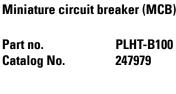
### **DATASHEET - PLHT-B100**

0 AK75C F:T-N

Miniature circuit breaker (MCB), 100A, 1p, B-Char, AC



FATON Powering Business Worldwide"

#### **Delivery program**

Basic function			Miniature circuit-breakers
Number of poles			1 pole
Tripping characteristic			В
Application			Switchgear for industrial and advanced commercial applications
Rated current	In	Α	100
Rated switching capacity acc. to IEC/EN 60947-2	I <sub>cu</sub>	kA	20
Product range			PLHT

20

## **Technical data**

FI	ectrical	
-	Courioui	

F	Rated switching capacity acc. to IEC/EN 60947-2	l <sub>cu</sub>	kA

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

Design vernication as per IEG/EN 01439			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	100
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	9.1
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	55
			linear, per +1 °C, results in a 0.35% 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**

Circuit breakers and fuses (EG000020) / Miniature circuit breaker (MCB) (EC000042)

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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])				
Release characteristic		В		
Number of poles (total)		1		
Number of protected poles		1		
Rated current	А	100		
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	0		
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	20		
Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V	kA	20		
Voltage type		AC		
Frequency	Hz	50 - 60		
Current limiting class		3		
Suitable for flush-mounted installation		No		
Concurrently switching N-neutral		No		
Over voltage category		3		
Pollution degree		2		
Additional equipment possible		Yes		
Width in number of modular spacings		1.5		
Built-in depth	mm	69.5		
Degree of protection (IP)		IP20		
Ambient temperature during operating	°C	-25 - 55		
Connectable conductor cross section multi-wired	mm²	2.5 - 50		
Connectable conductor cross section solid-core	mm²	2.5 - 50		