



DZ158-125/DZ158-125H Miniature 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

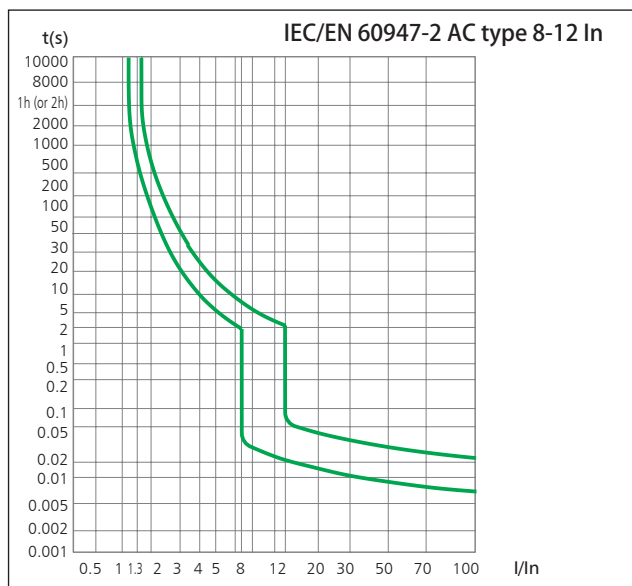
Technical data of the network at the point considered:
the earthing systems (TNS, TNC),
short-circuit current at the circuit-breaker installation point,
which must always be less than the breaking capacity of
this device,
Network normal voltage.

1.3 Approvals and certificates

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

2. Technical data

2.1 Curves



2.2

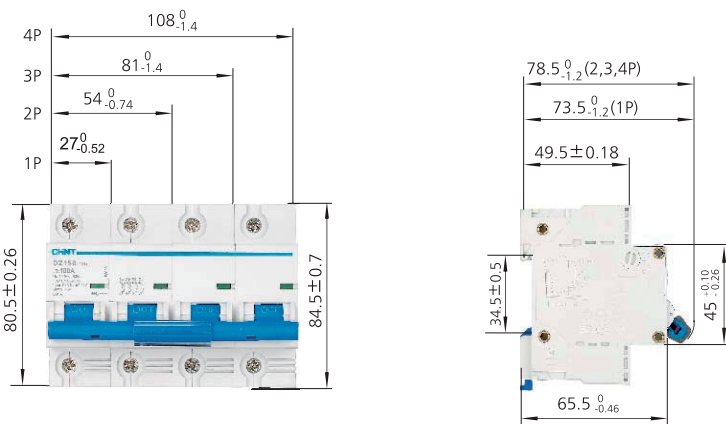
	Standard		IEC/EN 60947-2	
Electrical features	Rated current I_n	A	63, 80, 100, 125	
	Poles		1P, 2P, 3P, 4P	
	Rated voltage U_e	V	230/400~240/415	
	Insulation voltage U_i	V	500	
	Rated frequency	Hz	50	
	Rated breaking capacity	kA	6/10(AC), 20KA(DC 60V/125V), 10KA(DC 110V/220V)	
	Rated impulse withstand 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 ²	16~50	
		AWG	6-1/0	
	Terminal size top/bottom for busbar	mm ²	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)



4. Ordering information

Order code	Description and specification
158086	DZ158-125 1P 63A 6kA
158064	DZ158-125 1P 80A 6kA
158063	DZ158-125 1P 100A 6kA
158103	DZ158-125 1P 125A 6kA
158066	DZ158-125 2P 63A 6kA
158067	DZ158-125 2P 80A 6kA
158065	DZ158-125 2P 100A 6kA
158104	DZ158-125 2P 125A 6kA
158069	DZ158-125 3P 63A 6kA
158070	DZ158-125 3P 80A 6kA
158068	DZ158-125 3P 100A 6kA
158105	DZ158-125 3P 125A 6kA
158072	DZ158-125 4P 63A 6kA
158073	DZ158-125 4P 80A 6kA
158071	DZ158-125 4P 100A 6kA
158106	DZ158-125 4P 125A 6kA
158088	DZ158-125H 1P 63A 10kA

Order code	Description and specification
158089	DZ158-125H 1P 80A 10kA
158087	DZ158-125H 1P 100A 10kA
158107	DZ158-125H 1P 125A 10kA
158091	DZ158-125H 2P 63A 10kA
158092	DZ158-125H 2P 80A 10kA
158090	DZ158-125H 2P 100A 10kA
158108	DZ158-125H 2P 125A 10kA
158094	DZ158-125H 3P 63A 10kA
158095	DZ158-125H 3P 80A 10kA
158093	DZ158-125H 3P 100A 10kA
158109	DZ158-125H 3P 125A 10kA
158097	DZ158-125H 4P 63A 10kA
158098	DZ158-125H 4P 80A 10kA
158096	DZ158-125H 4P 100A 10kA
158110	DZ158-125H 4P 125A 10kA

5. 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 50 °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	1.715	1.618	1.545	1.473	1.394	1.303	1.212	1.109	1.000	0.891	0.806
80	1.668	1.573	1.502	1.426	1.343	1.266	1.183	1.094	1.000	0.893	0.810
100	1.675	1.581	1.510	1.433	1.344	1.273	1.184	1.095	1.000	0.894	0.811
125	1.617	1.524	1.454	1.384	1.308	1.256	1.163	1.082	1.000	0.907	0.826

6. Ordering information

Order code	Description and specification	Packing Qty	Order code	Description and specification	Packing Qty
171798	DZ158-125H 1P 100A 10kA Tel	108	201954	DZ158-125H 3P 80A 10kA Tel	36
201949	DZ158-125H 1P 80A 10kA Tel	108	201955	DZ158-125H 3P 100A 10kA Tel	36
201950	DZ158-125H 1P 125A 10kA Tel	108	201956	DZ158-125H 3P 125A 10kA Tel	36
201951	DZ158-125H 2P 80A 10kA Tel	54	201957	DZ158-125H 4P 80A 10kA Tel	27
201952	DZ158-125H 2P 100A 10kA Tel	54	201958	DZ158-125H 4P 100A 10kA Tel	27
201953	DZ158-125H 2P 125A 10kA Tel	54	201959	DZ158-125H 4P 125A 10kA Tel	27