## Miniature circuit breaker (MCB), 6 A, 3p, characteristic: B



Part no. HN-B6/3 Catalog No. 194878

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Basic function			Miniature circuit-breakers
Number of poles			3 pole
Tripping characteristic			В
Application			Switchgear for residential and commercial applications
Rated current	In	Α	6
Rated switching capacity according to IEC/EN 60898-1	I <sub>cn</sub>	kA	6
Product range			HN

## **Technical data**

**Electrical** 

Rated switching capacity according to IEC/EN 60898-1  $\rm I_{\rm cn}$ kA

Design verification as per IEC/EN 61439			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	6
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	5.5
Static heat dissipation, non-current-dependent	P <sub>vs</sub>	W	0
Heat dissipation capacity	P <sub>diss</sub>	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	75
			linear, per +1 °C, results in a 0.5% reduction of current carrying capacity
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
10.2.2 Corrosion resistance			Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures			Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat			Meets the product standard's requirements.
10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects			Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation			Meets the product standard's requirements.
10.2.5 Lifting			Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 Mechanical impact			Does not apply, since the entire switchgear needs to be evaluated.
10.2.7 Inscriptions			Meets the product standard's requirements.
10.3 Degree of protection of ASSEMBLIES			Does not apply, since the entire switchgear needs to be evaluated.
10.4 Clearances and creepage distances			Meets the product standard's requirements.
10.5 Protection against electric shock			Does not apply, since the entire switchgear needs to be evaluated.
10.6 Incorporation of switching devices and components			Does not apply, since the entire switchgear needs to be evaluated.
10.7 Internal electrical circuits and connections			Is the panel builder's responsibility.
10.8 Connections for external conductors			Is the panel builder's responsibility.
10.9 Insulation properties			
10.9.2 Power-frequency electric strength			Is the panel builder's responsibility.
10.9.3 Impulse withstand voltage			Is the panel builder's responsibility.
10.9.4 Testing of enclosures made of insulating material			Is the panel builder's responsibility.
10.10 Temperature rise			The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
10.11 Short-circuit rating			Is the panel builder's responsibility. The specifications for the switchgear must be observed.

10.12 Electromagnetic compatibility	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.13 Mechanical function	The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

## **Technical data ETIM 8.0**

Circuit breakers and fuses (EG000020) / Miniature circuit breaker (MCB) (EC000042)

Electric engineering, automation, process control engineering / Electrical installation, device / Miniature circuit breaker system (MCB) / Miniature circuit breaker (MCB) / Min

Built-in depth Release characteristic Number of poles (total) Number of protected poles Rated current Rated voltage Rated voltage Rated woltage Ui Rated insulation voltage Ui Rated insulation voltage Ui Rated insulation voltage Ui Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V Voltage type Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V Rated short-circuit breaking capacity Icu according to EN 60898 at 400 V Rated short-circuit breaking capacity Icu according to EN 60898 at 400 V Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V RA Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 240 V RA Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V RA Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V RA Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V RA Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V RA Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V RA Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V RA Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V RA  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V RA  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V RA  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V RA  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V RA  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V RA  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V RA  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V RA  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V RA  Rated short-
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Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V  Voltage type  Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Requency  Lurrent limiting class  Flush-mounted installation  Concurrently switching neutral conductor  Over voltage category  Pollution degree  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V  RA  O  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  RA  O  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V  RA  O  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V  RA  O  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V  RA  O  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V  RA  O  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V  RA  O  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V  RA  O  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V  RA  O  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V  RA  O  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V  RA  O  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V  RA  O  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V  RA  O  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V  RA  O  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V  RA  O  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V  RA  O  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V  RA  O  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V  RA
Voltage type  Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Frequency  Hz  50 - 60  Current limiting class  Flush-mounted installation  Yes  Concurrently switching neutral conductor  Over voltage category  Pollution degree  3  Pollution degree  AC  AC  No  3  AC
Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Frequency  Hz  50 - 60  Current limiting class  Flush-mounted installation  Yes  Concurrently switching neutral conductor  No  Over voltage category  Pollution degree  3
Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V
Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V
Frequency Current limiting class Flush-mounted installation Concurrently switching neutral conductor Over voltage category Pollution degree Hz 50 - 60 Yes No 3  7  8  9  9  9  9  9  9  9  9  9  9  9  9
Current limiting class  Flush-mounted installation  Yes  Concurrently switching neutral conductor  No  Over voltage category  3  Pollution degree  3
Flush-mounted installation  Concurrently switching neutral conductor  No  Over voltage category  Pollution degree  3
Concurrently switching neutral conductor  Over voltage category  3  Pollution degree  3
Over voltage category 3 Pollution degree 3
Pollution degree 3
Additional equipment possible Yes
Width in number of modular spacings 3
Degree of protection (IP)
Ambient temperature during operating °C -25 - 75
Connectable conductor cross section multi-wired mm <sup>2</sup> 1 - 25
Connectable conductor cross section solid-core mm <sup>2</sup> 1 - 25
Explosion-proof No