



MM504N



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

Technical properties

Architecture

Number of poles	3 P
Type of pole	3 P
Fixing mode	DIN rail type O (symmetrical)

Configuration

Number of modules	2.5
-------------------	-----

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 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

Type connection of power circuit	with screw
----------------------------------	------------

Connection

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

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

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

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

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
---------------------	-----

Standards

European directive RoHS	voluntary compliance
European directive WEEE	concerned

Safety

Protection index IP	IP20
REACH conform	Yes
RoHS conform	Yes
Phase failure sensitive	Yes

Use conditions

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

temperatur

Temperature of calibration	30 °C
----------------------------	-------