

## Description

Single pole thermal-magnetic circuit breaker with tease-free, trip-free, snap action mechanism and two button operation (M-type TM CBE to EN 60934). Featuring a narrow profile housing, recessed terminals, standard EN rail mounting, and precision CBE performance. Approved to CBE standard EN 60934 (IEC 60934).

## Typical applications

Process control systems, instrumentation, rail vehicles.

## Ordering information

Type No.	
201	single pole, rail mounted version
<b>Current ratings</b>	
0.05...16 A	
201 - 10 A	ordering example

Please be informed that we have minimum ordering quantities to be observed.

## Preferred types

Preferred types	Standard current ratings (A)									
	0.5	1	2	3	4	5	8	10	15	16
201-	x	x	x	x	x	x	x	x	x	x

## Standard current ratings and typical internal resistance values

Current rating (A)	Internal resistance (Ω)	Current rating (A)	Internal resistance (Ω)
0.05	447	3	0.19
0.1	131	4	0.090
0.2	40	5	0.061
0.3	19.3	6	0.041
0.4	10.4	7	0.034
0.5	7.1	8	< 0.02
0.6	4.3	10	< 0.02
0.8	2.5	12	< 0.02
1	1.67	14	< 0.02
1.5	0.61	15	< 0.02
2	0.38	16	< 0.02
2.5	0.24		

## Approvals

Authority	Standard	Rated voltage	Current ratings
VDE	IEC/EN 60934	AC 240 V DC 65 V	0.05 A...16 A 0.05 A...16 A
UL	UL 1077 C22.2 No 235	AC 250 V DC 80 V	0.05 A...16 A 0.05 A...16 A
CSA	C22.2 No 235	AC 250 V DC 80 V	0.05 A...16 A 0.05 A...16 A



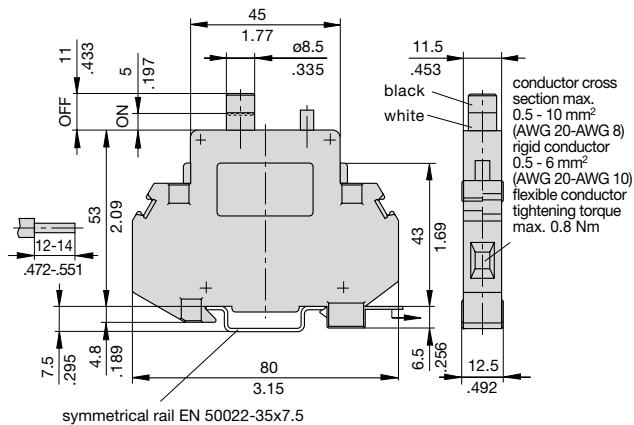
201-...

## Technical data

For further details please see: [http://www.e-t-a.de/ti\\_e](http://www.e-t-a.de/ti_e)

Voltage rating	AC 240 V (50/60 Hz); DC 65 V (UL: AC 250 V; DC 80 V)		
Current rating range	0.05...16 A		
Typical life	5,000 operations at 1 x I <sub>N</sub> , inductive 5,000 operations at 2 x I <sub>N</sub> , resistive		
Ambient temperature	-30...+60 °C (-22...+140 °F)		
Insulation co-ordination (IEC 60664 and 60664 A)	rated impulse withstand voltage 2.5 kV reinforced insulation	pollution degree 2 in operating area	
Dielectric strength (IEC 60664 and 60664A) operating area	test voltage AC 3,000 V		
Insulation resistance	> 100 MΩ (DC 500 V)		
Interrupting capacity I <sub>cn</sub>	0.05...0.8 A 1...2 A 2.5...16 A	self-limiting 200 A 400 A	
Interrupting capacity (UL 1077)	I <sub>N</sub> 0.05...16 A 0.05...16 A	U <sub>N</sub> AC 250 V DC 80 V	1,000 A 1,000 A
Degree of protection (IEC 60529/DIN 40050)	operating area IP40 terminal area IP20		
Vibration	5 g (57-500 Hz), ± 0.38 mm (10-57 Hz) to IEC 60068-2-6, test Fc 10 frequency cycles/axis		
Shock	25 g (11 ms) to IEC 60068-2-27, test Ea		
Corrosion	96 hours at 5 % salt mist, to IEC 60068-2-11, test Ka		
Humidity	240 hours at 95 % RH to IEC 60068-2-78, test Cab		
Mass	approx. 60 g		

## Dimensions



current rating in A

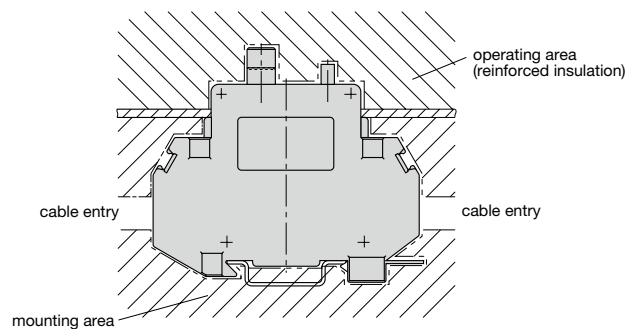
slot for fitting labels from Weidmüller type dekafix

Phoenix type ZBFM5 or ZB8

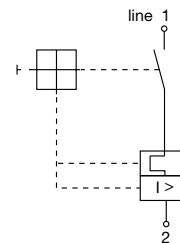
Phillips screw, size 2 to EN ISO 4757

This is a metric design and millimeter dimensions take precedence ( $\frac{\text{mm}}{\text{inch}}$ )

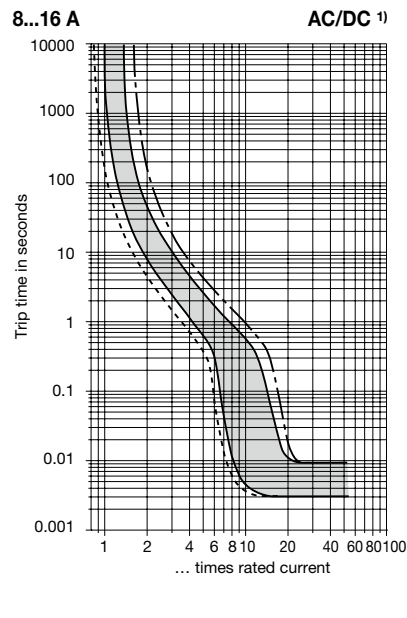
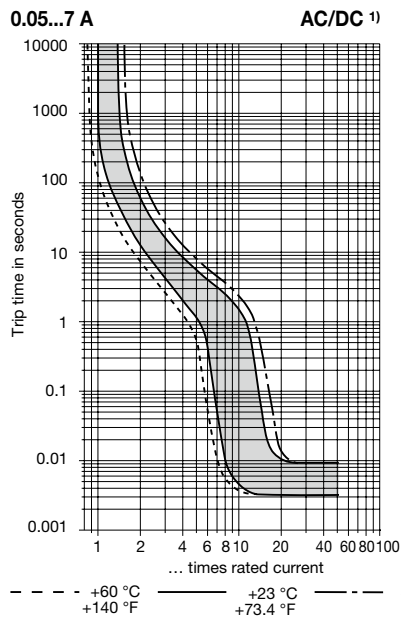
## Installation drawing



## Internal connection diagram



## Typical time/current characteristics



<sup>1)</sup> Magnetic tripping currents are increased by 20% on DC supplies.

Ambient temp. °F	-22	-4	+14	+32	+73.4	+104	+122	+140
°C	-30	-20	-10	0	+23	+40	+50	+60
Derating factor	0.76	0.79	0.83	0.88	1	1.08	1.16	1.24

The time/current characteristic curve depends on the ambient temperature prevailing. In order to eliminate nuisance tripping, please multiply the circuit breaker current ratings by the derating factor shown below. See also section Technical information.