



## DZ158-125/DZ158-125H Moulded Case Circuit Breaker

### 1. General

#### 1.1 Function

protection of circuits against short-circuit currents,  
protection of circuits against overload currents,  
switch,  
isolation,  
Suitable for application:110VDC/Pole

#### 1.2 Selection

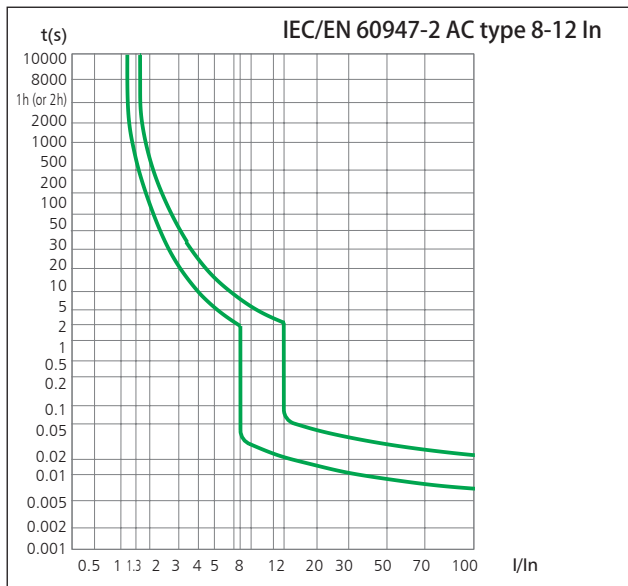
Technical data of the network at the point considered:  
the earthing systems (TNS, TNC),  
short-circuit current at the circuit-breaker installation point,  
which must always be less than the breaking capacity of  
this device,  
Network normal voltage.

#### 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	
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(AC), 20KA(DC 60V/125V), 10KA(DC 110V/220V)	
	Rated impulse withstand voltage(1.2/50) $U_{imp}$	V	6000	
	Dielectric test voltage at ind. Freq. for 1 min	kV	1.89	
	Pollution degree		3	
	Power loss			Rated current(A)
			80A	7W
			100A	8.5W
			125A	10W
Thermo-magnetic release characteristic			8-12 $I_n$	
Mechanical features	Electrical life		6,000 ( $I_n=63A, 80A, 100A$ ) 4,000 ( $I_n=125A$ )	
	Mechanical life		2,0000	
	Contact position indicator		Yes	
	Protection degree		IP20	
	Reference temperature for setting of thermal element	°C	30	
Operating temperature	°C	-35...+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 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.

Rated current In (A)	Temperature compensation coefficient under various operational temperature										
	-35°C	-20°C	-10°C	0°C	10°C	20°C	30°C	40°C	50°C	60°C	70°C
63	1.415	1.335	1.275	1.215	1.15	1.075	1	0.915	0.825	0.735	0.665
80	1.41	1.33	1.27	1.205	1.135	1.07	1	0.925	0.845	0.755	0.685
100	1.415	1.335	1.275	1.21	1.135	1.075	1	0.925	0.845	0.755	0.685
125	1.39	1.31	1.25	1.19	1.125	1.08	1	0.93	0.86	0.78	0.71

3. Overall and mounting dimensions (mm)

