



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
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Flexible c/w lug conductor section

min	mm ²	1
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Flexible with insulated spade lug conductor section

min	mm ²	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

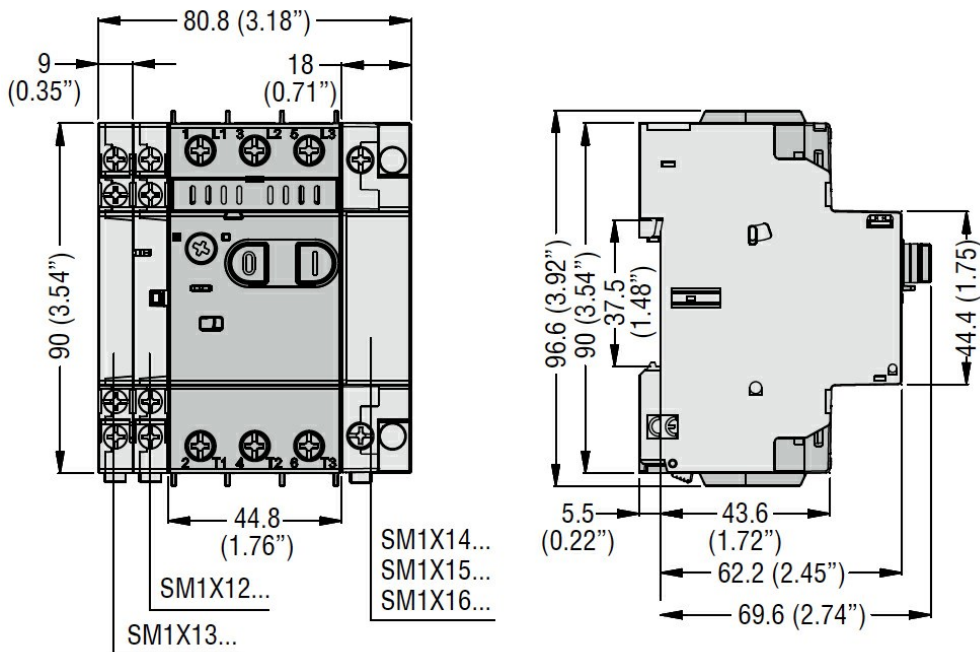
min	°C	-20
max	°C	50

Max altitude

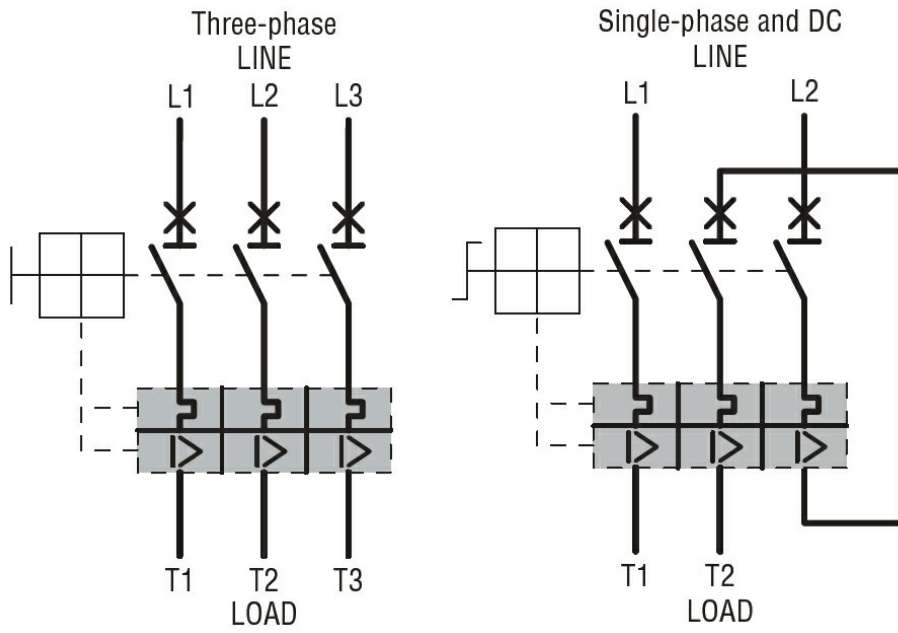
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Operating position	normal allowable	Vertical plan Any
Fixing		Screw / DIN rail 35mm
Weight	g	350
UL technical data		
UL508 / UL60947-4-1 Manual Motor Controller - Short circuit current		
Motor Disconnect	at 240V at 480V at 600V protection	kA kA kA 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 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 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