Miniature circuit breaker (MCB), 10 A, 1p, characteristic: B

Powering Business Worldwide

Part no. Catalog No. PLSM-B10-MW 242176

EL-Nummer (Norway)

1609101

Delivery program

Basic function			Miniature circuit-breakers
Number of poles			1 pole
Tripping characteristic			В
Application			Switchgear for residential and commercial applications
Rated current	In	Α	10
Rated switching capacity according to IEC/EN 60898-1	I _{cn}	kA	10
Product range			PLSM

Technical data

Electrical

Rated switching capacity according to IEC/EN 60898-1 kA 10

Design verification as per IEC/EN 61439			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	10
Heat dissipation per pole, current-dependent	P _{vid}	W	0
Equipment heat dissipation, current-dependent	P _{vid}	W	1.9
Static heat dissipation, non-current-dependent	P _{vs}	W	0
Heat dissipation capacity	P _{diss}	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) (ecl@ss10.0.1-27-14-19-01 [AAB905014])

Bull-in depth Release characteristic Release characteristic Rumber of poles (total) Number of poles (total) Rumber of poles (total) Rumber of poles (total) Rumber of poles (total) Rumber of poles (total) Rated current Rated current Rated current Rated invitation voltage Rated invitation voltage Uin Rated invitation voltage Uin Rated invitation voltage Uin Rated invitation voltage Uin Rated short-circuit breaking capacity Icn according to EN 6898 at 20 V Rollage Short-circuit breaking capacity Icn according to EN 6898 at 20 V Rated short-circuit breaking capacity Icn according to EN 6898 at 20 V Rated short-circuit breaking capacity Icn according to EN 6898 at 20 V Rated short-circuit breaking capacity Icn according to EN 6894 at 20 V Rated short-circuit breaking capacity Icn according to EN 6894 at 20 V Rated short-circuit breaking capacity Icn according to EN 6894 at 20 V Rated short-circuit breaking capacity Icn according to EN 6894 at 20 V Rated short-circuit breaking capacity Icn according to EN 6894 at 20 V Rated short-circuit breaking capacity Icn according to EN 6894 at 20 V Rated short-circuit breaking capacity Icn according to EN 6894 at 20 V Rated short-circuit breaking capacity Icn according to EN 6894 at 20 V Rated short-circuit breaking capacity Icn according to EN 6894 at 20 V Rated short-circuit breaking capacity Icn according to EN 6894 at 20 V Rated short-circuit breaking capacity Icn according to EN 6894 at 20 V Rated short-circuit breaking capacity Icn according to EN 6894 at 20 V Rated short-circuit breaking capacity Icn according to EN 6894 at 20 V Rated short-circuit breaking capacity Icn according to EN 6894 at 20 V Rated short-circuit breaking capacity Icn according to EN 6894 at 20 V Rated short-circuit breaking capacity Icn according to EN 6894 at 20 V Rated short-circuit breaking capacity Icn according to EN 6894 at 20 V Rated short-circuit breaking capacity Icn according to EN 6894 at 20 V Rated short-circuit breaking capacity Icn according to EN 6894 at 20 V Rated short-circuit brea	(eci@ss10.0.1-27-14-19-01 [AAB905014])		
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Number of protected poles 4 1 Rated current A 10 Rated voltage V 20 Rated insulation voltage Ui V 44 Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V kA 10 Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V kA 10 Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V kA 10 Rated short-circuit breaking capacity Icu according to EN 60898 at 400 V kA 10 Rated short-circuit breaking capacity Icu according to EC 60947-2 at 230 V kA 0 Rated short-circuit breaking capacity Icu according to EC 60947-2 at 230 V kA 0 Rated short-circuit breaking capacity Icu according to EC 60947-2 at 230 V kA 0 Rated short-circuit breaking capacity Icu according to EC 60947-2 at 230 V kA 0 Current limiting class In Read short-circuit breaking capacity Icu according to EC 60947-2 at 400 V kA 0 Concurrently switching neutral conductor In Read short-circuit breaking capacity Icu according to EC 60947-2 at 400 V KB 0 Concurrently switching actating to Explain s	Release characteristic		В
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Rated impulse with sand voltage Uimp 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 230 V Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 240 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 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 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 200 V Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 200 V Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 200 V Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 200 V Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 200 V Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 200 V Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 200 V Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 200 V Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 200 V Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 200 V Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 200 V Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 200 V Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 200 V Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 200 V Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 200 V Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 200 V Rated short-circuit breaki	Rated voltage	V	230
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Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V	Voltage type		AC
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 Additional equipment possible Width in number of modular spacings Ves Width in number of modular spacings Pogree of protection (IP) Ambient temperature during operating Connectable conductor cross section multi-wired Connectable conductor cross section solid-core kA 0 No No No Yes 1 1 1 1 1 1 1 1 1 1 1 1 1	Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V $$	kA	10
Frequency Current limiting class Flush-mounted installation Concurrently switching neutral conductor Over voltage category Pollution degree Additional equipment possible Width in number of modular spacings Very of protection (IP) Ambient temperature during operating Connectable conductor cross section multi-wired Connectable conductor cross section solid-core Hz 50 - 60 3 Con Concurrently switching neutral conductor No No 2 4 50 - 60 3 7 8 No No 4 1 2 4 4 50 - 60 1 1 1 1 1 1 1 1 1 1 1 1 1	Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V	kA	A 0
Current limiting class Flush-mounted installation Concurrently switching neutral conductor Over voltage category Over voltage category Pollution degree Additional equipment possible Width in number of modular spacings Width in number of modular spacings Flush-mounted installation Pollution degree Additional equipment possible Flush-mounted installation Flush-mounted ins	Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V	kA	0
Flush-mounted installation Concurrently switching neutral conductor Over voltage category Pollution degree 2 Additional equipment possible Width in number of modular spacings Ungree of protection (IP) Pegree of protection (IP) Ambient temperature during operating Connectable conductor cross section multi-wired Connectable conductor cross section solid-core No 2 4 Pollution degree Pes Yes IP20 TP20 TP20 Connectable conductor cross section multi-wired mm² 1 - 25 Tes Tes Tes Tes Tes Tes Tes Te	Frequency	Hz	z 50 - 60
Concurrently switching neutral conductor Over voltage category Pollution degree Additional equipment possible Width in number of modular spacings Width in number of protection (IP) Ambient temperature during operating Connectable conductor cross section multi-wired Connectable conductor cross section solid-core No 2 Ano Pollution degree Yes 1 1 P20 Arbient temperature during operating Cc -25 - 75 Connectable conductor cross section multi-wired mm² 1 - 25 Connectable conductor cross section solid-core mm² 1 - 25	Current limiting class		3
Over voltage category Pollution degree Additional equipment possible Width in number of modular spacings Degree of protection (IP) Ambient temperature during operating Connectable conductor cross section multi-wired Connectable conductor cross section solid-core Page 3 3 Yes Yes 1 1 P20 -25 - 75 Connectable conductor cross section multi-wired mm² 1 - 25 Connectable conductor cross section solid-core mm² 1 - 25	Flush-mounted installation		No
Pollution degree Additional equipment possible Width in number of modular spacings Width in number of protection (IP) Ambient temperature during operating Connectable conductor cross section multi-wired Connectable conductor cross section solid-core 2 Pes Yes 1 1 P20 Arbient temperature during operating CC -25 - 75 Connectable conductor cross section multi-wired mm² 1 - 25 Connectable conductor cross section solid-core mm² 1 - 25	Concurrently switching neutral conductor		No
Additional equipment possible Width in number of modular spacings Degree of protection (IP) Ambient temperature during operating Connectable conductor cross section multi-wired Connectable conductor cross section solid-core Yes 1 1 1 1 1 1 1 1 1 1 1 1 1	Over voltage category		3
Width in number of modular spacings Degree of protection (IP) Ambient temperature during operating Connectable conductor cross section multi-wired Connectable conductor cross section solid-core Degree of protection (IP) P20 -25 - 75 -25 - 75 -25 - 75 -25 - 75 -25 - 75 -25 - 75 -27 - 75 -27 - 75 -28 - 75 -29 -	Pollution degree		2
Degree of protection (IP) Ambient temperature during operating °C -25 - 75 Connectable conductor cross section multi-wired mm² 1 - 25 Connectable conductor cross section solid-core mm² 1 - 25	Additional equipment possible		Yes
Ambient temperature during operating °C -25 - 75 Connectable conductor cross section multi-wired mm² 1 - 25 Connectable conductor cross section solid-core mm² 1 - 25	Width in number of modular spacings		1
Connectable conductor cross section multi-wired mm² 1 - 25 Connectable conductor cross section solid-core mm² 1 - 25	Degree of protection (IP)		IP20
Connectable conductor cross section solid-core mm² 1 - 25	Ambient temperature during operating	°C	-25 - 75
	Connectable conductor cross section multi-wired	mm ²	m ² 1 - 25
Explosion-proof No	Connectable conductor cross section solid-core	mm ²	m ² 1 - 25
	Explosion-proof		No