## **DATASHEET - PLS6-D10/3-MW**



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

Part no. PLS6-D10/3-MW Catalog No. 242968



Similar to illustration

Delivery program			
Basic function	Miniature circuit-breakers		
Number of poles	3 pole		
Tripping characteristic	D		

Application Switchgear for residential and commercial applications

Rated current In A 10

Rated switching capacity according to IEC/EN 60898-1 I<sub>cn</sub> kA 6

Product range PLS6

uuctiange

## Electrical Rated switching canacity according to IEC/EN 60899

**Technical data** 

Rated switching capacity according to IEC/EN 60898-1 I<sub>cn</sub> kA 6

## **Design verification as per IEC/EN 61439**

Jesign verification as per IEC/EN 61439			
echnical data for design verification			
Rated operational current for specified heat dissipation	In	Α	10
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	4.6
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.
$10.2.3.3\mbox{Verification}$ 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.
			provide freat 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

Selectric engineering, automation, process control engineering / Electrical installation, device / Miniature circuit breaker (MCB) / Miniature	lechnical data ETIM 7.0					
Part	Circuit breakers and fuses (EG000020) / Miniature circuit breaker (MCB) (EC000042)					
Number of poles (total)	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])					
Auther of protected poles Acted current Acted voltage Acted insulation voltage Uin Acted insulation voltage Uinp Acted short-circuit breaking capacity Icn EN 60898 at 230 V Acted short-circuit breaking capacity Icn EN 60898 at 400 V Acted short-circuit breaking capacity Icn EN 60898 at 400 V Acted short-circuit breaking capacity Icu IEC 60947-2 at 230 V Acted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Acted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Acted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Acted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Acted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Acted Short-circuit breaking capacity Icu IEC 60947-2 at 400 V Acted Short-circuit breaking capacity Icu IEC 60947-2 at 400 V Acted Short-circuit breaking capacity Icu IEC 60947-2 at 400 V Acted Short-circuit breaking capacity Icu IEC 60947-2 at 400 V Acted Short-circuit breaking capacity Icu IEC 60947-2 at 400 V Acted Short-circuit breaking capacity Icu IEC 60947-2 at 400 V Acted Short-circuit breaking capacity Icu IEC 60947-2 at 400 V Acted Short-circuit breaking capacity Icu IEC 60947-2 at 400 V Acted Short-circuit breaking capacity Icu IEC 60947-2 at 400 V Acted Short-circuit breaking capacity Icu IEC 60947-2 at 400 V Acted Short-circuit breaking capacity Icu IEC 60947-2 at 400 V Acted Short-circuit breaking capacity Icu IEC 60947-2 at 400 V Acted Short-circuit breaking capacity Icu IEC 60947-2 at 230 V Acted Short-circuit breaking capacity Icu IEC 60947-2 at 230 V Acted Short-circuit breaking capacity Icu IEC 60947-2 at 230 V Acted Short-circuit breaking capacity Icu IEC 60947-2 at 230 V Acted Short-circuit breaking capacity Icu IEC 60947-2 at 230 V Acted Short-circuit breaking capacity Icu IEC 60947-2 at 230 V Acted Short-circuit breaking capacity Icu IEC 60947-2 at 230 V Acted Short-circuit breaking capacity Icu IEC 60947-2 at 230 V Acted Short-circuit breaking capacity Icu IEC 60947-2 at 230 V Acted Short-circuit breaking capacity Icu IEC 60947-	Release characteristic		D			
Asted doursent Asted current Asted outside Over Asted insulation voltage Uin Asted insulation voltage Uin Asted insulation voltage Uin Asted insulation voltage Uin Asted short-circuit breaking capacity Icn EN 60898 at 230 V	Number of poles (total)		3			
No   No   No   No   No   No   No   No	Number of protected poles		3			
No.	Rated current	Α	10			
Rated impulse withstand voltage Ulimp 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 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 400 V Rated short-circuit breaking capacity Icn IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icn IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icn IEC 60947-2 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 200 V R	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 0 Rated short-circuit breaking capacity Icn EC 60947-2 at 230 V kA 0 Rated short-circuit breaking capacity Icn IEC 60947-2 at 400 V kA 0 Rated short-circuit breaking capacity Icn IEC 60947-2 at 400 V kA 0 Rated short-circuit breaking capacity Icn IEC 60947-2 at 400 V kA 0 Rated short-circuit breaking capacity Icn IEC 60947-2 at 400 V kA 0 Rated short-circuit breaking capacity Icn IEC 60947-2 at 400 V kA 0 Rated short-circuit breaking capacity Icn IEC 60947-2 at 400 V kA 0 Rated short-circuit breaking capacity Icn IEC 60947-2 at 400 V kA 0 Rated short-circuit breaking capacity Icn IEC 60947-2 at 400 V kA 0 Rated short-circuit breaking capacity Icn IEC 60947-2 at 400 V kA 0 Rated short-circuit breaking capacity Icn IEC 60947-2 at 400 V kA 0 Rated short-circuit breaking capacity Icn IEC 60947-2 at 400 V kA 0 Rated short-circuit breaking capacity Icn IEC 60947-2 at 230 V kA 0 Rated short-circuit breaking capacity Icn IEC 60947-2 at 230 V kA 0 Rated short-circuit breaking capacity Icn IEC 60947-2 at 230 V kA 0 Rated short-circuit breaking capacity Icn IEC 60947-2 at 230 V kA 0 Rated short-circuit breaking capacity Icn IEC 60947-2 at 230 V kA 0 Rated short-circuit breaking capacity Icn IEC 60947-2 at 200 V kA 0 Rated short-circuit breaking capacity Icn IEC 60947-2 at 200 V kA 0 Rated short-circuit breaking capacity Icn IEC 60947-2 at 200 V kA 0 Rated short-circuit breaking capacity Icn IEC 60947-2 at 200 V kA 0 Rated short-circuit breaking capacity Icn IEC 60947-2 at 200 V kA 0 Rated short-circuit breaking capacity Icn IEC 60947-2 at 200 V kA 0 Rated short-circuit breaking capacity Icn IEC 60947-2 at 200 V kA 0 Rated short-circuit breaking capacity Icn IEC 60947-2 at 200 V kA 0 Rated short-circuit breaking capacity Icn IC	Rated insulation voltage Ui	V	440			
Rated short-circuit breaking capacity Icn EN 60898 at 400 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 400 V kA 0 Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V kA 0 Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V kA 0 Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V kA 0 Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 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 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 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 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 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 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 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 200 V kA 0 Rated short-circuit breaking capacity Icu IEC 60947-2 at 200 V kA 0 Rated short-circuit breaking capacity Icu IEC 60947-2 at 200 V kA 0 Rated short-circuit breaking capacity Icu IEC 60947-2 at 200 V kA 0 Rated short-circuit breaking capacity Icu IEC 60947-2 at 200 V kA 0 Rated short-circuit breaking capacity Icu IEC 60947-2 at 200 V kA 0 Rated short-circuit breaking capacity Icu IEC 60947-2 at 200 V kA 0 Rated short-circuit breaking capacity Icu IEC 60947-2 at 200 V kA 0 Rated short-circuit breaking capacity Icu IEC 60947-2 at 200 V kA 0 Rated short-circuit breaking capacity Icu IEC 60947-2 at 200 V kA 0 Rated sho	Rated impulse withstand voltage Uimp	kV	4			
Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity ICu IEC 60947-2 at 400 V Rated short-circuit breaking capacity ICu IEC 60947-2 at 400 V Rated short-circuit breaking capacity ICu IEC 60947-2 at 400 V Rated short-circuit breaking capacity ICu IEC 60947-2 at 400 V Rated short-circuit breaking capacity ICu IEC 60947-2 at 400 V Rated short-circuit breaking capacity ICu IEC 60947-2 at 400 V Rated short-circuit breaking capacity ICu IEC 60947-2 at 400 V Rated short-circuit breaking capacity ICu IEC 60947-2 at 400 V Rated short-circuit breaking capacity ICu IEC 60947-2 at 400 V Rated short-circuit breaking capacity ICu IEC 60947-2 at 400 V Rated short-circuit breaking capacity ICu IEC 60947-2 at 400 V Rated short-circuit breaking 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  AC  AC  Current limiting class Suitable for flush-mounted installation Concurrently switching N-neutral Over voltage category Cultion degree Additional equipment possible Width in number of modular spacings Built-in depth Ambient temperature during operating Concurced in the space of protection (IP) Ambient temperature during operating Concurrently switching number of modular cross section multi-wired  AC  AC  AC  AC  AC  AC  AC  AC  AC  A	Rated short-circuit breaking capacity Icn EN 60898 at 400 V	kA	6			
ACC Frequency Hz 50 - 60  Current limiting class Suitable for flush-mounted installation No Concurrently switching N-neutral No Over voltage category Pollution degree 2 Additional equipment possible Yes Width in number of modular spacings Built-in depth mm 70.5 Degree of protection (IP) Ambient temperature during operating National Service Section multi-wired multi-wired mm² 1-25	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  Sullition degree  Additional equipment possible  Width in number of modular spacings  Suilit-in depth  Degree of protection (IP)  Ambient temperature during operating  Connectable conductor cross section multi-wired  Hz  50 - 60  No  No  No  No  Yes  3  3  4  7  7  7  7  7  7  7  7  7  7  7  7	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  Suitable quipment possible  Width in number of modular spacings  Suilt-in depth  Degree of protection (IP)  Ambient temperature during operating  Connectable conductor cross section multi-wired  3  Suitable for flush-mounted installation  No  No  3  3  4  7  7  8  8  8  8  8  8  8  8  8  8  8	Voltage type		AC			
Suitable for flush-mounted installation  Concurrently switching N-neutral  Over voltage category  Collution degree  Additional equipment possible  Width in number of modular spacings  Suilt-in depth  Over voltage category  Midth in number of modular spacings  Suilt-in depth  Over voltage category  The suilt-in depth  The sui	Frequency	Hz	50 - 60			
Concurrently switching N-neutral  Over voltage category  2 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  And  2  Yes  3  3  3  1  1  1  1  1  1  1  1  1  1	Current limiting class		3			
Over voltage category  Over voltage category  Output on degree  Additional equipment possible  Vies  Additional equipment possible  Vies  Suilt-in depth  Min 70.5  Output of protection (IP)  Ambient temperature during operating  Connectable conductor cross section multi-wired  Ambient conductor cross section multi-wired	Suitable for flush-mounted installation		No			
Pollution degree 2 Additional equipment possible Yes 3 Midth 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  "C"  Connectable conductor cross section multi-wired  Wes  3  In page 70.5  I	Over voltage category		3			
Width in number of modular spacings  Built-in depth  mm  70.5  Degree of protection (IP)  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 mm² 1 - 25	Degree of protection (IP)		IP20			
	Ambient temperature during operating	°C	-25 - 75			
Connectable conductor cross section solid-core mm <sup>2</sup> 1 - 25	Connectable conductor cross section multi-wired	mm²	1 - 25			
	Connectable conductor cross section solid-core	mm²	1 - 25			