DATASHEET - CLS6-C50-DE



Miniature circuit breaker (MCB), 50A, 1p, type C characteristic

CLS6-C50-DE Part no. Catalog No. 247618



Similar to illustration

Design verification as per IEC/EN 61439			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	50
Heat dissipation per pole, current-dependent	P _{vid}	W	0
Equipment heat dissipation, current-dependent	P _{vid}	W	4.5
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
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 7.0

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

(ecl@ss10.0.1-27-14-19-01 [AAB905014])				
Release characteristic	С			
Number of poles (total)	1			

As a comment A 50 Bated voltage V 230 Bated insulation voltage Ui V 440 Bated impulse withstand voltage Uimp kV 4 Bated short-circuit breaking capacity Icn EN 60898 at 230 V kA 6 Bated short-circuit breaking capacity Icn EN 60898 at 400 V kA 6 Bated short-circuit breaking capacity Icu IEC 60947-2 at 230 V kA 0 Bated short-circuit breaking capacity Icu IEC 60947-2 at 400 V kA 0 Contract Ilmiting class S 0 Current Ilmiting class S 0 Current Ilmiting class No 0 Current Ilmiting class I 3 Current Ilmiting class I No Deveroutage category No 1 Pollution degree 2 2 Additional equip				
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Acted insulation voltage Uim Acted insulation voltage Uimp Acted short-circuit breaking capacity Icn EN 60898 at 230 V Acted short-circuit breaking capacity Icn EN 60898 at 400 V Acted short-circuit breaking capacity Icn EN 60898 at 400 V Acted short-circuit breaking capacity Icn EC 60947-2 at 230 V Acted short-circuit breaking capacity Icu IEC 60947-2 at 400 V Acted short-circuit breaking capacity Icu IE	Rated current	A	A	50
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Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Voltage type Voltage type Voltage type 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 Concuectage in a concurrent with the space of protection multi-wired KA CO CO CO CO CO CO CO CO CO C	Rated short-circuit breaking capacity Icn EN 60898 at 400 V	k	kA	6
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 So - 60 S	Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V	k	kA	0
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 Hz 50 - 60 No No No 2 4 No 4 5 4 7 5 6 7 7 7 8 1 1 1 1 1 1 1 1 1 1 1 1	Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V	k	kA	0
Current limiting class Suitable for flush-mounted installation Concurrently switching N-neutral Over voltage category Output of degree Additional equipment possible Width in number of modular spacings Suilt-in depth Degree of protection (IP) Ambient temperature during operating Connectable conductor cross section multi-wired 3 No No No Salit-in depth Fes 1 1 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 2 2 4 7 8 9 9 1 7 7 7 7 7 7 7 7 7 7 7 7	Frequency	H	Hz	50 - 60
Concurrently switching N-neutral Over voltage category Pollution degree Additional equipment possible Width in number of modular spacings Built-in depth mm 70.5 Degree of protection (IP) Ambient temperature during operating Connectable conductor cross section multi-wired Mod No No 2 And Pollution degree Pes 1 1 1 1 1 1 1 1 1 1 1 1 1	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 1 1 1 1 1 1 1 1 1 1 1 1 1	Suitable for flush-mounted installation			No
Pollution degree 2 Additional equipment possible Yes Width in number of modular spacings 1 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 mm 70.5 Degree of protection (IP) Ambient temperature during operating °C -25 - 55 Connectable conductor cross section multi-wired mm² 1 - 25	Over voltage category			3
Width in number of modular spacings Built-in depth mm 70.5 Degree of protection (IP) Ambient temperature during operating °C -25 - 55 Connectable 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			1
Ambient temperature during operating °C -25 - 55 Connectable conductor cross section multi-wired mm² 1 - 25	Built-in depth	n	mm	70.5
Connectable conductor cross section multi-wired mm² 1 - 25	Degree of protection (IP)			IP20
	Ambient temperature during operating	0	°C	-25 - 55
Connectable conductor cross section solid-core mm ² 1 - 25	Connectable conductor cross section multi-wired	n	mm²	1 - 25
	Connectable conductor cross section solid-core	n	mm²	1 - 25