



MM503N



**Motor protection circuit breaker 3P 0.25-0.4A ; 0.06/0.09 kW at 230/415V**

**Technical properties**

**Architecture**

Type of order	Short thumb-grip
Number of poles	3 P
Type of pole	3 P
Fixing mode	DIN rail type O (symmetrical)

**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	0.4 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°	0.25 / 0.27 / 0.29 / 0.31 / 0.33 / 0.34 / 0.36 / 0.38 / 0.4 A
Rating current 0°C according to IEC 60947	0.4 A
Rating current 10°C according to IEC 60947	0.4 A
Rating current 20°C according to IEC 60947	0.4 A
Rating current 30°C according to IEC 60947	0.4 A
Rating current 40°C according to IEC 60947	0.4 A
Rating current 50°C according to IEC 60947	0.4 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
<b>Dimensions</b>	
Strip length of main circuit connections	10 mm
<b>Frequency</b>	
Frequency	50 to 60 Hz
<b>Power</b>	
Total power loss under IN	5.22 W
Standard power rating of 3 phase motor in AC3 under 230V	0.06 kW
Standard power rating of 3 phase motor in AC3 under 400V	0.09 kW
Rated operational power for 3P under 220-230V AC3 according IEC60947-4	0.6 kW
Rated operational power for 3P under 240V AC3 according IEC60947-4	0.06 kW
Rated operational power for 3P under 415V AC3 according IEC60947-4	0.09 kW
Rated operational power for 3P under 440V AC3 according IEC60947-4	0.12 kW
Rated operational power for 3P under 500V AC3 according IEC60947-4	0.12 kW
<b>Electrical specifications</b>	
Nominal tightening torque of main circuit	1.7 Nm
<b>Endurance</b>	
Electric endurance in number of cycles	50000
Mechanical endurance in number of operations per hour	40
Number of mechanical operations	100000
<b>Installation, mounting</b>	
Tightening torque	1,7Nm
Type connection of power circuit	with screw
<b>Connection</b>	
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
<b>Settings</b>	
min/maxi threshold value of the AC magnetic operation	4.96 / 7.4 A
Setting type In or Ith	IN
<b>Equipment</b>	

Subject to technical modifications

Automatic compensation of the temperature	-5 / 40 °C
Can be accessorized	Yes
<b>Use cases</b>	
Category of use	AC3
<b>Standards</b>	
Standard text	IEC 60947-4-1 ; EN 60947-4-1
European directive RoHs	voluntary compliance
European directive WEEE	concerned
<b>Safety</b>	
Protection index IP	IP20
Phase failure sensitive	Yes
<b>Use conditions</b>	
Operating temperature	-25...55 °C
Degree of pollution according to IEC 60664 / IEC 60947-2	3
Storage/transport temperature	-25...80 °C
<b>temperatur</b>	
Temperature of calibration	30 °C