

## Over current switch, 100A, 3Np, C-Char, AC

Part no. PLHT-C100/3N Article no. 248066



Similar to illustration

Del	livery	nron	ramme
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Basic function			Miniature circuit breakers
Number of poles			3 pole+N
Tripping characteristic			C
Application			Switchgear for industrial and advanced commercial applications
Rated current	In	Α	100
Rated switching capacity acc. to IEC/EN 60947-2		kA	20
Product range			PLHT

## **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	100
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	28.3
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
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 6.0**

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

Electric engineering, automation, process control engineering / Electrical installation, device / Miniature circuit breaker system (MCB) / Miniature circuit breaker (MCB) (ecl@ss8.1-27-14-19-01 [AAB905011])

Release characteristic C Number of poles (total) 4 Number of protected poles C Number of	[AAB905011])			
Number of protected poles         4           Nominal rated current         A         100           Nominal rated voltage         V         400           Rated short-circuit breaking capacity Icn EN 60898 at 230 V         kA         20           Rated short-circuit breaking capacity Icn EN 60898 at 400 V         kA         20           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           Current limiting class         3         3           Frequency         Hz         50 - 60           Concurrently switching N-neutral         Yes           Suitable for flush-mounted installation         No           Over voltage category         3         3           Pollution degree         2         2           Width in number of modular spacings         6           Built-in depth         mm         75           Additional equipment possible         Yes	Release characteristic			С
Nominal rated current  Nominal rated voltage  Nominal rated voltage  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 Icu IEC 60947-2 at 230 V  Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V  Voltage type  Current limiting class  Frequency  Concurrently switching N-neutral  Suitable for flush-mounted installation  Over voltage category  Pollution degree  Width in number of modular spacings  Built-in depth  Additional equipment possible  Ad 100  Vo 400  400  400  400  400  400  400  400	Number of poles (total)			4
Nominal rated voltage  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 400 V  Voltage type  Current limiting class  Frequency  Concurrently switching N-neutral  Suitable for flush-mounted installation  Over voltage category  Pollution degree  Width in number of modular spacings  Built-in depth  Additional equipment possible  V 400  400  400  400  400  400  400  4	Number of protected poles			4
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  Current limiting class  Frequency  Currently switching N-neutral  Suitable for flush-mounted installation  Over voltage category  Pollution degree  Width in number of modular spacings  Built-in depth  Additional equipment possible	Nominal rated current	А	4	100
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  Current limiting class Frequency Concurrently switching N-neutral  Curcif flush-mounted installation  Over voltage category  Pollution degree  Width in number of modular spacings  Built-in depth  Additional equipment possible  kA  20  Concurrently sevitorit breaking capacity Icu IEC 60947-2 at 230 V  kA  0  Concurrently switching N-neutral  Yes  50 - 60  Ves  2  2  Width in number of modular spacings  Built-in depth  Additional equipment possible	Nominal rated voltage	V	1	400
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  Frequency  Concurrently switching N-neutral  Suitable for flush-mounted installation  Over voltage category  Pollution degree  Width in number of modular spacings  Built-in depth  Additional equipment possible  kA  0  C  C  C  KA  0  C  C  C  C  C  C  C  C  C  C  C  C	Rated short-circuit breaking capacity Icn EN 60898 at 230 V	k	:A	20
Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Voltage type  AC Current limiting class  Frequency  Concurrently switching N-neutral  Suitable for flush-mounted installation  Over voltage category  Pollution degree  Width in number of modular spacings  Built-in depth  Additional equipment possible  AC  AC  AC  3  Frequency  No  No  Over 406  Built-in depth  mm  75  Additional equipment possible	Rated short-circuit breaking capacity Icn EN 60898 at 400 V	k	:A	20
Voltage type Current limiting class Frequency Hz 50 - 60 Concurrently switching N-neutral Suitable for flush-mounted installation Over voltage category Pollution degree Width in number of modular spacings Built-in depth Machine Ma	Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V	k	:A	0
Current limiting class  Frequency  Concurrently switching N-neutral  Suitable for flush-mounted installation  Over voltage category  Pollution degree  Width in number of modular spacings  Built-in depth  Additional equipment possible  3  Yes  3  Pollution degree  Pollution degree  Midth in pumber of modular spacings  Midth in pumber of modular spacings  Midth in pumber of modular spacings  Midth in quipment possible  Possible Midth in quipment possible  Possible Midth in quipment possible  Possible Midth in quipment possible	Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V	k	:A	0
Frequency  Concurrently switching N-neutral  Suitable for flush-mounted installation  Over voltage category  Pollution degree  Width in number of modular spacings  Built-in depth  Additional equipment possible  Hz  50 - 60  Yes  Yes  Yes  Additional for flush-mounted installation  No  2  Concurrently switching N-neutral  Yes  No  Additional for flush-mounted installation  No  3  Concurrently switching N-neutral  Yes  Yes	Voltage type			AC
Concurrently switching N-neutral  Suitable for flush-mounted installation  No  Over voltage category  3  Pollution degree  2  Width in number of modular spacings  6  Built-in depth  mm  75  Additional equipment possible  Yes	Current limiting class			3
Suitable for flush-mounted installation  Over voltage category  Pollution degree  Width in number of modular spacings  Built-in depth  mm  75  Additional equipment possible  No  2  Wroth in number of modular spacings  For particular spacings  No  2  Ves	Frequency	Н	łz	50 - 60
Over voltage category  Pollution degree  Width in number of modular spacings  6  Built-in depth  mm  75  Additional equipment possible  3  Ves	Concurrently switching N-neutral			Yes
Pollution degree 2 Width in number of modular spacings 6 Built-in depth mm 75 Additional equipment possible Yes	Suitable for flush-mounted installation			No
Width in number of modular spacings 6  Built-in depth mm 75  Additional equipment possible Yes	Over voltage category			3
Built-in depth mm 75 Additional equipment possible Yes	Pollution degree			2
Additional equipment possible  Yes	Width in number of modular spacings			6
	Built-in depth	m	nm	75
Degree of protection (IP)	Additional equipment possible			Yes
	Degree of protection (IP)			IP20