DATASHEET - MMC6-C6/1



Miniature circuit breaker (MCB), 6 A, 1p, characteristic: C

Part no. mMC6-C6/1 Catalog No. 138836



Delivery program

Basic function			Miniature circuit-breakers
Number of poles			1 pole
Tripping characteristic			C
Application			Switchgear for residential and commercial applications
Rated current	In	Α	6
Rated switching capacity according to IEC/EN 60898-1	I _{cn}	kA	6
Product range			mMC6

Technical data

Electrical

Electrical	Operations		≧ 10000
lifespan			
Rated impulse withstand voltage	U _{imp}	kV	4
Rated insulation voltage	Ui	V	440
Rated switching capacity according to IEC/EN 60898-1	I _{cn}	kA	6

References

Auxiliary switch for subsequent installation	ZP-1HK 286052
Tripping signal contact for subsequent installation	ZP-NHK 248437
Remote control and automatic switching device	Z-FW/LP 248296
Switching interlock	Z-IS/SPE-1TE 274418

Mechanical

Standard front dimension	r	mm	45
Device height	r	mm	80
Mounting			Quick attachment with 3 latch positions for top-hat rail IEC/EN 60715
Degree of Protection			IP20
Terminals top and bottom			Open mouthed/lift terminals
Terminal protection			BGV A3, ÖVE-EN 6
Thickness of busbar material	r	mm	0.8 - 2

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	6
Heat dissipation per pole, current-dependent	P _{vid}	W	0
Equipment heat dissipation, current-dependent	P _{vid}	W	1.5
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	75
			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)

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 Number of poles (total) Number of protected poles Rated current Rated current Rated woltage Rated woltage Rated insulation voltage Uir Rated short-circuit breaking capacity (ne No898 at 230 V Rated short-circuit breaking cap	(ECI@SS10.0.1-27-14-13-01 [AAD303014])		
Number of protected poles I 1 Rated current A 6 Rated voltage V 20 Rated insulation voltage Ui V 440 Rated inpulse withstand voltage Uimp kV 4 Rated short-circuit breaking capacity Icn EN 60898 at 230 V kA 6 Rated short-circuit breaking capacity Icu EC 60947-2 at 230 V kA 6 Rated short-circuit breaking capacity Icu EC 60947-2 at 230 V kA 10 Rated short-circuit breaking capacity Icu EC 60947-2 at 230 V kA 10 Voltage type kA 10 10 Frequency kA 10 10 Current limiting class kA 10 10 Suitable for flush-mounted installation kA 10 10 Concurrently switching N-neutral kA 10 10 Over voltage category kA 2 10 Pollution degree kA 10 10 Width in number of modular spacings kA 10 10 Bull-in depth	Release characteristic		С
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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 -75 Connectable conductor cross section multi-wired mm² 1 - 25	Concurrently switching N-neutral		No
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Width in number of modular spacings 1 Built-in depth mm 70.5 Degree of protection (IP) IP20 Ambient temperature during operating °C -25 - 75 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 - 75 Connectable conductor cross section multi-wired mm² 1 - 25	Additional equipment possible		Yes
Degree of protection (IP) Ambient temperature during operating °C -25 - 75 Connectable conductor cross section multi-wired mm² 1 - 25	Width in number of modular spacings		1
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Connectable conductor cross section multi-wired mm² 1 - 25	Degree of protection (IP)		IP20
	Ambient temperature during operating	°C	C -25 - 75
Connectable conductor cross section solid-core mm ² 1 - 25	Connectable conductor cross section multi-wired	mm	nm² 1 - 25
	Connectable conductor cross section solid-core	mm	nm ² 1 - 25