



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		17...23
Rated current (I_n)	A	23
Magnetic tripping		13 x I_n
Total power dissipation	W	3.41

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

UL508 / UL60947-4-1 Manual Motor Controller - Short circuit current

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

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

UL508 / UL 60947-4-1 Manual Self Protected Combination Motor Controller (Type E) Short-circuit current

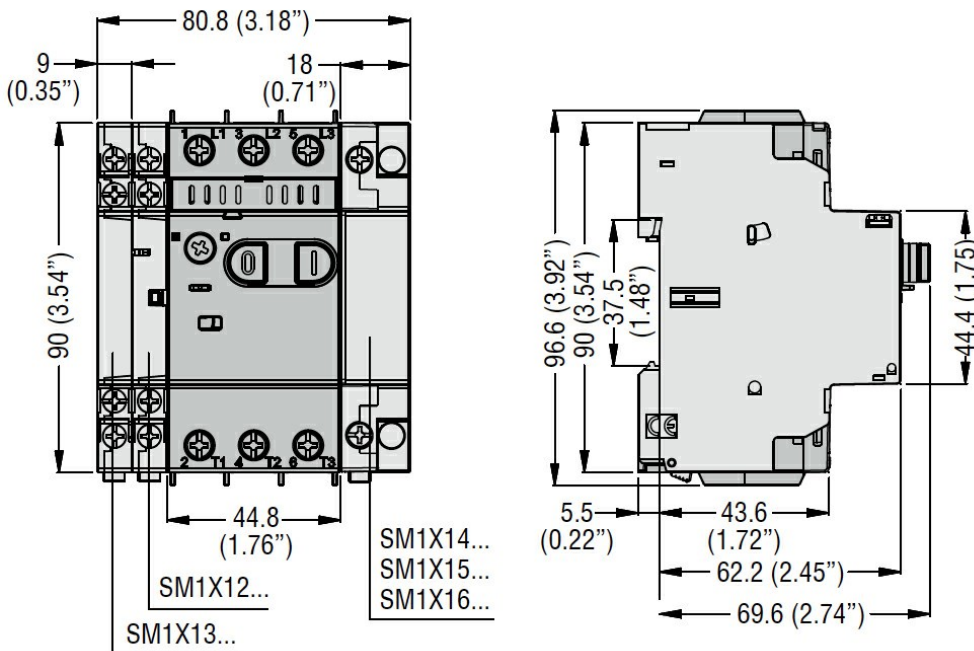
Maximum UL/CSA horsepower ratings single-phase

at 110V-120V hp 1.5
at 220V-240V hp 3

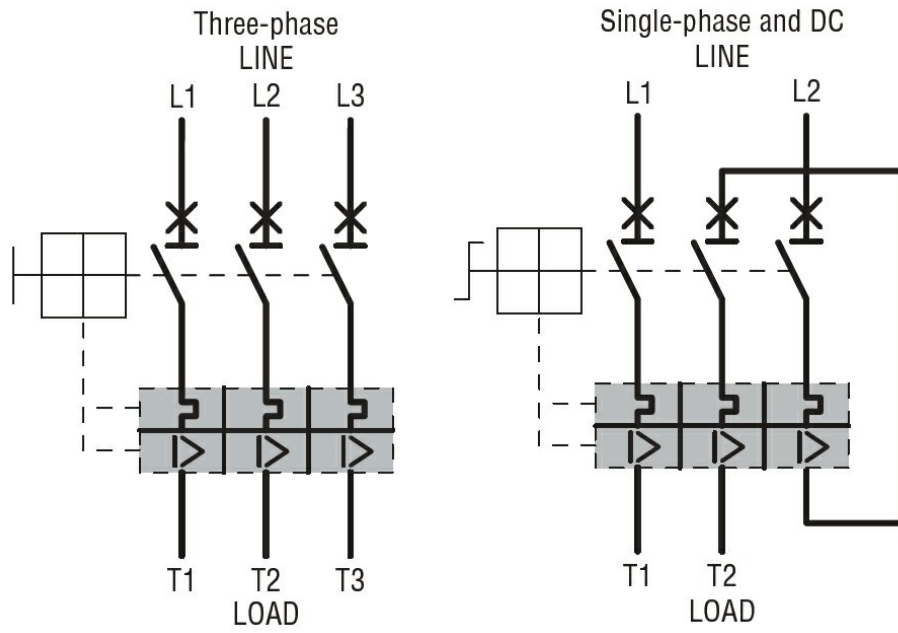
Maximum UL/CSA horsepower ratings three-phase, 3-pole

at 200V-208V hp 5
at 220V-240V hp 7.5
at 440V-480V hp 15
at 550V-600V hp 20

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