Miniature circuit breaker (MCB), 16 A, 3p, characteristic: C



Part no. HL-C16/3 Catalog No. 194791

	gram

Basic function			Miniature circuit-breakers
Number of poles			3 pole
Tripping characteristic			C
Application			Switchgear for residential and commercial applications
Rated current	In	Α	16
Rated switching capacity according to IEC/EN 60898-1	I _{cn}	kA	4.5
Product range			HL

Technical data

Electrical

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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	16
Heat dissipation per pole, current-dependent	P_{vid}	W	0
Equipment heat dissipation, current-dependent	P _{vid}	W	6.9
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	75
			linear, per +1 °C, results in a 0.5% 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 8.0

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) / Min

Release characteristic Aumber of poles (total) Aumber of protected poles Aumber of protected poles Author of protection of protectio	(ecl@ss10.0.1-27-14-19-01 [AAB905014])		
Author of poles (total) Author of protected poles Alter de current Alter de voltage Alter de voltage Alter de impulse withstand voltage Uimp Alter de short-circuit breaking capacity len according to EN 60898 at 230 V Alter de short-circuit breaking capacity len according to EN 60898 at 230 V Alter de short-circuit breaking capacity len according to EN 60898 at 400 V Alter de short-circuit breaking capacity len according to EN 60898 at 400 V Alter de short-circuit breaking capacity len according to EN 60898 at 400 V Alter de short-circuit breaking capacity len according to EN 60898 at 400 V Alter de short-circuit breaking capacity len according to EN 60898 at 400 V Alter de short-circuit breaking capacity len according to EN 60947-2 at 230 V Alter de short-circuit breaking capacity len according to EN 60947-2 at 230 V Alter de short-circuit breaking capacity len according to EN 60947-2 at 230 V Alter de short-circuit breaking capacity len according to EN 60947-2 at 230 V Alter de short-circuit breaking capacity len according to EN 60947-2 at 230 V Alter de short-circuit breaking capacity len according to EN 60947-2 at 230 V Alter de short-circuit breaking capacity len according to EN 60947-2 at 230 V Alter de short-circuit breaking capacity len according to EN 60947-2 at 230 V Alter de short-circuit breaking capacity len according to EN 60947-2 at 230 V Alter de short-circuit breaking capacity len according to EN 60988 at 400 V Alter de short-circuit breaking capacity len according to EN 60988 at 230 V Alter de short-circuit breaking capacity len according to EN 60988 at 230 V Alter de short-circuit breaking capacity len according to EN 60988 at 230 V Alter de short-circuit breaking capacity len according to EN 60988 at 230 V Alter de short-circuit breaking capacity len according to EN 60988 at 230 V Alter de short-circuit breaking capacity len according to EN 60988 at 230 V Alter de short-circuit breaking capacity len according to EN 60988 at 230 V Alter de short-circuit breaking capacity len according to EN 60	Built-in depth	mm	44
Author of protected poles A A 16 A 16 A 16 A 16 A 16 A 16 A 17 A 17 A 18 A	Release characteristic		С
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Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V Frequency Fres Frequency Fres Frequency Fres Frequency Fres Frequency Fres Fres Frequency Fres Fres	Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V	kA	4.5
trequency Current limiting class Clush-mounted installation Concurrently switching neutral conductor Concurrently switc	Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V	kA	0
Current limiting class Currently switching neutral conductor Concurrently switching neutral conductor 3 Concurrently switching neutral conductor 4 Concurrently switching neutral conductor 5 Concurrently switching neutral conductor 7 Concurrently switching neu	Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V	kA	0
Flush-mounted installation Concurrently switching neutral conductor Over voltage category Collution degree Collution degree Vidth in number of modular spacings Collution (IP) Connectable conductor cross section multi-wired Connectable conductor cross section solid-core Yes Vides Yes 1 1 1 1 1 1 1 1 1 1 1 1 1	Frequency	Hz	50 - 60
Concurrently switching neutral conductor Over voltage category 3 Pollution degree 3 Additional equipment possible Vidth in number of modular spacings Ougree of protection (IP) Ambient temperature during operating Connectable conductor cross section multi-wired Connectable conductor cross section solid-core No No 1 1 1 1 1 1 1 1 1 1 1 1 1	Current limiting class		3
Over voltage category 3 Collution degree 3 Collution degree 4 Collution degree 5 Connectable conductor cross section solid-core 3 Collution degree 7 ES Connectable conductor cross section solid-core 3 Collution degree 7 ES Connectable conductor cross section solid-core 3 Collution degree 7 ES Connectable conductor cross section solid-core 3 Collution degree 7 ES Collution degree 8 Collution degree 9 Collution	Flush-mounted installation		Yes
Pollution degree 3 Additional equipment possible Yes Width in number of modular spacings 3 Degree of protection (IP) IP20 Ambient temperature during operating °C -25 - 75 Connectable conductor cross section multi-wired mm² 1 - 25 Connectable conductor cross section solid-core mm² 1 - 25	Concurrently switching neutral conductor		No
Additional equipment possible Ves Vidth in number of modular spacings Segree of protection (IP) Ambient temperature during operating Connectable conductor cross section multi-wired Connectable conductor cross section solid-core Types Yes 3 IP20 Connectable conductor cross section multi-wired mm² 1 - 25 Connectable conductor cross section solid-core mm² 1 - 25	Over voltage category		3
Vidth in number of modular spacings 3 Degree of protection (IP) Ambient temperature during operating °C -25 - 75 Connectable conductor cross section multi-wired mm² 1 - 25 Connectable conductor cross section solid-core mm² 1 - 25	Pollution degree		3
Degree of protection (IP) Ambient temperature during operating °C -25 - 75 Connectable conductor cross section multi-wired mm² 1 - 25 Connectable conductor cross section solid-core mm² 1 - 25	Additional equipment possible		Yes
Ambient temperature during operating °C -25 - 75 Connectable conductor cross section multi-wired mm² 1 - 25 Connectable conductor cross section solid-core mm² 1 - 25	Width in number of modular spacings		3
Connectable conductor cross section multi-wired mm² 1 - 25 Connectable conductor cross section solid-core mm² 1 - 25	Degree of protection (IP)		IP20
Connectable conductor cross section solid-core mm² 1 - 25	Ambient temperature during operating	°C	-25 - 75
	Connectable conductor cross section multi-wired	mm²	1 - 25
ixplosion-proof No	Connectable conductor cross section solid-core	mm²	1 - 25
	Explosion-proof		No