



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		13...18
Rated current ( $I_n$ )	A	18
Magnetic tripping		13 x $I_n$
Total power dissipation	W	2.57

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

230V	kA	50
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

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 <sup>2</sup>	1
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Flexible c/w lug conductor section

min	mm <sup>2</sup>	1
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Flexible with insulated spade lug conductor section

min	mm <sup>2</sup>	1
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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

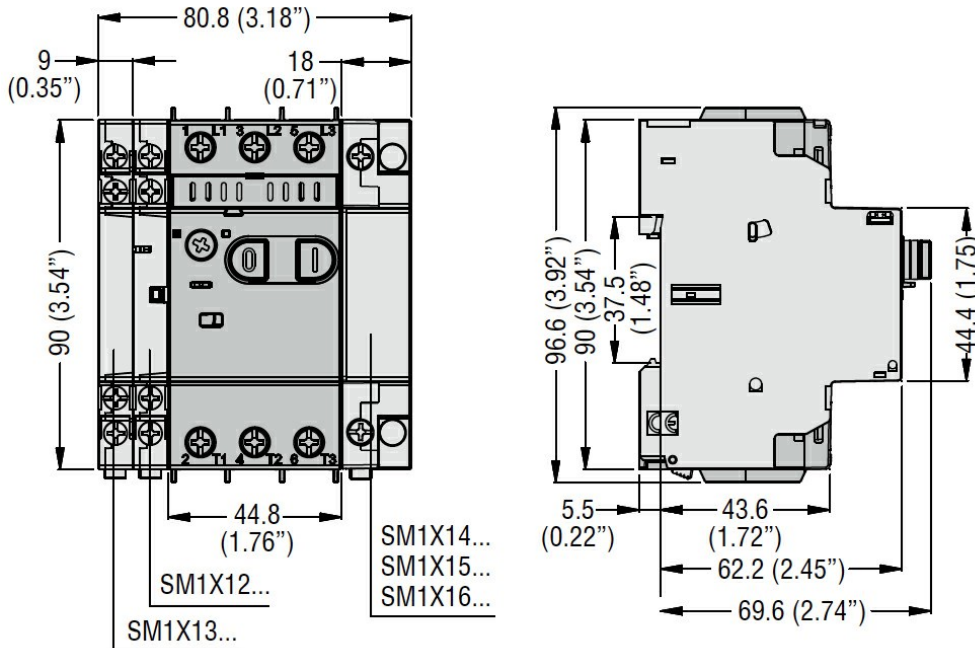
min	°C	-20
max	°C	50

Max altitude

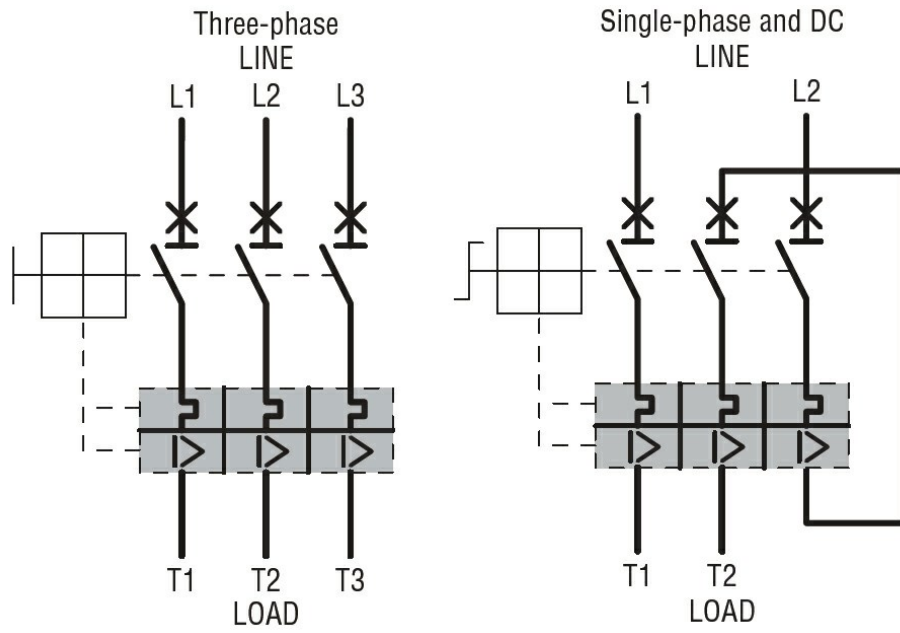
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Operating position	normal	Vertical plan
	allowable	Any
Fixing		Screw / DIN rail 35mm
Weight	g	350
<b>UL technical data</b>		
UL508 / UL60947-4-1 Manual Motor Controller - Short circuit current		
Motor Disconnect	at 240V	kA 30
	at 480V	kA 30
	protection	100A class J
Group Motor Installation	at 240V	kA 30
	at 480V	kA 30
	protection	100A class J
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 cur	50
	UL508 / UL 60947-4-1 Manual Self Protected Combination Motor Controller (Type E) Short-circuit cur	50
	UL508 / UL 60947-4-1 Manual Self Protected Combination Motor Controller (Type E) Short-circuit cur	50
Maximum UL/CSA horsepower ratings single-phase	at 110V-120V	hp 1
	at 220V-240V	hp 3
Maximum UL/CSA horsepower ratings three-phase, 3-pole	at 200V-208V	hp 5
	at 220V-240V	hp 5
	at 440V-480V	hp 10
	at 550V-600V	hp 15

**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**