Controller Sample_ABB_Profile_ControlNet_Compact
Rev. B
Controller Fault Handler
Power-Up Handler

Tasks

MainTask
- **MainProgram**
  - **MainRoutine**
  - **ACS355_Control_Cnet**
  - **ACS550_Control_Cnet**
  - **ACS800_Control_Cnet**
  - **ACS850_Control_Cnet**
  - **ACS880_Control_Cnet**
  - **DCS800_Control_Cnet**
  - **UDT_PROGRAM**

Unscheduled Programs

Motion Groups

Ungrouped Axes

Add-On Instructions

ABB_29
File Name: ABB_RCNA_AOI_103_102_9W
- **Logic**
  Transfer data to and from the drive
- **Prescan**
  Prescan Logic Conditioning
- **EnableInFalse**
  Protection Logic for EnableIn False

ABB_34
File Name: ABB_DCS800_RCNA_AOI_103_102_9W
- **Logic**
  Transfer data to and from the drive
- **Prescan**
  Prescan Logic Conditioning
- **EnableInFalse**
  Protection Logic for EnableIn False

ABB_73
File Name: ABB_FCNA_AOI_152_102_13W
- **Logic**
  Transfer data to and from the drive
- **Prescan**
  Prescan Logic Conditioning
- **EnableInFalse**
  Protection Logic for EnableIn False

Data Types

User-Defined
- **ABB_DCS800_RCNA_UDT_102_9**
  ABB Drives Profile Output Instance 102 Size 9 INTs Cntrl Word, Spd + 7 Data Outputs
- **ABB_DCS800_RCNA_UDT_103_9**
  ABB Drives Profile Input Instance 103 Size 9 INTs Sts Word , Spd Fbk & +7 Data Inputs
- **ABB_FCNA_UDT_102**
  ABB Drives Profile Output Instance 102 Size 13 INTs Cntrl Word, Spd & Trq Refs +10 Data Outputs
- **ABB_FCNA_UDT_152**
  ABB Drives Profile Input Instance 152 Size 13 INTs Sts Word, Spd fbk, Trq fbk +10 Data Inputs
- **ABB_RCNA_UDT_102_9**
  ABB Drives Profile Output Instance 102 Size 9 INTs Cntrl Word, Spd + 7 Data Outputs
- **ABB_RCNA_UDT_103_9**
  ABB Drives Profile Input Instance 103 RCNA - Size 11 INTs Sts Word , Spd Fbk & +7 Data Inputs

Strings
- **STRING**

Add-On-Defined

ABB_29
File Name: ABB_RCNA_AOI_103_102_9W

ABB_34
File Name: ABB_DCS800_RCNA_AOI_103_102_9W

ABB_73
File Name: ABB_FCNA_AOI_152_102_13W

Module-Defined

AB:1769_IF4XOF2:C:0
AB:1769_IF4XOF2:I:0
AB:1769_IF4XOF2:O:0
AB:1769_IQ6XOW4:C:0
AB:1769_IQ6XOW4:I:0
AB:1769_IQ6XOW4:O:0
AB:CONTROLNET_MODULE:C:0
AB:CONTROLNET_MODULE_INT_18Bytes:O:0
AB:CONTROLNET_MODULE_INT_22Bytes:I:0
AB:CONTROLNET_MODULE_INT_22Bytes:O:0
AB:CONTROLNET_MODULE_INT_26Bytes:O:0
AB:CONTROLNET_MODULE_INT_30Bytes:I:0

Trends

I/O Configuration

Backplane, CompactLogix System

1769-L32C Sample_ABB_Profile_ControlNet_Compact
1769-L32C ControlNet Port LocalCNB

ControlNet

1769-L32C ControlNet Port LocalCNB
5 CONTROLNET-MODULE RCNA_ACS550_ABB_PROFILE
RCNA installed on ACS550 programmed for ABB Drives profile. The RCNA will send 11 INT and receive 9 INT.
8 CONTROLNET-MODULE RCNA_ACS800_ABB_PROFILE
RCNA installed on ACS800 programmed for ABB Drives profile. The RCNA will send 11 INT and receive 9 INT.
9 CONTROLNET-MODULE RCNA_DCS800_ABB_PROFILE
RCNA installed on DCS800 programmed for ABB Drives profile. The RCNA will send 11 INT and receive 9 INT.
10 CONTROLNET-MODULE FCNA_ACS355_ABB_Profile
FCNA installed on ACS355 programmed for ABB Drives profile. The FCNA will send 13 INT and receive 13 INT.
11 CONTROLNET-MODULE FCNA_ACS850_ABB_Profile
FCNA installed on ACS850 programmed for ABB Drives profile. The FCNA will send 13 INT and receive 13 INT.
12 CONTROLNET-MODULE FCNA_ACS880_ABB_Profile
FCNA installed on ACS880 programmed for ABB Drives profile. The FCNA will send 13 INT and receive 13 INT.

CompactBus Local

[1] 1769-IF4XOF2/A Analog_Input
[2] 1769-IQ6XOW4/B Dig_Input_Output

Name	Value	Data Type	Scope
ACS355_Actual_Speed_CNet	0	INT	Sample_ABB_Profile_ControlNet_Compact
*ACS355_Actual_Speed_CNet - MainProgram/ACS355_Control_Cnet - *11(MOV)*			
ACS355_FCNA_ADD_ON_PROFILE		ABB_73	Sample_ABB_Profile_ControlNet_Compact
File Name: ABB_FCNA_AOI_152_102_13W *ACS355_FCNA_ADD_ON_PROFILE - MainProgram/UDT_PROGRAM - *3(ABB_73)*			
ACS355_Ref_1_SUM_CNet	0	INT	Sample_ABB_Profile_ControlNet_Compact
*ACS355_Ref_1_SUM_CNet - MainProgram/ACS355_Control_Cnet - *7(MOV), 8(MOV), 8(NEG)*			
ACS355_Ref_2_Divider_CNet	3.1744	REAL	Sample_ABB_Profile_ControlNet_Compact
ACS355_Ref_2_Divider_CNet - MainProgram/ACS355_Control_Cnet - 9(DIV)			
ACS355_Ref_2_SUM_CNet	0	INT	Sample_ABB_Profile_ControlNet_Compact
*ACS355_Ref_2_SUM_CNet - MainProgram/ACS355_Control_Cnet - *9(MOV), 10(MOV), 10(NEG)*			
ACS355_Ref_Divider_1_CNet	1.5872	REAL	Sample_ABB_Profile_ControlNet_Compact
ACS355_Ref_Divider_1_CNet - MainProgram/ACS355_Control_Cnet - 7(DIV)			
ACS355_Ref1_CNet	0	INT	Sample_ABB_Profile_ControlNet_Compact
*ACS355_Ref1_CNet - MainProgram/ACS355_Control_Cnet - *7(DIV), 7(MOV)*			
ACS355_Ref1_Total_CNet	0	INT	Sample_ABB_Profile_ControlNet_Compact
*ACS355_Ref1_Total_CNet - MainProgram/ACS355_Control_Cnet - *8(MOV), *8(NEG), 8(MOV)*			
ACS355_Ref2_CNet	0	INT	Sample_ABB_Profile_ControlNet_Compact
*ACS355_Ref2_CNet - MainProgram/ACS355_Control_Cnet - *9(DIV), 9(MOV)*			
ACS355_Ref2_Total_CNet	0	INT	Sample_ABB_Profile_ControlNet_Compact
*ACS355_Ref2_Total_CNet - MainProgram/ACS355_Control_Cnet - *10(MOV), *10(NEG), 10(MOV)*			
ACS550_Actual_Speed_CNet	0	INT	Sample_ABB_Profile_ControlNet_Compact
*ACS550_Actual_Speed_CNet - MainProgram/ACS550_Control_Cnet - *11(MOV)*			
ACS550_RCNA_ADD_ON_PROFILE		ABB_29	Sample_ABB_Profile_ControlNet_Compact
File Name: ABB_RCNA_AOI_103_102_9W *ACS550_RCNA_ADD_ON_PROFILE - MainProgram/UDT_PROGRAM - *0(ABB_29)*			
ACS550_Ref_1_SUM_CNet	0	INT	Sample_ABB_Profile_ControlNet_Compact
*ACS550_Ref_1_SUM_CNet - MainProgram/ACS550_Control_Cnet - *7(MOV), 8(MOV), 8(NEG)*			
ACS550_Ref_2_Divider_CNet	3.1744	REAL	Sample_ABB_Profile_ControlNet_Compact
ACS550_Ref_2_Divider_CNet - MainProgram/ACS550_Control_Cnet - 9(DIV)			
ACS550_Ref_2_SUM_CNet	0	INT	Sample_ABB_Profile_ControlNet_Compact
*ACS550_Ref_2_SUM_CNet - MainProgram/ACS550_Control_Cnet - *9(MOV), 10(MOV), 10(NEG)*			

ACS550_Ref_Divider_1_CNet (Continued)

ACS550_Ref_Divider_1_CNet	1.5872	REAL	Sample_ABB_Profile_ControlNet_Compact
ACS550_Ref_Divider_1_CNet - MainProgram/ACS550_Control_Cnet - 7(DIV)			
ACS550_Ref1_CNet	0	INT	Sample_ABB_Profile_ControlNet_Compact
*ACS550_Ref1_CNet - MainProgram/ACS550_Control_Cnet - *7(DIV), 7(MOV)*			
ACS550_Ref1_Total_CNet	0	INT	Sample_ABB_Profile_ControlNet_Compact
*ACS550_Ref1_Total_CNet - MainProgram/ACS550_Control_Cnet - *8(MOV), *8(NEG), 8(MOV)*			
ACS550_Ref2_CNet	0	INT	Sample_ABB_Profile_ControlNet_Compact
*ACS550_Ref2_CNet - MainProgram/ACS550_Control_Cnet - *9(DIV), 9(MOV)*			
ACS550_Ref2_Total_CNet	0	INT	Sample_ABB_Profile_ControlNet_Compact
*ACS550_Ref2_Total_CNet - MainProgram/ACS550_Control_Cnet - *10(MOV), *10(NEG), 10(MOV)*			
ACS800_Actual_Speed_CNet	0	INT	Sample_ABB_Profile_ControlNet_Compact
*ACS800_Actual_Speed_CNet - MainProgram/ACS800_Control_Cnet - *11(MOV)*			
ACS800_RCNA_ADD_ON_PROFILE		ABB_29	Sample_ABB_Profile_ControlNet_Compact
File Name: ABB_RCNA_AOI_103_102_9W *ACS800_RCNA_ADD_ON_PROFILE - MainProgram/UDT_PROGRAM - *1(ABB_29)*			
ACS800_Ref_1_SUM_CNet	0	INT	Sample_ABB_Profile_ControlNet_Compact
*ACS800_Ref_1_SUM_CNet - MainProgram/ACS800_Control_Cnet - *7(MOV), 8(MOV), 8(NEG)*			
ACS800_Ref_2_Divider_CNet	1.5872	REAL	Sample_ABB_Profile_ControlNet_Compact
ACS800_Ref_2_Divider_CNet - MainProgram/ACS800_Control_Cnet - 9(DIV)			
ACS800_Ref_2_SUM_CNet	0	INT	Sample_ABB_Profile_ControlNet_Compact
*ACS800_Ref_2_SUM_CNet - MainProgram/ACS800_Control_Cnet - *9(MOV), 10(MOV), 10(NEG)*			
ACS800_Ref_Divider_1_CNet	1.5872	REAL	Sample_ABB_Profile_ControlNet_Compact
ACS800_Ref_Divider_1_CNet - MainProgram/ACS800_Control_Cnet - 7(DIV)			
ACS800_Ref1_CNet	0	INT	Sample_ABB_Profile_ControlNet_Compact
*ACS800_Ref1_CNet - MainProgram/ACS800_Control_Cnet - *7(DIV), 7(MOV)*			
ACS800_Ref1_Total_CNet	0	INT	Sample_ABB_Profile_ControlNet_Compact
*ACS800_Ref1_Total_CNet - MainProgram/ACS800_Control_Cnet - *8(MOV), *8(NEG), 8(MOV)*			
ACS800_Ref2_CNet	0	INT	Sample_ABB_Profile_ControlNet_Compact
*ACS800_Ref2_CNet - MainProgram/ACS800_Control_Cnet - *9(DIV), 9(MOV)*			
ACS800_Ref2_Total_CNet	0	INT	Sample_ABB_Profile_ControlNet_Compact
*ACS800_Ref2_Total_CNet - MainProgram/ACS800_Control_Cnet - *10(MOV), *10(NEG), 10(MOV)*			
ACS850_Actual_Speed_CNet	0	INT	

ACS850_Actual_Speed_CNet (Continued)

Sample_ABB_Profile_ControlNet_Compact

*ACS850_Actual_Speed_CNet - MainProgram/ACS850_Control_Cnet - *11(MOV)*

ACS850_FCNA_ADD_ON_PROFILE ABB_73 Sample_ABB_Profile_ControlNet_Compact

File Name: ABB_FCNA_AOI_152_102_13W
*ACS850_FCNA_ADD_ON_PROFILE - MainProgram/UDT_PROGRAM - *4(ABB_73)*

ACS850_Ref_1_SUM_CNet 0 INT Sample_ABB_Profile_ControlNet_Compact

*ACS850_Ref_1_SUM_CNet - MainProgram/ACS850_Control_Cnet - *7(MOV), 8(MOV), 8(NEG)*

ACS850_Ref_2_Divider_CNet 3.1744 REAL Sample_ABB_Profile_ControlNet_Compact

ACS850_Ref_2_Divider_CNet - MainProgram/ACS850_Control_Cnet - 9(DIV)

ACS850_Ref_2_SUM_CNet 0 INT Sample_ABB_Profile_ControlNet_Compact

*ACS850_Ref_2_SUM_CNet - MainProgram/ACS850_Control_Cnet - *9(MOV), 10(MOV), 10(NEG)*

ACS850_Ref_Divider_1_CNet 1.5872 REAL Sample_ABB_Profile_ControlNet_Compact

ACS850_Ref_Divider_1_CNet - MainProgram/ACS850_Control_Cnet - 7(DIV)

ACS850_Ref1_CNet 0 INT Sample_ABB_Profile_ControlNet_Compact

*ACS850_Ref1_CNet - MainProgram/ACS850_Control_Cnet - *7(DIV), 7(MOV)*

ACS850_Ref1_Total_CNet 0 INT Sample_ABB_Profile_ControlNet_Compact

*ACS850_Ref1_Total_CNet - MainProgram/ACS850_Control_Cnet - *8(MOV), *8(NEG), 8(MOV)*

ACS850_Ref2_CNet 0 INT Sample_ABB_Profile_ControlNet_Compact

*ACS850_Ref2_CNet - MainProgram/ACS850_Control_Cnet - *9(DIV), 9(MOV)*

ACS850_Ref2_Total_CNet 0 INT Sample_ABB_Profile_ControlNet_Compact

*ACS850_Ref2_Total_CNet - MainProgram/ACS850_Control_Cnet - *10(MOV), *10(NEG), 10(MOV)*

ACS880_Actual_Speed_CNet 0 INT Sample_ABB_Profile_ControlNet_Compact

*ACS880_Actual_Speed_CNet - MainProgram/ACS880_Control_Cnet - *11(MOV)*

ACS880_FCNA_ADD_ON_PROFILE ABB_73 Sample_ABB_Profile_ControlNet_Compact

File Name: ABB_FCNA_AOI_152_102_13W
*ACS880_FCNA_ADD_ON_PROFILE - MainProgram/UDT_PROGRAM - *5(ABB_73)*

ACS880_Ref_1_SUM_CNet 0 INT Sample_ABB_Profile_ControlNet_Compact

*ACS880_Ref_1_SUM_CNet - MainProgram/ACS880_Control_Cnet - *7(MOV), 8(MOV), 8(NEG)*

ACS880_Ref_2_Divider_CNet 3.1744 REAL Sample_ABB_Profile_ControlNet_Compact

ACS880_Ref_2_Divider_CNet - MainProgram/ACS880_Control_Cnet - 9(DIV)

ACS880_Ref_2_SUM_CNet 0 INT Sample_ABB_Profile_ControlNet_Compact

*ACS880_Ref_2_SUM_CNet - MainProgram/ACS880_Control_Cnet - *9(MOV), 10(MOV), 10(NEG)*

ACS880_Ref_Divider_1_CNet (Continued)

ACS880_Ref_Divider_1_CNet	1.5872	REAL	Sample_ABB_Profile_ControlNet_Compact

ACS880_Ref_Divider_1_CNet - MainProgram/ACS880_Control_Cnet - 7(DIV)

ACS880_Ref1_CNet	0	INT	Sample_ABB_Profile_ControlNet_Compact

*ACS880_Ref1_CNet - MainProgram/ACS880_Control_Cnet - *7(DIV), 7(MOV)*

ACS880_Ref1_Total_CNet	0	INT	Sample_ABB_Profile_ControlNet_Compact

*ACS880_Ref1_Total_CNet - MainProgram/ACS880_Control_Cnet - *8(MOV), *8(NEG), 8(MOV)*

ACS880_Ref2_CNet	0	INT	Sample_ABB_Profile_ControlNet_Compact

*ACS880_Ref2_CNet - MainProgram/ACS880_Control_Cnet - *9(DIV), 9(MOV)*

ACS880_Ref2_Total_CNet	0	INT	Sample_ABB_Profile_ControlNet_Compact

*ACS880_Ref2_Total_CNet - MainProgram/ACS880_Control_Cnet - *10(MOV), *10(NEG), 10(MOV)*

DCS800_Actual_Speed_CNet	0	INT	Sample_ABB_Profile_ControlNet_Compact

*DCS800_Actual_Speed_CNet - MainProgram/DCS800_Control_Cnet - *7(MOV)*

DCS800_RCNA_ADD_ON_PROFILE		ABB_34	Sample_ABB_Profile_ControlNet_Compact

File Name: ABB_DCS800_RCNA_AOI_103_102_9W
*DCS800_RCNA_ADD_ON_PROFILE - MainProgram/UDT_PROGRAM - *2(ABB_34)*

DCS800_Ref_1_SUM_CNet	0	INT	Sample_ABB_Profile_ControlNet_Compact

*DCS800_Ref_1_SUM_CNet - MainProgram/DCS800_Control_Cnet - *5(MOV), 6(MOV), 6(NEG)*

DCS800_Ref_Divider_1_CNet	1.5872	REAL	Sample_ABB_Profile_ControlNet_Compact

DCS800_Ref_Divider_1_CNet - MainProgram/DCS800_Control_Cnet - 5(DIV)

DCS800_Ref1_CNet	0	INT	Sample_ABB_Profile_ControlNet_Compact

*DCS800_Ref1_CNet - MainProgram/DCS800_Control_Cnet - *5(DIV), 5(MOV)*

DCS800_Ref1_Total_CNet	0	INT	Sample_ABB_Profile_ControlNet_Compact

*DCS800_Ref1_Total_CNet - MainProgram/DCS800_Control_Cnet - *6(MOV), *6(NEG), 6(MOV)*

FCNA_ACS355_ABB_Profile:I		AB:CONTROLNET_MODULE_INT_30Bytes:I:0	Sample_ABB_Profile_ControlNet_Compact

*FCNA_ACS355_ABB_Profile:I - MainProgram/UDT_PROGRAM - *3(ABB_73)*

FCNA_ACS355_ABB_Profile:O		AB:CONTROLNET_MODULE_INT_26Bytes:O:0	Sample_ABB_Profile_ControlNet_Compact

*FCNA_ACS355_ABB_Profile:O - MainProgram/UDT_PROGRAM - *3(ABB_73)*

FCNA_ACS355_I_ASSY_152		ABB_FCNA_UDT_152	Sample_ABB_Profile_ControlNet_Compact

ABB Drives Profile Input Instance 152 Size 13 INTs Sts Word, Spd fbk, Trq fbk +10 Data Inputs
*FCNA_ACS355_I_ASSY_152 - MainProgram/UDT_PROGRAM - *3(ABB_73)*
FCNA_ACS355_I_ASSY_152.Actual_Speed - MainProgram/ACS355_Control_Cnet - 11(MOV)

FCNA_ACS355_O_ASSY_102		ABB_FCNA_UDT_102	

FCNA_ACS355_O_ASSY_102 (Continued)

Sample_ABB_Profile_ControlNet_Compact

ABB Drives Profile Output Instance 102 Size 13 INTs Cntrl Word, Spd & Trq Refs +10 Data Outputs
*FCNA_ACS355_O_ASSY_102 - MainProgram/UDT_PROGRAM - *3(ABB_73)*
*FCNA_ACS355_O_ASSY_102.Ext_Ctrl_Loc - MainProgram/ACS355_Control_Cnet - *6(OTE)*
*FCNA_ACS355_O_ASSY_102.Fault_Reset - MainProgram/ACS355_Control_Cnet - *3(OTE)*
*FCNA_ACS355_O_ASSY_102.Inhibit_Operation - MainProgram/ACS355_Control_Cnet - *4(OTE)*
*FCNA_ACS355_O_ASSY_102.Off_1_Ctrl - MainProgram/ACS355_Control_Cnet - *0(OTE)*
*FCNA_ACS355_O_ASSY_102.Off_2_Ctrl - MainProgram/ACS355_Control_Cnet - *1(OTE)*
*FCNA_ACS355_O_ASSY_102.Off_3_Ctrl - MainProgram/ACS355_Control_Cnet - *2(OTE)*
*FCNA_ACS355_O_ASSY_102.Ramp_Hold - MainProgram/ACS355_Control_Cnet - *4(OTE)*
*FCNA_ACS355_O_ASSY_102.RampIn_Zero - MainProgram/ACS355_Control_Cnet - *5(OTE)*
*FCNA_ACS355_O_ASSY_102.RampOut_Zero - MainProgram/ACS355_Control_Cnet - *4(OTE)*
*FCNA_ACS355_O_ASSY_102.Remote_Cmd - MainProgram/ACS355_Control_Cnet - *5(OTE)*
*FCNA_ACS355_O_ASSY_102.Speed_Ref - MainProgram/ACS355_Control_Cnet - *8(MOV)*
*FCNA_ACS355_O_ASSY_102.Torque_Ref - MainProgram/ACS355_Control_Cnet - *10(MOV)*

FCNA_ACS850_ABB_Profile:I AB:CONTROLNET_MODULE_INT_30Bytes:I:0 Sample_ABB_Profile_ControlNet_Compact

*FCNA_ACS850_ABB_Profile:I - MainProgram/UDT_PROGRAM - *4(ABB_73)*

FCNA_ACS850_ABB_Profile:O AB:CONTROLNET_MODULE_INT_26Bytes:O:0 Sample_ABB_Profile_ControlNet_Compact

*FCNA_ACS850_ABB_Profile:O - MainProgram/UDT_PROGRAM - *4(ABB_73)*

FCNA_ACS850_I_ASSY_152 ABB_FCNA_UDT_152 Sample_ABB_Profile_ControlNet_Compact

ABB Drives Profile Input Instance 152 Size 13 INTs Sts Word, Spd fbk, Trq fbk +10 Data Inputs
*FCNA_ACS850_I_ASSY_152 - MainProgram/UDT_PROGRAM - *4(ABB_73)*
FCNA_ACS850_I_ASSY_152.Actual_Speed - MainProgram/ACS850_Control_Cnet - 11(MOV)

FCNA_ACS850_O_ASSY_102 ABB_FCNA_UDT_102 Sample_ABB_Profile_ControlNet_Compact

ABB Drives Profile Output Instance 102 Size 13 INTs Cntrl Word, Spd & Trq Refs +10 Data Outputs
*FCNA_ACS850_O_ASSY_102 - MainProgram/UDT_PROGRAM - *4(ABB_73)*
*FCNA_ACS850_O_ASSY_102.Ext_Ctrl_Loc - MainProgram/ACS850_Control_Cnet - *6(OTE)*
*FCNA_ACS850_O_ASSY_102.Fault_Reset - MainProgram/ACS850_Control_Cnet - *3(OTE)*
*FCNA_ACS850_O_ASSY_102.Inhibit_Operation - MainProgram/ACS850_Control_Cnet - *4(OTE)*
*FCNA_ACS850_O_ASSY_102.Off_1_Ctrl - MainProgram/ACS850_Control_Cnet - *0(OTE)*
*FCNA_ACS850_O_ASSY_102.Off_2_Ctrl - MainProgram/ACS850_Control_Cnet - *1(OTE)*
*FCNA_ACS850_O_ASSY_102.Off_3_Ctrl - MainProgram/ACS850_Control_Cnet - *2(OTE)*
*FCNA_ACS850_O_ASSY_102.Ramp_Hold - MainProgram/ACS850_Control_Cnet - *4(OTE)*
*FCNA_ACS850_O_ASSY_102.RampIn_Zero - MainProgram/ACS850_Control_Cnet - *5(OTE)*
*FCNA_ACS850_O_ASSY_102.RampOut_Zero - MainProgram/ACS850_Control_Cnet - *4(OTE)*
*FCNA_ACS850_O_ASSY_102.Remote_Cmd - MainProgram/ACS850_Control_Cnet - *5(OTE)*
*FCNA_ACS850_O_ASSY_102.Speed_Ref - MainProgram/ACS850_Control_Cnet - *8(MOV)*
*FCNA_ACS850_O_ASSY_102.Torque_Ref - MainProgram/ACS850_Control_Cnet - *10(MOV)*

FCNA_ACS880_ABB_Profile:I AB:CONTROLNET_MODULE_INT_30Bytes:I:0 Sample_ABB_Profile_ControlNet_Compact

*FCNA_ACS880_ABB_Profile:I - MainProgram/UDT_PROGRAM - *5(ABB_73)*

FCNA_ACS880_ABB_Profile:O AB:CONTROLNET_MODULE_INT_26Bytes:O:0 Sample_ABB_Profile_ControlNet_Compact

*FCNA_ACS880_ABB_Profile:O - MainProgram/UDT_PROGRAM - *5(ABB_73)*

FCNA_ACS880_I_ASSY_152 ABB_FCNA_UDT_152 Sample_ABB_Profile_ControlNet_Compact

ABB Drives Profile Input Instance 152 Size 13 INTs Sts Word, Spd fbk, Trq fbk +10 Data Inputs

FCNA_ACS880_I_ASSY_152 (Continued)

*FCNA_ACS880_I_ASSY_152 - MainProgram/UDT_PROGRAM - *5(ABB_73)*
FCNA_ACS880_I_ASSY_152.Actual_Speed - MainProgram/ACS880_Control_Cnet - 11(MOV)

FCNA_ACS880_O_ASSY_102 ABB_FCNA_UDT_102 Sample_ABB_Profile_ControlNet_Compact

ABB Drives Profile Output Instance 102 Size 13 INTs Cntrl Word, Spd & Trq Refs +10 Data Outputs
*FCNA_ACS880_O_ASSY_102 - MainProgram/UDT_PROGRAM - *5(ABB_73)*
*FCNA_ACS880_O_ASSY_102.Ext_Ctrl_Loc - MainProgram/ACS880_Control_Cnet - *6(OTE)*
*FCNA_ACS880_O_ASSY_102.Fault_Reset - MainProgram/ACS880_Control_Cnet - *3(OTE)*
*FCNA_ACS880_O_ASSY_102.Inhibit_Operation - MainProgram/ACS880_Control_Cnet - *4(OTE)*
*FCNA_ACS880_O_ASSY_102.Off_1_Ctrl - MainProgram/ACS880_Control_Cnet - *0(OTE)*
*FCNA_ACS880_O_ASSY_102.Off_2_Ctrl - MainProgram/ACS880_Control_Cnet - *1(OTE)*
*FCNA_ACS880_O_ASSY_102.Off_3_Ctrl - MainProgram/ACS880_Control_Cnet - *2(OTE)*
*FCNA_ACS880_O_ASSY_102.Ramp_Hold - MainProgram/ACS880_Control_Cnet - *4(OTE)*
*FCNA_ACS880_O_ASSY_102.RampIn_Zero - MainProgram/ACS880_Control_Cnet - *5(OTE)*
*FCNA_ACS880_O_ASSY_102.RampOut_Zero - MainProgram/ACS880_Control_Cnet - *4(OTE)*
*FCNA_ACS880_O_ASSY_102.Remote_Cmd - MainProgram/ACS880_Control_Cnet - *5(OTE)*
*FCNA_ACS880_O_ASSY_102.Speed_Ref - MainProgram/ACS880_Control_Cnet - *8(MOV)*
*FCNA_ACS880_O_ASSY_102.Torque_Ref - MainProgram/ACS880_Control_Cnet - *10(MOV)*

Local:1:I AB:1769_IF4XOF2:I:0 Sample_ABB_Profile_ControlNet_Compact

Local:1:I.Ch0Data - MainProgram/ACS355_Control_Cnet - 7(DIV)
Local:1:I.Ch0Data - MainProgram/ACS550_Control_Cnet - 7(DIV)
Local:1:I.Ch0Data - MainProgram/ACS800_Control_Cnet - 7(DIV)
Local:1:I.Ch0Data - MainProgram/ACS850_Control_Cnet - 7(DIV)
Local:1:I.Ch0Data - MainProgram/ACS880_Control_Cnet - 7(DIV)
Local:1:I.Ch0Data - MainProgram/DCS800_Control_Cnet - 5(DIV)
Local:1:I.Ch1Data - MainProgram/ACS355_Control_Cnet - 9(DIV)
Local:1:I.Ch1Data - MainProgram/ACS550_Control_Cnet - 9(DIV)
Local:1:I.Ch1Data - MainProgram/ACS800_Control_Cnet - 9(DIV)
Local:1:I.Ch1Data - MainProgram/ACS850_Control_Cnet - 9(DIV)
Local:1:I.Ch1Data - MainProgram/ACS880_Control_Cnet - 9(DIV)

Local:2:I AB:1769_IQ6XOW4:I:0 Sample_ABB_Profile_ControlNet_Compact

Local:2:I.Data.0 - MainProgram/ACS355_Control_Cnet - 0(XIC)
Local:2:I.Data.0 - MainProgram/ACS550_Control_Cnet - 0(XIC)
Local:2:I.Data.0 - MainProgram/ACS800_Control_Cnet - 0(XIC)
Local:2:I.Data.0 - MainProgram/ACS850_Control_Cnet - 0(XIC)
Local:2:I.Data.0 - MainProgram/ACS880_Control_Cnet - 0(XIC)
Local:2:I.Data.0 - MainProgram/DCS800_Control_Cnet - 0(XIC)
Local:2:I.Data.1 - MainProgram/ACS355_Control_Cnet - 1(XIO)
Local:2:I.Data.1 - MainProgram/ACS550_Control_Cnet - 1(XIO)
Local:2:I.Data.1 - MainProgram/ACS800_Control_Cnet - 1(XIO)
Local:2:I.Data.1 - MainProgram/ACS850_Control_Cnet - 1(XIO)
Local:2:I.Data.1 - MainProgram/ACS880_Control_Cnet - 1(XIO)
Local:2:I.Data.1 - MainProgram/DCS800_Control_Cnet - 1(XIO)
Local:2:I.Data.2 - MainProgram/ACS355_Control_Cnet - 2(XIO)
Local:2:I.Data.2 - MainProgram/ACS550_Control_Cnet - 2(XIO)
Local:2:I.Data.2 - MainProgram/ACS800_Control_Cnet - 2(XIO)
Local:2:I.Data.2 - MainProgram/ACS850_Control_Cnet - 2(XIO)
Local:2:I.Data.2 - MainProgram/ACS880_Control_Cnet - 2(XIO)
Local:2:I.Data.2 - MainProgram/DCS800_Control_Cnet - 2(XIO)
Local:2:I.Data.3 - MainProgram/ACS355_Control_Cnet - 3(XIC)
Local:2:I.Data.3 - MainProgram/ACS550_Control_Cnet - 3(XIC)
Local:2:I.Data.3 - MainProgram/ACS800_Control_Cnet - 3(XIC)
Local:2:I.Data.3 - MainProgram/ACS850_Control_Cnet - 3(XIC)
Local:2:I.Data.3 - MainProgram/ACS880_Control_Cnet - 3(XIC)
Local:2:I.Data.3 - MainProgram/DCS800_Control_Cnet - 3(XIC)
Local:2:I.Data.4 - MainProgram/ACS355_Control_Cnet - 6(XIC)
Local:2:I.Data.4 - MainProgram/ACS550_Control_Cnet - 6(XIC)
Local:2:I.Data.4 - MainProgram/ACS800_Control_Cnet - 6(XIC)

Local:2:I (Continued)
Local:2:I.Data.4 - MainProgram/ACS850_Control_Cnet - 6(XIC)
Local:2:I.Data.4 - MainProgram/ACS880_Control_Cnet - 6(XIC)
Local:2:I.Data.5 - MainProgram/ACS355_Control_Cnet - 10(XIC), 8(XIC)
Local:2:I.Data.5 - MainProgram/ACS550_Control_Cnet - 10(XIC), 10(XIO), 8(XIC), 8(XIO)
Local:2:I.Data.5 - MainProgram/ACS800_Control_Cnet - 10(XIC), 10(XIO), 8(XIC), 8(XIO)
Local:2:I.Data.5 - MainProgram/ACS850_Control_Cnet - 10(XIC), 8(XIC)
Local:2:I.Data.5 - MainProgram/ACS880_Control_Cnet - 10(XIC), 8(XIC)
Local:2:I.Data.5 - MainProgram/DCS800_Control_Cnet - 6(XIC), 6(XIO)

RCNA_ACS550_ABB_PROFILE:I AB:CONTROLNET_MODULE_INT_22Bytes:I:0 Sample_ABB_Profile_ControlNet_Compact
*RCNA_ACS550_ABB_PROFILE:I - MainProgram/UDT_PROGRAM - *0(ABB_29)*

RCNA_ACS550_ABB_PROFILE:O AB:CONTROLNET_MODULE_INT_18Bytes:O:0 Sample_ABB_Profile_ControlNet_Compact
*RCNA_ACS550_ABB_PROFILE:O - MainProgram/UDT_PROGRAM - *0(ABB_29)*

RCNA_ACS550_I_ASSY_103 ABB_RCNA_UDT_103_9 Sample_ABB_Profile_ControlNet_Compact
ABB Drives Profile Input Instance 103 RCNA - Size 11 INTs Sts Word , Spd Fbk & +7 Data Inputs
*RCNA_ACS550_I_ASSY_103 - MainProgram/UDT_PROGRAM - *0(ABB_29)*
RCNA_ACS550_I_ASSY_103.Actual_Speed - MainProgram/ACS550_Control_Cnet - 11(MOV)

RCNA_ACS550_O_ASSY_102 ABB_RCNA_UDT_102_9 Sample_ABB_Profile_ControlNet_Compact
ABB Drives Profile Output Instance 102 Size 9 INTs Cntrl Word, Spd + 7 Data Outputs
*RCNA_ACS550_O_ASSY_102 - MainProgram/UDT_PROGRAM - *0(ABB_29)*
*RCNA_ACS550_O_ASSY_102.Custom_Out_01 - MainProgram/ACS550_Control_Cnet - *10(MOV)*
*RCNA_ACS550_O_ASSY_102.Ext_Ctrl_Loc - MainProgram/ACS550_Control_Cnet - *6(OTE)*
*RCNA_ACS550_O_ASSY_102.Fault_Reset - MainProgram/ACS550_Control_Cnet - *3(OTE)*
*RCNA_ACS550_O_ASSY_102.Inhibit_Operation - MainProgram/ACS550_Control_Cnet - *4(OTE)*
*RCNA_ACS550_O_ASSY_102.Off_1_Ctrl - MainProgram/ACS550_Control_Cnet - *0(OTE)*
*RCNA_ACS550_O_ASSY_102.Off_2_Ctrl - MainProgram/ACS550_Control_Cnet - *1(OTE)*
*RCNA_ACS550_O_ASSY_102.Off_3_Ctrl - MainProgram/ACS550_Control_Cnet - *2(OTE)*
*RCNA_ACS550_O_ASSY_102.Ramp_Hold - MainProgram/ACS550_Control_Cnet - *4(OTE)*
*RCNA_ACS550_O_ASSY_102.RampIn_Zero - MainProgram/ACS550_Control_Cnet - *5(OTE)*
*RCNA_ACS550_O_ASSY_102.RampOut_Zero - MainProgram/ACS550_Control_Cnet - *4(OTE)*
*RCNA_ACS550_O_ASSY_102.Remote_Cmd - MainProgram/ACS550_Control_Cnet - *5(OTE)*
*RCNA_ACS550_O_ASSY_102.Speed_Ref - MainProgram/ACS550_Control_Cnet - *8(MOV)*

RCNA_ACS800_ABB_PROFILE:I AB:CONTROLNET_MODULE_INT_22Bytes:I:0 Sample_ABB_Profile_ControlNet_Compact
*RCNA_ACS800_ABB_PROFILE:I - MainProgram/UDT_PROGRAM - *1(ABB_29)*

RCNA_ACS800_ABB_PROFILE:O AB:CONTROLNET_MODULE_INT_18Bytes:O:0 Sample_ABB_Profile_ControlNet_Compact
*RCNA_ACS800_ABB_PROFILE:O - MainProgram/UDT_PROGRAM - *1(ABB_29)*

RCNA_ACS800_I_ASSY_103 ABB_RCNA_UDT_103_9 Sample_ABB_Profile_ControlNet_Compact
ABB Drives Profile Input Instance 103 RCNA - Size 11 INTs Sts Word , Spd Fbk & +7 Data Inputs
*RCNA_ACS800_I_ASSY_103 - MainProgram/UDT_PROGRAM - *1(ABB_29)*
RCNA_ACS800_I_ASSY_103.Actual_Speed - MainProgram/ACS800_Control_Cnet - 11(MOV)

RCNA_ACS800_O_ASSY_102 ABB_RCNA_UDT_102_9 Sample_ABB_Profile_ControlNet_Compact
ABB Drives Profile Output Instance 102 Size 9 INTs Cntrl Word, Spd + 7 Data Outputs

RCNA_ACS800_O_ASSY_102 (Continued)

*RCNA_ACS800_O_ASSY_102 - MainProgram/UDT_PROGRAM - *1(ABB_29)*
*RCNA_ACS800_O_ASSY_102.Custom_Out_01 - MainProgram/ACS800_Control_Cnet - *10(MOV)*
*RCNA_ACS800_O_ASSY_102.Ext_Ctrl_Loc - MainProgram/ACS800_Control_Cnet - *6(OTE)*
*RCNA_ACS800_O_ASSY_102.Fault_Reset - MainProgram/ACS800_Control_Cnet - *3(OTE)*
*RCNA_ACS800_O_ASSY_102.Inhibit_Operation - MainProgram/ACS800_Control_Cnet - *4(OTE)*
*RCNA_ACS800_O_ASSY_102.Off_1_Ctrl - MainProgram/ACS800_Control_Cnet - *0(OTE)*
*RCNA_ACS800_O_ASSY_102.Off_2_Ctrl - MainProgram/ACS800_Control_Cnet - *1(OTE)*
*RCNA_ACS800_O_ASSY_102.Off_3_Ctrl - MainProgram/ACS800_Control_Cnet - *2(OTE)*
*RCNA_ACS800_O_ASSY_102.Ramp_Hold - MainProgram/ACS800_Control_Cnet - *4(OTE)*
*RCNA_ACS800_O_ASSY_102.RampIn_Zero - MainProgram/ACS800_Control_Cnet - *5(OTE)*
*RCNA_ACS800_O_ASSY_102.RampOut_Zero - MainProgram/ACS800_Control_Cnet - *4(OTE)*
*RCNA_ACS800_O_ASSY_102.Remote_Cmd - MainProgram/ACS800_Control_Cnet - *5(OTE)*
*RCNA_ACS800_O_ASSY_102.Speed_Ref - MainProgram/ACS800_Control_Cnet - *8(MOV)*

RCNA_DCS800_ABB_PROFILE:I AB:CONTROLNET_MODULE_INT_22Bytes:I:0 Sample_ABB_Profile_ControlNet_Compact

*RCNA_DCS800_ABB_PROFILE:I - MainProgram/UDT_PROGRAM - *2(ABB_34)*

RCNA_DCS800_ABB_PROFILE:O AB:CONTROLNET_MODULE_INT_18Bytes:O:0 Sample_ABB_Profile_ControlNet_Compact

*RCNA_DCS800_ABB_PROFILE:O - MainProgram/UDT_PROGRAM - *2(ABB_34)*

RCNA_DCS800_I_ASSY_103 ABB_DCS800_RCNA_UDT_103_9 Sample_ABB_Profile_ControlNet_Compact

ABB Drives Profile Input Instance 103 Size 9 INTs Sts Word , Spd Fbk & +7 Data Inputs
*RCNA_DCS800_I_ASSY_103 - MainProgram/UDT_PROGRAM - *2(ABB_34)*
RCNA_DCS800_I_ASSY_103.Actual_Speed - MainProgram/DCS800_Control_Cnet - 7(MOV)

RCNA_DCS800_O_ASSY_102 ABB_DCS800_RCNA_UDT_102_9 Sample_ABB_Profile_ControlNet_Compact

ABB Drives Profile Output Instance 102 Size 9 INTs Cntrl Word, Spd + 7 Data Outputs
*RCNA_DCS800_O_ASSY_102 - MainProgram/UDT_PROGRAM - *2(ABB_34)*
*RCNA_DCS800_O_ASSY_102.Fault_Reset - MainProgram/DCS800_Control_Cnet - *3(OTE)*
*RCNA_DCS800_O_ASSY_102.Off_1_Ctrl - MainProgram/DCS800_Control_Cnet - *0(OTE)*
*RCNA_DCS800_O_ASSY_102.Off_2_Ctrl - MainProgram/DCS800_Control_Cnet - *1(OTE)*
*RCNA_DCS800_O_ASSY_102.Off_3_Ctrl - MainProgram/DCS800_Control_Cnet - *2(OTE)*
*RCNA_DCS800_O_ASSY_102.Ramp_Hold - MainProgram/DCS800_Control_Cnet - *4(OTE)*
*RCNA_DCS800_O_ASSY_102.RampIn_Zero - MainProgram/DCS800_Control_Cnet - *4(OTE)*
*RCNA_DCS800_O_ASSY_102.RampOut_Zero - MainProgram/DCS800_Control_Cnet - *4(OTE)*
*RCNA_DCS800_O_ASSY_102.Remote_Cmd - MainProgram/DCS800_Control_Cnet - *4(OTE)*
*RCNA_DCS800_O_ASSY_102.Run - MainProgram/DCS800_Control_Cnet - *0(OTE)*
*RCNA_DCS800_O_ASSY_102.Speed_Ref - MainProgram/DCS800_Control_Cnet - *6(MOV)*

Sample program below is controlling a ACS355 on ControlNet. The ACS355 is program to use ABB Drives profile for control and status.
Note: Parameter 51.12 needs to be programmed to a "1" (32 bit Run/Idle header).

0

Local:2:I.Data.0

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs Bit 0 - Off1
Control
(1 = Ready to
Operate; ON)
FCNA_ACS355_O_ASSY_102.Off_1_Ctrl

1

Local:2:I.Data.1

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs Bit 1 - Off2
Control
(1 = NOT Coast Stop)
FCNA_ACS355_O_ASSY_102.Off_2_Ctrl

2

Local:2:I.Data.2

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs Bit 2 - Off3
Control
(1 = NOT Estop)
FCNA_ACS355_O_ASSY_102.Off_3_Ctrl

3

Local:2:I.Data.3

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs Bit 7 -
Fault Reset Request
(Transition 0->1)
FCNA_ACS355_O_ASSY_102.Fault_Reset

4

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs Bit 3 -
Inhibit Operation /
Run Control
(1 = Operation
Enabled = Run if Run
Enable in Drive is
set to Comm or True)
FCNA_ACS355_O_ASSY_102.Inhibit_Operation

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs Bit 4 - Ramp
Out Zero Command
(1 = Normal
Operation)
FCNA_ACS355_O_ASSY_102.RampOut_Zero

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs Bit 5 - Ramp
Hold
(1 = Normal
Operation)
FCNA_ACS355_O_ASSY_102.Ramp_Hold

5

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs Bit 6 - Ramp
In Zero Command
(1 = Normal
Operation)
FCNA_ACS355_O_ASSY_102.RampIn_Zero

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs Bit 9 -
Fieldbus Control
Enable
(1 = Fieldbus
Control)
FCNA_ACS355_O_ASSY_102.Remote_Cmd

6

Local:2:I.Data.4

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs Bit 10 -
Control Location
Select
(1 = Select EXT2)
FCNA_ACS355_O_ASSY_102.Ext_Ctrl_Loc

7

DIV
Divide
Source A Local:1:I.Ch0Data
0
Source B ACS355_Ref_Divider_1_CNet
1.5872
Dest ACS355_Ref1_CNet
0

MOV
Move
Source ACS355_Ref1_CNet
0
Dest ACS355_Ref_1_SUM_CNet
0

8

MOV
Move
Source ACS355_Ref_1_SUM_CNet
0
Dest ACS355_Ref1_Total_CNet
0

Local:2:I.Data.5

NEG
Negate
Source ACS355_Ref_1_SUM_CNet
0
Dest ACS355_Ref1_Total_CNet
0

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs +/- Speed
Reference
(See documentation
for scaling)

MOV
Move
Source ACS355_Ref1_Total_CNet
0
Dest FCNA_ACS355_O_ASSY_102.Speed_Ref
0

9

DIV
Divide
Source A Local:1:I.Ch1Data
0
Source B ACS355_Ref_2_Divider_CNet
3.1744
Dest ACS355_Ref2_CNet
0

MOV
Move
Source ACS355_Ref2_CNet
0
Dest ACS355_Ref_2_SUM_CNet
0

10

MOV
Move
Source ACS355_Ref_2_SUM_CNet
0
Dest ACS355_Ref2_Total_CNet
0

Local:2:I.Data.5

NEG
Negate
Source ACS355_Ref_2_SUM_CNet
0
Dest ACS355_Ref2_Total_CNet
0

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs +/- Torque
Reference (See
documentation for
Scaling)

MOV
Move
Source ACS355_Ref2_Total_CNet
0
Dest FCNA_ACS355_O_ASSY_102.Torque_Ref
0

11

MOV
Move
Source FCNA_ACS355_I_ASSY_152.Actual_Speed
0
Dest ACS355_Actual_Speed_CNet
0

(End)

Sample program below is controlling a ACS550 on ControlNet. The ACS550 is program to use ABB Drives profile for control and status.

Bit 0 = Stop along currently active deceleration ramp (22.03/22.05). Enter OFF1 ACTIVE; proceed to READY TO SWITCH ON unless other interlocks (OFF2, OFF3) are active.

0

Local:2:I.Data.0

ABB Drives Profile
Output Instance 102
Size 9 INTs
Cntrl Word, Spd + 7
Data Outputs Bit 0 -
Off1 Control (1 =
Ready to Operate;
ON)
RCNA_ACS550_O_ASSY_102.Off_1_Ctrl

1

Local:2:I.Data.1

ABB Drives Profile
Output Instance 102
Size 9 INTs
Cntrl Word, Spd + 7
Data Outputs Bit 1 -
Off2 Control (1 =
NOT Coast Stop)
RCNA_ACS550_O_ASSY_102.Off_2_Ctrl

2

Local:2:I.Data.2

ABB Drives Profile
Output Instance 102
Size 9 INTs
Cntrl Word, Spd + 7
Data Outputs Bit 2 -
Off3 Control (1 =
NOT Estop)
RCNA_ACS550_O_ASSY_102.Off_3_Ctrl

3

Local:2:I.Data.3

ABB Drives Profile
Output Instance 102
Size 9 INTs
Cntrl Word, Spd + 7
Data Outputs Bit 7 -
Fault Reset Request
(Transition 0->1)
RCNA_ACS550_O_ASSY_102.Fault_Reset

4

ABB Drives Profile Output Instance 102 Size 9 INTs Cntrl Word, Spd + 7 Data Outputs Bit 3 - Inhibit Operation / Run Control (1 = Operation Enabled = Run if Run Enable in Drive is set to Comm or True)
RCNA_ACS550_O_ASSY_102.Inhibit_Operation

ABB Drives Profile Output Instance 102 Size 9 INTs Cntrl Word, Spd + 7 Data Outputs Bit 4 - Ramp Out Zero Command (1 = Normal Operation)
RCNA_ACS550_O_ASSY_102.RampOut_Zero

ABB Drives Profile Output Instance 102 Size 9 INTs Cntrl Word, Spd + 7 Data Outputs Bit 5 - Ramp Hold (1 = Normal Operation)
RCNA_ACS550_O_ASSY_102.Ramp_Hold

5

ABB Drives Profile Output Instance 102 Size 9 INTs Cntrl Word, Spd + 7 Data Outputs Bit 6 - Ramp In Zero Command (1 = Normal Operation)
RCNA_ACS550_O_ASSY_102.RampIn_Zero

ABB Drives Profile Output Instance 102 Size 9 INTs Cntrl Word, Spd + 7 Data Outputs Bit 10 - Fieldbus Control Enable (1 = Fieldbus Control)
RCNA_ACS550_O_ASSY_102.Remote_Cmd

6

Local:2:I.Data.4

ABB Drives Profile Output Instance 102 Size 9 INTs Cntrl Word, Spd + 7 Data Outputs Bit 11 - Control Location Select (1 = Select EXT2)
RCNA_ACS550_O_ASSY_102.Ext_Ctrl_Loc

This rung is used to rescale the Analog Input to 20,000 unit. The 20,000 units will be max. speed for the drive based on parameter group 20. See User Manual for more information.

7

DIV
Divide
Source A Local:1:I.Ch0Data
0
Source B ACS550_Ref_Divider_1_CNet
1.5872
Dest ACS550_Ref1_CNet
0

MOV
Move
Source ACS550_Ref1_CNet
0
Dest ACS550_Ref_1_SUM_CNet
0

8

Local:2:I.Data.5 /

MOV
Move
Source ACS550_Ref_1_SUM_CNet
0
Dest ACS550_Ref1_Total_CNet
0

Local:2:I.Data.5

NEG
Negate
Source ACS550_Ref_1_SUM_CNet
0
Dest ACS550_Ref1_Total_CNet
0

ABB Drives Profile
Output Instance 102
Size 9 INTs
Cntrl Word, Spd + 7
Data Outputs +/-
Speed Reference (See
documentation for
scaling)

MOV
Move
Source ACS550_Ref1_Total_CNet
0
Dest RCNA_ACS550_O_ASSY_102.Speed_Ref
0

This rung is used to rescale the Analog Input to 10,000 unit. The 10,000 units will be max. speed for the drive based on parameter group 20 or 100% Torque for the motor. See User Manual for more information.

9

DIV
Divide
Source A Local:1:I.Ch1Data
0
Source B ACS550_Ref_2_Divider_CNet
3.1744
Dest ACS550_Ref2_CNet
0

MOV
Move
Source ACS550_Ref2_CNet
0
Dest ACS550_Ref_2_SUM_CNet
0

10

Local:2:I.Data.5 /

MOV
Move
Source ACS550_Ref_2_SUM_CNet
0
Dest ACS550_Ref2_Total_CNet
0

Local:2:I.Data.5

NEG
Negate
Source ACS550_Ref_2_SUM_CNet
0
Dest ACS550_Ref2_Total_CNet
0

ABB Drives Profile
Output Instance 102
Size 9 INTs
Cntrl Word, Spd + 7
Data Outputs Custom
Data to Drive Value
#01

MOV
Move
Source ACS550_Ref2_Total_CNet
0
Dest RCNA_ACS550_O_ASSY_102.Custom_Out_01
0

11

MOV
Move
Source RCNA_ACS550_I_ASSY_103.Actual_Speed
0
Dest ACS550_Actual_Speed_CNet
0

(End)

Sample program below is controlling a ACS800 on ControlNet. The ACS800 is program to use ABB Drives profile for control and status.

Bit 0 = Stop along currently active deceleration ramp (22.03/22.05). Enter OFF1 ACTIVE; proceed to READY TO SWITCH ON unless other interlocks (OFF2, OFF3) are active.

0
Local:2:I.Data.0
ABB Drives Profile Output Instance 102 Size 9 INTs Cntrl Word, Spd + 7 Data Outputs Bit 0 - Off1 Control (1 = Ready to Operate; ON)
RCNA_ACS800_O_ASSY_102.Off_1_Ctrl

1
Local:2:I.Data.1
ABB Drives Profile Output Instance 102 Size 9 INTs Cntrl Word, Spd + 7 Data Outputs Bit 1 - Off2 Control (1 = NOT Coast Stop)
RCNA_ACS800_O_ASSY_102.Off_2_Ctrl

2
Local:2:I.Data.2
ABB Drives Profile Output Instance 102 Size 9 INTs Cntrl Word, Spd + 7 Data Outputs Bit 2 - Off3 Control (1 = NOT Estop)
RCNA_ACS800_O_ASSY_102.Off_3_Ctrl

3
Local:2:I.Data.3
ABB Drives Profile Output Instance 102 Size 9 INTs Cntrl Word, Spd + 7 Data Outputs Bit 7 - Fault Reset Request (Transition 0->1)
RCNA_ACS800_O_ASSY_102.Fault_Reset

4

ABB Drives Profile Output Instance 102 Size 9 INTs Cntrl Word, Spd + 7 Data Outputs Bit 3 - Inhibit Operation / Run Control (1 = Operation Enabled = Run if Run Enable in Drive is set to Comm or True)
RCNA_ACS800_O_ASSY_102.Inhibit_Operation

ABB Drives Profile Output Instance 102 Size 9 INTs Cntrl Word, Spd + 7 Data Outputs Bit 4 - Ramp Out Zero Command (1 = Normal Operation)
RCNA_ACS800_O_ASSY_102.RampOut_Zero

ABB Drives Profile Output Instance 102 Size 9 INTs Cntrl Word, Spd + 7 Data Outputs Bit 5 - Ramp Hold (1 = Normal Operation)
RCNA_ACS800_O_ASSY_102.Ramp_Hold

5

ABB Drives Profile Output Instance 102 Size 9 INTs Cntrl Word, Spd + 7 Data Outputs Bit 6 - Ramp In Zero Command (1 = Normal Operation)
RCNA_ACS800_O_ASSY_102.RampIn_Zero

ABB Drives Profile Output Instance 102 Size 9 INTs Cntrl Word, Spd + 7 Data Outputs Bit 10 - Fieldbus Control Enable (1 = Fieldbus Control)
RCNA_ACS800_O_ASSY_102.Remote_Cmd

6

Local:2:I.Data.4

ABB Drives Profile Output Instance 102 Size 9 INTs Cntrl Word, Spd + 7 Data Outputs Bit 11 - Control Location Select (1 = Select EXT2)
RCNA_ACS800_O_ASSY_102.Ext_Ctrl_Loc

This rung is used to rescale the Analog Input to 20,000 unit. The 20,000 units will be max. speed for the drive based on parameter group 20. See User Manual for more information.

7

DIV
Divide
Source A Local:1:I.Ch0Data
0
Source B ACS800_Ref_Divider_1_CNet
1.5872
Dest ACS800_Ref1_CNet
0

MOV
Move
Source ACS800_Ref1_CNet
0
Dest ACS800_Ref_1_SUM_CNet
0

8

Local:2:I.Data.5 /

MOV
Move
Source ACS800_Ref_1_SUM_CNet
0
Dest ACS800_Ref1_Total_CNet
0

Local:2:I.Data.5

NEG
Negate
Source ACS800_Ref_1_SUM_CNet
0
Dest ACS800_Ref1_Total_CNet
0

ABB Drives Profile
Output Instance 102
Size 9 INTs
Cntrl Word, Spd + 7
Data Outputs +/-
Speed Reference (See
documentation for
scaling)

MOV
Move
Source ACS800_Ref1_Total_CNet
0
Dest RCNA_ACS800_O_ASSY_102.Speed_Ref
0

This rung is used to rescale the Analog Input to 20,000 unit. The 20,000 units will be max. speed for the drive based on parameter group 20. See User Manual for more information.

9

DIV
Divide
Source A Local:1:I.Ch1Data
0
Source B ACS800_Ref_2_Divider_CNet
1.5872
Dest ACS800_Ref2_CNet
0

MOV
Move
Source ACS800_Ref2_CNet
0
Dest ACS800_Ref_2_SUM_CNet
0

10

Local:2:I.Data.5 /

MOV
Move
Source ACS800_Ref_2_SUM_CNet
0
Dest ACS800_Ref2_Total_CNet
0

Local:2:I.Data.5

NEG
Negate
Source ACS800_Ref_2_SUM_CNet
0
Dest ACS800_Ref2_Total_CNet
0

ABB Drives Profile
Output Instance 102
Size 9 INTs
Cntrl Word, Spd + 7
Data Outputs Custom
Data to Drive Value
#01

MOV
Move
Source ACS800_Ref2_Total_CNet
0
Dest RCNA_ACS800_O_ASSY_102.Custom_Out_01
0

11

MOV
Move
Source RCNA_ACS800_I_ASSY_103.Actual_Speed
0
Dest ACS800_Actual_Speed_CNet
0

(End)

Sample program below is controlling a ACS850 on ControlNet. The ACS850 is program to use ABB Drives profile for control and status.
Note: Parameter 51.12 needs to be programmed to a "1" (32 bit Run/Idle header).

0

Local:2:I.Data.0

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs Bit 0 - Off1
Control
(1 = Ready to
Operate; ON)
FCNA_ACS850_O_ASSY_102.Off_1_Ctrl

1

Local:2:I.Data.1

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs Bit 1 - Off2
Control
(1 = NOT Coast Stop)
FCNA_ACS850_O_ASSY_102.Off_2_Ctrl

2

Local:2:I.Data.2

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs Bit 2 - Off3
Control
(1 = NOT Estop)
FCNA_ACS850_O_ASSY_102.Off_3_Ctrl

3

Local:2:I.Data.3

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs Bit 7 -
Fault Reset Request
(Transition 0->1)
FCNA_ACS850_O_ASSY_102.Fault_Reset

4

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs Bit 3 -
Inhibit Operation /
Run Control
(1 = Operation
Enabled = Run if Run
Enable in Drive is
set to Comm or True)
FCNA_ACS850_O_ASSY_102.Inhibit_Operation

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs Bit 4 - Ramp
Out Zero Command
(1 = Normal
Operation)
FCNA_ACS850_O_ASSY_102.RampOut_Zero

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs Bit 5 - Ramp
Hold
(1 = Normal
Operation)
FCNA_ACS850_O_ASSY_102.Ramp_Hold

5

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs Bit 6 - Ramp
In Zero Command
(1 = Normal
Operation)
FCNA_ACS850_O_ASSY_102.RampIn_Zero

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs Bit 9 -
Fieldbus Control
Enable
(1 = Fieldbus
Control)
FCNA_ACS850_O_ASSY_102.Remote_Cmd

6

Local:2:I.Data.4

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs Bit 10 -
Control Location
Select
(1 = Select EXT2)
FCNA_ACS850_O_ASSY_102.Ext_Ctrl_Loc

7

DIV
Divide
Source A Local:1:I.Ch0Data
0
Source B ACS850_Ref_Divider_1_CNet
1.5872
Dest ACS850_Ref1_CNet
0

MOV
Move
Source ACS850_Ref1_CNet
0
Dest ACS850_Ref_1_SUM_CNet
0

8

MOV
Move
Source ACS850_Ref_1_SUM_CNet
0
Dest ACS850_Ref1_Total_CNet
0

Local:2:I.Data.5

NEG
Negate
Source ACS850_Ref_1_SUM_CNet
0
Dest ACS850_Ref1_Total_CNet
0

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs +/- Speed
Reference
(See documentation
for scaling)

MOV
Move
Source ACS850_Ref1_Total_CNet
0
Dest FCNA_ACS850_O_ASSY_102.Speed_Ref
0

9

DIV
Divide
Source A Local:1:I.Ch1Data
0
Source B ACS850_Ref_2_Divider_CNet
3.1744
Dest ACS850_Ref2_CNet
0

MOV
Move
Source ACS850_Ref2_CNet
0
Dest ACS850_Ref_2_SUM_CNet
0

10

MOV
Move
Source ACS850_Ref_2_SUM_CNet
0
Dest ACS850_Ref2_Total_CNet
0

Local:2:I.Data.5

NEG
Negate
Source ACS850_Ref_2_SUM_CNet
0
Dest ACS850_Ref2_Total_CNet
0

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs +/- Torque
Reference (See
documentation for
Scaling)

MOV
Move
Source ACS850_Ref2_Total_CNet
0
Dest FCNA_ACS850_O_ASSY_102.Torque_Ref
0

11

MOV
Move
Source FCNA_ACS850_I_ASSY_152.Actual_Speed
0
Dest ACS850_Actual_Speed_CNet
0

(End)

Sample program below is controlling a ACS880 on ControlNet. The ACS880 is program to use ABB Drives profile for control and status.
Note: Parameter 51.12 needs to be programmed to a "1" (32 bit Run/Idle header).

0

Local:2:I.Data.0

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs Bit 0 - Off1
Control
(1 = Ready to
Operate; ON)
FCNA_ACS880_O_ASSY_102.Off_1_Ctrl

1

Local:2:I.Data.1

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs Bit 1 - Off2
Control
(1 = NOT Coast Stop)
FCNA_ACS880_O_ASSY_102.Off_2_Ctrl

2

Local:2:I.Data.2

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs Bit 2 - Off3
Control
(1 = NOT Estop)
FCNA_ACS880_O_ASSY_102.Off_3_Ctrl

3

Local:2:I.Data.3

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs Bit 7 -
Fault Reset Request
(Transition 0->1)
FCNA_ACS880_O_ASSY_102.Fault_Reset

4

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs Bit 3 -
Inhibit Operation /
Run Control
(1 = Operation
Enabled = Run if Run
Enable in Drive is
set to Comm or True)
FCNA_ACS880_O_ASSY_102.Inhibit_Operation

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs Bit 4 - Ramp
Out Zero Command
(1 = Normal
Operation)
FCNA_ACS880_O_ASSY_102.RampOut_Zero

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs Bit 5 - Ramp
Hold
(1 = Normal
Operation)
FCNA_ACS880_O_ASSY_102.Ramp_Hold

5

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs Bit 6 - Ramp
In Zero Command
(1 = Normal
Operation)
FCNA_ACS880_O_ASSY_102.RampIn_Zero

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs Bit 9 -
Fieldbus Control
Enable
(1 = Fieldbus
Control)
FCNA_ACS880_O_ASSY_102.Remote_Cmd

6

Local:2:I.Data.4

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs Bit 10 -
Control Location
Select
(1 = Select EXT2)
FCNA_ACS880_O_ASSY_102.Ext_Ctrl_Loc

7

DIV
Divide
Source A Local:1:I.Ch0Data
0
Source B ACS880_Ref_Divider_1_CNet
1.5872
Dest ACS880_Ref1_CNet
0

MOV
Move
Source ACS880_Ref1_CNet
0
Dest ACS880_Ref_1_SUM_CNet
0

8

MOV
Move
Source ACS880_Ref_1_SUM_CNet
0
Dest ACS880_Ref1_Total_CNet
0

Local:2:I.Data.5

NEG
Negate
Source ACS880_Ref_1_SUM_CNet
0
Dest ACS880_Ref1_Total_CNet
0

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs +/- Speed
Reference
(See documentation
for scaling)

MOV
Move
Source ACS880_Ref1_Total_CNet
0
Dest FCNA_ACS880_O_ASSY_102.Speed_Ref
0

9

DIV
Divide
Source A Local:1:I.Ch1Data
0
Source B ACS880_Ref_2_Divider_CNet
3.1744
Dest ACS880_Ref2_CNet
0

MOV
Move
Source ACS880_Ref2_CNet
0
Dest ACS880_Ref_2_SUM_CNet
0

10

MOV
Move
Source ACS880_Ref_2_SUM_CNet
0
Dest ACS880_Ref2_Total_CNet
0

Local:2:I.Data.5

NEG
Negate
Source ACS880_Ref_2_SUM_CNet
0
Dest ACS880_Ref2_Total_CNet
0

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs +/- Torque
Reference (See
documentation for
Scaling)

MOV
Move
Source ACS880_Ref2_Total_CNet
0
Dest FCNA_ACS880_O_ASSY_102.Torque_Ref
0

11

MOV
Move
Source FCNA_ACS880_I_ASSY_152.Actual_Speed
0
Dest ACS880_Actual_Speed_CNet
0

(End)

Sample program below is controlling a DCS800 on ControlNet. The DCS800 is program to use ABB Drives profile for control and status.

Bit 0 = Stop along currently active deceleration ramp (22.03/22.05). Enter OFF1 ACTIVE; proceed to READY TO SWITCH ON unless other interlocks (OFF2, OFF3) are active.

0
Local:2:I.Data.0
ABB Drives Profile
Output Instance 102
Size 9 INTs
Cntrl Word, Spd + 7
Data Outputs Bit 0 -
Off1 Control (1 =
Ready to Operate;
ON)
RCNA_DCS800_O_ASSY_102.Off_1_Ctrl
ABB Drives Profile
Output Instance 102
Size 9 INTs
Cntrl Word, Spd + 7
Data Outputs Bit 3 -
Run Control (1 =
Ready Run =
Operation Enabled)
RCNA_DCS800_O_ASSY_102.Run

1
Local:2:I.Data.1
ABB Drives Profile
Output Instance 102
Size 9 INTs
Cntrl Word, Spd + 7
Data Outputs Bit 1 -
Off2 Control (1 =
NOT Coast Stop)
RCNA_DCS800_O_ASSY_102.Off_2_Ctrl

2
Local:2:I.Data.2
ABB Drives Profile
Output Instance 102
Size 9 INTs
Cntrl Word, Spd + 7
Data Outputs Bit 2 -
Off3 Control (1 =
NOT Estop)
RCNA_DCS800_O_ASSY_102.Off_3_Ctrl

3
Local:2:I.Data.3
ABB Drives Profile
Output Instance 102
Size 9 INTs
Cntrl Word, Spd + 7
Data Outputs Bit 7 -
Fault Reset Request
(Transition 0->1)
RCNA_DCS800_O_ASSY_102.Fault_Reset

4

ABB Drives Profile
Output Instance 102
Size 9 INTs
Cntrl Word, Spd + 7
Data Outputs Bit 4 -
Ramp Out Zero
Command (1 = Normal
Operation)
RCNA_DCS800_O_ASSY_102.RampOut_Zero

ABB Drives Profile
Output Instance 102
Size 9 INTs
Cntrl Word, Spd + 7
Data Outputs Bit 5 -
Ramp Hold (1 =
Normal Operation)
RCNA_DCS800_O_ASSY_102.Ramp_Hold

ABB Drives Profile
Output Instance 102
Size 9 INTs
Cntrl Word, Spd + 7
Data Outputs Bit 6 -
Ramp In Zero Command
(1 = Normal
Operation)
RCNA_DCS800_O_ASSY_102.RampIn_Zero

ABB Drives Profile
Output Instance 102
Size 9 INTs
Cntrl Word, Spd + 7
Data Outputs Bit 10
- Fieldbus Control
Enable (1 = Fieldbus
Control)
RCNA_DCS800_O_ASSY_102.Remote_Cmd

5

This rung is used to rescale the Analog Input to 20,000 unit. The 20,000 units will be max. speed for the drive based on parameter group 20. See User Manual for more information.

DIV
Divide
Source A Local:1:I.Ch0Data
0
Source B DCS800_Ref_Divider_1_CNet
1.5872
Dest DCS800_Ref1_CNet
0

MOV
Move
Source DCS800_Ref1_CNet
0
Dest DCS800_Ref_1_SUM_CNet
0

6

Local:2:I.Data.5 /

MOV
Move
Source DCS800_Ref_1_SUM_CNet
0
Dest DCS800_Ref1_Total_CNet
0

Local:2:I.Data.5

NEG
Negate
Source DCS800_Ref_1_SUM_CNet
0
Dest DCS800_Ref1_Total_CNet
0

ABB Drives Profile
Output Instance 102
Size 9 INTs
Cntrl Word, Spd + 7
Data Outputs +/-
Speed Reference (See
documentation for
scaling)

MOV
Move
Source DCS800_Ref1_Total_CNet
0
Dest RCNA_DCS800_O_ASSY_102.Speed_Ref
0

7

MOV
Move
Source RCNA_DCS800_I_ASSY_103.Actual_Speed
0
Dest DCS800_Actual_Speed_CNet
0

(End)

0
JSR
Jump To Subroutine
Routine Name UDT_PROGRAM

1
JSR
Jump To Subroutine
Routine Name ACS550_Control_Cnet

2
JSR
Jump To Subroutine
Routine Name ACS800_Control_Cnet

3
JSR
Jump To Subroutine
Routine Name DCS800_Control_Cnet

4
JSR
Jump To Subroutine
Routine Name ACS880_Control_Cnet

5
JSR
Jump To Subroutine
Routine Name ACS850_Control_Cnet

6
JSR
Jump To Subroutine
Routine Name ACS355_Control_Cnet

(End)

0

File Name:
ABB_RCNA_AOI_103_102
_9W

ABB_29

File Name: ABB_RCNA_AOI_103_102_9W	
ABB_29	ACS550_RCNA_ADD_ON_PROFILE ...
AB_COMM_MODULE_I	RCNA_ACS550_ABB_PROFILE:I.Data
AB_COMM_MODULE_O	RCNA_ACS550_ABB_PROFILE:O.Data
ABB_RCNA_UDT_103_9	RCNA_ACS550_I_ASSY_103
ABB_RCNA_UDT_102_9	RCNA_ACS550_O_ASSY_102
StatusWord	16#0000
ControlWord	16#0000

1

File Name:
ABB_RCNA_AOI_103_102
_9W

ABB_29

File Name: ABB_RCNA_AOI_103_102_9W	
ABB_29	ACS800_RCNA_ADD_ON_PROFILE ...
AB_COMM_MODULE_I	RCNA_ACS800_ABB_PROFILE:I.Data
AB_COMM_MODULE_O	RCNA_ACS800_ABB_PROFILE:O.Data
ABB_RCNA_UDT_103_9	RCNA_ACS800_I_ASSY_103
ABB_RCNA_UDT_102_9	RCNA_ACS800_O_ASSY_102
StatusWord	16#0000
ControlWord	16#0000

2

File Name:
ABB_DCS800_RCNA_AOI_
103_102_9W

ABB_34

File Name: ABB_DCS800_RCNA_AOI_103_102_9W	
ABB_34	DCS800_RCNA_ADD_ON_PROFILE ...
AB_COMM_MODULE_I	RCNA_DCS800_ABB_PROFILE:I.Data
AB_COMM_MODULE_O	RCNA_DCS800_ABB_PROFILE:O.Data
ABB_DCS800_RCNA_UDT_103_9	RCNA_DCS800_I_ASSY_103
ABB_DCS800_RCNA_UDT_102_9	RCNA_DCS800_O_ASSY_102
StatusWord	16#0000
ControlWord	16#0000

3

File Name:
ABB_FCNA_AOI_152_102
_13W

ABB_73

File Name: ABB_FCNA_AOI_152_102_13W	
ABB_73	ACS355_FCNA_ADD_ON_PROFILE ...
AB_COMM_MODULE_I	FCNA_ACS355_ABB_Profile:I.Data
AB_COMM_MODULE_O	FCNA_ACS355_ABB_Profile:O.Data
ABB_FCNA_UDT_152	FCNA_ACS355_I_ASSY_152
ABB_FCNA_UDT_102	FCNA_ACS355_O_ASSY_102
StatusWord	16#0000
ControlWord	16#0000

4

File Name:
ABB_FCNA_AOI_152_102
_13W
ABB_73

File Name: ABB_FCNA_AOI_152_102_13W	
ABB_73	ACS850_FCNA_ADD_ON_PROFILE ...
AB_COMM_MODULE_I	FCNA_ACS850_ABB_Profile:I.Data
AB_COMM_MODULE_O	FCNA_ACS850_ABB_Profile:O.Data
ABB_FCNA_UDT_152	FCNA_ACS850_I_ASSY_152
ABB_FCNA_UDT_102	FCNA_ACS850_O_ASSY_102
StatusWord	16#0000
ControlWord	16#0000

5

File Name:
ABB_FCNA_AOI_152_102
_13W
ABB_73

File Name: ABB_FCNA_AOI_152_102_13W	
ABB_73	ACS880_FCNA_ADD_ON_PROFILE ...
AB_COMM_MODULE_I	FCNA_ACS880_ABB_Profile:I.Data
AB_COMM_MODULE_O	FCNA_ACS880_ABB_Profile:O.Data
ABB_FCNA_UDT_152	FCNA_ACS880_I_ASSY_152
ABB_FCNA_UDT_102	FCNA_ACS880_O_ASSY_102
StatusWord	16#0000
ControlWord	16#0000

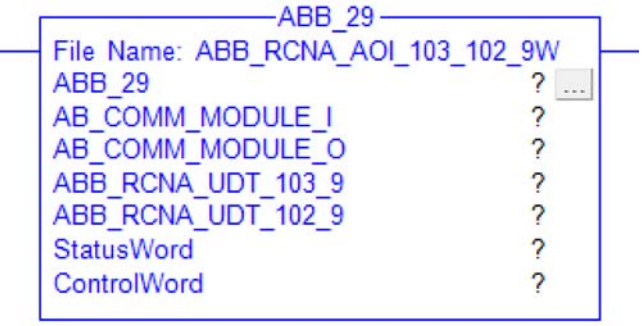
(End)

ABB_29 v1.0

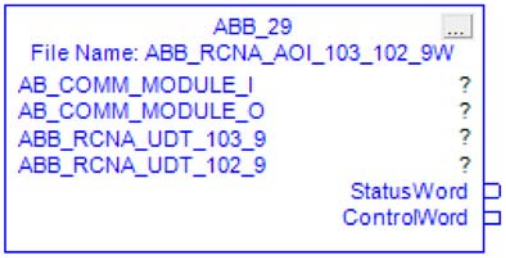
File Name: ABB_RCNA_AOI_103_102_9W

Available Languages

Relay Ladder



Function Block



Structured Text

```
ABB_29(AB_COMM_MODULE_I, AB_COMM_MODULE_O, ABB_RCNA_UDT_103_9, ABB_RCNA_UDT_102_9);
```

Parameters

Required	Name	Data Type	Usage	Description
X	ABB_29	ABB_29	InOut	File Name: ABB_RCNA_AOI_103_102_9W
	EnableIn	BOOL	Input	
	EnableOut	BOOL	Output	
X	AB_COMM_MODULE_I	INT	InOut	
X	AB_COMM_MODULE_O	INT	InOut	
X	ABB_RCNA_UDT_103_9	ABB_RCNA_UDT_103_9	InOut	
X	ABB_RCNA_UDT_102_9	ABB_RCNA_UDT_102_9	InOut	
	StatusWord	INT	Output	First Input Word (Typically Status Word from Drive)
	ControlWord	INT	Output	First Output Word (Typically ControlWord to Drive)

Extended Description

This AddOn instruction accomplishes three things:
1. Synchronously moves the plc commands and values to the drive; and the feedback from the drive to the plc.
2. Resets operate command bits in the plc pre-scan
3. Resets operate command bits and zeros references when EnableIn is false.
(EnableIn = False is never an intended use of this AddOn, and this feature is only included as a protective measure.)

Input Assy Instance: 103
Output Assy Instance: 102
Max Word Size: 9
Static/Dynamic: Dynamic
Profile Type: ABB
Comm Module Type: RCNA
File Name: ABB_RCNA_AOI_103_102_9W
Instruction Name: ABB_29
Required User Defined Data Types: ABB_RCNA_UDT_103_9, ABB_RCNA_UDT_102_9

Note: Assembly consists of custom data. Pre-scan and enable-in-false are responsibility of user.

Execution

Condition	Description
EnableIn is false	Protection Logic for EnableIn False
EnableIn is true	Transfer data to and from the drive
Prescan	Prescan Logic Conditioning

Revision v1.0 Notes

Name	Default	Data Type	Scope
StatusWord	16#0000	INT	ABB_29
First Input Word (Typically Status Word from Drive)			
Usage:	Output Parameter		
Required:	No		
Visible:	Yes		
*StatusWord - ABB_29/Logic - *2(CPS)*			
AB_COMM_MODULE_I		INT[11]	ABB_29
Usage:	InOut Parameter		
Required:	Yes		
Visible:	Yes		
AB_COMM_MODULE_I - ABB_29/Logic - 0(CPS)			
AB_COMM_MODULE_I[2] - ABB_29/Logic - 2(CPS)			
AB_COMM_MODULE_O		INT[9]	ABB_29
Usage:	InOut Parameter		
Required:	Yes		
Visible:	Yes		
*AB_COMM_MODULE_O - ABB_29/Logic - *1(CPS)*			
ControlWord	16#0000	INT	ABB_29
First Output Word (Typically ControlWord to Drive)			
Usage:	Output Parameter		
Required:	No		
Visible:	Yes		
*ControlWord - ABB_29/Logic - *2(CPS)*			
ABB_RCNA_UDT_102_9		ABB_RCNA_UDT_102_9	ABB_29
ABB Drives Profile Output Instance 102 Size 9 INTs Cntrl Word, Spd + 7 Data Outputs			
Usage:	InOut Parameter		
Required:	Yes		
Visible:	Yes		
ABB_RCNA_UDT_102_9 - ABB_29/Logic - 1(CPS), 2(CPS)			
*ABB_RCNA_UDT_102_9.Inhibit_Operation - ABB_29/EnableInFalse - *0(OTU)*			
*ABB_RCNA_UDT_102_9.Inhibit_Operation - ABB_29/Prescan - *0(OTU)*			
*ABB_RCNA_UDT_102_9.Off_1_Ctrl - ABB_29/EnableInFalse - *0(OTU)*			
*ABB_RCNA_UDT_102_9.Off_1_Ctrl - ABB_29/Prescan - *0(OTU)*			
*ABB_RCNA_UDT_102_9.Off_2_Ctrl - ABB_29/EnableInFalse - *0(OTU)*			
*ABB_RCNA_UDT_102_9.Off_2_Ctrl - ABB_29/Prescan - *0(OTU)*			
*ABB_RCNA_UDT_102_9.Off_3_Ctrl - ABB_29/EnableInFalse - *0(OTU)*			
*ABB_RCNA_UDT_102_9.Off_3_Ctrl - ABB_29/Prescan - *0(OTU)*			
*ABB_RCNA_UDT_102_9.Speed_Ref - ABB_29/EnableInFalse - *1(MOV)*			
ABB_RCNA_UDT_103_9		ABB_RCNA_UDT_103_9	ABB_29
ABB Drives Profile Input Instance 103 RCNA - Size 11 INTs Sts Word , Spd Fbk & +7 Data Inputs			
Usage:	InOut Parameter		
Required:	Yes		
Visible:	Yes		
*ABB_RCNA_UDT_103_9 - ABB_29/Logic - *0(CPS)*			

Name	Default	Data Type	Scope
No Tags Exist			

****
Copy Data from the Drive into the UDT Tag Structure
NOTE: Start at ELEMENT #2 because 1st two inputs are reserved when using Control Net
****

0

ABB Drives Profile
Input Instance 103
RCNA - Size 11 INTs
Sts Word , Spd Fbk &
+7 Data Inputs

CPS
Synchronous Copy File
Source AB_COMM_MODULE_I[2]
Dest ABB_RCNA_UDT_103_9
Length 9

****
Copy Data from the UDT Tag Structure to the Drive
****

1

CPS
Synchronous Copy File
Source ABB_RCNA_UDT_102_9
Dest AB_COMM_MODULE_O[0]
Length 9

****
Populate 1st Input and Output Words (For use as Status and Control Words)
****

2

First Input Word
(Typically Status
Word from Drive)

CPS
Synchronous Copy File
Source AB_COMM_MODULE_I[2]
Dest StatusWord
Length 1

First Output Word
(Typically
ControlWord to
Drive)

CPS
Synchronous Copy File
Source ABB_RCNA_UDT_102_9
Dest ControlWord
Length 1

(End)

****
****
Make sure Run Commands are reset prior to first scan
****
****

0

ABB Drives Profile Output Instance 102 Size 9 INTs Cntrl Word, Spd + 7 Data Outputs Bit 0 - Off1 Control (1 = Ready to Operate; ON) ABB_RCNA_UDT_102_9.Off_1_Ctrl	ABB Drives Profile Output Instance 102 Size 9 INTs Cntrl Word, Spd + 7 Data Outputs Bit 1 - Off2 Control (1 = NOT Coast Stop) ABB_RCNA_UDT_102_9.Off_2_Ctrl	ABB Drives Profile Output Instance 102 Size 9 INTs Cntrl Word, Spd + 7 Data Outputs Bit 2 - Off3 Control (1 = NOT Estop) ABB_RCNA_UDT_102_9.Off_3_Ctrl
U	U	U

ABB Drives Profile Output Instance 102 Size 9 INTs Cntrl Word, Spd + 7 Data Outputs Bit 3 - Inhibit Operation / Run Control (1 = Operation Enabled = Run if Run Enable in Drive is set to Comm or True) ABB_RCNA_UDT_102_9.Inhibit_Operation

U

(End)

****
Reset Run Commands and Zero reference on loss of EnableIn
****

0

ABB Drives Profile Output Instance 102 Size 9 INTs Cntrl Word, Spd + 7 Data Outputs Bit 0 - Off1 Control (1 = Ready to Operate; ON)
ABB_RCNA_UDT_102_9.Off_1_Ctrl
U

ABB Drives Profile Output Instance 102 Size 9 INTs Cntrl Word, Spd + 7 Data Outputs Bit 1 - Off2 Control (1 = NOT Coast Stop)
ABB_RCNA_UDT_102_9.Off_2_Ctrl
U

ABB Drives Profile Output Instance 102 Size 9 INTs Cntrl Word, Spd + 7 Data Outputs Bit 2 - Off3 Control (1 = NOT Estop)
ABB_RCNA_UDT_102_9.Off_3_Ctrl
U

ABB Drives Profile Output Instance 102 Size 9 INTs Cntrl Word, Spd + 7 Data Outputs Bit 3 - Inhibit Operation / Run Control (1 = Operation Enabled = Run if Run Enable in Drive is set to Comm or True)
ABB_RCNA_UDT_102_9.Inhibit_Operation
U

1

ABB Drives Profile Output Instance 102 Size 9 INTs Cntrl Word, Spd + 7 Data Outputs +/- Speed Reference (See documentation for scaling)

MOV
Move
Source 0
Dest ABB_RCNA_UDT_102_9.Speed_Ref
??

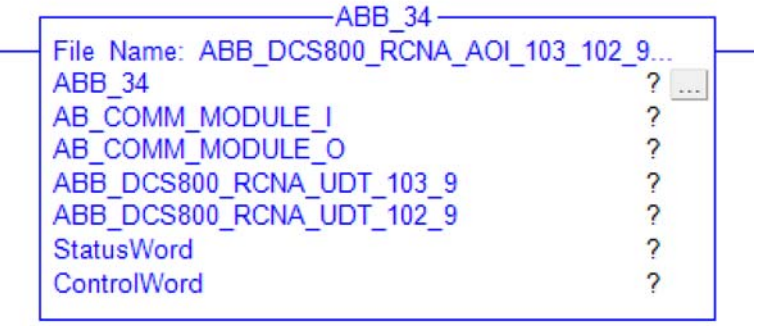
(End)

ABB_34 v1.0

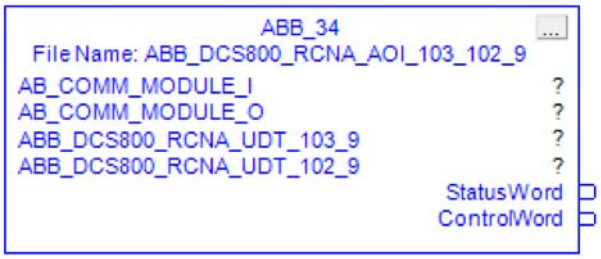
File Name: ABB_DCS800_RCNA_AOI_103_102_9W

Available Languages

Relay Ladder



Function Block



Structured Text

```
ABB_34(AB_COMM_MODULE_I, AB_COMM_MODULE_O, ABB_DCS800_RCNA_UDT_103_9, ABB_DCS800_RCNA_UDT_102_9);
```

Parameters

Required	Name	Data Type	Usage	Description
X	ABB_34	ABB_34	InOut	File Name: ABB_DCS800_RCNA_AOI_103_102_9W
	EnableIn	BOOL	Input	
	EnableOut	BOOL	Output	
X	AB_COMM_MODULE_I	INT	InOut	
X	AB_COMM_MODULE_O	INT	InOut	
X	ABB_DCS800_RCNA_UDT_103_9	ABB_DCS800_RCNA_UDT_103_9	InOut	
X	ABB_DCS800_RCNA_UDT_102_9	ABB_DCS800_RCNA_UDT_102_9	InOut	
	StatusWord	INT	Output	First Input Word (Typically Status Word from Drive)
	ControlWord	INT	Output	First Output Word (Typically ControlWord to Drive)

Extended Description

This AddOn instruction accomplishes three things:
1. Synchronously moves the plc commands and values to the drive; and the feedback from the drive to the plc.
2. Resets operate command bits in the plc pre-scan
3. Resets operate command bits and zeros references when EnableIn is false.
(EnableIn = False is never an intended use of this AddOn, and this feature is only included as a protective measure.)

Input Assy Instance: 103
Output Assy Instance: 102
Max Word Size: 9
Static/Dynamic: Dynamic
Profile Type: ABB
Comm Module Type: RCNA
File Name: ABB_AOI_103_102_9W
Instruction Name: ABB_15
Required User Defined Data Types: ABB_UDT_103, ABB_UDT_102

Note: Assembly consists of custom data. Pre-scan and enable-in-false are responsibility of user.

Execution

Condition	Description
EnableIn is false	Protection Logic for EnableIn False
EnableIn is true	Transfer data to and from the drive
Prescan	Prescan Logic Conditioning

Revision v1.0 Notes

Name	Default	Data Type	Scope
StatusWord	16#0000	INT	ABB_34
First Input Word (Typically Status Word from Drive)			
Usage:	Output Parameter		
Required:	No		
Visible:	Yes		
*StatusWord - ABB_34/Logic - *2(CPS)*			
AB_COMM_MODULE_I		INT[11]	ABB_34
Usage:	InOut Parameter		
Required:	Yes		
Visible:	Yes		
AB_COMM_MODULE_I - ABB_34/Logic - 0(CPS)			
AB_COMM_MODULE_I[2] - ABB_34/Logic - 2(CPS)			
AB_COMM_MODULE_O		INT[9]	ABB_34
Usage:	InOut Parameter		
Required:	Yes		
Visible:	Yes		
*AB_COMM_MODULE_O - ABB_34/Logic - *1(CPS)*			
ControlWord	16#0000	INT	ABB_34
First Output Word (Typically ControlWord to Drive)			
Usage:	Output Parameter		
Required:	No		
Visible:	Yes		
*ControlWord - ABB_34/Logic - *2(CPS)*			
ABB_DCS800_RCNA_UDT_102_9		ABB_DCS800_RCNA_UDT_102_9	ABB_34
ABB Drives Profile Output Instance 102 Size 9 INTs Cntrl Word, Spd + 7 Data Outputs			
Usage:	InOut Parameter		
Required:	Yes		
Visible:	Yes		
ABB_DCS800_RCNA_UDT_102_9 - ABB_34/Logic - 1(CPS), 2(CPS)			
*ABB_DCS800_RCNA_UDT_102_9.Off_1_Ctrl - ABB_34/EnableInFalse - *0(OTU)*			
*ABB_DCS800_RCNA_UDT_102_9.Off_1_Ctrl - ABB_34/Prescan - *0(OTU)*			
*ABB_DCS800_RCNA_UDT_102_9.Off_2_Ctrl - ABB_34/EnableInFalse - *0(OTU)*			
*ABB_DCS800_RCNA_UDT_102_9.Off_2_Ctrl - ABB_34/Prescan - *0(OTU)*			
*ABB_DCS800_RCNA_UDT_102_9.Off_3_Ctrl - ABB_34/EnableInFalse - *0(OTU)*			
*ABB_DCS800_RCNA_UDT_102_9.Off_3_Ctrl - ABB_34/Prescan - *0(OTU)*			
*ABB_DCS800_RCNA_UDT_102_9.Run - ABB_34/EnableInFalse - *0(OTU)*			
*ABB_DCS800_RCNA_UDT_102_9.Run - ABB_34/Prescan - *0(OTU)*			
*ABB_DCS800_RCNA_UDT_102_9.Speed_Ref - ABB_34/EnableInFalse - *1(MOV)*			
ABB_DCS800_RCNA_UDT_103_9		ABB_DCS800_RCNA_UDT_103_9	ABB_34
ABB Drives Profile Input Instance 103 Size 9 INTs Sts Word , Spd Fbk & +7 Data Inputs			
Usage:	InOut Parameter		
Required:	Yes		
Visible:	Yes		
*ABB_DCS800_RCNA_UDT_103_9 - ABB_34/Logic - *0(CPS)*			

Name	Default	Data Type	Scope
No Tags Exist			

****
Copy Data from the Drive into the UDT Tag Structure
NOTE: Start at ELEMENT #2 because 1st two inputs are reserved when using Control Net
****

0

ABB Drives Profile
Input Instance 103
Size 9 INTs
Sts Word , Spd Fbk &
+7 Data Inputs

CPS
Synchronous Copy File
Source AB_COMM_MODULE_I[2]
Dest ABB_DCS800_RCNA_UDT_103_9
Length 9

****
Copy Data from the UDT Tag Structure to the Drive
****

1

CPS
Synchronous Copy File
Source ABB_DCS800_RCNA_UDT_102_9
Dest AB_COMM_MODULE_O[0]
Length 9

****
Populate 1st Input and Output Words (For use as Status and Control Words)
****

2

First Input Word
(Typically Status
Word from Drive)

CPS
Synchronous Copy File
Source AB_COMM_MODULE_I[2]
Dest StatusWord
Length 1

First Output Word
(Typically
ControlWord to
Drive)

CPS
Synchronous Copy File
Source ABB_DCS800_RCNA_UDT_102_9
Dest ControlWord
Length 1

(End)

****
Make sure Run Commands are reset prior to first scan
****

0

ABB Drives Profile
Output Instance 102
Size 9 INTs
Cntrl Word, Spd + 7
Data Outputs Bit 0 -
Off1 Control (1 =
Ready to Operate;
ON)
ABB_DCS800_RCNA_UDT_102_9.Off_1_Ctrl
U

ABB Drives Profile
Output Instance 102
Size 9 INTs
Cntrl Word, Spd + 7
Data Outputs Bit 1 -
Off2 Control (1 =
NOT Coast Stop)
ABB_DCS800_RCNA_UDT_102_9.Off_2_Ctrl
U

ABB Drives Profile
Output Instance 102
Size 9 INTs
Cntrl Word, Spd + 7
Data Outputs Bit 2 -
Off3 Control (1 =
NOT Estop)
ABB_DCS800_RCNA_UDT_102_9.Off_3_Ctrl
U

ABB Drives Profile
Output Instance 102
Size 9 INTs
Cntrl Word, Spd + 7
Data Outputs Bit 3 -
Run Control (1 =
Ready Run =
Operation Enabled)
ABB_DCS800_RCNA_UDT_102_9.Run
U

(End)

****
Reset Run Commands and Zero reference on loss of EnableIn
****

0

ABB Drives Profile
Output Instance 102
Size 9 INTs
Cntrl Word, Spd + 7
Data Outputs Bit 0 -
Off1 Control (1 =
Ready to Operate;
ON)
ABB_DCS800_RCNA_UDT_102_9.Off_1_Ctrl
U

ABB Drives Profile
Output Instance 102
Size 9 INTs
Cntrl Word, Spd + 7
Data Outputs Bit 1 -
Off2 Control (1 =
NOT Coast Stop)
ABB_DCS800_RCNA_UDT_102_9.Off_2_Ctrl
U

ABB Drives Profile
Output Instance 102
Size 9 INTs
Cntrl Word, Spd + 7
Data Outputs Bit 2 -
Off3 Control (1 =
NOT Estop)
ABB_DCS800_RCNA_UDT_102_9.Off_3_Ctrl
U

ABB Drives Profile
Output Instance 102
Size 9 INTs
Cntrl Word, Spd + 7
Data Outputs Bit 3 -
Run Control (1 =
Ready Run =
Operation Enabled)
ABB_DCS800_RCNA_UDT_102_9.Run
U

1

ABB Drives Profile
Output Instance 102
Size 9 INTs
Cntrl Word, Spd + 7
Data Outputs +/-
Speed Reference (See
documentation for
scaling)
MOV
Move
Source 0
Dest ABB_DCS800_RCNA_UDT_102_9.Speed_Ref
??

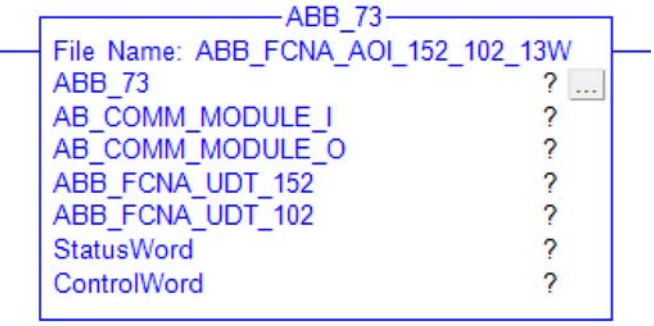
(End)

ABB_73 v1.0

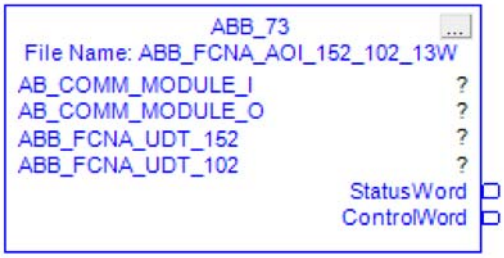
File Name: ABB_FCNA_AOI_152_102_13W

Available Languages

Relay Ladder



Function Block



Structured Text

```
ABB_73(AB_COMM_MODULE_I, AB_COMM_MODULE_O, ABB_FCNA_UDT_152, ABB_FCNA_UDT_102);
```

Parameters

Required	Name	Data Type	Usage	Description
X	ABB_73	ABB_73	InOut	File Name: ABB_FCNA_AOI_152_102_13W
	EnableIn	BOOL	Input	
	EnableOut	BOOL	Output	
X	AB_COMM_MODULE_I	INT	InOut	
X	AB_COMM_MODULE_O	INT	InOut	
X	ABB_FCNA_UDT_152	ABB_FCNA_UDT_152	InOut	
X	ABB_FCNA_UDT_102	ABB_FCNA_UDT_102	InOut	
	StatusWord	INT	Output	Status Word from Drive
	ControlWord	INT	Output	ControlWord to Drive

Extended Description

This AddOn instruction accomplishes three things:
1. Synchronously moves the plc commands and values to the drive; and the feedback from the drive to the plc.
2. Resets operate command bits in the plc pre-scan
3. Resets operate command bits and zeros references when EnableIn is false.
(EnableIn = False is never an intended use of this AddOn, and this feature is only included as a protective measure.)

Input Assy Instance: 152
Output Assy Instance: 102
Max Word Size: 13
Static/Dynamic: Dynamic
Profile Type: ABB
Comm Module Type: FCNA
File Name: ABB_FCNA_AOI_152_102_13W
Instruction Name: ABB_73
Required User Defined Data Types: ABB_FCNA_UDT_152, ABB_FCNA_UDT_102

Note: Assembly consists of custom data. Pre-scan and enable-in-false are responsibility of user

Execution

Condition	Description
EnableIn is false	Protection Logic for EnableIn False
EnableIn is true	Transfer data to and from the drive
Prescan	Prescan Logic Conditioning

Revision v1.0 Notes

Name	Default	Data Type	Scope
StatusWord	16#0000	INT	ABB_73
Status Word from Drive			
Usage:	Output Parameter		
Required:	No		
Visible:	Yes		
*StatusWord - ABB_73/Logic - *2(CPS)*			
AB_COMM_MODULE_I		INT[15]	ABB_73
Usage:	InOut Parameter		
Required:	Yes		
Visible:	Yes		
AB_COMM_MODULE_I - ABB_73/Logic - 0(CPS)			
AB_COMM_MODULE_I[2] - ABB_73/Logic - 2(CPS)			
AB_COMM_MODULE_O		INT[13]	ABB_73
Usage:	InOut Parameter		
Required:	Yes		
Visible:	Yes		
*AB_COMM_MODULE_O - ABB_73/Logic - *1(CPS)*			
ControlWord	16#0000	INT	ABB_73
ControlWord to Drive			
Usage:	Output Parameter		
Required:	No		
Visible:	Yes		
*ControlWord - ABB_73/Logic - *2(CPS)*			
ABB_FCNA_UDT_102		ABB_FCNA_UDT_102	ABB_73
ABB Drives Profile Output Instance 102 Size 13 INTs Cntrl Word, Spd & Trq Refs +10 Data Outputs			
Usage:	InOut Parameter		
Required:	Yes		
Visible:	Yes		
ABB_FCNA_UDT_102 - ABB_73/Logic - 1(CPS), 2(CPS)			
*ABB_FCNA_UDT_102.Inhibit_Operation - ABB_73/EnableInFalse - *0(OTU)*			
*ABB_FCNA_UDT_102.Inhibit_Operation - ABB_73/Prescan - *0(OTU)*			
*ABB_FCNA_UDT_102.Off_1_Ctrl - ABB_73/EnableInFalse - *0(OTU)*			
*ABB_FCNA_UDT_102.Off_1_Ctrl - ABB_73/Prescan - *0(OTU)*			
*ABB_FCNA_UDT_102.Off_2_Ctrl - ABB_73/EnableInFalse - *0(OTU)*			
*ABB_FCNA_UDT_102.Off_2_Ctrl - ABB_73/Prescan - *0(OTU)*			
*ABB_FCNA_UDT_102.Off_3_Ctrl - ABB_73/EnableInFalse - *0(OTU)*			
*ABB_FCNA_UDT_102.Off_3_Ctrl - ABB_73/Prescan - *0(OTU)*			
*ABB_FCNA_UDT_102.Speed_Ref - ABB_73/EnableInFalse - *1(MOV)*			
*ABB_FCNA_UDT_102.Torque_Ref - ABB_73/EnableInFalse - *1(MOV)*			
ABB_FCNA_UDT_152		ABB_FCNA_UDT_152	ABB_73
ABB Drives Profile Input Instance 152 Size 13 INTs Sts Word, Spd fbk, Trq fbk +10 Data Inputs			
Usage:	InOut Parameter		
Required:	Yes		
Visible:	Yes		
*ABB_FCNA_UDT_152 - ABB_73/Logic - *0(CPS)*			

Name	Default	Data Type	Scope
No Tags Exist			

****
Copy Data from the Drive into the UDT Tag Structure
NOTE: Start at ELEMENT #2 because 1st two inputs are reserved when using Control Net
****

0

ABB Drives Profile
Input Instance 152
Size 13 INTs
Sts Word, Spd fbk,
Trq fbk +10 Data
Inputs

CPS
Synchronous Copy File
Source AB_COMM_MODULE_I[2]
Dest ABB_FCNA_UDT_152
Length 13

****
Copy Data from the UDT Tag Structure to the Drive
****

1

CPS
Synchronous Copy File
Source ABB_FCNA_UDT_102
Dest AB_COMM_MODULE_O[0]
Length 13

****
Populate Control and Status Words
****

2

Status Word from
Drive

CPS
Synchronous Copy File
Source AB_COMM_MODULE_I[2]
Dest StatusWord
Length 1

ControlWord to Drive

CPS
Synchronous Copy File
Source ABB_FCNA_UDT_102
Dest ControlWord
Length 1

(End)

****
****
Make sure Run Commands are reset prior to first scan
****
****

0

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs Bit 0 - Off1
Control
(1 = Ready to
Operate; ON)
ABB_FCNA_UDT_102.Off_1_Ctrl
U

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs Bit 1 - Off2
Control
(1 = NOT Coast Stop)
ABB_FCNA_UDT_102.Off_2_Ctrl
U

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs Bit 2 - Off3
Control
(1 = NOT Estop)
ABB_FCNA_UDT_102.Off_3_Ctrl
U

ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd &
Trq Refs +10 Data
Outputs Bit 3 -
Inhibit Operation /
Run Control
(1 = Operation
Enabled = Run if Run
Enable in Drive is
set to Comm or True)
ABB_FCNA_UDT_102.Inhibit_Operation
U

(End)

****
Reset Run Commands and Zero reference on loss of EnableIn
****

0

ABB Drives Profile Output Instance 102 Size 13 INTs Cntrl Word, Spd & Trq Refs +10 Data Outputs Bit 0 - Off1 Control (1 = Ready to Operate; ON)
ABB_FCNA_UDT_102.Off_1_Ctrl
U

ABB Drives Profile Output Instance 102 Size 13 INTs Cntrl Word, Spd & Trq Refs +10 Data Outputs Bit 1 - Off2 Control (1 = NOT Coast Stop)
ABB_FCNA_UDT_102.Off_2_Ctrl
U

ABB Drives Profile Output Instance 102 Size 13 INTs Cntrl Word, Spd & Trq Refs +10 Data Outputs Bit 2 - Off3 Control (1 = NOT Estop)
ABB_FCNA_UDT_102.Off_3_Ctrl
U

ABB Drives Profile Output Instance 102 Size 13 INTs Cntrl Word, Spd & Trq Refs +10 Data Outputs Bit 3 - Inhibit Operation / Run Control (1 = Operation Enabled = Run if Run Enable in Drive is set to Comm or True)
ABB_FCNA_UDT_102.Inhibit_Operation
U

1

ABB Drives Profile Output Instance 102 Size 13 INTs Cntrl Word, Spd & Trq Refs +10 Data Outputs +/- Torque Reference (See documentation for Scaling)

MOV
Move
Source 0
Dest ABB_FCNA_UDT_102.Torque_Ref ??

ABB Drives Profile Output Instance 102 Size 13 INTs Cntrl Word, Spd & Trq Refs +10 Data Outputs +/- Speed Reference (See documentation for scaling)

MOV
Move
Source 0
Dest ABB_FCNA_UDT_102.Speed_Ref ??

(End)

Data type Name: ABB_DCS800_RCNA_UDT_102_9

Description:
ABB Drives Profile
Output Instance 102
Size 9 INTs
Cntrl Word, Spd + 7 Data Outputs

Size: 20 byte(s)

Name	Data Type	Style	Description
Off_1_Ctrl	BOOL	Decimal	Bit 0 - Off1 Control (1 = Ready to Operate; ON)
Off_2_Ctrl	BOOL	Decimal	Bit 1 - Off2 Control (1 = NOT Coast Stop)
Off_3_Ctrl	BOOL	Decimal	Bit 2 - Off3 Control (1 = NOT Estop)
Run	BOOL	Decimal	Bit 3 - Run Control (1 = Ready Run = Operation Enabled)
RampOut_Zero	BOOL	Decimal	Bit 4 - Ramp Out Zero Command (1 = Normal Operation)
Ramp_Hold	BOOL	Decimal	Bit 5 - Ramp Hold (1 = Normal Operation)
RampIn_Zero	BOOL	Decimal	Bit 6 - Ramp In Zero Command (1 = Normal Operation)
Fault_Reset	BOOL	Decimal	Bit 7 - Fault Reset Request (Transition 0->1)
Inching_1	BOOL	Decimal	Bit 8 - Inching 1 (1= Run at Constant Speed Parameter 23.02 FixedSpeed1)
Inching_2	BOOL	Decimal	Bit 9 - Inching 2 (1= Run at Constant Speed Parameter 23.03 FixedSpeed2)
Remote_Cmd	BOOL	Decimal	Bit 10 - Fieldbus Control Enable (1 = Fieldbus Control)
Aux_Control_B11	BOOL	Decimal	Bit 11 - Freely programmable control bits. See manual
Aux_Control_B12	BOOL	Decimal	Bit 12 - Freely programmable control bits. See manual
Aux_Control_B13	BOOL	Decimal	Bit 13 - Freely programmable control bits. See manual
Aux_Control_B14	BOOL	Decimal	Bit 14 - Freely programmable control bits. See manual
Aux_Control_B15	BOOL	Decimal	Bit 15 - Freely programmable control bits. See manual
Speed_Ref	INT	Decimal	+/- Speed Reference (See documentation for scaling)
Custom_Out_01	INT	Decimal	Custom Data to Drive Value #01
Custom_Out_02	INT	Decimal	Custom Data to Drive Value #02
Custom_Out_03	INT	Decimal	Custom Data to Drive Value #03
Custom_Out_04	INT	Decimal	Custom Data to Drive Value #04
Custom_Out_05	INT	Decimal	Custom Data to Drive Value #05
Custom_Out_06	INT	Decimal	Custom Data to Drive Value #06
Custom_Out_07	INT	Decimal	Custom Data to Drive Value #07

Data type Name: ABB_DCS800_RCNA_UDT_103_9

Description:
ABB Drives Profile
Input Instance 103
Size 9 INTs
Sts Word , Spd Fbk & +7 Data Inputs

Size: 24 byte(s)

Name	Data Type	Style	Description
CN_INT_1	INT	Decimal	Word 0 -Unused
CN_INT_2	INT	Decimal	Word 1 - Unused
Rdy_On	BOOL	Decimal	Bit 0 - Ready On Status (1 = Ready to Switch On)
Rdy_Run	BOOL	Decimal	Bit 1 - Read Run Status (1 = Ready to Operate)
Rdy_Ref	BOOL	Decimal	Bit 2 - Ready Ref Status (1 = Operation Enabled)
Tripped	BOOL	Decimal	Bit 3 - Drive Fault Status (1 = Fault)
Off2_Status	BOOL	Decimal	Bit 4 - Off2 Status (1 = Off2 Inactive)
Off3_Status	BOOL	Decimal	Bit 5 - Off3 Status (1 = Off3 Inactive)
Swc_On_Inhibit	BOOL	Decimal	Bit 6 - Switch On Inhibit Status (1= Sw On Inhibit Active)
Warning	BOOL	Decimal	Bit 7 - Warning Status (1 = Warning/Alarm)
At_Ref	BOOL	Decimal	Bit 8 - Drive At Reference Status (1 = At Ref)
Remote	BOOL	Decimal	Bit 9 - Drive Control Location (1 = Remote)
Above_Limit	BOOL	Decimal	Bit 10 - Supervised Parameter Above Limit (See Drive Manual)
Drive_Sts_B11	BOOL	Decimal	Bit 11 - Ext Control Location Selected (1 = External control EXT2 selected)
Drive_Sts_B12	BOOL	Decimal	Bit 12 - External Run Enable Status (1 = External Run Enable signal received)
Drive_Sts_B13	BOOL	Decimal	Bit 13 - Unused
Drive_Sts_B14	BOOL	Decimal	Bit 14 - Unused
Drive_Sts_B15	BOOL	Decimal	Bit 15 - Unused
Actual_Speed	INT	Decimal	+/- Speed Feedback (See documentation for scaling)
Custom_Input_01	INT	Decimal	Custom Data from Drive Value #01
Custom_Input_02	INT	Decimal	Custom Data from Drive Value #02
Custom_Input_03	INT	Decimal	Custom Data from Drive Value #03
Custom_Input_04	INT	Decimal	Custom Data from Drive Value #04
Custom_Input_05	INT	Decimal	Custom Data from Drive Value #05
Custom_Input_06	INT	Decimal	Custom Data from Drive Value #06
Custom_Input_07	INT	Decimal	Custom Data from Drive Value #07

Data type Name: ABB_FCNA_UDT_102

Description:
ABB Drives Profile
Output Instance 102
Size 13 INTs
Cntrl Word, Spd & Trq Refs +10 Data Outputs

Size: 28 byte(s)

Name	Data Type	Style	Description
Off_1_Ctrl	BOOL	Decimal	Bit 0 - Off1 Control (1 = Ready to Operate; ON)
Off_2_Ctrl	BOOL	Decimal	Bit 1 - Off2 Control (1 = NOT Coast Stop)
Off_3_Ctrl	BOOL	Decimal	Bit 2 - Off3 Control (1 = NOT Estop)
Inhibit_Operation	BOOL	Decimal	Bit 3 - Inhibit Operation / Run Control (1 = Operation Enabled = Run if Run Enable in Drive is set to Comm or True)
RampOut_Zero	BOOL	Decimal	Bit 4 - Ramp Out Zero Command (1 = Normal Operation)
Ramp_Hold	BOOL	Decimal	Bit 5 - Ramp Hold (1 = Normal Operation)
RampIn_Zero	BOOL	Decimal	Bit 6 - Ramp In Zero Command (1 = Normal Operation)
Fault_Reset	BOOL	Decimal	Bit 7 - Fault Reset Request (Transition 0->1)
Drive_Ctrl_B8	BOOL	Decimal	Bit 8 - Unused
Drive_Ctrl_B9	BOOL	Decimal	Bit 9 - Unused
Remote_Cmd	BOOL	Decimal	Bit 9 - Fieldbus Control Enable (1 = Fieldbus Control)
Ext_Ctrl_Loc	BOOL	Decimal	Bit 10 - Control Location Select (1 = Select EXT2)
Speed_Ref	INT	Decimal	+/- Speed Reference (See documentation for scaling)
Torque_Ref	INT	Decimal	+/- Torque Reference (See documentation for Scaling)
Custom_Out_01	INT	Decimal	Custom Data to Drive Value #01
Custom_Out_02	INT	Decimal	Custom Data to Drive Value #02
Custom_Out_03	INT	Decimal	Custom Data to Drive Value #03
Custom_Out_04	INT	Decimal	Custom Data to Drive Value #04
Custom_Out_05	INT	Decimal	Custom Data to Drive Value #05
Custom_Out_06	INT	Decimal	Custom Data to Drive Value #06
Custom_Out_07	INT	Decimal	Custom Data to Drive Value #07
Custom_Out_08	INT	Decimal	Custom Data to Drive Value #08
Custom_Out_09	INT	Decimal	Custom Data to Drive Value #09
Custom_Out_10	INT	Decimal	Custom Data to Drive Value #10

Data type Name: ABB_FCNA_UDT_152

Description:
ABB Drives Profile
Input Instance 152
Size 13 INTs
Sts Word, Spd fbk, Trq fbk +10 Data Inputs

Size: 32 byte(s)

Name	Data Type	Style	Description
CN_INT_1	INT	Decimal	Word 0 -Unused
CN_INT_2	INT	Decimal	Word 1 - Unused
Rdy_On	BOOL	Decimal	Bit 0 - Ready On Status (1 = Ready to Switch On)
Rdy_Run	BOOL	Decimal	Bit 1 - Read Run Status (1 = Ready to Operate)
Rdy_Ref	BOOL	Decimal	Bit 2 - Ready Ref Status (1 = Operation Enabled)
Tripped	BOOL	Decimal	Bit 3 - Drive Fault Status (1 = Fault)
Off2_Status	BOOL	Decimal	Bit 4 - Off2 Status (1 = Off2 Inactive)
Off3_Status	BOOL	Decimal	Bit 5 - Off3 Status (1 = Off3 Inactive)
Swc_On_Inhibit	BOOL	Decimal	Bit 6 - Switch On Inhibit Status (1= Sw On Inhibit Active)
Warning	BOOL	Decimal	Bit 7 - Warning Status (1 = Warning/Alarm)
At_Ref	BOOL	Decimal	Bit 8 - Drive At Reference Status (1 = At Ref)
Remote	BOOL	Decimal	Bit 9 - Drive Control Location (1 = Remote)
Above_Limit	BOOL	Decimal	Bit 10 - Supervised Parameter Above Limit (See Drive Manual)
Ext_Ctrl_Loc_Used	BOOL	Decimal	Bit 11 - Ext Control Location Selected (1 = External control EXT2 selected)
Ext_Run_Ena	BOOL	Decimal	Bit 12 - External Run Enable Status (1 = External Run Enable signal received)
Drive_Sts_B13	BOOL	Decimal	Bit 13 - Unused
Drive_Sts_B14	BOOL	Decimal	Bit 14 - Unused
Drive_Sts_B15	BOOL	Decimal	Bit 15 - Unused
Actual_Speed	INT	Decimal	+/- Speed Feedback (See documentation for scaling)
Actual_Torque	INT	Decimal	+/- Torque Feedback (See documentation for scaling)
Custom_Input_01	INT	Decimal	Custom Data from Drive Value #01
Custom_Input_02	INT	Decimal	Custom Data from Drive Value #02
Custom_Input_03	INT	Decimal	Custom Data from Drive Value #03
Custom_Input_04	INT	Decimal	Custom Data from Drive Value #04
Custom_Input_05	INT	Decimal	Custom Data from Drive Value #05
Custom_Input_06	INT	Decimal	Custom Data from Drive Value #06
Custom_Input_07	INT	Decimal	Custom Data from Drive Value #07
Custom_Input_08	INT	Decimal	Custom Data from Drive Value #08
Custom_Input_09	INT	Decimal	Custom Data from Drive Value #09
Custom_Input_10	INT	Decimal	Custom Data from Drive Value #10

Name	Data Type	Style	Description

Data type Name: ABB_RCNA_UDT_102_9

Description:
ABB Drives Profile
Output Instance 102
Size 9 INTs
Cntrl Word, Spd + 7 Data Outputs

Size: 20 byte(s)

Name	Data Type	Style	Description
Off_1_Ctrl	BOOL	Decimal	Bit 0 - Off1 Control (1 = Ready to Operate; ON)
Off_2_Ctrl	BOOL	Decimal	Bit 1 - Off2 Control (1 = NOT Coast Stop)
Off_3_Ctrl	BOOL	Decimal	Bit 2 - Off3 Control (1 = NOT Estop)
Inhibit_Operation	BOOL	Decimal	Bit 3 - Inhibit Operation / Run Control (1 = Operation Enabled = Run if Run Enable in Drive is set to Comm or True)
RampOut_Zero	BOOL	Decimal	Bit 4 - Ramp Out Zero Command (1 = Normal Operation)
Ramp_Hold	BOOL	Decimal	Bit 5 - Ramp Hold (1 = Normal Operation)
RampIn_Zero	BOOL	Decimal	Bit 6 - Ramp In Zero Command (1 = Normal Operation)
Fault_Reset	BOOL	Decimal	Bit 7 - Fault Reset Request (Transition 0->1)
Drive_Ctrl_B7	BOOL	Decimal	Bit 8 - Unused
Drive_Ctrl_B8	BOOL	Decimal	Bit 9 - Unused
Remote_Cmd	BOOL	Decimal	Bit 10 - Fieldbus Control Enable (1 = Fieldbus Control)
Ext_Ctrl_Loc	BOOL	Decimal	Bit 11 - Control Location Select (1 = Select EXT2)
Speed_Ref	INT	Decimal	+/- Speed Reference (See documentation for scaling)
Custom_Out_01	INT	Decimal	Custom Data to Drive Value #01
Custom_Out_02	INT	Decimal	Custom Data to Drive Value #02
Custom_Out_03	INT	Decimal	Custom Data to Drive Value #03
Custom_Out_04	INT	Decimal	Custom Data to Drive Value #04
Custom_Out_05	INT	Decimal	Custom Data to Drive Value #05
Custom_Out_06	INT	Decimal	Custom Data to Drive Value #06
Custom_Out_07	INT	Decimal	Custom Data to Drive Value #07

Data type Name: ABB_RCNA_UDT_103_9

Description:
ABB Drives Profile
Input Instance 103
RCNA - Size 11 INTs
Sts Word , Spd Fbk & +7 Data Inputs

Size: 24 byte(s)

Name	Data Type	Style	Description
CN_INT_1	INT	Decimal	Word 0 -Unused
CN_INT_2	INT	Decimal	Word 1 - Unused
Rdy_On	BOOL	Decimal	Bit 0 - Ready to Switch On (1 = Ready to switch on)
Rdy_Run	BOOL	Decimal	Bit 1 - Read Run Status (1 = Ready to Operate)
Rdy_Ref	BOOL	Decimal	Bit 2 - Ready Ref Status (1 = Operation Enabled)
Tripped	BOOL	Decimal	Bit 3 - Drive Fault Status (1 = Fault)
Off2_Status	BOOL	Decimal	Bit 4 - Off2 Status (1 = Off2 Inactive)
Off3_Status	BOOL	Decimal	Bit 5 - Off3 Status (1 = Off3 Inactive)
Swc_On_Inhibit	BOOL	Decimal	Bit 6 - Switch On Inhibit Status (1= Sw On Inhibit Active)
Warning	BOOL	Decimal	Bit 7 - Warning Status (1 = Warning/Alarm)
At_Ref	BOOL	Decimal	Bit 8 - Drive At Reference Status (1 = At Ref)
Remote	BOOL	Decimal	Bit 9 - Drive Control Location (1 = Remote)
Above_Limit	BOOL	Decimal	Bit 10 - Supervised Parameter Above Limit (See Drive Manual)
Ext_Ctrl_Loc	BOOL	Decimal	Bit 11 - Ext Control Location Selected (1 = External control EXT2 selected)
Ext_Run_Ena	BOOL	Decimal	Bit 12 - External Run Enable Status (1 = External Run Enable signal received)
Drive_Sts_B13	BOOL	Decimal	Bit 13 - Unused
Drive_Sts_B14	BOOL	Decimal	Bit 14 - Unused
Drive_Sts_B15	BOOL	Decimal	Bit 15 - Unused
Actual_Speed	INT	Decimal	+/- Speed Feedback (See documentation for scaling)
Custom_Input_01	INT	Decimal	Custom Data from Drive Value #01
Custom_Input_02	INT	Decimal	Custom Data from Drive Value #02
Custom_Input_03	INT	Decimal	Custom Data from Drive Value #03
Custom_Input_04	INT	Decimal	Custom Data from Drive Value #04
Custom_Input_05	INT	Decimal	Custom Data from Drive Value #05
Custom_Input_06	INT	Decimal	Custom Data from Drive Value #06
Custom_Input_07	INT	Decimal	Custom Data from Drive Value #07

Data type Name: ABB_29

Description:
File Name: ABB_RCNA_AOI_103_102_9W

Size: 8 byte(s)

Name	Data Type	Style	Description
EnableIn	BOOL	Decimal	Enable Input - System Defined Parameter
EnableOut	BOOL	Decimal	Enable Output - System Defined Parameter
StatusWord	INT	Hex	First Input Word (Typically Status Word from Drive)
ControlWord	INT	Hex	First Output Word (Typically ControlWord to Drive)

Data type Name: ABB_34

Description:
File Name: ABB_DCS800_RCNA_AOI_103_102_9W

Size: 8 byte(s)

Name	Data Type	Style	Description
EnableIn	BOOL	Decimal	Enable Input - System Defined Parameter
EnableOut	BOOL	Decimal	Enable Output - System Defined Parameter
StatusWord	INT	Hex	First Input Word (Typically Status Word from Drive)
ControlWord	INT	Hex	First Output Word (Typically ControlWord to Drive)

Data type Name: ABB_73

Description:
File Name: ABB_FCNA_AOI_152_102_13W

Size: 8 byte(s)

Name	Data Type	Style	Description
EnableIn	BOOL	Decimal	Enable Input - System Defined Parameter
EnableOut	BOOL	Decimal	Enable Output - System Defined Parameter
StatusWord	INT	Hex	Status Word from Drive
ControlWord	INT	Hex	ControlWord to Drive

Data type Name: STRING

Description:

Size: 88 byte(s)

Name	Data Type	Style	Description
LEN	DINT	Decimal	
DATA	SINT[82]	ASCII	