DATASHEET - PLSM-C50/4-MW



Miniature circuit breaker (MCB), 50 A, 4p, characteristic: C

Powering Business Worldwide*

Part no. PLSM-C50/4-MW Catalog No. 242617

EL-Nummer (Norway)

1609228

Similar to illustration

Delivery program

2011-0-1/ p. 1-03-1-11			
Basic function			Miniature circuit-breakers
Number of poles			4 pole
Tripping characteristic			С
Application			Switchgear for residential and commercial applications
Rated current	In	Α	50
Rated switching capacity according to IEC/EN 60898-1	I _{cn}	kA	10
Product range			PLSM

Technical data

Electrical

|--|

Design verification as per IEC/EN 61439

esign verification as per IEC/EN 61439			
echnical data for design verification			
Rated operational current for specified heat dissipation	In	Α	50
Heat dissipation per pole, current-dependent	P_{vid}	W	0
Equipment heat dissipation, current-dependent	P_{vid}	W	18
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
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 wi 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

Electric engineering, automation, process control engineering / Electrical installation, device / Ministrue circuit breaker (MCB) / Ministrue circuit breaker (MCB) (ec (835 tot.) 1-27-14-19-01 [AAB906014]) Rolease characteristic Number of poles (total) A	Technical data ETIM 7.0				
Care	Circuit breakers and fuses (EG000020) / Miniature circuit breaker (MCB) (EC000042)				
Number of poles (total) 4 Number of protected poles 4 Rated current A 50 Rated voltage V 400 Rated insulation voltage Uin V 40 Rated insulation voltage Uin kV 40 Rated short-circuit breaking capacity Icn EN 60888 at 230 V kA 10 Rated short-circuit breaking capacity Icn EN 60888 at 400 V kA 10 Rated short-circuit breaking capacity Icu IEC 60947-2 at 420 V kA 0 Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V kA 0 Return timiting class L C Suitable for flush-mounted installation L No Concurrently switching N-neutral L 2 Over voltage category L 2 Pollution degree L 2 Additional equipment possible yes Width in number of modular spacings m 75 Built-in depth mm 75 Ambient temperature during operating C 25-75 Connectable condud	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])				
Number of protected poles 4 Rated current A 50 Rated voltage V 400 Rated insulation voltage Ui V 440 Rated simpulse withstand voltage Uimp kV 4 Rated short-circuit breaking capacity Ion EN 60898 at 230 V kA 10 Rated short-circuit breaking capacity Ion EN 60898 at 400 V kA 10 Rated short-circuit breaking capacity Ion EN 60898 at 400 V kA 0 Rated short-circuit breaking capacity Ion EN 60898 at 400 V kA 0 Rated short-circuit breaking capacity Ion EN 60897-2 at 230 V kA 0 Rated short-circuit breaking capacity Ion EN 60897-2 at 400 V kA 0 Voltage type B AC Frequency B No Current limiting class S No Suitable for flush-mounted installation Yes Over voltage category Yes Pollution degree Yes Additional equipment possible Yes Width in number of modular spacings Yes Built-in depth <	Release characteristic		С		
Rated current A 50 Rated voltage V 400 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 C Frequency KA 0 C Current limiting class X 3 C Suitable for flush-mounted installation X Yes Concurrently switching N-neutral Yes 2 Over voltage category Yes 2 Pollution degree Yes Yes Additional equipment possible Yes Yes Width in number of modular spacings Yes Yes Built-in depth Yes Yes Conceptable conducto	Number of poles (total)		4		
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 AC AC Frequency By 2 3 Current limiting class 3 3 Suitable for flush-mounted installation Yes Yes Concurrently switching N-neutral Yes 3 Over voltage category 3 3 Pollution degree Yes Yes Additional equipment possible Yes Width in number of modular spacings Mm 7.5 Built-in depth Mm 7.5 Degree of protection (IP) Pi20 25-75 Ambient temperature during operating 7.2 25-7	Number of protected poles		4		
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 Current limiting class back 3 Suitable for flush-mounted installation back No Concurrently switching N-neutral vex yes Over voltage category back 2 Pollution degree yes yes Additional equipment possible yes yes Width in number of modular spacings yes yes Built-in depth protection (IP) protection (IP) Ambient temperature during operating cer yes Connectable conductor cross section multi-wired cer yes	Rated current	А	50		
Rated impulse withstand 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 IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icn IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icn IEC 60947-2 at 240 V Voltage type Voltage type Rrequency Current limiting class Suitable for flush-mounted installation Concurrently switching N-neutral Over voltage category Pollution degree Pollution degree Rdditional equipment possible Width in number of modular spacings Built-in degth Built-in degth Built-in degth Concertage for fotection (IP) Ambient temperature during operating Connectable conductor cross section multi-wired Rated short-circuit breaking capacity Icn IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icn IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icn IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icn IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icn IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icn IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icn IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icn IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icn IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icn IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icn IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icn IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icn IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icn IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icn IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icn IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icn IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icn IEC 60947-2 at 200 V Rated short-circuit breaking capacity Icn IEC 60947-2 at 200 V Rated short-circuit breaking capacity Icn IEC 60947-2 at 200 V Rated short-circuit breaki	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 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 RA RA 10 10 10 10 10 10 10 10 10 1	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 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 MA O O O O A A O A O A O A C O A D D D D D D D D D D D D	Rated impulse withstand voltage Uimp	kV	4		
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 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 D 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 Voltage type Hz 50 - 60 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 Cneuction in the special section multi-wired kA Concurrently switching N-neutral No No Yes 2 Yes 4 1 1 1 1 1 1 1 1 1 1 1 1	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 AC AC AC AC PU 4 Ves 3 3 4 4 4 4 4 4 4 Ambient temperature during operating C C -25 - 75 Connectable conductor cross section multi-wired AC AC AC PU 4 PU 50 - 60 AD AD AD AD AD AD AD AD AD A	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 90-80 No 90-90-90 Yes 2 4 Yes Yes Yes 70.5 P20 P20 P20 P20 P20 P20 P20 P2	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 Connectable conductor cross section multi-wired 3 No Yes 3 4 Pollution Pols	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 Yes Yes 4 Pol. 10-25 1	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 Wes Yes Yes Yes Yes 1 Pol Pol Pol Pol Pol 1-25	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 March 1 - 25 March 2 - 20 M	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 -75 Connectable conductor cross section multi-wired mm² 1 - 25	Concurrently switching N-neutral		Yes		
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 P25 - 75 P30 P30 P30 P40 P40 P40 P50 P50 P50 P50 P5	Over voltage category		3		
Width in number of modular spacings Built-in depth Degree of protection (IP) Ambient temperature during operating Connectable conductor cross section multi-wired Ambient temperature during operating The conductor cross section multi-wired Mind the conductor cross section multi-wired Ambient temperature during operating The conductor cross section multi-wired The conductor cross section multi-wired Ambient temperature during operating The conductor cross section multi-wired	Pollution degree		2		
Built-in depth mm 70.5 Degree of protection (IP) P20 Ambient temperature during operating °C -25 - 75 Connectable conductor cross section multi-wired mm² 1 - 25	Additional equipment possible		Yes		
Degree of protection (IP) Ambient temperature during operating °C -25 - 75 Connectable conductor cross section multi-wired mm² 1 - 25	Width in number of modular spacings		4		
Ambient temperature during operating °C -25 - 75 Connectable conductor cross section multi-wired mm² 1 - 25	Built-in depth	mm	70.5		
Connectable conductor cross section multi-wired mm ² 1 - 25	Degree of protection (IP)		IP20		
	Ambient temperature during operating	°C	-25 - 75		
Connectable conductor cross section solid-core mm ² 1 - 25	Connectable conductor cross section multi-wired	mm²	1 - 25		
	Connectable conductor cross section solid-core	mm²	1 - 25		