



## 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

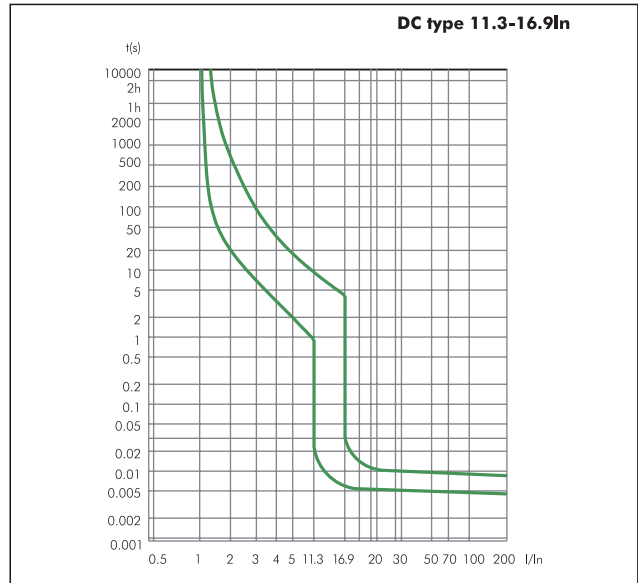
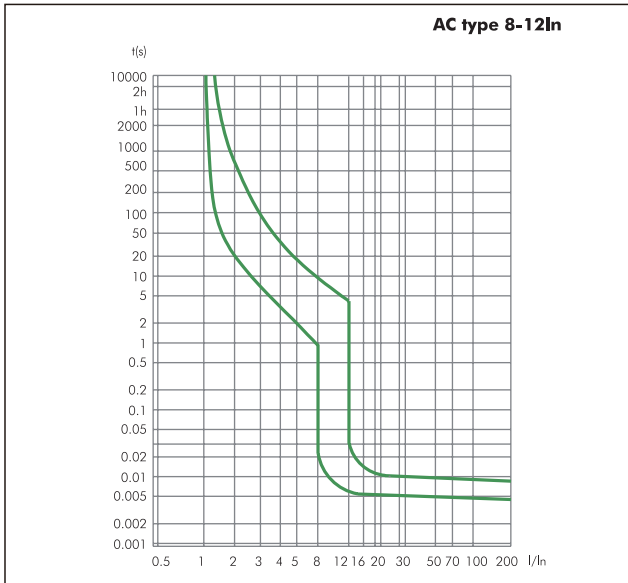
Technical data of the network at the point considered:  
the earthing systems (TNS, TNC),  
short-circuit current at the circuit-breaker installation point,  
which must always be less than the breaking capacity of  
this device, network normal voltage.

#### 1.3 Approvals and certificates

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

## 2. Technical data

### 2.1 Curves



### 2.2

	Standard		IEC/EN 60947-2	UL1077
Electrical features	Rated current $I_n$	A	63, 80, 100, 125	
	Poles		1P, 2P, 3P, 4P	1P, 2P, 3P, 4P
	Rated voltage $U_e$	V	230/400–240/415 AC	277 AC, 480 AC, 60/110 DC, 110/220 DC
	Insulation voltage $U_i$	V	500	
	Rated frequency	Hz	50/60	
	Rated breaking capacity	kA	6/10	5, 10
	Rated impulse withstand voltage(1.2/50) $U_{imp}$	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 ( $I_n=63A, 80A, 100A$ ) 1,000 ( $I_n=125A$ )	6000
	Mechanical life		8,500 ( $I_n=63A, 80A, 100A$ ) 7,000 ( $I_n=125A$ )	6000
	Contact position indicator		Yes	
	Protection degree		IP20	
	Reference temperature for setting of thermal element	°C	30	25
	Ambient temperature (with daily average $\leq 35^\circ\text{C}$ )	°C	-5...+40	
Storage temperature	°C	-25...+70		
Installation	Terminal connection type		Cable	
	Terminal size top/bottom for cable	mm <sup>2</sup>	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°C**

In/Rated current (A)	Current correction value under different ambient temperature										
	-25°C	-20°C	-10°C	0°C	10°C	20°C	30°C	40°C	50°C	60°C	70°C
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)

