DZ158 Moulded Case Circuit Breaker

1. General

1.1 Function

protection of circuits against short-circuit currents,
protection of circuits against overload currents,
switch, isolation.

1.2 Selection

Technical data of the network at the point considered:
the earthing systems (TNS, TNC),
short-circuit current at the circuit-breaker installation point,
which must always be less than the breaking capacity of
this device, network normal voltage.

1.3 Approvals and certificates

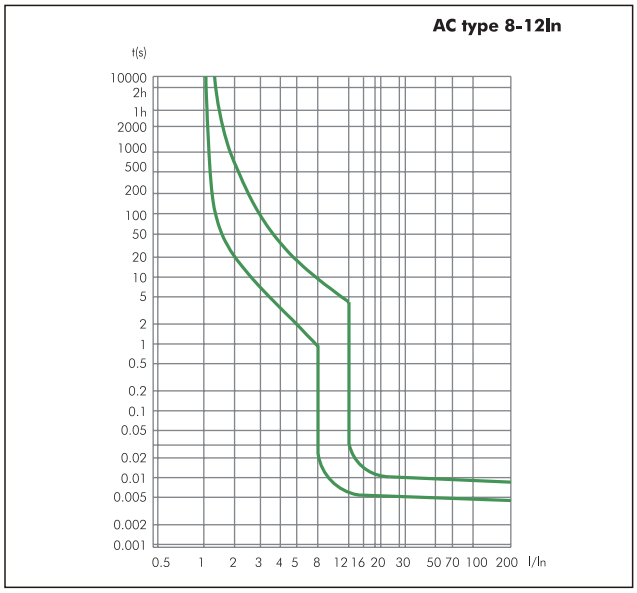
Detailed information, please refer to Certificates Table
on the last page.

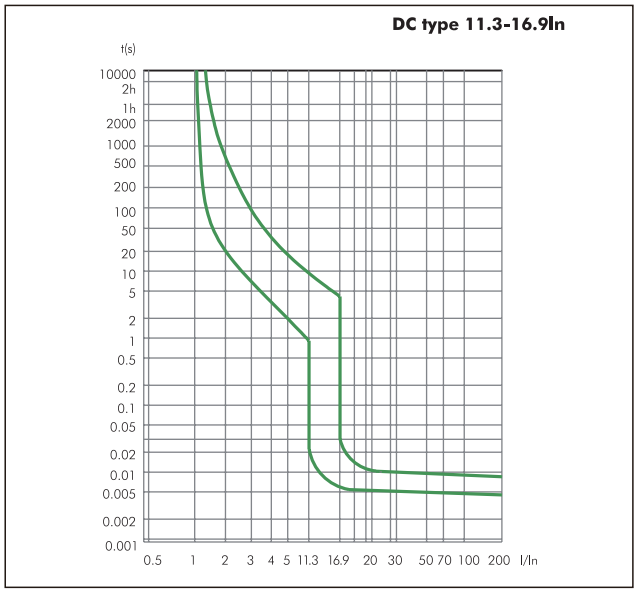
RCC SAA

A

2.Technical data

2.1 Curves





2.2

	Standard		IEC/EN 60947-2	UL1077			
Electrical features	Rated current In	A	63, 80, 100, 125				
	Poles		1P, 2P, 3P, 4P	1P	2P,3P,4P	1P	2P
	Rated voltage Ue	V	230/400~240/415 AC	277 AC	480 AC	60/110 DC	110/220 DC
	Insulation voltage Ui	V	500				
	Rated frequency	Hz	50/60				
	Rated breaking capacity	kA	5			10	
	Rated impulse withstand voltage(1.2/50) Uimp	kV	4				
	Dielectric test voltage at ind. Freq. for 1 min	kV	1.89				
	Pollution degree		3				
	Thermo-magnetic release characteristic		8-12In			11.3-16.9 In	
Mechanical features	Electrical life		1,500 (In=63A, 80A, 100A) 1,000 (In=125A)	6000			
	Mechanical life		8,500 (In=63A, 80A, 100A) 7,000 (In=125A)	6000			
	Contact position indicator		Yes				
	Protection degree		IP20				
	Reference temperature for setting of thermal element	℃	30	25			
	Ambient temperature (with daily average≤35℃)	℃	-5...+40				
	Storage temperation	℃	-25...+70				
Installation	Terminal connection type		Cable				
	Terminal size top/bottom for cable	mm^2	16~50				
		AWG	6-0				
	Tightening torque	N·m	3.5				
		In-lbs.	31				
	Mounting		On DIN rail EN 60715 (35mm) by means of fast clip device				
	Connection		From top and bottom				
Combination with accessories	Auxiliary contact		Yes				

2.3 Temperature derating

The maximum permissible current in a circuit breaker depends on the ambient temperature where the circuit breaker is placed. Ambient temperature is the temperature inside the enclosure or switchboard in which the circuit breakers are installed.

The reference temperature is 30℃

In/Rated current (A)	Current correction value under different ambient temperature										
	-25℃	-20℃	-10℃	0℃	10℃	20℃	30℃	40℃	50℃	60℃	70℃
63	1.375	1.345	1.275	1.215	1.15	1.075	1.00	0.915	0.825	0.735	0.69
80	1.37	1.34	1.27	1.205	1.135	1.07	1.00	0.925	0.845	0.755	0.71
100	1.38	1.35	1.275	1.21	1.135	1.075	1.00	0.925	0.845	0.755	0.72
125	1.35	1.32	1.25	1.19	1.125	1.08	1.00	0.93	0.86	0.78	0.74

3. Overall and mounting dimensions (mm)