DATASHEET - HN-B50/1

Miniature circuit breaker (MCB), 50 A, 1p, characteristic: B



Part no.	HN-B50/1 194826	Powering Business Worldwia
Product name		Eaton Moeller series xPole Home - HN/HN-HX MCB
Part no.		HN-B50/1
EAN		9010238063105
Product Length/Depth		85 millimetre
Product height		73 millimetre
Product width		17.7 millimetre
Product weight		0.12 kilogram
Compliances		RoHS conform
Product Tradename		xPole Home - HN/HN-HX
Product Type		МСВ
Product Sub Type		None
Application		Switchgear for residential and commercial applications xPole Home - Switchgear for residential applications
Number of poles		Single-pole
Number of poles (total)		1
Number of poles (protected)		1
Tripping characteristic		B
Release characteristic		B
Amperage Rating		50 A
Туре		HN Miniature circuit breaker
Voltage type		AC
Rated operational voltage (Ue) - max		230 V
Rated insulation voltage (Ui)		440 V
Rated impulse withstand voltage (Uimp)		4 kV
Frequency rating - min		50 Hz
Frequency rating - max		60 Hz
Rated switching capacity (IEC/EN 60898-1)		6 kA
Rated short-circuit breaking capacity (EN 60898) at 230 V		6 kA
Rated short-circuit breaking capacity (EN 60898) at 400 V Rated short-circuit breaking capacity (IEC 60947-2) at 230 V	1	6 kA 0 kA
Rated short-circuit breaking capacity (IEC 60947-2) at 200 V		0 kA
Overvoltage category	·	
Pollution degree		3
· · · · · · · · · · · · · · · · · · ·		
Width in number of modular spacings		1
Built-in depth		44 mm
Degree of protection		IP20
Connectable conductor cross section (solid-core) - min		1 mm ²
Connectable conductor cross section (solid-core) - max		25 mm ²
Connectable conductor cross section (multi-wired) - min		1 mm ²
Connectable conductor cross section (multi-wired) - max		25 mm ²
Rated operational current for specified heat dissipation (In)	50 A
Heat dissipation per pole, current-dependent		0 W
Equipment heat dissination, current-dependent		4.5 W

Equipment heat dissipation, current-dependent

Static heat dissipation, non-current-dependent

4.5 W

0 W

Heat dissipation capacity	0 W
Ambient operating temperature - min	-25 °C
Ambient operating temperature - max	75 °C
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 Resist. of insul. mat. to abnormal heat/fire by internal elect. 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.
10.9.2 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.
Current limiting class	3
Features	Additional equipment possible
Special features	Ambient temperature hint: a 1 °C increase results in a 0.5% linear reduction of current carrying capacity
Suitable for	Flush-mounted installation
Used with	HN Miniature circuit breaker

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) (ecl@ss10.0.1-27-14-19-01 [AAB905014])

Built-in depth	mm	44
Release characteristic		В
Number of poles (total)		1
Number of protected poles		1
Rated current	А	50
Rated voltage	V	230
Rated insulation voltage Ui	V	440
Rated impulse withstand voltage Uimp	kV	4
Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V	kA	6
Voltage type		AC
Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V $$	kA	6
Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V $$	kA	0
Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V $$	kA	0
Frequency	Hz	50 - 60
Current limiting class		3
Flush-mounted installation		Yes

Concurrently switching neutral conductor		No
Over voltage category		3
Pollution degree		3
Additional equipment possible		Yes
Width in number of modular spacings		1
Degree of protection (IP)		IP20
Ambient temperature during operating	°C	-25 - 75
Connectable conductor cross section multi-wired	mm	n ² 1 - 25
Connectable conductor cross section solid-core	mm	n ² 1 - 25
Explosion-proof		No