



Motor protective circuit breaker
SM1R

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 Ui IEC/EN	V	690	
Rated impulse withstand voltage Uimp	kV	6	
Rated frequency	Hz	50/60	
Thermal trip adjustment range		0.25...0.4	
Rated current (In)	A	0.4	
Magnetic tripping		13 x In	
Total power dissipation	W	1.99	
Operational short-circuit current breaking capacity (Ics) at AC			
	230V	kA	100
	400V	kA	100
	440V	kA	100
	500V	kA	100
	690V	kA	100

Maximum short-circuit current breaking capacity (Icu) at AC

	230V	kA	100
	400V	kA	100
	440V	kA	100
	500V	kA	100
	690V	kA	100

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	Ibin	1.8
max	Ibin	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
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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	Vertical plan
allowable	Any
	Screw / DIN rail 35mm

Fixing

Weight

g 320

UL technical data

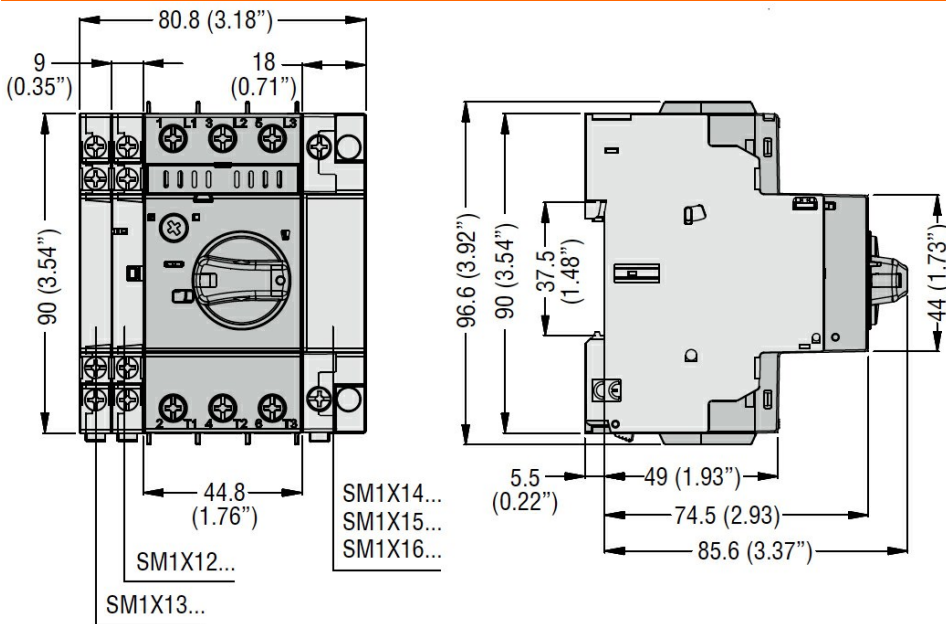
UL508 / UL60947-4-1 Manual Motor Controller - Short circuit current

Motor Disconnect

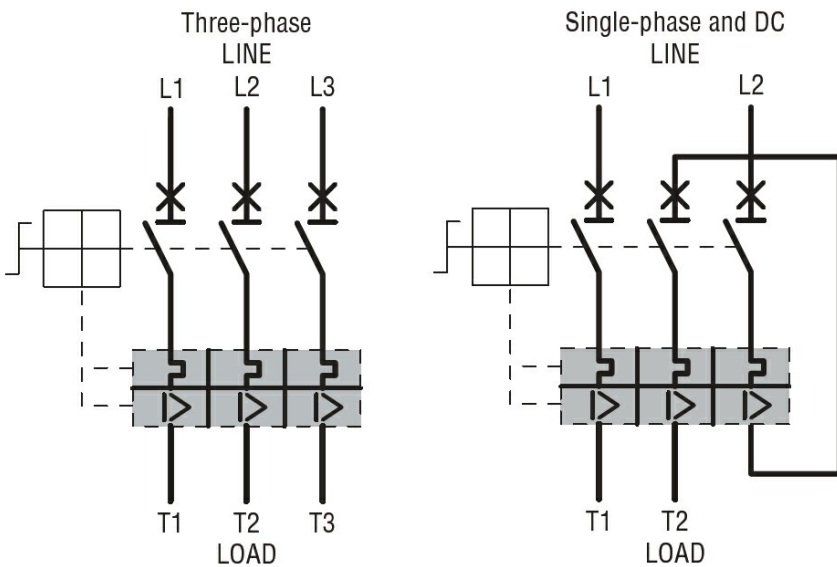
at 480V	kA	50
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Group Motor Installation	at 600V protection	kA	50 Fuse or CB
Tap Conductor Protection	at 480V at 600V protection	kA kA	50 50 Fuse or CB
UL508 / UL 60947-4-1 Manual Self Protected Combination Motor Controller (Type E) Short circuit current	at 480Y/277V at 600Y/347V	kA kA	50 50
Maximum UL/CSA horsepower ratings single-phase	at 110V-120V at 220V-240V	hp hp	- -
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	- - - -

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

Compliance	UL508
	cULus
	EAC
ETIM 6 classification	