



Motor protective circuit
breaker
SM1P

Product designation

Product type designation

Electrical features

| | | |
|---|-----|------------|
| Number of poles | nr. | 3 |
| Magnetic protection | | yes |
| Thermal protection | | yes |
| Phase failure detection | | yes |
| Rated insulation voltage U_i IEC/EN | V | 690 |
| Rated impulse withstand voltage U_{imp} | kV | 6 |
| Rated frequency | Hz | 50/60 |
| Thermal trip adjustment range | | 1.6...2.5 |
| Rated current (I_n) | A | 2.5 |
| Magnetic tripping | | 13 x I_n |
| Total power dissipation | W | 1.63 |

Operational short-circuit current breaking capacity (I_{cs}) at AC

| | | |
|------|----|-----|
| 230V | kA | 100 |
| 400V | kA | 100 |
| 440V | kA | 100 |
| 500V | kA | 100 |
| 690V | kA | 3 |

Maximum short-circuit current breaking capacity (I_{cu}) at AC

| | | |
|------|----|-----|
| 230V | kA | 100 |
| 400V | kA | 100 |
| 440V | kA | 100 |
| 500V | kA | 100 |
| 690V | kA | 3 |

Tripping class

10A

IEC Utilization category

A

Operations

| | | |
|-----------------|--------|--------|
| Mechanical life | cycles | 100000 |
| Electrical life | cycles | 100000 |

Mechanical features

Tightening torque for terminals

| | | |
|-----|------|-----|
| min | Nm | 2.5 |
| max | Nm | 3 |
| min | lbin | 1.8 |
| max | lbin | 2.2 |

Max number of wires simultaneously connectable

nr. 2

Conductor section

AWG/Kcmil

| | |
|-----|----|
| min | 16 |
| max | 8 |

Flexible w/o lug conductor section

| | | |
|-----|-----------------|---|
| min | mm ² | 1 |
|-----|-----------------|---|

Flexible c/w lug conductor section

| | | |
|-----|-----------------|---|
| min | mm ² | 1 |
|-----|-----------------|---|

Flexible with insulated spade lug conductor section

| | | |
|-----|-----------------|---|
| min | mm ² | 1 |
|-----|-----------------|---|

Screwdriver

PH2

Power terminal protection according to IEC/EN 60529

IP20

Cable stripping length

main circuit mm 1

Ambient conditions

Temperature

Operating temperature

| | | |
|-----|----|-----|
| min | °C | -20 |
| max | °C | 60 |

Storage temperature

| | | |
|-----|----|-----|
| min | °C | -50 |
| max | °C | 80 |

Compensation temperature

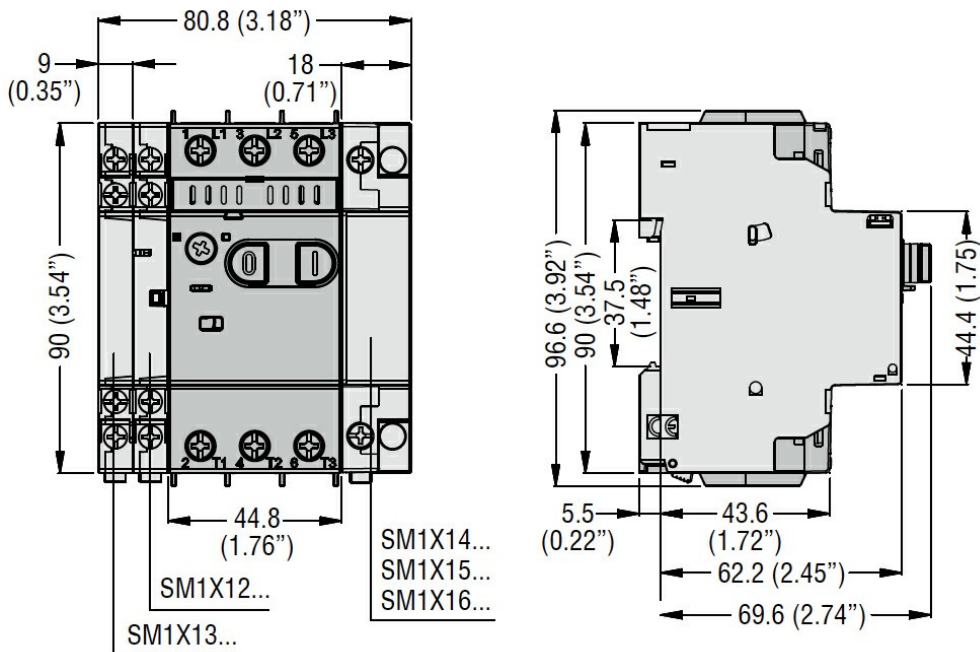
| | | |
|-----|----|-----|
| min | °C | -20 |
| max | °C | 50 |

Max altitude

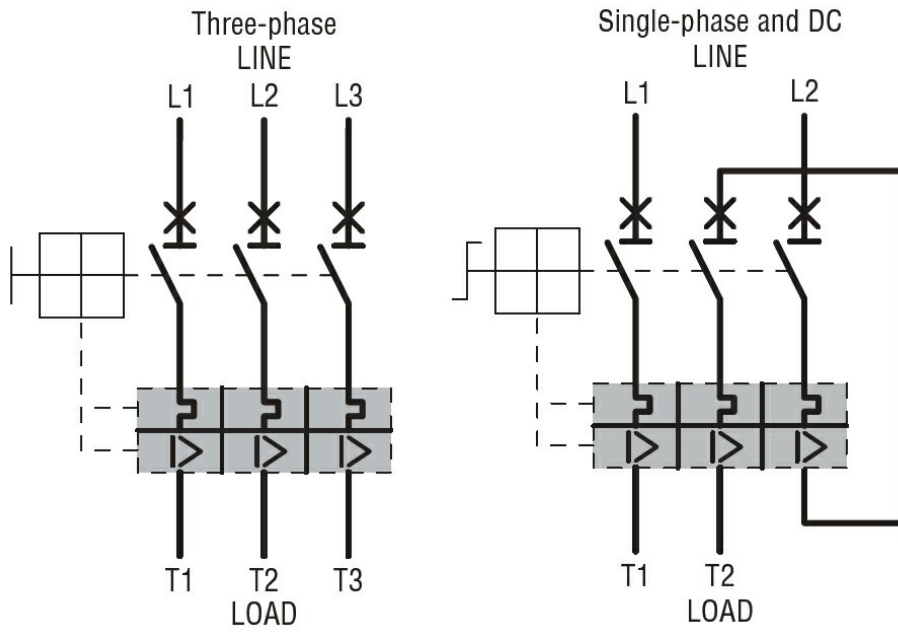
m 3000

| | | |
|--|--|--|
| Operating position | normal allowable | Vertical plan Any |
| Fixing | | Screw / DIN rail 35mm |
| Weight | g | 350 |
| UL technical data | | |
| UL508 / UL60947-4-1 Manual Motor Controller - Short circuit current | | |
| Motor Disconnect | at 240V at 480V at 600V protection | kA kA kA 100A class J |
| Group Motor Installation | | |
| | at 240V at 480V at 600V protection | kA kA kA 100A class J |
| Tap Conductor Protection | | |
| | at 480Y/277V at 600Y/347V | kA kA 50 50 |
| UL508 / UL 60947-4-1 Manual Self Protected Combination Motor Controller (Type E) Short circuit current | | |
| | UL508 / UL 60947-4-1 Manual Self Protected Combination Motor Controller (Type E) Short-circuit current | 50 |
| | UL508 / UL 60947-4-1 Manual Self Protected Combination Motor Controller (Type E) Short-circuit current | 50 |
| | UL508 / UL 60947-4-1 Manual Self Protected Combination Motor Controller (Type E) Short-circuit current | 50 |
| Maximum UL/CSA horsepower ratings single-phase | | |
| | at 110V-120V at 220V-240V | hp hp - 1/6 |
| Maximum UL/CSA horsepower ratings three-phase, 3-pole | | |
| | at 200V-208V at 220V-240V at 440V-480V at 550V-600V | hp hp hp hp 1/2 1/2 1 1.5 |

Dimensions



Wiring diagrams



Certifications and compliance

Certifications

CSA C22.2 n° 14
IEC/EN 60947-1
IEC/EN 60947-2
IEC/EN 60947-4-1
UL508

Compliance

cULus
EAC

ETIM 6 classification