### DATASHEET - PL6-C16/1

# 

Miniature circuit breaker (MCB), 16A, 1p, type C characteristic

PL6-C16/1 286533

Part no. Catalog No.



Similar to illustration

#### **Delivery program**

Basic function			Miniature circuit-breakers
Number of poles			1 pole
Tripping characteristic			C
Application			Switchgear for residential and commercial applications
Rated current	In	А	16
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

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Technical data for design verification			
Rated operational current for specified heat dissipation	I <sub>n</sub>	А	16
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	2.2
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
IEC/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**

Electric engineering, automation, process control engineering / Electrical installations   Verical installation (MCB) / Miniature circuit breaker (MCB)     Release characteristic   C     Number of poles (total)   1     Number of protected poles   C     Rated current   C     Rated soltage   Verical installation voltage Uin     Rated soltage constrol engineering / Electrical installation   Verical installation voltage Uin     Rated soltage constrol engineering, automation, process control engineering   Verical installation     Rated soltage constrol engineering, automation, process control engineering   Verical installation     Rated soltage constrol engineering, automation, process control engineering, automation, automation, process control engineering, automation, automatin, automation, automation, automation, automa
Number of poles (total)   I     Number of protected poles   I     Number of protected poles   I     Rated current   A   I     Rated voltage   V   230     Rated insulation voltage Ui   V   440     Rated sohrt-circuit breaking capacity Icn EN 60898 at 230 V   KA   I     Rated short-circuit breaking capacity Icn EN 60898 at 400 V   KA   I     Rated short-circuit breaking capacity Icn EN 60898 at 400 V   KA   I     Rated short-circuit breaking capacity Icn EN 60898 at 400 V   KA   I     Rated short-circuit breaking capacity Icn EN 60898 at 400 V   KA   I     Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V   KA   I     Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V   KA   I     Voltage type   KA   I   I     Frequency   KA   I   I     Current limiting class   SI   I   I     Suitable for flush-mounted installation   I   I   I     Concurrently switching N-neutral   I   I   I
Number of protected poles     I       Rated current     6     6       Rated outrage     6     30       Rated voltage     V     30       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 60898 at 400 V     KA     6       Rated short-circuit breaking capacity Icn EN 60898 at 400 V     KA     6       Rated short-circuit breaking capacity Icn EN 60898 at 400 V     KA     6       Rated short-circuit breaking capacity Icn EN 60898 at 400 V     KA     6       Rated short-circuit breaking capacity Icn EN 60898 at 400 V     KA     6       Rated short-circuit breaking capacity Icn EN 60947-2 at 400 V     KA     0       Voltage type     KA     0     6       Frequency     Concurrent work of the short of
Rated current   A   B     Rated voltage   V   30     Rated insulation voltage Ui   V   40     Rated insulation voltage Uimp   kV   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 60898 at 400 V   KA   6     Rated short-circuit breaking capacity Icn EN 60898 at 400 V   KA   6     Rated short-circuit breaking capacity Icn EC 60947-2 at 230 V   KA   0     Notage type   KA   0   1     Frequency   KA   0   1     Current limiting class   So 60   1   1     Suitable for flush-mounted installation   KA   No   1     Concurrently switching N-neutral   KA   1   1
Rated voltage   V   30     Rated insulation voltage Ui   V   440     Rated insulation voltage Uimp   KV   440     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 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 230 V   KA   0     Voltage type   KA   0   1     Frequency   KA   0   1     Current limiting class   Suitable for flush-mounted installation   5   0     Suitable for flush-mounted installation   K   0   1     Concurrently switching N-neutral   K   0   1
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 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   1     Frequency   KA   50 - 60   1     Current limiting class   Suitable for flush-mounted installation   KA   50 - 60     Suitable for flush-mounted installation   KA   No   1
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 Icn EN 60997-2 at 230 V   KA   0     Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V   KA   0     Voltage type   KA   0     Frequency   KA   50-60     Current limiting class   So   60     Suitable for flush-mounted installation   MO   MO     Courrently switching N-neutral   MO   MO
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     Frequency   KA   C     Current limiting class   50 - 60     Suitable for flush-mounted installation   KA   No     Concurrently switching N-neutral   KA   No
Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V   KA   6     Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V   KA   0     Notage type   KA   0     Frequency   KA   C     Current limiting class   So   50-60     Suitable for flush-mounted installation   KA   Mo     Concurrently switching N-neutral   KA   Mo
Rated short-circuit breaking capacity lcu IEC 60947-2 at 230 V   KA   0     Rated short-circuit breaking capacity lcu IEC 60947-2 at 400 V   KA   0     Voltage type   AC   AC     Frequency   Hz   50-60     Current limiting class   Suitable for flush-mounted installation   Mo     Concurrently switching N-neutral   Mo   No
Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V KA 0   Voltage type AC   Frequency Hz 50 - 60   Current limiting class Suitable for flush-mounted installation No   Concurrently switching N-neutral Main All All All All All All All All All Al
Voltage type AC   Frequency Hz 50-60   Current limiting class Suitable for flush-mounted installation Mo   Concurrently switching N-neutral Mo No
Frequency Hz 50 - 60   Current limiting class Suitable for flush-mounted installation Mo   Concurrently switching N-neutral Mo No
Current limiting class 3   Suitable for flush-mounted installation Mo   Concurrently switching N-neutral Mo
Suitable for flush-mounted installation Mo   Concurrently switching N-neutral Mo
Concurrently switching N-neutral No
Over voltage category 3
Pollution degree 2
Additional equipment possible Yes
Width in number of modular spacings 1
Built-in depth mm 70.5
Degree of protection (IP)
Ambient temperature during operating °C -25 - 55
Connectable conductor cross section multi-wired mm <sup>2</sup> 1 - 25
Connectable conductor cross section solid-core mm <sup>2</sup> 1 - 25