

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

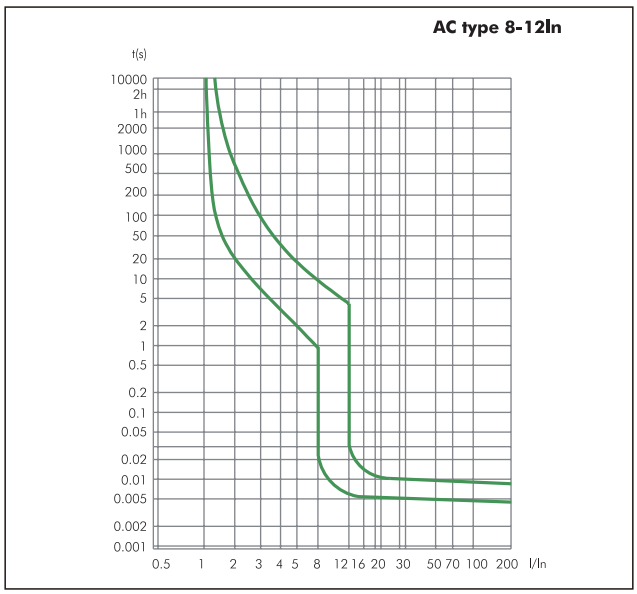
Technical data of the network at the point considered:
the earthing systems (TNS, TNC),
short-circuit current at the circuit-breaker installation point,
which must always be less than the breaking capacity of
this device, network normal voltage.

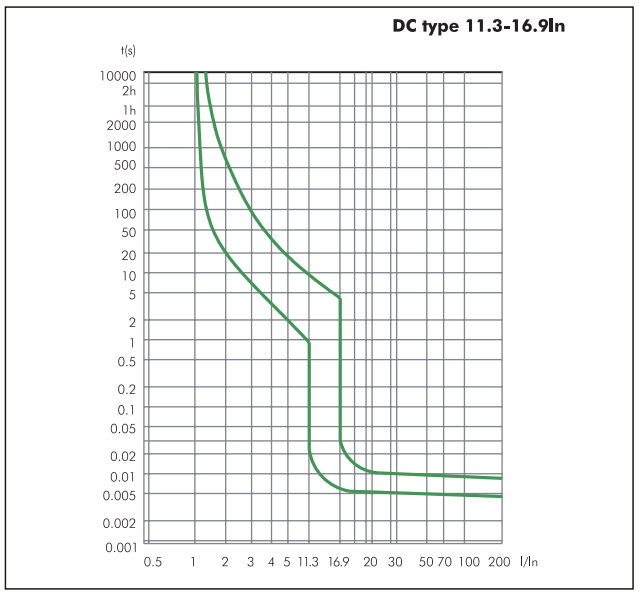
1.3 Approvals and certificates

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 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	6/10	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 or bottom				
	Weight	kg	0.16/per pole				
Combination with accessories	Auxiliary contact		Yes				

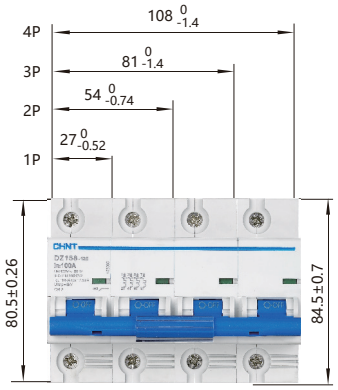
2.3 Temperature derating

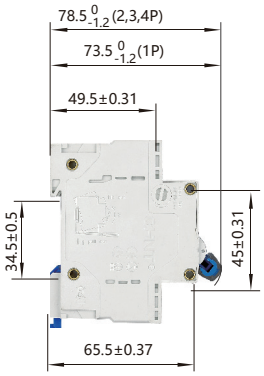
The maximum permissible current in a circuit breaker depends on the ambient temperature where the circuit breaker is placed. Ambient temperature is the temperature inside the enclosure or switchboard in which the circuit breakers are installed.

The reference temperature is 30℃

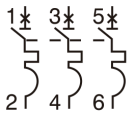
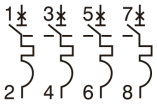
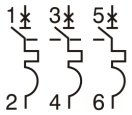
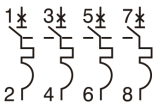
In/Rated current (A)	Current correction value under different ambient temperature										
	-25℃	-20℃	-10℃	0℃	10℃	20℃	30℃	40℃	50℃	60℃	70℃
63	1.375	1.345	1.275	1.215	1.15	1.075	1.00	0.915	0.825	0.735	0.69
80	1.37	1.34	1.27	1.205	1.135	1.07	1.00	0.925	0.845	0.755	0.71
100	1.38	1.35	1.275	1.21	1.135	1.075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





DZ158-125	H	1P	63A	10kA
Frame	**Breaking capacity code**	**Poles**	**Current(In)**	**Breaking capacity**
DZ158-125	Blank: 6kA H: 10kA	1P 2P 3P 4P	63A 80A 100A 125A	6kA 10kA

Diagram	Curve	Poles	In(A)	Icu(kA)	Ue(V)	Description	Code
	8-12In	1P	63	6	AC230/240	DZ158-125 1P 63A 6kA	158086
	8-12In	1P	80	6	AC230/240	DZ158-125 1P 80A 6kA	158064
	8-12In	1P	100	6	AC230/240	DZ158-125 1P 100A 6kA	158063
	8-12In	1P	125	6	AC230/240	DZ158-125 1P 125A 6kA	158103
	8-12In	2P	63	6	AC400/415	DZ158-125 2P 63A 6kA	158066
	8-12In	2P	80	6	AC400/415	DZ158-125 2P 80A 6kA	158067
	8-12In	2P	100	6	AC400/415	DZ158-125 2P 100A 6kA	158065
	8-12In	2P	125	6	AC400/415	DZ158-125 2P 125A 6kA	158104
	8-12In	3P	63	6	AC400/415	DZ158-125 3P 63A 6kA	158069
	8-12In	3P	80	6	AC400/415	DZ158-125 3P 80A 6kA	158070
	8-12In	3P	100	6	AC400/415	DZ158-125 3P 100A 6kA	158068
	8-12In	3P	125	6	AC400/415	DZ158-125 3P 125A 6kA	158105
	8-12In	4P	63	6	AC400/415	DZ158-125 4P 63A 6kA	158072
	8-12In	4P	80	6	AC400/415	DZ158-125 4P 80A 6kA	158073
	8-12In	4P	100	6	AC400/415	DZ158-125 4P 100A 6kA	158071
	8-12In	4P	125	6	AC400/415	DZ158-125 4P 125A 6kA	158106
	8-12In	1P	63	10	AC230/240	DZ158-125H 1P 63A 10kA	158088
	8-12In	1P	80	10	AC230/240	DZ158-125H 1P 80A 10kA	158089
	8-12In	1P	100	10	AC230/240	DZ158-125H 1P 100A 10kA	158087
	8-12In	1P	125	10	AC230/240	DZ158-125H 1P 125A 10kA	158107
	8-12In	2P	63	10	AC400/415	DZ158-125H 2P 63A 10kA	158091
	8-12In	2P	80	10	AC400/415	DZ158-125H 2P 80A 10kA	158092
	8-12In	2P	100	10	AC400/415	DZ158-125H 2P 100A 10kA	158090
	8-12In	2P	125	10	AC400/415	DZ158-125H 2P 125A 10kA	158108
	8-12In	3P	63	10	AC400/415	DZ158-125H 3P 63A 10kA	158094
	8-12In	3P	80	10	AC400/415	DZ158-125H 3P 80A 10kA	158095
	8-12In	3P	100	10	AC400/415	DZ158-125H 3P 100A 10kA	158093
	8-12In	3P	125	10	AC400/415	DZ158-125H 3P 125A 10kA	158109
	8-12In	4P	63	10	AC400/415	DZ158-125H 4P 63A 10kA	158097
	8-12In	4P	80	10	AC400/415	DZ158-125H 4P 80A 10kA	158098
	8-12In	4P	100	10	AC400/415	DZ158-125H 4P 100A 10kA	158096
	8-12In	4P	125	10	AC400/415	DZ158-125H 4P 125A 10kA	158110