



Product designation

Motor protection
circuit breaker
SM1P

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 | | 9...14 |
| Rated current (I_n) | A | 14 |
| Magnetic tripping | | 13 x I_n |

| | | | |
|----------------------------|-----|---|------|
| Power dissipation per pole | min | W | 1.13 |
| | max | W | 2.73 |

| | | | |
|--|------|----|------|
| Operational short-circuit current breaking capacity (I_{cs}) at AC | 230V | kA | 100 |
| | 400V | kA | 12.5 |
| | 440V | kA | 5 |
| | 500V | kA | 5 |
| | 690V | kA | 3 |

| | | | |
|--|------|----|-----|
| Maximum short-circuit current breaking capacity (I_{cu}) at AC | 230V | kA | 100 |
| | 400V | kA | 25 |
| | 440V | kA | 10 |
| | 500V | kA | 10 |
| | 690V | kA | 3 |

| | | | |
|--|------|----|---|
| Breaking capacity short-circuit current (I_{cn}) at DC | 150V | kA | 0 |
| | 300V | kA | 0 |
| | 450V | kA | 0 |

| | | |
|----------------|--|-----|
| Tripping class | | 10A |
|----------------|--|-----|

| | | |
|--------------------------|--|---|
| IEC Utilization category | | A |
|--------------------------|--|---|

Operations

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

Mechanical features

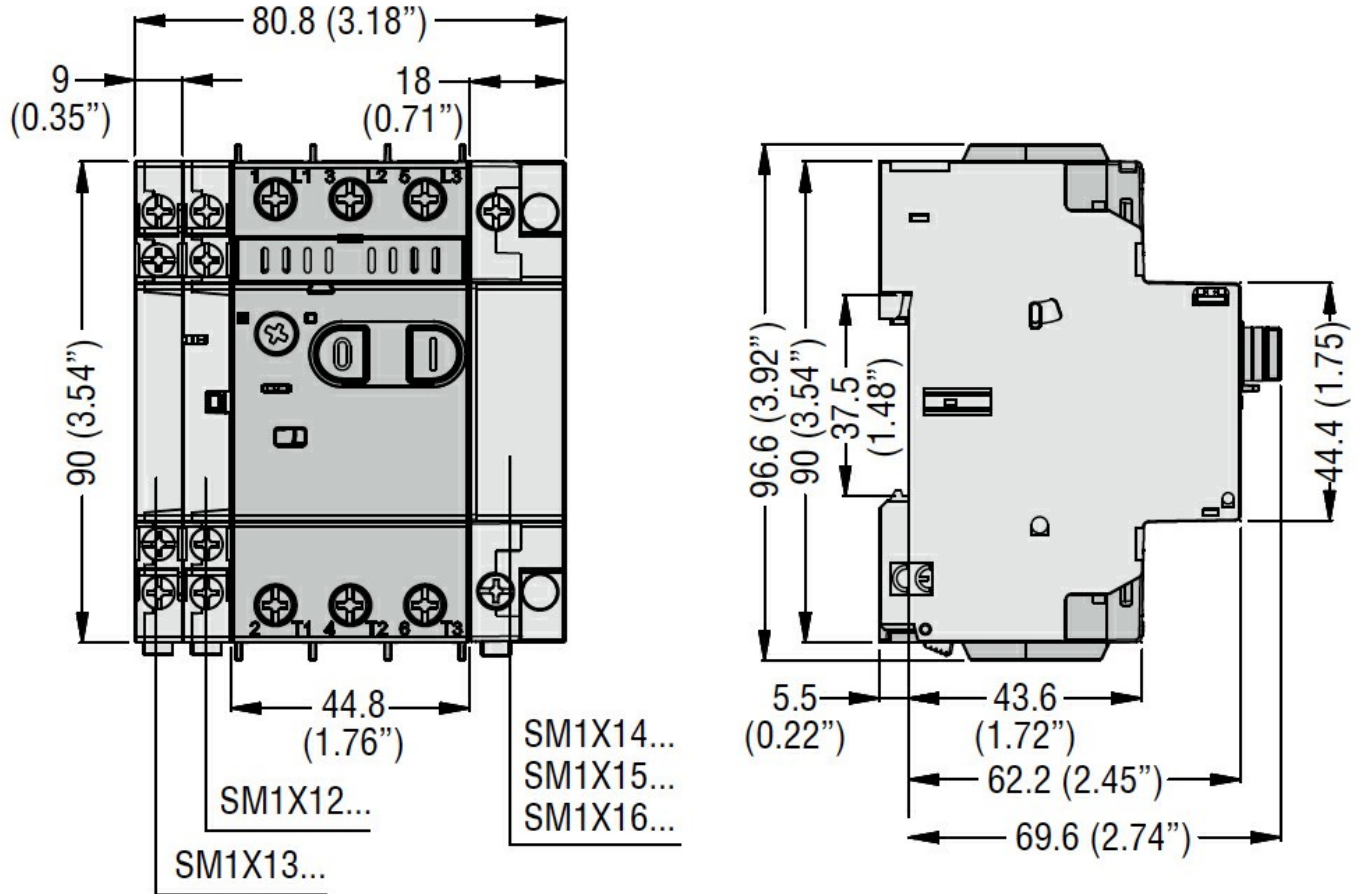
| | | | |
|---------------------------------|-----|------|------|
| Tightening torque for terminals | min | Nm | 2.5 |
| | max | Nm | 3 |
| | min | lbin | 22 |
| | max | lbin | 26.5 |

| | | |
|--|-----|---|
| Max number of wires simultaneously connectable | Nr. | 2 |
|--|-----|---|

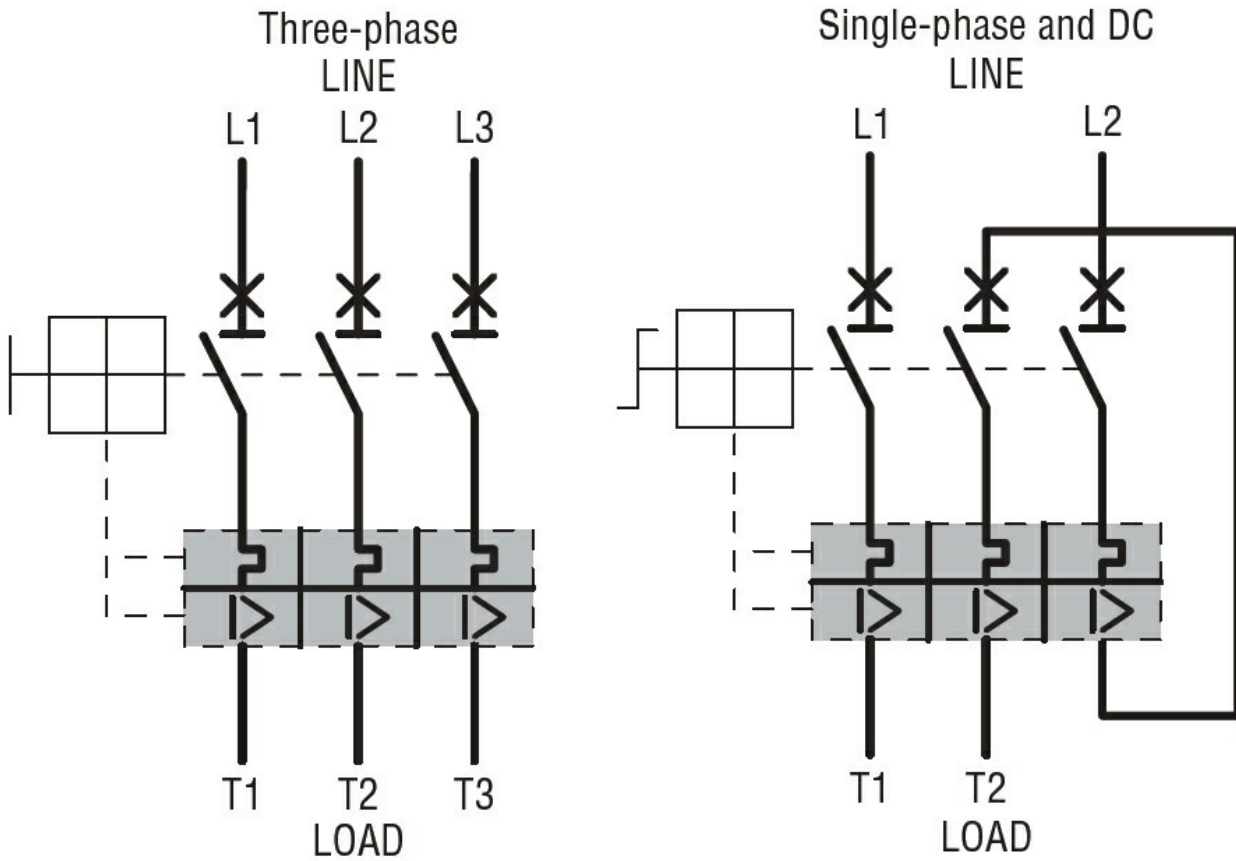
| | | | |
|--|------------------|-----------------|--------------------------|
| Conductor section | | | |
| AWG/Kcmil | min | | 16 |
| | max | | 8 |
| Flexible w/o lug conductor section | | | |
| | min | mm ² | 1 |
| | max | mm ² | 10 |
| Flexible c/w lug conductor section | | | |
| | min | mm ² | 1 |
| | max | mm ² | 10 |
| Flexible with insulated spade lug conductor section | | | |
| | min | mm ² | 1 |
| | max | mm ² | 10 |
| Screwdriver | | | PH2 |
| Power terminal protection according to IEC/EN 60529 | | | IP20 on front |
| Cable stripping length | | | |
| | main circuit | mm | 12 |
| 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 | 30 |
| | at 480V | kA | 30 |
| | at 600V | kA | 30 |
| | protection | | 100A class J |
| Group Motor Installation | | | |
| | at 240V | kA | 30 |
| | at 480V | kA | 30 |
| | at 600V | kA | 30 |
| | protection | | 100A class J |
| Tap Conductor Protection | | | |
| | at 480Y/277V | kA | 50 |
| | at 600Y/347V | kA | 50 |
| Maximum UL/CSA horsepower ratings single-phase | | | |
| | 110V-120V | HP | 3/4 |
| | 220V-240V | HP | 2 |
| Maximum UL/CSA horsepower ratings three-phase, 3-pole | | | |

| | | |
|-----------|----|----|
| 200V-208V | HP | 3 |
| 220V-240V | HP | 3 |
| 440V-480V | HP | 10 |

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 classification

ETIM 8.0

EC000074 -
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circuit-breaker