



Circuit-breaker; 80 A; 3p; Type D characteristic

Part no.
Catalog No.mMCT-D80/3
129668

Delivery program

Basic function			Miniature circuit-breakers
Number of poles			3 pole
Tripping characteristic			D
Application			Switchgear for industrial and advanced commercial applications
Rated current	I_n	A	80
Rated switching capacity acc. to IEC/EN 60947-2	I_{cu}	kA	20
Product range			mMCT

Technical data

Electrical

Rated switching capacity acc. to IEC/EN 60947-2	I_{cu}	kA	20
Rated insulation voltage	U_i	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
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
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	I_n	A	80
Heat dissipation per pole, current-dependent	P_{vid}	W	0
Equipment heat dissipation, current-dependent	P_{vid}	W	21.4
Static heat dissipation, non-current-dependent	P_{vs}	W	0
Heat dissipation capacity	P_{diss}	W	0
Operating ambient temperature min.		°C	-30
Operating ambient temperature max.		°C	55
			linear, per +1 °C, results in a 0.5% reduction of current carrying capacity

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) (ecI@ss10.0.1-27-14-19-01 [AAB905014])			
Release characteristic			D
Number of poles (total)			3
Number of protected poles			3
Rated current		A	80
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	0
Rated short-circuit breaking capacity Icn EN 60898 at 400 V	kA	0
Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V	kA	20
Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V	kA	20
Voltage type		AC
Frequency	Hz	50 - 60
Current limiting class		3
Suitable for flush-mounted installation		No
Concurrently switching N-neutral		No
Over voltage category		3
Pollution degree		2
Additional equipment possible		Yes
Width in number of modular spacings		4.5
Built-in depth	mm	75
Degree of protection (IP)		IP20
Ambient temperature during operating	°C	-25 - 55
Connectable conductor cross section multi-wired	mm ²	2.5 - 50
Connectable conductor cross section solid-core	mm ²	2.5 - 50