DATASHEET - MMC6-C13/4



Miniature circuit breaker (MCB), 13 A, 4p, characteristic: C



mMC6-C13/4 Part no. Catalog No. 139198

Delivery program				
Basic function			Miniature circuit-breakers	
Number of poles			4 pole	
Tripping characteristic			С	
Application			Switchgear for residential and commercial applications	
Rated current	In	Α	13	

 I_{cn}

kA

6

mMC6

Technical data

Rated switching capacity according to IEC/EN 60898-1

Electrical

Product range

210041041			
Rated switching capacity according to IEC/EN 60898-1	I _{cn}	kA	6
Rated insulation voltage	Ui	V	440
Rated impulse withstand voltage	U_{imp}	kV	4
lifespan			
Electrical	Operations		≧ 10000
Mechanical	Operations		≧ 20000
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	mm	45
Device height	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	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	13
Heat dissipation per pole, current-dependent	P_{vid}	W	0
Equipment heat dissipation, current-dependent	P_{vid}	W	10
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

Technical data ETIM 7.0

Circuit breakers and fuses (FG000020) / Miniature circuit breaker (MCR) (FC0	000401

Electric engineering, automation, process control engineering / Electrical installation, device / Miniature circuit breaker system (MCB) / Miniature circuit breaker (MCB)

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Release characteristic	С		
Number of poles (total)	4		

Rated current A 13 Rated voltage V 20 Rated insulation voltage Ui V 44 Rated impulse withstand voltage Uimp kV 4 Rated short-circuit breaking capacity Icn EN 60898 at 230 V kA 6 Rated short-circuit breaking capacity Icn EN 60898 at 400 V kA 6 Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V kA 10 Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V kA 10 Voltage type kA 10 Current limiting class S 6-6 Current limiting class No 3 Suitable for flush-mounted installation No 3 Door voltage category No 3 Pollution degree 2 2 Additional equipment possible yes Width in number of modular spacings yes Built-in depth mm 0.5 Ambient temperature during operating "C 25-75 Connectable conductor cross section multi-wired mm" 1-25			
Rated voltage V 200 Rated insulation voltage Uin V 440 Rated impulse withstand voltage Uinip 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 10 Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V kA 10 Voltage type kA 10 Current limiting class 3 3 Suitable for flush-mounted installation No No Concurrently switching N-neutral No 3 Over voltage category 3 3 Pollution degree 2 4 Additional equipment possible Yes Width in number of modular spacings 4 1920 Bull-in depth mm 70.5 Degree of protection (IP) 1P20 Ambient temperature during operating *C 25-75 Connectable conductor cross section multi-wired mm* 1-25	Number of protected poles		4
Rated insulation voltage Uin Rated insulation voltage Uinp Rated short-circuit breaking capacity Icn EN 60998 at 230 V Rated short-circuit breaking capacity Icn EN 60998 at 400 V Rated short-circuit breaking capacity Icn EN 60998 at 400 V Rated short-circuit breaking capacity Icn IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icu I	Rated current	Α	13
Rated impulse withstand voltage Ulimp Rated short-circuit breaking capacity Icn EN 60898 at 230 V Rated short-circuit breaking capacity Icn EN 60898 at 400 V Rated short-circuit breaking capacity Icn EC 60947-2 at 230 V Rated short-circuit breaking capacity Icn IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icn IEC 60947-2 at 400 V Voltage type Frequency Lurrent limiting class Suitable for flush-mounted installation Concurrently switching N-neutral Dover 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 RV RA B A B Connectable conductor cross section multi-wired RV RA B Connectable conductor cross section multi-wired RA CO RA CO CO RA CO CO CO CO CO CO CO CO CO C	Rated voltage	V	230
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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 Rrequency Rrequency Ruitable for flush-mounted installation Concurrently switching N-neutral Over voltage category Pollution degree Additional equipment possible Width in number of modular spacings Ruitable for frotection (IP) Ambient temperature during operating Concectable conductor cross section multi-wired Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V RA 10 10 10 10 10 10 10 10 10 10 10 10 10	Rated short-circuit breaking capacity Icn EN 60898 at 230 V	kA	6
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 10 AC AC AC AC No No No 3 2 4 Yes 4 Pel Pel Pel Pel Pel Pel Pel	Rated short-circuit breaking capacity Icn EN 60898 at 400 V	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 BC BC BC BC BC BC BC BC BC	Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V	kA	10
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 Hz 50 - 60 No No No Ves Yes 4 The protection (IP) IP20 Ambient temperature during operating "C -25 - 75 Connectable conductor cross section multi-wired III - 25	Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V	kA	10
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 3 No No No 2 4 7 7 8 7 8 7 8 7 8 8 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9 9	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 1 2 4 70.5 12 12 12 12 12 12 12 12 12 1	Frequency	Hz	50 - 60
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Pollution degree 2 Additional equipment possible Yes Width in number of modular spacings 4 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
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 - 75 Connectable conductor cross section multi-wired Pyes 4 Pues 1 - 25	Over voltage category		3
Width in number of modular spacings 4 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		4
Ambient temperature during operating °C -25 - 75 Connectable conductor cross section multi-wired mm² 1 - 25	Built-in depth	mm	70.5
Connectable conductor cross section multi-wired mm² 1 - 25	Degree of protection (IP)		IP20
	Ambient temperature during operating	°C	-25 - 75
Connectable conductor cross section solid-core mm² 1 - 25	Connectable conductor cross section multi-wired	mm²	1 - 25
	Connectable conductor cross section solid-core	mm²	1 - 25