DATASHEET - PLSM-B8/3N-MW



Miniature circuit breaker (MCB), 8A, 3pole+N, type B characteristic

Powering Business Worldwide*

Part no. PLSM-B8/3N-MW Catalog No. 242512

Delivery program

Basic function			Miniature circuit-breakers
Number of poles			3 pole+N
Tripping characteristic			В
Application			Switchgear for residential and commercial applications
Rated current	In	Α	8
Rated switching capacity according to IEC/EN 60898-1	I _{cn}	kA	10
Product range			PLSM

Technical data

Electrical

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Design verification as per IEC/EN 61439

Design verification as per IEC/EN 61439			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	8
Heat dissipation per pole, current-dependent	P _{vid}	W	0
Equipment heat dissipation, current-dependent	P _{vid}	W	6.5
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
EC/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 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 7.0

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

Aumber of poles (total) 4 Number of protected poles 3 Rated current A 8 Rated voltage V 400 Rated slatidion voltage Ui V 400 Rated simpulse withstand voltage Uimp kV 4 Rated short-circuit breaking capacity Icn EN 60898 at 230 V kA 10 Rated short-circuit breaking capacity Icu IEC 60947-2 at 220 V kA 10 Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V kA 0 Requency KA 0 Current limiting class 3 3 Suitable for flush-mounted installation No No Over voltage category Yes 3 Over voltage category Yes 3 Pollution degree Yes 3 Additional equipment possible Yes 3 Ambient temperature during operating	(ecl@ss10.0.1-27-14-19-01 [AAB905014])			
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Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Voltage type AC AC Frequency Hz 50 - 60 Current limiting class Suitable for flush-mounted installation Concurrently switching N-neutral Over voltage category Pollution degree Additional equipment possible Width in number of modular spacings Built-in depth Mmm 70.5 Degree of protection (IP) Ambient temperature during operating Connectable conductor cross section multi-wired kA DC AC AC AC AC AC AC AC AC A	Rated short-circuit breaking capacity Icn EN 60898 at 400 V	kA	10	
Voltage type Frequency Hz 50 - 60 Current limiting class Suitable for flush-mounted installation Concurrently switching N-neutral Over voltage category Pollution degree Additional equipment possible Width in number of modular spacings Built-in depth Degree of protection (IP) Ambient temperature during operating Connectable conductor cross section multi-wired AC DC AC DC DC DC DC DC DC DC	Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V	kA	0	
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Over voltage category Pollution degree Additional equipment possible Width in number of modular spacings Width in depth Degree of protection (IP) Ambient temperature during operating Connectable conductor cross section multi-wired 3 4 Figure 1 Figure 2 Figure 3 Figure 4 Figure 3 Figure 3 Figure 4 F	Suitable for flush-mounted installation		No	
Pollution degree 2 Additional equipment possible Yes Width in number of modular spacings 4 Built-in depth mm 70.5 Degree of protection (IP) IP20 Ambient temperature during operating °C -25 - 55 Connectable conductor cross section multi-wired mm² 1 - 25	Concurrently switching N-neutral		Yes	
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Built-in depth mm 70.5 Degree of protection (IP) IP20 Ambient temperature during operating °C -25 - 55 Connectable conductor cross section multi-wired mm² 1 - 25	Additional equipment possible		Yes	
Degree of protection (IP) Ambient temperature during operating Connectable conductor cross section multi-wired P20 TP20 T	Width in number of modular spacings		4	
Ambient temperature during operating °C -25 - 55 Connectable conductor cross section multi-wired mm² 1 - 25	Built-in depth	mm	70.5	
Connectable conductor cross section multi-wired mm² 1 - 25	Degree of protection (IP)		IP20	
	Ambient temperature during operating	°C	-25 - 55	
Connectable conductor cross section solid-core mm² 1 - 25	Connectable conductor cross section multi-wired	mm²	1 - 25	
	Connectable conductor cross section solid-core	mm²	1 - 25	