# **DATASHEET - PL6-C2/1**



# Miniature circuit breaker (MCB), 2 A, 1p, characteristic: C

Part no. PL6-C2/1 Catalog No. 286528



Similar to illustration

**Delivery program** 

Delivery program			
Basic function			Miniature circuit-breakers
Number of poles			1 pole
Tripping characteristic			С
Application			Switchgear for residential and commercial applications
Rated current	In	Α	2
Rated switching capacity according to IEC/EN 60898-1	I <sub>cn</sub>	kA	6
Product range			PL6

### **Technical data**

### **Electrical**

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

### **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	2
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	1.4
Static heat dissipation, non-current-dependent	P <sub>vs</sub>	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.
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

Electricanjinearing, automation, process control engineering / Electrical installation device / Nario (1921)   1921   1	Technical data ETIM 7.0					
Carlos Characteristic   Carl	Circuit breakers and fuses (EG000020) / Miniature circuit breaker (MCB) (EC0000	)42)				
Number of poles (total)         4         1           Number of protected poles         4         2           Rated current         4         2           Rated insulation voltage Uin         4         44           Rated insulation voltage Uimp         4         4           Rated short-circuit breaking capacity Icn EN 60888 at 230 V         5         6           Rated short-circuit breaking capacity Icn EN 60888 at 400 V         6         6           Rated short-circuit breaking capacity Icu IEC 60847-2 at 230 V         6         6           Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V         6         6           Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V         6         6           Requency         6         6         6           Current limiting class         3         6           Suitable for flush-mounted installation         6         7         8           Concurrently switching N-neutral         7         8         7           Pollution degree         7         9         8           Width in number of modular spacings         8         9         9           Width in number of modular spacings         9         9         9           Built-in depth						
Number of protected poles         I         1           Rated current         A         2           Rated voltage         V         20           Rated insulation voltage Ui         V         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 Icn EN 60894 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           Voltage type         KA         0         0           Current limiting class         S         0         0           Suitable for flush-mounted installation         N         N         0           Concurrently switching N-neutral         Y         N         0           Over voltage category         Y         N         0           Pollution degree         Y         Y         Y           Additional equipment possible         Y         Y         Y           With in number of modular spacings         Y         Y         Y           Degr	Release characteristic			C		
Rated current         A         2           Rated voltage         V         30           Rated insulation voltage Ui         V         44           Rated insulation voltage Uimp         VV         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         4           Voltage type         Bate of hort-circuit breaking capacity Icu IEC 60947-2 at 400 V         KA         0         0           Current limiting class         A         0         <	Number of poles (total)			1		
Rated voltage         V         230           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         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         AC         0           Suitable for flush-mounted installation         KA         0           Concurrently switching N-neutral         No         No           Over voltage category         No         X           Pollution degree         Y         Y           Additional equipment possible         Y         Y           With in number of modular spacings         M         N           Built-in depth         M         N         N           Degree of protection (IP)         M         N         N           Ambient temperature during operating         C         25.75 <td< td=""><td>Number of protected poles</td><td></td><td></td><td>1</td></td<>	Number of protected poles			1		
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         0         0           Over voltage category         kA         0         0           Pollution degree         kA         x         2           Additional equipment possible         ka         x         1           Width in number of modular spacings         k         y         1           Built-in depth         k         y         1         2           Degree of protection (IP)         k         y         2         2           Ambient temperature during oper	Rated current		Α	2		
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 608947-2 at 230 V Rated short-circuit breaking capacity Icn IEC 60947-2 at 230	Rated voltage		V	230		
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 ICC 60947-2 at 200 V Rated Short-circuit breaking capacity Icu ICC 60947-2 at 200 V Rated Short-circuit breaking capacity Icu ICC 60947-2 at 200 V Rated Short-circuit breaking capacity Icu ICC	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	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  Voltage type  Lurent 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  Col  Connectable conductor cross section multi-wired  kA  Col  Col  AC  CO  CO  CO  CO  CO  CO  CO  CO  CO	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 C C C C C C C C C C C C C C C C C C	Rated short-circuit breaking capacity Icn EN 60898 at 400 V		kA	6		
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  AC  PO  4  50 - 60  No  No  No  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 So 60 S	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    Validation	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  1  PO  2  4  7  8  7  9  7  7  7  7  7  7  7  7  7  7  7	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  Mo  No  2  About 1  3  About 1  4  Pes  1  1  1  1  1  1  1  1  1  1  1  1  1	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  Pollution degree  3  Pollution degree Protection (IP)	Suitable for flush-mounted installation			No		
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  Pollution degree  yes 1 1 2 1 2 1 2 1 2 1 2 2 2 2 2 2 2 3 3 3 4 3 5 5 5 6 7 5 7 5 7 7 7 7 7 7 7 7 7 7 7 7	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  P25 - 75  P30  P30  P30  P30  P30  P30  P30  P3	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  To a protection (IP)  To a prot	Pollution degree			2		
Built-in depth 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  Connectable conductor cross section multi-wired  P20  1P20  25 - 75  1 - 25	Width in number of modular spacings			1		
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 <sup>2</sup> 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		