



Product designation

SM1R

Product type designation

Motor protective
circuit breaker

Electrical features

Number of poles	nr.	3
Magnetic protection		Yes
Thermal protection		Yes
Phase failure detection		Yes
Rated insulation voltage U_i	V	690
Rated impulse withstand voltage U_{imp}	kV	6
Rated frequency	Hz	50/60
Thermal trip adjustment range		2,5...4
Rated current (I_n)	A	4
Magnetic tripping		13 x I_n
Operational short-circuit current breaking capacity (I_{cs}) at AC		

230V	kA	100
400V	kA	100
440V	kA	100
500V	kA	100
690V	kA	10

Maximum short-circuit current breaking capacity (I_{cu}) at AC

230V	kA	100
400V	kA	100
440V	kA	100
500V	kA	100
690V	kA	10

Operations

Mechanical life	Cycles	100,000
Electrical life	Cycles	100,000

Mechanical features

Tightening torque for terminals

min	Nm	3
max	Nm	3
min	lbft	2
max	lbft	2

max number of wires simultaneously connectable

nr. 2

Conductor section

AWG

min	16
max	8

Flexible w/o lug conductor section

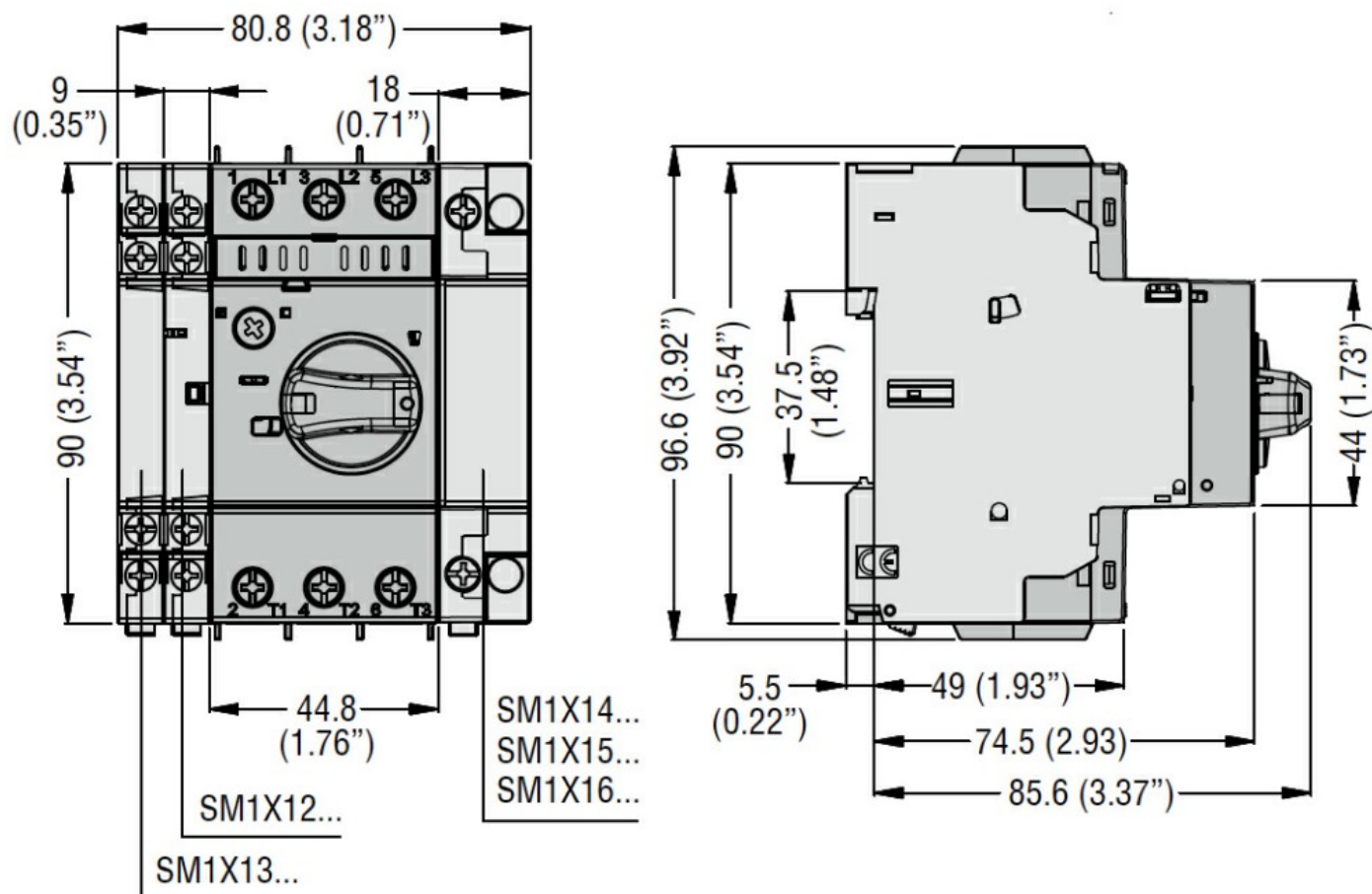
min	mm ²	1
max	mm ²	10

Flexible c/w lug conductor section

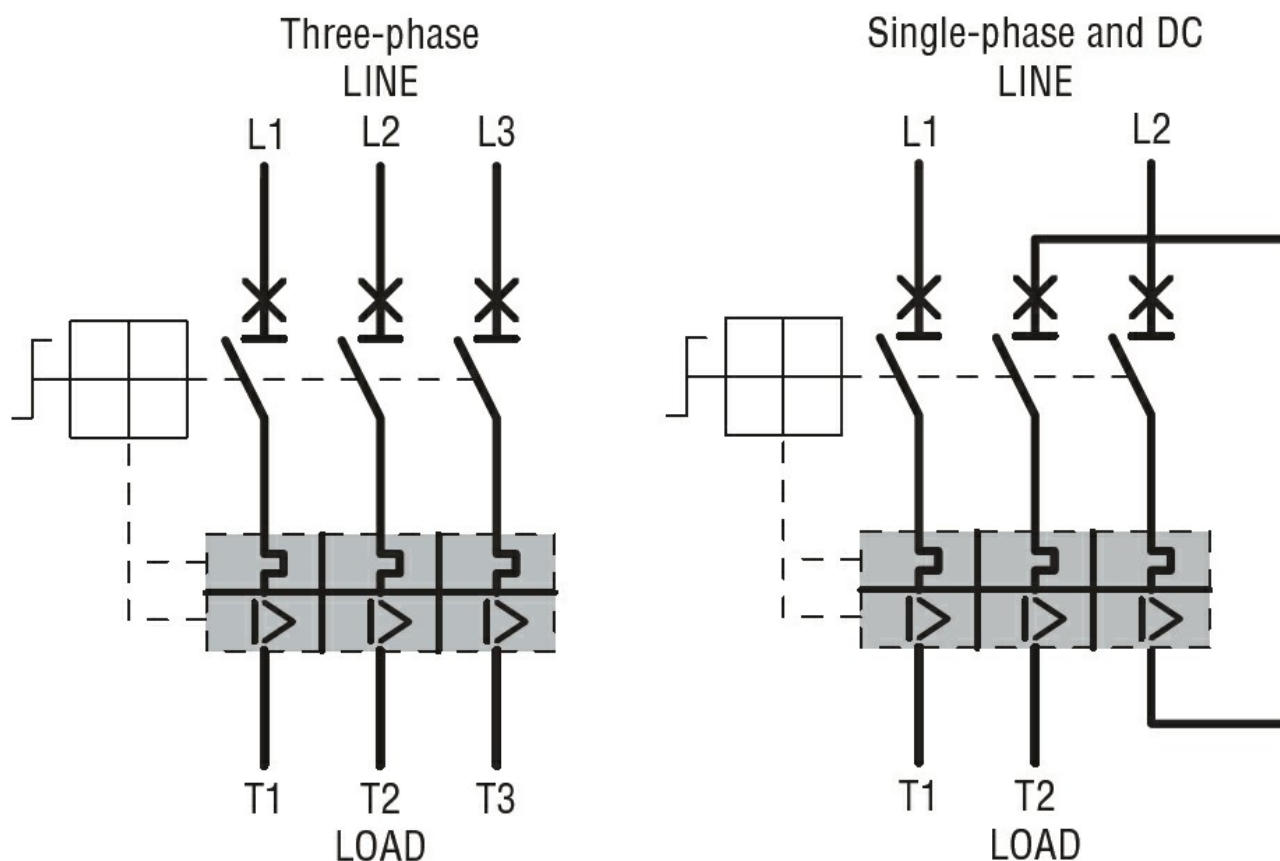
min	mm ²	1
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		max	mm²	10
Flexible with insulated spade lug conductor section		min	mm²	1
		max	mm²	10
Screwdriver				PH2
Power terminal protection according to IEC/EN 60529				IP20
Cable stripping lenght		main circuit	mm	1
Ambient conditions				
Temperature				
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	3,000
Operating position		normal allowable	Su piano verticale Qualsiasi	
Mounting			A vite / profilato omega 35mm	
Weight			g	390
UL technical data				
UL508 / UL60947-4-1 Manual Motor Controller - Short circuit current				
Motor Disconnect		at 480V at 600V protection	kA kA	30 30 Fuse or CB
Group Motor Installation		at 480V at 600V protection	kA kA	30 30 Fuse or CB
Tap Conductor Protection		at 480Y/277V at 600Y/347V	kA kA	30 30
UL508 / UL 60947-4-1 Manual Self Protected Combination Motor Controller (Type E) Short circuit current				
		at 240V	kA	30
		at 480Y/277V	kA	30
		at 600Y/347V	kA	30
Maximum UL/CSA horsepower ratings single-phase		at 110V-120V at 220V-240V	hp hp	1 2
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	3 3 10 -

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