## **DATASHEET - CLS6-C16-DE**

Part no.

Catalog No.



Miniature circuit breaker (MCB), 16A, 1p, type C characteristic



CLS6-C16-DE 247613



Similar to illustration

## **Design verification as per IEC/EN 61439** Technical data for design verification Rated operational current for specified heat dissipation I<sub>n</sub> Α 16 Heat dissipation per pole, current-dependent P<sub>vid</sub> W 0 Equipment heat dissipation, current-dependent W 2.2 P<sub>vid</sub> Static heat dissipation, non-current-dependent W 0 $P_{vs}$ w Heat dissipation capacity $\mathsf{P}_{\mathsf{diss}}$ 0 Operating ambient temperature min. °C -25 °C Operating ambient temperature max. 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. Meets the product standard's requirements. 10.2.3.2 Verification of resistance of insulating materials to normal heat 10.2.3.3 Verification of resistance of insulating materials to abnormal heat Meets the product standard's requirements. and fire due to internal electric effects 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. Meets the product standard's requirements. 10.4 Clearances and creepage distances 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. The panel builder is responsible for the temperature rise calculation. Eaton will 10.10 Temperature rise provide heat dissipation data for the devices. Is the panel builder's responsibility. The specifications for the switchgear must be 10.11 Short-circuit rating 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)

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)

Rated current     A     A       Rated voltage     V     30       Rated insulation voltage Uin     V     40       Rated short-circuit breaking capacity Icn EN 60898 at 200 V     KV     40       Rated short-circuit breaking capacity Icn EN 60898 at 400 V     KA     6       Rated short-circuit breaking capacity Icn EN 60898 at 400 V     KA     6       Rated short-circuit breaking capacity Icn EC 60947-2 at 200 V     KA     0       Rated short-circuit breaking capacity Icu IEC 60947-2 at 200 V     KA     0       Voltage type     KA     0     0       Younge type     KA     0     0       Frequery     KA     0     0       Current limiting class     KA     0     0       Suitable for flush-mounted installation     KA     0     0       Our voltage category     KA     0     0       Pollution degree     KA     0     0       Additional quipment possible     KA     0     0       With in number of modular spacings     KA     No     0     0      So <th></th> <th></th> <th></th>			
Rate votinge V 3   Rate votinge Line V 40   Rate votinge Line V 40   Rate votinge Line V 40   Rate votinge votinge votinge Line V 40   Rate votinge votin	Number of protected poles		1
Aread insulation voltage Ui     V     40       Rated insulation voltage Uinp     K0     4       Rated short-circuit breaking capacity Icn EN 60989 at 230 V     K0     6       Rated short-circuit breaking capacity Icn EN 60989 at 400 V     K0     6       Rated short-circuit breaking capacity Icn EN 60987-2 at 230 V     K0     6       Notage type     K0     6     6       Voltage type     K0     6     6       Voltage type     K1     6     6       Current limiting class     K0     6     6       Suble for flush-mounted installation     K1     6     6       Over voltage category     K1     5     6       Pollution degree     K1     K1     6       Additional equipment possible     K1     5     6       With in number of modular spacings     K1     K1     5       Built-in depth     K1     K2     K2     K2       Additional equipment possible     K1     K2     K2     K2       Refere of protectin (IP)     K2     K2 <td< td=""><td>Rated current</td><td>А</td><td>16</td></td<>	Rated current	А	16
Reted impulse withstand voltage Uimp     Ive	Rated voltage	V	230
Rated short-circuit breaking capacity lon EN 60898 at 200 V   KA   6     Rated short-circuit breaking capacity lon EN 60898 at 400 V   KA   6     Rated short-circuit breaking capacity lon EN 60898 at 400 V   KA   0     Rated short-circuit breaking capacity lon EN 60898 at 400 V   KA   0     Rated short-circuit breaking capacity lon EN 60894 7.2 at 200 V   KA   0     Voltage type   KA   0     Frequency   KA   0     Current limiting class   KA   0     Suitable for flush-mouted installation   KA   0     Concurrently switching N-neutral   KA   0     Pollution degree   KA   0   0     Additional equipment possible   KA   0   0     With in number of modular spacings   Ma   KA   0     Built-in depth   Ma   10   1     Built-in depth   Ma   5   1     Degree of protection (IP)   Ma   10   1     Athient temperature during operating   C   10   1     Concurctors section multi-wired   Ma   12   5	Rated insulation voltage Ui	V	440
Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V KA 6   Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V KA 0   Notage type KA 0   Voltage type KA 0   Frequency KA 0   Current limiting class KA 0   Suitable for flush-mounted installation KA 0   Concurrently switching N-neutral KA 0   Pollution degree KA 0   Additional equipment possible KA 0   Built-in depth KA 0   Degree of protection (IP) KA 0   Anbient temperature during operating C Y   Anbient temperature during setsetion multi-wired KA 0	Rated impulse withstand voltage Uimp	kV	4
Rated short-circuit breaking capacity lou IEC 60947-2 at 230 V     kA     0       Rated short-circuit breaking capacity lou IEC 60947-2 at 400 V     kA     0       Voltage type     KA     C       Frequency     KA     Solo       Current limiting class     KA     Solo       Suitable for flush-mounted installation     KA     Solo       Concurrently switching N-neutral     KA     Solo       Over voltage category     Solo     Solo       Pollution degree     KA     Solo       Mith in number of modular spacings     Man     Solo       Buil-in depth     Man     Solo       Degree of protection (IP)     Man     Solo       Anbient temperature during operating     Ca     Solo       Connectable conductor cross section multi-wired     To     Solo	Rated short-circuit breaking capacity Icn EN 60898 at 230 V	kA	6
Rated short-circuit breaking capacity lcu IEC 60947-2 at 400 V   KA   C     Voltage type   C   C   C     Frequency   Hz   5-60   S     Current limiting class   S   S   S     Suitable for flush-mounted installation   M   S   S     Concurrently switching N-neutral   M   S   S     Pollution degree   M   S   S     Additional equipment possible   M   S   S     With in number of modular spacings   M   S   S     Built-in depth   M   M   S   S     Abdient temperature during operating   C   M   S   S     Concectable conductor cross section multi-wired   M   S <td< td=""><td>Rated short-circuit breaking capacity Icn EN 60898 at 400 V</td><td>kA</td><td>6</td></td<>	Rated short-circuit breaking capacity Icn EN 60898 at 400 V	kA	6
Voltage typeACFrequencyHz50-60Current limiting classGGSuitable for flush-mounted installationMoNoConcurrently switching N-neutralGNoOver voltage categoryGGSPollution degreeGGSAdditional equipment possibleMoSSBuilt-in depthMmmToSDegree of protection (IP)MmmSSAnbient temperature during operatingCgSConcutable conductor cross section multi-wiredmm²125	Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V	kA	0
Frequency Hz 50 - 60   Current limiting class 50 - 60   Suitable for flush-mounted installation 50 - 60   Concurrently switching N-neutral Mail No   Concurrently switching N-neutral Mail No   Over voltage category Mail Suitable   Pollution degree Mail Suitable   Additional equipment possible Mail Suitable   Built-in depth mm To   Degree of protection (IP) Mail Suitable   Anbient emperature during operating °C Suitable   Concectable conductor cross section multi-wired mm <sup>a</sup> 125	Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V	kA	0
Current limiting class Image: State of the state of t	Voltage type		AC
Suitable for flush-mounted installation   Image: Concurrently switching N-neutral   No     Concurrently switching N-neutral   Image: Concurrently switching N-neutral   No     Over voltage category   Image: Concurrently switching N-neutral   No     Pollution degree   Image: Concurrently switching N-neutral   Image: Concurrent N-neutral   Imag	Frequency	Hz	50 - 60
Concurrently switching N-neutralMoOver voltage category3Pollution degree2Additional equipment possibleMoWitch in number of modular spacingsMoBuilt-in depthMmmDegree of protection (IP)MmmAmbient temperaturg during operatingCSoncetable conductor cross section multi-wiredMm²Interprete temperature during operatingImm²Interprete temperature during operating<	Current limiting class		3
Over voltage categorySSPollution degreeCSAdditional equipment possibleCYesWidth in number of modular spacingsMm7.5Built-in depthMm19.0Degree of protection (IP)C19.0Ambient temperaturg operatingC25.55Connectable conductor cross section multi-wiredmm²1.25	Suitable for flush-mounted installation		No
Pollution degree2Additional equipment possibleYesWidth in number of modular spacingsmmBuilt-in depthmmDegree of protection (IP)CAmbient temperature during operatingCSconectable conductor cross section multi-wiredmm²Interperature during operatingmm²Interperature during operatingmm²Interp	Concurrently switching N-neutral		No
Additional equipment possibleYesWidth in number of modular spacings1Built-in depthmmDegree of protection (IP)CAmbient temperature during operatingCSonnectable conductor cross section multi-wiredmm²1 25	Over voltage category		3
Width in number of modular spacingsImage: March and	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 Imm <sup>2</sup> 1 - 25	Additional equipment possible		Yes
Degree of protection (IP) IP20   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 mm <sup>2</sup> 1 - 25	Built-in depth	mm	70.5
Connectable conductor cross section multi-wired mm <sup>2</sup> 1 - 25	Degree of protection (IP)		IP20
	Ambient temperature during operating	°C	-25 - 55
Connectable conductor cross section solid-core mm <sup>2</sup> 1 - 25	Connectable conductor cross section multi-wired	mm²	1 - 25
	Connectable conductor cross section solid-core	mm²	1 - 25