



MM504N



**Motor protection circuit breaker 3P 0.4-0.63A ; 0.09/0.12 kW at 230/415V**

**Technical properties**

**Architecture**

Type of order	Short thumb-grip
Number of poles	3 P
Type of pole	3 P

**Configuration**

Number of modules	2.5
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**Main electrical features**

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

**Voltage**

Rated insulation voltage	690 V
Rated impulse withstand voltage	6000 V

**Electric current**

Rated current	0.63 A
Rated ultimate short-circuit breaking capacity Icu under 690V AC IEC 60947-2	150 kA
Magnetic regulating current	12.4 / 15.5 / 18.6 In
Thermal trip setting with 30°	0.4 / 0.43 / 0.46 / 0.49 / 0.52 / 0.54 / 0.57 / 0.6 / 0.63 A
Rating current 0°C according to IEC 60947	0.63 A
Rating current 10°C according to IEC 60947	0.63 A
Rating current 20°C according to IEC 60947	0.63 A
Rating current 30°C according to IEC 60947	0.63 A
Rating current 40°C according to IEC 60947	0.63 A
Rating current 50°C according to IEC 60947	0.63 A
Rated service breaking capacity Ics AC according to IEC 60947-2	100 %
Rated ultimate short-circuit breaking capacity Icu under 230V AC IEC 60947-2	150 kA
Rated ultimate short-circuit breaking capacity Icu under 240V AC IEC 60947-2	150 kA
Rated ultimate short-circuit breaking capacity Icu under 400V AC IEC 60947-2	150 kA
Rated ultimate short-circuit breaking capacity Icu under 415V AC IEC 60947-2	100 kA
Rated ultimate short-circuit breaking capacity Icu under 220V AC IEC 60947-2	150 kA

Rated ultimate short-circuit breaking capacity Icu under 380V AC IEC 60947-2 150 kA

### Dimensions

Strip length of main circuit connections 10 mm

### Frequency

Frequency 50 to 60 Hz

### Power

Total power loss under IN 5.16 W

Standard power rating of 3 phase motor in AC3 under 230V 0.09 kW

Standard power rating of 3 phase motor in AC3 under 400V 0.12 kW

Rated operational power for 3P under 220-230V AC3 according IEC60947-4 0.09 kW

Rated operational power for 3P under 240V AC3 according IEC60947-4 0.09 kW

Rated operational power for 3P under 415V AC3 according IEC60947-4 0.12 kW

Rated operational power for 3P under 440V AC3 according IEC60947-4 0.18 kW

Rated operational power for 3P under 500V AC3 according IEC60947-4 0.25 kW

### Electrical specifications

Nominal tightening torque of main circuit 1.7 Nm

### Endurance

Electric endurance in number of cycles 50000

Mechanical endurance in number of operations per hour 40

Number of mechanical operations 100000

### Installation, mounting

Tightening torque 1,7Nm

Type connection of power circuit with screw

### Connection

Connection cross-section of input and output with screws, for massive conductors 1 / 6 mm<sup>2</sup>

Connection cross section of access and exit with screws, for flexible conductor 1 / 6 mm<sup>2</sup>

Cable flexibel cross section for main circuit 1x (1 - 6) mm<sup>2</sup> / 2x (1 - 6) mm<sup>2</sup>

Cable rigid cross section for main circuit 1x (1 - 6) mm<sup>2</sup> / 2x (1 - 6) mm<sup>2</sup>

Type of connection with screw

### Settings

min/maxi threshold value of the AC magnetic operation 7.8 / 11.7 A

Setting type In or Ith IN

### Equipment

Automatic compensation of the temperature -5 / 40 °C

Can be accessorized Yes

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**Use cases**

Category of use AC3

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**Standards**

Standard text IEC 60947-4-1 ; EN 60947-4-1

European directive RoHs voluntary compliance

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**Safety**

REACH conform Yes

RoHS conform Yes

Phase failure sensitive Yes

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**Use conditions**

Operating temperature -25...55 °C

Degree of pollution according to IEC 60664 /  
IEC 60947-2 3

Storage/transport temperature -25...80 °C

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Temperature of calibration 30 °C