



MM508N

## Motor protection circuit breaker 3P 2.5-4A ; 0.75/1.5 kW at 230/415V

## **Technical properties**

Type of order	Short thumb-grip
Number of poles	3 F
Type of pole	3 F
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	4 4
Rated ultimate short-circuit breaking capa- city Icu under 690V AC IEC 60947-2	3 kA
Magnetic regulating currrent	12.4 / 15.5 / 18.6 lr
Thermal trip setting with 30°	2.5 / 2.7 / 2.9 / 3.1 / 3.3 / 3.4 / 3.6 / 3.8 / 4 /
Rating current 0°C according to IEC 60947	0.17 Å
Rating current 10°C according to IEC 60947	0.17 4
Rating current 20°C according to IEC 60947	0.17 4
Rating current 30°C according to IEC 60947	0.17 4
Rating current 40°C according to IEC 60947	0.17 4
Rating current 50°C according to IEC 60947	0.17 4
Rated service breaking capacity Ics AC according IEC 60947-2	100 %
Rated ultimate short-circuit breaking capa- city Icu under 230V AC IEC 60947-2	150 kA
Rated ultimate short-circuit breaking capa- city Icu under 240V AC IEC 60947-2	150 k/
Rated ultimate short-circuit breaking capa- city Icu under 400V AC IEC 60947-2	150 k/
Rated ultimate short-circuit breaking capa- city Icu under 415V AC IEC 60947-2	100 kA
Rated ultimate short-circuit breaking capa- city Icu under 220V AC IEC 60947-2	150 kA

Dimensions	
Strip length of main circuit connections	10 m
Frequency	
Frequency	50 to 60 F
Power	
Total power loss under IN	5.33
Standard power rating of 3 phase motor in AC3 under 230V	0.75 k
Standard power rating of 3 phase motor in AC3 under 400V	1.5 k
Rated operational power for 3P under 220- 230V AC3 according IEC60947-4	0.75 k
Rated operational power for 3P under 240V AC3 according IEC60947-4	0.75 k
Rated operational power for 3P under 415V AC3 according IEC60947-4	1.5 k
Rated operational power for 3P under 440V AC3 according IEC60947-4	1.5 k
Rated operational power for 3P under 500V AC3 according IEC60947-4	2.2 k
Electrical specifications	
Endurance Electric endurance in number of cycles	5000
Mechanical endurance in number of opera- tions per hour	
Number of mechanical operations	10000
Installation, mounting	
 Tightening torque	1,7N
Type connection of power circuit	with scre
Connection	
Connection cross-section of input and output with screws, for massive conductors	1 / 6 mr
Connection cross section of access and exit with screws, for flexible conductor	1 / 6 mr
with screws, for flexible conductor	1x (1 - 6) mm² / 2x (1 - 6) mr
with screws, for flexible conductor Cable flexibel cross section for main circuit	1x (1 - 6) mm² / 2x (1 - 6) mm 1x (1 - 6) mm² / 2x (1 - 6) mm
with screws, for flexible conductor Cable flexibel cross section for main circuit Cable rigid cross section for main circuit	1x (1 - 6) mm² / 2x (1 - 6) mm 1x (1 - 6) mm² / 2x (1 - 6) mm
with screws, for flexible conductor Cable flexibel cross section for main circuit Cable rigid cross section for main circuit Type of connection	1x (1 - 6) mm <sup>2</sup> / 2x (1 - 6) mr 1x (1 - 6) mm <sup>2</sup> / 2x (1 - 6) mr with scre
with screws, for flexible conductor Cable flexibel cross section for main circuit Cable rigid cross section for main circuit Type of connection Settings min/maxi threshold value of the AC	1 / 6 mr 1x (1 - 6) mm² / 2x (1 - 6) mr 1x (1 - 6) mm² / 2x (1 - 6) mr with scre 49.6 / 74.4
with screws, for flexible conductor Cable flexibel cross section for main circuit Cable rigid cross section for main circuit Type of connection Settings min/maxi threshold value of the AC magnetic operation	1x (1 - 6) mm <sup>2</sup> / 2x (1 - 6) mm 1x (1 - 6) mm <sup>2</sup> / 2x (1 - 6) mm with scree 49.6 / 74.4

Can be accessorized	Yes
Use cases	
Category of use	AC3
Standards	
Standard text	IEC 60947-4-1 ; EN 60947-4-1
European directive RoHs	voluntary compliance
Safety	
REACH conform	Yes
RoHS conform	Yes
Phase failure sensitive	Yes
Use conditions	
Operating temperature	-2555 °C
Degree of pollution according to IEC 60664 / IEC 60947-2	3
Storage/transport temperature	-2580 °C
temperatur	
Temperature of calibration	30 °C