

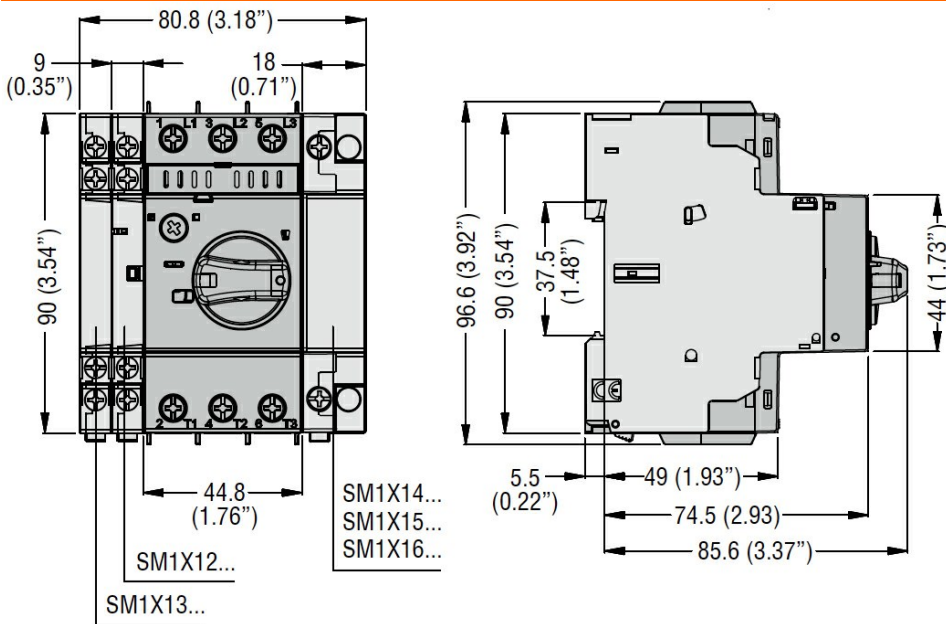


Motor protective circuit breaker  
SM1R

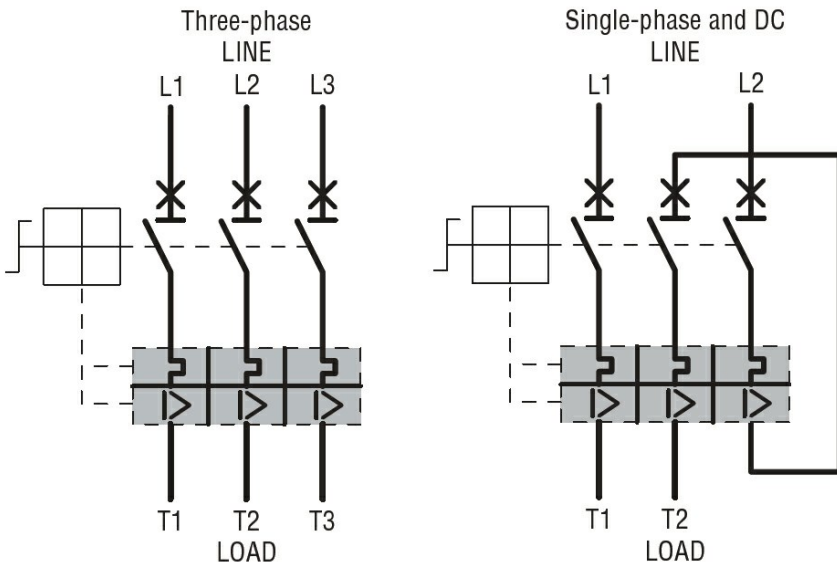
Product designation			
Product type designation			
<b>Electrical features</b>			
Number of poles		nr.	3
Magnetic protection			yes
Thermal protection			yes
Phase failure detection			yes
Rated insulation voltage U <sub>i</sub> IEC/EN		V	690
Rated impulse withstand voltage U <sub>imp</sub>		kV	6
Rated frequency		Hz	50/60
Thermal trip adjustment range			0.16...0.25
Rated current (I <sub>n</sub> )		A	0.25
Magnetic tripping			10 x I <sub>n</sub>
Total power dissipation		W	1.97
Operational short-circuit current breaking capacity (I <sub>cs</sub> ) at AC			
	230V	kA	100
	400V	kA	100
	440V	kA	100
	500V	kA	100
	690V	kA	100
Maximum short-circuit current breaking capacity (I <sub>cu</sub> ) at AC			
	230V	kA	100
	400V	kA	100
	440V	kA	100
	500V	kA	100
	690V	kA	100
Tripping class			10A
IEC Utilization category			A
<b>Operations</b>			
Mechanical life		cycles	100000
Electrical life		cycles	100000
<b>Mechanical features</b>			
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			
Conductor section			
AWG/Kcmil			
	min		16
	max		8
Flexible w/o lug conductor section			
	min	mm <sup>2</sup>	1
Flexible c/w lug conductor section			
	min	mm <sup>2</sup>	1
Flexible with insulated spade lug conductor section			
	min	mm <sup>2</sup>	1
Screwdriver			PH2
Power terminal protection according to IEC/EN 60529			IP20
Cable stripping length			
	main circuit	mm	1
<b>Ambient conditions</b>			
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
Fixing			Screw / DIN rail 35mm
Weight		g	320
<b>UL technical data</b>			
UL508 / UL60947-4-1 Manual Motor Controller - Short circuit current			
Motor Disconnect			
	at 480V	kA	50

Group Motor Installation	at 600V protection	kA	50	Fuse or CB
	at 480V protection	kA	50	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 at 240				
UL508 / UL 60947-4-1 Manual Self Protected Combination Motor Controller (Type E) Short-circuit current at 480				
UL508 / UL 60947-4-1 Manual Self Protected Combination Motor Controller (Type E) Short-circuit current at 600				
Maximum UL/CSA horsepower ratings single-phase				
		at 110V-120V	hp	-
		at 220V-240V	hp	-
Maximum UL/CSA horsepower ratings three-phase, 3-pole				
		at 200V-208V	hp	-
		at 220V-240V	hp	-
		at 440V-480V	hp	-
		at 550V-600V	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

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UL508

Compliance

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cULus  
EAC

ETIM 6 classification