



MM504N



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

**Technical characteristics**

**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
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### Dimensions

Strip length of main circuit connections	10 mm
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### Frequency

Frequency	50 to 60 Hz
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### Power

Total power loss under IN	5.16 W
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Standard power rating of 3 phase motor in AC3 under 230V	0.09 kW
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Standard power rating of 3 phase motor in AC3 under 400V	0.12 kW
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Rated operational power for 3P under 220-230V AC3 according IEC60947-4	0.09 kW
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Rated operational power for 3P under 240V AC3 according IEC60947-4	0.09 kW
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Rated operational power for 3P under 415V AC3 according IEC60947-4	0.12 kW
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Rated operational power for 3P under 440V AC3 according IEC60947-4	0.18 kW
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Rated operational power for 3P under 500V AC3 according IEC60947-4	0.25 kW
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### Electrical specifications

Nominal tightening torque of main circuit	1.7 Nm
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### Endurance

Electric endurance in number of cycles	50000
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Mechanical endurance in number of operations per hour	40
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Number of mechanical operations	100000
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### Installation, mounting

Tightening torque	1,7Nm
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Type connection of power circuit	with screw
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### Connection

Connection cross-section of input and output with screws, for massive conductors	1 / 6 mm <sup>2</sup>
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Connection cross section of access and exit with screws, for flexible conductor	1 / 6 mm <sup>2</sup>
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Cable flexibel cross section for main circuit	1x (1 - 6) mm <sup>2</sup> / 2x (1 - 6) mm <sup>2</sup>
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Cable rigid cross section for main circuit	1x (1 - 6) mm <sup>2</sup> / 2x (1 - 6) mm <sup>2</sup>
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Type of connection	with screw
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### Settings

min/maxi threshold value of the AC magnetic operation	7.8 / 11.7 A
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Setting type In or Ith	IN
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### Equipment

Automatic compensation of the temperature	-5 / 40 °C
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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
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European directive RoHs	voluntary compliance
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**Safety**

REACH conform	Yes
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RoHS conform	Yes
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Halogen free	No
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Phase failure sensitive	Yes
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**Use conditions**

Operating temperature	-25...55 °C
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Degree of pollution according to IEC 60664 / IEC 60947-2	3
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Storage/transport temperature	-25...80 °C
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Temperature of calibration	30 °C
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