



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 | | 20...25 |
| Rated current (I_n) | A | 25 |
| Magnetic tripping | | 13 x I_n |
| Total power dissipation | W | 2.83 |

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

| | | |
|------|----|----|
| 230V | kA | 50 |
| 400V | kA | 5 |
| 440V | kA | 5 |
| 500V | kA | 5 |
| 690V | kA | 2 |

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

| | | |
|------|----|----|
| 230V | kA | 50 |
| 400V | kA | 15 |
| 440V | kA | 10 |
| 500V | kA | 10 |
| 690V | kA | 2 |

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

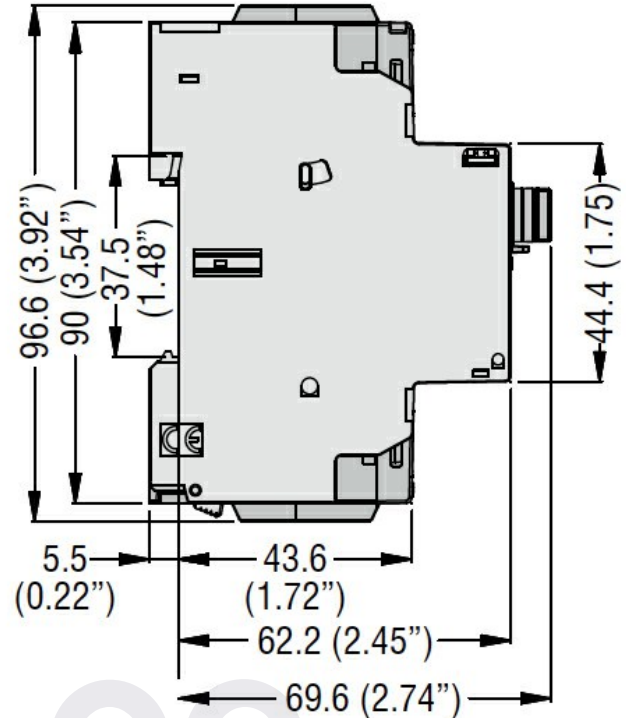
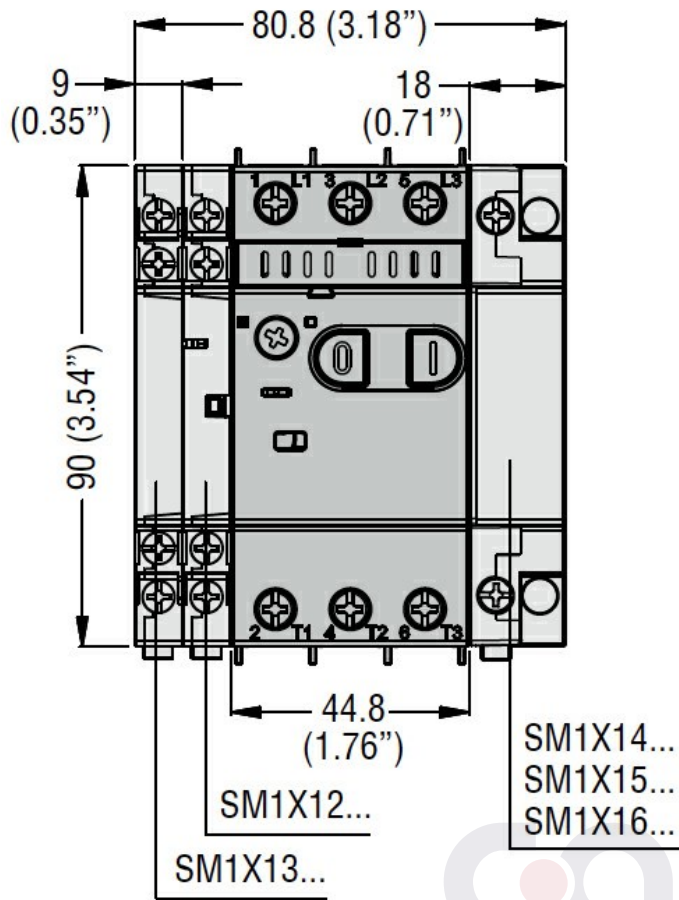
| | | | |
|--------------------------|-----|----|------|
| Temperature | | | |
| Operating temperature | | | |
| | min | °C | -20 |
| | max | °C | 60 |
| Storage temperature | | | |
| | min | °C | -50 |
| | max | °C | 80 |
| Compensation temperature | | | |
| | min | °C | -20 |
| | max | °C | 50 |
| Max altitude | | m | 3000 |

| | | |
|--------------------|------------------|-----------------------|
| Operating position | normal allowable | Vertical plan Any |
| Fixing | | Screw / DIN rail 35mm |
| Weight | g | 350 |

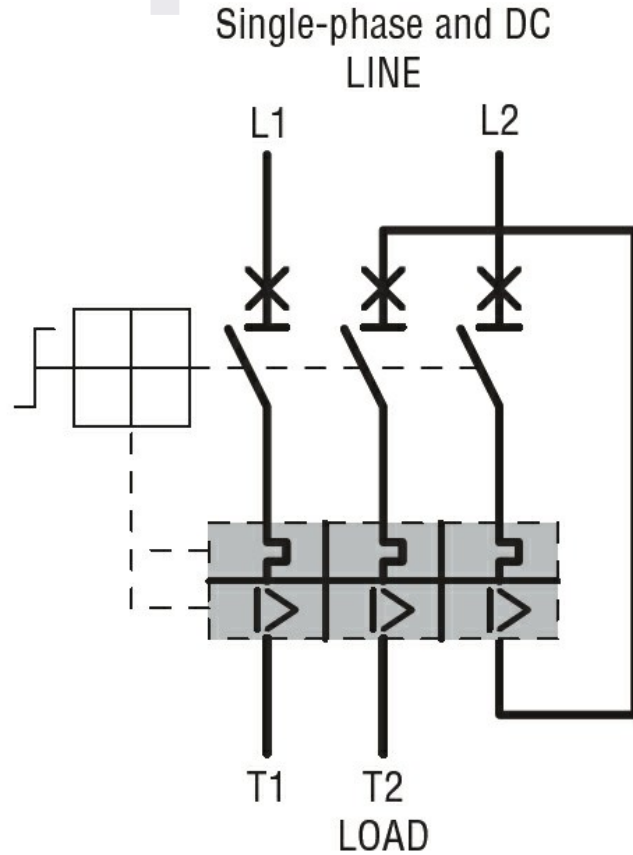
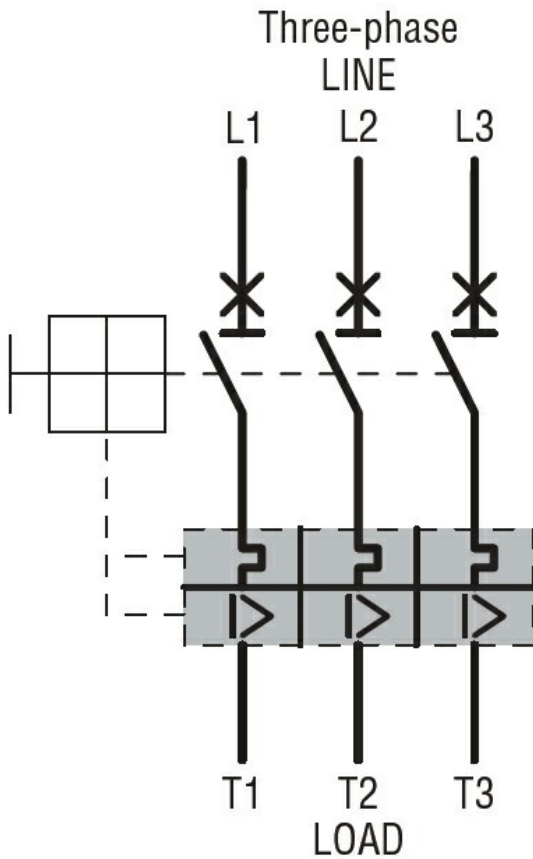
UL technical data

| | | | |
|--|--------------|----|------------|
| Motor Disconnect | | | |
| | at 240V | kA | 5 |
| | at 480V | kA | 5 |
| | protection | | Fuse or CB |
| Group Motor Installation | | | |
| | at 240V | kA | 5 |
| | at 480V | kA | 5 |
| | protection | | Fuse or CB |
| Tap Conductor Protection | | | |
| | at 480Y/277V | kA | 50 |
| | at 600Y/347V | kA | 50 |
| UL508 / UL 60947-4-1 Manual Self Protected Combination Motor Controller (Type E) Short circuit current | | | |
| | at 240V | kA | 50 |
| | at 480Y/277V | kA | 50 |
| | at 600Y/347V | kA | 50 |
| Maximum UL/CSA horsepower ratings single-phase | | | |
| | 110V-120V | HP | 2 |
| | 220V-240V | HP | 3 |
| Maximum UL/CSA horsepower ratings three-phase, 3-pole | | | |
| | 200V-208V | HP | 5 |
| | 220V-240V | HP | 7.5 |
| | 440V-480V | HP | 15 |

Dimensions



Wiring diagrams



Certifications and compliance



SM1P2500
 MOTOR PROTECTION CIRCUIT BREAKER, IEC BREAKING CAPACITY ICU 15KA AT 400V,
 20...25A

Certifications

- CSA C22.2 n° 14

- IEC/EN 60947-1

- IEC/EN 60947-2

- IEC/EN 60947-4-1

- UL508

Compliance

- cULus

- EAC

ETIM classification

ETIM 8.0

EC000074 -
 Motor protection
 circuit-breaker

