



Technical Data

Electrical Features

Rated current I_n	1,2,3,4,5,6,8,10,13,16,20,25,32,40,50,63A
Poles	1P,1P+N,2P,3P,3P+N,4P
Rated voltage U_e	240/415V
Insulation voltage U_i	500V
Rated frequency	50/60Hz
Rated breaking capacity	4,500A
Energy limiting class	3
Rated impulse withstand voltage(1.5/50) U_{imp}	4,000V
Dielectric test voltage at ind. Freq. for 1 min	2kV
Pollution degree	2
Thermo-magnetic release characteristic	B,C,D

Mechanical Features

Electrical life	4,000 Cycles
Mechanical life	10,000 Cycles
Contact position indicator	Yes
Protection degree	IP20
Reference temperature for setting of thermal element	30°C
Ambient temperature (with daily average $\leq 35^\circ\text{C}$)	-5°C~+40°C
Storage temperature	-25°C~+70°C

Installation

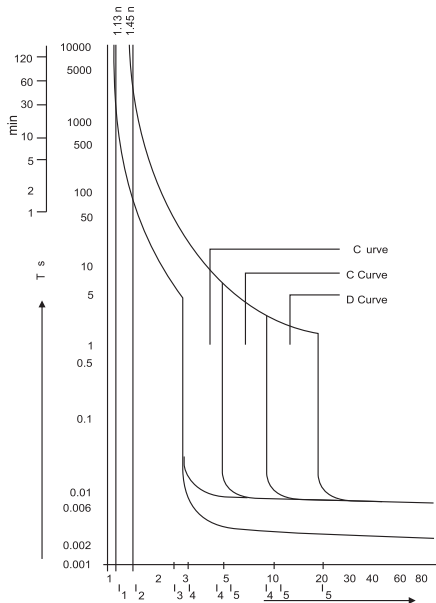
Terminal connection type	Cable/Pin-type busbar
Terminal size top/bottom for cable	25mm ² 18-3AWG
Terminal size top/bottom for busbar	25mm ² 18-3AWG
Tightening torque	2.5Nm 22In-lbs
Mounting	On DIN rail EN60715(35mm) by means of fast clip device
Connection	From top and bottom

Combination with accessories

Auxiliary contact	DZ47-OF
Alarm contact	DZ47-FB
Shunt release	DZ47-MX
Over/Under voltage release	DZ47-MV+MN

MCB Characteristics

Characteristics Curves



As per IEC60898	Thermal Tripping		Magnetic Tripping			
	No tripping current	Tripping current I_2	Time Limits t	Hold current I_4	Trip current I_5	Time Limits t
B Curve	$1.13 \times I_N$	$1.45 \times I_N$	$\geq 1h$	$3 \times I_N$	$5 \times I_N$	$\geq 0.1s$
			$< 1h$			$< 0.1s$
C Curve	$1.13 \times I_N$	$1.45 \times I_N$	$\geq 1h$	$5 \times I_N$	$10 \times I_N$	$\geq 0.1s$
			$< 1h$			$< 0.1s$
D Curve	$1.13 \times I_N$	$1.45 \times I_N$	$\geq 1h$	$10 \times I_N$	$20 \times I_N$	$\geq 0.1s$
			$< 1h$			$< 0.1s$

Tripping characteristics

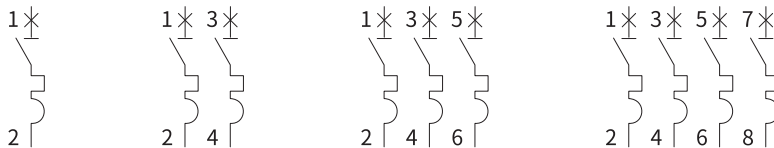
Based on the Tripping Characteristics, MCB are available in “ B”, “C” and “D” curve to suit different types of applications.

“B” Curve for protection of electrical circuits with equipment that does not cause surge current (lighting and distribution circuits) Short circuit release is set to (3-5)In.

“C” Curve for protection of electrical circuits with equipment that cause surge current (inductive loads and motor circuits) Short circuit release is set to (5-10)In.

“D” Curve for protection of electrical circuits with cause high inrush current, typically 12-15 times the thermal rated current (transformes, x-ray machines etc,)Short circuit release is set to (10-20)In.

Circuit Diagram



Overall and Installation Dimension(mm)

