DATASHEET - MMCM-D8/4



Miniature circuit breaker (MCB), 8 A, 4p, characteristic: D



mMCM-D8/4 Part no. Catalog No. 169952

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Basic function			Miniature circuit-breakers
Dasic function			Williature Circuit-Dreakers
Number of poles			4 pole
Tripping characteristic			D
Application			Switchgear for residential and commercial applications
Rated current	In	Α	8
Rated switching capacity according to IEC/EN 60898-1	I _{cn}	kA	10
Product range			mMCM

Technical data

Electrical

Rated switching capacity according to IEC/EN 60898-1	I _{cn}	kA	10
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-IHK 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	8
Heat dissipation per pole, current-dependent	P_{vid}	W	0
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 brookers and fuesa	/FC000000\ / Milinia turi	سميلممسط فنبيميا	(MACD) (EC000043)
Circuit breakers and fuses	(EGUUUUZU) / WIIIIlaturi	e circuit breaker	(IVIUD) (EUUUUU4Z)

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	D		
Number of poles (total)	4		
Number of protected poles	4		

Rated voltage V 400 Rated insulation voltage Ui V 440 Rated impulse withstand voltage Uimp kV 4 Rated short-circuit breaking capacity Icn EN 60898 at 230 V kA 10 Rated short-circuit breaking capacity Icn EN 60898 at 400 V kA 15 Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V kA 15 Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V kA 15 Voltage type AC AC Frequency Hz 50 - 60 Current limiting class 3 3 Suitable for flush-mounted installation No Concurrently switching N-neutral Yes Over voltage category 3 2 Pollution degree 2 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-w			
Rated insulation voltage Ui V 440 Rated insulation voltage Uimp kV 4 Rated short-circuit breaking capacity Icn EN 60988 at 230 V kA 10 Rated short-circuit breaking capacity Icn EN 60988 at 400 V kA 15 Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V kA 15 Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V kA 15 Voltage type AC AC Frequency Hz 50 - 60 Current limiting class 3 3 Suitable for flush-mounted installation No No Concurrently switching N-neutral Yes 2 Over voltage category 3 3 Pollution degree 2 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	Rated current	А	8
Rated impulse withstand voltage Uimp 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 EN 60898 at 400 V Rated short-circuit breaking capacity Icn EN 60898 at 400 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 Rated short-circuit breaking capacity Icn IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icn IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icn IEC 60947-2 at 400 V Rated short-circuit breaking capacity Icn IEC 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 230 V Rated short-circuit breaking capacity Icn IEC 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 230 V Rated short-circuit breaking capacity Icn IEC 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 230 V Rated short-circuit breaking capacity Icn IEC 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 230 V Rated short-circuit breaking capacity Icn IEC 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 230 V Rated short-circuit breaking capacity Icn IEC 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 230 V Rated short-circuit breaking capacity Icn IEC 60947-2 at 250 V Rated short-circuit breaking capacity Icn IEC 60947-2 at 250 V Rated short-circuit breaking capacity Icn IEC 60947-2 at 250 V Rated short-circuit breaking capacity Icn IEC 60947-2 at 250 V Rated short-circuit br	Rated voltage	V	400
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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 15 AC AC AC AC No Ves 3 2 4 Fes Ves 4 IP20 Ambient temperature during operating ° C -25 - 75 Connectable conductor cross section multi-wired	Rated short-circuit breaking capacity Icn EN 60898 at 400 V	kA	10
Voltage type Frequency Hz 50 - 60 Current limiting class Suitable for flush-mounted installation No 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 50 - 60 No Yes 2 Yes 4 Poll The polity of the po	Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V	kA	15
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 Yes Yes 2 4 Hz 10 - 25 - 75 Connectable conductor cross section multi-wired Hz 10 - 60 No Yes 2 - 25 - 75 Connectable conductor cross section multi-wired No 1 - 25	Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V	kA	15
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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 Yes 2 4 Built-in depth mm 70.5 IP20 Connectable conductor cross section multi-wired No No Yes 2 4 Leg Tes Tes Tes Tes Tes Tes Tes T	Frequency	Hz	50 - 60
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Over voltage category Pollution degree Additional equipment possible Width in number of modular spacings Wilthin depth Degree of protection (IP) Ambient temperature during operating Connectable conductor cross section multi-wired 3 Yes 4 Fundament of Modular spacings Possible of Po	Suitable for flush-mounted installation		No
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		Yes
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 4 Publication Touch Publication	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 mm ² 1 - 25	Degree of protection (IP)		IP20
	Ambient temperature during operating	°C	-25 - 75
Connectable conductor cross section solid-core mm ² 1 - 25	Connectable conductor cross section multi-wired	mm ²	² 1 - 25
	Connectable conductor cross section solid-core	mm²	² 1 - 25