

TECHNICAL DATA SHEET

High speed bi-directional circuit breaker for DC applications

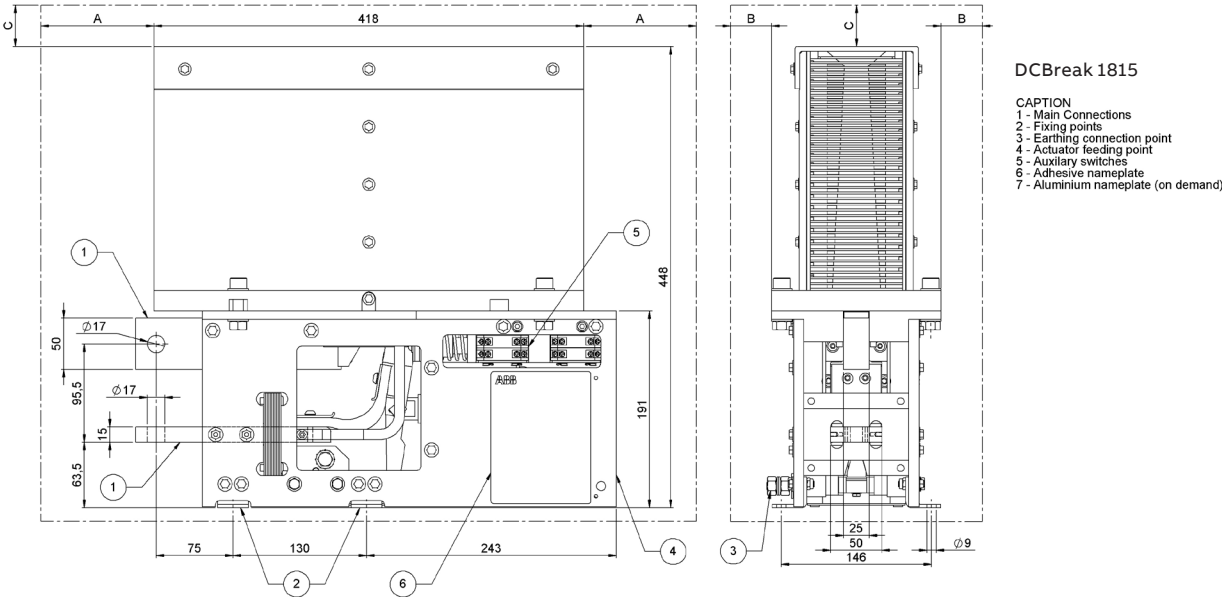
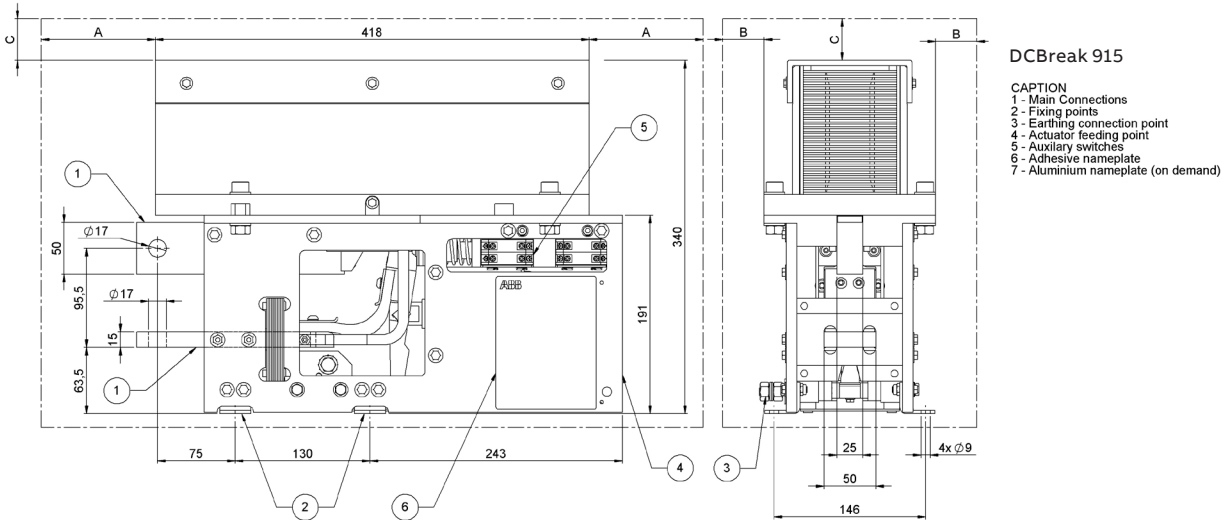
DCBreak 900 V

DCBreak 1800 V

	DCBreak 915	DCBreak 1815
Main circuit		
Rated operational voltage (Ue)	900 V	1800 V
Rated insulation voltage	2300 V	2300 V
Rated impulse withstand voltage	18 kV	18 kV
Rated operational current (Tamb = +40°C)	1500 A	1500 A
Conventional free air thermal current (Tamb = +40°C)	1500 A	1500 A
Rated short-circuit making and breaking capacity	30 kA	30 kA
Rated time constant T1	30 kA/0 ms	17 kA/0 ms
Rated time constant T2	30 kA/15 ms	30 kA/15 ms
Rated time constant T3	30 kA/50 ms	30 kA/40 ms
Rated time constant T4	30 kA/150 ms	30 kA/100 ms
Operational performance capability	C3	C3
Direct over-current release	0.9 - 1.3 kA	0.9 - 1.3 kA
	1.3 - 1.8 kA	1.3 - 1.8 kA
	1.8 - 3.6 kA	1.8 - 3.6 kA
Peak arc voltage x Ue	2.5	2.5
Power frequency withstand voltage (50 Hz, 1 min)		
Across main contacts (open)	6.6 kV	6.6 kV
Main circuit (closed) to earth and control circuit	6.6 kV	6.6 kV
Low voltages circuit to earth	1.5 kV	1.5 kV
Standard applied	IEC 60077-3 and IEC 61373	IEC 60077-3 and IEC 61373
Control circuit		
Nominal voltage	24 / 36 / 48 / 72 / 110 V	24 / 36 / 48 / 72 / 110 V
Nominal closing power (Tamb = +20°C)	1000 W	1000 W
Nominal holding power (Tamb = +20°C)	10 W	10 W
Control type	Holding resistance (not included)	Holding resistance (not included)
Auxiliary contacts circuit		
Number of standard contacts	2 NO / 2 NC	2 NO / 2 NC
	4 NO / 4 NC	4 NO / 4 NC
	6 NO / 6 NC	6 NO / 6 NC
	8 NO / 8 NC	8 NO / 8 NC
Contact material	Hard Silver	Hard Silver
Rated voltage (potential free contacts)	24 to 110 V	24 to 110 V
Rated current	10 A	10 A
Maximum breaking current		
Ohmic load at 110 V DC	1 A	1 A
Inductive load = 15 ms at 110 V DC	0.3 A	0.3 A
Minimum let-through current at 24 V DC 10 mA	10 mA	10 mA
Operating conditions		
Ambient temperature	-25 to 70 °C	-25 to 70 °C
Minimum mechanical durability	200 000 operations	200 000 operations
Mechanical lifetime	500 000 operations	500 000 operations
Altitude max	1400 m	1400 m
Humidity max	95%	95%
Pollution degree	PD3	PD3

Minimum flashover distance		A	B	C
DCBreak 900 V				
	to insulated wall	90	50	30
	to earth (metal wall)	300	100	150
DCBreak 1800 V				
	to insulated wall	90	50	30
	to earth (metal wall)	300	100	150

Main dimensions



	DCBreak 915	DCBreak 1815
Circuit breaker weight (kg)	28	38