# **DATASHEET - PLSM-C0,25/2-MW**



# Miniature circuit breaker (MCB), 0,25A, 2p, type C characteristic

Part no. PLSM-C0,25/2-MW Catalog No. 242387



Similar to illustration

	program

Basic function			Miniature circuit-breakers
Number of poles			2 pole
Tripping characteristic			C
Application			Switchgear for residential and commercial applications
Rated current	In	Α	0.25
Rated switching capacity according to IEC/EN 60898-1		kA	10
Product range			PLSM

### **Technical data**

#### **Electrical**

Rated switching capacity according to IEC/EN 60898-1	I <sub>cn</sub>	kA	10				
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## Design verification as per IEC/EN 61439

Design verification as per IEC/EN 61439			
echnical data for design verification			
Rated operational current for specified heat dissipation	In	Α	0.25
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0
Equipment heat dissipation, current-dependent	$P_{\text{vid}}$	W	4
Static heat dissipation, non-current-dependent	$P_{vs}$	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
C/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 wil 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 7.0

Number of protected poles         2           Rated current         A         0.25           Rated voltage         V         400           Rated insulation voltage Ui         V         440           Rated insulation voltage Uimp         kV         4           Rated short-circuit breaking capacity Icn EN 60898 at 230 V         kA         10           Rated short-circuit breaking capacity Icn EN 60898 at 400 V         kA         10           Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V         kA         0           Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V         kA         0           Voltage type         KA         0         0           Frequency         Core         AC         0           Current limiting class         Suitable for flush-mounted installation         No         0           Concurrently switching N-neutral         No         No           Over voltage category         3         3           Pollution degree         Yes         2           Additional equipment possible         Yes           Width in number of modular spacings         mm         70.5           Built-in depth         mm         70.5           Degree of protection (IP)	Technical data ETIM 7.0				
Release characteristic   Number of poles (total)	Circuit breakers and fuses (EG000020) / Miniature circuit breaker (MCB) (EC000042)				
Number of poles (total)         Early         2           Number of protected poles         4         25           Rated current         4         40           Rated insulation voltage Uin         4         40           Rated insulation voltage Uin p         4         44           Rated short-circuit breaking capacity Icn EN 60898 at 230 V         5         4           Rated short-circuit breaking capacity Icn EN 60898 at 240 V         6         1           Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V         6         0           Rated short-circuit breaking capacity Icu IEC 60947-2 at 240 V         6         0           Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V         6         0           Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V         6         0           Requency         6         6         0           Current limiting class         1         1         0           Suitable for flush-mounted installation         9         1         0         0           Concurrently switching N-neutral         9         1         2         0           Over voltage category         9         2         2         0           Villation alequipment possible         9					
Number of protected poles         2           Rated current         A         0.25           Rated voltage         V         40           Rated insulation voltage Ui         V         40           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 Icn EN 60898 at 400 V         kA         10           Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V         kA         0           Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V         kA         0           Voltage type         kA         0         0           Current limiting class         S         3         0           Suitable for flush-mounted installation         KA         No         0           Concurrently switching N-neutral         KA         No         0           Over voltage category         KA         No         0           Pollution degree         KA         Yes           Additional equipment possible         Yes         2           With in number of modular spacings         Yes         Yes           Built-in depth         Yes         Yes	Release characteristic		С		
Rated current         A         25           Rated voltage         V         400           Rated insulation voltage Ui         V         440           Rated insulation voltage Uimp         VV         440           Rated short-circuit breaking capacity Icn EN 60898 at 230 V         KA         10           Rated short-circuit breaking capacity Icn EN 60898 at 400 V         KA         10           Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V         KA         0           Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V         KA         0           Voltage type         KA         0         C           Frequency         Concertaint initing class         3         3           Suitable for flush-mounted installation         Concurrently switching N-neutral         No         3           Oncervortage category         No         3         3           Pollution degree         Fee         2         2           Additional equipment possible         Yes         2           Within in number of modular spacings         Pollution degree	Number of poles (total)		2		
Rated voltage         V         400           Rated insulation voltage Ui         V         440           Rated inpulse withstand voltage Uimp         kV         4           Rated short-circuit breaking capacity Icn EN 60898 at 230 V         kA         10           Rated short-circuit breaking capacity Icn EN 60898 at 400 V         kA         10           Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V         kA         0           Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V         kA         0           Voltage type         KA         0         0           Current limiting class         So - 60         0           Suitable for flush-mounted installation         MO         No           Concurrently switching N-neutral         No         No           Over voltage category         No         3           Pollution degree         Yes         Yes           Additional equipment possible         Yes         Yes           Width in number of modular spacings         mm         70.5           Built-in depth         mm         70.5           Degree of protection (IP)         mm         70.5           Ambient temperature during operating         mr         22.5           Connecta	Number of protected poles		2		
Rated insulation voltage Ui         V         440           Rated impulse withstand voltage Uimp         kV         4           Rated short-circuit breaking capacity Icn EN 60898 at 230 V         kA         10           Rated short-circuit breaking capacity Icn EN 60898 at 400 V         kA         10           Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V         kA         0           Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V         kA         0           Voltage type         kA         0         0           Current limiting class         kA         50-60           Suitable for flush-mounted installation         kA         No           Concurrently switching N-neutral         kA         No           Over voltage category         kA         3           Pollution degree         kA         kS           Additional equipment possible         kS         kS           Width in number of modular spacings         kS         yS           Built-in depth         kS         p2           Degree of protection (IP)         kS         p2           Ambient temperature during operating         kS         p2           Connectable conductor cross section multi-wired         kS         p2	Rated current	А	0.25		
Rated impulse with sand voltage Uimp Rated short-circuit breaking capacity Icn EN 60898 at 230 V Rated short-circuit breaking capacity Icn EN 60898 at 400 V Rated short-circuit breaking capacity Icn EN 60898 at 400 V Rated short-circuit breaking capacity Icn EN 60898 at 400 V Rated short-circuit breaking capacity Icn EN 60947-2 at 230 V Rated short-circuit breaking capacity Icn EN 60947-2 at 230 V Rated short-circuit breaking capacity Icn EN 60947-2 at 400 V Rottage type  Frequency  Current Imiting class Suitable for flush-mounted installation Concurrently switching N-neutral Concurrently switching N-neutral Concurrently switching N-neutral Cover 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  Mark 1   Rated Short-circuit breaking capacity Icn EN 60898 at 400 V RA  Rated short-circuit breaking capacity Icn EN 60898 at 400 V RA  Rated short-circuit breaking capacity Icn EN 60898 at 400 V RA  Rated short-circuit breaking capacity Icn EN 60898 at 400 V RA  Rated short-circuit breaking capacity Icn EN 60898 at 400 V RA  Rated short-circuit breaking capacity Icn EN 60898 at 400 V RA  Rated short-circuit breaking capacity Icn EN 60898 at 400 V RA  Rated short-circuit breaking capacity Icn EN 60898 at 400 V RA  Rated short-circuit breaking capacity Icn EN 60989 at 400 V RA  Rated short-circuit breaking capacity Icn EN 60989 at 400 V RA  Rated short-circuit breaking capacity Icn EN 60989 at 400 V RA  Rated short-circuit breaking capacity Icn EN 60989 at 400 V RA  Rated short-circuit breaking capacity Icn EN 60989 at 400 V RA  Rated short-circuit breaking capacity Icn EN 60989 at 400 V RA  Rated short-circuit breaking capacity Icn EN 60989 at 400 V RA  Rated short-circuit breaking capacity Icn EN 60989 at 400 V RA  Rated short-circuit breaking capacity Icn EN 60989 at 400 V RA  Rated short-circuit breaking capacity Icn EN 6099 at 400 V RA  Rate	Rated voltage	V	400		
Rated short-circuit breaking capacity Icn EN 60898 at 230 V Rated short-circuit breaking capacity Icn EN 60898 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Voltage type  Voltage type  Frequency Current Imiting 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  Na  Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated Short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated Short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated Short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated Short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated Short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated Short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated Short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated Short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated Short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated Short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated Short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated Short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated Short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated Short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated Short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated Short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated Short-circuit breaking capacity Icu IEC 60947-2 at 200 V Rated Short-circuit breaking capacity Icu IEC 60947-2 at 200 V Rated Short-circuit breaking capacity Icu IC	Rated insulation voltage Ui	V	440		
Rated short-circuit breaking capacity Icn EN 60898 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Voltage type  Frequency 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    KA   0     C   C     C   C     C   C     C   C	Rated impulse withstand voltage Uimp	kV	4		
Rated short-circuit breaking capacity lcu IEC 60947-2 at 230 V Rated short-circuit breaking capacity lcu IEC 60947-2 at 400 V Voltage type  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    KA   0     C   C     C   C     C   C     C   C	Rated short-circuit breaking capacity Icn EN 60898 at 230 V	kA	10		
Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Voltage type  Frequency Current limiting class Suitable for flush-mounted installation Concurrently switching N-neutral Over voltage category 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  kA  C  AC  AC  AC  AC  AC  AC  AC  AC	Rated short-circuit breaking capacity Icn EN 60898 at 400 V	kA	10		
Voltage type Frequency 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 Cancurrently switching N-color Solator Solat	Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V	kA	0		
Frequency 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  Hz 50-60  No  Concurrently switching N-neutral No  No  2  4  4  4  5  6  7  7  8  7  8  7  8  7  8  7  8  7  8  8	Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V	kA	0		
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 Current limiting class    No     No     Suparation   Suparation	Voltage type		AC		
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  No  No  No  Pollution  Yes  2  2  70.5  Pl20  Pl20  The policy operating  Pl20  1 - 25 - 55  Connectable conductor cross section multi-wired  No  No  No  No  Policy operation  No  No  No  No  Policy operation  No  No  No  No  Policy operation  No  No  No  No  No  No  No  No  No	Frequency	Hz	50 - 60		
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  No  No  2  2  Pollution degree Protection (IP)  IP20  The protection (IP)  IP20  The protection (IP)  IP20  The protection (IP)  IP20  The protection (IP)  Th	Current limiting class		3		
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  Meridian in a protection in a protection multi-wired  Meridian in a protection in a protection multi-wired  Meridian in a protection in a prote	Suitable for flush-mounted installation		No		
Pollution degree 2 Additional equipment possible Yes Width in number of modular spacings 2 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		No		
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  Meditional equipment possible  mm 70.5  P20  P20  P20  P20  P25 - 55  P25 - 55  P26 - 25 - 55  P27 - 25 - 55	Over voltage category		3		
Width in number of modular spacings 2 Built-in depth 70.5 Degree of protection (IP) IP20 Ambient temperature during operating Connectable conductor cross section multi-wired page 2  2 P20	Pollution degree		2		
Built-in depth Pogree of protection (IP) P20 Ambient temperature during operating Connectable conductor cross section multi-wired PM	Additional equipment possible		Yes		
Degree of protection (IP)  Ambient temperature during operating  Connectable conductor cross section multi-wired  IP20  *C	Width in number of modular spacings		2		
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 mm <sup>2</sup> 1 - 25	Degree of protection (IP)		IP20		
	Ambient temperature during operating	°C	-25 - 55		
Connectable conductor cross section solid-core mm <sup>2</sup> 1 - 25	Connectable conductor cross section multi-wired	mm <sup>2</sup>	1 - 25		
	Connectable conductor cross section solid-core	mm <sup>2</sup>	1 - 25		