIED600:2014 |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| TstOutCmd | ABBIED600_Rev20_ENC_TstOut_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |

### 5.2.108 3.2.108 LN: MFADPSDE2 Name: PSDE (ED2)

| Attribute | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| name | | | | |
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| GndStr | ABBIED600_Rev3_ASG_SG_i | Voltage start value | | |
| StrDlTmms | ABBIED600_Rev1_ING_SP_1 | Start delay time | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| DirMod | ABBIED600_Rev3_ENG_SG_DirMod | Directional Mode | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary out-puts | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1_e | Reset Delay Time | E | IEC 61850-7-4:2007 |
| ItmEFInd | ABBIED600_Rev1_SPS_e | Intermittent earth-fault in-dication | E | ABBIED600:2014 |
| InhEF | ABBIED600_Rev1_SPS_e | Block EF | E | ABBIED600:2014 |
| PkInd | ABBIED600_Rev1_SPS_e | Current transi-ent detection indication | E | ABBIED600:2014 |
| TrgSt | ABBIED600_Rev1_SPS_simple_e | Signal indicat-ing function triggering | E | ABBIED600:2014 |
| PkCntLim | ABBIED600_Rev1_ING_SP_1_e | Min require-ment for peak counter before start in IEF mode | E | ABBIED600:2014 |
| TestPro | ABBIED600_Rev2_ENC_TestPro_e | Test control for | E | ABBIED600:2014,status- |

| | | | | |
|---|---|---|---|---|
| | | outputs | | only,direct-with-normal-security |
| OpModTEF | ABBIED600_Rev3_ENG_SP_OpModTEF_e | Operation mode for function | E | ABBIED600:2014 |
| AResSigSel | ABBIED600_Rev2_ENG_SP_AResSigSel_e | Selection for used Io signal | E | ABBIED600:2014 |
| VResSigSel | ABBIED600_Rev2_ENG_SP_VResSigSel_e | Selection for used Uo signal | E | ABBIED600:2014 |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |

### 5.2.109 3.2.109 LN: MFADRDIR2 Name: RDIR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Dir | ABBIED600_Rev1_ACD_simple | Direction | | |
| BlkValA | ABBIED600_Rev3_ASG_SG_i | Minimum operating current | | |
| RevPol | ABBIED600_Rev1_SPG_SP_e | Rotate polarizing quantity | E | ABBIED600:2014 |
| OpPolAng | ABBIED600_Rev3_MV_simple_i_e | Angle between polarizing and operating quantity | E | ABBIED600:2014 |
| TiltAng | ABBIED600_Rev3_ASG_SG_i_e | Characteristic tilt angle | E | ABBIED600:2014 |
| OpQtySel | ABBIED600_Rev1_ENG_SP_OpQtySel_e | Operating quantity selection: resistive, amplitude | E | ABBIED600:2014 |
| DirRs | ABBIED600_Rev1_SPC_simple_e | Direction calculation reset | E | ABBIED600:2014,status-only |

## 5.2.110 3.2.110 LN: ROVPTOV2 Name: PTOV (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Residual Over Voltage start value | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| TstOutCmd | ABBIED600_Rev20_ENC_TstOut_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| VResSigSel | ABBIED600_Rev2_ENG_SP_VResSigSel_e | Selection for used Uo signal | E | ABBIED600:2014 |

## 5.2.111 3.2.111 LN: PHPTUV2 Name: PTUV (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for | | |

| | | | | |
|---|---|---|---|---|
| | | all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_threephase | Start | | |
| Op | ABBIED600_Rev1_ACT_threephase | Operate | | |
| TmVCrv | ABBIED600_Rev2_CURVE_SG | Operating Curve Type | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| TmMult | ABBIED600_Rev3_ASG_SG_i | Time Dial Multiplier | | |
| MinOpTmms | ABBIED600_Rev1_ING_SP_1 | Minimum Operate Time | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| TypRsCrv | ABBIED600_Rev3_ENG_SG_TypRsCrv_e | Type of Reset Curve | E | IEC 61850-7-4:2007 |
| BlkVal | ABBIED600_Rev3_ASG_SP_i_e | Voltage block value | E | IEC 61850-7-4:2007 |
| NumPh | ABBIED600_Rev3_ENG_SP_StrPhSel_e | Number of phases required for operate activation | E | ABBIED600:2014 |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| TestPro | ABBIED600_Rev2_ENC_TestPro_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| CrvSatRl | ABBIED600_Rev1_ASG_SP_f_e | Tuning parameter to avoid curve discontinuities | E | ABBIED600:2014 |
| VSel | ABBIED600_Rev3_ENG_SP_VSel_e | Parameter to select phase or | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| | | phase-to-phase voltages | | |
| EnaBlkVal | ABBIED600_Rev1_SPG_SP_e | Enable block value | E | ABBIED600:2014 |
| HysRl | ABBIED600_Rev3_ASG_SP_i_e | Relative hysteresis for operation | E | ABBIED600:2014 |
| TypTmRs | ABBIED600_Rev2_ENG_SG_TypTmRs_e | Type of time reset | E | ABBIED600:2014 |

### 5.2.112 3.2.112 LN: PHPTOV2 Name: PTOV (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_threephase | Start | | |
| Op | ABBIED600_Rev1_ACT_threephase | Operate | | |
| TmVCrv | ABBIED600_Rev2_CURVE_SG | Operating Curve Type | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| TmMult | ABBIED600_Rev3_ASG_SG_i | Time Dial Multiplier | | |
| MinOpTmms | ABBIED600_Rev1_ING_SP_1 | Minimum Operate Time | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| TypRsCrv | ABBIED600_Rev3_ENG_SG_TypRsCrv_e | Type of Reset Curve | E | IEC 61850-7-4:2007 |
| NumPh | ABBIED600_Rev3_ENG_SP_StrPhSel_e | Number of | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| | | phases required for operate activation | | |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| TestPro | ABBIED600_Rev2_ENC_TestPro_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| CrvSatRl | ABBIED600_Rev1_ASG_SP_f_e | Tuning parameter to avoid curve discontinuities | E | ABBIED600:2014 |
| VSel | ABBIED600_Rev3_ENG_SP_VSel_e | Parameter to select phase or phase-to-phase voltages | E | ABBIED600:2014 |
| HysRl | ABBIED600_Rev3_ASG_SP_i_e | Relative hysteresis for operation | E | ABBIED600:2014 |
| TypTmRs | ABBIED600_Rev2_ENG_SG_TypTmRs_e | Type of time reset | E | ABBIED600:2014 |

### 5.2.113 3.2.113 LN: FRPTRC2 Name: PTRC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| TestPro | ABBIED600_Rev2_ENC_TestPro_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with- |

| | | | | |
|---|---|---|---|---|
| | | | | normal-security |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| OpModProHz | ABBIED600_Rev2_ENG_SG_OpModProHz_e | Operation mode | E | ABBIED600:2014 |

### 5.2.114 3.2.114 LN: FRPTOF2 Name: PTOF (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Str | ABBIED600_Rev1_ACD_simple | Start, overfrequency | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate, overfrequency | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time, overfrequency | E | ABBIED600:2014 |

### 5.2.115 3.2.115 LN: FRPTUF2 Name: PTUF (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Str | ABBIED600_Rev1_ACD_simple | Start, underfrequency | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate, underfrequency | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time, underfrequency | E | ABBIED600:2014 |

### 5.2.116 3.2.116 LN: FRPFRC2 Name: PFRC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Str | ABBIED600_Rev1_ACD_simple | Start, frequency gradient | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate, frequency gradient | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value df/dt | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time, frequency gradient | E | ABBIED600:2014 |

### 5.2.117 3.2.117 LN: CCBRBRF2 Name: RBRF (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Str | ABBIED600_Rev1_ACD_simple | Delayed CB failure alarm | | |
| OpEx | ABBIED600_Rev1_ACT_simple | Breaker failure trip (external trip) | | |
| OpIn | ABBIED600_Rev1_ACT_simple | Operate, retrip (internal trip) | | |
| FailMod | ABBIED600_Rev2_ENG_SP_FailMod | Breaker Failure Detection Mode (current, breaker status, both, other) | | |
| FailTmms | ABBIED600_Rev1_ING_SP | Breaker Failure Time Delay for bus bar | | |

| | | | | |
|---|---|---|---|---|
| | | trip | | |
| TPTrTmms | ABBIED600_Rev1_ING_SP | Three Pole Retrip Time Delay | | |
| DetValA | ABBIED600_Rev3_ASG_SP_i | Current Detector Value | | |
| ReTrMod | ABBIED600_Rev2_ENG_SP_ReTrMod | Retrip Mode | | |
| TrPlsTmms | ABBIED600_Rev1_ING_SP_e | Trip pulse time | E | IEC 61850-7-4:2007 |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| DetValARes | ABBIED600_Rev3_ASG_SP_i_e | Current Detector Value for residual current | E | ABBIED600:2014 |
| AMeasMod | ABBIED600_Rev3_ENG_SP_MeasMod_e | Measurement mode selection (current): 2= DFT; 3= Peak-to-Peak | E | ABBIED600:2014 |
| CBAlmTmms | ABBIED600_Rev1_ING_SP_e | Circuit breaker faulty alarm delay | E | ABBIED600:2014 |
| OpExMod | ABBIED600_Rev2_ENG_SP_buTripMode_e | Select type of backup trip logic | E | ABBIED600:2014 |
| InStr | ABBIED600_Rev1_SPS_e | CBFP start command | E | ABBIED600:2014 |
| InPosCls | ABBIED600_Rev1_SPS_e | CB in closed poisition | E | ABBIED600:2014 |
| InCBFlt | ABBIED600_Rev1_SPS_e | CB faulty and unable to trip | E | ABBIED600:2014 |
| TstOutCmd | ABBIED600_Rev20_ENC_TstOut_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |

| | | | | |
|---|---|---|---|---|
| StrLtcMod | ABBIED600_Rev2_ENG_SP_StrLtcMod_e | Start reset delayed or immediately | E | ABBIED600:2014 |

### 5.2.118 3.2.118 LN: LSHDPTRC2 Name: PTRC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Time delay to restore | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| TstOutCmd | ABBIED600_Rev20_ENC_TstOut_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| LodShdMod | ABBIED600_Rev2_ENG_SG_OpModProHz_e | Operation mode | E | ABBIED600:2014 |

### 5.2.119 3.2.119 LN: LSHDPTOF2 Name: PTOF (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Str | ABBIED600_Rev1_ACD_simple | Start of re- | | |

| | | | | |
|---|---|---|---|---|
| | | store | | |
| Op | ABBIED600_Rev1_ACT_simple | Restore the load | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Restore frequency | | |
| ManRest | ABBIED600_Rev2_SPC_control_e | Manual restore command | E | ABBIED600:2014,status-only,direct-with-normal-security |
| RestMod | ABBIED600_Rev2_ENG_SG_AutoManMod_e | Restore mode | E | ABBIED600:2014 |
| BlkRest | ABBIED600_Rev2_SPC_control_e | Cancel restore | E | ABBIED600:2014,status-only,direct-with-normal-security |

### 5.2.120 3.2.120 LN: SSCBR2 Name: SCBR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mod | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| ColOpn | ABBIED600_Rev1_SPS_simple | Open command of trip coil | | |
| OpCntAlm | ABBIED600_Rev1_SPS | Number of CB operations exceeds alarm limit | | |
| OpTmOpn | ABBIED600_Rev3_MV_simple_i | Travel time of the CB during opening operation | | |
| OpTmCls | ABBIED600_Rev3_MV_simple_i | Travel time of the CB during | | |

| | | | | |
|---|---|---|---|---|
| | | closing operation | | |
| OpTmAlm | ABBIED600_Rev1_SPS_simple | Switch operating time exceeded | | |
| OpAlmNum | ABBIED600_Rev1_ING_SP_1 | Setting of alarm for number of CB operations. | | |
| OpCntRs | ABBIED600_Rev1_INC_simple_int | Number of CB operation cycle | | status-only |
| InPosOpn | ABBIED600_Rev1_SPS_e | POSOPEN | E | ABBIED600:2014 |
| InPosCls | ABBIED600_Rev1_SPS_e | POSCLOSE | E | ABBIED600:2014 |
| ColCls | ABBIED600_Rev1_SPS_simple_e | Close command status | E | ABBIED600:2014 |
| PosOpn | ABBIED600_Rev1_SPS_e | CB position is open | E | ABBIED600:2014 |
| PosIvd | ABBIED600_Rev1_SPS_e | INVALIDPOS | E | ABBIED600:2014 |
| PosCls | ABBIED600_Rev1_SPS_e | CB position is closed | E | ABBIED600:2014 |
| OpnAlm | ABBIED600_Rev1_SPS_e | CB open travel time exceeded set value | E | ABBIED600:2014 |
| ClsAlm | ABBIED600_Rev1_SPS_e | CB close travel time exceeded set value | E | ABBIED600:2014 |
| OpCntLO | ABBIED600_Rev1_SPS_e | Number of CB operations exceeds lockout limit | E | ABBIED600:2014 |
| LonTmAlm | ABBIED600_Rev1_SPS_e | CB 'not operated for long | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| | | time' alarm | | |
| APwrAlm | ABBIED600_Rev1_SPS_e | Accumulated currents power (lyt),exceeded alarm limit | E | ABBIED600:2014 |
| APwrLO | ABBIED600_Rev1_SPS_e | Accumulated currents power (lyt),exceeded lockout limit | E | ABBIED600:2014 |
| RmnNumO-pAlm | ABBIED600_Rev1_SPS_e | Remaining life of CB ex-ceeded alarm limit | E | ABBIED600:2014 |
| OpnAlmTmms | ABBIED600_Rev1_ING_SP_1_e | Setting of alarm level for open travel time in ms | E | ABBIED600:2014 |
| CorOpnTmms | ABBIED600_Rev1_ING_SP_1_e | Correction factor for open travel time in ms | E | ABBIED600:2014 |
| ClsAlmTmms | ABBIED600_Rev1_ING_SP_1_e | Setting of alarm level for close travel time in ms | E | ABBIED600:2014 |
| CorClsTmms | ABBIED600_Rev1_ING_SP_1_e | Correction factor for CB close travel time in ms | E | ABBIED600:2014 |
| CorDifTmms | ABBIED600_Rev1_ING_SP_1_e | Corr. factor for time dif in aux. and | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| | | main contacts open time | | |
| OpLONum | ABBIED600_Rev1_ING_SP_1_e | Setting to block operation when number of operation is more. | E | ABBIED600:2014 |
| OpNumRtg | ABBIED600_Rev1_ING_SP_1_e | Number of operations possible at rated current | E | ABBIED600:2014 |
| NumOpAlmLev | ABBIED600_Rev1_ING_SP_1_e | Alarm level for CB remaining life | E | ABBIED600:2014 |
| OpNumFlt | ABBIED600_Rev1_ING_SP_1_e | Number of operations possible at rated fault current | E | ABBIED600:2014 |
| CntIniVal | ABBIED600_Rev1_ING_SP_1_e | The operation numbers counter initialization value | E | ABBIED600:2014 |
| InaAlmTmd | ABBIED600_Rev1_ING_SP_1_e | Alarm limit value of the inactive days counter | E | ABBIED600:2014 |
| IniInaTmd | ABBIED600_Rev1_ING_SP_1_e | Initial value of the inactive days counter | E | ABBIED600:2014 |
| InaAlmTmh | ABBIED600_Rev1_ING_SP_1_e | Alarm time of the inactive days counter | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| | | in hours | | |
| InaTmdCnt | ABBIED600_Rev1_INS_e | The number of days CB has been inactive | E | ABBIED600:2014 |
| RsAccmAPwr | ABBIED600_Rev2_SPC_control_e | Reset accumulation energy | E | ABBIED600:2014,status-only,direct-with-normal-security |
| RsCBWear | ABBIED600_Rev2_SPC_control_e | Reset input for CB remaining life and operation counter | E | ABBIED600:2014,status-only,direct-with-normal-security |
| RsTrvTm | ABBIED600_Rev2_SPC_control_e | SSCBR2 travel t | E | ABBIED600:2014,status-only,direct-with-normal-security |
| TestSpvn | ABBIED600_Rev3_ENC_TestSpvn_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| TrvClcMod | ABBIED600_Rev2_ENG_SP_TrvClcMod_e | Travel time calculation mode | E | ABBIED600:2014 |
| DirCff | ABBIED600_Rev1_ASG_SP_f_e | Directional coefficient for CB life calculation | E | ABBIED600:2014 |
| IniRmnNumOp | ABBIED600_Rev1_ASG_SP_f_e | Initial value for the CB remaining life estimates | E | ABBIED600:2014 |
| AlmAccmAPwr | ABBIED600_Rev3_ASG_SP_i_e | Setting of alarm level for accumulated currents | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| | | power, lyt | | |
| AccmStopA | ABBIED600_Rev3_ASG_SP_i_e | Setting of the RMS current below which engy acm stops | E | ABBIED600:2014 |
| LOAccmAPwr | ABBIED600_Rev3_ASG_SP_i_e | Setting of lockout level for accumulated currents power, lyt | E | ABBIED600:2014 |
| AExpn | ABBIED600_Rev1_ASG_SP_f_e | Current exponent setting for energy calculation | E | ABBIED600:2014 |
| AOpRtg | ABBIED600_Rev3_ASG_SP_i_e | Rated operating current of the breaker | E | ABBIED600:2014 |
| AFltRtg | ABBIED600_Rev3_ASG_SP_i_e | Rated fault current of the breaker | E | ABBIED600:2014 |
| IniAccmAPwr | ABBIED600_Rev3_ASG_SP_i_e | Initial value for accumulation energy (lyt) | E | ABBIED600:2014 |

### 5.2.121 3.2.121 LN: SPH1SCBR2 Name: SCBR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| ColOpn | ABBIED600_Rev1_SPS_simple | Open command of trip coil | | |
| RmnNumOp | ABBIED600_Rev1_INS_d_e | CB Remaining life phase A | E | ABBIED600:2014 |
| AccmAPwr | ABBIED600_Rev3_MV_simple_i_e | Accumulated currents power | E | ABBIED600:2014 |

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|---|---|---|---|---|
| | | (Iyt), phase A | | |

### 5.2.122 3.2.122 LN: SPH2SCBR2 Name: SCBR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| ColOpn | ABBIED600_Rev1_SPS_simple | Open command of trip coil | | |
| RmnNumOp | ABBIED600_Rev1_INS_d_e | CB Remaining life phase B | E | ABBIED600:2014 |
| AccmAPwr | ABBIED600_Rev3_MV_simple_i_e | Accumulated currents power (Iyt), phase B | E | ABBIED600:2014 |

### 5.2.123 3.2.123 LN: SPH3SCBR2 Name: SCBR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| ColOpn | ABBIED600_Rev1_SPS_simple | Open command of trip coil | | |
| RmnNumOp | ABBIED600_Rev1_INS_d_e | CB Remaining life phase C | E | ABBIED600:2014 |
| AccmAPwr | ABBIED600_Rev3_MV_simple_i_e | Accumulated currents power (Iyt), phase C | E | ABBIED600:2014 |

### 5.2.124 3.2.124 LN: SSIMG2 Name: SIMG (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| InsAlm | ABBIED600_Rev1_SPS | Pressure below alarm level | | |
| InsBlk | ABBIED600_Rev1_SPS | Pressure below lockout level | | |
| PresAlm | ABBIED600_Rev1_SPS | Binary pressure input for alarm | | |
| PresBlk | ABBIED600_Rev1_SPS_e | Binary pressure input for lock-out indication | E | ABBIED600:2014 |
| InsAlmTmms | ABBIED600_Rev1_ING_SP_1_e | Time delay for gas pressure | E | ABBIED600:2014 |

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|---|---|---|---|---|
| | | alarm. | | |
| InsBlkTmms | ABBIED600_Rev1_ING_SP_e | Time delay for gas pressure lockout. | E | ABBIED600:2014 |

### 5.2.125 3.2.125 LN: SSOPM2 Name: SOPM (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| SprChaAlm | ABBIED600_Rev1_SPS_e | Spring charging time has crossed the set value | E | ABBIED600:2014 |
| SprChaStr | ABBIED600_Rev1_SPS_e | CB spring charg-ing started input | E | ABBIED600:2014 |
| SprChaStop | ABBIED600_Rev1_SPS_e | CB spring charged input | E | ABBIED600:2014 |
| SprChaTmms | ABBIED600_Rev1_ING_SP_e | Setting of alarm for spring charg-ing time of CB in ms. | E | ABBIED600:2014 |
| TmsSprCha | ABBIED600_Rev3_MV_simple_i_e | The charging time of the CB spring | E | ABBIED600:2014 |
| RsSprChaTm | ABBIED600_Rev2_SPC_control_e | SSCBR2 spr.charge t | E | ABBIED600:2014,status-only,direct-with-normal-security |

### 5.2.126 3.2.126 LN: DARREC2 Name: RREC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| OpCntRs | ABBIED600_Rev1_INC_simple_int_e | Resetable op-eration counter (all shots) | E | IEC 61850-7-4:2007,status-only |

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|---|---|---|---|---|
| RecCyc | ABBIED600_Rev1_INS | Actual reclose cycle (number between 1 and UseCyc) | | |
| OpCls | ABBIED600_Rev1_ACT_threephase | Operate (close command to XCBR) | | |
| AutoRecSt | ABBIED600_Rev3_ENS_AutoRecSt | Auto Reclosing Status | | |
| Rec1Tmms1 | ABBIED600_Rev1_ING_SP | First reclose time | | |
| Rec1Tmms2 | ABBIED600_Rev1_ING_SP | Second reclose time | | |
| Rec1Tmms3 | ABBIED600_Rev1_ING_SP | Third reclose time | | |
| Rec1Tmms4 | ABBIED600_Rev1_ING_SP | Fourth reclose time | | |
| Rec1Tmms5 | ABBIED600_Rev1_ING_SP | Fifth reclose time | | |
| Rec1Tmms6 | ABBIED600_Rev1_ING_SP | Sixth reclose time | | |
| Rec1Tmms7 | ABBIED600_Rev1_ING_SP | Seventh reclose time | | |
| Rec3Tmms1 | ABBIED600_Rev1_ING_SP | First reclose time | | |
| Rec3Tmms2 | ABBIED600_Rev1_ING_SP | Second reclose time | | |
| Rec3Tmms3 | ABBIED600_Rev1_ING_SP | Third reclose time | | |
| Rec3Tmms4 | ABBIED600_Rev1_ING_SP | Fourth reclose time | | |
| Rec3Tmms5 | ABBIED600_Rev1_ING_SP | Fifth reclose time | | |
| Rec3Tmms6 | ABBIED600_Rev1_ING_SP | Sixth reclose time | | |

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|---|---|---|---|---|
| Rec3Tmms7 | ABBIED600_Rev1_ING_SP | Seventh reclose time | | |
| RclTmms | ABBIED600_Rev1_ING_SP | Reclaim time | | |
| OpOpn | ABBIED600_Rev1_ACT_threephase_e | Operate (open command to XCBR) | E | IEC 61850-7-4:2007 |
| BlkRec | ABBIED600_Rev2_SPC_control_e | Block reclose | E | AB-BIED600:2014,status-only,direct-with-normal-security |
| RecCnt1 | ABBIED600_Rev1_INS_e | Operation counter (1st shot) | E | ABBIED600:2014 |
| RecCnt2 | ABBIED600_Rev1_INS_e | Operation counter (2nd shot) | E | ABBIED600:2014 |
| RecCnt3 | ABBIED600_Rev1_INS_e | Operation counter (3rd shot) | E | ABBIED600:2014 |
| RecCnt4 | ABBIED600_Rev1_INS_e | Operation counter (4th shot) | E | ABBIED600:2014 |
| RecCnt5 | ABBIED600_Rev1_INS_e | Operation counter (5th shot) | E | ABBIED600:2014 |
| AutoIni | ABBIED600_Rev1_ING_SP_1_e | Auto init | E | ABBIED600:2014 |
| RecOp | ABBIED600_Rev2_ENG_SP_recOp_e | Reclosing op-eration | E | ABBIED600:2014 |
| ManClsMod | ABBIED600_Rev1_SPG_SP_e | Manual close mode | E | ABBIED600:2014 |
| WtClsTmms | ABBIED600_Rev1_ING_SP_e | Wait close time | E | ABBIED600:2014 |
| MaxWtTmms | ABBIED600_Rev1_ING_SP_e | Max wait time | E | ABBIED600:2014 |
| MaxBlkTmms | ABBIED600_Rev1_ING_SP_e | Max Thm block time | E | ABBIED600:2014 |
| CutOutTmms | ABBIED600_Rev1_ING_SP_e | Cut-out time | E | ABBIED600:2014 |

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|---|---|---|---|---|
| DsrTmms1 | ABBIED600_Rev1_ING_SP_e | Dsr time shot 1 | E | ABBIED600:2014 |
| DsrTmms2 | ABBIED600_Rev1_ING_SP_e | Dsr time shot 2 | E | ABBIED600:2014 |
| DsrTmms3 | ABBIED600_Rev1_ING_SP_e | Dsr time shot 3 | E | ABBIED600:2014 |
| DsrTmms4 | ABBIED600_Rev1_ING_SP_e | Dsr time shot 4 | E | ABBIED600:2014 |
| TermPrio | ABBIED600_Rev2_ENG_SP_termPrio_e | Terminal priori-ty | E | ABBIED600:2014 |
| SynSet | ABBIED600_Rev1_ING_SP_1_e | Synchronisa-tion set | E | ABBIED600:2014 |
| AutoWtT-mms | ABBIED600_Rev1_ING_SP_e | Auto wait time | E | ABBIED600:2014 |
| AutoLORs | ABBIED600_Rev1_SPG_SP_e | Auto lockout reset | E | ABBIED600:2014 |
| ProCrdLim | ABBIED600_Rev1_ING_SP_1_e | Protection crd limit | E | ABBIED600:2014 |
| ProCrdMod | AB-BIED600_Rev2_ENG_SP_proCrdMod_e | Protection crd mode | E | ABBIED600:2014 |
| AutoIniCnd | ABBIED600_Rev2_ENG_SP_autoIniCnd_e | Auto initiation cnd | E | ABBIED600:2014 |
| TrLin | ABBIED600_Rev1_ING_SP_1_e | Tripping line | E | ABBIED600:2014 |
| CtlLin | ABBIED600_Rev1_ING_SP_1_e | Control line | E | ABBIED600:2014 |
| EnaShotJmp | ABBIED600_Rev1_SPG_SP_e | Enable shot jump | E | ABBIED600:2014 |
| CBClsPosSt | ABBIED600_Rev1_SPG_SP_e | CB closed Pos status | E | ABBIED600:2014 |
| Ena4DlSOF | ABBIED600_Rev1_SPG_SP_e | Fourth delay in SOTF | E | ABBIED600:2014 |
| IniSigCBB1 | ABBIED600_Rev1_ING_SP_1_e | Init signals CBB1 | E | ABBIED600:2014 |
| IniSigCBB2 | ABBIED600_Rev1_ING_SP_1_e | Init signals CBB2 | E | ABBIED600:2014 |
| IniSigCBB3 | ABBIED600_Rev1_ING_SP_1_e | Init signals CBB3 | E | ABBIED600:2014 |
| IniSigCBB4 | ABBIED600_Rev1_ING_SP_1_e | Init signals CBB4 | E | ABBIED600:2014 |

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|---|---|---|---|---|
| IniSigCBB5 | ABBIED600_Rev1_ING_SP_1_e | Init signals CBB5 | E | ABBIED600:2014 |
| IniSigCBB6 | ABBIED600_Rev1_ING_SP_1_e | Init signals CBB6 | E | ABBIED600:2014 |
| IniSigCBB7 | ABBIED600_Rev1_ING_SP_1_e | Init signals CBB7 | E | ABBIED600:2014 |
| BlkSigCBB1 | ABBIED600_Rev1_ING_SP_1_e | Blk signals CBB1 | E | ABBIED600:2014 |
| BlkSigCBB2 | ABBIED600_Rev1_ING_SP_1_e | Blk signals CBB2 | E | ABBIED600:2014 |
| BlkSigCBB3 | ABBIED600_Rev1_ING_SP_1_e | Blk signals CBB3 | E | ABBIED600:2014 |
| BlkSigCBB4 | ABBIED600_Rev1_ING_SP_1_e | Blk signals CBB4 | E | ABBIED600:2014 |
| BlkSigCBB5 | ABBIED600_Rev1_ING_SP_1_e | Blk signals CBB5 | E | ABBIED600:2014 |
| BlkSigCBB6 | ABBIED600_Rev1_ING_SP_1_e | Blk signals CBB6 | E | ABBIED600:2014 |
| BlkSigCBB7 | ABBIED600_Rev1_ING_SP_1_e | Blk signals CBB7 | E | ABBIED600:2014 |
| ShotNum1 | ABBIED600_Rev1_ING_SP_1_e | Shot number CBB1 | E | ABBIED600:2014 |
| ShotNum2 | ABBIED600_Rev1_ING_SP_1_e | Shot number CBB2 | E | ABBIED600:2014 |
| ShotNum3 | ABBIED600_Rev1_ING_SP_1_e | Shot number CBB3 | E | ABBIED600:2014 |
| ShotNum4 | ABBIED600_Rev1_ING_SP_1_e | Shot number CBB4 | E | ABBIED600:2014 |
| ShotNum5 | ABBIED600_Rev1_ING_SP_1_e | Shot number CBB5 | E | ABBIED600:2014 |
| ShotNum6 | ABBIED600_Rev1_ING_SP_1_e | Shot number CBB6 | E | ABBIED600:2014 |
| ShotNum7 | ABBIED600_Rev1_ING_SP_1_e | Shot number CBB7 | E | ABBIED600:2014 |
| Str2Tmms1 | ABBIED600_Rev1_ING_SP_e | Str 2 delay shot | E | ABBIED600:2014 |

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|---|---|---|---|---|
| | | 1 | | |
| Str2Tmms2 | ABBIED600_Rev1_ING_SP_e | Str 2 delay shot 2 | E | ABBIED600:2014 |
| Str2Tmms3 | ABBIED600_Rev1_ING_SP_e | Str 2 delay shot 3 | E | ABBIED600:2014 |
| Str2Tmms4 | ABBIED600_Rev1_ING_SP_e | Str 2 delay shot 4 | E | ABBIED600:2014 |
| Str3Tmms1 | ABBIED600_Rev1_ING_SP_e | Str 3 delay shot 1 | E | ABBIED600:2014 |
| Str3Tmms2 | ABBIED600_Rev1_ING_SP_e | Str 3 delay shot 2 | E | ABBIED600:2014 |
| Str3Tmms3 | ABBIED600_Rev1_ING_SP_e | Str 3 delay shot 3 | E | ABBIED600:2014 |
| Str3Tmms4 | ABBIED600_Rev1_ING_SP_e | Str 3 delay shot 4 | E | ABBIED600:2014 |
| Str4Tmms1 | ABBIED600_Rev1_ING_SP_e | Str 4 delay shot 1 | E | ABBIED600:2014 |
| Str4Tmms2 | ABBIED600_Rev1_ING_SP_e | Str 4 delay shot 2 | E | ABBIED600:2014 |
| Str4Tmms3 | ABBIED600_Rev1_ING_SP_e | Str 4 delay shot 3 | E | ABBIED600:2014 |
| Str4Tmms4 | ABBIED600_Rev1_ING_SP_e | Str 4 delay shot 4 | E | ABBIED600:2014 |
| FrqCntLim | ABBIED600_Rev1_ING_SP_1_e | Frq Op counter limit | E | ABBIED600:2014 |
| FrqCntTmm | ABBIED600_Rev1_ING_SP_1_e | Frq Op counter time | E | ABBIED600:2014 |
| FrqRcvTmm | ABBIED600_Rev1_ING_SP_1_e | Frq Op recov-ery time | E | ABBIED600:2014 |
| PlsTmms | ABBIED600_Rev1_ING_SP_e | Close pulse time | E | ABBIED600:2014 |
| MaxTrTmms | ABBIED600_Rev1_ING_SP_e | Max trip time | E | ABBIED600:2014 |
| InInhRec | ABBIED600_Rev1_SPS_e | Inhibit reclose (status) | E | ABBIED600:2014 |

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|---|---|---|---|---|
| InBlkThm | ABBIED600_Rev1_SPS_e | Thermal block (status) | E | ABBIED600:2014 |
| LO | ABBIED600_Rev1_SPS_e | Lockout status | E | ABBIED600:2014 |
| RdyRec | ABBIED600_Rev1_SPS_e | Ready reclose status | E | ABBIED600:2014 |
| ActRec | ABBIED600_Rev1_SPS_e | Active reclose status | E | ABBIED600:2014 |
| SucRec | ABBIED600_Rev1_SPS_e | Successful reclose status | E | ABBIED600:2014 |
| UnsRec | ABBIED600_Rev1_SPS_e | Unsuccessful reclose status | E | ABBIED600:2014 |
| PrgRec | ABBIED600_Rev1_SPS_e | In progress status | E | ABBIED600:2014 |
| UnsCBCls | ABBIED600_Rev1_SPS_e | Unsuccessful CB closing status | E | ABBIED600:2014 |
| WtMstr | ABBIED600_Rev1_SPS_e | Master signal to follower | E | ABBIED600:2014 |
| PrgRec1 | ABBIED600_Rev1_SPS_e | In progress 1st reclose | E | ABBIED600:2014 |
| PrgRec2 | ABBIED600_Rev1_SPS_e | In progress 2nd reclose | E | ABBIED600:2014 |
| PrgRec3 | ABBIED600_Rev1_SPS_e | In progress 3rd reclose | E | ABBIED600:2014 |
| PrgRec4 | ABBIED600_Rev1_SPS_e | In progress 4th reclose | E | ABBIED600:2014 |
| PrgRec5 | ABBIED600_Rev1_SPS_e | In progress 5th reclose | E | ABBIED600:2014 |
| PrgDsr | ABBIED600_Rev1_SPS_e | Discrimination time in progress | E | ABBIED600:2014 |
| PrgCutOut | ABBIED600_Rev1_SPS_e | Cutout time in progress | E | ABBIED600:2014 |
| FrqOpCnt | ABBIED600_Rev1_INS_e | Frequent operation counter | E | ABBIED600:2014 |

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|---|---|---|---|---|
| FrqOpAlm | ABBIED600_Rev1_SPS_e | Frequent operation counter alarm | E | ABBIED600:2014 |
| RecRs | ABBIED600_Rev2_SPC_control_e | DARREC2 reset | E | ABBIED600:2014,status-only,direct-with-normal-security |
| CntRs | ABBIED600_Rev2_SPC_control_e | DARREC2 counters | E | ABBIED600:2014,status-only,direct-with-normal-security |
| DsaCnt | ABBIED600_Rev2_SPC_control_e | Signal for counter disabling | E | ABBIED600:2014,status-only,direct-with-normal-security |
| RclTmStr | ABBIED600_Rev1_SPS_e | Reclaim time started | E | ABBIED600:2014 |
| ProCrd | ABBIED600_Rev1_SPS_e | Protection coordination | E | ABBIED600:2014 |
| CBManCls | ABBIED600_Rev1_SPS_e | CB manually closed | E | ABBIED600:2014 |
| AutoRecOn | ABBIED600_Rev1_SPS_e | AR switched On | E | ABBIED600:2014 |
| ShotPntr | ABBIED600_Rev1_INS_e | Shot pointer value | E | ABBIED600:2014 |
| InRecOn | ABBIED600_Rev1_SPS_e | AR on/off control signal status | E | ABBIED600:2014 |
| InBlkRclTm | ABBIED600_Rev1_SPS_e | Block reclaim time | E | ABBIED600:2014 |
| InCBPos | ABBIED600_Rev1_SPS_e | CB position input | E | ABBIED600:2014 |
| InCBRdy | ABBIED600_Rev1_SPS_e | CB ready for reclosing | E | ABBIED600:2014 |
| InSynChk | ABBIED600_Rev1_SPS_e | Synchro check fulfilled | E | ABBIED600:2014 |

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|---|---|---|---|---|
| InIncrPntr | ABBIED600_Rev1_SPS_e | Shot pointer increment by one | E | ABBIED600:2014 |
| InIni1 | ABBIED600_Rev1_SPS_e | No 1 operate signal | E | ABBIED600:2014 |
| InIni2 | ABBIED600_Rev1_SPS_e | No 2 operate signal | E | ABBIED600:2014 |
| InIni3 | ABBIED600_Rev1_SPS_e | No 3 operate signal | E | ABBIED600:2014 |
| InIni4 | ABBIED600_Rev1_SPS_e | No 4 operate signal | E | ABBIED600:2014 |
| InIni5 | ABBIED600_Rev1_SPS_e | No 5 operate signal | E | ABBIED600:2014 |
| InIni6 | ABBIED600_Rev1_SPS_e | No 6 operate signal | E | ABBIED600:2014 |
| InDlIni2 | ABBIED600_Rev1_SPS_e | No 2 start signal | E | ABBIED600:2014 |
| InDlIni3 | ABBIED600_Rev1_SPS_e | No 3 start signal | E | ABBIED600:2014 |
| InDlIni4 | ABBIED600_Rev1_SPS_e | No 4 start signal | E | ABBIED600:2014 |
| RclTmEla | ABBIED600_Rev1_SPS_e | Reclaim time elapsed | E | ABBIED600:2014 |
| InBlkRecTm | ABBIED600_Rev1_SPS_e | Blocks and resets dead time | E | ABBIED600:2014 |
| SOF | ABBIED600_Rev1_SPS_e | Switch on the fault | E | ABBIED600:2014 |
| TestCtl | ABBIED600_Rev5_ENC_TestCtl_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |

### 5.2.127 3.2.127 LN: CMMXU2 Name: MMXU (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|

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|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Operation | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| A | ABBIED600_Rev3_WYE_threephase_full_i | Phase currents | | |
| AMeasMod | ABBIED600_Rev3_ENG_SP_MeasMod_e | Selects used measurement mode | E | ABBIED600:2014 |
| NumPh | ABBIED600_Rev3_ENG_SP_StrPhSel_e | Number of phases required by limit supervision | E | ABBIED600:2014 |
| HiAlm | ABBIED600_Rev1_SPS_e | High alarm | E | ABBIED600:2014 |
| HiWrn | ABBIED600_Rev1_SPS_e | High warning | E | ABBIED600:2014 |
| LoWrn | ABBIED600_Rev1_SPS_e | Low warning | E | ABBIED600:2014 |
| LoAlm | ABBIED600_Rev1_SPS_e | Low alarm | E | ABBIED600:2014 |
| RcdRs | ABBIED600_Rev2_SPC_control_e | CMMXU2 demands | E | ABBIED600:2014,status-only,direct-with-normal-security |

### 5.2.128 3.2.128 LN: PEMMXU2 Name: MMXU (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| TotW | ABBIED600_Rev4_MV_3 | Total Active Power (Total P) | | |
| TotVAr | ABBIED600_Rev4_MV_3 | Total Reactive Power (Total Q) | | |
| TotVA | ABBIED600_Rev4_MV_3 | Total Appar- | | |

| | | | | |
|---|---|---|---|---|
| | | ent Power (Total S) | | |
| TotPF | ABBIED600_Rev4_MV_4 | Average Power factor (Total PF) | | |
| WhDir | ABBIED600_Rev2_ENG_SP_DirMod2_e | Active power Dir | E | ABBIED600:2014 |
| VArhDir | ABBIED600_Rev2_ENG_SP_DirMod2_e | Reactive power Dir | E | ABBIED600:2014 |
| RcdRs | ABBIED600_Rev2_SPC_control_e | PEMMXU2 demands | E | AB-BIED600:2014,status-only,direct-with-normal-security |
| PwrMeas-Mod | AB-BIED600_Rev3_ENG_SP_PwrMeasMod_e | Measure-ment mode for power calculation | E | ABBIED600:2014 |

### 5.2.129 3.2.129 LN: PEMMTR2 Name: MMTR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| SupWh | ABBIED600_Rev4_BCR_2 | EA_RV_ACM | | |
| SupVArh | ABBIED600_Rev4_BCR_2 | ER_RV_ACM | | |
| DmdWh | ABBIED600_Rev4_BCR_2 | EA_FWD_ACM | | |
| DmdVArh | ABBIED600_Rev4_BCR_2 | ER_FWD_ACM | | |
| IniDmdWh | ABBIED600_Rev1_ING_SP_1_e | Preset Initial value for forward active energy | E | ABBIED600:2014 |
| IniSupWh | ABBIED600_Rev1_ING_SP_1_e | Preset Initial value for reverse active energy | E | ABBIED600:2014 |
| IniDmdVArh | ABBIED600_Rev1_ING_SP_1_e | Preset Initial value for forward reac- | E | ABBIED600:2014 |

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|---|---|---|---|---|
| | | tive energy | | |
| IniSupVArh | ABBIED600_Rev1_ING_SP_1_e | Preset Initial value for reverse reactive energy | E | ABBIED600:2014 |
| SupDmdRs | ABBIED600_Rev2_SPC_control_e | Reset of accumulated energy readings | E | ABBIED600:2014,status-only,direct-with-normal-security |

### 5.2.130 3.2.130 LN: SPEMMXU2 Name: MMXU (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| W | ABBIED600_Rev3_WYE_3_1 | Phase active power (P) | | |
| VAr | ABBIED600_Rev3_WYE_3_1 | Phase reactive power (Q) | | |
| VA | ABBIED600_Rev3_WYE_3_1 | Phase apparent power (S) | | |
| PF | ABBIED600_Rev3_WYE_3_1 | Average power factor (PF) | | |
| WhDir | ABBIED600_Rev2_ENG_SP_DirMod2_e | Active power direction | E | ABBIED600:2014 |
| VArhDir | ABBIED600_Rev2_ENG_SP_DirMod2_e | Reactive power direction | E | ABBIED600:2014 |
| RcdRs | ABBIED600_Rev2_SPC_control_e | Demands | E | ABBIED600:2014,status-only,direct-with-normal-security |

### 5.2.131 3.2.131 LN: SPE1MMTR2 Name: MMTR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |

| | | | | |
|---|---|---|---|---|
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| SupWh | ABBIED600_Rev4_BCR_2 | SPE1MMTR2 real energy supply | | |
| SupVArh | ABBIED600_Rev4_BCR_2 | SPE1MMTR2 reactive energy supply | | |
| DmdWh | ABBIED600_Rev4_BCR_2 | SPE1MMTR2 real energy demand | | |
| DmdVArh | ABBIED600_Rev4_BCR_2 | SPE1MMTR2 reactive energy demand | | |
| IniDmdWh | ABBIED600_Rev1_ING_SP_1_e | SPE1MMTR2 preset initial value for forward active energy | E | ABBIED600:2014 |
| IniSupWh | ABBIED600_Rev1_ING_SP_1_e | SPE1MMTR2 preset initial value for reverse active energy | E | ABBIED600:2014 |
| IniDmdVArh | ABBIED600_Rev1_ING_SP_1_e | SPE1MMTR2 preset initial value for forward reactive energy | E | ABBIED600:2014 |
| IniSupVArh | ABBIED600_Rev1_ING_SP_1_e | SPE1MMTR2 preset initial value for reverse reactive energy | E | ABBIED600:2014 |
| EnValRs | ABBIED600_Rev2_SPC_control_e | SPE1MMTR2 reset of accumulated energy readings | E | ABBIED600:2014,status-only,direct-with-normal-security |

### 5.2.132 3.2.132 LN: SPE2MMTR2 Name: MMTR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| SupWh | ABBIED600_Rev4_BCR_2 | SPE2MMTR2 real energy supply | | |

| | | | | |
|---|---|---|---|---|
| SupVArh | ABBIED600_Rev4_BCR_2 | SPE2MMTR2 reactive energy supply | | |
| DmdWh | ABBIED600_Rev4_BCR_2 | SPE2MMTR2 real energy demand | | |
| DmdVArh | ABBIED600_Rev4_BCR_2 | SPE2MMTR2 reactive energy demand | | |
| IniDmdWh | ABBIED600_Rev1_ING_SP_1_e | SPE2MMTR2 preset initial value for forward active energy | E | ABBIED600:2014 |
| IniSupWh | ABBIED600_Rev1_ING_SP_1_e | SPE2MMTR2 preset initial value for reverse active energy | E | ABBIED600:2014 |
| IniDmdVArh | ABBIED600_Rev1_ING_SP_1_e | SPE2MMTR2 preset initial value for forward reactive energy | E | ABBIED600:2014 |
| IniSupVArh | ABBIED600_Rev1_ING_SP_1_e | SPE2MMTR2 preset initial value for reverse reactive energy | E | ABBIED600:2014 |
| EnValRs | ABBIED600_Rev2_SPC_control_e | SPE2MMTR2 reset of accumulated energy readings | E | ABBIED600:2014,status-only,direct-with-normal-security |

### 5.2.133 3.2.133 LN: SPE3MMTR2 Name: MMTR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| SupWh | ABBIED600_Rev4_BCR_2 | SPE3MMTR2 real energy supply | | |
| SupVArh | ABBIED600_Rev4_BCR_2 | SPE3MMTR2 reactive energy supply | | |
| DmdWh | ABBIED600_Rev4_BCR_2 | SPE3MMTR2 real | | |

| | | | | |
|---|---|---|---|---|
| | | energy demand | | |
| DmdVArh | ABBIED600_Rev4_BCR_2 | SPE3MMTR2 reactive energy demand | | |
| IniDmdWh | ABBIED600_Rev1_ING_SP_1_e | SPE3MMTR2 preset initial value for forward active energy | E | ABBIED600:2014 |
| IniSupWh | ABBIED600_Rev1_ING_SP_1_e | SPE3MMTR2 preset initial value for reverse active energy | E | ABBIED600:2014 |
| IniDmdVArh | ABBIED600_Rev1_ING_SP_1_e | SPE3MMTR2 preset initial value for forward reactive energy | E | ABBIED600:2014 |
| IniSupVArh | ABBIED600_Rev1_ING_SP_1_e | SPE3MMTR2 preset initial value for reverse reactive energy | E | ABBIED600:2014 |
| EnValRs | ABBIED600_Rev2_SPC_control_e | SPE3MMTR2 reset of accumulated energy readings | E | ABBIED600:2014,status-only,direct-with-normal-security |

### 5.2.134 3.2.134 LN: DPHLPTOC3 Name: PTOC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_threephase | Start | | |
| Op | ABBIED600_Rev1_ACT_threephase | Operate | | |
| TmACrv | ABBIED600_Rev2_CURVE_SG | Operating Curve Type | | |

| | | | | |
|---|---|---|---|---|
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| TmMult | ABBIED600_Rev3_ASG_SG_i | Time Dial Multiplier | | |
| MinOpTmms | ABBIED600_Rev1_ING_SP_1 | Minimum Operate Time | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| TypRsCrv | ABBIED600_Rev3_ENG_SG_TypRsCrv | Type of Reset Curve | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| DirMod | ABBIED600_Rev3_ENG_SG_DirMod | Directional Mode | | |
| InEnaMult | ABBIED600_Rev1_SPS_e | Enable signal for current multiplier | E | ABBIED600:2014 |
| NumPh | ABBIED600_Rev3_ENG_SP_StrPhSel_e | Number of phases required for operate activation | E | ABBIED600:2014 |
| StrValMult | ABBIED600_Rev3_ASG_SG_i_e | Multiplier for scaling the start value | E | ABBIED600:2014 |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| AMeasMod | ABBIED600_Rev3_ENG_SP_MeasMod_e | Measuring mode | E | ABBIED600:2014 |
| TestPro | ABBIED600_Rev2_ENC_TestPro_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| AllwNonDir | ABBIED600_Rev1_SPG_SP_e | Allows prot activation as non-dir when dir info is in- | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| | | valid | | |
| NonDir | ABBIED600_Rev1_SPS_e | Forces protection to non-directional | E | ABBIED600:2014 |

### 5.2.135 3.2.135 LN: DPHLRDIR3 Name: RDIR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Dir | ABBIED600_Rev1_ACD_threephase | Direction | | |
| ChrAng | ABBIED600_Rev3_ASG_SG_i | Characteristic angle | | |
| MinFwdAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in forward direction | | |
| MinRvAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in reverse direction | | |
| MaxFwdAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in forward direction | | |
| MaxRvAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in reverse direction | | |
| BlkValA | ABBIED600_Rev3_ASG_SP_i | Min operate current | | |
| BlkValV | ABBIED600_Rev3_ASG_SP_i | Min operate voltage | | |
| PolQty | ABBIED600_Rev3_ENG_SG_PolQty | Polarising Quantity | | |
| VMemTmms | ABBIED600_Rev1_ING_SG_e | Voltage memory time | E | ABBIED600:2014 |
| OpChrAngPhsA | ABBIED600_Rev3_MV_simple_i_e | Calc angle difference phase A | E | ABBIED600:2014 |
| OpChrAngPhsB | ABBIED600_Rev3_MV_simple_i_e | Calc angle difference phase B | E | ABBIED600:2014 |
| OpChrAngPhsC | ABBIED600_Rev3_MV_simple_i_e | Calc angle difference phase C | E | ABBIED600:2014 |
| VMemUsedSt | ABBIED600_Rev1_SPS_e | Voltage memory in use status | E | ABBIED600:2014 |

### 5.2.136 3.2.136 LN: DPHLPTOC4 Name: PTOC (ED2)

| Attribute | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| name | | | | |
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_threephase | Start | | |
| Op | ABBIED600_Rev1_ACT_threephase | Operate | | |
| TmACrv | ABBIED600_Rev2_CURVE_SG | Operating Curve Type | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| TmMult | ABBIED600_Rev3_ASG_SG_i | Time Dial Multiplier | | |
| MinOpTmms | ABBIED600_Rev1_ING_SP_1 | Minimum Operate Time | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| TypRsCrv | ABBIED600_Rev3_ENG_SG_TypRsCrv | Type of Reset Curve | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| DirMod | ABBIED600_Rev3_ENG_SG_DirMod | Directional Mode | | |
| InEnaMult | ABBIED600_Rev1_SPS_e | Enable signal for current multiplier | E | ABBIED600:2014 |
| NumPh | ABBIED600_Rev3_ENG_SP_StrPhSel_e | Number of phases required for operate activation | E | ABBIED600:2014 |
| StrValMult | ABBIED600_Rev3_ASG_SG_i_e | Multiplier for scaling the start value | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| AMeasMod | ABBIED600_Rev3_ENG_SP_MeasMod_e | Measuring mode | E | ABBIED600:2014 |
| TestPro | ABBIED600_Rev2_ENC_TestPro_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| AllwNonDir | ABBIED600_Rev1_SPG_SP_e | Allows prot activation as non-dir when dir info is in-valid | E | ABBIED600:2014 |
| NonDir | ABBIED600_Rev1_SPS_e | Forces protec-tion to non-directional | E | ABBIED600:2014 |

### 5.2.137 3.2.137 LN: DPHLRDIR4 Name: RDIR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Dir | ABBIED600_Rev1_ACD_threephase | Direction | | |
| ChrAng | ABBIED600_Rev3_ASG_SG_i | Characteristic angle | | |
| MinFwdAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in forward direction | | |
| MinRvAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in reverse direction | | |
| MaxFwdAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in forward direction | | |
| MaxRvAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in reverse direction | | |
| BlkValA | ABBIED600_Rev3_ASG_SP_i | Min operate current | | |
| BlkValV | ABBIED600_Rev3_ASG_SP_i | Min operate voltage | | |
| PolQty | ABBIED600_Rev3_ENG_SG_PolQty | Polarising Quantity | | |
| VMemTmms | ABBIED600_Rev1_ING_SG_e | Voltage memory time | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| OpChrAngPhsA | ABBIED600_Rev3_MV_simple_i_e | Calc angle difference phase A | E | ABBIED600:2014 |
| OpChrAngPhsB | ABBIED600_Rev3_MV_simple_i_e | Calc angle difference phase B | E | ABBIED600:2014 |
| OpChrAngPhsC | ABBIED600_Rev3_MV_simple_i_e | Calc angle difference phase C | E | ABBIED600:2014 |
| VMemUsedSt | ABBIED600_Rev1_SPS_e | Voltage memory in use status | E | ABBIED600:2014 |

### 5.2.138 3.2.138 LN: DPHHPTOC3 Name: PTOC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_threephase | Start | | |
| Op | ABBIED600_Rev1_ACT_threephase | Operate | | |
| TmACrv | ABBIED600_Rev2_CURVE_SG | Operating Curve Type | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| TmMult | ABBIED600_Rev3_ASG_SG_i | Time Dial Multiplier | | |
| MinOpTmms | ABBIED600_Rev1_ING_SP_1 | Minimum Operate Time | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| TypRsCrv | ABBIED600_Rev3_ENG_SG_TypRsCrv | Selection of reset curve type | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| DirMod | ABBIED600_Rev3_ENG_SG_DirMod | Directional Mode | | |

| | | | | |
|---|---|---|---|---|
| InEnaMult | ABBIED600_Rev1_SPS_e | Enables current multiplier | E | ABBIED600:2014 |
| NumPh | ABBIED600_Rev3_ENG_SP_StrPhSel_e | Number of phases required for operate activation | E | ABBIED600:2014 |
| StrValMult | ABBIED600_Rev3_ASG_SG_i_e | Multiplier for scaling the start value | E | ABBIED600:2014 |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| AMeasMod | ABBIED600_Rev3_ENG_SP_MeasMod_e | Selects used measurement mode | E | ABBIED600:2014 |
| TestPro | ABBIED600_Rev2_ENC_TestPro_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| AllwNonDir | ABBIED600_Rev1_SPG_SP_e | Allows prot activation as non-dir when dir info is invalid | E | ABBIED600:2014 |
| NonDir | ABBIED600_Rev1_SPS_e | Forces protection to non-directional | E | ABBIED600:2014 |

### 5.2.139 3.2.139 LN: DPHHRDIR3 Name: RDIR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Dir | ABBIED600_Rev1_ACD_threephase | DIR | | |
| ChrAng | ABBIED600_Rev3_ASG_SG_i | Characteristic angle | | |
| MinFwdAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in forward direction | | |
| MinRvAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in | | |

| | | | | |
|---|---|---|---|---|
| | | reverse direction | | |
| MaxFwdAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in forward direction | | |
| MaxRvAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in reverse direction | | |
| BlkValA | ABBIED600_Rev3_ASG_SP_i | Min operate current | | |
| BlkValV | ABBIED600_Rev3_ASG_SP_i | Min operate voltage | | |
| PolQty | ABBIED600_Rev3_ENG_SG_PolQty | Polarizing quantity | | |
| VMemTmms | ABBIED600_Rev1_ING_SG_e | Voltage memory time | E | ABBIED600:2014 |
| OpChrAngPhsA | ABBIED600_Rev3_MV_simple_i_e | Calc angle difference phase A | E | ABBIED600:2014 |
| OpChrAngPhsB | ABBIED600_Rev3_MV_simple_i_e | Calc angle difference phase B | E | ABBIED600:2014 |
| OpChrAngPhsC | ABBIED600_Rev3_MV_simple_i_e | Calc angle difference phase C | E | ABBIED600:2014 |
| VMemUsedSt | ABBIED600_Rev1_SPS_e | Voltage memory in use status | E | ABBIED600:2014 |

### 5.2.140 3.2.140 LN: DPHHPTOC4 Name: PTOC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary out-puts | | |
| Str | ABBIED600_Rev1_ACD_threephase | Start | | |
| Op | ABBIED600_Rev1_ACT_threephase | Operate | | |
| TmACrv | ABBIED600_Rev2_CURVE_SG | Operating Curve Type | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| TmMult | ABBIED600_Rev3_ASG_SG_i | Time Dial Mul-tiplier | | |

| | | | | |
|---|---|---|---|---|
| MinOpTmms | ABBIED600_Rev1_ING_SP_1 | Minimum Operate Time | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| TypRsCrv | ABBIED600_Rev3_ENG_SG_TypRsCrv | Selection of reset curve type | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| DirMod | ABBIED600_Rev3_ENG_SG_DirMod | Directional Mode | | |
| InEnaMult | ABBIED600_Rev1_SPS_e | Enables current multiplier | E | ABBIED600:2014 |
| NumPh | ABBIED600_Rev3_ENG_SP_StrPhSel_e | Number of phases required for operate activation | E | ABBIED600:2014 |
| StrValMult | ABBIED600_Rev3_ASG_SG_i_e | Multiplier for scaling the start value | E | ABBIED600:2014 |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| AMeasMod | ABBIED600_Rev3_ENG_SP_MeasMod_e | Selects used measurement mode | E | ABBIED600:2014 |
| TestPro | ABBIED600_Rev2_ENC_TestPro_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| AllwNonDir | ABBIED600_Rev1_SPG_SP_e | Allows prot activation as non-dir when dir info is invalid | E | ABBIED600:2014 |
| NonDir | ABBIED600_Rev1_SPS_e | Forces protection to non-directional | E | ABBIED600:2014 |

### 5.2.141 3.2.141 LN: DPHHRDIR4 Name: RDIR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Dir | ABBIED600_Rev1_ACD_threephase | DIR | | |
| ChrAng | ABBIED600_Rev3_ASG_SG_i | Characteristic angle | | |
| MinFwdAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in forward direction | | |
| MinRvAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in reverse direction | | |
| MaxFwdAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in forward direction | | |
| MaxRvAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in reverse direction | | |
| BlkValA | ABBIED600_Rev3_ASG_SP_i | Min operate current | | |
| BlkValV | ABBIED600_Rev3_ASG_SP_i | Min operate voltage | | |
| PolQty | ABBIED600_Rev3_ENG_SG_PolQty | Polarizing quantity | | |
| VMemTmms | ABBIED600_Rev1_ING_SG_e | Voltage memory time | E | ABBIED600:2014 |
| OpChrAngPhsA | ABBIED600_Rev3_MV_simple_i_e | Calc angle difference phase A | E | ABBIED600:2014 |
| OpChrAngPhsB | ABBIED600_Rev3_MV_simple_i_e | Calc angle difference phase B | E | ABBIED600:2014 |
| OpChrAngPhsC | ABBIED600_Rev3_MV_simple_i_e | Calc angle difference phase C | E | ABBIED600:2014 |
| VMemUsedSt | ABBIED600_Rev1_SPS_e | Voltage memory in use status | E | ABBIED600:2014 |

### 5.2.142 3.2.142 LN: DEFLPTOC3 Name: PTOC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |

| | | | | |
|---|---|---|---|---|
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| TmACrv | ABBIED600_Rev2_CURVE_SG | Curve parameter E | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| TmMult | ABBIED600_Rev3_ASG_SG_i | Time Dial Multiplier | | |
| MinOpTmms | ABBIED600_Rev1_ING_SP_1 | Minimum Operate Time | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| TypRsCrv | ABBIED600_Rev3_ENG_SG_TypRsCrv | Selection of reset curve type | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| DirMod | ABBIED600_Rev3_ENG_SG_DirMod | Directional Mode | | |
| VStr | ABBIED600_Rev3_ASG_SG_i_e | Voltage start value | E | IEC 61850-7-4:2007 |
| StrValMult | ABBIED600_Rev3_ASG_SG_i_e | Multiplier for scaling the start value | E | ABBIED600:2014 |
| AllwNonDir | ABBIED600_Rev1_SPG_SP_e | Allows prot activation as non-dir when dir info is invalid | E | ABBIED600:2014 |
| AMeasMod | ABBIED600_Rev3_ENG_SP_MeasMod_e | Selects used measurement mode | E | ABBIED600:2014 |
| InEnaMult | ABBIED600_Rev1_SPS_e | Enables cur- | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| | | rent multiplier | | |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| EnaVLim | ABBIED600_Rev1_SPG_SG_e | Enable voltage limit | E | ABBIED600:2014 |
| TestPro | ABBIED600_Rev2_ENC_TestPro_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| AResSigSel | ABBIED600_Rev2_ENG_SP_AResSigSel_e | Selection for used Io signal | E | ABBIED600:2014 |

### 5.2.143 3.2.143 LN: DEFLRDIR3 Name: RDIR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Dir | ABBIED600_Rev1_ACD_simple | Direction | | |
| ChrAng | ABBIED600_Rev3_ASG_SG_i | Characteristic angle | | |
| MinFwdAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in forward direction | | |
| MinRvAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in reverse direction | | |
| MaxFwdAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in forward direction | | |
| MaxRvAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in reverse direction | | |
| BlkValA | ABBIED600_Rev3_ASG_SP_i | Minimum operating current | | |
| BlkValV | ABBIED600_Rev3_ASG_SP_i | Minimum operating voltage | | |
| PolQty | ABBIED600_Rev1_ENG_SP_PolQty | Polarizing quantity | | |
| InRcaCtl | ABBIED600_Rev1_SPS_e | Relay characteristic angle control | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| OpModEF | ABBIED600_Rev2_ENG_SG_OpModEF_e | Operation criteria | E | ABBIED600:2014 |
| CorAng | ABBIED600_Rev3_ASG_SP_i_e | Correction angle | E | ABBIED600:2014 |
| RevPol | ABBIED600_Rev1_SPG_SP_e | Rotate polarizing quantity | E | ABBIED600:2014 |
| OpAEF | ABBIED600_Rev3_MV_simple_i_e | Operating current for EF protection | E | ABBIED600:2014 |
| OpPolAng | ABBIED600_Rev3_MV_simple_i_e | Angle between operating and polarizing quantity | E | ABBIED600:2014 |
| OpChrAng | ABBIED600_Rev3_MV_simple_i_e | Angle between operating angle and characteristic angle | E | ABBIED600:2014 |
| VResSigSel | ABBIED600_Rev2_ENG_SP_VResSigSel_e | Selection for used Uo signal | E | ABBIED600:2014 |

### 5.2.144 3.2.144 LN: DEFLPTOC4 Name: PTOC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| TmACrv | ABBIED600_Rev2_CURVE_SG | Curve parameter E | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| TmMult | ABBIED600_Rev3_ASG_SG_i | Time Dial Multiplier | | |
| MinOpTmms | ABBIED600_Rev1_ING_SP_1 | Minimum Operate Time | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |

| | | | | |
|---|---|---|---|---|
| TypRsCrv | ABBIED600_Rev3_ENG_SG_TypRsCrv | Selection of reset curve type | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| DirMod | ABBIED600_Rev3_ENG_SG_DirMod | Directional Mode | | |
| VStr | ABBIED600_Rev3_ASG_SG_i_e | Voltage start value | E | IEC 61850-7-4:2007 |
| StrValMult | ABBIED600_Rev3_ASG_SG_i_e | Multiplier for scaling the start value | E | ABBIED600:2014 |
| AllwNonDir | ABBIED600_Rev1_SPG_SP_e | Allows prot activation as non-dir when dir info is invalid | E | ABBIED600:2014 |
| AMeasMod | ABBIED600_Rev3_ENG_SP_MeasMod_e | Selects used measurement mode | E | ABBIED600:2014 |
| InEnaMult | ABBIED600_Rev1_SPS_e | Enables current multiplier | E | ABBIED600:2014 |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| EnaVLim | ABBIED600_Rev1_SPG_SG_e | Enable voltage limit | E | ABBIED600:2014 |
| TestPro | ABBIED600_Rev2_ENC_TestPro_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| AResSigSel | ABBIED600_Rev2_ENG_SP_AResSigSel_e | Selection for used Io signal | E | ABBIED600:2014 |

### 5.2.145 3.2.145 LN: DEFLRDIR4 Name: RDIR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Dir | ABBIED600_Rev1_ACD_simple | Direction | | |
| ChrAng | ABBIED600_Rev3_ASG_SG_i | Characteristic angle | | |
| MinFwdAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in forward direction | | |
| MinRvAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in reverse direction | | |
| MaxFwdAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in forward direction | | |
| MaxRvAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in reverse direction | | |
| BlkValA | ABBIED600_Rev3_ASG_SP_i | Minimum operating current | | |
| BlkValV | ABBIED600_Rev3_ASG_SP_i | Minimum operating voltage | | |
| PolQty | ABBIED600_Rev1_ENG_SP_PolQty | Polarizing quantity | | |
| InRcaCtl | ABBIED600_Rev1_SPS_e | Relay characteristic angle control | E | ABBIED600:2014 |
| OpModEF | ABBIED600_Rev2_ENG_SG_OpModEF_e | Operation criteria | E | ABBIED600:2014 |
| CorAng | ABBIED600_Rev3_ASG_SP_i_e | Correction angle | E | ABBIED600:2014 |
| RevPol | ABBIED600_Rev1_SPG_SP_e | Rotate polarizing quantity | E | ABBIED600:2014 |
| OpAEF | ABBIED600_Rev3_MV_simple_i_e | Operating current for EF protection | E | ABBIED600:2014 |
| OpPolAng | ABBIED600_Rev3_MV_simple_i_e | Angle between operating and polarizing quantity | E | ABBIED600:2014 |
| OpChrAng | ABBIED600_Rev3_MV_simple_i_e | Angle between operating angle and characteristic angle | E | ABBIED600:2014 |
| VResSigSel | ABBIED600_Rev2_ENG_SP_VResSigSel_e | Selection for used Uo signal | E | ABBIED600:2014 |

## 5.2.146 3.2.146 LN: DEFHPTOC3 Name: PTOC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| TmACrv | ABBIED600_Rev2_CURVE_SG | Operating Curve Type | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| TmMult | ABBIED600_Rev3_ASG_SG_i | Time Dial Multiplier | | |
| MinOpTmms | ABBIED600_Rev1_ING_SP_1 | Minimum Operate Time | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| TypRsCrv | ABBIED600_Rev3_ENG_SG_TypRsCrv | Selection of reset curve type | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| DirMod | ABBIED600_Rev3_ENG_SG_DirMod | Directional Mode | | |
| VStr | ABBIED600_Rev3_ASG_SG_i_e | Voltage start value | E | IEC 61850-7-4:2007 |
| StrValMult | ABBIED600_Rev3_ASG_SG_i_e | Multiplier for scaling the start value | E | ABBIED600:2014 |
| AllwNonDir | ABBIED600_Rev1_SPG_SP_e | Allows prot activation as non-dir when | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| | | dir info is invalid | | |
| AMeasMod | ABBIED600_Rev3_ENG_SP_MeasMod_e | Selects used measurement mode | E | ABBIED600:2014 |
| InEnaMult | ABBIED600_Rev1_SPS_e | Enables current multiplier | E | ABBIED600:2014 |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| EnaVLim | ABBIED600_Rev1_SPG_SG_e | Enable voltage limit | E | ABBIED600:2014 |
| TestPro | ABBIED600_Rev2_ENC_TestPro_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| AResSigSel | ABBIED600_Rev2_ENG_SP_AResSigSel_e | Selection for used Io signal | E | ABBIED600:2014 |

### 5.2.147 3.2.147 LN: DEFHRDIR3 Name: RDIR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Dir | ABBIED600_Rev1_ACD_simple | Direction | | |
| ChrAng | ABBIED600_Rev3_ASG_SG_i | Characteristic angle | | |
| MinFwdAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in forward direction | | |
| MinRvAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in reverse direction | | |
| MaxFwdAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in forward direction | | |
| MaxRvAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in reverse direction | | |
| BlkValA | ABBIED600_Rev3_ASG_SP_i | Minimum operating current | | |

| | | | | |
|---|---|---|---|---|
| BlkValV | ABBIED600_Rev3_ASG_SP_i | Minimum operating voltage | | |
| PolQty | ABBIED600_Rev1_ENG_SP_PolQty | Polarizing quantity | | |
| InRcaCtl | ABBIED600_Rev1_SPS_e | Relay characteristic angle control | E | ABBIED600:2014 |
| OpModEF | ABBIED600_Rev2_ENG_SG_OpModEF_e | Operation criteria | E | ABBIED600:2014 |
| CorAng | ABBIED600_Rev3_ASG_SP_i_e | Correction angle | E | ABBIED600:2014 |
| RevPol | ABBIED600_Rev1_SPG_SP_e | Rotate polarizing quantity | E | ABBIED600:2014 |
| OpAEF | ABBIED600_Rev3_MV_simple_i_e | Operating current for EF protection | E | ABBIED600:2014 |
| OpPolAng | ABBIED600_Rev3_MV_simple_i_e | Angle between operating and polarizing quantity | E | ABBIED600:2014 |
| OpChrAng | ABBIED600_Rev3_MV_simple_i_e | Angle between operating angle and characteristic angle | E | ABBIED600:2014 |
| VResSigSel | ABBIED600_Rev2_ENG_SP_VResSigSel_e | Selection for used Uo signal | E | ABBIED600:2014 |

### 5.2.148 3.2.148 LN: DEFHPTOC4 Name: PTOC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| TmACrv | ABBIED600_Rev2_CURVE_SG | Operating Curve Type | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |

| | | | | |
|---|---|---|---|---|
| TmMult | ABBIED600_Rev3_ASG_SG_i | Time Dial Multiplier | | |
| MinOpTmms | ABBIED600_Rev1_ING_SP_1 | Minimum Operate Time | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| TypRsCrv | ABBIED600_Rev3_ENG_SG_TypRsCrv | Selection of reset curve type | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| DirMod | ABBIED600_Rev3_ENG_SG_DirMod | Directional Mode | | |
| VStr | ABBIED600_Rev3_ASG_SG_i_e | Voltage start value | E | IEC 61850-7-4:2007 |
| StrValMult | ABBIED600_Rev3_ASG_SG_i_e | Multiplier for scaling the start value | E | ABBIED600:2014 |
| AllwNonDir | ABBIED600_Rev1_SPG_SP_e | Allows prot activation as non-dir when dir info is invalid | E | ABBIED600:2014 |
| AMeasMod | ABBIED600_Rev3_ENG_SP_MeasMod_e | Selects used measurement mode | E | ABBIED600:2014 |
| InEnaMult | ABBIED600_Rev1_SPS_e | Enables current multiplier | E | ABBIED600:2014 |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| EnaVLim | ABBIED600_Rev1_SPG_SG_e | Enable voltage limit | E | ABBIED600:2014 |
| TestPro | ABBIED600_Rev2_ENC_TestPro_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |

| | | | | |
|---|---|---|---|---|
| AResSigSel | ABBIED600_Rev2_ENG_SP_AResSigSel_e | Selection for used Io signal | E | ABBIED600:2014 |

### 5.2.149 3.2.149 LN: DEFHRDIR4 Name: RDIR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Dir | ABBIED600_Rev1_ACD_simple | Direction | | |
| ChrAng | ABBIED600_Rev3_ASG_SG_i | Characteristic angle | | |
| MinFwdAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in forward direction | | |
| MinRvAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in reverse direction | | |
| MaxFwdAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in forward direction | | |
| MaxRvAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in reverse direction | | |
| BlkValA | ABBIED600_Rev3_ASG_SP_i | Minimum operating current | | |
| BlkValV | ABBIED600_Rev3_ASG_SP_i | Minimum operating voltage | | |
| PolQty | ABBIED600_Rev1_ENG_SP_PolQty | Polarizing quantity | | |
| InRcaCtl | ABBIED600_Rev1_SPS_e | Relay characteristic angle control | E | ABBIED600:2014 |
| OpModEF | ABBIED600_Rev2_ENG_SG_OpModEF_e | Operation criteria | E | ABBIED600:2014 |
| CorAng | ABBIED600_Rev3_ASG_SP_i_e | Correction angle | E | ABBIED600:2014 |
| RevPol | ABBIED600_Rev1_SPG_SP_e | Rotate polarizing quantity | E | ABBIED600:2014 |
| OpAEF | ABBIED600_Rev3_MV_simple_i_e | Operating current for EF protection | E | ABBIED600:2014 |
| OpPolAng | ABBIED600_Rev3_MV_simple_i_e | Angle between operating and polarizing quantity | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| OpChrAng | ABBIED600_Rev3_MV_simple_i_e | Angle between operating angle and characteristic angle | E | ABBIED600:2014 |
| VResSigSel | ABBIED600_Rev2_ENG_SP_VResSigSel_e | Selection for used Uo signal | E | ABBIED600:2014 |

### 5.2.150 3.2.150 LN: PHPTUC1 Name: PTUC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_threephase | Start | | |
| Op | ABBIED600_Rev1_ACT_threephase | Operate | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Current setting/Start value high | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| BlkValA | ABBIED600_Rev3_ASG_SG_i | Current setting/Start value low | | |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| TstOutCmd | ABBIED600_Rev20_ENC_TstOut_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| OpModPh | ABBIED600_Rev2_ENG_SP_OpModPh_e | Operation mode | E | ABBIED600:2014 |

### 5.2.151 3.2.151 LN: PHPTUC2 Name: PTUC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_threephase | Start | | |
| Op | ABBIED600_Rev1_ACT_threephase | Operate | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Current setting/Start value high | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| BlkValA | ABBIED600_Rev3_ASG_SG_i | Current setting/Start value low | | |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| TstOutCmd | ABBIED600_Rev20_ENC_TstOut_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| OpModPh | ABBIED600_Rev2_ENG_SP_OpModPh_e | Operation mode | E | ABBIED600:2014 |

### 5.2.152 3.2.152 LN: DPSRDIR2 Name: RDIR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |

| | | | | |
|---|---|---|---|---|
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Dir | ABBIED600_Rev1_ACD_simple | Direction | | |
| ChrAng | ABBIED600_Rev3_ASG_SG_i | Characteristic angle | | |
| MinFwdAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in forward direction | | |
| MinRvAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in reverse direction | | |
| MaxFwdAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in forward direction | | |
| MaxRvAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in reverse direction | | |
| BlkValA | ABBIED600_Rev3_ASG_SP_i | Min operate current | | |
| BlkValV | ABBIED600_Rev3_ASG_SP_i | Min operate voltage | | |
| DirMod | ABBIED600_Rev3_ENG_SG_DirMod_e | Directional Mode | E | IEC 61850-7-4:2007 |
| OpChrAng | ABBIED600_Rev3_MV_simple_i_e | Angle between operating angle and characteristic angle | E | ABBIED600:2014 |
| RelDlTmms | ABBIED600_Rev1_ING_SG_e | Release Delay Time | E | ABBIED600:2014 |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1_e | Reset Delay Time | E | IEC 61850-7-4:2007 |

| | | | | |
|---|---|---|---|---|
| TstOutCmd | ABBIED600_Rev20_ENC_TstOut_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |

### 5.2.153 3.2.153 LN: FDPHLPTOC1 Name: PTOC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_threephase | Start | | |
| Op | ABBIED600_Rev1_ACT_threephase | Operate | | |
| TmACrv | ABBIED600_Rev2_CURVE_SG | Operating Curve Type | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| TmMult | ABBIED600_Rev3_ASG_SG_i | Time Dial Multiplier | | |
| MinOpTmms | ABBIED600_Rev1_ING_SP_1 | Minimum Operate Time | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| TypRsCrv | ABBIED600_Rev3_ENG_SG_TypRsCrv | Type of Reset Curve | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| DirMod | ABBIED600_Rev3_ENG_SG_DirMod | Directional Mode | | |
| InEnaMult | ABBIED600_Rev1_SPS_e | Enable signal for current multiplier | E | ABBIED600:2014 |
| NumPh | ABBIED600_Rev3_ENG_SP_StrPhSel_e | Number of phases re- | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| | | quired for operate activation | | |
| StrValMult | ABBIED600_Rev3_ASG_SG_i_e | Multiplier for scaling the start value | E | ABBIED600:2014 |
| StrDur | ABBIED600_Rev3_MV_simple_i_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| AMeasMod | ABBIED600_Rev3_ENG_SP_MeasMod_e | Measuring mode | E | ABBIED600:2014 |
| TestPro | ABBIED600_Rev2_ENC_TestPro_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| AllwNonDir | ABBIED600_Rev1_SPG_SP_e | Allows prot activation as non-dir when dir info is invalid | E | ABBIED600:2014 |
| NonDir | ABBIED600_Rev1_SPS_e | Forces protection to non-directional | E | ABBIED600:2014 |

### 5.2.154 3.2.154 LN: FDPHLRDIR1 Name: RDIR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Dir | ABBIED600_Rev1_ACD_threephase | Direction | | |
| ChrAng | ABBIED600_Rev3_ASG_SG_i | Characteristic angle | | |
| MinFwdAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in forward direction | | |
| MinRvAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in reverse direction | | |
| MaxFwdAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in forward direction | | |

| | | | | |
|---|---|---|---|---|
| MaxRvAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in reverse direction | | |
| BlkValA | ABBIED600_Rev3_ASG_SP_i | Min operate current | | |
| BlkValV | ABBIED600_Rev3_ASG_SP_i | Min operate voltage | | |
| PolQty | ABBIED600_Rev3_ENG_SG_PolQty | Polarising Quantity | | |
| VMemTmms | ABBIED600_Rev1_ING_SG_e | Voltage memory time | E | ABBIED600:2014 |
| OpChrAngPhsA | ABBIED600_Rev3_MV_simple_i_e | Calc angle difference phase A | E | ABBIED600:2014 |
| OpChrAngPhsB | ABBIED600_Rev3_MV_simple_i_e | Calc angle difference phase B | E | ABBIED600:2014 |
| OpChrAngPhsC | ABBIED600_Rev3_MV_simple_i_e | Calc angle difference phase C | E | ABBIED600:2014 |
| VMemUsedSt | ABBIED600_Rev1_SPS_e | Voltage memory in use status | E | ABBIED600:2014 |

### 5.2.155 3.2.155 LN: FDPHLPTOC2 Name: PTOC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_threephase | Start | | |
| Op | ABBIED600_Rev1_ACT_threephase | Operate | | |
| TmACrv | ABBIED600_Rev2_CURVE_SG | Operating Curve Type | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| TmMult | ABBIED600_Rev3_ASG_SG_i | Time Dial Multiplier | | |
| MinOpTmms | ABBIED600_Rev1_ING_SP_1 | Minimum Operate Time | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay | | |

| | | | | |
|---|---|---|---|---|
| | | Time | | |
| TypRsCrv | ABBIED600_Rev3_ENG_SG_TypRsCrv | Type of Reset Curve | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| DirMod | ABBIED600_Rev3_ENG_SG_DirMod | Directional Mode | | |
| InEnaMult | ABBIED600_Rev1_SPS_e | Enable signal for current multiplier | E | ABBIED600:2014 |
| NumPh | ABBIED600_Rev3_ENG_SP_StrPhSel_e | Number of phases required for operate activation | E | ABBIED600:2014 |
| StrValMult | ABBIED600_Rev3_ASG_SG_i_e | Multiplier for scaling the start value | E | ABBIED600:2014 |
| StrDur | ABBIED600_Rev3_MV_simple_i_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| AMeasMod | ABBIED600_Rev3_ENG_SP_MeasMod_e | Measuring mode | E | ABBIED600:2014 |
| TestPro | ABBIED600_Rev2_ENC_TestPro_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| AllwNonDir | ABBIED600_Rev1_SPG_SP_e | Allows prot activation as non-dir when dir info is invalid | E | ABBIED600:2014 |
| NonDir | ABBIED600_Rev1_SPS_e | Forces protection to non-directional | E | ABBIED600:2014 |

### 5.2.156 3.2.156 LN: FDPHLRDIR2 Name: RDIR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Dir | ABBIED600_Rev1_ACD_threephase | Direction | | |
| ChrAng | ABBIED600_Rev3_ASG_SG_i | Characteristic angle | | |
| MinFwdAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in forward direction | | |
| MinRvAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in reverse direction | | |
| MaxFwdAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in forward direction | | |
| MaxRvAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in reverse direction | | |
| BlkValA | ABBIED600_Rev3_ASG_SP_i | Min operate current | | |
| BlkValV | ABBIED600_Rev3_ASG_SP_i | Min operate voltage | | |
| PolQty | ABBIED600_Rev3_ENG_SG_PolQty | Polarising Quantity | | |
| VMemTmms | ABBIED600_Rev1_ING_SG_e | Voltage memory time | E | ABBIED600:2014 |
| OpChrAngPhsA | ABBIED600_Rev3_MV_simple_i_e | Calc angle difference phase A | E | ABBIED600:2014 |
| OpChrAngPhsB | ABBIED600_Rev3_MV_simple_i_e | Calc angle difference phase B | E | ABBIED600:2014 |
| OpChrAngPhsC | ABBIED600_Rev3_MV_simple_i_e | Calc angle difference phase C | E | ABBIED600:2014 |
| VMemUsedSt | ABBIED600_Rev1_SPS_e | Voltage memory in use status | E | ABBIED600:2014 |

### 5.2.157 3.2.157 LN: FDEFLPTOC1 Name: PTOC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |

| | | | | |
|---|---|---|---|---|
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| TmACrv | ABBIED600_Rev2_CURVE_SG | Operating curve type | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| TmMult | ABBIED600_Rev3_ASG_SG_i | Time dial multiplier | | |
| MinOpTmms | ABBIED600_Rev1_ING_SP_1 | Minimum operate time | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate delay time | | |
| TypRsCrv | ABBIED600_Rev3_ENG_SG_TypRsCrv | Selection of reset curve type | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset delay time | | |
| DirMod | ABBIED600_Rev3_ENG_SG_DirMod | Directional mode | | |
| VStr | ABBIED600_Rev3_ASG_SG_i_e | Voltage start value | E | IEC 61850-7-4:2007 |
| StrValMult | ABBIED600_Rev3_ASG_SG_i_e | Multiplier for scaling the start value | E | ABBIED600:2014 |
| AllwNonDir | ABBIED600_Rev1_SPG_SP_e | Allows prot activation as non-dir when dir info is invalid | E | ABBIED600:2014 |
| AMeasMod | ABBIED600_Rev3_ENG_SP_MeasMod_e | Selects used measurement mode | E | ABBIED600:2014 |
| InEnaMult | ABBIED600_Rev1_SPS_e | Enables cur- | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| | | rent multiplier | | |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| EnaVLim | ABBIED600_Rev1_SPG_SG_e | Enable voltage limit | E | ABBIED600:2014 |
| TestPro | ABBIED600_Rev2_ENC_TestPro_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| AResSigSel | ABBIED600_Rev2_ENG_SP_AResSigSel_e | Selection for used Io signal | E | ABBIED600:2014 |

### 5.2.158 3.2.158 LN: FDEFLRDIR1 Name: RDIR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Dir | ABBIED600_Rev1_ACD_simple | Direction | | |
| ChrAng | ABBIED600_Rev3_ASG_SG_i | Characteristic angle | | |
| MinFwdAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in forward direction | | |
| MinRvAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in reverse direction | | |
| MaxFwdAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in forward direction | | |
| MaxRvAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in reverse direction | | |
| BlkValA | ABBIED600_Rev3_ASG_SP_i | Minimum operating current | | |
| BlkValV | ABBIED600_Rev3_ASG_SP_i | Minimum operating voltage | | |
| PolQty | ABBIED600_Rev1_ENG_SP_PolQty | Polarizing quantity | | |
| InRcaCtl | ABBIED600_Rev1_SPS_e | Relay characteristic angle control | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| OpModEF | ABBIED600_Rev2_ENG_SG_OpModEF_e | Operation criteria | E | ABBIED600:2014 |
| CorAng | ABBIED600_Rev3_ASG_SP_i_e | Correction angle | E | ABBIED600:2014 |
| RvPol | ABBIED600_Rev1_SPG_SP_e | Rotate polarizing quantity | E | ABBIED600:2014 |
| OpAEF | ABBIED600_Rev3_MV_simple_i_e | Operating current for earth fault protection | E | ABBIED600:2014 |
| OpPolAng | ABBIED600_Rev3_MV_simple_i_e | Angle between operating and polarizing quantity | E | ABBIED600:2014 |
| OpChrAng | ABBIED600_Rev3_MV_simple_i_e | Angle between operating and characteristic angle | E | ABBIED600:2014 |
| VResSigSel | ABBIED600_Rev2_ENG_SP_VResSigSel_e | Selection for used Uo signal | E | ABBIED600:2014 |

### 5.2.159 3.2.159 LN: FDEFLPTOC2 Name: PTOC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| TmACrv | ABBIED600_Rev2_CURVE_SG | Operating curve type | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| TmMult | ABBIED600_Rev3_ASG_SG_i | Time dial multiplier | | |
| MinOpTmms | ABBIED600_Rev1_ING_SP_1 | Minimum operate time | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate delay time | | |

| | | | | |
|---|---|---|---|---|
| TypRsCrv | ABBIED600_Rev3_ENG_SG_TypRsCrv | Selection of reset curve type | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset delay time | | |
| DirMod | ABBIED600_Rev3_ENG_SG_DirMod | Directional mode | | |
| VStr | ABBIED600_Rev3_ASG_SG_i_e | Voltage start value | E | IEC 61850-7-4:2007 |
| StrValMult | ABBIED600_Rev3_ASG_SG_i_e | Multiplier for scaling the start value | E | ABBIED600:2014 |
| AllwNonDir | ABBIED600_Rev1_SPG_SP_e | Allows prot activation as non-dir when dir info is invalid | E | ABBIED600:2014 |
| AMeasMod | ABBIED600_Rev3_ENG_SP_MeasMod_e | Selects used measurement mode | E | ABBIED600:2014 |
| InEnaMult | ABBIED600_Rev1_SPS_e | Enables current multiplier | E | ABBIED600:2014 |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| EnaVLim | ABBIED600_Rev1_SPG_SG_e | Enable voltage limit | E | ABBIED600:2014 |
| TestPro | ABBIED600_Rev2_ENC_TestPro_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| AResSigSel | ABBIED600_Rev2_ENG_SP_AResSigSel_e | Selection for used Io signal | E | ABBIED600:2014 |

### 5.2.160 3.2.160 LN: FDEFLRDIR2 Name: RDIR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Dir | ABBIED600_Rev1_ACD_simple | Direction | | |
| ChrAng | ABBIED600_Rev3_ASG_SG_i | Characteristic angle | | |
| MinFwdAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in forward direction | | |
| MinRvAng | ABBIED600_Rev3_ASG_SG_i | Minimum phase angle in reverse direction | | |
| MaxFwdAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in forward direction | | |
| MaxRvAng | ABBIED600_Rev3_ASG_SG_i | Maximum phase angle in reverse direction | | |
| BlkValA | ABBIED600_Rev3_ASG_SP_i | Minimum operating current | | |
| BlkValV | ABBIED600_Rev3_ASG_SP_i | Minimum operating voltage | | |
| PolQty | ABBIED600_Rev1_ENG_SP_PolQty | Polarizing quantity | | |
| InRcaCtl | ABBIED600_Rev1_SPS_e | Relay characteristic angle control | E | ABBIED600:2014 |
| OpModEF | ABBIED600_Rev2_ENG_SG_OpModEF_e | Operation criteria | E | ABBIED600:2014 |
| CorAng | ABBIED600_Rev3_ASG_SP_i_e | Correction angle | E | ABBIED600:2014 |
| RvPol | ABBIED600_Rev1_SPG_SP_e | Rotate polarizing quantity | E | ABBIED600:2014 |
| OpAEF | ABBIED600_Rev3_MV_simple_i_e | Operating current for earth fault protection | E | ABBIED600:2014 |
| OpPolAng | ABBIED600_Rev3_MV_simple_i_e | Angle between operating and polarizing quantity | E | ABBIED600:2014 |
| OpChrAng | ABBIED600_Rev3_MV_simple_i_e | Angle between operating and characteristic angle | E | ABBIED600:2014 |
| VResSigSel | ABBIED600_Rev2_ENG_SP_VResSigSel_e | Selection for used Uo signal | E | ABBIED600:2014 |

## 5.2.161 3.2.161 LN: INTRPTEF1 Name: PTEF (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary out-puts | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| GndStr | ABBIED600_Rev3_ASG_SG_i | Voltage start value | | |
| DirMod | ABBIED600_Rev3_ENG_SG_DirMod | Directional Mode | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG_e | Operate Delay Time | E | IEC 61850-7-4:2007 |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1_e | Reset Delay Time | E | IEC 61850-7-4:2007 |
| BlkValA | ABBIED600_Rev3_ASG_SP_i_e | Minimum op-erating current | E | IEC 61850-7-4:2007 |
| InhEF | ABBIED600_Rev1_SPS_e | Block EF | E | ABBIED600:2014 |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| PkCntLim | ABBIED600_Rev1_ING_SP_1_e | Min require-ment for peak counter before start in IEF mode | E | ABBIED600:2014 |
| TstOutCmd | ABBIED600_Rev20_ENC_TstOut_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| OpModTEF | ABBIED600_Rev3_ENG_SP_OpModTEF_e | Operation mode for func- | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| | | tion | | |
| VResSigSel | ABBIED600_Rev2_ENG_SP_VResSigSel_e | Selection for used Uo signal | E | ABBIED600:2014 |

### 5.2.162 3.2.162 LN: WPSDE1 Name: PSDE (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| GndStr | ABBIED600_Rev3_ASG_SG_i | Voltage start value | | |
| GndOp | ABBIED600_Rev3_ASG_SG_i | Current start value | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate delay time | | |
| DirMod | ABBIED600_Rev3_ENG_SG_DirMod | Directional mode | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i_e | Power start value | E | IEC 61850-7-4:2007 |
| TmACrv | ABBIED600_Rev2_CURVE_SG_setCharact_e | Operating curve type | E | IEC 61850-7-4:2007 |
| TmMult | ABBIED600_Rev3_ASG_SG_i_e | Time multipli-er | E | IEC 61850-7-4:2007 |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1_e | Reset delay time | E | IEC 61850-7-4:2007 |
| RefW | ABBIED600_Rev3_ASG_SG_i_e | Reference power | E | ABBIED600:2014 |
| AMeasMod | ABBIED600_Rev3_ENG_SP_MeasMod_e | Measurement mode | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| TestPro | ABBIED600_Rev2_ENC_TestPro_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| AResSigSel | ABBIED600_Rev2_ENG_SP_AResSigSel_e | Selection for used Io signal | E | ABBIED600:2014 |

### 5.2.163 3.2.163 LN: WRDIR1 Name: RDIR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Dir | ABBIED600_Rev1_ACD_simple | Direction information | | |
| ChrAng | ABBIED600_Rev3_ASG_SG_i | Characteristic angle | | |
| BlkValA | ABBIED600_Rev3_ASG_SP_i | Min operate current | | |
| BlkValV | ABBIED600_Rev3_ASG_SP_i | Min operate voltage | | |
| CorAng | ABBIED600_Rev3_ASG_SP_i_e | Correction angle | E | ABBIED600:2014 |
| RevPol | ABBIED600_Rev1_SPG_SP_e | Pol reversal | E | ABBIED600:2014 |
| OpPolAng | ABBIED600_Rev3_MV_simple_i_e | Angle between operating and polarizing quantity | E | ABBIED600:2014 |
| OpChrAng | ABBIED600_Rev3_MV_simple_i_e | Angle between operating angle and characteristic angle | E | ABBIED600:2014 |
| InRcaCtl | ABBIED600_Rev1_SPS_e | Relay characteristic angle control | E | ABBIED600:2014 |
| VResSigSel | ABBIED600_Rev2_ENG_SP_VResSigSel_e | Selection for polarization signal | E | ABBIED600:2014 |

### 5.2.164 3.2.164 LN: WPSDE2 Name: PSDE (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with- |

| | | | | |
|---|---|---|---|---|
| | | | | normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| GndStr | ABBIED600_Rev3_ASG_SG_i | Voltage start value | | |
| GndOp | ABBIED600_Rev3_ASG_SG_i | Current start value | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate delay time | | |
| DirMod | ABBIED600_Rev3_ENG_SG_DirMod | Directional mode | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i_e | Power start value | E | IEC 61850-7-4:2007 |
| TmACrv | ABBIED600_Rev2_CURVE_SG_setCharact_e | Operating curve type | E | IEC 61850-7-4:2007 |
| TmMult | ABBIED600_Rev3_ASG_SG_i_e | Time multipli-er | E | IEC 61850-7-4:2007 |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1_e | Reset delay time | E | IEC 61850-7-4:2007 |
| RefW | ABBIED600_Rev3_ASG_SG_i_e | Reference power | E | ABBIED600:2014 |
| AMeasMod | ABBIED600_Rev3_ENG_SP_MeasMod_e | Measurement mode | E | ABBIED600:2014 |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| TestPro | ABBIED600_Rev2_ENC_TestPro_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| AResSigSel | ABBIED600_Rev2_ENG_SP_AResSigSel_e | Selection for used Io signal | E | ABBIED600:2014 |

### 5.2.165 3.2.165 LN: WRDIR2 Name: RDIR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Dir | ABBIED600_Rev1_ACD_simple | Direction information | | |
| ChrAng | ABBIED600_Rev3_ASG_SG_i | Characteristic angle | | |
| BlkValA | ABBIED600_Rev3_ASG_SP_i | Min operate current | | |
| BlkValV | ABBIED600_Rev3_ASG_SP_i | Min operate voltage | | |
| CorAng | ABBIED600_Rev3_ASG_SP_i_e | Correction angle | E | ABBIED600:2014 |
| RevPol | ABBIED600_Rev1_SPG_SP_e | Pol reversal | E | ABBIED600:2014 |
| OpPolAng | ABBIED600_Rev3_MV_simple_i_e | Angle between operating and polarizing quantity | E | ABBIED600:2014 |
| OpChrAng | ABBIED600_Rev3_MV_simple_i_e | Angle between operating angle and characteristic angle | E | ABBIED600:2014 |
| InRcaCtl | ABBIED600_Rev1_SPS_e | Relay characteristic angle control | E | ABBIED600:2014 |
| VResSigSel | ABBIED600_Rev2_ENG_SP_VResSigSel_e | Selection for polarization signal | E | ABBIED600:2014 |

### 5.2.166 3.2.166 LN: WPSDE3 Name: PSDE (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| GndStr | ABBIED600_Rev3_ASG_SG_i | Voltage start | | |

| | | | | |
|---|---|---|---|---|
| | | value | | |
| GndOp | ABBIED600_Rev3_ASG_SG_i | Current start value | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate delay time | | |
| DirMod | ABBIED600_Rev3_ENG_SG_DirMod | Directional mode | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i_e | Power start value | E | IEC 61850-7-4:2007 |
| TmACrv | ABBIED600_Rev2_CURVE_SG_setCharact_e | Operating curve type | E | IEC 61850-7-4:2007 |
| TmMult | ABBIED600_Rev3_ASG_SG_i_e | Time multipli-er | E | IEC 61850-7-4:2007 |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1_e | Reset delay time | E | IEC 61850-7-4:2007 |
| RefW | ABBIED600_Rev3_ASG_SG_i_e | Reference power | E | ABBIED600:2014 |
| AMeasMod | ABBIED600_Rev3_ENG_SP_MeasMod_e | Measurement mode | E | ABBIED600:2014 |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| TestPro | ABBIED600_Rev2_ENC_TestPro_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| AResSigSel | ABBIED600_Rev2_ENG_SP_AResSigSel_e | Selection for used Io signal | E | ABBIED600:2014 |

### 5.2.167 3.2.167 LN: WRDIR3 Name: RDIR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Dir | ABBIED600_Rev1_ACD_simple | Direction information | | |
| ChrAng | ABBIED600_Rev3_ASG_SG_i | Characteristic angle | | |

| | | | | |
|---|---|---|---|---|
| BlkValA | ABBIED600_Rev3_ASG_SP_i | Min operate current | | |
| BlkValV | ABBIED600_Rev3_ASG_SP_i | Min operate voltage | | |
| CorAng | ABBIED600_Rev3_ASG_SP_i_e | Correction angle | E | ABBIED600:2014 |
| RevPol | ABBIED600_Rev1_SPG_SP_e | Pol reversal | E | ABBIED600:2014 |
| OpPolAng | ABBIED600_Rev3_MV_simple_i_e | Angle between operating and polarizing quantity | E | ABBIED600:2014 |
| OpChrAng | ABBIED600_Rev3_MV_simple_i_e | Angle between operating angle and characteristic angle | E | ABBIED600:2014 |
| InRcaCtl | ABBIED600_Rev1_SPS_e | Relay characteristic angle control | E | ABBIED600:2014 |
| VResSigSel | ABBIED600_Rev2_ENG_SP_VResSigSel_e | Selection for polarization signal | E | ABBIED600:2014 |

### 5.2.168 3.2.168 LN: HAEFPTOC1 Name: PTOC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| TmACrv | ABBIED600_Rev2_CURVE_SG | Operating Curve Type | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| TmMult | ABBIED600_Rev3_ASG_SG_i | Time Dial Multiplier | | |
| MinOpTmms | ABBIED600_Rev1_ING_SG | Minimum Operate Time | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate De- | | |

| | | | | |
|---|---|---|---|---|
| | | lay Time | | |
| TypRsCrv | ABBIED600_Rev3_ENG_SG_TypRsCrv | Type of Reset Curve | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP | Reset Delay Time | | |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| TstOutCmd | ABBIED600_Rev20_ENC_TstOut_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| EnaRef | ABBIED600_Rev1_SPG_SG_e | Enable reference | E | ABBIED600:2014 |
| HRmsARef | ABBIED600_Rev3_WYE_res_simple_i_e | Reference current from other IEDs | E | ABBIED600:2014 |
| BlkARef | ABBIED600_Rev1_SPS_e | Current comparison status indicator | E | ABBIED600:2014 |

### 5.2.169 3.2.169 LN: PHLPTOC1 Name: PTOC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_threephase | Start | | |
| Op | ABBIED600_Rev1_ACT_threephase | Operate | | |
| TmACrv | ABBIED600_Rev2_CURVE_SG | Operating Curve Type | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| TmMult | ABBIED600_Rev3_ASG_SG_i | Time Dial | | |

| | | | | |
|---|---|---|---|---|
| | | Multiplier | | |
| MinOpTmms | ABBIED600_Rev1_ING_SP_1 | Minimum Operate Time | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| TypRsCrv | ABBIED600_Rev3_ENG_SG_TypRsCrv | Type of Reset Curve | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| InEnaMult | ABBIED600_Rev1_SPS_e | Enable signal for current multiplier | E | ABBIED600:2014 |
| NumPh | ABBIED600_Rev3_ENG_SP_StrPhSel_e | Number of phases required for operate activation | E | ABBIED600:2014 |
| StrValMult | ABBIED600_Rev3_ASG_SG_i_e | Multiplier for scaling the start value | E | ABBIED600:2014 |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| AMeasMod | ABBIED600_Rev3_ENG_SP_MeasMod_e | Measuring mode | E | ABBIED600:2014 |
| TstOutCmd | ABBIED600_Rev20_ENC_TstOut_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |

### 5.2.170 3.2.170 LN: FPHLPTOC1 Name: PTOC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |

| | | | | |
|---|---|---|---|---|
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_threephase | Start | | |
| Op | ABBIED600_Rev1_ACT_threephase | Operate | | |
| TmACrv | ABBIED600_Rev2_CURVE_SG | Operating Curve Type | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| TmMult | ABBIED600_Rev3_ASG_SG_i | Time Dial Multiplier | | |
| MinOpTmms | ABBIED600_Rev1_ING_SP_1 | Minimum Operate Time | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| TypRsCrv | ABBIED600_Rev3_ENG_SG_TypRsCrv | Type of Reset Curve | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| InEnaMult | ABBIED600_Rev1_SPS_e | Enable signal for current multiplier | E | ABBIED600:2014 |
| NumPh | ABBIED600_Rev3_ENG_SP_StrPhSel_e | Number of phases required for operate activation | E | ABBIED600:2014 |
| StrValMult | ABBIED600_Rev3_ASG_SG_i_e | Multiplier for scaling the start value | E | ABBIED600:2014 |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| AMeasMod | ABBIED600_Rev3_ENG_SP_MeasMod_e | Measuring mode | E | ABBIED600:2014 |
| TstOutCmd | ABBIED600_Rev20_ENC_TstOut_e | Test control | E | ABBIED600:2014,status- |

| | | | | |
|---|---|---|---|---|
| | | for outputs | | only,direct-with-normal-security |

### 5.2.171 3.2.171 LN: PHHPTOC1 Name: PTOC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_threephase | Start | | |
| Op | ABBIED600_Rev1_ACT_threephase | Operate | | |
| TmACrv | ABBIED600_Rev2_CURVE_SG | Operating Curve Type | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| TmMult | ABBIED600_Rev3_ASG_SG_i | Time Dial Multiplier | | |
| MinOpTmms | ABBIED600_Rev1_ING_SP_1 | Minimum Operate Time | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| TypRsCrv | ABBIED600_Rev3_ENG_SG_TypRsCrv | Type of Reset Curve | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| InEnaMult | ABBIED600_Rev1_SPS_e | Enable signal for current multiplier | E | ABBIED600:2014 |
| NumPh | ABBIED600_Rev3_ENG_SP_StrPhSel_e | Number of phases required for operate activation | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| StrValMult | ABBIED600_Rev3_ASG_SG_i_e | Multiplier for scaling the start value | E | ABBIED600:2014 |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| AMeasMod | ABBIED600_Rev3_ENG_SP_MeasMod_e | Measuring mode | E | ABBIED600:2014 |
| TstOutCmd | ABBIED600_Rev20_ENC_TstOut_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |

### 5.2.172 3.2.172 LN: EFLPTOC1 Name: PTOC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| TmACrv | ABBIED600_Rev2_CURVE_SG | Operating Curve Type | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| TmMult | ABBIED600_Rev3_ASG_SG_i | Time Dial Multiplier | | |
| MinOpTmms | ABBIED600_Rev1_ING_SP_1 | Minimum Operate Time | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| TypRsCrv | ABBIED600_Rev3_ENG_SG_TypRsCrv | Type of Reset Curve | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay | | |

| | | | | |
|---|---|---|---|---|
| | | Time | | |
| AMeasMod | ABBIED600_Rev3_ENG_SP_MeasMod_e | Measurement mode selection | E | ABBIED600:2014 |
| StrValMult | ABBIED600_Rev3_ASG_SG_i_e | Multiplier for operate current level | E | ABBIED600:2014 |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| InEnaMult | ABBIED600_Rev1_SPS_e | Enable current multiplier | E | ABBIED600:2014 |
| TstOutCmd | ABBIED600_Rev20_ENC_TstOut_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| AResSigSel | ABBIED600_Rev2_ENG_SP_AResSigSel_e | Selection for used Io signal | E | ABBIED600:2014 |

### 5.2.173 3.2.173 LN: EFHPTOC1 Name: PTOC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| TmACrv | ABBIED600_Rev2_CURVE_SG | Operating Curve Type | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| TmMult | ABBIED600_Rev3_ASG_SG_i | Time Dial Multiplier | | |
| MinOpTmms | ABBIED600_Rev1_ING_SP_1 | Minimum Op- | | |

| | | | | |
|---|---|---|---|---|
| | | erate Time | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| TypRsCrv | ABBIED600_Rev3_ENG_SG_TypRsCrv | Type of Reset Curve | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| AMeasMod | ABBIED600_Rev3_ENG_SP_MeasMod_e | Measurement mode selec-tion | E | ABBIED600:2014 |
| StrValMult | ABBIED600_Rev3_ASG_SG_i_e | Multiplier for operate cur-rent level | E | ABBIED600:2014 |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| InEnaMult | ABBIED600_Rev1_SPS_e | Enable current multiplier | E | ABBIED600:2014 |
| TstOutCmd | ABBIED600_Rev20_ENC_TstOut_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| AResSigSel | ABBIED600_Rev2_ENG_SP_AResSigSel_e | Selection for used Io signal | E | ABBIED600:2014 |

### 5.2.174 3.2.174 LN: FEFLPTOC1 Name: PTOC (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| TmACrv | ABBIED600_Rev2_CURVE_SG | Operating curve type | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |

| | | | | |
|---|---|---|---|---|
| TmMult | ABBIED600_Rev3_ASG_SG_i | Time dial multiplier | | |
| MinOpTmms | ABBIED600_Rev1_ING_SP_1 | Minimum operate time | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate delay time | | |
| TypRsCrv | ABBIED600_Rev3_ENG_SG_TypRsCrv | Type of reset curve | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset delay time | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| AMeasMod | ABBIED600_Rev3_ENG_SP_MeasMod_e | Measurement mode selection | E | ABBIED600:2014 |
| StrValMult | ABBIED600_Rev3_ASG_SG_i_e | Multiplier for operate current level | E | ABBIED600:2014 |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| InEnaMult | ABBIED600_Rev1_SPS_e | Enable current multiplier | E | ABBIED600:2014 |
| TestPro | ABBIED600_Rev2_ENC_TestPro_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| AResSigSel | ABBIED600_Rev2_ENG_SP_AResSigSel_e | Selection for used Io signal | E | ABBIED600:2014 |

### 5.2.175 3.2.175 LN: PHPTUV3 Name: PTUV (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |

| | | | | |
|---|---|---|---|---|
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_threephase | Start | | |
| Op | ABBIED600_Rev1_ACT_threephase | Operate | | |
| TmVCrv | ABBIED600_Rev2_CURVE_SG | Operating Curve Type | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| TmMult | ABBIED600_Rev3_ASG_SG_i | Time Dial Multiplier | | |
| MinOpTmms | ABBIED600_Rev1_ING_SP_1 | Minimum Operate Time | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| TypRsCrv | ABBIED600_Rev3_ENG_SG_TypRsCrv_e | Type of Reset Curve | E | IEC 61850-7-4:2007 |
| BlkVal | ABBIED600_Rev3_ASG_SP_i_e | Voltage block value | E | IEC 61850-7-4:2007 |
| NumPh | ABBIED600_Rev3_ENG_SP_StrPhSel_e | Number of phases required for operate activation | E | ABBIED600:2014 |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| TestPro | ABBIED600_Rev2_ENC_TestPro_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| CrvSatRl | ABBIED600_Rev1_ASG_SP_f_e | Tuning parameter to avoid curve discontinuities | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| VSel | ABBIED600_Rev3_ENG_SP_VSel_e | Parameter to select phase or phase-to-phase voltages | E | ABBIED600:2014 |
| EnaBlkVal | ABBIED600_Rev1_SPG_SP_e | Enable block value | E | ABBIED600:2014 |
| HysRl | ABBIED600_Rev3_ASG_SP_i_e | Relative hysteresis for operation | E | ABBIED600:2014 |
| TypTmRs | ABBIED600_Rev2_ENG_SG_TypTmRs_e | Type of time reset | E | ABBIED600:2014 |

### 5.2.176 3.2.176 LN: PHPTOV3 Name: PTOV (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_threephase | Start | | |
| Op | ABBIED600_Rev1_ACT_threephase | Operate | | |
| TmVCrv | ABBIED600_Rev2_CURVE_SG | Operating Curve Type | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| TmMult | ABBIED600_Rev3_ASG_SG_i | Time Dial Multiplier | | |
| MinOpTmms | ABBIED600_Rev1_ING_SP_1 | Minimum Operate Time | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| TypRsCrv | ABBIED600_Rev3_ENG_SG_TypRsCrv_e | Type of Reset | E | IEC 61850-7-4:2007 |

| | | | | |
|---|---|---|---|---|
| | | Curve | | |
| NumPh | ABBIED600_Rev3_ENG_SP_StrPhSel_e | Number of phases required for operate activation | E | ABBIED600:2014 |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| TestPro | ABBIED600_Rev2_ENC_TestPro_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| CrvSatRl | ABBIED600_Rev1_ASG_SP_f_e | Tuning parameter to avoid curve discontinuities | E | ABBIED600:2014 |
| VSel | ABBIED600_Rev3_ENG_SP_VSel_e | Parameter to select phase or phase-to-phase voltages | E | ABBIED600:2014 |
| HysRl | ABBIED600_Rev3_ASG_SP_i_e | Relative hysteresis for operation | E | ABBIED600:2014 |
| TypTmRs | ABBIED600_Rev2_ENG_SG_TypTmRs_e | Type of time reset | E | ABBIED600:2014 |

### 5.2.177 3.2.177 LN: NSPTOV1 Name: PTOV (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |

| | | | | |
|---|---|---|---|---|
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| TstOutCmd | ABBIED600_Rev20_ENC_TstOut_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |

### 5.2.178 3.2.178 LN: PSPTUV1 Name: PTUV (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Str | ABBIED600_Rev1_ACD_simple | Start | | |
| Op | ABBIED600_Rev1_ACT_simple | Operate | | |
| StrVal | ABBIED600_Rev3_ASG_SG_i | Start value | | |
| OpDlTmms | ABBIED600_Rev1_ING_SG | Operate Delay Time | | |
| RsDlTmms | ABBIED600_Rev1_ING_SP_1 | Reset Delay Time | | |
| BlkVal | ABBIED600_Rev3_ASG_SG_i_e | Voltage block value | E | IEC 61850-7-4:2007 |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| StrDur | ABBIED600_Rev3_MV_2_e | Ratio of start time / operate time | E | ABBIED600:2014 |
| TstOutCmd | ABBIED600_Rev20_ENC_TstOut_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal- |

| | | | | |
|---|---|---|---|---|
| | | | | security |
| EnaBlkVal | ABBIED600_Rev1_SPG_SG_e | Enable block value | E | ABBIED600:2014 |
| HysRl | ABBIED600_Rev3_ASG_SP_i_e | Relative hysteresis for operation | E | ABBIED600:2014 |

### 5.2.179 3.2.179 LN: CMHAI1 Name: MHAI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Operation | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Hz | ABBIED600_Rev3_MV_simple_i | Fundamental frequency | | |
| TddA | ABBIED600_Rev3_WYE_threephase_simple_i | Current Total Demand Distortion per IEEE 519 | | |
| NomA | ABBIED600_Rev3_ASG_SP_i | Normalising demand current used in IEEE 519 TDD calculation | | |
| Alm | ABBIED600_Rev1_SPS | Alarm | | |
| TddAVal | ABBIED600_Rev3_ASG_SP_i_e | TddA Alarm setting - value entered in % | E | ABBIED600:2014 |
| RcdRs | ABBIED600_Rev2_SPC_control_e | CMHAI1 max.demands | E | ABBIED600:2014,status-only,direct-with- |

| | | | | |
|---|---|---|---|---|
| | | | | normal-security |
| DmdItrv | ABBIED600_Rev2_ENG_SP_dmdItrv_e | Time interval for demand calculation | E | ABBIED600:2014 |
| DmdTddA | AB-BIED600_Rev3_WYE_threephase_simple_i_e | Current Total Demand Dis-tortion | E | ABBIED600:2014 |
| MaxDmdTddA | AB-BIED600_Rev3_WYE_threephase_simple_i_e | Maximum current total demand dis-tortion | E | ABBIED600:2014 |
| DmdWinMod | ABBIED600_Rev2_ENG_SP_DmdWinMod_e | Demand cal-culation window | E | ABBIED600:2014 |

### 5.2.180 3.2.180 LN: VMHAI1 Name: MHAI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Operation | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| Hz | ABBIED600_Rev3_MV_simple_i | Fundamental frequency | | |
| ThdPhV | ABBIED600_Rev3_WYE_threephase_simple_i | Voltage To-tal Harmonic Distortion per IEEE 519 | | |
| ThdVVal | ABBIED600_Rev3_ASG_SP_i | ThdPhV / ThdPPV alarm Set-ting – value entered in % | | |
| Alm | ABBIED600_Rev1_SPS | Alarm | | |

| | | | | |
|---|---|---|---|---|
| RcdRs | ABBIED600_Rev2_SPC_control_e | VMHAI1 max.demands | E | AB-BIED600:2014,status-only,direct-with-normal-security |
| DmdItrv | ABBIED600_Rev2_ENG_SP_dmdItrv_e | Time interval for demand calculation | E | ABBIED600:2014 |
| DmdThdPhV | AB-BIED600_Rev3_WYE_threephase_simple_i_e | Voltage Total Harmonic Distortion | E | ABBIED600:2014 |
| MaxDmdThdV | AB-BIED600_Rev3_WYE_threephase_simple_i_e | Maximum voltage total harmonic distortion | E | ABBIED600:2014 |
| DmdWinMod | ABBIED600_Rev2_ENG_SP_DmdWinMod_e | Demand calculation window | E | ABBIED600:2014 |

### 5.2.181 3.2.181 LN: PH1QVVR1 Name: QVVR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| VarStr | ABBIED600_Rev1_SPS | Start Phase A (Voltage Variation Event in progress) | | |
| DipStr | ABBIED600_Rev1_SPS | Start (Voltage Dip Event in progress) | | |
| SwlStr | ABBIED600_Rev1_SPS | Start (Voltage Swell Event in | | |

| | | | | |
|---|---|---|---|---|
| | | progress) | | |
| IntrStr | ABBIED600_Rev1_SPS | Start (Voltage Interruption Event in progress) | | |
| VarEnd | ABBIED600_Rev1_SPS | Event finished but not Reset | | |
| VVa | ABBIED600_Rev3_MV_simple_i | Voltage Variation Magnitude of the last completed event | | |
| VVaTm | ABBIED600_Rev3_MV_simple_i | Voltage Variation Duration of the last completed event | | |
| OpCntRs | ABBIED600_Rev2_INC_control_int | Resettable operation counter | | status-only,direct-with-normal-security |
| DipStrVal | ABBIED600_Rev3_ASG_SG_i | Voltage Dip Set Point 1 | | |
| DipStr2Val | ABBIED600_Rev3_ASG_SG_i_e | Voltage Dip Set Point 2 | E | ABBIED600:2014 |
| DipStr3Val | ABBIED600_Rev3_ASG_SG_i_e | Voltage Dip Set Point 3 | E | ABBIED600:2014 |
| SwlStrVal | ABBIED600_Rev3_ASG_SG_i | Voltage Swell Set Point 1 | | |
| SwlStr2Val | ABBIED600_Rev3_ASG_SG_i_e | Voltage Swell Set Point 2 | E | ABBIED600:2014 |
| SwlStr3Val | ABBIED600_Rev3_ASG_SG_i_e | Voltage Swell Set Point 3 | E | ABBIED600:2014 |
| IntrStrVal | ABBIED600_Rev3_ASG_SG_i | Voltage Interruption Set Point | | |
| RefV | ABBIED600_Rev3_ASG_SG_i_e | Reference | E | IEC 61850-7-4:2007 |

| | | | | |
|---|---|---|---|---|
| | | supply voltage in % | | |
| Dip1Cyc | ABBIED600_Rev3_ASG_SG_i_e | Voltage variation dip duration 1 | E | ABBIED600:2014 |
| Dip2Cyc | ABBIED600_Rev3_ASG_SG_i_e | Voltage variation dip duration 2 | E | ABBIED600:2014 |
| Dip3Tmms | ABBIED600_Rev1_ING_SG_e | Voltage variation dip duration 3 | E | ABBIED600:2014 |
| Swl1Cyc | ABBIED600_Rev3_ASG_SG_i_e | Voltage variation swell duration 1 | E | ABBIED600:2014 |
| Swl2Cyc | ABBIED600_Rev3_ASG_SG_i_e | Voltage variation swell duration 2 | E | ABBIED600:2014 |
| Swl3Tmms | ABBIED600_Rev1_ING_SG_e | Voltage variation swell duration 3 | E | ABBIED600:2014 |
| Intr1Cyc | ABBIED600_Rev3_ASG_SG_i_e | Voltage variation interruption duration 1 | E | ABBIED600:2014 |
| Intr2Cyc | ABBIED600_Rev3_ASG_SG_i_e | Voltage variation interruption duration 2 | E | ABBIED600:2014 |
| Intr3Tmms | ABBIED600_Rev1_ING_SG_e | Voltage variation interruption duration 3 | E | ABBIED600:2014 |
| MaxDurTmms | ABBIED600_Rev1_ING_SG_e | Maximum voltage variation duration | E | ABBIED600:2014 |
| SwlOp | ABBIED600_Rev1_SPS_e | Voltage Event Swell detected | E | ABBIED600:2014 |
| DipOp | ABBIED600_Rev1_SPS_e | Voltage Event Dip detected | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| IntrOp | ABBIED600_Rev1_SPS_e | Voltage Event Interruption detected | E | ABBIED600:2014 |
| APreVa | ABBIED600_Rev3_MV_simple_i_e | Current magnitude Ph A preceding variation | E | ABBIED600:2014 |
| SwlInstCnt | ABBIED600_Rev1_INS_e | Instantaneous swell operation counter | E | ABBIED600:2014 |
| SwlMomCnt | ABBIED600_Rev1_INS_e | Momentary swell operation counter | E | ABBIED600:2014 |
| SwlTmpCnt | ABBIED600_Rev1_INS_e | Temporary swell operation counter | E | ABBIED600:2014 |
| SwlMaxCnt | ABBIED600_Rev1_INS_e | Maximum duration swell operation counter | E | ABBIED600:2014 |
| DipInstCnt | ABBIED600_Rev1_INS_e | Instantaneous dip operation counter | E | ABBIED600:2014 |
| DipTmpCnt | ABBIED600_Rev1_INS_e | Temporary dip operation counter | E | ABBIED600:2014 |
| DipMomCnt | ABBIED600_Rev1_INS_e | Momentary dip operation counter | E | ABBIED600:2014 |
| DipMaxCnt | ABBIED600_Rev1_INS_e | Maximum duration dip operation counter | E | ABBIED600:2014 |
| IntrMomCnt | ABBIED600_Rev1_INS_e | Momentary interruption operation counter | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| IntrTmpCnt | ABBIED600_Rev1_INS_e | Temporary interruption operation counter | E | ABBIED600:2014 |
| IntrSstCnt | ABBIED600_Rev1_INS_e | Sustained interruption operation counter | E | ABBIED600:2014 |
| IntrMaxCnt | ABBIED600_Rev1_INS_e | Maximum duration interruptionl operation counter | E | ABBIED600:2014 |
| CntRs | ABBIED600_Rev2_SPC_control_e | Counters reset | E | ABBIED600:2014,status-only,direct-with-normal-security |
| PhSpvn | ABBIED600_Rev2_ENG_SP_PhSv_e | Monitored phase | E | ABBIED600:2014 |
| OpModPh | ABBIED600_Rev2_ENG_SP_OpModPh_e | Phase mode | E | ABBIED600:2014 |
| TstOutCmd | ABBIED600_Rev20_ENC_TstOut_e | Test control for outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| VVaEna | ABBIED600_Rev3_ENG_SP_VVaTyp_e | Variation enable | E | ABBIED600:2014 |
| VaOp | ABBIED600_Rev1_SPS_e | Voltage Event detected | E | ABBIED600:2014 |
| VaStrGen | ABBIED600_Rev1_SPS_e | Start (Voltage Variation Event in progress) | E | ABBIED600:2014 |
| VVaTyp | ABBIED600_Rev3_ENS_VVaTyp_e | Voltage variation type | E | ABBIED600:2014 |
| RcdRs | ABBIED600_Rev2_SPC_control_e | Recorded data reset | E | ABBIED600:2014,status-only,direct-with-normal-security |

### 5.2.182 3.2.182 LN: PH2QVVR1 Name: QVVR (ED2)

| Attribute | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| name | | | | |
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| VarStr | ABBIED600_Rev1_SPS | Start Phase B (Voltage Variation Event in progress) | | |
| VVa | ABBIED600_Rev3_MV_simple_i | Voltage Variation Magnitude of the last completed event | | |
| VVaTm | ABBIED600_Rev3_MV_simple_i | Voltage Variation Duration of the last completed event | | |
| APreVa | ABBIED600_Rev3_MV_simple_i_e | Current magnitude Phase B preceding variation | E | ABBIED600:2014 |

### 5.2.183 3.2.183 LN: PH3QVVR1 Name: QVVR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| VarStr | ABBIED600_Rev1_SPS | Start Phase C (Voltage Variation Event in progress) | | |
| VVa | ABBIED600_Rev3_MV_simple_i | Voltage Variation Magnitude of the last completed event | | |
| VVaTm | ABBIED600_Rev3_MV_simple_i | Voltage Variation Duration of the last completed event | | |
| APreVa | ABBIED600_Rev3_MV_simple_i_e | Current magnitude Ph C preceding variation | E | ABBIED600:2014 |

### 5.2.184 3.2.184 LN: VSQVUB1 Name: QVUB (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |

| | | | | |
|---|---|---|---|---|
| VarStr | ABBIED600_Rev1_SPS | Start of the event | | |
| MaxVVa | ABBIED600_Rev3_MV_simple_i | Maximum unbalance deviation value | | |
| UnbDetMth | ABBIED600_Rev1_ENG_SP_UnbDetMth | Unbalance detection method | | |
| StrVal | ABBIED600_Rev3_ASG_SP_i | Voltage unbalance start value | | |
| TrgModPQ | ABBIED600_Rev2_ENG_SP_TrgModPQ_e | Observation period triggering mode | E | ABBIED600:2014 |
| ObsPerSel | ABBIED600_Rev2_ENG_SP_ObsPerSel_e | Observation period duration | E | ABBIED600:2014 |
| ObsPerUsr | ABBIED600_Rev1_ING_SP_1_e | User defined observation period | E | ABBIED600:2014 |
| HiPctVUnb | ABBIED600_Rev1_SPS_e | Status percentile unbalance exceeds the limit | E | ABBIED600:2014 |
| ObsPerAct | ABBIED600_Rev1_SPS_e | Observation period for statistical calculation active | E | ABBIED600:2014 |
| PctUnbVal | ABBIED600_Rev3_MV_simple_i_e | Percentile value of voltage unbalance in an observation | E | ABBIED600:2014 |
| VUnb3sMn | ABBIED600_Rev3_MV_simple_i_e | Non sliding 3 second mean value of volt- | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| | | age unbal-ance | | |
| VUnb10mMn | ABBIED600_Rev3_MV_simple_i_e | Sliding 10 minutes mean value of volt-age unbal-ance | E | ABBIED600:2014 |
| PctUnb | ABBIED600_Rev3_ASG_SP_i_e | Percentile In-dex | E | ABBIED600:2014 |
| ObsPerStr | ABBIED600_Rev1_SPS_simple_e | Observation Start | E | ABBIED600:2014 |
| ObsPerEnd | ABBIED600_Rev1_SPS_simple_e | Observation End | E | ABBIED600:2014 |
| TestOth | ABBIED600_Rev1_ENC_TestOth_e | Test Outputs | E | ABBIED600:2014,status-only,direct-with-normal-security |
| TrgObsPer | ABBIED600_Rev2_SPC_control_e | Trigger for observation period | E | ABBIED600:2014,status-only,direct-with-normal-security |
| RcdRs | ABBIED600_Rev2_SPC_control_e | Recorded da-ta reset | E | ABBIED600:2014,status-only,direct-with-normal-security |
| PerStrDate | ABBIED600_Rev3_TSG_SP_setCal_e | Observation start time | E | ABBIED600:2014 |

### 5.2.185 3.2.185 LN: IL1TCTR1 Name: TCTR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Mode | | |
| AmpSv | ABBIED600_Rev1_SAV_92_lite | Current (Sampled value) phase A | | |
| ARtg | ABBIED600_Rev3_ASG_SP_ARtg_VRtg | Primary rated cur-rent | | |
| Cor | ABBIED600_Rev1_ASG_SP_f | Phase A Current | | |

| | | | | |
|---|---|---|---|---|
| | | phasor magnitude correction of an external current transformer | | |
| AngCor | ABBIED600_Rev3_ASG_SP_i | Phase A Current phasor angle correction of an external current transformer | | |
| Alm | ABBIED600_Rev1_SPS_e | Alarm | E | IEC 61850-7-4:2007 |
| Wrn | ABBIED600_Rev1_SPS_e | Warning | E | IEC 61850-7-4:2007 |
| ARtgScy | ABBIED600_Rev2_ENG_SP_ARtgSec_e | Secondary rated current | E | ABBIED600:2014,order code dependent |
| ARtgNom | ABBIED600_Rev1_ASG_SP_f_e | Network Nominal Current | E | ABBIED600:2014,order code dependent |
| VRtgScyRat | ABBIED600_Rev1_ASG_SP_f_e | Rated Secondary Value | E | ABBIED600:2014,order code dependent |
| RevPol | ABBIED600_Rev1_SPG_SP_e | Reverse polarity | E | ABBIED600:2014 |

### 5.2.186 3.2.186 LN: RESTCTR1 Name: TCTR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Mode | | |
| AmpSv | ABBIED600_Rev1_SAV_92_lite | Current (Sampled value) | | |
| ARtg | ABBIED600_Rev3_ASG_SP_ARtg_VRtg | Primary rated current | | |
| Cor | ABBIED600_Rev1_ASG_SP_f | Current phasor magnitude correction of an external current transformer | | |
| AngCor | ABBIED600_Rev3_ASG_SP_i | Residual Current phasor angle correction of an external current transformer | | |
| Alm | ABBIED600_Rev1_SPS_e | Alarm | E | IEC 61850-7-4:2007 |
| Wrn | ABBIED600_Rev1_SPS_e | Warning | E | IEC 61850-7- |

| | | | | |
|---|---|---|---|---|
| | | | | 4:2007 |
| ARtgScy | ABBIED600_Rev2_ENG_SP_ARtgSec_e | Secondary rated current | E | ABBIED600:2014 |
| RevPol | ABBIED600_Rev1_SPG_SP_e | Reverse polarity | E | ABBIED600:2014 |

### 5.2.187 3.2.187 LN: XGGIO120 Name: GGIO (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_OnOff_NoBlk | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Ind1 | ABBIED600_Rev1_SPS | X120-Input 1 | | |
| Ind2 | ABBIED600_Rev1_SPS | X120-Input 2 | | |
| Ind3 | ABBIED600_Rev1_SPS | X120-Input 3 | | |
| Ind4 | ABBIED600_Rev1_SPS | X120-Input 4 | | |
| FilTmms1 | ABBIED600_Rev1_ING_SP_1_e | Input 1 filter time | E | ABBIED600:2014 |
| FilTmms2 | ABBIED600_Rev1_ING_SP_1_e | Input 2 filter time | E | ABBIED600:2014 |
| FilTmms3 | ABBIED600_Rev1_ING_SP_1_e | Input 3 filter time | E | ABBIED600:2014 |
| FilTmms4 | ABBIED600_Rev1_ING_SP_1_e | Input 4 filter time | E | ABBIED600:2014 |
| DigInInv1 | ABBIED600_Rev1_SPG_SP_e | Input 1 inver-sion | E | ABBIED600:2014 |
| DigInInv2 | ABBIED600_Rev1_SPG_SP_e | Input 2 inver-sion | E | ABBIED600:2014 |
| DigInInv3 | ABBIED600_Rev1_SPG_SP_e | Input 3 inver-sion | E | ABBIED600:2014 |
| DigInInv4 | ABBIED600_Rev1_SPG_SP_e | Input 4 inver-sion | E | ABBIED600:2014 |
| CardNam | ABBIED600_Rev8_DPL_eeprom_2_ED2_e | Card infor-mation | E | ABBIED600:2014 |
| HwId | ABBIED600_Rev1_LPL_VSS_1_20_e | HW module | E | ABBIED600:2014 |
| TestStaId | ABBIED600_Rev1_LPL_VSS_dU_20_e | Testing | E | ABBIED600:2014 |

## 5.2.188 3.2.188 LN: UL1TVTR1 Name: TVTR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Mode | | order code dependent |
| VolSv | ABBIED600_Rev1_SAV_92_lite | Voltage (sampled value) phase A | | |
| FuFail | ABBIED600_Rev1_SPS | TVTR fuse failure | | |
| VRtg | ABBIED600_Rev3_ASG_SP_ARtg_VRtg | Primary rated voltage | | |
| Rat | ABBIED600_Rev1_ASG_SP_f | Division ratio | | order code dependent |
| Cor | ABBIED600_Rev1_ASG_SP_f | Amplitude corr. A | | |
| AngCor | ABBIED600_Rev3_ASG_SP_i | Angle corr. A | | |
| Alm | ABBIED600_Rev1_SPS_e | Alarm | E | IEC 61850-7-4:2007 |
| Wrn | ABBIED600_Rev1_SPS_e | Warning | E | IEC 61850-7-4:2007 |
| VRtgScy | ABBIED600_Rev1_ASG_SP_f_e | Secondary rated voltage | E | ABBIED600:2014 |
| VConnTyp | ABBIED600_Rev3_ENG_SP_ConnType_e | VT connection | E | ABBIED600:2014 |
| VInTyp | ABBIED600_Rev2_ENG_SP_AnInType_e | Type of the voltage input | E | ABBIED600:2014 |

## 5.2.189 3.2.189 LN: XSGGIO130 Name: GGIO (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_OnOff_NoBlk | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| CardNam | ABBIED600_Rev8_DPL_eeprom_2_ED2_e | Card information | E | ABBIED600:2014 |
| HwId | ABBIED600_Rev1_LPL_VSS_1_20_e | HW module | E | ABBIED600:2014 |
| TestStaId | ABBIED600_Rev1_LPL_VSS_dU_20_e | Testing | E | ABBIED600:2014 |

## 5.2.190 3.2.190 LN: UL1TVTR2 Name: TVTR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Mode | | order code dependent |
| VolSv | ABBIED600_Rev1_SAV_92_lite | Voltage (sampled value) phase A | | |
| FuFail | ABBIED600_Rev1_SPS | TVTR fuse failure | | |
| VRtg | ABBIED600_Rev3_ASG_SP_ARtg_VRtg | Primary rated voltage | | |
| Rat | ABBIED600_Rev1_ASG_SP_f | Division ratio | | order code dependent |
| Cor | ABBIED600_Rev1_ASG_SP_f | Phase A Voltage phasor magnitude correction of an external voltage transformer | | |
| AngCor | ABBIED600_Rev3_ASG_SP_i | Angle corr. A | | |
| Alm | ABBIED600_Rev1_SPS_e | Alarm | E | IEC 61850-7-4:2007 |
| Wrn | ABBIED600_Rev1_SPS_e | Warning | E | IEC 61850-7-4:2007 |
| VRtgScy | ABBIED600_Rev1_ASG_SP_f_e | Secondary rated voltage | E | ABBIED600:2014 |
| VConnTyp | ABBIED600_Rev3_ENG_SP_ConnType_e | VT connection | E | ABBIED600:2014 |
| VInTyp | ABBIED600_Rev2_ENG_SP_AnInType_e | Type of the voltage input | E | ABBIED600:2014 |

## 5.2.191 3.2.191 LN: RESTVTR1 Name: TVTR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Mode | | |
| VolSv | ABBIED600_Rev1_SAV_92_lite | Voltage (sampled value) | | |
| VRtg | ABBIED600_Rev3_ASG_SP_ARtg_VRtg | Rated primary voltage | | |
| Cor | ABBIED600_Rev1_ASG_SP_f | Voltage phasor magnitude correction of external volt- | | |

| | | | | |
|---|---|---|---|---|
| | | age transformer | | |
| AngCor | ABBIED600_Rev3_ASG_SP_i | Residual Voltage phasor angle correction of an external voltage transformer | | |
| Alm | ABBIED600_Rev1_SPS_e | Alarm | E | IEC 61850-7-4:2007 |
| Wrn | ABBIED600_Rev1_SPS_e | Warning | E | IEC 61850-7-4:2007 |
| VRtgScy | ABBIED600_Rev1_ASG_SP_f_e | Rated secondary voltage | E | ABBIED600:2014 |

### 5.2.192 3.2.192 LN: RESVMMXU1 Name: MMXU (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Operation | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Blk | ABBIED600_Rev1_SPS_simple | Block signal for all binary outputs | | |
| PhV | ABBIED600_Rev3_WYE_res_full_i | Residual voltage | | |
| VMeasMod | ABBIED600_Rev3_ENG_SP_MeasMod_e | Selects used measurement mode | E | ABBIED600:2014 |
| HiAlm | ABBIED600_Rev1_SPS_e | High alarm | E | ABBIED600:2014 |
| HiWrn | ABBIED600_Rev1_SPS_e | High warning | E | ABBIED600:2014 |
| RcdRs | ABBIED600_Rev2_SPC_control_e | RESVMMXU1 demands | E | ABBIED600:2014,status-only,direct-with-normal-security |

### 5.2.193 3.2.193 LN: XAGGIO130 Name: GGIO (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_OnOff_NoBlk | Mode | | status-only,direct-with-normal-security |

| | | | | |
|---|---|---|---|---|
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Ind1 | ABBIED600_Rev1_SPS | X130-Input 1 | | |
| Ind2 | ABBIED600_Rev1_SPS | X130-Input 2 | | |
| Ind3 | ABBIED600_Rev1_SPS | X130-Input 3 | | |
| Ind4 | ABBIED600_Rev1_SPS | X130-Input 4 | | |
| FilTmms1 | ABBIED600_Rev1_ING_SP_1_e | Input 1 filter time | E | ABBIED600:2014 |
| FilTmms2 | ABBIED600_Rev1_ING_SP_1_e | Input 2 filter time | E | ABBIED600:2014 |
| FilTmms3 | ABBIED600_Rev1_ING_SP_1_e | Input 3 filter time | E | ABBIED600:2014 |
| FilTmms4 | ABBIED600_Rev1_ING_SP_1_e | Input 4 filter time | E | ABBIED600:2014 |
| DigInInv1 | ABBIED600_Rev1_SPG_SP_e | Input 1 inversion | E | ABBIED600:2014 |
| DigInInv2 | ABBIED600_Rev1_SPG_SP_e | Input 2 inversion | E | ABBIED600:2014 |
| DigInInv3 | ABBIED600_Rev1_SPG_SP_e | Input 3 inversion | E | ABBIED600:2014 |
| DigInInv4 | ABBIED600_Rev1_SPG_SP_e | Input 4 inversion | E | ABBIED600:2014 |
| CardNam | ABBIED600_Rev8_DPL_eeprom_2_ED2_e | Card information | E | ABBIED600:2014 |
| HwId | ABBIED600_Rev1_LPL_VSS_1_20_e | HW module | E | ABBIED600:2014 |
| TestStaId | ABBIED600_Rev1_LPL_VSS_dU_20_e | Testing | E | ABBIED600:2014 |

### 5.2.194 3.2.194 LN: XARGGIO130 Name: GGIO (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| AnIn1 | ABBIED600_Rev6_MV_6 | Analogue input 1 | | |

| | | | | |
|---|---|---|---|---|
| AnIn2 | ABBIED600_Rev6_MV_6 | Analogue input 2 | | |
| AnIn3 | ABBIED600_Rev6_MV_6 | Analogue input 3 | | |
| Alm1 | ABBIED600_Rev1_SPS | Alarm | | |
| Wrn1 | ABBIED600_Rev1_SPS | Warning | | |
| InMinVal1 | ABBIED600_Rev1_ASG_SP_f_e | Input minimum | E | ABBIED600:2014 |
| InMinVal2 | ABBIED600_Rev1_ASG_SP_f_e | Input minimum | E | ABBIED600:2014 |
| InMinVal3 | ABBIED600_Rev1_ASG_SP_f_e | Input minimum | E | ABBIED600:2014 |
| InMaxVal1 | ABBIED600_Rev1_ASG_SP_f_e | Input maximum | E | ABBIED600:2014 |
| InMaxVal2 | ABBIED600_Rev1_ASG_SP_f_e | Input maximum | E | ABBIED600:2014 |
| InMaxVal3 | ABBIED600_Rev1_ASG_SP_f_e | Input maximum | E | ABBIED600:2014 |
| InMod1 | ABBIED600_Rev2_ENG_SP_SenInMod_e | Input mode | E | ABBIED600:2014 |
| InMod2 | ABBIED600_Rev2_ENG_SP_SenInMod_e | Input mode | E | ABBIED600:2014 |
| InMod3 | ABBIED600_Rev2_ENG_SP_SenInMod_e | Input mode | E | ABBIED600:2014 |
| CardNam | ABBIED600_Rev8_DPL_eeprom_2_ED2_e | Card information | E | ABBIED600:2014 |
| HwId | ABBIED600_Rev1_LPL_VSS_1_20_e | HW module | E | ABBIED600:2014 |
| TestStaId | ABBIED600_Rev1_LPL_VSS_dU_20_e | Testing | E | ABBIED600:2014 |

### 5.2.195 3.2.195 LN: IL1TCTR2 Name: TCTR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Mode | | |
| AmpSv | ABBIED600_Rev1_SAV_92_lite | Current (Sampled value) phase A | | |
| ARtg | ABBIED600_Rev3_ASG_SP_ARtg_VRtg | Primary rated current | | |

| | | | | |
|---|---|---|---|---|
| Cor | ABBIED600_Rev1_ASG_SP_f | Phase A Current phasor magnitude correction of an external current transformer | | |
| AngCor | ABBIED600_Rev3_ASG_SP_i | Phase A Current phasor angle correction of an external current transformer | | |
| Alm | ABBIED600_Rev1_SPS_e | Alarm | E | IEC 61850-7-4:2007 |
| Wrn | ABBIED600_Rev1_SPS_e | Warning | E | IEC 61850-7-4:2007 |
| ARtgScy | ABBIED600_Rev2_ENG_SP_ARtgSec_e | Secondary current | E | ABBIED600:2014 |
| ARtgNom | ABBIED600_Rev1_ASG_SP_f_e | Network Nominal Current | E | ABBIED600:2014 |
| VRtgScyRat | ABBIED600_Rev1_ASG_SP_f_e | Rated Secondary Value | E | ABBIED600:2014 |
| RevPol | ABBIED600_Rev1_SPG_SP_e | Reverse polarity | E | ABBIED600:2014 |

### 5.2.196 3.2.196 LN: XAGGIO120 Name: GGIO (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_OnOff_NoBlk | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| NamPlt | ABBIED600_Rev1_LPL_1 | Name plate | | |
| CardNam | ABBIED600_Rev8_DPL_eeprom_2_ED2_e | Card information | E | ABBIED600:2014 |
| HwId | ABBIED600_Rev1_LPL_VSS_1_20_e | HW module | E | ABBIED600:2014 |
| TestStaId | ABBIED600_Rev1_LPL_VSS_dU_20_e | Testing | E | ABBIED600:2014 |

### 5.2.197 3.2.197 LN: XGGIO110 Name: GGIO (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_OnOff_NoBlk | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |

| | | | | |
|---|---|---|---|---|
| SPCSO1 | ABBIED600_Rev2_SPC_control | X110-Output 1 | | status-only,direct-with-normal-security |
| SPCSO2 | ABBIED600_Rev2_SPC_control | X110-Output 2 | | status-only,direct-with-normal-security |
| SPCSO3 | ABBIED600_Rev2_SPC_control | X110-Output 3 | | status-only,direct-with-normal-security |
| SPCSO4 | ABBIED600_Rev2_SPC_control | X110-Output 4 | | status-only,direct-with-normal-security |
| Ind1 | ABBIED600_Rev1_SPS | X110-Input 1 | | |
| Ind2 | ABBIED600_Rev1_SPS | X110-Input 2 | | |
| Ind3 | ABBIED600_Rev1_SPS | X110-Input 3 | | |
| Ind4 | ABBIED600_Rev1_SPS | X110-Input 4 | | |
| Ind5 | ABBIED600_Rev1_SPS | X110-Input 5 | | |
| Ind6 | ABBIED600_Rev1_SPS | X110-Input 6 | | |
| Ind7 | ABBIED600_Rev1_SPS | X110-Input 7 | | |
| Ind8 | ABBIED600_Rev1_SPS | X110-Input 8 | | |
| FilTmms1 | ABBIED600_Rev1_ING_SP_1_e | Input 1 filter time | E | ABBIED600:2014 |
| FilTmms2 | ABBIED600_Rev1_ING_SP_1_e | Input 2 filter time | E | ABBIED600:2014 |
| FilTmms3 | ABBIED600_Rev1_ING_SP_1_e | Input 3 filter time | E | ABBIED600:2014 |
| FilTmms4 | ABBIED600_Rev1_ING_SP_1_e | Input 4 filter time | E | ABBIED600:2014 |
| FilTmms5 | ABBIED600_Rev1_ING_SP_1_e | Input 5 filter time | E | ABBIED600:2014 |
| FilTmms6 | ABBIED600_Rev1_ING_SP_1_e | Input 6 filter time | E | ABBIED600:2014 |
| FilTmms7 | ABBIED600_Rev1_ING_SP_1_e | Input 7 filter time | E | ABBIED600:2014 |
| FilTmms8 | ABBIED600_Rev1_ING_SP_1_e | Input 8 filter time | E | ABBIED600:2014 |
| DigInInv1 | ABBIED600_Rev1_SPG_SP_e | Input 1 inver-sion | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| DigInInv2 | ABBIED600_Rev1_SPG_SP_e | Input 2 inversion | E | ABBIED600:2014 |
| DigInInv3 | ABBIED600_Rev1_SPG_SP_e | Input 3 inversion | E | ABBIED600:2014 |
| DigInInv4 | ABBIED600_Rev1_SPG_SP_e | Input 4 inversion | E | ABBIED600:2014 |
| DigInInv5 | ABBIED600_Rev1_SPG_SP_e | Input 5 inversion | E | ABBIED600:2014 |
| DigInInv6 | ABBIED600_Rev1_SPG_SP_e | Input 6 inversion | E | ABBIED600:2014 |
| DigInInv7 | ABBIED600_Rev1_SPG_SP_e | Input 7 inversion | E | ABBIED600:2014 |
| DigInInv8 | ABBIED600_Rev1_SPG_SP_e | Input 8 inversion | E | ABBIED600:2014 |
| CardNam | ABBIED600_Rev8_DPL_eeprom_2_ED2_e | Card information | E | ABBIED600:2014 |
| HwId | ABBIED600_Rev1_LPL_VSS_1_20_e | HW module | E | ABBIED600:2014 |
| TestStaId | ABBIED600_Rev1_LPL_VSS_dU_20_e | Testing | E | ABBIED600:2014 |

### 5.2.198 3.2.198 LN: XGGIO130 Name: GGIO (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_OnOff_NoBlk | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Health | ABBIED600_Rev4_ENS_health | Health | | |
| SPCSO1 | ABBIED600_Rev2_SPC_control | X130-Output 1 | | status-only,direct-with-normal-security |
| SPCSO2 | ABBIED600_Rev2_SPC_control | X130-Output 2 | | status-only,direct-with-normal-security |
| SPCSO3 | ABBIED600_Rev2_SPC_control | X130-Output 3 | | status-only,direct-with-normal-security |
| Ind1 | ABBIED600_Rev1_SPS | X130-Input 1 | | |
| Ind2 | ABBIED600_Rev1_SPS | X130-Input 2 | | |

| | | | | |
|---|---|---|---|---|
| Ind3 | ABBIED600_Rev1_SPS | X130-Input 3 | | |
| Ind4 | ABBIED600_Rev1_SPS | X130-Input 4 | | |
| Ind5 | ABBIED600_Rev1_SPS | X130-Input 5 | | |
| Ind6 | ABBIED600_Rev1_SPS | X130-Input 6 | | |
| FilTmms1 | ABBIED600_Rev1_ING_SP_1_e | Input 1 filter time | E | ABBIED600:2014 |
| FilTmms2 | ABBIED600_Rev1_ING_SP_1_e | Input 2 filter time | E | ABBIED600:2014 |
| FilTmms3 | ABBIED600_Rev1_ING_SP_1_e | Input 3 filter time | E | ABBIED600:2014 |
| FilTmms4 | ABBIED600_Rev1_ING_SP_1_e | Input 4 filter time | E | ABBIED600:2014 |
| FilTmms5 | ABBIED600_Rev1_ING_SP_1_e | Input 5 filter time | E | ABBIED600:2014 |
| FilTmms6 | ABBIED600_Rev1_ING_SP_1_e | Input 6 filter time | E | ABBIED600:2014 |
| DigInInv1 | ABBIED600_Rev1_SPG_SP_e | Input 1 inversion | E | ABBIED600:2014 |
| DigInInv2 | ABBIED600_Rev1_SPG_SP_e | Input 2 inversion | E | ABBIED600:2014 |
| DigInInv3 | ABBIED600_Rev1_SPG_SP_e | Input 3 inversion | E | ABBIED600:2014 |
| DigInInv4 | ABBIED600_Rev1_SPG_SP_e | Input 4 inversion | E | ABBIED600:2014 |
| DigInInv5 | ABBIED600_Rev1_SPG_SP_e | Input 5 inversion | E | ABBIED600:2014 |
| DigInInv6 | ABBIED600_Rev1_SPG_SP_e | Input 6 inversion | E | ABBIED600:2014 |
| CardNam | ABBIED600_Rev8_DPL_eeprom_2_ED2_e | Card information | E | ABBIED600:2014 |
| HwId | ABBIED600_Rev1_LPL_VSS_1_20_e | HW module | E | ABBIED600:2014 |
| TestStaId | ABBIED600_Rev1_LPL_VSS_dU_20_e | Testing | E | ABBIED600:2014 |

### 5.2.199 3.2.199 LN: XGGIO90 Name: GGIO (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Beh | ABBIED600_Rev4_ENS_beh | X90 on/off | | |
| CardNam | ABBIED600_Rev8_DPL_eeprom_2_ED2_e | Card information | E | ABBIED600:2014 |
| HwId | ABBIED600_Rev1_LPL_VSS_1_20_e | HW module | E | ABBIED600:2014 |
| TestStaId | ABBIED600_Rev1_LPL_VSS_dU_20_e | Testing | E | ABBIED600:2014 |

### 5.2.200 3.2.200 LN: SERLCCH1 Name: LCCH (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Beh | ABBIED600_Rev4_ENS_beh | SERLCCH1 on/off | | |
| FibMod | ABBIED600_Rev2_ENG_SP_FibMod_e | Fiber mode for COM1 | E | ABBIED600:2014 |
| SerMod | ABBIED600_Rev2_ENG_SP_SerMod_e | Serial mode for COM1 | E | ABBIED600:2014 |
| CTSDlTmms | ABBIED600_Rev1_ING_SP_1_e | CTS delay for COM1 | E | ABBIED600:2014 |
| RTSDlTmms | ABBIED600_Rev1_ING_SP_1_e | RTS delay for COM1 | E | ABBIED600:2014 |
| SerBaudRte | ABBIED600_Rev1_ENG_SP_BaudRate_e | Baudrate for COM1 | E | ABBIED600:2014 |
| CharRxCnt | ABBIED600_Rev1_INS_e | Number of characters received | E | ABBIED600:2014 |
| FrRxCnt | ABBIED600_Rev1_INS_e | Number of successfully received link frames | E | ABBIED600:2014 |
| RxErrCnt | ABBIED600_Rev1_INS_e | Number of discarded link frames | E | ABBIED600:2014 |
| FrTxCnt | ABBIED600_Rev1_INS_e | Number of transmitted link frames | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| CDLosCnt | ABBIED600_Rev1_INS_e | CD lost | E | ABBIED600:2014 |
| CollCnt | ABBIED600_Rev1_INS_e | Collision | E | ABBIED600:2014 |
| CTSTmOut | ABBIED600_Rev1_INS_e | CTS timeout | E | ABBIED600:2014 |
| TxTmOutCnt | ABBIED600_Rev1_INS_e | Transmission timeout | E | ABBIED600:2014 |
| PtyErrCnt | ABBIED600_Rev1_INS_e | Number of parity errors | E | ABBIED600:2014 |
| OvRunErr | ABBIED600_Rev1_INS_e | Number of overrun errors | E | ABBIED600:2014 |
| FrErrCnt | ABBIED600_Rev1_INS_e | Framing errors | E | ABBIED600:2014 |
| ChLiv | ABBIED600_Rev1_SPS_simple | Channel Live | | |
| LnkLiv | ABBIED600_Rev1_SPS_simple_e | Link Live | E | ABBIED600:2014 |
| CntRs | ABBIED600_Rev2_SPC_control_e | Reset Counters | E | ABBIED600:2014,status-only,direct-with-normal-security |

### 5.2.201 3.2.201 LN: SERLCCH2 Name: LCCH (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Beh | ABBIED600_Rev4_ENS_beh | SERLCCH2 on/off | | |
| FibMod | ABBIED600_Rev2_ENG_SP_FibMod_e | Fiber mode for COM2 | E | ABBIED600:2014 |
| SerMod | ABBIED600_Rev2_ENG_SP_SerMod_e | Serial mode for COM2 | E | ABBIED600:2014 |
| CTSDlTmms | ABBIED600_Rev1_ING_SP_1_e | CTS delay for COM2 | E | ABBIED600:2014 |
| RTSDlTmms | ABBIED600_Rev1_ING_SP_1_e | RTS delay for COM2 | E | ABBIED600:2014 |
| SerBaudRte | ABBIED600_Rev1_ENG_SP_BaudRate_e | Baudrate for COM2 | E | ABBIED600:2014 |
| CharRxCnt | ABBIED600_Rev1_INS_e | Number of characters re-ceived | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| FrRxCnt | ABBIED600_Rev1_INS_e | Number of successfully received link frames | E | ABBIED600:2014 |
| RxErrCnt | ABBIED600_Rev1_INS_e | Number of discarded link frames | E | ABBIED600:2014 |
| FrTxCnt | ABBIED600_Rev1_INS_e | Number of transmitted link frames | E | ABBIED600:2014 |
| CDLosCnt | ABBIED600_Rev1_INS_e | CD lost | E | ABBIED600:2014 |
| CollCnt | ABBIED600_Rev1_INS_e | Collision | E | ABBIED600:2014 |
| CTSTmOut | ABBIED600_Rev1_INS_e | CTS timeout | E | ABBIED600:2014 |
| TxTmOutCnt | ABBIED600_Rev1_INS_e | Transmission timeout | E | ABBIED600:2014 |
| PtyErrCnt | ABBIED600_Rev1_INS_e | Number of parity errors | E | ABBIED600:2014 |
| OvRunErr | ABBIED600_Rev1_INS_e | Number of overrun errors | E | ABBIED600:2014 |
| FrErrCnt | ABBIED600_Rev1_INS_e | Framing errors | E | ABBIED600:2014 |
| ChLiv | ABBIED600_Rev1_SPS_simple | Channel Live | | |
| LnkLiv | ABBIED600_Rev1_SPS_simple_e | Link Live | E | ABBIED600:2014 |
| CntRs | ABBIED600_Rev2_SPC_control_e | Reset Counters | E | ABBIED600:2014,status-only,direct-with-normal-security |

### 5.2.202 3.2.202 LN: RCHLCCH1 Name: LCCH (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Beh | ABBIED600_Rev4_ENS_beh | Physical Channel behavior | | |
| ChLiv | ABBIED600_Rev1_SPS | Physical channel status of port A | | |
| RedChLiv | ABBIED600_Rev1_SPS | Physical channel status of port B | | |

| | | | | |
|---|---|---|---|---|
| LnkLiv | ABBIED600_Rev1_SPS_e | Link status of port A | E | ABBIED600:2014 |
| RedLnkLiv | ABBIED600_Rev1_SPS_e | Link status of port B | E | ABBIED600:2014 |
| RedCfg | ABBIED600_Rev1_ENG_SP_ChRedKind_e | Redundant mode | E | REx615:2014 |

### 5.2.203 3.2.203 LN: SCHLCCH1 Name: LCCH (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Beh | ABBIED600_Rev4_ENS_beh | Physical Channel behavior | | |
| ChLiv | ABBIED600_Rev1_SPS | Physical channel status | | |
| LnkLiv | ABBIED600_Rev1_SPS_e | Link status | E | ABBIED600:2014 |
| PortMod | ABBIED600_Rev4_ENG_SP_EthPortMod_e | Ethernet port mode | E | ABBIED600:2014 |

### 5.2.204 3.2.204 LN: SCHLCCH2 Name: LCCH (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Beh | ABBIED600_Rev4_ENS_beh | Physical Channel behavior | | |
| ChLiv | ABBIED600_Rev1_SPS | Physical channel status | | |
| LnkLiv | ABBIED600_Rev1_SPS_e | Link status | E | ABBIED600:2014 |
| PortMod | ABBIED600_Rev4_ENG_SP_EthPortMod_e | Ethernet port mode | E | ABBIED600:2014 |

### 5.2.205 3.2.205 LN: SCHLCCH3 Name: LCCH (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Beh | ABBIED600_Rev4_ENS_beh | Physical Channel behavior | | |
| ChLiv | ABBIED600_Rev1_SPS | Physical channel status | | |
| LnkLiv | ABBIED600_Rev1_SPS_e | Link status | E | ABBIED600:2014 |
| PortMod | ABBIED600_Rev4_ENG_SP_EthPortMod_e | Ethernet port mode | E | ABBIED600:2014 |

### 5.2.206 3.2.206 LN: LLN0 Name: LLN0 (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_OnTestBlockOff | Control | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Control | | |
| NamPlt | ABBIED600_Rev2_LPL_CTRLDR_LNN0 | Control | | |
| Loc | ABBIED600_Rev1_SPS_retain | Local / Remote | | |
| LocKey | ABBIED600_Rev1_SPS_simple | Local operation | | |
| LocSta | ABBIED600_Rev1_SPC_retain | Station operation | | status-only,direct-with-normal-security |
| GrRef | ABBIED600_Rev4_ORG_SP_1 | GrRef | | |
| MltLev | ABBIED600_Rev1_SPG_SP | Multiple levels | | |
| CmdBlk | ABBIED600_Rev1_SPC_simple | Commands blocked | | status-only |
| LocKeyHMI | ABBIED600_Rev3_ENS_LocKeyHMI_e | Control HMI | E | REx615:2014 |
| LocKeyOff | ABBIED600_Rev1_SPS_simple_e | Control disable | E | REx615:2014 |
| LocKeyLoc | ABBIED600_Rev1_SPS_simple_e | Control local | E | REx615:2014 |
| LocKeyRem | ABBIED600_Rev1_SPS_simple_e | Control remote | E | REx615:2014 |
| LocKeySta | ABBIED600_Rev1_SPS_simple_e | Control station | E | REx615:2014 |
| LocKeyAll | ABBIED600_Rev1_SPS_simple_e | Control all | E | REx615:2014 |
| LocRemMod | ABBIED600_Rev1_ENG_SP_LocRemMod_e | Control mode | E | REx615:2014 |
| StaLevSet | ABBIED600_Rev1_ENG_SP_StaLevSet_e | Station authority | E | REx615:2014 |

### 5.2.207 3.2.207 LN: CBCSWI1 Name: CSWI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Loc | ABBIED600_Rev1_SPS | Local operation | | |
| OpCntRs | ABBIED600_Rev2_INC_control_int | Operation counter | | status-only,direct-with-normal-security |
| Pos | ABBIED600_Rev8_DPC_control | Switch, general | | status-only,direct-with-normal-security,sbo-with-enhanced-security |
| OpOpn | ABBIED600_Rev1_ACT_simple | Switch, general | | |
| OpCls | ABBIED600_Rev1_ACT_simple | Switch, general | | |
| SelOpn | ABBIED600_Rev1_SPS | Selection open switch | | |
| SelCls | ABBIED600_Rev1_SPS | Selection close switch | | |
| PosDlTmms | ABBIED600_Rev1_ING_SP_1_e | Event delay | E | ABBIED600:2014 |
| PosOpn | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit opn | E | ABBIED600:2014 |
| PosCls | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit cls | E | ABBIED600:2014 |
| PosOk | ABBIED600_Rev1_SPS_simple_e | Position OK | E | ABBIED600:2014 |
| AdpPls | ABBIED600_Rev1_SPG_SP_e | Adaptive pulse | E | ABBIED600:2014 |
| OpnEna | ABBIED600_Rev1_SPS_e | OPEN_ENAD | E | ABBIED600:2014 |
| ClsEna | ABBIED600_Rev1_SPS_e | CLOSE_ENAD | E | ABBIED600:2014 |
| InSynOk | ABBIED600_Rev1_SPS_e | SYNC OK | E | ABBIED600:2014 |
| SynItlByps | ABBIED600_Rev1_SPS_e | SYNC_ITL_BYP | E | ABBIED600:2014 |

### 5.2.208 3.2.208 LN: CBXCBR1 Name: XCBR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Loc | ABBIED600_Rev1_SPS_simple | Local operation | | |
| EEName | ABBIED600_Rev4_DPL_EEName | External equipment name plate | | |

| | | | | |
|---|---|---|---|---|
| OpCnt | ABBIED600_Rev1_INS | Operation counter | | |
| Pos | ABBIED600_Rev4_DPC_simple | Switch position | | status-only |
| BlkOpn | ABBIED600_Rev1_SPC_simple | Block opening | | status-only |
| BlkCls | ABBIED600_Rev1_SPC_simple | Block closing | | status-only |
| CBOpCap | ABBIED600_Rev2_ENS_CBOpCap | Circuit breaker operating capability | | |

### 5.2.209 3.2.209 LN: DCCILO1 Name: CILO (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| EnaOpn | ABBIED600_Rev1_SPS | Enable Open | | |
| EnaCls | ABBIED600_Rev1_SPS | Enable Close | | |
| ItlByps | ABBIED600_Rev1_SPS_e | ITL_BYPASS | E | ABBIED600:2014 |

### 5.2.210 3.2.210 LN: DCCSWI1 Name: CSWI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Loc | ABBIED600_Rev1_SPS | Local operation | | |
| OpCntRs | ABBIED600_Rev2_INC_control_int | Operation counter | | status-only,direct-with-normal-security |
| Pos | ABBIED600_Rev8_DPC_control | Switch, general | | status-only,direct-with-normal-security,sbo-with-enhanced-security |
| OpOpn | ABBIED600_Rev1_ACT_simple | Switch, general | | |
| OpCls | ABBIED600_Rev1_ACT_simple | Switch, gen- | | |

| | | | | |
|---|---|---|---|---|
| | | eral | | |
| PosDlTmms | ABBIED600_Rev1_ING_SP_1_e | Event delay | E | ABBIED600:2014 |
| PosOpn | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit opn | E | ABBIED600:2014 |
| PosCls | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit cls | E | ABBIED600:2014 |
| PosOk | ABBIED600_Rev1_SPS_simple_e | Position OK | E | ABBIED600:2014 |
| AdpPls | ABBIED600_Rev1_SPG_SP_e | Adaptive pulse | E | ABBIED600:2014 |
| OpnEna | ABBIED600_Rev1_SPS_e | OPEN_ENAD | E | ABBIED600:2014 |
| ClsEna | ABBIED600_Rev1_SPS_e | CLOSE_ENAD | E | ABBIED600:2014 |

### 5.2.211 3.2.211 LN: DCXSWI1 Name: XSWI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Loc | ABBIED600_Rev1_SPS_simple | Local operation | | |
| EEName | ABBIED600_Rev4_DPL_EEName | External equipment name plate | | |
| OpCnt | ABBIED600_Rev1_INS | Operation counter | | |
| Pos | ABBIED600_Rev4_DPC_simple | Switch position | | status-only |
| BlkOpn | ABBIED600_Rev1_SPC_simple | Block opening | | status-only |
| BlkCls | ABBIED600_Rev1_SPC_simple | Block closing | | status-only |
| SwTyp | ABBIED600_Rev1_ENS_SwTyp | Switch type | | |
| SwOpCap | ABBIED600_Rev1_ENS_SwOpCap | Disconnector operating capability | | |

### 5.2.212 3.2.212 LN: DCCILO2 Name: CILO (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| EnaOpn | ABBIED600_Rev1_SPS | Enable Open | | |
| EnaCls | ABBIED600_Rev1_SPS | Enable Close | | |
| ItlByps | ABBIED600_Rev1_SPS_e | ITL_BYPASS | E | ABBIED600:2014 |

### 5.2.213 3.2.213 LN: DCCSWI2 Name: CSWI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Loc | ABBIED600_Rev1_SPS | Local operation | | |
| OpCntRs | ABBIED600_Rev2_INC_control_int | Operation counter | | status-only,direct-with-normal-security |
| Pos | ABBIED600_Rev8_DPC_control | Switch, general | | status-only,direct-with-normal-security,sbo-with-enhanced-security |
| OpOpn | ABBIED600_Rev1_ACT_simple | Switch, general | | |
| OpCls | ABBIED600_Rev1_ACT_simple | Switch, general | | |
| PosDlTmms | ABBIED600_Rev1_ING_SP_1_e | Event delay | E | ABBIED600:2014 |
| PosOpn | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit opn | E | ABBIED600:2014 |
| PosCls | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit cls | E | ABBIED600:2014 |
| PosOk | ABBIED600_Rev1_SPS_simple_e | Position OK | E | ABBIED600:2014 |
| AdpPls | ABBIED600_Rev1_SPG_SP_e | Adaptive pulse | E | ABBIED600:2014 |
| OpnEna | ABBIED600_Rev1_SPS_e | OPEN_ENAD | E | ABBIED600:2014 |
| ClsEna | ABBIED600_Rev1_SPS_e | CLOSE_ENAD | E | ABBIED600:2014 |

### 5.2.214 3.2.214 LN: DCXSWI2 Name: XSWI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Loc | ABBIED600_Rev1_SPS_simple | Local operation | | |
| EEName | ABBIED600_Rev4_DPL_EEName | External equipment name plate | | |
| OpCnt | ABBIED600_Rev1_INS | Operation counter | | |

| | | | | |
|---|---|---|---|---|
| Pos | ABBIED600_Rev4_DPC_simple | Switch position | | status-only |
| BlkOpn | ABBIED600_Rev1_SPC_simple | Block opening | | status-only |
| BlkCls | ABBIED600_Rev1_SPC_simple | Block closing | | status-only |
| SwTyp | ABBIED600_Rev1_ENS_SwTyp | Switch type | | |
| SwOpCap | ABBIED600_Rev1_ENS_SwOpCap | Disconnector operating capability | | |

### 5.2.215 3.2.215 LN: DCCILO3 Name: CILO (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| EnaOpn | ABBIED600_Rev1_SPS | Enable Open | | |
| EnaCls | ABBIED600_Rev1_SPS | Enable Close | | |
| ItlByps | ABBIED600_Rev1_SPS_e | ITL_BYPASS | E | ABBIED600:2014 |

### 5.2.216 3.2.216 LN: DCCSWI3 Name: CSWI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Loc | ABBIED600_Rev1_SPS | Local operation | | |
| OpCntRs | ABBIED600_Rev2_INC_control_int | Operation counter | | status-only,direct-with-normal-security |
| Pos | ABBIED600_Rev8_DPC_control | Switch, general | | status-only,direct-with-normal-security,sbo-with-enhanced-security |
| OpOpn | ABBIED600_Rev1_ACT_simple | Switch, general | | |
| OpCls | ABBIED600_Rev1_ACT_simple | Switch, general | | |
| PosDlTmms | ABBIED600_Rev1_ING_SP_1_e | Event delay | E | ABBIED600:2014 |
| PosOpn | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit opn | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| PosCls | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit cls | E | ABBIED600:2014 |
| PosOk | ABBIED600_Rev1_SPS_simple_e | Position OK | E | ABBIED600:2014 |
| AdpPls | ABBIED600_Rev1_SPG_SP_e | Adaptive pulse | E | ABBIED600:2014 |
| OpnEna | ABBIED600_Rev1_SPS_e | OPEN_ENAD | E | ABBIED600:2014 |
| ClsEna | ABBIED600_Rev1_SPS_e | CLOSE_ENAD | E | ABBIED600:2014 |

### 5.2.217 3.2.217 LN: DCXSWI3 Name: XSWI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Loc | ABBIED600_Rev1_SPS_simple | Local operation | | |
| EEName | ABBIED600_Rev4_DPL_EEName | External equipment name plate | | |
| OpCnt | ABBIED600_Rev1_INS | Operation counter | | |
| Pos | ABBIED600_Rev4_DPC_simple | Switch position | | status-only |
| BlkOpn | ABBIED600_Rev1_SPC_simple | Block opening | | status-only |
| BlkCls | ABBIED600_Rev1_SPC_simple | Block closing | | status-only |
| SwTyp | ABBIED600_Rev1_ENS_SwTyp | Switch type | | |
| SwOpCap | ABBIED600_Rev1_ENS_SwOpCap | Disconnector operating capability | | |

### 5.2.218 3.2.218 LN: DCCILO4 Name: CILO (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| EnaOpn | ABBIED600_Rev1_SPS | Enable Open | | |
| EnaCls | ABBIED600_Rev1_SPS | Enable Close | | |
| ItlByps | ABBIED600_Rev1_SPS_e | ITL_BYPASS | E | ABBIED600:2014 |

### 5.2.219 3.2.219 LN: DCCSWI4 Name: CSWI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |

| | | | | |
|---|---|---|---|---|
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Loc | ABBIED600_Rev1_SPS | Local operation | | |
| OpCntRs | ABBIED600_Rev2_INC_control_int | Operation counter | | status-only,direct-with-normal-security |
| Pos | ABBIED600_Rev8_DPC_control | Switch, general | | status-only,direct-with-normal-security,sbo-with-enhanced-security |
| OpOpn | ABBIED600_Rev1_ACT_simple | Switch, general | | |
| OpCls | ABBIED600_Rev1_ACT_simple | Switch, general | | |
| PosDlTmms | ABBIED600_Rev1_ING_SP_1_e | Event delay | E | ABBIED600:2014 |
| PosOpn | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit opn | E | ABBIED600:2014 |
| PosCls | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit cls | E | ABBIED600:2014 |
| PosOk | ABBIED600_Rev1_SPS_simple_e | Position OK | E | ABBIED600:2014 |
| AdpPls | ABBIED600_Rev1_SPG_SP_e | Adaptive pulse | E | ABBIED600:2014 |
| OpnEna | ABBIED600_Rev1_SPS_e | OPEN_ENAD | E | ABBIED600:2014 |
| ClsEna | ABBIED600_Rev1_SPS_e | CLOSE_ENAD | E | ABBIED600:2014 |

### 5.2.220 3.2.220 LN: DCXSWI4 Name: XSWI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Loc | ABBIED600_Rev1_SPS_simple | Local operation | | |
| EEName | ABBIED600_Rev4_DPL_EEName | External equipment name plate | | |
| OpCnt | ABBIED600_Rev1_INS | Operation counter | | |
| Pos | ABBIED600_Rev4_DPC_simple | Switch position | | status-only |
| BlkOpn | ABBIED600_Rev1_SPC_simple | Block opening | | status-only |
| BlkCls | ABBIED600_Rev1_SPC_simple | Block closing | | status-only |
| SwTyp | ABBIED600_Rev1_ENS_SwTyp | Switch type | | |
| SwOpCap | ABBIED600_Rev1_ENS_SwOpCap | Disconnector operating capability | | |

### 5.2.221 3.2.221 LN: DCSXSWI1 Name: XSWI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Loc | ABBIED600_Rev1_SPS_simple | Local operation | | |
| EEName | ABBIED600_Rev4_DPL_EEName | External equipment name plate | | |
| OpCnt | ABBIED600_Rev1_INS | Operation counter | | |
| Pos | ABBIED600_Rev4_DPC_simple | Switch position | | status-only |
| BlkOpn | ABBIED600_Rev1_SPC_simple | Block opening | | status-only |
| BlkCls | ABBIED600_Rev1_SPC_simple | Block closing | | status-only |
| SwTyp | ABBIED600_Rev1_ENS_SwTyp | Switch type | | |
| SwOpCap | ABBIED600_Rev1_ENS_SwOpCap | Disconnector operating capability | | |

### 5.2.222 3.2.222 LN: DCSCSWI1 Name: CSWI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Pos | ABBIED600_Rev4_DPC_simple | Switch position | | status-only |
| PosDlTmms | ABBIED600_Rev1_ING_SP_1_e | Event delay | E | ABBIED600:2014 |
| PosOpn | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit opn | E | ABBIED600:2014 |
| PosCls | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit cls | E | ABBIED600:2014 |
| PosOk | ABBIED600_Rev1_SPS_simple_e | Position OK | E | ABBIED600:2014 |

### 5.2.223 3.2.223 LN: ESSXSWI1 Name: XSWI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Loc | ABBIED600_Rev1_SPS_simple | Local operation | | |
| EEName | ABBIED600_Rev4_DPL_EEName | External equipment name plate | | |
| OpCnt | ABBIED600_Rev1_INS | Operation counter | | |
| Pos | ABBIED600_Rev4_DPC_simple | Switch position | | status-only |
| BlkOpn | ABBIED600_Rev1_SPC_simple | Block opening | | status-only |

| | | | | |
|---|---|---|---|---|
| BlkCls | ABBIED600_Rev1_SPC_simple | Block closing | | status-only |
| SwTyp | ABBIED600_Rev1_ENS_SwTyp | Switch type | | |
| SwOpCap | ABBIED600_Rev1_ENS_SwOpCap | Disconnector operating capability | | |

### 5.2.224 3.2.224 LN: ESSCSWI1 Name: CSWI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Pos | ABBIED600_Rev4_DPC_simple | Switch position | | status-only |
| PosDlTmms | ABBIED600_Rev1_ING_SP_1_e | Event delay | E | ABBIED600:2014 |
| PosOpn | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit opn | E | ABBIED600:2014 |
| PosCls | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit cls | E | ABBIED600:2014 |
| PosOk | ABBIED600_Rev1_SPS_simple_e | Position OK | E | ABBIED600:2014 |

### 5.2.225 3.2.225 LN: ESSXSWI2 Name: XSWI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Loc | ABBIED600_Rev1_SPS_simple | Local operation | | |
| EEName | ABBIED600_Rev4_DPL_EEName | External equipment name plate | | |
| OpCnt | ABBIED600_Rev1_INS | Operation counter | | |
| Pos | ABBIED600_Rev4_DPC_simple | Switch position | | status-only |
| BlkOpn | ABBIED600_Rev1_SPC_simple | Block opening | | status-only |
| BlkCls | ABBIED600_Rev1_SPC_simple | Block closing | | status-only |
| SwTyp | ABBIED600_Rev1_ENS_SwTyp | Switch type | | |
| SwOpCap | ABBIED600_Rev1_ENS_SwOpCap | Disconnector operating capability | | |

### 5.2.226 3.2.226 LN: ESSCSWI2 Name: CSWI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Pos | ABBIED600_Rev4_DPC_simple | Switch position | | status-only |

| | | | | |
|---|---|---|---|---|
| PosDlTmms | ABBIED600_Rev1_ING_SP_1_e | Event delay | E | ABBIED600:2014 |
| PosOpn | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit opn | E | ABBIED600:2014 |
| PosCls | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit cls | E | ABBIED600:2014 |
| PosOk | ABBIED600_Rev1_SPS_simple_e | Position OK | E | ABBIED600:2014 |

### 5.2.227 3.2.227 LN: ESSXSWI3 Name: XSWI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Loc | ABBIED600_Rev1_SPS_simple | Local operation | | |
| EEName | ABBIED600_Rev4_DPL_EEName | External equipment name plate | | |
| OpCnt | ABBIED600_Rev1_INS | Operation counter | | |
| Pos | ABBIED600_Rev4_DPC_simple | Switch position | | status-only |
| BlkOpn | ABBIED600_Rev1_SPC_simple | Block opening | | status-only |
| BlkCls | ABBIED600_Rev1_SPC_simple | Block closing | | status-only |
| SwTyp | ABBIED600_Rev1_ENS_SwTyp | Switch type | | |
| SwOpCap | ABBIED600_Rev1_ENS_SwOpCap | Disconnector operating capability | | |

### 5.2.228 3.2.228 LN: ESSCSWI3 Name: CSWI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Pos | ABBIED600_Rev4_DPC_simple | Switch position | | status-only |
| PosDlTmms | ABBIED600_Rev1_ING_SP_1_e | Event delay | E | ABBIED600:2014 |
| PosOpn | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit opn | E | ABBIED600:2014 |
| PosCls | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit cls | E | ABBIED600:2014 |
| PosOk | ABBIED600_Rev1_SPS_simple_e | Position OK | E | ABBIED600:2014 |

### 5.2.229 3.2.229 LN: ESSXSWI4 Name: XSWI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |

| | | | | |
|---|---|---|---|---|
| Loc | ABBIED600_Rev1_SPS_simple | Local operation | | |
| EEName | ABBIED600_Rev4_DPL_EEName | External equipment name plate | | |
| OpCnt | ABBIED600_Rev1_INS | Operation counter | | |
| Pos | ABBIED600_Rev4_DPC_simple | Switch position | | status-only |
| BlkOpn | ABBIED600_Rev1_SPC_simple | Block opening | | status-only |
| BlkCls | ABBIED600_Rev1_SPC_simple | Block closing | | status-only |
| SwTyp | ABBIED600_Rev1_ENS_SwTyp | Switch type | | |
| SwOpCap | ABBIED600_Rev1_ENS_SwOpCap | Disconnector operating capability | | |

### 5.2.230 3.2.230 LN: ESSCSWI4 Name: CSWI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Pos | ABBIED600_Rev4_DPC_simple | Switch position | | status-only |
| PosDlTmms | ABBIED600_Rev1_ING_SP_1_e | Event delay | E | ABBIED600:2014 |
| PosOpn | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit opn | E | ABBIED600:2014 |
| PosCls | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit cls | E | ABBIED600:2014 |
| PosOk | ABBIED600_Rev1_SPS_simple_e | Position OK | E | ABBIED600:2014 |

### 5.2.231 3.2.231 LN: CBCSWI2 Name: CSWI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Loc | ABBIED600_Rev1_SPS | Local operation | | |
| OpCntRs | ABBIED600_Rev2_INC_control_int | Operation counter | | status-only,direct-with-normal-security |
| Pos | ABBIED600_Rev8_DPC_control | Switch, general | | status-only,direct-with-normal-security,sbo-with-enhanced-security |
| OpOpn | ABBIED600_Rev1_ACT_simple | Switch, general | | |
| OpCls | ABBIED600_Rev1_ACT_simple | Switch, general | | |

| | | | | |
|---|---|---|---|---|
| SelOpn | ABBIED600_Rev1_SPS | Selection open switch | | |
| SelCls | ABBIED600_Rev1_SPS | Selection close switch | | |
| PosDlTmms | ABBIED600_Rev1_ING_SP_1_e | Event delay | E | ABBIED600:2014 |
| PosOpn | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit opn | E | ABBIED600:2014 |
| PosCls | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit cls | E | ABBIED600:2014 |
| PosOk | ABBIED600_Rev1_SPS_simple_e | Position OK | E | ABBIED600:2014 |
| AdpPls | ABBIED600_Rev1_SPG_SP_e | Adaptive pulse | E | ABBIED600:2014 |
| OpnEna | ABBIED600_Rev1_SPS_e | OPEN_ENAD | E | ABBIED600:2014 |
| ClsEna | ABBIED600_Rev1_SPS_e | CLOSE_ENAD | E | ABBIED600:2014 |
| InSynOk | ABBIED600_Rev1_SPS_e | SYNC OK | E | ABBIED600:2014 |
| SynItlByps | ABBIED600_Rev1_SPS_e | SYNC_ITL_BYP | E | ABBIED600:2014 |

### 5.2.232 3.2.232 LN: CBXCBR2 Name: XCBR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Loc | ABBIED600_Rev1_SPS_simple | Local operation | | |
| EEName | ABBIED600_Rev4_DPL_EEName | External equipment name plate | | |
| OpCnt | ABBIED600_Rev1_INS | Operation counter | | |
| Pos | ABBIED600_Rev4_DPC_simple | Switch position | | status-only |
| BlkOpn | ABBIED600_Rev1_SPC_simple | Block opening | | status-only |
| BlkCls | ABBIED600_Rev1_SPC_simple | Block closing | | status-only |
| CBOpCap | ABBIED600_Rev2_ENS_CBOpCap | Circuit breaker operating capability | | |

### 5.2.233 3.2.233 LN: DCCILO5 Name: CILO (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| EnaOpn | ABBIED600_Rev1_SPS | Enable Open | | |
| EnaCls | ABBIED600_Rev1_SPS | Enable Close | | |
| ItlByps | ABBIED600_Rev1_SPS_e | ITL_BYPASS | E | ABBIED600:2014 |

### 5.2.234 3.2.234 LN: DCCSWI5 Name: CSWI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Loc | ABBIED600_Rev1_SPS | Local operation | | |
| OpCntRs | ABBIED600_Rev2_INC_control_int | Operation counter | | status-only,direct-with-normal-security |
| Pos | ABBIED600_Rev8_DPC_control | Switch, general | | status-only,direct-with-normal-security,sbo-with-enhanced-security |
| OpOpn | ABBIED600_Rev1_ACT_simple | Switch, general | | |
| OpCls | ABBIED600_Rev1_ACT_simple | Switch, general | | |
| PosDlTmms | ABBIED600_Rev1_ING_SP_1_e | Event delay | E | ABBIED600:2014 |
| PosOpn | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit opn | E | ABBIED600:2014 |
| PosCls | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit cls | E | ABBIED600:2014 |
| PosOk | ABBIED600_Rev1_SPS_simple_e | Position OK | E | ABBIED600:2014 |
| AdpPls | ABBIED600_Rev1_SPG_SP_e | Adaptive pulse | E | ABBIED600:2014 |
| OpnEna | ABBIED600_Rev1_SPS_e | OPEN_ENAD | E | ABBIED600:2014 |
| ClsEna | ABBIED600_Rev1_SPS_e | CLOSE_ENAD | E | ABBIED600:2014 |

### 5.2.235 3.2.235 LN: DCXSWI5 Name: XSWI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Loc | ABBIED600_Rev1_SPS_simple | Local operation | | |
| EEName | ABBIED600_Rev4_DPL_EEName | External equipment name plate | | |
| OpCnt | ABBIED600_Rev1_INS | Operation counter | | |
| Pos | ABBIED600_Rev4_DPC_simple | Switch position | | status-only |
| BlkOpn | ABBIED600_Rev1_SPC_simple | Block opening | | status-only |
| BlkCls | ABBIED600_Rev1_SPC_simple | Block closing | | status-only |
| SwTyp | ABBIED600_Rev1_ENS_SwTyp | Switch type | | |
| SwOpCap | ABBIED600_Rev1_ENS_SwOpCap | Disconnector operating capability | | |

### 5.2.236 3.2.236 LN: DCCILO6 Name: CILO (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| EnaOpn | ABBIED600_Rev1_SPS | Enable Open | | |
| EnaCls | ABBIED600_Rev1_SPS | Enable Close | | |
| ItlByps | ABBIED600_Rev1_SPS_e | ITL_BYPASS | E | ABBIED600:2014 |

### 5.2.237 3.2.237 LN: DCCSWI6 Name: CSWI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Loc | ABBIED600_Rev1_SPS | Local operation | | |
| OpCntRs | ABBIED600_Rev2_INC_control_int | Operation counter | | status-only,direct-with-normal-security |
| Pos | ABBIED600_Rev8_DPC_control | Switch, general | | status-only,direct-with-normal-security,sbo-with- |

| | | | | |
|---|---|---|---|---|
| | | | | enhanced-security |
| OpOpn | ABBIED600_Rev1_ACT_simple | Switch, general | | |
| OpCls | ABBIED600_Rev1_ACT_simple | Switch, general | | |
| PosDlTmms | ABBIED600_Rev1_ING_SP_1_e | Event delay | E | ABBIED600:2014 |
| PosOpn | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit opn | E | ABBIED600:2014 |
| PosCls | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit cls | E | ABBIED600:2014 |
| PosOk | ABBIED600_Rev1_SPS_simple_e | Position OK | E | ABBIED600:2014 |
| AdpPls | ABBIED600_Rev1_SPG_SP_e | Adaptive pulse | E | ABBIED600:2014 |
| OpnEna | ABBIED600_Rev1_SPS_e | OPEN_ENAD | E | ABBIED600:2014 |
| ClsEna | ABBIED600_Rev1_SPS_e | CLOSE_ENAD | E | ABBIED600:2014 |

### 5.2.238 3.2.238 LN: DCXSWI6 Name: XSWI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Loc | ABBIED600_Rev1_SPS_simple | Local operation | | |
| EEName | ABBIED600_Rev4_DPL_EEName | External equipment name plate | | |
| OpCnt | ABBIED600_Rev1_INS | Operation counter | | |
| Pos | ABBIED600_Rev4_DPC_simple | Switch position | | status-only |
| BlkOpn | ABBIED600_Rev1_SPC_simple | Block opening | | status-only |
| BlkCls | ABBIED600_Rev1_SPC_simple | Block closing | | status-only |
| SwTyp | ABBIED600_Rev1_ENS_SwTyp | Switch type | | |
| SwOpCap | ABBIED600_Rev1_ENS_SwOpCap | Disconnector operating capability | | |

### 5.2.239 3.2.239 LN: DCCILO7 Name: CILO (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| EnaOpn | ABBIED600_Rev1_SPS | Enable Open | | |

| | | | | |
|---|---|---|---|---|
| EnaCls | ABBIED600_Rev1_SPS | Enable Close | | |
| ItlByps | ABBIED600_Rev1_SPS_e | ITL_BYPASS | E | ABBIED600:2014 |

## 5.2.240 3.2.240 LN: DCCSWI7 Name: CSWI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Loc | ABBIED600_Rev1_SPS | Local operation | | |
| OpCntRs | ABBIED600_Rev2_INC_control_int | Operation counter | | status-only,direct-with-normal-security |
| Pos | ABBIED600_Rev8_DPC_control | Switch, general | | status-only,direct-with-normal-security,sbo-with-enhanced-security |
| OpOpn | ABBIED600_Rev1_ACT_simple | Switch, general | | |
| OpCls | ABBIED600_Rev1_ACT_simple | Switch, general | | |
| PosDlTmms | ABBIED600_Rev1_ING_SP_1_e | Event delay | E | ABBIED600:2014 |
| PosOpn | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit opn | E | ABBIED600:2014 |
| PosCls | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit cls | E | ABBIED600:2014 |
| PosOk | ABBIED600_Rev1_SPS_simple_e | Position OK | E | ABBIED600:2014 |
| AdpPls | ABBIED600_Rev1_SPG_SP_e | Adaptive pulse | E | ABBIED600:2014 |
| OpnEna | ABBIED600_Rev1_SPS_e | OPEN_ENAD | E | ABBIED600:2014 |
| ClsEna | ABBIED600_Rev1_SPS_e | CLOSE_ENAD | E | ABBIED600:2014 |

## 5.2.241 3.2.241 LN: DCXSWI7 Name: XSWI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Loc | ABBIED600_Rev1_SPS_simple | Local operation | | |

| | | | | |
|---|---|---|---|---|
| EEName | ABBIED600_Rev4_DPL_EEName | External equipment name plate | | |
| OpCnt | ABBIED600_Rev1_INS | Operation counter | | |
| Pos | ABBIED600_Rev4_DPC_simple | Switch position | | status-only |
| BlkOpn | ABBIED600_Rev1_SPC_simple | Block opening | | status-only |
| BlkCls | ABBIED600_Rev1_SPC_simple | Block closing | | status-only |
| SwTyp | ABBIED600_Rev1_ENS_SwTyp | Switch type | | |
| SwOpCap | ABBIED600_Rev1_ENS_SwOpCap | Disconnector operating capability | | |

### 5.2.242 3.2.242 LN: DCCILO8 Name: CILO (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| EnaOpn | ABBIED600_Rev1_SPS | Enable Open | | |
| EnaCls | ABBIED600_Rev1_SPS | Enable Close | | |
| ItlByps | ABBIED600_Rev1_SPS_e | ITL_BYPASS | E | ABBIED600:2014 |

### 5.2.243 3.2.243 LN: DCCSWI8 Name: CSWI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev2_ENC_Mod_OffOn_FD | Mode | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Loc | ABBIED600_Rev1_SPS | Local operation | | |
| OpCntRs | ABBIED600_Rev2_INC_control_int | Operation counter | | status-only,direct-with-normal-security |
| Pos | ABBIED600_Rev8_DPC_control | Switch, general | | status-only,direct-with-normal-security,sbo-with-enhanced-security |
| OpOpn | ABBIED600_Rev1_ACT_simple | Switch, general | | |
| OpCls | ABBIED600_Rev1_ACT_simple | Switch, general | | |

| | | | | |
|---|---|---|---|---|
| PosDlTmms | ABBIED600_Rev1_ING_SP_1_e | Event delay | E | ABBIED600:2014 |
| PosOpn | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit opn | E | ABBIED600:2014 |
| PosCls | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit cls | E | ABBIED600:2014 |
| PosOk | ABBIED600_Rev1_SPS_simple_e | Position OK | E | ABBIED600:2014 |
| AdpPls | ABBIED600_Rev1_SPG_SP_e | Adaptive pulse | E | ABBIED600:2014 |
| OpnEna | ABBIED600_Rev1_SPS_e | OPEN_ENAD | E | ABBIED600:2014 |
| ClsEna | ABBIED600_Rev1_SPS_e | CLOSE_ENAD | E | ABBIED600:2014 |

### 5.2.244 3.2.244 LN: DCXSWI8 Name: XSWI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Loc | ABBIED600_Rev1_SPS_simple | Local operation | | |
| EEName | ABBIED600_Rev4_DPL_EEName | External equipment name plate | | |
| OpCnt | ABBIED600_Rev1_INS | Operation counter | | |
| Pos | ABBIED600_Rev4_DPC_simple | Switch position | | status-only |
| BlkOpn | ABBIED600_Rev1_SPC_simple | Block opening | | status-only |
| BlkCls | ABBIED600_Rev1_SPC_simple | Block closing | | status-only |
| SwTyp | ABBIED600_Rev1_ENS_SwTyp | Switch type | | |
| SwOpCap | ABBIED600_Rev1_ENS_SwOpCap | Disconnector operating capability | | |

### 5.2.245 3.2.245 LN: DCSXSWI2 Name: XSWI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Loc | ABBIED600_Rev1_SPS_simple | Local operation | | |
| EEName | ABBIED600_Rev4_DPL_EEName | External equipment name plate | | |
| OpCnt | ABBIED600_Rev1_INS | Operation counter | | |
| Pos | ABBIED600_Rev4_DPC_simple | Switch position | | status-only |
| BlkOpn | ABBIED600_Rev1_SPC_simple | Block opening | | status-only |
| BlkCls | ABBIED600_Rev1_SPC_simple | Block closing | | status-only |

| | | | | |
|---|---|---|---|---|
| SwTyp | ABBIED600_Rev1_ENS_SwTyp | Switch type | | |
| SwOpCap | ABBIED600_Rev1_ENS_SwOpCap | Disconnector operating capability | | |

### 5.2.246 3.2.246 LN: DCSCSWI2 Name: CSWI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Pos | ABBIED600_Rev4_DPC_simple | Switch position | | status-only |
| PosDlTmms | ABBIED600_Rev1_ING_SP_1_e | Event delay | E | ABBIED600:2014 |
| PosOpn | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit opn | E | ABBIED600:2014 |
| PosCls | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit cls | E | ABBIED600:2014 |
| PosOk | ABBIED600_Rev1_SPS_simple_e | Position OK | E | ABBIED600:2014 |

### 5.2.247 3.2.247 LN: ESSXSWI5 Name: XSWI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Loc | ABBIED600_Rev1_SPS_simple | Local operation | | |
| EEName | ABBIED600_Rev4_DPL_EEName | External equipment name plate | | |
| OpCnt | ABBIED600_Rev1_INS | Operation counter | | |
| Pos | ABBIED600_Rev4_DPC_simple | Switch position | | status-only |
| BlkOpn | ABBIED600_Rev1_SPC_simple | Block opening | | status-only |
| BlkCls | ABBIED600_Rev1_SPC_simple | Block closing | | status-only |
| SwTyp | ABBIED600_Rev1_ENS_SwTyp | Switch type | | |
| SwOpCap | ABBIED600_Rev1_ENS_SwOpCap | Disconnector operating capability | | |

### 5.2.248 3.2.248 LN: ESSCSWI5 Name: CSWI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Pos | ABBIED600_Rev4_DPC_simple | Switch position | | status-only |
| PosDlTmms | ABBIED600_Rev1_ING_SP_1_e | Event delay | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| PosOpn | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit opn | E | ABBIED600:2014 |
| PosCls | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit cls | E | ABBIED600:2014 |
| PosOk | ABBIED600_Rev1_SPS_simple_e | Position OK | E | ABBIED600:2014 |

### 5.2.249 3.2.249 LN: ESSXSWI6 Name: XSWI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Loc | ABBIED600_Rev1_SPS_simple | Local operation | | |
| EEName | ABBIED600_Rev4_DPL_EEName | External equipment name plate | | |
| OpCnt | ABBIED600_Rev1_INS | Operation counter | | |
| Pos | ABBIED600_Rev4_DPC_simple | Switch position | | status-only |
| BlkOpn | ABBIED600_Rev1_SPC_simple | Block opening | | status-only |
| BlkCls | ABBIED600_Rev1_SPC_simple | Block closing | | status-only |
| SwTyp | ABBIED600_Rev1_ENS_SwTyp | Switch type | | |
| SwOpCap | ABBIED600_Rev1_ENS_SwOpCap | Disconnector operating capability | | |

### 5.2.250 3.2.250 LN: ESSCSWI6 Name: CSWI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Pos | ABBIED600_Rev4_DPC_simple | Switch position | | status-only |
| PosDlTmms | ABBIED600_Rev1_ING_SP_1_e | Event delay | E | ABBIED600:2014 |
| PosOpn | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit opn | E | ABBIED600:2014 |
| PosCls | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit cls | E | ABBIED600:2014 |
| PosOk | ABBIED600_Rev1_SPS_simple_e | Position OK | E | ABBIED600:2014 |

### 5.2.251 3.2.251 LN: ESSXSWI7 Name: XSWI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Loc | ABBIED600_Rev1_SPS_simple | Local operation | | |

| | | | | |
|---|---|---|---|---|
| EEName | ABBIED600_Rev4_DPL_EEName | External equipment name plate | | |
| OpCnt | ABBIED600_Rev1_INS | Operation counter | | |
| Pos | ABBIED600_Rev4_DPC_simple | Switch position | | status-only |
| BlkOpn | ABBIED600_Rev1_SPC_simple | Block opening | | status-only |
| BlkCls | ABBIED600_Rev1_SPC_simple | Block closing | | status-only |
| SwTyp | ABBIED600_Rev1_ENS_SwTyp | Switch type | | |
| SwOpCap | ABBIED600_Rev1_ENS_SwOpCap | Disconnector operating capability | | |

### 5.2.252 3.2.252 LN: ESSCSWI7 Name: CSWI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Pos | ABBIED600_Rev4_DPC_simple | Switch position | | status-only |
| PosDlTmms | ABBIED600_Rev1_ING_SP_1_e | Event delay | E | ABBIED600:2014 |
| PosOpn | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit opn | E | ABBIED600:2014 |
| PosCls | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit cls | E | ABBIED600:2014 |
| PosOk | ABBIED600_Rev1_SPS_simple_e | Position OK | E | ABBIED600:2014 |

### 5.2.253 3.2.253 LN: ESSXSWI8 Name: XSWI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Loc | ABBIED600_Rev1_SPS_simple | Local operation | | |
| EEName | ABBIED600_Rev4_DPL_EEName | External equipment name plate | | |
| OpCnt | ABBIED600_Rev1_INS | Operation counter | | |
| Pos | ABBIED600_Rev4_DPC_simple | Switch position | | status-only |
| BlkOpn | ABBIED600_Rev1_SPC_simple | Block opening | | status-only |
| BlkCls | ABBIED600_Rev1_SPC_simple | Block closing | | status-only |
| SwTyp | ABBIED600_Rev1_ENS_SwTyp | Switch type | | |
| SwOpCap | ABBIED600_Rev1_ENS_SwOpCap | Disconnector operating capability | | |

## 5.2.254 3.2.254 LN: ESSCSWI8 Name: CSWI (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| Pos | ABBIED600_Rev4_DPC_simple | Switch position | | status-only |
| PosDlTmms | ABBIED600_Rev1_ING_SP_1_e | Event delay | E | ABBIED600:2014 |
| PosOpn | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit opn | E | ABBIED600:2014 |
| PosCls | ABBIED600_Rev1_SPS_simple_e | Pos 1-bit cls | E | ABBIED600:2014 |
| PosOk | ABBIED600_Rev1_SPS_simple_e | Position OK | E | ABBIED600:2014 |

## 5.2.255 3.2.255 LN: RDRE1 Name: RDRE (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_On | Mode | | status-only |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| RcdTrg | ABBIED600_Rev2_SPC_control | Trig recording | | status-only,direct-with-normal-security |
| MemClr | ABBIED600_Rev2_SPC_control | Disturbance records | | status-only,direct-with-normal-security |
| RcdMade | ABBIED600_Rev1_SPS_simple | Recording made | | |
| FltNum | ABBIED600_Rev1_INS | Number of re-cordings | | |
| RcdStr | ABBIED600_Rev1_SPS_simple | Recording started | | |
| MemUsed | ABBIED600_Rev1_INS | Rec. memory used | | |
| PerTrgTms | ABBIED600_Rev1_ING_SP_time | Periodic trig time | | |
| ExclTmms | ABBIED600_Rev1_ING_SP_time | Exclusion time | | |
| RcdMod | ABBIED600_Rev1_ENG_SP_RcdMod | Operation mode | | |
| RcdDltInd | ABBIED600_Rev1_SPS_simple_e | Recording de- | E | ABBIED600:2014 |

| | | | | |
|---|---|---|---|---|
| | | leted | | |
| RmnRcdCap | ABBIED600_Rev1_INS_e | Rem. amount of rec. | E | ABBIED600:2014 |
| MemFullSt | ABBIED600_Rev1_SPS_simple_e | Memory full | E | ABBIED600:2014 |
| OvWrRcdInd | ABBIED600_Rev1_SPS_simple_e | Overwrite of rec. | E | ABBIED600:2014 |
| PreTrgLen | ABBIED600_Rev1_ING_SP_1_e | Pre-trg length | E | ABBIED600:2014 |
| RcdLen | ABBIED600_Rev1_ING_SP_1_e | Record length | E | ABBIED600:2014 |
| StoRteSel | ABBIED600_Rev2_ING_SP_EStoRte_e | Storage rate | E | ABBIED600:2014 |
| StoModPer | ABBIED600_Rev2_ENG_SP_EStoMod_e | Stor. mode periodic | E | ABBIED600:2014 |
| StoModMan | ABBIED600_Rev2_ENG_SP_EStoMod_e | Stor. mode manual | E | ABBIED600:2014 |
| PerTmRmn | ABBIED600_Rev1_INS_e | Time to trigger | E | ABBIED600:2014 |
| PerTrgInd | ABBIED600_Rev1_SPS_simple_e | Periodic triggering | E | ABBIED600:2014 |
| ManTrgInd | ABBIED600_Rev1_SPS_simple_e | Manual triggering | E | ABBIED600:2014 |

### 5.2.256 3.2.256 LN: RBDR1 Name: RBDR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_OnOff_NoBlk | Operation | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| ChTrg | ABBIED600_Rev1_SPS_simple | Channel triggered | | |
| LevMod | ABBIED600_Rev2_ENG_SP_LevMod | Level trigger mode | | |
| StoMod | ABBIED600_Rev2_ENG_SP_EStoMod_e | Storage mode | E | ABBIED600:2014 |
| ExclTmRmn | ABBIED600_Rev1_INS_e | Exclusion time rem. | E | ABBIED600:2014 |
| BinInSt | ABBIED600_Rev1_SPS_e | input | E | ABBIED600:2014 |

#### 5.2.257 3.2.257 LN: RADR1 Name: RADR (ED2)

| Attribute name | Attribute type | Explanation | M/O/E | Remarks |
|---|---|---|---|---|
| Mod | ABBIED600_Rev1_ENC_Mod_OnOff_NoBlk | Operation | | status-only,direct-with-normal-security |
| Beh | ABBIED600_Rev4_ENS_beh | Behaviour | | |
| ChTrg | ABBIED600_Rev1_SPS_simple | Channel trig-gered | | |
| HiTrgLev | ABBIED600_Rev3_ASG_SP_i | High trigger level | | |
| LoTrgLev | ABBIED600_Rev3_ASG_SP_i | Low trigger level | | |
| ChSigSel | ABBIED600_Rev5_ENG_SP_RadrChNum_e | input | E | ABBIED600:2014 |
| StoMod | ABBIED600_Rev2_ENG_SP_EStoMod_e | Storage mode | E | ABBIED600:2014 |
| ExclTmRmn | ABBIED600_Rev1_INS_e | Exclusion time rem. | E | ABBIED600:2014 |

# 6 4. Common Data Class Extensions

## 6.1 4.1 New common data classes

None

## 6.2 4.2 Extented data classes ED1

# 7 5. Enum type extensions

## 7.1 5.1 New Enum types

### 7.1.1 5.1.1 ABBIED600_Rev1_OpModSC

| Value | Description | Remarks |
|---|---|---|
| 1 | Off | Synchro check mode,Synchro check operation mode |
| 2 | Synchronous | Synchro check mode,Synchro check operation mode |
| 3 | Asynchronous | Synchro check mode,Synchro check operation mode |

### 7.1.2 5.1.2 ABBIED600_Rev2_OpModCtrl

| Value | Description | Remarks |
|---|---|---|

| | | |
|---|---|---|
| 1 | Continuous | Control mode,Selection of synchro check command or Continuous control mode |
| 2 | Command | Control mode,Selection of synchro check command or Continuous control mode |
| 3 | Autosynchronization | Control mode,Selection of synchro check command or Continuous control mode |

### 7.1.3 5.1.3 ABBIED600_Rev1_EnergSt

| Value | Description | Remarks |
|---|---|---|
| 0 | Unknown | ENERG_STATE,Energization state of Line and Bus |
| 1 | Both Live | ENERG_STATE,Energization state of Line and Bus |
| 2 | Live L, Dead B | ENERG_STATE,Energization state of Line and Bus |
| 3 | Dead L, Live B | ENERG_STATE,Energization state of Line and Bus |
| 4 | Both Dead | ENERG_STATE,Energization state of Line and Bus |

### 7.1.4 5.1.4 ABBIED600_Rev5_TestCtlKind

| Value | Description | Remarks |
|---|---|---|
| 0 | Reset | SECRSYN1,Test control for outputs |
| 1 | Activate START | SECRSYN1,Test control for outputs |
| 2 | Deactive START | SECRSYN1,Test control for outputs |
| 3 | Activate ALARM | SECRSYN1,Test control for outputs |
| 4 | Deactive ALARM | SECRSYN1,Test control for outputs |
| 5 | Activate OPEN_CB | SECRSYN1,Test control for outputs |
| 6 | Deactive OPEN_CB | SECRSYN1,Test control for outputs |
| 7 | Activate CLOSE_CB | SECRSYN1,Test control for outputs |
| 8 | Deactive CLOSE_CB | SECRSYN1,Test control for outputs |
| 9 | Activate CMD_WAIT | SECRSYN1,Test control for outputs |
| 10 | Deactive CMD_WAIT | SECRSYN1,Test control for outputs |
| 11 | Activate PROT_CRD | SECRSYN1,Test control for outputs |
| 12 | Deactive PROT_CRD | SECRSYN1,Test control for outputs |
| 13 | Activate INPRO | SECRSYN1,Test control for outputs |
| 14 | Deactive INPRO | SECRSYN1,Test control for outputs |
| 15 | Activate LOCKED | SECRSYN1,Test control for outputs |

| | | |
|---|---|---|
| 16 | Deactive LOCKED | SECRSYN1,Test control for outputs |
| 17 | Activate UNSUC_RECL | SECRSYN1,Test control for outputs |
| 18 | Deactive UNSUC_RECL | SECRSYN1,Test control for outputs |
| 19 | Activate AR_ON | SECRSYN1,Test control for outputs |
| 20 | Deactive AR_ON | SECRSYN1,Test control for outputs |
| 21 | Activate READY | SECRSYN1,Test control for outputs |
| 22 | Deactive READY | SECRSYN1,Test control for outputs |
| 23 | Activate RAISE | SECRSYN1,Test control for outputs |
| 24 | Deactive RAISE | SECRSYN1,Test control for outputs |
| 25 | Activate LOWER | SECRSYN1,Test control for outputs |
| 26 | Deactive LOWER | SECRSYN1,Test control for outputs |
| 27 | Activate PAR_FAIL | SECRSYN1,Test control for outputs |
| 28 | Deactive PAR_FAIL | SECRSYN1,Test control for outputs |
| 29 | Activate SYNC_INPRO | SECRSYN1,Test control for outputs |
| 30 | Deactive SYNC_INPRO | SECRSYN1,Test control for outputs |
| 31 | Activate SYNC_OK | SECRSYN1,Test control for outputs |
| 32 | Deactive SYNC_OK | SECRSYN1,Test control for outputs |
| 33 | Activate CL_FAIL_AL | SECRSYN1,Test control for outputs |
| 34 | Deactive CL_FAIL_AL | SECRSYN1,Test control for outputs |
| 35 | Activate CMD_FAIL_AL | SECRSYN1,Test control for outputs |
| 36 | Deactive CMD_FAIL_AL | SECRSYN1,Test control for outputs |
| 37 | Activate LLDB | SECRSYN1,Test control for outputs |
| 38 | Deactive LLDB | SECRSYN1,Test control for outputs |
| 39 | Activate LLLB | SECRSYN1,Test control for outputs |
| 40 | Deactive LLLB | SECRSYN1,Test control for outputs |
| 41 | Activate DLLB | SECRSYN1,Test control for outputs |
| 42 | Deactive DLLB | SECRSYN1,Test control for outputs |
| 43 | Activate DLDB | SECRSYN1,Test control for outputs |
| 44 | Deactive DLDB | SECRSYN1,Test control for outputs |
| 45 | Activate ACTIVE | SECRSYN1,Test control for outputs |
| 46 | Deactive ACTIVE | SECRSYN1,Test control for outputs |

| | | |
|---|---|---|
| 47 | Activate OPEN_CB1 | SECRSYN1,Test control for outputs |
| 48 | Deactive OPEN_CB1 | SECRSYN1,Test control for outputs |
| 49 | Activate CLOSE_CB1 | SECRSYN1,Test control for outputs |
| 50 | Deactive CLOSE_CB1 | SECRSYN1,Test control for outputs |
| 51 | Activate OPEN_CB2 | SECRSYN1,Test control for outputs |
| 52 | Deactive OPEN_CB2 | SECRSYN1,Test control for outputs |
| 53 | Activate CLOSE_CB2 | SECRSYN1,Test control for outputs |
| 54 | Deactive CLOSE_CB2 | SECRSYN1,Test control for outputs |
| 55 | Activate BLKD_AL | SECRSYN1,Test control for outputs |
| 56 | Deactive BLKD_AL | SECRSYN1,Test control for outputs |
| 57 | Activate AS_CONFLICT | SECRSYN1,Test control for outputs |
| 58 | Deactive AS_CONFLICT | SECRSYN1,Test control for outputs |
| 59 | Activate LBDG | SECRSYN1,Test control for outputs |
| 60 | Deactive LBDG | SECRSYN1,Test control for outputs |
| 61 | Activate LBLG | SECRSYN1,Test control for outputs |
| 62 | Deactive LBLG | SECRSYN1,Test control for outputs |
| 63 | Activate DBLG | SECRSYN1,Test control for outputs |
| 64 | Deactive DBLG | SECRSYN1,Test control for outputs |
| 65 | Activate DBDG | SECRSYN1,Test control for outputs |
| 66 | Deactive DBDG | SECRSYN1,Test control for outputs |
| 67 | Activate SYNC_INPRO | SECRSYN1,Test control for outputs |
| 68 | Deactive SYNC_INPRO | SECRSYN1,Test control for outputs |
| 69 | Activate SYNC_OK | SECRSYN1,Test control for outputs |
| 70 | Deactive SYNC_OK | SECRSYN1,Test control for outputs |
| 71 | Activate MATCH_INPRO | SECRSYN1,Test control for outputs |
| 72 | Deactive MATCH_INPRO | SECRSYN1,Test control for outputs |
| 73 | Activate MATCH_OK | SECRSYN1,Test control for outputs |
| 74 | Deactive MATCH_OK | SECRSYN1,Test control for outputs |
| 75 | Activate CL_CB_CMD | SECRSYN1,Test control for outputs |
| 76 | Deactive CL_CB_CMD | SECRSYN1,Test control for outputs |
| 77 | Activate CMD_FAIL_AL | SECRSYN1,Test control for outputs |

| | | |
|---|---|---|
| 78 | Deactive CMD_FAIL_AL | SECRSYN1,Test control for outputs |
| 79 | Activate CL_FAIL_AL | SECRSYN1,Test control for outputs |
| 80 | Deactive CL_FAIL_AL | SECRSYN1,Test control for outputs |
| 81 | Activate RAISE_U | SECRSYN1,Test control for outputs |
| 82 | Deactive RAISE_U | SECRSYN1,Test control for outputs |
| 83 | Activate LOWER_U | SECRSYN1,Test control for outputs |
| 84 | Deactive LOWER_U | SECRSYN1,Test control for outputs |
| 85 | Activate RAISE_F | SECRSYN1,Test control for outputs |
| 86 | Deactive RAISE_F | SECRSYN1,Test control for outputs |
| 87 | Activate LOWER_F | SECRSYN1,Test control for outputs |
| 88 | Deactive LOWER_F | SECRSYN1,Test control for outputs |
| 89 | Activate GOV_DROOP | SECRSYN1,Test control for outputs |
| 90 | Deactive GOV_DROOP | SECRSYN1,Test control for outputs |
| 91 | Activate AVR_DROOP | SECRSYN1,Test control for outputs |
| 92 | Deactive AVR_DROOP | SECRSYN1,Test control for outputs |

### 7.1.5 5.1.5 ABBIED600_Rev1_CtlModelKind_StatusDirect

| Value | Description | Remarks |
|---|---|---|
| 0 | status-only | |
| 1 | direct-with-normal-security | |

### 7.1.6 5.1.6 ABBIED600_Rev2_MeasMod

| Value | Description | Remarks |
|---|---|---|
| 1 | RMS | Measurement mode,Selects used measurement mode |
| 2 | DFT | Measurement mode,Selects used measurement mode |
| 3 | Peak-to-Peak | Measurement mode,Selects used measurement mode |
| 4 | P-to-P + backup | Measurement mode,Selects used measurement mode |
| 5 | Wide P-to-P | Measurement mode,Selects used measurement mode |

### 7.1.7 5.1.7 ABBIED600_Rev2_StrPhSel

| Value | Description | Remarks |
|---|---|---|
| 1 | 1 out of 3 | Num of phases,Number of phases required by limit supervision |

| | | |
|---|---|---|
| 2 | 2 out of 3 | Num of phases,Number of phases required by limit supervision |
| 3 | 3 out of 3 | Num of phases,Number of phases required by limit supervision |
| 4 | Exactly 1 of 3 | Num of phases,Number of phases required by limit supervision |
| 5 | Exactly 2 of 3 | Num of phases,Number of phases required by limit supervision |
| 6 | Exactly 3 of 3 | Num of phases,Number of phases required by limit supervision |

### 7.1.8 5.1.8 ABBIED600_Rev1_DefHzSel

| Value | Description | Remarks |
|---|---|---|
| 1 | Nominal | Def frequency Sel,Default frequency selection |
| 2 | Zero | Def frequency Sel,Default frequency selection |

### 7.1.9 5.1.9 ABBIED600_Rev1_OpModSG

| Value | Description | Remarks |
|---|---|---|
| 0 | Operator | SG operation mode,Operation mode for setting group change |
| 1 | Logic mode 1 | SG operation mode,Operation mode for setting group change |
| 2 | Logic mode 2 | SG operation mode,Operation mode for setting group change |

### 7.1.10 5.1.10 ABBIED600_Rev1_CpySG

| Value | Description | Remarks |
|---|---|---|
| 1 | Cancel | Copy group 1,Copy setting group 1 values into selected group |
| 2 | Copy 1 into 2 | Copy group 1,Copy setting group 1 values into selected group |
| 3 | Copy 1 into 3 | Copy group 1,Copy setting group 1 values into selected group |
| 4 | Copy 1 into 4 | Copy group 1,Copy setting group 1 values into selected group |
| 5 | Copy 1 into 5 | Copy group 1,Copy setting group 1 values into selected group |
| 6 | Copy 1 into 6 | Copy group 1,Copy setting group 1 values into selected group |
| 99 | Copy 1 into all | Copy group 1,Copy setting group 1 values into selected group |

### 7.1.11 5.1.11 ABBIED600_Rev1_CtlModelKind_Status

| Value | Description | Remarks |
|---|---|---|
| 0 | status-only | |

### 7.1.12 5.1.12 ABBIED600_Rev1_SetSvMaxDl

| Value | Description | Remarks |
|---|---|---|

| | | |
|---|---|---|
| 0 | 1.90 1.58 ms | SMV Max Delay,SMV Maximum allowed delay |
| 1 | 3.15 2.62 ms | SMV Max Delay,SMV Maximum allowed delay |
| 2 | 4.40 3.67 ms | SMV Max Delay,SMV Maximum allowed delay |
| 3 | 5.65 4.71 ms | SMV Max Delay,SMV Maximum allowed delay |
| 4 | 6.90 5.75 ms | SMV Max Delay,SMV Maximum allowed delay |

### 7.1.13 5.1.13 ABBIED600_Rev1_BlkMod

| Value | Description | Remarks |
|---|---|---|
| 0 | Use Global | Blocking mode,Behaviour for function BLOCK inputs |
| 1 | Freeze timer | Blocking mode,Behaviour for function BLOCK inputs |
| 2 | Block all | Blocking mode,Behaviour for function BLOCK inputs |
| 3 | Block OPERATE output | Blocking mode,Behaviour for function BLOCK inputs |

### 7.1.14 5.1.14 ABBIED600_Rev1_HzSet

| Value | Description | Remarks |
|---|---|---|
| 1 | 50Hz | Rated frequency,Rated frequency of the network |
| 2 | 60Hz | Rated frequency,Rated frequency of the network |

### 7.1.15 5.1.15 ABBIED600_Rev1_PhRotSet

| Value | Description | Remarks |
|---|---|---|
| 1 | ABC | Phase rotation,Phase rotation order |
| 2 | ACB | Phase rotation,Phase rotation order |

### 7.1.16 5.1.16 ABBIED600_Rev1_PhOrdSet

| Value | Description | Remarks |
|---|---|---|
| 1 | ABC | Phase order mode,Selection for phase connection order |
| 2 | BCA | Phase order mode,Selection for phase connection order |
| 3 | CAB | Phase order mode,Selection for phase connection order |
| 4 | ACB | Phase order mode,Selection for phase connection order |
| 5 | CBA | Phase order mode,Selection for phase connection order |
| 6 | BAC | Phase order mode,Selection for phase connection order |

### 7.1.17 5.1.17 ABBIED600_Rev1_DmdAvMod

| Value | Description | Remarks |
|---|---|---|
| 1 | Linear | A demand Av mode,Current demand calculation method |
| 2 | Logarithmic | A demand Av mode,Current demand calculation method |

### 7.1.18 5.1.18 ABBIED600_Rev1_dmdItrv

| Value | Description | Remarks |
|---|---|---|
| 0 | 1 minute | Demand interval,Interval for demand calculation |
| 1 | 5 minutes | Demand interval,Interval for demand calculation |
| 2 | 10 minutes | Demand interval,Interval for demand calculation |
| 3 | 15 minutes | Demand interval,Interval for demand calculation |
| 4 | 30 minutes | Demand interval,Interval for demand calculation |
| 5 | 60 minutes | Demand interval,Interval for demand calculation |
| 6 | 180 minutes | Demand interval,Interval for demand calculation |

### 7.1.19 5.1.19 ABBIED600_Rev1_ModRemCtl

| Value | Description | Remarks |
|---|---|---|
| 1 | Off | Remote test mode,Authority for remote activation of test mode |
| 2 | Maintenance | Remote test mode,Authority for remote activation of test mode |
| 3 | All levels | Remote test mode,Authority for remote activation of test mode |

### 7.1.20 5.1.20 ABBIED600_Rev4_Languages

| Value | Description | Remarks |
|---|---|---|
| 1 | English (us,iec) | Language selection,Language selection |
| 2 | English (us,ansi) | Language selection,Language selection |
| 3 | Chinese (cn,iec) | Language selection,Language selection |
| 4 | German (de,iec) | Language selection,Language selection |
| 5 | Swedish (se,iec) | Language selection,Language selection |
| 6 | Spanish (es,iec) | Language selection,Language selection |
| 7 | Russian (ru,iec) | Language selection,Language selection |
| 8 | Polish (pl,iec) | Language selection,Language selection |
| 9 | Portuguese (br,iec) | Language selection,Language selection |

| | | |
|---|---|---|
| 10 | Portuguese (pt,iec) | Language selection,Language selection |
| 11 | Italian (it,iec) | Language selection,Language selection |
| 12 | Finnish (fi,iec) | Language selection,Language selection |
| 13 | French (fr,iec) | Language selection,Language selection |
| 14 | Norwegian (no,iec) | Language selection,Language selection |
| 15 | Czech (cz,iec) | Language selection,Language selection |
| 16 | Arabic (sa,iec) | Language selection,Language selection |
| 17 | Farsi (ir,iec) | Language selection,Language selection |
| 18 | Korean (kr,iec) | Language selection,Language selection |
| 19 | Flam (nl,iec) | Language selection,Language selection |
| 20 | Danish (dk, iec) | Language selection,Language selection |
| 21 | Spanish (mx,ansi) | Language selection,Language selection |
| 22 | Portuguese (br,ansi) | Language selection,Language selection |
| 23 | Turkish (tr,iec) | Language selection,Language selection |
| 24 | Croatian (hr,iec) | Language selection,Language selection |
| 25 | Ukrainian (ua,iec) | Language selection,Language selection |
| 26 | Hungarian (hu,iec) | Language selection,Language selection |
| 27 | Language 1 | Language selection,Language selection |
| 28 | Language 2 | Language selection,Language selection |
| 29 | Language 3 | Language selection,Language selection |
| 30 | Language 4 | Language selection,Language selection |
| 31 | Language 5 | Language selection,Language selection |
| 32 | Language 6 | Language selection,Language selection |
| 33 | Language 7 | Language selection,Language selection |
| 34 | Language 8 | Language selection,Language selection |
| 35 | Language 9 | Language selection,Language selection |
| 36 | Language 10 | Language selection,Language selection |

### 7.1.21 5.1.21 ABBIED600_Rev4_LanguageFiles

| Value | Description | Remarks |
|---|---|---|
| 1 | en-US-IEC | Language files,Name of the language files |
| 2 | en-US-ANSI | Language files,Name of the language files |

| | | |
|---|---|---|
| 3 | zh-CN-IEC | Language files,Name of the language files |
| 4 | de-DE-IEC | Language files,Name of the language files |
| 5 | sv-SE-IEC | Language files,Name of the language files |
| 6 | es-ES-IEC | Language files,Name of the language files |
| 7 | ru-RU-IEC | Language files,Name of the language files |
| 8 | pl-PL-IEC | Language files,Name of the language files |
| 9 | pt-BR-IEC | Language files,Name of the language files |
| 10 | pt-PT-IEC | Language files,Name of the language files |
| 11 | it-IT-IEC | Language files,Name of the language files |
| 12 | fi-FI-IEC | Language files,Name of the language files |
| 13 | fr-FR-IEC | Language files,Name of the language files |
| 14 | nb-NO-IEC | Language files,Name of the language files |
| 15 | cs-CZ-IEC | Language files,Name of the language files |
| 16 | ar-SA-IEC | Language files,Name of the language files |
| 17 | fa-IR-IEC | Language files,Name of the language files |
| 18 | ko-KR-IEC | Language files,Name of the language files |
| 19 | nl-NL-IEC | Language files,Name of the language files |
| 20 | da-DK-IEC | Language files,Name of the language files |
| 21 | es-MX-ANSI | Language files,Name of the language files |
| 22 | pt-BR-ANSI | Language files,Name of the language files |
| 23 | tr-TR-IEC | Language files,Name of the language files |
| 24 | hr-HR-IEC | Language files,Name of the language files |
| 25 | uk-UA-IEC | Language files,Name of the language files |
| 26 | hu-HU-IEC | Language files,Name of the language files |
| 27 | language1 | Language files,Name of the language files |
| 28 | language2 | Language files,Name of the language files |
| 29 | language3 | Language files,Name of the language files |
| 30 | language4 | Language files,Name of the language files |
| 31 | language5 | Language files,Name of the language files |
| 32 | language6 | Language files,Name of the language files |
| 33 | language7 | Language files,Name of the language files |

| | | |
|---|---|---|
| 34 | language8 | Language files,Name of the language files |
| 35 | language9 | Language files,Name of the language files |
| 36 | language10 | Language files,Name of the language files |

### 7.1.22 5.1.22 ABBIED600_Rev1_FormatTime

| Value | Description | Remarks |
|---|---|---|
| 1 | 24H:MM:SS:MS | Time format,Time format |
| 2 | 12H:MM:SS:MS | Time format,Time format |

### 7.1.23 5.1.23 ABBIED600_Rev1_FormatDate

| Value | Description | Remarks |
|---|---|---|
| 1 | DD.MM.YYYY | Date format,Date format |
| 2 | DD/MM/YYYY | Date format,Date format |
| 3 | DD-MM-YYYY | Date format,Date format |
| 4 | MM.DD.YYYY | Date format,Date format |
| 5 | MM/DD/YYYY | Date format,Date format |
| 6 | YYYY-MM-DD | Date format,Date format |
| 7 | YYYY-DD-MM | Date format,Date format |
| 8 | YYYY/DD/MM | Date format,Date format |

### 7.1.24 5.1.24 ABBIED600_Rev1_NamingConvention

| Value | Description | Remarks |
|---|---|---|
| 1 | IEC61850 | FB naming convention,FB naming convention used in IED |
| 2 | IEC60617 | FB naming convention,FB naming convention used in IED |
| 3 | IEC-ANSI | FB naming convention,FB naming convention used in IED |
| 4 | ANSI-ANSI | FB naming convention,FB naming convention used in IED |
| 5 | CHINESE | FB naming convention,FB naming convention used in IED |

### 7.1.25 5.1.25 ABBIED600_Rev3_DefaultView

| Value | Description | Remarks |
|---|---|---|
| 1 | Measurements | Default view,LHMI default view |
| 2 | Main menu | Default view,LHMI default view |
| 3 | SLD | Default view,LHMI default view |

### 7.1.26 5.1.26 ABBIED600_Rev2_WhmiMod

| Value | Description | Remarks |
|---|---|---|
| 1 | Active read only | Web HMI mode,Web HMI functionality |
| 2 | Active | Web HMI mode,Web HMI functionality |
| 3 | Disabled | Web HMI mode,Web HMI functionality |
| 4 | Active secure only | Web HMI mode,Web HMI functionality |
| 5 | Secure station | Web HMI mode,Web HMI functionality |

### 7.1.27 5.1.27 ABBIED600_Rev1_SLDSymbolFormat

| Value | Description | Remarks |
|---|---|---|
| 1 | IEC | SLD symbol format,Single Line Diagram symbol format |
| 2 | ANSI | SLD symbol format,Single Line Diagram symbol format |

### 7.1.28 5.1.28 ABBIED600_Rev1_InUseMod

| Value | Description | Remarks |
|---|---|---|
| 1 | In use | Close delay mode,Selection for using delayed LHMI close |
| 2 | Not in use | Close delay mode,Selection for using delayed LHMI close |

### 7.1.29 5.1.29 ABBIED600_Rev1_SetVsb

| Value | Description | Remarks |
|---|---|---|
| 1 | Basic | Setting visibility,Setting visibility for HMI |
| 2 | Advanced | Setting visibility,Setting visibility for HMI |

### 7.1.30 5.1.30 ABBIED600_Rev8_AuthAcs

| Value | Description | Remarks |
|---|---|---|
| 0 | No activity | Viewer access,Viewer authority actions |
| 1 | Configuration change | Viewer access,Viewer authority actions |
| 2 | Firmware change | Viewer access,Viewer authority actions |
| 3 | Firmware change fail | Viewer access,Viewer authority actions |
| 4 | Attached to retrofit test case | Viewer access,Viewer authority actions |
| 5 | Removed from retrofit test case | Viewer access,Viewer authority actions |
| 10 | Setting group remote | Viewer access,Viewer authority actions |
| 11 | Setting group local | Viewer access,Viewer authority actions |

| | | |
|---|---|---|
| 20 | Control remote | Viewer access,Viewer authority actions |
| 21 | Control local | Viewer access,Viewer authority actions |
| 22 | Test on | Viewer access,Viewer authority actions |
| 23 | Test off | Viewer access,Viewer authority actions |
| 24 | Reset trips | Viewer access,Viewer authority actions |
| 30 | Setting commit | Viewer access,Viewer authority actions |
| 33 | Time change | Viewer access,Viewer authority actions |
| 40 | Audit log access | Viewer access,Viewer authority actions |
| 41 | Login | Viewer access,Viewer authority actions |
| 42 | Logout | Viewer access,Viewer authority actions |
| 43 | Logout timed | Viewer access,Viewer authority actions |
| 50 | Password change | Viewer access,Viewer authority actions |
| 51 | Password/id creation | Viewer access,Viewer authority actions |
| 52 | Password/id deletion | Viewer access,Viewer authority actions |
| 60 | Firmware reset | Viewer access,Viewer authority actions |
| 61 | Audit overflow | Viewer access,Viewer authority actions |
| 70 | Violation remote | Viewer access,Viewer authority actions |
| 71 | Violation local | Viewer access,Viewer authority actions |

### 7.1.31 5.1.31 ABBIED600_Rev1_AuthAcsLev

| Value | Description | Remarks |
|---|---|---|
| 1 | None | Authority logging,Authority logging level |
| 2 | Configuration change | Authority logging,Authority logging level |
| 3 | Setting group | Authority logging,Authority logging level |
| 4 | Setting group, control | Authority logging,Authority logging level |
| 5 | Settings edit | Authority logging,Authority logging level |
| 6 | All | Authority logging,Authority logging level |

### 7.1.32 5.1.32 ABBIED600_Rev1_AlmLedSt

| Value | Description | Remarks |
|---|---|---|
| 0 | None | Programmable LED 1,Status of programmable LED 1 |
| 1 | Ok | Programmable LED 1,Status of programmable LED 1 |

| | | |
|---|---|---|
| 2 | Warning | Programmable LED 1,Status of programmable LED 1 |
| 3 | Alarm | Programmable LED 1,Status of programmable LED 1 |

### 7.1.33 5.1.33 ABBIED600_Rev2_LedMode

| Value | Description | Remarks |
|---|---|---|
| 0 | Follow-S | Alarm mode,Alarm mode for programmable LED 1 |
| 1 | Follow-F | Alarm mode,Alarm mode for programmable LED 1 |
| 2 | Latched-S | Alarm mode,Alarm mode for programmable LED 1 |
| 3 | LatchedAck-F-S | Alarm mode,Alarm mode for programmable LED 1 |

### 7.1.34 5.1.34 ABBIED600_Rev2_LedColor

| Value | Description | Remarks |
|---|---|---|
| 1 | Green | Alarm colour,Colour for the alarm state of the LED |
| 2 | Red | Alarm colour,Colour for the alarm state of the LED |
| 3 | Yellow | Alarm colour,Colour for the alarm state of the LED |

### 7.1.35 5.1.35 ABBIED600_Rev5_SyncSrc

| Value | Description | Remarks |
|---|---|---|
| 0 | None | Synch source,Time synchronization source |
| 1 | SNTP | Synch source,Time synchronization source |
| 2 | Modbus | Synch source,Time synchronization source |
| 3 | IEEE 1588 | Synch source,Time synchronization source |
| 5 | IRIG-B | Synch source,Time synchronization source |
| 8 | Line differential | Synch source,Time synchronization source |
| 9 | DNP | Synch source,Time synchronization source |
| 16 | IEC60870-5-101 | Synch source,Time synchronization source |
| 17 | IEC60870-5-103 | Synch source,Time synchronization source |
| 18 | IEC60870-5-104 | Synch source,Time synchronization source |

### 7.1.36 5.1.36 ABBIED600_Rev3_TmSrc

| Value | Description | Remarks |
|---|---|---|
| 0 | Not defined | Synch source,Current time source |
| 1 | SNTP primary | Synch source,Current time source |

| | | |
|---|---|---|
| 2 | SNTP secondary | Synch source,Current time source |
| 3 | SNTP tertiary or further | Synch source,Current time source |
| 4 | IEEE 1588 master | Synch source,Current time source |
| 5 | IEEE 1588 slave | Synch source,Current time source |
| 6 | IEEE 1588 further | Synch source,Current time source |
| 7 | IRIG-B | Synch source,Current time source |
| 8 | DNP 3.0 | Synch source,Current time source |
| 9 | Modbus | Synch source,Current time source |
| 10 | SPA | Synch source,Current time source |
| 11 | LON VATS | Synch source,Current time source |
| 12 | LON other | Synch source,Current time source |
| 13 | PPS | Synch source,Current time source |
| 14 | Minute pulse | Synch source,Current time source |
| 15 | local GPS | Synch source,Current time source |
| 16 | IEC60870-5-101 | Synch source,Current time source |
| 17 | IEC60870-5-103 | Synch source,Current time source |
| 18 | IEC60870-5-104 | Synch source,Current time source |
| 19 | EXT | Synch source,Current time source |
| 20 | LHMI | Synch source,Current time source |
| 21 | Line differential | Synch source,Current time source |
| 99 | Free running, locally generated | Synch source,Current time source |

### 7.1.37 5.1.37 ABBIED600_Rev1_PTPTmSrc

| Value | Description | Remarks |
|---|---|---|
| 1 | Atomic clock | Grandmaster time Src,GrandMaster timeSource enum according to PTPv2 |
| 2 | GPS | Grandmaster time Src,GrandMaster timeSource enum according to PTPv2 |
| 3 | Terrestial radio | Grandmaster time Src,GrandMaster timeSource enum according to PTPv2 |
| 4 | PTP | Grandmaster time Src,GrandMaster timeSource enum according to PTPv2 |
| 5 | NTP | Grandmaster time Src,GrandMaster timeSource enum according to PTPv2 |
| 6 | Hand set | Grandmaster time Src,GrandMaster timeSource enum according to PTPv2 |
| 7 | Other | Grandmaster time Src,GrandMaster timeSource enum according to PTPv2 |

| | | |
|---|---|---|
| 8 | Internal oscil. | Grandmaster time Src,GrandMaster timeSource enum according to PTPv2 |

### 7.1.38 5.1.38 ABBIED600_Rev1_PTPClkAcc

| Value | Description | Remarks |
|---|---|---|
| 1 | 25 ns | Grandmaster accuracy,Grandmaster clockAccuracy enum according to PTPv2 |
| 2 | 100 ns | Grandmaster accuracy,Grandmaster clockAccuracy enum according to PTPv2 |
| 3 | 250 ns | Grandmaster accuracy,Grandmaster clockAccuracy enum according to PTPv2 |
| 4 | 1 us | Grandmaster accuracy,Grandmaster clockAccuracy enum according to PTPv2 |
| 5 | 2.5 us | Grandmaster accuracy,Grandmaster clockAccuracy enum according to PTPv2 |
| 6 | 10 us | Grandmaster accuracy,Grandmaster clockAccuracy enum according to PTPv2 |
| 7 | 25 us | Grandmaster accuracy,Grandmaster clockAccuracy enum according to PTPv2 |
| 8 | 100 us | Grandmaster accuracy,Grandmaster clockAccuracy enum according to PTPv2 |
| 9 | 250 us | Grandmaster accuracy,Grandmaster clockAccuracy enum according to PTPv2 |
| 10 | 1 ms | Grandmaster accuracy,Grandmaster clockAccuracy enum according to PTPv2 |
| 11 | 2.5 ms | Grandmaster accuracy,Grandmaster clockAccuracy enum according to PTPv2 |
| 12 | 10 ms | Grandmaster accuracy,Grandmaster clockAccuracy enum according to PTPv2 |
| 13 | 25 ms | Grandmaster accuracy,Grandmaster clockAccuracy enum according to PTPv2 |
| 14 | 100 ms | Grandmaster accuracy,Grandmaster clockAccuracy enum according to PTPv2 |
| 15 | 250 ms | Grandmaster accuracy,Grandmaster clockAccuracy enum according to PTPv2 |
| 16 | 1 s | Grandmaster accuracy,Grandmaster clockAccuracy enum according to PTPv2 |
| 17 | 10 s | Grandmaster accuracy,Grandmaster clockAccuracy enum according to PTPv2 |
| 18 | more than 10 s | Grandmaster accuracy,Grandmaster clockAccuracy enum according to PTPv2 |

### 7.1.39 5.1.39 ABBIED600_Rev1_PTPAnncMod

| Value | Description | Remarks |
|---|---|---|
| 1 | Basic IEEE1588 | PTP announce mode,PTP announce frame mode |
| 2 | Power Profile | PTP announce mode,PTP announce frame mode |

### 7.1.40 5.1.40 ABBIED600_Rev2_TestProKind

| Value | Description | Remarks |
|---|---|---|
| 0 | Reset | DPHLPDOC1,Test control for outputs |
| 1 | Activate START | DPHLPDOC1,Test control for outputs |

| | | |
|---|---|---|
| 2 | Deactive START | DPHLPDOC1,Test control for outputs |
| 3 | Activate ST_A | DPHLPDOC1,Test control for outputs |
| 4 | Deactive ST_A | DPHLPDOC1,Test control for outputs |
| 5 | Activate ST_B | DPHLPDOC1,Test control for outputs |
| 6 | Deactive ST_B | DPHLPDOC1,Test control for outputs |
| 7 | Activate ST_C | DPHLPDOC1,Test control for outputs |
| 8 | Deactive ST_C | DPHLPDOC1,Test control for outputs |
| 9 | Activate OPERATE | DPHLPDOC1,Test control for outputs |
| 10 | Deactive OPERATE | DPHLPDOC1,Test control for outputs |
| 11 | Activate OPR_A | DPHLPDOC1,Test control for outputs |
| 12 | Deactive OPR_A | DPHLPDOC1,Test control for outputs |
| 13 | Activate OPR_B | DPHLPDOC1,Test control for outputs |
| 14 | Deactive OPR_B | DPHLPDOC1,Test control for outputs |
| 15 | Activate OPR_C | DPHLPDOC1,Test control for outputs |
| 16 | Deactive OPR_C | DPHLPDOC1,Test control for outputs |
| 17 | Activate ALARM | DPHLPDOC1,Test control for outputs |
| 18 | Deactive ALARM | DPHLPDOC1,Test control for outputs |
| 19 | Activate WARNING | DPHLPDOC1,Test control for outputs |
| 20 | Deactive WARNING | DPHLPDOC1,Test control for outputs |
| 21 | Activate BLK_CLOSE | DPHLPDOC1,Test control for outputs |
| 22 | Deactive BLK_CLOSE | DPHLPDOC1,Test control for outputs |
| 23 | Activate BLK_EF | DPHLPDOC1,Test control for outputs |
| 24 | Deactive BLK_EF | DPHLPDOC1,Test control for outputs |
| 25 | Activate ARC_FLT_DET | DPHLPDOC1,Test control for outputs |
| 26 | Deactive ARC_FLT_DET | DPHLPDOC1,Test control for outputs |
| 27 | Activate STR_LS_LOC | DPHLPDOC1,Test control for outputs |
| 28 | Deactive STR_LS_LOC | DPHLPDOC1,Test control for outputs |
| 29 | Activate STR_LS_REM | DPHLPDOC1,Test control for outputs |
| 30 | Deactive STR_LS_REM | DPHLPDOC1,Test control for outputs |
| 31 | Activate OPR_LS_LOC | DPHLPDOC1,Test control for outputs |
| 32 | Deactive OPR_LS_LOC | DPHLPDOC1,Test control for outputs |

| | | |
|---|---|---|
| 33 | Activate OPR_LS_REM | DPHLPDOC1,Test control for outputs |
| 34 | Deactive OPR_LS_REM | DPHLPDOC1,Test control for outputs |
| 35 | Activate OPR_HS_LOC | DPHLPDOC1,Test control for outputs |
| 36 | Deactive OPR_HS_LOC | DPHLPDOC1,Test control for outputs |
| 37 | Activate OPR_HS_REM | DPHLPDOC1,Test control for outputs |
| 38 | Deactive OPR_HS_REM | DPHLPDOC1,Test control for outputs |
| 39 | Activate RSTD2H_LOC | DPHLPDOC1,Test control for outputs |
| 40 | Deactive RSTD2H_LOC | DPHLPDOC1,Test control for outputs |
| 41 | Activate RSTD2H_REM | DPHLPDOC1,Test control for outputs |
| 42 | Deactive RSTD2H_REM | DPHLPDOC1,Test control for outputs |
| 43 | Activate PROT_ACTIVE | DPHLPDOC1,Test control for outputs |
| 44 | Deactive PROT_ACTIVE | DPHLPDOC1,Test control for outputs |
| 45 | Activate RESTORE | DPHLPDOC1,Test control for outputs |
| 46 | Deactive RESTORE | DPHLPDOC1,Test control for outputs |
| 47 | Activate RELEASE | DPHLPDOC1,Test control for outputs |
| 48 | Deactive RELEASE | DPHLPDOC1,Test control for outputs |
| 49 | Activate OPR_IIT | DPHLPDOC1,Test control for outputs |
| 50 | Deactive OPR_IIT | DPHLPDOC1,Test control for outputs |
| 51 | Activate OPR_STALL | DPHLPDOC1,Test control for outputs |
| 52 | Deactive OPR_STALL | DPHLPDOC1,Test control for outputs |
| 53 | Activate MOT_START | DPHLPDOC1,Test control for outputs |
| 54 | Deactive MOT_START | DPHLPDOC1,Test control for outputs |
| 55 | Activate LOCK_START | DPHLPDOC1,Test control for outputs |
| 56 | Deactive LOCK_START | DPHLPDOC1,Test control for outputs |
| 57 | Activate BLK_RESTART | DPHLPDOC1,Test control for outputs |
| 58 | Deactive BLK_RESTART | DPHLPDOC1,Test control for outputs |
| 59 | Activate OPR_LS | DPHLPDOC1,Test control for outputs |
| 60 | Deactive OPR_LS | DPHLPDOC1,Test control for outputs |
| 61 | Activate OPR_HS | DPHLPDOC1,Test control for outputs |
| 62 | Deactive OPR_HS | DPHLPDOC1,Test control for outputs |
| 63 | Activate BLKD2H | DPHLPDOC1,Test control for outputs |

| | | |
|---|---|---|
| 64 | Deactive BLKD2H | DPHLPDOC1,Test control for outputs |
| 65 | Activate BLKD5H | DPHLPDOC1,Test control for outputs |
| 66 | Deactive BLKD5H | DPHLPDOC1,Test control for outputs |
| 67 | Activate BLKDWAV | DPHLPDOC1,Test control for outputs |
| 68 | Deactive BLKDWAV | DPHLPDOC1,Test control for outputs |
| 69 | Activate OPR_UFRQ | DPHLPDOC1,Test control for outputs |
| 70 | Deactive OPR_UFRQ | DPHLPDOC1,Test control for outputs |
| 71 | Activate OPR_OFRQ | DPHLPDOC1,Test control for outputs |
| 72 | Deactive OPR_OFRQ | DPHLPDOC1,Test control for outputs |
| 73 | Activate OPR_FRG | DPHLPDOC1,Test control for outputs |
| 74 | Deactive OPR_FRG | DPHLPDOC1,Test control for outputs |
| 75 | Activate ST_UFRQ | DPHLPDOC1,Test control for outputs |
| 76 | Deactive ST_UFRQ | DPHLPDOC1,Test control for outputs |
| 77 | Activate ST_OFRQ | DPHLPDOC1,Test control for outputs |
| 78 | Deactive ST_OFRQ | DPHLPDOC1,Test control for outputs |
| 79 | Activate ST_FRG | DPHLPDOC1,Test control for outputs |
| 80 | Deactive ST_FRG | DPHLPDOC1,Test control for outputs |
| 81 | Activate ST_REST | DPHLPDOC1,Test control for outputs |
| 82 | Deactive ST_REST | DPHLPDOC1,Test control for outputs |
| 83 | Activate INT_BLKD | DPHLPDOC1,Test control for outputs |
| 84 | Deactive INT_BLKD | DPHLPDOC1,Test control for outputs |
| 85 | Activate COOL_ACTIVE | DPHLPDOC1,Test control for outputs |
| 86 | Deactive COOL_ACTIVE | DPHLPDOC1,Test control for outputs |
| 87 | Activate OPERATE_Z1 | DPHLPDOC1,Test control for outputs |
| 88 | Deactive OPERATE_Z1 | DPHLPDOC1,Test control for outputs |
| 89 | Activate OPERATE_Z2 | DPHLPDOC1,Test control for outputs |
| 90 | Deactive OPERATE_Z2 | DPHLPDOC1,Test control for outputs |
| 91 | Activate OPERATE_Z3 | DPHLPDOC1,Test control for outputs |
| 92 | Deactive OPERATE_Z3 | DPHLPDOC1,Test control for outputs |
| 93 | Activate OPERATE_Z4 | DPHLPDOC1,Test control for outputs |
| 94 | Deactive OPERATE_Z4 | DPHLPDOC1,Test control for outputs |

| | | |
|---|---|---|
| 95 | Activate OPERATE_Z5 | DPHLPDOC1,Test control for outputs |
| 96 | Deactive OPERATE_Z5 | DPHLPDOC1,Test control for outputs |
| 97 | Activate START_Z1 | DPHLPDOC1,Test control for outputs |
| 98 | Deactive START_Z1 | DPHLPDOC1,Test control for outputs |
| 99 | Activate START_Z2 | DPHLPDOC1,Test control for outputs |
| 100 | Deactive START_Z2 | DPHLPDOC1,Test control for outputs |
| 101 | Activate START_Z3 | DPHLPDOC1,Test control for outputs |
| 102 | Deactive START_Z3 | DPHLPDOC1,Test control for outputs |
| 103 | Activate START_Z4 | DPHLPDOC1,Test control for outputs |
| 104 | Deactive START_Z4 | DPHLPDOC1,Test control for outputs |
| 105 | Activate START_Z5 | DPHLPDOC1,Test control for outputs |
| 106 | Deactive START_Z5 | DPHLPDOC1,Test control for outputs |
| 107 | Activate LODDSR_GFC | DPHLPDOC1,Test control for outputs |
| 108 | Deactive LODDSR_GFC | DPHLPDOC1,Test control for outputs |
| 109 | Activate START_GFC | DPHLPDOC1,Test control for outputs |
| 110 | Deactive START_GFC | DPHLPDOC1,Test control for outputs |
| 111 | Activate ST_ALARM | DPHLPDOC1,Test control for outputs |
| 112 | Deactive ST_ALARM | DPHLPDOC1,Test control for outputs |
| 113 | Activate OPR_OVLOD | DPHLPDOC1,Test control for outputs |
| 114 | Deactive OPR_OVLOD | DPHLPDOC1,Test control for outputs |
| 115 | Activate ST_OVLOD | DPHLPDOC1,Test control for outputs |
| 116 | Deactive ST_OVLOD | DPHLPDOC1,Test control for outputs |
| 117 | Activate OPR_UN_I | DPHLPDOC1,Test control for outputs |
| 118 | Deactive OPR_UN_I | DPHLPDOC1,Test control for outputs |
| 119 | Activate ST_UN_I | DPHLPDOC1,Test control for outputs |
| 120 | Deactive ST_UN_I | DPHLPDOC1,Test control for outputs |
| 121 | Activate INTR_EF | DPHLPDOC1,Test control for outputs |
| 122 | Deactive INTR_EF | DPHLPDOC1,Test control for outputs |
| 123 | Activate PEAK_IND | DPHLPDOC1,Test control for outputs |
| 124 | Deactive PEAK_IND | DPHLPDOC1,Test control for outputs |

### 7.1.41 5.1.41 ABBIED600_Rev1_AResSigSel

| Value | Description | Remarks |
|---|---|---|
| 1 | Measured Io | Io signal Sel,Selection for used Io signal |
| 2 | Calculated Io | Io signal Sel,Selection for used Io signal |

### 7.1.42 5.1.42 ABBIED600_Rev1_OpModEF

| Value | Description | Remarks |
|---|---|---|
| 1 | Phase angle | Operation mode,Operation criteria |
| 2 | IoSin | Operation mode,Operation criteria |
| 3 | IoCos | Operation mode,Operation criteria |
| 4 | Phase angle 80 | Operation mode,Operation criteria |
| 5 | Phase angle 88 | Operation mode,Operation criteria |

### 7.1.43 5.1.43 ABBIED600_Rev1_VResSigSel

| Value | Description | Remarks |
|---|---|---|
| 1 | Measured Uo | Uo signal Sel,Selection for used Uo signal |
| 2 | Calculated Uo | Uo signal Sel,Selection for used Uo signal |

### 7.1.44 5.1.44 ABBIED600_Rev2_OpModTEF

| Value | Description | Remarks |
|---|---|---|
| 1 | Intermittent EF | Operation mode,Operation criteria |
| 2 | Transient EF | Operation mode,Operation criteria |
| 3 | General EF | Operation mode,Operation criteria |
| 4 | Alarming EF | Operation mode,Operation criteria |

### 7.1.45 5.1.45 ABBIED600_Rev1_OpQtySel

| Value | Description | Remarks |
|---|---|---|
| 1 | Adaptive | Operating quantity,Operating quantity selection |
| 2 | Amplitude | Operating quantity,Operating quantity selection |

### 7.1.46 5.1.46 ABBIED600_Rev2_VSel

| Value | Description | Remarks |
|---|---|---|
| 1 | phase-to-earth | Voltage selection,Parameter to select phase or phase-to-phase voltages |

| | | |
|---|---|---|
| 2 | phase-to-phase | Voltage selection,Parameter to select phase or phase-to-phase voltages |
| 3 | pos sequence | Voltage selection,Parameter to select phase or phase-to-phase voltages |

### 7.1.47 5.1.47 ABBIED600_Rev1_TypTmRs

| Value | Description | Remarks |
|---|---|---|
| 1 | Freeze Op timer | Type of time reset,Selection of time reset |
| 2 | Decrease Op timer | Type of time reset,Selection of time reset |

### 7.1.48 5.1.48 ABBIED600_Rev1_OpModProHz

| Value | Description | Remarks |
|---|---|---|
| 1 | Freq< | Operation mode,Frequency protection operation mode selection |
| 2 | Freq> | Operation mode,Frequency protection operation mode selection |
| 3 | df/dt | Operation mode,Frequency protection operation mode selection |
| 4 | Freq< + df/dt | Operation mode,Frequency protection operation mode selection |
| 5 | Freq> + df/dt | Operation mode,Frequency protection operation mode selection |
| 6 | Freq< OR df/dt | Operation mode,Frequency protection operation mode selection |
| 7 | Freq> OR df/dt | Operation mode,Frequency protection operation mode selection |
| 8 | Freq< AND df/dt | Operation mode,Frequency protection operation mode selection |
| 9 | Freq> AND df/dt | Operation mode,Frequency protection operation mode selection |
| 10 | Freq< OR Freq> | Operation mode,Frequency protection operation mode selection |

### 7.1.49 5.1.49 ABBIED600_Rev1_buTripMode

| Value | Description | Remarks |
|---|---|---|
| 1 | 2 out of 4 | CB failure trip mode,Backup trip current check mode |
| 2 | 1 out of 3 | CB failure trip mode,Backup trip current check mode |
| 3 | 1 out of 4 | CB failure trip mode,Backup trip current check mode |

### 7.1.50 5.1.50 ABBIED600_Rev1_StrLtcMod

| Value | Description | Remarks |
|---|---|---|
| 1 | Rising edge | Start latching mode,Start reset delayed or immediately |
| 2 | Level sensitive | Start latching mode,Start reset delayed or immediately |

### 7.1.51 5.1.51 ABBIED600_Rev1_TrOutMod

| Value | Description | Remarks |
|---|---|---|
| 1 | Non-latched | Trip output mode,Select the operation mode for trip output |
| 2 | Latched | Trip output mode,Select the operation mode for trip output |
| 3 | Lockout | Trip output mode,Select the operation mode for trip output |

### 7.1.52 5.1.52 ABBIED600_Rev1_OpModComp

| Value | Description | Remarks |
|---|---|---|
| 1 | Over | Operation mode,Operation mode |
| 2 | Under | Operation mode,Operation mode |

### 7.1.53 5.1.53 ABBIED600_Rev1_AutoManMod

| Value | Description | Remarks |
|---|---|---|
| 1 | Disabled | Restore mode,Mode of operation of restore functionality |
| 2 | Auto | Restore mode,Mode of operation of restore functionality |
| 3 | Manual | Restore mode,Mode of operation of restore functionality |

### 7.1.54 5.1.54 ABBIED600_Rev1_EFAlg

| Value | Description | Remarks |
|---|---|---|
| 1 | Load compensation | EF algorithm Sel,Selection for PhE-loop calculation algorithm |
| 2 | Load modelling | EF algorithm Sel,Selection for PhE-loop calculation algorithm |

### 7.1.55 5.1.55 ABBIED600_Rev1_EFAlgASel

| Value | Description | Remarks |
|---|---|---|
| 1 | Io based | EF algorithm Cur Sel,Selection for earth-fault current model |
| 2 | I2 based | EF algorithm Cur Sel,Selection for earth-fault current model |

### 7.1.56 5.1.56 ABBIED600_Rev6_TestProRlKind

| Value | Description | Remarks |
|---|---|---|
| 0 | Reset | SCEFRFLO1,Test control for outputs |
| 1 | Activate OPERATE | SCEFRFLO1,Test control for outputs |
| 2 | Deactive OPERATE | SCEFRFLO1,Test control for outputs |
| 3 | Activate CB_FAULT_AL | SCEFRFLO1,Test control for outputs |

| | | |
|---|---|---|
| 4 | Deactive CB_FAULT_AL | SCEFRFLO1,Test control for outputs |
| 5 | Activate TRBU | SCEFRFLO1,Test control for outputs |
| 6 | Deactive TRBU | SCEFRFLO1,Test control for outputs |
| 7 | Activate TRRET | SCEFRFLO1,Test control for outputs |
| 8 | Deactive TRRET | SCEFRFLO1,Test control for outputs |
| 9 | Activate BLK2H | SCEFRFLO1,Test control for outputs |
| 10 | Deactive BLK2H | SCEFRFLO1,Test control for outputs |
| 11 | Activate BLK2H_A | SCEFRFLO1,Test control for outputs |
| 12 | Deactive BLK2H_A | SCEFRFLO1,Test control for outputs |
| 13 | Activate BLK2H_B | SCEFRFLO1,Test control for outputs |
| 14 | Deactive BLK2H_B | SCEFRFLO1,Test control for outputs |
| 15 | Activate BLK2H_C | SCEFRFLO1,Test control for outputs |
| 16 | Deactive BLK2H_C | SCEFRFLO1,Test control for outputs |
| 17 | Activate TRIP | SCEFRFLO1,Test control for outputs |
| 18 | Deactive TRIP | SCEFRFLO1,Test control for outputs |
| 19 | Activate CL_LKOUT | SCEFRFLO1,Test control for outputs |
| 20 | Deactive CL_LKOUT | SCEFRFLO1,Test control for outputs |
| 21 | Activate OPR_Z_EXTN | SCEFRFLO1,Test control for outputs |
| 22 | Deactive OPR_Z_EXTN | SCEFRFLO1,Test control for outputs |
| 23 | Activate OPR_IRV | SCEFRFLO1,Test control for outputs |
| 24 | Deactive OPR_IRV | SCEFRFLO1,Test control for outputs |
| 25 | Activate OPR_WEI | SCEFRFLO1,Test control for outputs |
| 26 | Deactive OPR_WEI | SCEFRFLO1,Test control for outputs |
| 27 | Activate ECHO | SCEFRFLO1,Test control for outputs |
| 28 | Deactive ECHO | SCEFRFLO1,Test control for outputs |
| 29 | Activate CR | SCEFRFLO1,Test control for outputs |
| 30 | Deactive CR | SCEFRFLO1,Test control for outputs |
| 31 | Activate CS | SCEFRFLO1,Test control for outputs |
| 32 | Deactive CS | SCEFRFLO1,Test control for outputs |
| 33 | Activate CRL | SCEFRFLO1,Test control for outputs |
| 34 | Deactive CRL | SCEFRFLO1,Test control for outputs |

| | | |
|---|---|---|
| 35 | Activate LCG | SCEFRFLO1,Test control for outputs |
| 36 | Deactive LCG | SCEFRFLO1,Test control for outputs |
| 37 | Activate OPR_LOSSLOAD | SCEFRFLO1,Test control for outputs |
| 38 | Deactive OPR_LOSSLOAD | SCEFRFLO1,Test control for outputs |
| 39 | Activate ALARM | SCEFRFLO1,Test control for outputs |
| 40 | Deactive ALARM | SCEFRFLO1,Test control for outputs |
| 41 | Activate CS_PRM | SCEFRFLO1,Test control for outputs |
| 42 | Deactive CS_PRM | SCEFRFLO1,Test control for outputs |
| 43 | Act. CS_BLOCKING | SCEFRFLO1,Test control for outputs |
| 44 | Deact. CS_BLOCKING | SCEFRFLO1,Test control for outputs |
| 45 | Act. CS_INTER_TR | SCEFRFLO1,Test control for outputs |
| 46 | Deact. CS_INTER_TR | SCEFRFLO1,Test control for outputs |
| 47 | Activate RELEASE | SCEFRFLO1,Test control for outputs |
| 48 | Deactive RELEASE | SCEFRFLO1,Test control for outputs |
| 49 | Activate SWING_OP | SCEFRFLO1,Test control for outputs |
| 50 | Deactive SWING_OP | SCEFRFLO1,Test control for outputs |
| 51 | Activate SWING | SCEFRFLO1,Test control for outputs |
| 52 | Deactive SWING | SCEFRFLO1,Test control for outputs |
| 53 | Activate OSB | SCEFRFLO1,Test control for outputs |
| 54 | Deactive OSB | SCEFRFLO1,Test control for outputs |
| 55 | Activate OSB_Z2 | SCEFRFLO1,Test control for outputs |
| 56 | Deactive OSB_Z2 | SCEFRFLO1,Test control for outputs |

### 7.1.57 5.1.57 ABBIED600_Rev1_PhVMeas

| Value | Description | Remarks |
|---|---|---|
| 1 | Accurate | Phase voltage Meas,Phase voltage measurement principle |
| 2 | Ph-to-ph without Uo | Phase voltage Meas,Phase voltage measurement principle |

### 7.1.58 5.1.58 ABBIED600_Rev1_RecOp

| Value | Description | Remarks |
|---|---|---|
| 1 | Off | Reclosing operation,Reclosing operation (Off, External Ctl / On) |
| 2 | External Ctl | Reclosing operation,Reclosing operation (Off, External Ctl / On) |

| | | |
|---|---|---|
| 3 | On | Reclosing operation,Reclosing operation (Off, External Ctl / On) |

### 7.1.59 5.1.59 ABBIED600_Rev1_TermPrio

| Value | Description | Remarks |
|---|---|---|
| 1 | None | Terminal priority,Terminal priority |
| 2 | Low (follower) | Terminal priority,Terminal priority |
| 3 | High (master) | Terminal priority,Terminal priority |

### 7.1.60 5.1.60 ABBIED600_Rev1_ProCrdMod

| Value | Description | Remarks |
|---|---|---|
| 1 | No condition | Protection crd mode,Protection coordination mode |
| 2 | AR inoperative | Protection crd mode,Protection coordination mode |
| 3 | CB close manual | Protection crd mode,Protection coordination mode |
| 4 | AR inop, CB man | Protection crd mode,Protection coordination mode |
| 5 | Always | Protection crd mode,Protection coordination mode |

### 7.1.61 5.1.61 ABBIED600_Rev1_AutoIniCnd

| Value | Description | Remarks |
|---|---|---|
| 1 | Not allowed | Auto initiation cnd,Auto initiation condition |
| 2 | When sync fails | Auto initiation cnd,Auto initiation condition |
| 3 | CB doesn't close | Auto initiation cnd,Auto initiation condition |
| 4 | Both | Auto initiation cnd,Auto initiation condition |

### 7.1.62 5.1.62 ABBIED600_Rev1_BusPrio

| Value | Description | Remarks |
|---|---|---|
| 1 | Bus 1 | Main bus priority,Main bus priority (1 or 2) |
| 2 | Bus 2 | Main bus priority,Main bus priority (1 or 2) |

### 7.1.63 5.1.63 ABBIED600_Rev3_TestSpvnKind

| Value | Description | Remarks |
|---|---|---|
| 0 | Reset | SSCBR1,Test control for outputs |
| 1 | Activate START | SSCBR1,Test control for outputs |
| 2 | Deactive START | SSCBR1,Test control for outputs |

| | | |
|---|---|---|
| 3 | Activate OPERATE | SSCBR1,Test control for outputs |
| 4 | Deactive OPERATE | SSCBR1,Test control for outputs |
| 5 | Activate ALARM | SSCBR1,Test control for outputs |
| 6 | Deactive ALARM | SSCBR1,Test control for outputs |
| 7 | Activate WARNING | SSCBR1,Test control for outputs |
| 8 | Deactive WARNING | SSCBR1,Test control for outputs |
| 9 | Act. TRV_T_OP_ALM | SSCBR1,Test control for outputs |
| 10 | Deact. TRV_T_OP_ALM | SSCBR1,Test control for outputs |
| 11 | Act. TRV_T_CL_ALM | SSCBR1,Test control for outputs |
| 12 | Deact. TRV_T_CL_ALM | SSCBR1,Test control for outputs |
| 13 | Act. DIFTRVTOPALM | SSCBR1,Test control for outputs |
| 14 | Deact. DIFTRVTOPALM | SSCBR1,Test control for outputs |
| 15 | Act. DIFTRVTCLALM | SSCBR1,Test control for outputs |
| 16 | Deact. DIFTRVTCLALM | SSCBR1,Test control for outputs |
| 17 | Activate SPR_CHR_ALM | SSCBR1,Test control for outputs |
| 18 | Deactive SPR_CHR_ALM | SSCBR1,Test control for outputs |
| 19 | Activate OPR_ALM | SSCBR1,Test control for outputs |
| 20 | Deactive OPR_ALM | SSCBR1,Test control for outputs |
| 21 | Activate OPR_LO | SSCBR1,Test control for outputs |
| 22 | Deactive OPR_LO | SSCBR1,Test control for outputs |
| 23 | Activate IPOW_ALM | SSCBR1,Test control for outputs |
| 24 | Deactive IPOW_ALM | SSCBR1,Test control for outputs |
| 25 | Activate IPOW_LO | SSCBR1,Test control for outputs |
| 26 | Deactive IPOW_LO | SSCBR1,Test control for outputs |
| 27 | Activate CB_LIFE_ALM | SSCBR1,Test control for outputs |
| 28 | Deactive CB_LIFE_ALM | SSCBR1,Test control for outputs |
| 29 | Activate MON_ALM | SSCBR1,Test control for outputs |
| 30 | Deactive MON_ALM | SSCBR1,Test control for outputs |
| 31 | Activate PRES_ALM | SSCBR1,Test control for outputs |
| 32 | Deactive PRES_ALM | SSCBR1,Test control for outputs |
| 33 | Activate PRES_LO | SSCBR1,Test control for outputs |

| | | |
|---|---|---|
| 34 | Deactive PRES_LO | SSCBR1,Test control for outputs |
| 35 | Activate OPENPOS | SSCBR1,Test control for outputs |
| 36 | Deactive OPENPOS | SSCBR1,Test control for outputs |
| 37 | Activate INVALIDPOS | SSCBR1,Test control for outputs |
| 38 | Deactive INVALIDPOS | SSCBR1,Test control for outputs |
| 39 | Activate CLOSEPOS | SSCBR1,Test control for outputs |
| 40 | Deactive CLOSEPOS | SSCBR1,Test control for outputs |
| 41 | Activate FAIL | SSCBR1,Test control for outputs |
| 42 | Deactive FAIL | SSCBR1,Test control for outputs |
| 43 | Activate FUSEF_3PH | SSCBR1,Test control for outputs |
| 44 | Deactive FUSEF_3PH | SSCBR1,Test control for outputs |
| 45 | Activate FUSEF_U | SSCBR1,Test control for outputs |
| 46 | Deactive FUSEF_U | SSCBR1,Test control for outputs |
| 47 | Activate FAIL_CTGRP1 | SSCBR1,Test control for outputs |
| 48 | Deactive FAIL_CTGRP1 | SSCBR1,Test control for outputs |
| 49 | Activate FAIL_CTGRP2 | SSCBR1,Test control for outputs |
| 50 | Deactive FAIL_CTGRP2 | SSCBR1,Test control for outputs |
| 51 | Activate FAIL_CTGRP3 | SSCBR1,Test control for outputs |
| 52 | Deactive FAIL_CTGRP3 | SSCBR1,Test control for outputs |
| 53 | Activate U_LIVE | SSCBR1,Test control for outputs |
| 54 | Deactive U_LIVE | SSCBR1,Test control for outputs |
| 55 | Activate U_DEAD | SSCBR1,Test control for outputs |
| 56 | Deactive U_DEAD | SSCBR1,Test control for outputs |
| 57 | Activate U_A_AB_LIVE | SSCBR1,Test control for outputs |
| 58 | Deactive U_A_AB_LIVE | SSCBR1,Test control for outputs |
| 59 | Activate U_B_BC_LIVE | SSCBR1,Test control for outputs |
| 60 | Deactive U_B_BC_LIVE | SSCBR1,Test control for outputs |
| 61 | Activate U_C_CA_LIVE | SSCBR1,Test control for outputs |
| 62 | Deactive U_C_CA_LIVE | SSCBR1,Test control for outputs |
| 63 | Activate U_A_AB_DEAD | SSCBR1,Test control for outputs |
| 64 | Deactive U_A_AB_DEAD | SSCBR1,Test control for outputs |

| | | |
|---|---|---|
| 65 | Activate U_B_BC_DEAD | SSCBR1,Test control for outputs |
| 66 | Deactive U_B_BC_DEAD | SSCBR1,Test control for outputs |
| 67 | Activate U_C_CA_DEAD | SSCBR1,Test control for outputs |
| 68 | Deactive U_C_CA_DEAD | SSCBR1,Test control for outputs |
| 69 | Activate WARNING_AUX | SSCBR1,Test control for outputs |
| 70 | Deactive WARNING_AUX | SSCBR1,Test control for outputs |
| 71 | Activate WARNING_I | SSCBR1,Test control for outputs |
| 72 | Deactive WARNING_I | SSCBR1,Test control for outputs |

### 7.1.64 5.1.64 ABBIED600_Rev1_TrvClcMod

| Value | Description | Remarks |
|---|---|---|
| 1 | From Cmd to Pos | Travel time Clc mode,Travel time calculation mode selection |
| 2 | From Pos to Pos | Travel time Clc mode,Travel time calculation mode selection |

### 7.1.65 5.1.65 ABBIED600_Rev1_DirMod2

| Value | Description | Remarks |
|---|---|---|
| 1 | Forward | Active power Dir,Direction of active power flow: Forward, Reverse |
| 2 | Reverse | Active power Dir,Direction of active power flow: Forward, Reverse |

### 7.1.66 5.1.66 ABBIED600_Rev1_PwrMeasMod

| Value | Description | Remarks |
|---|---|---|
| 1 | PhsA, PhsB, PhsC | Measurement mode,Selected measurement mode for power calculation |
| 2 | Arone | Measurement mode,Selected measurement mode for power calculation |
| 3 | Pos Seq | Measurement mode,Selected measurement mode for power calculation |
| 4 | PhsAB | Measurement mode,Selected measurement mode for power calculation |
| 5 | PhsBC | Measurement mode,Selected measurement mode for power calculation |
| 6 | PhsCA | Measurement mode,Selected measurement mode for power calculation |
| 7 | PhsA | Measurement mode,Selected measurement mode for power calculation |
| 8 | PhsB | Measurement mode,Selected measurement mode for power calculation |
| 9 | PhsC | Measurement mode,Selected measurement mode for power calculation |

### 7.1.67 5.1.67 ABBIED600_Rev1_TestOthKind

| Value | Description | Remarks |
|---|---|---|

| | | |
|---|---|---|
| 0 | Reset | DTMGAPC1,Test control for outputs |
| 1 | Activate START | DTMGAPC1,Test control for outputs |
| 2 | Deactive START | DTMGAPC1,Test control for outputs |
| 3 | Activate OPERATE | DTMGAPC1,Test control for outputs |
| 4 | Deactive OPERATE | DTMGAPC1,Test control for outputs |
| 5 | Activate SWELLST | DTMGAPC1,Test control for outputs |
| 6 | Deactive SWELLST | DTMGAPC1,Test control for outputs |
| 7 | Activate DIPST | DTMGAPC1,Test control for outputs |
| 8 | Deactive DIPST | DTMGAPC1,Test control for outputs |
| 9 | Activate INTST | DTMGAPC1,Test control for outputs |
| 10 | Deactive INTST | DTMGAPC1,Test control for outputs |
| 11 | Activate MN_UNB_AL | DTMGAPC1,Test control for outputs |
| 12 | Deactive MN_UNB_AL | DTMGAPC1,Test control for outputs |
| 13 | Activate PCT_UNB_AL | DTMGAPC1,Test control for outputs |
| 14 | Deactive PCT_UNB_AL | DTMGAPC1,Test control for outputs |
| 15 | Activate OBS_PR_ACT | DTMGAPC1,Test control for outputs |
| 16 | Deactive OBS_PR_ACT | DTMGAPC1,Test control for outputs |

### 7.1.68 5.1.68 ABBIED600_Rev1_OpModPh

| Value | Description | Remarks |
|---|---|---|
| 1 | Three Phase | Operation mode,Number of phases needed to start |
| 2 | Single Phase | Operation mode,Number of phases needed to start |

### 7.1.69 5.1.69 ABBIED600_Rev1_DmdWinMod

| Value | Description | Remarks |
|---|---|---|
| 1 | Sliding | Demand window,Demand calculation window type |
| 2 | Non-sliding | Demand window,Demand calculation window type |

### 7.1.70 5.1.70 ABBIED600_Rev2_PhSv

| Value | Description | Remarks |
|---|---|---|
| 1 | Ph A | Phase supervision,Monitored voltage phase |
| 2 | Ph B | Phase supervision,Monitored voltage phase |

| | | |
|---|---|---|
| 3 | Ph A + B | Phase supervision,Monitored voltage phase |
| 4 | Ph C | Phase supervision,Monitored voltage phase |
| 5 | Ph A + C | Phase supervision,Monitored voltage phase |
| 6 | Ph B + C | Phase supervision,Monitored voltage phase |
| 7 | Ph A + B + C | Phase supervision,Monitored voltage phase |
| 8 | Pos sequence | Phase supervision,Monitored voltage phase |

### 7.1.71 5.1.71 ABBIED600_Rev2_VVaTyp

| Value | Description | Remarks |
|---|---|---|
| 0 | No variation | Variation enable,Enable variation type |
| 1 | Swell | Variation enable,Enable variation type |
| 2 | Dip | Variation enable,Enable variation type |
| 3 | Swell + dip | Variation enable,Enable variation type |
| 4 | Interruption | Variation enable,Enable variation type |
| 5 | Swell + Int | Variation enable,Enable variation type |
| 6 | Dip + Int | Variation enable,Enable variation type |
| 7 | Swell+dip+Int | Variation enable,Enable variation type |

### 7.1.72 5.1.72 ABBIED600_Rev1_TrgModPQ

| Value | Description | Remarks |
|---|---|---|
| 1 | Single | Trigger mode,Specifies the observation period triggering mode |
| 2 | Periodic | Trigger mode,Specifies the observation period triggering mode |
| 3 | Continuous | Trigger mode,Specifies the observation period triggering mode |

### 7.1.73 5.1.73 ABBIED600_Rev1_ObsPerSel

| Value | Description | Remarks |
|---|---|---|
| 1 | 1 Hour | Obs period selection,Observation period for unbalance calculation |
| 2 | 12 Hours | Obs period selection,Observation period for unbalance calculation |
| 3 | 1 Day | Obs period selection,Observation period for unbalance calculation |
| 4 | 7 Days | Obs period selection,Observation period for unbalance calculation |
| 5 | User defined | Obs period selection,Observation period for unbalance calculation |

### 7.1.74 5.1.74 ABBIED600_Rev1_ARtgSec

| Value | Description | Remarks |
|---|---|---|
| 1 | 0.2A | Secondary current,Rated secondary current |
| 2 | 1A | Secondary current,Rated secondary current |
| 3 | 5A | Secondary current,Rated secondary current |

### 7.1.75 5.1.75 ABBIED600_Rev2_ConnType

| Value | Description | Remarks |
|---|---|---|
| 1 | Wye | VT connection,Voltage transducer measurement connection |
| 2 | Delta | VT connection,Voltage transducer measurement connection |
| 3 | U12 | VT connection,Voltage transducer measurement connection |
| 4 | UL1 | VT connection,Voltage transducer measurement connection |

### 7.1.76 5.1.76 ABBIED600_Rev1_AnInpType

| Value | Description | Remarks |
|---|---|---|
| 1 | Voltage trafo | Voltage input type,Type of the voltage input |
| 2 | Current trafo | Voltage input type,Type of the voltage input |
| 3 | CVD sensor | Voltage input type,Type of the voltage input |
| 4 | Rogowski sensor | Voltage input type,Type of the voltage input |

### 7.1.77 5.1.77 ABBIED600_Rev1_SenInMod

| Value | Description | Remarks |
|---|---|---|
| 1 | Not in use | Input mode,Analogue input mode |
| 2 | Resistance | Input mode,Analogue input mode |
| 5 | 0..20mA | Input mode,Analogue input mode |
| 10 | Pt100 | Input mode,Analogue input mode |
| 11 | Pt250 | Input mode,Analogue input mode |
| 20 | Ni100 | Input mode,Analogue input mode |
| 21 | Ni120 | Input mode,Analogue input mode |
| 22 | Ni250 | Input mode,Analogue input mode |
| 30 | Cu10 | Input mode,Analogue input mode |

### 7.1.78 5.1.78 ABBIED600_Rev1_FibMod

| Value | Description | Remarks |
|---|---|---|
| 0 | No fiber | Fiber mode,Fiber mode |
| 2 | Fiber optic | Fiber mode,Fiber mode |

### 7.1.79 5.1.79 ABBIED600_Rev1_SerMod

| Value | Description | Remarks |
|---|---|---|
| 1 | RS485 2Wire | Serial mode,Serial mode |
| 2 | RS485 4Wire | Serial mode,Serial mode |
| 3 | RS232 no handshake | Serial mode,Serial mode |
| 4 | RS232 with handshake | Serial mode,Serial mode |

### 7.1.80 5.1.80 ABBIED600_Rev1_BaudRate

| Value | Description | Remarks |
|---|---|---|
| 1 | 300 | Baudrate,Baudrate |
| 2 | 600 | Baudrate,Baudrate |
| 3 | 1200 | Baudrate,Baudrate |
| 4 | 2400 | Baudrate,Baudrate |
| 5 | 4800 | Baudrate,Baudrate |
| 6 | 9600 | Baudrate,Baudrate |
| 7 | 19200 | Baudrate,Baudrate |
| 8 | 38400 | Baudrate,Baudrate |
| 9 | 57600 | Baudrate,Baudrate |
| 10 | 115200 | Baudrate,Baudrate |

### 7.1.81 5.1.81 ABBIED600_Rev2_EthPortMod

| Value | Description | Remarks |
|---|---|---|
| 0 | Off | Port 1 mode,Ethernet port mode |
| 1 | On | Port 1 mode,Ethernet port mode |

### 7.1.82 5.1.82 ABBIED600_Rev3_CmdRsp

| Value | Description | Remarks |
|---|---|---|
| 0 | No commands | Command response,Latest command response |

| | | |
|---|---|---|
| 1 | Select open | Command response,Latest command response |
| 2 | Select close | Command response,Latest command response |
| 3 | Operate open | Command response,Latest command response |
| 4 | Operate close | Command response,Latest command response |
| 5 | Direct open | Command response,Latest command response |
| 6 | Direct close | Command response,Latest command response |
| 7 | Cancel | Command response,Latest command response |
| 8 | Position reached | Command response,Latest command response |
| 9 | Position timeout | Command response,Latest command response |
| 10 | Object status only | Command response,Latest command response |
| 11 | Object direct | Command response,Latest command response |
| 12 | Object select | Command response,Latest command response |
| 13 | RL local allowed | Command response,Latest command response |
| 14 | RL remote allowed | Command response,Latest command response |
| 15 | RL off | Command response,Latest command response |
| 16 | Function off | Command response,Latest command response |
| 17 | Function blocked | Command response,Latest command response |
| 18 | Command progress | Command response,Latest command response |
| 19 | Select timeout | Command response,Latest command response |
| 20 | Missing authority | Command response,Latest command response |
| 21 | Close not enabled | Command response,Latest command response |
| 22 | Open not enabled | Command response,Latest command response |
| 23 | Internal fault | Command response,Latest command response |
| 24 | Already close | Command response,Latest command response |
| 25 | Wrong client | Command response,Latest command response |
| 26 | RL station allowed | Command response,Latest command response |
| 27 | RL change | Command response,Latest command response |
| 28 | Abortion by trip | Command response,Latest command response |

### 7.1.83 5.1.83 ABBIED600_Rev3_LocKeyHMI

| Value | Description | Remarks |
|---|---|---|
| 0 | Off | LR state,LR state monitoring |

| | | |
|---|---|---|
| 1 | Local | LR state,LR state monitoring |
| 2 | Remote | LR state,LR state monitoring |
| 3 | Station | LR state,LR state monitoring |
| 4 | L+R | LR state,LR state monitoring |
| 5 | L+S | LR state,LR state monitoring |
| 6 | L+S+R | LR state,LR state monitoring |
| 7 | S+R | LR state,LR state monitoring |

### 7.1.84 5.1.84 ABBIED600_Rev1_LocRemMod

| Value | Description | Remarks |
|---|---|---|
| 1 | LR key | LR control,LR control through LR key or binary input |
| 2 | Binary input | LR control,LR control through LR key or binary input |

### 7.1.85 5.1.85 ABBIED600_Rev1_StaLevSet

| Value | Description | Remarks |
|---|---|---|
| 1 | L,R | Station authority,Control command originator category usage |
| 2 | L,S,R | Station authority,Control command originator category usage |
| 3 | L,R,L+R | Station authority,Control command originator category usage |
| 4 | L,S,S+R,L+S,L+S+R | Station authority,Control command originator category usage |

### 7.1.86 5.1.86 ABBIED600_Rev1_EStoRte

| Value | Description | Remarks |
|---|---|---|
| 8 | 8 samples / cycle | Storage rate,Storage rate for waveform recordings in samples per cycle |
| 16 | 16 samples / cycle | Storage rate,Storage rate for waveform recordings in samples per cycle |
| 32 | 32 samples / cycle | Storage rate,Storage rate for waveform recordings in samples per cycle |

### 7.1.87 5.1.87 ABBIED600_Rev1_EStoMod

| Value | Description | Remarks |
|---|---|---|
| 0 | Waveform | Stor. mode periodic,Storage mode selection (waveform / trend) for periodic trigger |
| 1 | Trend / cycle | Stor. mode periodic,Storage mode selection (waveform / trend) for periodic trigger |

### 7.1.88 5.1.88 ABBIED600_Rev4_RadrChNum

| Value | Description | Remarks |
|---|---|---|

| | | |
|---|---|---|
| 0 | Disabled | Channel selection,Select a signal, which will be recorded by this channel |
| 1 | Io | Channel selection,Select a signal, which will be recorded by this channel |
| 2 | IL1 | Channel selection,Select a signal, which will be recorded by this channel |
| 3 | IL2 | Channel selection,Select a signal, which will be recorded by this channel |
| 4 | IL3 | Channel selection,Select a signal, which will be recorded by this channel |
| 5 | IoB | Channel selection,Select a signal, which will be recorded by this channel |
| 6 | IL1B | Channel selection,Select a signal, which will be recorded by this channel |
| 7 | IL2B | Channel selection,Select a signal, which will be recorded by this channel |
| 8 | IL3B | Channel selection,Select a signal, which will be recorded by this channel |
| 9 | Uo | Channel selection,Select a signal, which will be recorded by this channel |
| 10 | U1 | Channel selection,Select a signal, which will be recorded by this channel |
| 11 | U2 | Channel selection,Select a signal, which will be recorded by this channel |
| 12 | U3 | Channel selection,Select a signal, which will be recorded by this channel |
| 13 | UoB | Channel selection,Select a signal, which will be recorded by this channel |
| 14 | U1B | Channel selection,Select a signal, which will be recorded by this channel |
| 15 | U2B | Channel selection,Select a signal, which will be recorded by this channel |
| 16 | U3B | Channel selection,Select a signal, which will be recorded by this channel |
| 17 | CIo | Channel selection,Select a signal, which will be recorded by this channel |
| 18 | SI1 | Channel selection,Select a signal, which will be recorded by this channel |
| 19 | SI2 | Channel selection,Select a signal, which will be recorded by this channel |
| 20 | SU0 | Channel selection,Select a signal, which will be recorded by this channel |
| 21 | SU1 | Channel selection,Select a signal, which will be recorded by this channel |
| 22 | SU2 | Channel selection,Select a signal, which will be recorded by this channel |
| 23 | CIoB | Channel selection,Select a signal, which will be recorded by this channel |
| 24 | SI1B | Channel selection,Select a signal, which will be recorded by this channel |
| 25 | SI2B | Channel selection,Select a signal, which will be recorded by this channel |
| 26 | SU0B | Channel selection,Select a signal, which will be recorded by this channel |
| 27 | SU1B | Channel selection,Select a signal, which will be recorded by this channel |
| 28 | SU2B | Channel selection,Select a signal, which will be recorded by this channel |
| 29 | U12 | Channel selection,Select a signal, which will be recorded by this channel |
| 30 | U23 | Channel selection,Select a signal, which will be recorded by this channel |

| | | |
|---|---|---|
| 31 | U31 | Channel selection,Select a signal, which will be recorded by this channel |
| 32 | UL1 | Channel selection,Select a signal, which will be recorded by this channel |
| 33 | UL2 | Channel selection,Select a signal, which will be recorded by this channel |
| 34 | UL3 | Channel selection,Select a signal, which will be recorded by this channel |
| 35 | U12B | Channel selection,Select a signal, which will be recorded by this channel |
| 36 | U23B | Channel selection,Select a signal, which will be recorded by this channel |
| 37 | U31B | Channel selection,Select a signal, which will be recorded by this channel |
| 38 | UL1B | Channel selection,Select a signal, which will be recorded by this channel |
| 39 | UL2B | Channel selection,Select a signal, which will be recorded by this channel |
| 40 | UL3B | Channel selection,Select a signal, which will be recorded by this channel |
| 41 | U1T | Channel selection,Select a signal, which will be recorded by this channel |
| 42 | U2T | Channel selection,Select a signal, which will be recorded by this channel |
| 43 | U3T | Channel selection,Select a signal, which will be recorded by this channel |
| 44 | PD | Channel selection,Select a signal, which will be recorded by this channel |
| 45 | IoC | Channel selection,Select a signal, which will be recorded by this channel |
| 46 | IL1C | Channel selection,Select a signal, which will be recorded by this channel |
| 47 | IL2C | Channel selection,Select a signal, which will be recorded by this channel |
| 48 | IL3C | Channel selection,Select a signal, which will be recorded by this channel |
| 49 | CIoC | Channel selection,Select a signal, which will be recorded by this channel |
| 50 | SI1C | Channel selection,Select a signal, which will be recorded by this channel |
| 51 | SI2C | Channel selection,Select a signal, which will be recorded by this channel |
| 52 | U1C | Channel selection,Select a signal, which will be recorded by this channel |
| 53 | U1D | Channel selection,Select a signal, which will be recorded by this channel |

## 7.2 5.2 Extented Enum types

### 7.2.1 5.2.1 ABBIED600_Rev1_HealthKind

| Value | Description | Remarks |
|---|---|---|
| -2 | Waiting | |
| -1 | Test | |
| 1 | Ok | |
| 2 | Warning | |

| | | |
|---|---|---|
| 3 | Alarm | |

### 7.2.2 5.2.2 ABBIED600_Rev1_LiveDeadModeKind

| Value | Description | Remarks |
|---|---|---|
| -1 | Off | Live dead mode,Energizing check mode |
| 1 | Dead Line, Dead Bus | Live dead mode,Energizing check mode,Both Dead |
| 2 | Live Line, Dead Bus | Live dead mode,Energizing check mode,Live L, Dead B |
| 3 | Dead Line, Live Bus | Live dead mode,Energizing check mode,Dead L, Live B |
| 4 | Dead Line, Dead Bus OR Live Line, Dead Bus | Live dead mode,Energizing check mode,Dead Bus, L Any |
| 5 | Dead Line, Dead Bus OR Dead Line, Live Bus | Live dead mode,Energizing check mode,Dead L, Bus Any |
| 6 | Live Line, Dead Bus OR Dead Line, Live Bus | Live dead mode,Energizing check mode,One Live, Dead |
| 7 | Dead Line, Dead Bus OR Live Line, Dead Bus OR Dead Line, Live Bus | Live dead mode,Energizing check mode,Not Both Live |

### 7.2.3 5.2.3 ABBIED600_Rev1_PhaseFaultDirectionKind

| Value | Description | Remarks |
|---|---|---|
| -1 | both | |
| 0 | unknown | |
| 1 | forward | |
| 2 | backward | |

### 7.2.4 5.2.4 ABBIED600_Rev20_TstOutKind

| Value | Description | Remarks |
|---|---|---|
| 0 | Reset | PHIPTOC1,Test control for outputs |
| 1 | Activate START | PHIPTOC1,Test control for outputs |
| 2 | Deactive START | PHIPTOC1,Test control for outputs |
| 3 | Activate ST_A | PHIPTOC1,Test control for outputs |
| 4 | Deactive ST_A | PHIPTOC1,Test control for outputs |

| | | |
|---|---|---|
| 5 | Activate ST_B | PHIPTOC1,Test control for outputs |
| 6 | Deactive ST_B | PHIPTOC1,Test control for outputs |
| 7 | Activate ST_C | PHIPTOC1,Test control for outputs |
| 8 | Deactive ST_C | PHIPTOC1,Test control for outputs |
| 9 | Activate OPERATE | PHIPTOC1,Test control for outputs |
| 10 | Deactive OPERATE | PHIPTOC1,Test control for outputs |
| 11 | Activate OPR_A | PHIPTOC1,Test control for outputs |
| 12 | Deactive OPR_A | PHIPTOC1,Test control for outputs |
| 13 | Activate OPR_B | PHIPTOC1,Test control for outputs |
| 14 | Deactive OPR_B | PHIPTOC1,Test control for outputs |
| 15 | Activate OPR_C | PHIPTOC1,Test control for outputs |
| 16 | Deactive OPR_C | PHIPTOC1,Test control for outputs |
| 17 | Activate ALARM | PHIPTOC1,Test control for outputs |
| 18 | Deactive ALARM | PHIPTOC1,Test control for outputs |
| 19 | Activate WARNING | PHIPTOC1,Test control for outputs |
| 20 | Deactive WARNING | PHIPTOC1,Test control for outputs |
| 21 | Activate BLK_CLOSE | PHIPTOC1,Test control for outputs |
| 22 | Deactive BLK_CLOSE | PHIPTOC1,Test control for outputs |
| 23 | reserved1 | PHIPTOC1,Test control for outputs |
| 24 | reserved2 | PHIPTOC1,Test control for outputs |
| 25 | Activate CB_FAULT_AL | PHIPTOC1,Test control for outputs |
| 26 | Deactive CB_FAULT_AL | PHIPTOC1,Test control for outputs |
| 27 | Activate TRBU | PHIPTOC1,Test control for outputs |
| 28 | Deactive TRBU | PHIPTOC1,Test control for outputs |
| 29 | Activate TRRET | PHIPTOC1,Test control for outputs |
| 30 | Deactive TRRET | PHIPTOC1,Test control for outputs |
| 31 | Activate BLK_EF | PHIPTOC1,Test control for outputs |
| 32 | Deactive BLK_EF | PHIPTOC1,Test control for outputs |
| 33 | Activate ARC_FLT_DET | PHIPTOC1,Test control for outputs |
| 34 | Deactive ARC_FLT_DET | PHIPTOC1,Test control for outputs |
| 35 | Activate BLK2H | PHIPTOC1,Test control for outputs |

| | | |
|---|---|---|
| 36 | Deactive BLK2H | PHIPTOC1,Test control for outputs |
| 37 | Activate BLK2H_A | PHIPTOC1,Test control for outputs |
| 38 | Deactive BLK2H_A | PHIPTOC1,Test control for outputs |
| 39 | Activate BLK2H_B | PHIPTOC1,Test control for outputs |
| 40 | Deactive BLK2H_B | PHIPTOC1,Test control for outputs |
| 41 | Activate BLK2H_C | PHIPTOC1,Test control for outputs |
| 42 | Deactive BLK2H_C | PHIPTOC1,Test control for outputs |
| 43 | Activate TRIP | PHIPTOC1,Test control for outputs |
| 44 | Deactive TRIP | PHIPTOC1,Test control for outputs |
| 45 | Activate CL_LKOUT | PHIPTOC1,Test control for outputs |
| 46 | Deactive CL_LKOUT | PHIPTOC1,Test control for outputs |
| 47 | Activate OPEN_CB | PHIPTOC1,Test control for outputs |
| 48 | Deactive OPEN_CB | PHIPTOC1,Test control for outputs |
| 49 | Activate CLOSE_CB | PHIPTOC1,Test control for outputs |
| 50 | Deactive CLOSE_CB | PHIPTOC1,Test control for outputs |
| 51 | Activate CMD_WAIT | PHIPTOC1,Test control for outputs |
| 52 | Deactive CMD_WAIT | PHIPTOC1,Test control for outputs |
| 53 | Activate PROT_CRD | PHIPTOC1,Test control for outputs |
| 54 | Deactive PROT_CRD | PHIPTOC1,Test control for outputs |
| 55 | Activate INPRO | PHIPTOC1,Test control for outputs |
| 56 | Deactive INPRO | PHIPTOC1,Test control for outputs |
| 57 | Activate LOCKED | PHIPTOC1,Test control for outputs |
| 58 | Deactive LOCKED | PHIPTOC1,Test control for outputs |
| 59 | Activate UNSUC_RECL | PHIPTOC1,Test control for outputs |
| 60 | Deactive UNSUC_RECL | PHIPTOC1,Test control for outputs |
| 61 | Activate AR_ON | PHIPTOC1,Test control for outputs |
| 62 | Deactive AR_ON | PHIPTOC1,Test control for outputs |
| 63 | Act. TRV_T_OP_ALM | PHIPTOC1,Test control for outputs |
| 64 | Deact. TRV_T_OP_ALM | PHIPTOC1,Test control for outputs |
| 65 | Act. TRV_T_CL_ALM | PHIPTOC1,Test control for outputs |
| 66 | Deact. TRV_T_CL_ALM | PHIPTOC1,Test control for outputs |

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|---|---|---|
| 67 | Act. DIFTRVTOPALM | PHIPTOC1,Test control for outputs |
| 68 | Deact. DIFTRVTOPALM | PHIPTOC1,Test control for outputs |
| 69 | Act. DIFTRVTCLALM | PHIPTOC1,Test control for outputs |
| 70 | Deact. DIFTRVTCLALM | PHIPTOC1,Test control for outputs |
| 71 | Activate SPR_CHR_ALM | PHIPTOC1,Test control for outputs |
| 72 | Deactive SPR_CHR_ALM | PHIPTOC1,Test control for outputs |
| 73 | Activate OPR_ALM | PHIPTOC1,Test control for outputs |
| 74 | Deactive OPR_ALM | PHIPTOC1,Test control for outputs |
| 75 | Activate OPR_LO | PHIPTOC1,Test control for outputs |
| 76 | Deactive OPR_LO | PHIPTOC1,Test control for outputs |
| 77 | Activate IPOW_ALM | PHIPTOC1,Test control for outputs |
| 78 | Deactive IPOW_ALM | PHIPTOC1,Test control for outputs |
| 79 | Activate IPOW_LO | PHIPTOC1,Test control for outputs |
| 80 | Deactive IPOW_LO | PHIPTOC1,Test control for outputs |
| 81 | Activate CB_LIFE_ALM | PHIPTOC1,Test control for outputs |
| 82 | Deactive CB_LIFE_ALM | PHIPTOC1,Test control for outputs |
| 83 | Activate MON_ALM | PHIPTOC1,Test control for outputs |
| 84 | Deactive MON_ALM | PHIPTOC1,Test control for outputs |
| 85 | Activate PRES_ALM | PHIPTOC1,Test control for outputs |
| 86 | Deactive PRES_ALM | PHIPTOC1,Test control for outputs |
| 87 | Activate PRES_LO | PHIPTOC1,Test control for outputs |
| 88 | Deactive PRES_LO | PHIPTOC1,Test control for outputs |
| 89 | Activate OPENPOS | PHIPTOC1,Test control for outputs |
| 90 | Deactive OPENPOS | PHIPTOC1,Test control for outputs |
| 91 | Activate INVALIDPOS | PHIPTOC1,Test control for outputs |
| 92 | Deactive INVALIDPOS | PHIPTOC1,Test control for outputs |
| 93 | Activate CLOSEPOS | PHIPTOC1,Test control for outputs |
| 94 | Deactive CLOSEPOS | PHIPTOC1,Test control for outputs |
| 95 | Activate STR_LS_LOC | PHIPTOC1,Test control for outputs |
| 96 | Deactive STR_LS_LOC | PHIPTOC1,Test control for outputs |
| 97 | Activate STR_LS_REM | PHIPTOC1,Test control for outputs |

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|---|---|---|
| 98 | Deactive STR_LS_REM | PHIPTOC1,Test control for outputs |
| 99 | Activate OPR_LS_LOC | PHIPTOC1,Test control for outputs |
| 100 | Deactive OPR_LS_LOC | PHIPTOC1,Test control for outputs |
| 101 | Activate OPR_LS_REM | PHIPTOC1,Test control for outputs |
| 102 | Deactive OPR_LS_REM | PHIPTOC1,Test control for outputs |
| 103 | Activate OPR_HS_LOC | PHIPTOC1,Test control for outputs |
| 104 | Deactive OPR_HS_LOC | PHIPTOC1,Test control for outputs |
| 105 | Activate OPR_HS_REM | PHIPTOC1,Test control for outputs |
| 106 | Deactive OPR_HS_REM | PHIPTOC1,Test control for outputs |
| 107 | Activate RSTD2H_LOC | PHIPTOC1,Test control for outputs |
| 108 | Deactive RSTD2H_LOC | PHIPTOC1,Test control for outputs |
| 109 | Activate RSTD2H_REM | PHIPTOC1,Test control for outputs |
| 110 | Deactive RSTD2H_REM | PHIPTOC1,Test control for outputs |
| 111 | Activate PROT_ACTIVE | PHIPTOC1,Test control for outputs |
| 112 | Deactive PROT_ACTIVE | PHIPTOC1,Test control for outputs |
| 113 | Activate FAIL | PHIPTOC1,Test control for outputs |
| 114 | Deactive FAIL | PHIPTOC1,Test control for outputs |
| 115 | Activate RESTORE | PHIPTOC1,Test control for outputs |
| 116 | Deactive RESTORE | PHIPTOC1,Test control for outputs |
| 117 | Activate FUSEF_3PH | PHIPTOC1,Test control for outputs |
| 118 | Deactive FUSEF_3PH | PHIPTOC1,Test control for outputs |
| 119 | Activate FUSEF_U | PHIPTOC1,Test control for outputs |
| 120 | Deactive FUSEF_U | PHIPTOC1,Test control for outputs |
| 121 | Activate READY | PHIPTOC1,Test control for outputs |
| 122 | Deactive READY | PHIPTOC1,Test control for outputs |
| 123 | Activate RELEASE | PHIPTOC1,Test control for outputs |
| 124 | Deactive RELEASE | PHIPTOC1,Test control for outputs |
| 125 | Activate OPR_Z_EXTN | PHIPTOC1,Test control for outputs |
| 126 | Deactive OPR_Z_EXTN | PHIPTOC1,Test control for outputs |
| -1 | Activate OPR_IIT | PHIPTOC1,Test control for outputs |
| -2 | Deactive OPR_IIT | PHIPTOC1,Test control for outputs |

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|---|---|---|
| -3 | Activate OPR_STALL | PHIPTOC1,Test control for outputs |
| -4 | Deactive OPR_STALL | PHIPTOC1,Test control for outputs |
| -5 | Activate MOT_START | PHIPTOC1,Test control for outputs |
| -6 | Deactive MOT_START | PHIPTOC1,Test control for outputs |
| -7 | Activate LOCK_START | PHIPTOC1,Test control for outputs |
| -8 | Deactive LOCK_START | PHIPTOC1,Test control for outputs |
| -9 | Activate BLK_RESTART | PHIPTOC1,Test control for outputs |
| -10 | Deactive BLK_RESTART | PHIPTOC1,Test control for outputs |
| -11 | Activate OPR_LS | PHIPTOC1,Test control for outputs |
| -12 | Deactive OPR_LS | PHIPTOC1,Test control for outputs |
| -13 | Activate OPR_HS | PHIPTOC1,Test control for outputs |
| -14 | Deactive OPR_HS | PHIPTOC1,Test control for outputs |
| -15 | Activate BLKD2H | PHIPTOC1,Test control for outputs |
| -16 | Deactive BLKD2H | PHIPTOC1,Test control for outputs |
| -17 | Activate BLKD5H | PHIPTOC1,Test control for outputs |
| -18 | Deactive BLKD5H | PHIPTOC1,Test control for outputs |
| -19 | Activate BLKDWAV | PHIPTOC1,Test control for outputs |
| -20 | Deactive BLKDWAV | PHIPTOC1,Test control for outputs |
| -21 | Activate OPR_UFRQ | PHIPTOC1,Test control for outputs |
| -22 | Deactive OPR_UFRQ | PHIPTOC1,Test control for outputs |
| -23 | Activate OPR_OFRQ | PHIPTOC1,Test control for outputs |
| -24 | Deactive OPR_OFRQ | PHIPTOC1,Test control for outputs |
| -25 | Activate OPR_FRG | PHIPTOC1,Test control for outputs |
| -26 | Deactive OPR_FRG | PHIPTOC1,Test control for outputs |
| -27 | Activate ST_UFRQ | PHIPTOC1,Test control for outputs |
| -28 | Deactive ST_UFRQ | PHIPTOC1,Test control for outputs |
| -29 | Activate ST_OFRQ | PHIPTOC1,Test control for outputs |
| -30 | Deactive ST_OFRQ | PHIPTOC1,Test control for outputs |
| -31 | Activate ST_FRG | PHIPTOC1,Test control for outputs |
| -32 | Deactive ST_FRG | PHIPTOC1,Test control for outputs |
| -33 | Activate RAISE | PHIPTOC1,Test control for outputs |

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|---|---|---|
| -34 | Deactive RAISE | PHIPTOC1,Test control for outputs |
| -35 | Activate LOWER | PHIPTOC1,Test control for outputs |
| -36 | Deactive LOWER | PHIPTOC1,Test control for outputs |
| -37 | Activate PAR_FAIL | PHIPTOC1,Test control for outputs |
| -38 | Deactive PAR_FAIL | PHIPTOC1,Test control for outputs |
| -39 | Activate SYNC_INPRO | PHIPTOC1,Test control for outputs |
| -40 | Deactive SYNC_INPRO | PHIPTOC1,Test control for outputs |
| -41 | Activate SYNC_OK | PHIPTOC1,Test control for outputs |
| -42 | Deactive SYNC_OK | PHIPTOC1,Test control for outputs |
| -43 | Activate CL_FAIL_AL | PHIPTOC1,Test control for outputs |
| -44 | Deactive CL_FAIL_AL | PHIPTOC1,Test control for outputs |
| -45 | Activate CMD_FAIL_AL | PHIPTOC1,Test control for outputs |
| -46 | Deactive CMD_FAIL_AL | PHIPTOC1,Test control for outputs |
| -47 | Activate LLDB | PHIPTOC1,Test control for outputs |
| -48 | Deactive LLDB | PHIPTOC1,Test control for outputs |
| -49 | Activate LLLB | PHIPTOC1,Test control for outputs |
| -50 | Deactive LLLB | PHIPTOC1,Test control for outputs |
| -51 | Activate DLLB | PHIPTOC1,Test control for outputs |
| -52 | Deactive DLLB | PHIPTOC1,Test control for outputs |
| -53 | Activate DLDB | PHIPTOC1,Test control for outputs |
| -54 | Deactive DLDB | PHIPTOC1,Test control for outputs |
| -55 | Activate ST_REST | PHIPTOC1,Test control for outputs |
| -56 | Deactive ST_REST | PHIPTOC1,Test control for outputs |
| -57 | Activate INT_BLKD | PHIPTOC1,Test control for outputs |
| -58 | Deactive INT_BLKD | PHIPTOC1,Test control for outputs |
| -59 | Activate SWELLST | PHIPTOC1,Test control for outputs |
| -60 | Deactive SWELLST | PHIPTOC1,Test control for outputs |
| -61 | Activate DIPST | PHIPTOC1,Test control for outputs |
| -62 | Deactive DIPST | PHIPTOC1,Test control for outputs |
| -63 | Activate INTST | PHIPTOC1,Test control for outputs |
| -64 | Deactive INTST | PHIPTOC1,Test control for outputs |

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|---|---|---|
| -65 | Activate COOL_ACTIVE | PHIPTOC1,Test control for outputs |
| -66 | Deactive COOL_ACTIVE | PHIPTOC1,Test control for outputs |
| -67 | Activate MN_UNB_AL | PHIPTOC1,Test control for outputs |
| -68 | Deactive MN_UNB_AL | PHIPTOC1,Test control for outputs |
| -69 | Activate PCT_UNB_AL | PHIPTOC1,Test control for outputs |
| -70 | Deactive PCT_UNB_AL | PHIPTOC1,Test control for outputs |
| -71 | Activate FAIL_CTGRP1 | PHIPTOC1,Test control for outputs |
| -72 | Deactive FAIL_CTGRP1 | PHIPTOC1,Test control for outputs |
| -73 | Activate FAIL_CTGRP2 | PHIPTOC1,Test control for outputs |
| -74 | Deactive FAIL_CTGRP2 | PHIPTOC1,Test control for outputs |
| -75 | Activate FAIL_CTGRP3 | PHIPTOC1,Test control for outputs |
| -76 | Deactive FAIL_CTGRP3 | PHIPTOC1,Test control for outputs |
| -77 | Activate OBS_PR_ACT | PHIPTOC1,Test control for outputs |
| -78 | Deactive OBS_PR_ACT | PHIPTOC1,Test control for outputs |
| -79 | Activate OPERATE_Z1 | PHIPTOC1,Test control for outputs |
| -80 | Deactive OPERATE_Z1 | PHIPTOC1,Test control for outputs |
| -81 | Activate OPERATE_Z2 | PHIPTOC1,Test control for outputs |
| -82 | Deactive OPERATE_Z2 | PHIPTOC1,Test control for outputs |
| -83 | Activate OPERATE_Z3 | PHIPTOC1,Test control for outputs |
| -84 | Deactive OPERATE_Z3 | PHIPTOC1,Test control for outputs |
| -85 | Activate OPERATE_Z4 | PHIPTOC1,Test control for outputs |
| -86 | Deactive OPERATE_Z4 | PHIPTOC1,Test control for outputs |
| -87 | Activate OPERATE_Z5 | PHIPTOC1,Test control for outputs |
| -88 | Deactive OPERATE_Z5 | PHIPTOC1,Test control for outputs |
| -89 | Activate START_Z1 | PHIPTOC1,Test control for outputs |
| -90 | Deactive START_Z1 | PHIPTOC1,Test control for outputs |
| -91 | Activate START_Z2 | PHIPTOC1,Test control for outputs |
| -92 | Deactive START_Z2 | PHIPTOC1,Test control for outputs |
| -93 | Activate START_Z3 | PHIPTOC1,Test control for outputs |
| -94 | Deactive START_Z3 | PHIPTOC1,Test control for outputs |
| -95 | Activate START_Z4 | PHIPTOC1,Test control for outputs |

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|---|---|---|
| -96 | Deactive START_Z4 | PHIPTOC1,Test control for outputs |
| -97 | Activate START_Z5 | PHIPTOC1,Test control for outputs |
| -98 | Deactive START_Z5 | PHIPTOC1,Test control for outputs |
| -99 | Activate LODDSR_GFC | PHIPTOC1,Test control for outputs |
| -100 | Deactive LODDSR_GFC | PHIPTOC1,Test control for outputs |
| -101 | Activate START_GFC | PHIPTOC1,Test control for outputs |
| -102 | Deactive START_GFC | PHIPTOC1,Test control for outputs |
| -103 | Activate ST_ALARM | PHIPTOC1,Test control for outputs |
| -104 | Deactive ST_ALARM | PHIPTOC1,Test control for outputs |
| -105 | Activate OPR_IRV | PHIPTOC1,Test control for outputs |
| -106 | Deactive OPR_IRV | PHIPTOC1,Test control for outputs |
| -107 | Activate OPR_WEI | PHIPTOC1,Test control for outputs |
| -108 | Deactive OPR_WEI | PHIPTOC1,Test control for outputs |
| -109 | Activate ECHO | PHIPTOC1,Test control for outputs |
| -110 | Deactive ECHO | PHIPTOC1,Test control for outputs |
| -111 | Activate CR | PHIPTOC1,Test control for outputs |
| -112 | Deactive CR | PHIPTOC1,Test control for outputs |
| -113 | Activate CS | PHIPTOC1,Test control for outputs |
| -114 | Deactive CS | PHIPTOC1,Test control for outputs |
| -115 | Activate CRL | PHIPTOC1,Test control for outputs |
| -116 | Deactive CRL | PHIPTOC1,Test control for outputs |
| -117 | Activate LCG | PHIPTOC1,Test control for outputs |
| -118 | Deactive LCG | PHIPTOC1,Test control for outputs |
| -119 | Activate OPR_OVLOD | PHIPTOC1,Test control for outputs |
| -120 | Deactive OPR_OVLOD | PHIPTOC1,Test control for outputs |
| -121 | Activate ST_OVLOD | PHIPTOC1,Test control for outputs |
| -122 | Deactive ST_OVLOD | PHIPTOC1,Test control for outputs |
| -123 | Activate OPR_UN_I | PHIPTOC1,Test control for outputs |
| -124 | Deactive OPR_UN_I | PHIPTOC1,Test control for outputs |
| -125 | Activate ST_UN_I | PHIPTOC1,Test control for outputs |
| -126 | Deactive ST_UN_I | PHIPTOC1,Test control for outputs |

### 7.2.5 5.2.5 ABBIED600_Rev1_CurveCharKind

| Value | Description | Remarks |
|---|---|---|
| 1 | ANSI Extremely Inverse | Operating curve type,Selection of time delay curve type,ANSI Ext. inv. |
| 2 | ANSI Very Inverse | Operating curve type,Selection of time delay curve type,ANSI Very inv. |
| 3 | ANSI Normal Inverse | Operating curve type,Selection of time delay curve type,ANSI Norm. inv. |
| 4 | ANSI Moderate Inverse | Operating curve type,Selection of time delay curve type,ANSI Mod. inv. |
| 5 | ANSI Definite Time | Operating curve type,Selection of time delay curve type,ANSI Def. Time |
| 6 | Long-Time Extremely Inverse | Operating curve type,Selection of time delay curve type,L.T.E. inv. |
| 7 | Long-Time Very Inverse | Operating curve type,Selection of time delay curve type,L.T.V. inv. |
| 8 | Long-Time Inverse | Operating curve type,Selection of time delay curve type,L.T. inv. |
| 9 | IEC Normal Inverse | Operating curve type,Selection of time delay curve type,IEC Norm. inv. |
| 10 | IEC Very Inverse | Operating curve type,Selection of time delay curve type,IEC Very inv. |
| 11 | IEC Inverse | Operating curve type,Selection of time delay curve type,IEC inv. |
| 12 | IEC Extremely Inverse | Operating curve type,Selection of time delay curve type,IEC Ext. inv. |
| 13 | IEC Short-Time Inverse | Operating curve type,Selection of time delay curve type,IEC S.T. inv. |
| 14 | IEC Long-Time Inverse | Operating curve type,Selection of time delay curve type,IEC L.T. inv. |
| 15 | IEC Definite Time | Operating curve type,Selection of time delay curve type,IEC Def. Time |
| 16 | Reserved | Operating curve type,Selection of time delay curve type |
| 17 | Polynom 1 | Operating curve type,Selection of time delay curve type,Programmable |
| 18 | Polynom 2 | Operating curve type,Selection of time delay curve type,RI type |
| 19 | Polynom 3 | Operating curve type,Selection of time delay curve type,RD type |
| 20 | Polynom 4 | Operating curve type,Selection of time delay curve type |
| 21 | Polynom 5 | Operating curve type,Selection of time delay curve type |

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|---|---|---|
| 22 | Polynom 6 | Operating curve type,Selection of time delay curve type |
| 23 | Polynom 7 | Operating curve type,Selection of time delay curve type |
| 24 | Polynom 8 | Operating curve type,Selection of time delay curve type |
| 25 | Polynom 9 | Operating curve type,Selection of time delay curve type |
| 26 | Polynom 10 | Operating curve type,Selection of time delay curve type |
| 27 | Polynom 11 | Operating curve type,Selection of time delay curve type |
| 28 | Polynom 12 | Operating curve type,Selection of time delay curve type |
| 29 | Polynom 13 | Operating curve type,Selection of time delay curve type |
| 30 | Polynom 14 | Operating curve type,Selection of time delay curve type |
| 31 | Polynom 15 | Operating curve type,Selection of time delay curve type |
| 32 | Polynom 16 | Operating curve type,Selection of time delay curve type |
| 33 | Multiline 1 | Operating curve type,Selection of time delay curve type |
| 34 | Multiline 2 | Operating curve type,Selection of time delay curve type |
| 35 | Multiline 3 | Operating curve type,Selection of time delay curve type |
| 36 | Multiline 4 | Operating curve type,Selection of time delay curve type |
| 37 | Multiline 5 | Operating curve type,Selection of time delay curve type |
| 38 | Multiline 6 | Operating curve type,Selection of time delay curve type |
| 39 | Multiline 7 | Operating curve type,Selection of time delay curve type |
| 40 | Multiline 8 | Operating curve type,Selection of time delay curve type |
| 41 | Multiline 9 | Operating curve type,Selection of time delay curve type |
| 42 | Multiline 10 | Operating curve type,Selection of time delay curve type |
| 43 | Multiline 11 | Operating curve type,Selection of time delay curve type |
| 44 | Multiline 12 | Operating curve type,Selection of time delay curve type |
| 45 | Multiline 13 | Operating curve type,Selection of time delay curve type |
| 46 | Multiline 14 | Operating curve type,Selection of time delay curve type |
| 47 | Multiline 15 | Operating curve type,Selection of time delay curve type |
| 48 | Multiline 16 | Operating curve type,Selection of time delay curve type |
| -1 | Recloser 1 | Operating curve type,Selection of time delay curve type |
| -2 | Recloser 2 | Operating curve type,Selection of time delay curve type |
| -3 | Recloser 3 | Operating curve type,Selection of time delay curve type |
| -4 | Recloser 4 | Operating curve type,Selection of time delay curve type |

| | | |
|---|---|---|
| -5 | Recloser 5 | Operating curve type,Selection of time delay curve type |
| -6 | Recloser 6 | Operating curve type,Selection of time delay curve type |
| -7 | Recloser 7 | Operating curve type,Selection of time delay curve type |
| -8 | Recloser 8 | Operating curve type,Selection of time delay curve type |
| -9 | Recloser 8+ | Operating curve type,Selection of time delay curve type |
| -10 | Recloser 8* | Operating curve type,Selection of time delay curve type |
| -11 | Recloser 9 | Operating curve type,Selection of time delay curve type |
| -12 | Recloser 11 | Operating curve type,Selection of time delay curve type |
| -13 | Recloser 13 | Operating curve type,Selection of time delay curve type |
| -14 | Recloser 14 | Operating curve type,Selection of time delay curve type |
| -15 | Recloser 15 | Operating curve type,Selection of time delay curve type |
| -16 | Recloser 16 | Operating curve type,Selection of time delay curve type |
| -17 | Recloser 17 | Operating curve type,Selection of time delay curve type |
| -18 | Recloser 18 | Operating curve type,Selection of time delay curve type |
| -19 | Recloser A | Operating curve type,Selection of time delay curve type |
| -20 | Recloser B | Operating curve type,Selection of time delay curve type |
| -21 | Recloser C | Operating curve type,Selection of time delay curve type |
| -22 | Recloser D | Operating curve type,Selection of time delay curve type |
| -23 | Recloser E | Operating curve type,Selection of time delay curve type |
| -24 | Recloser F | Operating curve type,Selection of time delay curve type |
| -25 | Recloser G | Operating curve type,Selection of time delay curve type |
| -26 | Recloser H | Operating curve type,Selection of time delay curve type |
| -27 | Recloser J | Operating curve type,Selection of time delay curve type |
| -28 | Recloser Kg | Operating curve type,Selection of time delay curve type |
| -29 | Recloser Kp | Operating curve type,Selection of time delay curve type |
| -30 | Recloser L | Operating curve type,Selection of time delay curve type |
| -31 | Recloser M | Operating curve type,Selection of time delay curve type |
| -32 | Recloser N | Operating curve type,Selection of time delay curve type |
| -33 | Recloser P | Operating curve type,Selection of time delay curve type |
| -34 | Recloser R | Operating curve type,Selection of time delay curve type |
| -35 | Recloser T | Operating curve type,Selection of time delay curve type |

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|---|---|---|
| -36 | Recloser V | Operating curve type,Selection of time delay curve type |
| -37 | Recloser W | Operating curve type,Selection of time delay curve type |
| -38 | Recloser Y | Operating curve type,Selection of time delay curve type |
| -39 | Recloser Z | Operating curve type,Selection of time delay curve type |

### 7.2.6 5.2.6 ABBIED600_Rev1_PolarizingQuantityKind

| Value | Description | Remarks |
|---|---|---|
| -1 | Zro vol.OR cur. | Pol quantity,Reference quantity used to determine fault direction |
| 1 | None | Pol quantity,Reference quantity used to determine fault direction,Self pol |
| 2 | Zero Sequence Current | Pol quantity,Reference quantity used to determine fault direction,Zero seq. cur. |
| 3 | Zero Sequence Voltage | Pol quantity,Reference quantity used to determine fault direction,Zero seq. volt. |
| 4 | Negative Sequence Voltage | Pol quantity,Reference quantity used to determine fault direction,Neg. seq. volt. |
| 5 | Phase to Phase Voltages | Pol quantity,Reference quantity used to determine fault direction,Cross pol |
| 6 | Phase to Ground Volt-ages | Pol quantity,Reference quantity used to determine fault direction,Ph-to-gnd volt. |
| 7 | Positive sequence volt-age | Pol quantity,Reference quantity used to determine fault direction,Pos. seq. volt. |

### 7.2.7 5.2.7 ABBIED600_Rev2_FaultLoopKind

| Value | Description | Remarks |
|---|---|---|
| -5 | No fault | FAULT_LOOP,Fault impedance loop |
| -4 | PhaseAtoBtoCtoGround | FAULT_LOOP,Fault impedance loop,ABCG Fault |
| -3 | PhaseCtoAGround | FAULT_LOOP,Fault impedance loop,CAG Fault |
| -2 | PhaseBtoCGround | FAULT_LOOP,Fault impedance loop,BCG Fault |
| -1 | PhaseAtoBGround | FAULT_LOOP,Fault impedance loop,ABG Fault |
| 1 | PhaseAtoGround | FAULT_LOOP,Fault impedance loop,AG Fault |
| 2 | PhaseBtoGround | FAULT_LOOP,Fault impedance loop,BG Fault |
| 3 | PhaseCtoGround | FAULT_LOOP,Fault impedance loop,CG Fault |

| | | |
|---|---|---|
| 4 | PhaseAtoB | FAULT_LOOP,Fault impedance loop,AB Fault |
| 5 | PhaseBtoC | FAULT_LOOP,Fault impedance loop,BC Fault |
| 6 | PhaseCtoA | FAULT_LOOP,Fault impedance loop,CA Fault |
| 7 | Others | FAULT_LOOP,Fault impedance loop,ABC Fault |

### 7.2.8 5.2.8 ABBIED600_Rev2_AutoReclosingKind

| Value | Description | Remarks |
|---|---|---|
| -1 | Not defined | STATUS,AR status signal for IEC61850 |
| 1 | Ready | STATUS,AR status signal for IEC61850 |
| 2 | InProgress | STATUS,AR status signal for IEC61850 |
| 3 | Successful | STATUS,AR status signal for IEC61850 |
| 4 | WaitingForTrip | STATUS,AR status signal for IEC61850 |
| 5 | TripFromProtection | STATUS,AR status signal for IEC61850 |
| 6 | FaultDisappeared | STATUS,AR status signal for IEC61850 |
| 7 | WaitToComplete | STATUS,AR status signal for IEC61850 |
| 8 | CBclosed | STATUS,AR status signal for IEC61850 |
| 9 | CycleUnsuccessful | STATUS,AR status signal for IEC61850 |
| 10 | Unsuccessful | STATUS,AR status signal for IEC61850 |
| 11 | Aborted | STATUS,AR status signal for IEC61850 |

### 7.2.9 5.2.9 ABBIED600_Rev2_cmdQual

| Value | Description | Remarks |
|---|---|---|
| -1 | Off | Operation mode,Operation mode for generic control point |
| 0 | pulse | Operation mode,Operation mode for generic control point,Pulsed |
| 1 | persistent | Operation mode,Operation mode for generic control point,Toggle/Persistent |

### 7.2.10 5.2.10 ABBIED600_RECRER61520_Rev34_ProFcn

| Value | Description | Remarks |
|---|---|---|
| -127 | PHAPTUV1 | Protection,Protection function |
| -126 | PHCPTOV1 | Protection,Protection function |
| -125 | PHBPTOV1 | Protection,Protection function |
| -124 | PHAPTOV1 | Protection,Protection function |

| | | |
|---|---|---|
| -123 | DPH3LPDOC2 | Protection,Protection function |
| -122 | DPH3LPDOC1 | Protection,Protection function |
| -121 | DPH3HPDOC2 | Protection,Protection function |
| -120 | DPH3HPDOC1 | Protection,Protection function |
| -119 | PH3LPTOC2 | Protection,Protection function |
| -118 | PH3LPTOC1 | Protection,Protection function |
| -117 | XDEFLPDEF2 | Protection,Protection function |
| -116 | XDEFLPDEF1 | Protection,Protection function |
| -115 | SDPHLPDOC2 | Protection,Protection function |
| -114 | SDPHLPDOC1 | Protection,Protection function |
| -113 | XNSPTOC2 | Protection,Protection function |
| -112 | XNSPTOC1 | Protection,Protection function |
| -111 | XEFIPTOC2 | Protection,Protection function |
| -110 | XEFHPTOC4 | Protection,Protection function |
| -109 | XEFHPTOC3 | Protection,Protection function |
| -108 | XEFLPTOC3 | Protection,Protection function |
| -107 | XEFLPTOC2 | Protection,Protection function |
| -106 | MAPGAPC16 | Protection,Protection function |
| -105 | MAPGAPC15 | Protection,Protection function |
| -104 | MAPGAPC14 | Protection,Protection function |
| -103 | MAPGAPC13 | Protection,Protection function |
| -102 | MAPGAPC12 | Protection,Protection function |
| -101 | MAPGAPC11 | Protection,Protection function |
| -100 | MAPGAPC10 | Protection,Protection function |
| -99 | MAPGAPC9 | Protection,Protection function |
| -98 | RESCPSCH1 | Protection,Protection function |
| -96 | SPHIPTOC1 | Protection,Protection function |
| -93 | SPHLPTOC2 | Protection,Protection function |
| -92 | SPHLPTOC1 | Protection,Protection function |
| -89 | SPHHPTOC2 | Protection,Protection function |
| -88 | SPHHPTOC1 | Protection,Protection function |

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|---|---|---|
| -87 | SPHPTUV4 | Protection,Protection function |
| -86 | SPHPTUV3 | Protection,Protection function |
| -85 | SPHPTUV2 | Protection,Protection function |
| -84 | SPHPTUV1 | Protection,Protection function |
| -83 | SPHPTOV4 | Protection,Protection function |
| -82 | SPHPTOV3 | Protection,Protection function |
| -81 | SPHPTOV2 | Protection,Protection function |
| -80 | SPHPTOV1 | Protection,Protection function |
| -79 | PH3HPTOC2 | Protection,Protection function |
| -78 | PH3HPTOC1 | Protection,Protection function |
| -77 | PH3IPTOC1 | Protection,Protection function |
| -76 | MAPGAPC18 | Protection,Protection function |
| -75 | MAPGAPC17 | Protection,Protection function |
| -74 | DOPPDPR3 | Protection,Protection function |
| -73 | DOPPDPR2 | Protection,Protection function |
| -72 | DOPPDPR1 | Protection,Protection function |
| -70 | DUPPDPR2 | Protection,Protection function |
| -69 | DUPPDPR1 | Protection,Protection function |
| -68 | PHPVOC2 | Protection,Protection function |
| -67 | DQPTUV2 | Protection,Protection function |
| -66 | DQPTUV1 | Protection,Protection function |
| -65 | VVSPPAM1 | Protection,Protection function |
| -64 | PHPVOC1 | Protection,Protection function |
| -63 | H3EFPSEF1 | Protection,Protection function |
| -62 | SRCPTOC1 | Protection,Protection function |
| -61 | COLPTOC1 | Protection,Protection function |
| -60 | HCUBPTOC1 | Protection,Protection function |
| -59 | CUBPTOC1 | Protection,Protection function |
| -58 | UZPDIS1 | Protection,Protection function |
| -57 | FDEFLPDEF2 | Protection,Protection function |
| -56 | FDEFLPDEF1 | Protection,Protection function |

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|---|---|---|
| -54 | FEFLPTOC1 | Protection,Protection function |
| -53 | FDPHLPDOC2 | Protection,Protection function |
| -52 | FDPHLPDOC1 | Protection,Protection function |
| -50 | FPHLPTOC1 | Protection,Protection function |
| -47 | MAP12GAPC8 | Protection,Protection function |
| -46 | MAP12GAPC7 | Protection,Protection function |
| -45 | MAP12GAPC6 | Protection,Protection function |
| -44 | MAP12GAPC5 | Protection,Protection function |
| -43 | MAP12GAPC4 | Protection,Protection function |
| -42 | MAP12GAPC3 | Protection,Protection function |
| -41 | MAP12GAPC2 | Protection,Protection function |
| -40 | MAP12GAPC1 | Protection,Protection function |
| -39 | UEXPDIS2 | Protection,Protection function |
| -37 | HAEFPTOC1 | Protection,Protection function |
| -36 | UEXPDIS1 | Protection,Protection function |
| -35 | WPWDE3 | Protection,Protection function |
| -34 | WPWDE2 | Protection,Protection function |
| -33 | WPWDE1 | Protection,Protection function |
| -32 | LSHDPFRQ8 | Protection,Protection function |
| -31 | LSHDPFRQ7 | Protection,Protection function |
| -30 | PHDSTPDIS1 | Protection,Protection function |
| -29 | TR3PTDF1 | Protection,Protection function |
| -28 | HICPDIF1 | Protection,Protection function |
| -27 | HIBPDIF1 | Protection,Protection function |
| -26 | HIAPDIF1 | Protection,Protection function |
| -25 | OEPVPH4 | Protection,Protection function |
| -24 | OEPVPH3 | Protection,Protection function |
| -23 | OEPVPH2 | Protection,Protection function |
| -22 | OEPVPH1 | Protection,Protection function |
| -19 | PSPTOV2 | Protection,Protection function |
| -18 | PSPTOV1 | Protection,Protection function |

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| -17 | MPUPF2 | Protection,Protection function |
| -16 | MPUPF1 | Protection,Protection function |
| -15 | PREVPTOC1 | Protection,Protection function |
| -14 | OOSRPSB1 | Protection,Protection function |
| -13 | PHPTUC3 | Protection,Protection function |
| -12 | PHPTUC2 | Protection,Protection function |
| -11 | PHPTUC1 | Protection,Protection function |
| -10 | LVRTPTUV1 | Protection,Protection function |
| -9 | PHIZ1 | Protection,Protection function |
| -8 | LVRTPTUV2 | Protection,Protection function |
| -7 | INTRPTEF1 | Protection,Protection function |
| -6 | LVRTPTUV3 | Protection,Protection function |
| -5 | STTPMSU1 | Protection,Protection function |
| -4 | MREFPTOC1 | Protection,Protection function |
| -3 | JAMPTOC1 | Protection,Protection function |
| -2 | PHCPTUV1 | Protection,Protection function |
| -1 | PHBPTUV1 | Protection,Protection function |
| 0 | Unknown | Protection,Protection function |
| 1 | PHLPTOC1 | Protection,Protection function |
| 2 | PHLPTOC2 | Protection,Protection function |
| 3 | PHLPTOC3 | Protection,Protection function |
| 5 | PHLTPTOC1 | Protection,Protection function |
| 6 | PHHPTOC1 | Protection,Protection function |
| 7 | PHHPTOC2 | Protection,Protection function |
| 8 | PHHPTOC3 | Protection,Protection function |
| 9 | PHHPTOC4 | Protection,Protection function |
| 10 | PHHPTOC5 | Protection,Protection function |
| 11 | PHHPTOC6 | Protection,Protection function |
| 12 | PHIPTOC1 | Protection,Protection function |
| 13 | PHIPTOC2 | Protection,Protection function |
| 14 | MFADPSDE1 | Protection,Protection function |

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|---|---|---|
| 15 | MFADPSDE2 | Protection,Protection function |
| 17 | EFLPTOC1 | Protection,Protection function |
| 18 | EFLPTOC2 | Protection,Protection function |
| 19 | EFLPTOC3 | Protection,Protection function |
| 20 | EFLPTOC4 | Protection,Protection function |
| 21 | DEFHPDEF4 | Protection,Protection function |
| 22 | EFHPTOC1 | Protection,Protection function |
| 23 | EFHPTOC2 | Protection,Protection function |
| 24 | EFHPTOC3 | Protection,Protection function |
| 25 | EFHPTOC4 | Protection,Protection function |
| 26 | EFHPTOC5 | Protection,Protection function |
| 27 | EFHPTOC6 | Protection,Protection function |
| 28 | EFHPTOC7 | Protection,Protection function |
| 29 | EFHPTOC8 | Protection,Protection function |
| 30 | EFIPTOC1 | Protection,Protection function |
| 31 | EFIPTOC2 | Protection,Protection function |
| 32 | EFIPTOC3 | Protection,Protection function |
| 33 | DPHHPDOC4 | Protection,Protection function |
| 34 | DPHLPDOC4 | Protection,Protection function |
| 35 | NSPTOC1 | Protection,Protection function |
| 36 | NSPTOC2 | Protection,Protection function |
| 37 | NSPTOC3 | Protection,Protection function |
| 38 | NSPTOC4 | Protection,Protection function |
| 41 | PDNSPTOC1 | Protection,Protection function |
| 44 | T1PTTR1 | Protection,Protection function |
| 45 | T1PTTR2 | Protection,Protection function |
| 46 | T2PTTR1 | Protection,Protection function |
| 47 | DEFLPDEF4 | Protection,Protection function |
| 48 | MPTTR1 | Protection,Protection function |
| 50 | DEFLPDEF1 | Protection,Protection function |
| 51 | DEFLPDEF2 | Protection,Protection function |

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| 52 | DEFLPDEF3 | Protection,Protection function |
| 53 | DEFHPDEF1 | Protection,Protection function |
| 54 | DEFHPDEF2 | Protection,Protection function |
| 55 | DEFHPDEF3 | Protection,Protection function |
| 56 | EFPADM1 | Protection,Protection function |
| 57 | EFPADM2 | Protection,Protection function |
| 58 | EFPADM3 | Protection,Protection function |
| 59 | FRPFRQ1 | Protection,Protection function |
| 60 | FRPFRQ2 | Protection,Protection function |
| 61 | FRPFRQ3 | Protection,Protection function |
| 62 | FRPFRQ4 | Protection,Protection function |
| 63 | FRPFRQ5 | Protection,Protection function |
| 64 | FRPFRQ6 | Protection,Protection function |
| 65 | LSHDPFRQ1 | Protection,Protection function |
| 66 | LSHDPFRQ2 | Protection,Protection function |
| 67 | LSHDPFRQ3 | Protection,Protection function |
| 68 | LSHDPFRQ4 | Protection,Protection function |
| 69 | LSHDPFRQ5 | Protection,Protection function |
| 70 | LSHDPFRQ6 | Protection,Protection function |
| 71 | DPHLPDOC1 | Protection,Protection function |
| 72 | DPHLPDOC2 | Protection,Protection function |
| 73 | DPHLPDOC3 | Protection,Protection function |
| 74 | DPHHPDOC1 | Protection,Protection function |
| 75 | DPHHPDOC2 | Protection,Protection function |
| 76 | DPHHPDOC3 | Protection,Protection function |
| 77 | MAPGAPC1 | Protection,Protection function |
| 78 | MAPGAPC2 | Protection,Protection function |
| 79 | MAPGAPC3 | Protection,Protection function |
| 80 | MAPGAPC4 | Protection,Protection function |
| 81 | MAPGAPC5 | Protection,Protection function |
| 82 | MAPGAPC6 | Protection,Protection function |

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|---|---|---|
| 83 | MAPGAPC7 | Protection,Protection function |
| 84 | MAPGAPC8 | Protection,Protection function |
| 85 | MNSPTOC1 | Protection,Protection function |
| 86 | MNSPTOC2 | Protection,Protection function |
| 88 | LOFLPTUC1 | Protection,Protection function |
| 89 | LOFLPTUC2 | Protection,Protection function |
| 90 | TR2PTDF1 | Protection,Protection function |
| 91 | LNPLDF1 | Protection,Protection function |
| 92 | LREFPNDF1 | Protection,Protection function |
| 93 | LREFPNDF2 | Protection,Protection function |
| 94 | MPDIF1 | Protection,Protection function |
| 96 | HREFPDIF1 | Protection,Protection function |
| 97 | HREFPDIF2 | Protection,Protection function |
| 98 | MHZPDIF1 | Protection,Protection function |
| 100 | ROVPTOV1 | Protection,Protection function |
| 101 | ROVPTOV2 | Protection,Protection function |
| 102 | ROVPTOV3 | Protection,Protection function |
| 103 | ROVPTOV4 | Protection,Protection function |
| 104 | PHPTOV1 | Protection,Protection function |
| 105 | PHPTOV2 | Protection,Protection function |
| 106 | PHPTOV3 | Protection,Protection function |
| 107 | PHPTOV4 | Protection,Protection function |
| 108 | PHPTUV1 | Protection,Protection function |
| 109 | PHPTUV2 | Protection,Protection function |
| 110 | PHPTUV3 | Protection,Protection function |
| 111 | PHPTUV4 | Protection,Protection function |
| 112 | NSPTOV1 | Protection,Protection function |
| 113 | NSPTOV2 | Protection,Protection function |
| 114 | NSPTOV3 | Protection,Protection function |
| 115 | NSPTOV4 | Protection,Protection function |
| 116 | PSPTUV1 | Protection,Protection function |

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|---|---|---|
| 117 | PSPTUV2 | Protection,Protection function |
| 118 | ARCSARC1 | Protection,Protection function |
| 119 | ARCSARC2 | Protection,Protection function |
| 120 | ARCSARC3 | Protection,Protection function |