



HMT050DR

Moulded Case Circuit Breaker h3+ P250 TM ADJ 3P3D 50A 50kA FTC

Technical properties

Architecture

Type of order	Toggle
Neutral position	without neutral
Number of protected poles	3
Number of poles	3 P
Type of pole	3P3D
Fixing mode	Screwed
Type of case	Fixed built-in

Functions

Complete device with protection unit	Yes
Reversing switch	No
Version as main switch	Yes
Version as emergency stop installation	No
Version as safety switch	No
Version as maintenance-/service switch	Yes
Trip Unit	TM A/A
Integrated earth fault protection	No

Controls and indicators

Motor drive integrated	No
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Main electrical features

Rated operational voltage Ue	220 / 690 V
Type of supply voltage	AC
Frequency	50/60 Hz

Voltage

Rated insulation voltage	800 V
Rated impulse withstand voltage	8 kV
With under voltage release	No

Electric current

Rated current	50 A
Rated ultimate short-circuit breaking capacity Icu under 690V AC IEC 60947-2	6 kA
Thermal protection nob setting xIN	0.63 / 0.8 / 1
Rating current 10°C according to IEC 60947	63.1 A
Rating current 15°C according to IEC 60947	61.6 A
Rating current 20°C according to IEC 60947	60.1 A

Rating current 25°C according to IEC 60947	58.5 A
Rating current 30°C according to IEC 60947	56.9 A
Rating current 35°C according to IEC 60947	55.3 A
Rating current 40°C according to IEC 60947	53.6 A
Rating current 45°C according to IEC 60947	51.8 A
Rating current 50°C according to IEC 60947	50 A
Rating current 55°C according to IEC 60947	48.1 A
Rating current 60°C according to IEC 60947	46.2 A
Rating current 65°C according to IEC 60947	44.1 A
Rating current 70°C according to IEC 60947	42 A
Rated service breaking capacity Ics under 660V AC according IEC 60947-2	6 kA
Breaking capacity on 1 pole for IT 230V NF 60947-2	6 kA
Breaking capacity on 1 pole for IT 400V NF 60947-2	6 kA
Breaking capacity on 1 pole for IT 415V NF 60947-2	6 kA
Breaking capacity on 1 pole for IT 690V NF 60947-2	4.25 kA
Rated ultimate short-circuit breaking capacity Icu under 230V AC IEC 60947-2	65 kA
Rated ultimate short-circuit breaking capacity Icu under 240V AC IEC 60947-2	65 kA
Rated ultimate short-circuit breaking capacity Icu under 400V AC IEC 60947-2	50 kA
Rated ultimate short-circuit breaking capacity Icu under 415V AC IEC 60947-2	50 kA
Range of the thermal adjustment	32 / 40 / 50 A
Rated service breaking capacity Ics under 110-138V AC according IEC 60947-2	65 kA
Rated ultimate short-circuit breaking capacity Icu under 220V AC IEC 60947-2	65 kA
Rated ultimate short-circuit breaking capacity Icu under 380V AC IEC 60947-2	50 kA
Rated ultimate short-circuit breaking capacity Icu under 660V AC IEC 60947-2	6 kA
Dimensions	
Depth of installed product	97 mm
Height of installed product	165 mm
Width of installed product	105 mm
Frequency	
Frequency	50 to 60 Hz
Power	
Power loss per pole at 0.63*In	2.05 W
Power loss per pole at 0.8*In	3.2 W
Total power loss at 0.63*In	6.14 W
Total power loss at 0.8*In	9.6 W
Total power loss under IN	15 W
Power loss per pole at In	5 W

Subject to technical modifications

Tripping	
Short-time delayed tripping	No
Endurance	
Electric endurance in number of cycles	10000
Number of mechanical operations	40000
Cover, door	
Interlockable	Yes
Installation, mounting	
Tightening torque	12Nm
DIN rail mounting with optional adaptor	No
Suitable for front mounting center	No
Suitable for front mounting	No
Suitable for ground mounting	Yes
Connection	
Connection cross-sect. flexible conductor	35 / 150mm ²
Connection cross-sect. rigid cable	35 / 185mm ²
Connection	Front connection
Type of connection	Terminal
Protection	
Instantaneous protection (li): type	without
Cable	
Cable Material	Cu / Al
Settings	
Range of the magnetic adjustment	300 / 400 / 500 / 650 A
Magnetic protection nob setting xIN	6 / 8 / 10 / 13
Equipment	
Number of auxiliary contacts as normally closed contact	0
Number of auxiliary contacts as normally open contact	0
Number of auxiliary contacts as change-over contact	0
Motor drive optional	Yes
Can be accessorized	Yes
Use cases	
Category of use	A
Use	
Vibrations and shocks withstand	IEC 68068-2-52 Test FC
Standards	
Standard text	IEC 60947-2
European directive WEEE	concerned

Safety

Protection index IP	IP4X
REACH conform	Yes
RoHS conform	Yes
Halogen free	No

Use conditions

Degree of pollution according to IEC 60664 / IEC 60947-2	3
Altitude	2000 m
Air humidity protection	95%HR 55°C sev Kn (IEC 68-2-30/52)

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Temperature of calibration	50 °C
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