



HMT050DR

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

**Technical characteristics**

**Architecture**

Type of order	Toggle
Neutral position	without neutral
Number of protected poles	3
Number of poles	3 P
Type of pole	3P3D
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
<b>Dimensions</b>	
Depth of installed product	97 mm
Height of installed product	165 mm
Width of installed product	105 mm
<b>Frequency</b>	
Frequency	50 to 60 Hz
<b>Power</b>	
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
<b>Tripping</b>	

Subject to technical modifications

Short-time delayed tripping	No
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### Endurance

Electric endurance in number of cycles	10000
Number of mechanical operations	40000

### Cover, door

Interlockable	Yes
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### Installation, mounting

Tightening torque	12Nm
DIN rail mounting with optional adaptor	Yes
Suitable for front mounting center	No
Suitable for front mounting	No
Suitable for ground mounting	Yes

### Connection

Connection cross-sect. flexible conductor	35 / 150mm <sup>2</sup>
Connection cross-sect. rigid cable	35 / 185mm <sup>2</sup>
Connection	Front connection
Type of connection	Terminal

### Protection

Instantaneous protection (Ii): type	fixed
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### Cable

Cable Material	Cu / Al
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### 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
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### Use

Vibrations and shocks withstand	IEC 68068-2-52 Test FC
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### Standards

Standard text	IEC 60947-2
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### Safety

REACH conform	Yes
RoHS conform	Yes
Halogen free	No

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**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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