DATASHEET - CLS4-C10/1N-MX

Part no. Catalog No.



Miniature circuit breaker (MCB), 10A, 1pole+N, type C characteristic

CLS4-C10/1N-MX

263704



Similar to illustration

Design verification as per IEC/EN 61439			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	10
Heat dissipation per pole, current-dependent	P _{vid}	W	0
Equipment heat dissipation, current-dependent	P _{vid}	W	1.7
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 0.5% 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 be observed.
10.12 Electromagnetic compatibility			Is the panel builder's responsibility. The specifications for the switchgear must lobserved.
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)

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	С			
Number of poles (total)	2			
Number of protected poles	1			

Rated voltage V 230 Rated insulation voltage Uin V 440 Rated impulse withstand voltage Uimp kV 4 Rated short-circuit breaking capacity Icn EN 60898 at 230 V kA 4.5 Rated short-circuit breaking capacity Icn EN 60898 at 400 V kA 4.5 Rated short-circuit breaking capacity Icu IEC 60947-2 at 220 V kA 0 Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V kA 0 Voltage type kA 0 C Frequency kA 0 C Current limiting class 3 3 C Suitable for flush-mounted installation No No Concurrently switching N-neutral No No Over voltage category 3 2 Pollution degree 2 2 Additional equipment possible Yes Width in number of modular spacings mm 70.5 Built-in depth mm 70.5 Degree of protection (IP) POLY Concurrent (IP) POLY Concurrent (IP) POLY Concurren			
Rated insulation voltage Ui V 440 Rated impulse withstand voltage Uimp kV 4 Rated short-circuit breaking capacity Icn EN 6098 at 230 V kA 4.5 Rated short-circuit breaking capacity Icn EN 6098 at 400 V kA 0 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 Frequency Hz 50 - 60 Current limiting class 3 3 Suitable for flush-mounted installation No No Concurrently switching N-neutral No No Over voltage category 3 3 Pollution degree 2 2 Additional equipment possible Yes Width in number of modular spacings 2 Built-in depth mm 70.5 Degree of protection (IP) IP20 Ambient temperature during operating °C -25 - 55 Connectable conductor cross section multi-wired mm² 1 - 25	Rated current	Α	10
Rated impulse withstand voltage Ulimp RATED SAME AND SAM	Rated voltage	V	230
Rated short-circuit breaking capacity Icn EN 60898 at 230 V	Rated insulation voltage Ui	V	440
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 0 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 No Over voltage category 3 Pollution degree 2 Additional equipment possible Yes Width in number of modular spacings Built-in depth mm 70.5 Degree of protection (IP) IP20 Ambient temperature during operating °C - 25 - 55 Connectable conductor cross section multi-wired MA 0 KA 4.5 4.5 4.6 4.7 4.8 4.9 4.0 4.0 4.0 4.0 4.0 4.0 4.0	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 Voltage type Requency	Rated short-circuit breaking capacity Icn EN 60898 at 230 V	kA	4.5
Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Voltage type AC Frequency Current limiting class Suitable for flush-mounted installation Concurrently switching N-neutral Over voltage category Pollution degree 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 KA 0 AC AC AC No No No No 1 2 4 7 7 7 7 7 7 7 7 7 7 7 7	Rated short-circuit breaking capacity Icn EN 60898 at 400 V	kA	4.5
Voltage type Frequency Hz 50 - 60 Current limiting class Suitable for flush-mounted installation Concurrently switching N-neutral Over voltage category Pollution degree 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 AC AC AC AC BUIL 50 - 60 No No No 2 8 9 1 2 2 2 4 7 1 1 1 1 1 1 1 1 1 1 1 1	Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V	kA	0
Frequency Current limiting class Suitable for flush-mounted installation Concurrently switching N-neutral No Over voltage category Pollution degree 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 Hz 50 - 60 No No No No No No 2 4 7 7 7 8 7 8 7 8 8 8 9 8 9 8 9 8 9 8 9 9	Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V	kA	0
Current limiting class Suitable for flush-mounted installation Concurrently switching N-neutral Over voltage category Over voltage category 3 Pollution degree 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 3 No No No 70 70 8 9 9 1 1 1 1 1 1 1 1 1 1 1	Voltage type		AC
Suitable for flush-mounted installation Concurrently switching N-neutral Over voltage category Pollution degree 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 No No No 1 No 2 2 2 4 7 7 7 8 Pollution degree Pes 2 2 Connectable conductor cross section multi-wired No No No No 1 No No 2 Pollution degree 2 2 Connectable onductor gross section multi-wired No No No 1 No No 2 2 Andient gross gros	Frequency	Hz	50 - 60
Concurrently switching N-neutral Over voltage category Pollution degree 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 2 2 Pollution degree Yes 2 Pollution degree Possible Yes 1 Possible Possible Possible No 1 2 Possible Possible Possible No 1 2 And Possible Possib	Current limiting class		3
Over voltage category Pollution degree 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 3 Yes Yes 2 Pol. To.5 IP20 Arbient temperature during operating C -25 - 55 Connectable conductor cross section multi-wired 3 Arbient degree C -25 - 55 Connectable conductor cross section multi-wired 1 - 25	Suitable for flush-mounted installation		No
Pollution degree 2 Additional equipment possible Yes Width in number of modular spacings 2 Built-in depth mm 70.5 Degree of protection (IP) IP20 Ambient temperature during operating °C -25 -55 Connectable conductor cross section multi-wired mm² 1 - 25	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 Yes 2 1 1 1 1 1 1 1 1 1 1 1 1	Over voltage category		3
Width in number of modular spacings Built-in depth Degree of protection (IP) Ambient temperature during operating Connectable conductor cross section multi-wired 2 IP20 The conductor cross section multi-wired mm² 1 - 25	Pollution degree		2
Built-in depth mm 70.5 Degree of protection (IP) IP20 Ambient temperature during operating °C -25 - 55 Connectable conductor cross section multi-wired mm² 1 - 25	Additional equipment possible		Yes
Degree of protection (IP) Ambient temperature during operating °C -25 - 55 Connectable conductor cross section multi-wired mm² 1 - 25	Width in number of modular spacings		2
Ambient temperature during operating °C -25 - 55 Connectable conductor cross section multi-wired mm² 1 - 25	Built-in depth	mm	70.5
Connectable conductor cross section multi-wired mm ² 1 - 25	Degree of protection (IP)		IP20
	Ambient temperature during operating	°C	-25 - 55
Connectable conductor cross section solid-core mm ² 1 - 25	Connectable conductor cross section multi-wired	mm²	1 - 25
	Connectable conductor cross section solid-core	mm²	1 - 25