



Circuit-breaker; 80 A; 3pole+N; Type D characteristic

Part no. **mMCT-D80/3N**  
 Catalog No. **129684**

### Delivery program

Basic function			Miniature circuit-breakers
Number of poles			3 pole+N
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		$\geq 10000$
Mechanical	Operations		$\geq 20000$

#### 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	21.11
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) (ecl@ss10.0.1-27-14-19-01 [AAB905014])			
Release characteristic			D
Number of poles (total)			4
Number of protected poles			3
Rated current		A	80
Rated voltage		V	400

Rated insulation voltage $U_i$	V	440
Rated impulse withstand voltage $U_{imp}$	kV	4
Rated short-circuit breaking capacity $I_{cn}$ EN 60898 at 230 V	kA	0
Rated short-circuit breaking capacity $I_{cn}$ EN 60898 at 400 V	kA	0
Rated short-circuit breaking capacity $I_{cu}$ IEC 60947-2 at 230 V	kA	20
Rated short-circuit breaking capacity $I_{cu}$ 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		Yes
Over voltage category		3
Pollution degree		2
Additional equipment possible		Yes
Width in number of modular spacings		6
Built-in depth	mm	75
Degree of protection (IP)		IP20
Ambient temperature during operating	°C	-25 - 55
Connectable conductor cross section multi-wired	mm <sup>2</sup>	2.5 - 50
Connectable conductor cross section solid-core	mm <sup>2</sup>	2.5 - 50