



## 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.

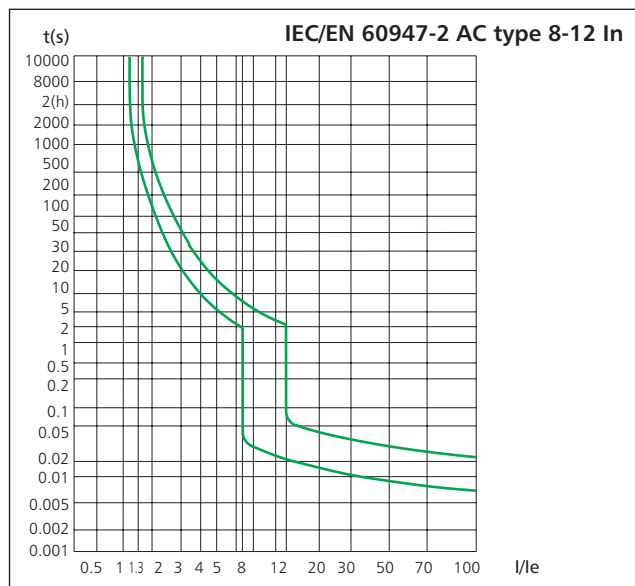


RCC

SAA

3. Technical data

3.1 Curves



3.2

	Standard		IEC/EN 60947-2
Electrical features	Rated current $I_n$	A	63, 80, 100, 125
	Poles		1P, 2P, 3P, 4P
	Rated voltage $U_e$	V	230/400~240/415
	Insulation voltage $U_i$	V	500
	Rated frequency	Hz	50
	Rated breaking capacity	kA	6/10
	Rated impulse withstand voltage(1.2/50) $U_{imp}$	V	4000
	Dielectric test voltage at ind. Freq. for 1 min	kV	2.0
	Pollution degree		3
	Thermo-magnetic release characteristic		8-12In
Mechanical features	Electrical life		1,500 ( $I_n=63A, 80A, 100A$ ) 1,000 ( $I_n=125A$ )
	Mechanical life		8,500 ( $I_n=63A, 80A, 100A$ ) 7,000 ( $I_n=125A$ )
	Contact position indicator		Yes
	Protection degree		IP20
	Reference temperature for setting of thermal element	°C	30
	Ambient temperature (with daily average $\leq 35^\circ C$ )	°C	-5...+40(Special application please refer to P28 for temperature compensation correction)
Storage temperature	°C	-25...+70	
Installation	Terminal connection type		Cable/Pin-type busbar
	Terminal size top/bottom for cable	mm <sup>2</sup>	16~50
		AWG	6-1/0
	Terminal size top/bottom for busbar	mm <sup>2</sup>	16~35
		AWG	6-2
	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	
Combination with accessories	Auxiliary contact		Yes

### 3.3 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**

Rated current In (A)	Temperature compensation coefficient under various operational temperature							
	-10°C	0°C	10°C	20°C	30°C	40°C	50°C	60°C
63	1.275	1.215	1.15	1.075	1.00	0.915	0.825	0.735
80	1.27	1.205	1.135	1.07	1.00	0.925	0.845	0.755
100	1.275	1.21	1.135	1.075	1.00	0.925	0.845	0.755
125	1.25	1.19	1.125	1.08	1.00	0.93	0.86	0.78

### 4. Overall and mounting dimensions (mm)

