DATASHEET - PLS6-C10/3-MW

Part no. Catalog No.



Miniature circuit breaker (MCB), 10 A, 3p, characteristic: C

PLS6-C10/3-MW 242945



Similar to illustration

Delivery program			
Basic function			Miniature circuit-breakers
Number of poles			3 pole
Tripping characteristic			С
Application			Switchgear for residential and commercial applications
Rated current	In	Α	10
Rated switching capacity according to IEC/EN 60898-1	I _{cn}	kA	6
Product range			PLS6

Technical data

Electrical

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Design verification as per IEC/EN 61439

Jesign verification as per IEC/EN 61439			
Fechnical 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	4.6
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 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

Electricaginaering, automation, process control engineering / Electrical installator, device / Humaniaer in control engineering / Electrical installator, device / Humaniaer installator, devi	lechnical data Elim 7.0					
Release obaracteristic	Circuit breakers and fuses (EG000020) / Miniature circuit breaker (MCB) (EC000042)					
Number of poles (total) 4 3 Number of protected poles 4 3 Rated current 4 10 Rated voltage 4 40 Rated insulation voltage Uin 4 40 Rated short-circuit breaking capacity Icn EN 60898 at 230 V 5 4 Rated short-circuit breaking capacity Icn EN 60898 at 230 V 6 6 Rated short-circuit breaking capacity Icn EN 60898 at 230 V 5 6 Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V 6 6 Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V 6 7 Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V 6 6 Voltage type 6 7 6 Frequency 1 8 6 Current limiting class 1 9 6 Suitable for flush-mounted installation 1 1 9 6 Concurrently switching N-neutral 1 2 1 2 Pollution degree 1 2 2 3						
Number of protected poles 4 3 Rated current A 10 Rated voltage V 40 Rated insulation voltage Ui V 40 Rated simplise withstand voltage Uimp kV 4 Rated short-circuit breaking capacity Icn EN 60898 at 230 V kA 6 Rated short-circuit breaking capacity Icn EN 60898 at 400 V kA 6 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 b2 C Current limiting class S 3 Suitable for flush-mounted installation B No Concurrently switching N-neutral B No Over voltage category No No Pollution degree B 2 Additional equipment possible B 2 With in number of modular spacings B Yes Built-in depth B Yes Concertable on protection (IP) P Yes	Release characteristic		С			
Rated current A 10 Rated voltage V 40 Rated insulation voltage Ui V 40 Rated insulation voltage Uimp VV 40 Rated short-circuit breaking capacity Icn EN 60898 at 230 V KA 6 Rated short-circuit breaking capacity Icn EN 60898 at 400 V KA 6 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 C 0 C Current liniting class M 0 C Suitable for flush-mounted installation C NO NO Concurrently switching N-neutral M 0 NO NO Over voltage category F 0 NO NO <td>Number of poles (total)</td> <td></td> <td>3</td>	Number of poles (total)		3			
Rated voltage V 400 Rated insulation voltage Uin V 440 Rated inpulse withstand voltage Uimp kV 4 Rated short-circuit breaking capacity Icn EN 60898 at 230 V kA 6 Rated short-circuit breaking capacity Icn EN 60898 at 400 V kA 6 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 Current limiting class kB 0 C Suitable for flush-mounted installation M A 0 Concurrently switching N-neutral M No 0 Over voltage category M 3 0 Pollution degree M Yes Additional equipment possible M 7 9 Width in number of modular spacings M 7 9 Built-in depth M 7 9 Degree of protection (IP) M 7 9 <th< td=""><td>Number of protected poles</td><td></td><td>3</td></th<>	Number of protected poles		3			
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 6 Rated short-circuit breaking capacity Icn EN 60898 at 400 V kA 6 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 0 0 Suitable for flush-mounted installation kA 0 0 Concurrently switching N-neutral kA No 0 Over voltage category kA 3 0 Pollution degree kA yS x Additional equipment possible kB yS x Width in number of modular spacings kB yB yS Built-in depth kB yB yB yB Degree of protection (IP) kB yB yB yB Abient temperatur	Rated current	Α	10			
Rated impulse with and voltage Uimp KV 4 Rated short-circuit breaking capacity Icn EN 60898 at 230 V kA 6 Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V kA 0 Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V kA 0 Rated short-circuit breaking capacity Icu IEC 60947-2 at 2400 V kA 0 Voltage type AC AC Current limiting class But be full-individual of installation 3 No Currently switching N-neutral No No No Over voltage category 3 Secure of installation No Over voltage category 2 Yes No Pollution degree 2 Yes Additional equipment possible Yes 3 Width in number of modular spacings The properties of protection (IP) No No Degree of protection (IP) Pize Pize Ambient temperature during operating Yes 25-75 Connectable conductor cross section multi-wired No 25-75	Rated voltage	V	400			
Rated short-circuit breaking capacity Icn EN 60898 at 230 V kA 6 Rated short-circuit breaking capacity Icn EN 60898 at 400 V kA 6 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 Bate Short-circuit breaking capacity Icu IEC 60947-2 at 400 V Bate Short-circuit breaking capacity Icu IEC 60947-2 at 400 V Curgett Imiting class AC AC Current Imiting class So -60 Suitable for flush-mounted installation No No Concurrently switching N-neutral So -60 No Over voltage category So -80 No Pollution degree So -80 Yes Additional equipment possible Yes No Width in number of modular spacings No No Built-in depth To -5 No Degree of protection (IP) Pro No Ambient temperature during operating Co -25-75 -25-75 Connectable conductor cross section	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 6 C 0 C 0 C 0 C 25-75 C 0 C 25-75 C 0	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 0 C	Rated short-circuit breaking capacity Icn EN 60898 at 230 V	kA	6			
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 O AC AC AC AC AC No No No No Vet 3 3 4 7 7 7 8 8	Rated short-circuit breaking capacity Icn EN 60898 at 400 V	kA	6			
Voltage type AC Frequency 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 So-60 AC So-60 No No No No AC Pollution No No No 2 4 Pollution No No No No No Pollution No No No No No No No No No N	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 No No Ves 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 Over voltage category Pollution degree Additional equipment possible Width in number of modular spacings Built-in depth mm 70.5 Degree of protection (IP) Ambient temperature during operating Connectable conductor cross section multi-wired 3 3 3 4 7 7 7 7 7 7 7 7 7 7 7 7	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 No 2 4 7 5 6 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 8	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 1 2 About 1 Yes 3 Built-in depth Pro Pro Pro Pro Pro Pro Pro Pr	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 3 Pollution degree Pres Tos Pres Tos Pres	Suitable for flush-mounted installation		No			
Pollution degree 2 Additional equipment possible Yes Width in number of modular spacings 3 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		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 Yes 70.5 P20 P20 -25 -75 Connectable conductor cross section multi-wired mm² 1 - 25	Over voltage category		3			
Width in number of modular spacings 3 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	Pollution degree		2			
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	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		3			
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	mm ²	1 - 25			
	Connectable conductor cross section solid-core	mm²	1 - 25			