DATASHEET - PLHT-B40/4



Miniature circuit breaker (MCB), 40A, 4p, B-Char, AC

Powering Business Worldwide*

Part no. PLHT-B40/4 Catalog No. 248079

Πe	livery	/ nro	gram
		Piu	gruin

Basic function			Miniature circuit-breakers
Number of poles			4 pole
Tripping characteristic			В
Application			Switchgear for industrial and advanced commercial applications
Rated current	In	Α	40
Rated switching capacity acc. to IEC/EN 60947-2	I _{cu}	kA	25
Product range			PLHT

Technical data

Electrical

|--|--|

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	40
Heat dissipation per pole, current-dependent	P_{vid}	W	0
Equipment heat dissipation, current-dependent	P _{vid}	W	4.4
Static heat dissipation, non-current-dependent	P_{vs}	W	0
Heat dissipation capacity	P _{diss}	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 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

	e circuit breaker (MCB) (FC000042)

Electric engineering, automation, process control engineering / Electrical installation, device / Miniature circuit breaker system (MCB) / Miniature circuit breaker (MCB) / Min

Aumber of poles (total) Aumber of protected poles Autour protected p	(ecl@ss10.0.1-27-14-19-01 [AAB905014])	icc / iviiiilataic cii	cuit breaker system (Mob), Miniataire enealt breaker (Mob)
Author of protected poles Atted current Atted current Atted current Atted voltage Atted insulation voltage Ui Atted insulation voltage Uimp Atted short-circuit breaking capacity Icn EN 60898 at 230 V Atted short-circuit breaking capacity Icn EN 60898 at 400 V Atted short-circuit breaking capacity Icn EN 60898 at 400 V Atted short-circuit breaking capacity Icu IEC 60947-2 at 230 V Atted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Atted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Atted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Atted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Atted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Atted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Atted Short-circuit breaking capacity Icu IEC 60947-2 at 400 V Atted Short-circuit breaking capacity Icu IEC 60947-2 at 400 V Atted Short-circuit breaking capacity Icu IEC 60947-2 at 400 V Atted Short-circuit breaking capacity Icu IEC 60947-2 at 400 V Atted Short-circuit breaking capacity Icu IEC 60947-2 at 400 V Atted Short-circuit breaking capacity Icu IEC 60947-2 at 400 V Atted Short-circuit breaking capacity Icu IEC 60947-2 at 400 V Atted Short-circuit breaking capacity Icu IEC 60947-2 at 400 V Atted Short-circuit breaking capacity Icu IEC 60947-2 at 400 V Atted Short-circuit breaking capacity Icu IEC 60947-2 at 400 V Atted Short-circuit breaking capacity Icu IEC 60947-2 at 400 V Atted Short-circuit breaking capacity Icu IEC 60947-2 at 400 V Atted Short-circuit breaking capacity Icu IEC 60947-2 at 400 V Atted Short-circuit breaking capacity Icu IEC 60947-2 at 200 V Atted Short-circuit breaking capacity Icu IEC 60947-2 at 200 V Atted Short-circuit breaking capacity Icu IEC 60947-2 at 200 V Atted Short-circuit breaking capacity Icu IEC 60947-2 at 200 V Atted Short-circuit breaking capacity Icu IEC 60947-2 at 200 V Atted Short-circuit breaking capacity Icu IEC 60947-2 at 200 V Atted Short-circuit breaking capacity Icu IEC 60947-2 at 200 V Atted Short-circuit break	Release characteristic		В
Asted current Asted current Asted voltage Asted insulation voltage Uin Asted insulation voltage Uin Asted short-circuit breaking capacity Icn EN 60898 at 230 V Asted short-circuit breaking capacity Icn EN 60898 at 400 V Asted short-circuit breaking capacity Icn EN 60898 at 400 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 230 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 230 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 200 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 200 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 200 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 200 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 200 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 200 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 200 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 200 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 200 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 200 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 200 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 200 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 200 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 200 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 200 V As	Number of poles (total)		4
Asted voltage Asted insulation voltage Uim Asted impulse withstand voltage Uimp Asted short-circuit breaking capacity Icn EN 60898 at 230 V Asted short-circuit breaking capacity Icn EN 60898 at 400 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 230 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Asted short-circuit breaking capacity Icu IEC 609	Number of protected poles		4
No.	Rated current	Α	40
Asted impulse withstand voltage Ulimp kV 4 Asted short-circuit breaking capacity Icn EN 60898 at 230 V kA 0 Asted short-circuit breaking capacity Icn EN 60898 at 400 V kA 25 Asted short-circuit breaking capacity Icn IEC 60947-2 at 230 V kA 25 Asted short-circuit breaking capacity Icn IEC 60947-2 at 230 V kA 25 Asted short-circuit breaking capacity Icn IEC 60947-2 at 2400 V kA 25 Activated short-circuit breaking capacity Icn IEC 60947-2 at 400 V kA 25 Activated short-circuit breaking capacity Icn IEC 60947-2 at 400 V kA 25 Activated short-circuit breaking capacity Icn IEC 60947-2 at 400 V kA 25 Activated short-circuit breaking capacity Icn IEC 60947-2 at 230 V kA 25 Activated short-circuit breaking capacity Icn IEC 60947-2 at 230 V kA 25 Activated short-circuit breaking capacity Icn IEC 60947-2 at 230 V kA 25 Activated short-circuit breaking capacity Icn IEC 60947-2 at 230 V kA 25 Activated short-circuit breaking capacity Icn IEC 60947-2 at 230 V kA 25 Activated short-circuit breaking capacity Icn IEC 60947-2 at 230 V kA 25 Activated short-circuit breaking capacity Icn IEC 60947-2 at 230 V kA 25 Activated short-circuit breaking capacity Icn IEC 60947-2 at 230 V kA 25 Activated short-circuit breaking capacity Icn IEC 60947-2 at 230 V kA 25 Activated short-circuit breaking capacity Icn IEC 60947-2 at 230 V kA 25 Activated short-circuit breaking capacity Icn IEC 60947-2 at 230 V kA 25 Activated short-circuit breaking capacity Icn IEC 60947-2 at 230 V kA 25 Activated short-circuit breaking capacity Icn IEC 60947-2 at 230 V kA 25 Activated short-circuit breaking capacity Icn IEC 60947-2 at 230 V kA 25 Activated short-circuit breaking capacity Icn IEC 60947-2 at 230 V kA 25 Activated short-circuit breaking capacity Icn IEC 60947-2 at 230 V kA 25 Activated short-circuit breaking capacity Icn IEC 60947-2 at 200 V kA 25 Activated short-circuit breaking capacity Icn IEC 60947-2 at 200 V kA 25 Activated short-circuit breaking capacity Icn IEC 60947-2 at 200 V kA 25 Activated short-circuit break	Rated voltage	V	400
Asted short-circuit breaking capacity Icn EN 60898 at 230 V kA 0 Asted short-circuit breaking capacity Icu IEC 60947-2 at 230 V kA 25 Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V kA 25 Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V kA 25 Asted short-circuit breaking capacity Icu IEC 60947-2 at 400 V kA 25 According type ACC ACCORDING STORM ST	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 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 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 25 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 25 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 25 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 25 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 25 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 25 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 25 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 25 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 25 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 25 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 25 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 25 V Rated short-circuit breaking capacity Icu IEC	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 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 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 capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icu ICu III Rated short-circuit breaking capacity Icu III Rated Short-circuit	Rated short-circuit breaking capacity Icn EN 60898 at 230 V	kA	0
Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V AC AC Correquency Current limiting class Suitable for flush-mounted installation Concurrently switching N-neutral Over voltage category Collidion degree Additional equipment possible Width in number of modular spacings Built-in depth Concectable conductor cross section multi-wired Ambient temperature during operating Connectable conductor 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	0
AC prequency AC prediction AC precipitation AC pre	Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V	kA	25
Frequency Freque	Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V	kA	25
Current limiting class Suitable for flush-mounted installation Concurrently switching N-neutral Over voltage category Ould to degree Additional equipment possible Width in number of modular spacings Suilt-in depth Ougree of protection (IP) Ambient temperature during operating Connectable conductor cross section multi-wired 3 3 No No No 9 9 9 9 9 9 9 9 9 9 9 9 9	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 equipment possible Midth in question (IP) Ambient temperature during operating Connectable conductor cross section multi-wired No No No No 2 4 5 6 7 7 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 1920 19	Frequency	Hz	50 - 60
Concurrently switching N-neutral Over voltage category 3 Pollution degree 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	Current limiting class		3
Over voltage category Over voltage category Output on degree Ou	Suitable for flush-mounted installation		No
Pollution degree 2 Additional equipment possible Yes Width in number of modular spacings 6 Built-in depth mm 75 Degree of protection (IP) IP20 Ambient temperature during operating °C -25 - 55 Connectable conductor cross section multi-wired mm² 2.5 - 50	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 Wes 6 IP20 Connectable conductor cross section multi-wired mm² 2.5 - 50	Over voltage category		3
Width in number of modular spacings Built-in depth mm 75 Degree of protection (IP) Ambient temperature during operating °C -25 - 55 Connectable conductor cross section multi-wired mm² 2.5 - 50	Pollution degree		2
Built-in depth mm 75 Degree of protection (IP) IP20 Ambient temperature during operating °C -25 - 55 Connectable conductor cross section multi-wired mm² 2.5 - 50	Additional equipment possible		Yes
Degree of protection (IP) Ambient temperature during operating °C -25 - 55 Connectable conductor cross section multi-wired mm² 2.5 - 50	Width in number of modular spacings		6
Ambient temperature during operating °C -25 - 55 Connectable conductor cross section multi-wired mm² 2.5 - 50	Built-in depth	mm	75
Connectable conductor cross section multi-wired mm² 2.5 - 50	Degree of protection (IP)		IP20
	Ambient temperature during operating	°C	-25 - 55
Connectable conductor cross section solid-core mm ² 2.5 - 50	Connectable conductor cross section multi-wired	mm²	2.5 - 50
	Connectable conductor cross section solid-core	mm²	2.5 - 50