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eBC eB eBG
Miniature 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.
Tripping curves:

B curve (3-5In)

protection for people and big length cables in TN and IT systems.

C curve (5-10In)

protection for resistive and inductive loads with low inrush current.

D curve(10-20In)

protection for circuits which supply loads with high inrush current at the circuit closing
(LV/LV transformers, breakdown lamps).

1.3 Approvals and certificates

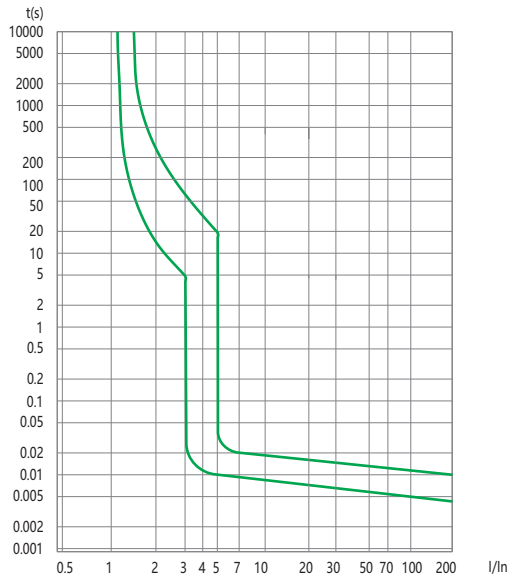
Detailed information, please refer to Certificates Table on the last page.

2. Technical data

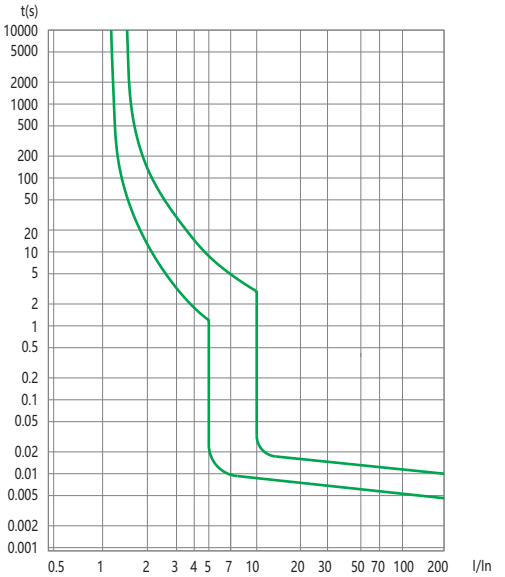
2.1 Curves

CBC CB CBG is of high current limiting performance to limit the destruction energy due to short circuit to the greatest extent.

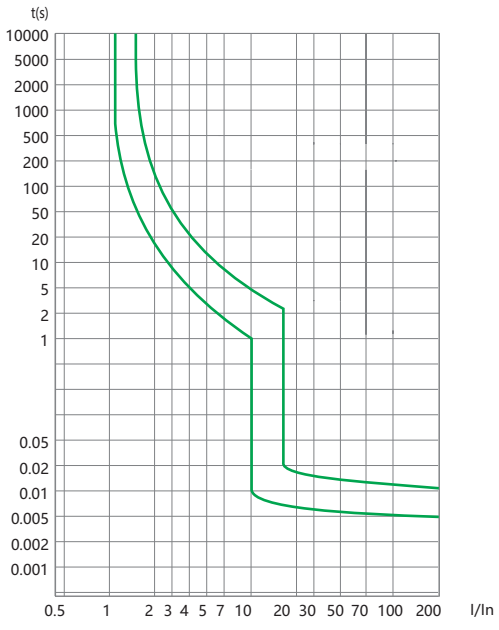
IEC/EN 60898-1 AC type B curve



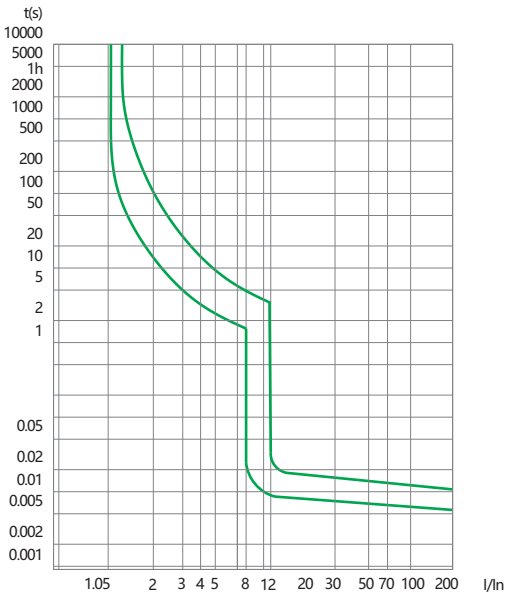
IEC/EN 60898-1 AC type C curve



IEC/EN 60898-1 AC type D curve



IEC/EN 60947-2 AC type 8-12 In



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2.2

	Standard		IEC/EN 60898-1	IEC/EN 60947-2
Electrical features	Rated current In	A	1, 2, 3, 4, 5, 6, 10, 15, 16, 20, 25, 32, 40, 50, 60, 63	
	Poles		1P, 2P, 3P, 4P	
	Rated voltage Ue	V	230/400~240/415	
	Insulation voltage Ui		500	
	Rated frequency	Hz	50/60	
	Rated breaking capacity	kA	3 (1~63A) eBC 4.5 (1~63A) eB 6 (B,C 1~40A) eBG	
	Rated impulse withstand voltage(1.2/50) Uimp	V	4000	
	Dielectric test voltage at ind. Freq. for 1 min		2	
	Pollution degree		2	
	Thermo-magnetic release characteristic		B, C, D	8-12In
Mechanical features	Electrical life		4, 000	
	Mechanical life		10, 000	
	Protection degree		IP20	
	Reference temperature for setting of thermal element	℃	30	
	Ambient temperature (with daily average≤35℃)	℃	-5...+40	
	Storage temperation	℃	-25...+70	
Installation	Terminal connection type		Cable/Pin-type busbar	
	Terminal size top/bottom for cable	mm^2	1~25	
		AWG	17~3	
	Terminal size top/bottom for busbar	mm^2	1~10	
		AWG	17~7	
	Tightening torque	N·m	2	
		In-lbs.	18	
	Mounting		On DIN rail EN 60715 (35mm) by means of fast clip device	
	Connection		From top and bottom	

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℃

Rated current In (A)	Temperature compensation coefficient under various operational temperature								
	-10℃	0℃	10℃	20℃	30℃	40℃	50℃	55℃	60℃
1~6	1.20	1.14	1.09	1.05	1.00	0.96	0.80	0.75	0.70
10~32	1.18	1.12	1.08	1.04	1.00	0.96	0.92	0.88	0.84
40~60	1.16	1.12	1.07	1.03	1.00	0.97	0.87	0.83	0.80

3. Overall and mounting dimensions (mm)