



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

Operational short-circuit current breaking capacity (Ics) at AC

230V	kA	100
400V	kA	100
440V	kA	5
500V	kA	5
690V	kA	2

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

230V	kA	100
400V	kA	100
440V	kA	100
500V	kA	10
690V	kA	4

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

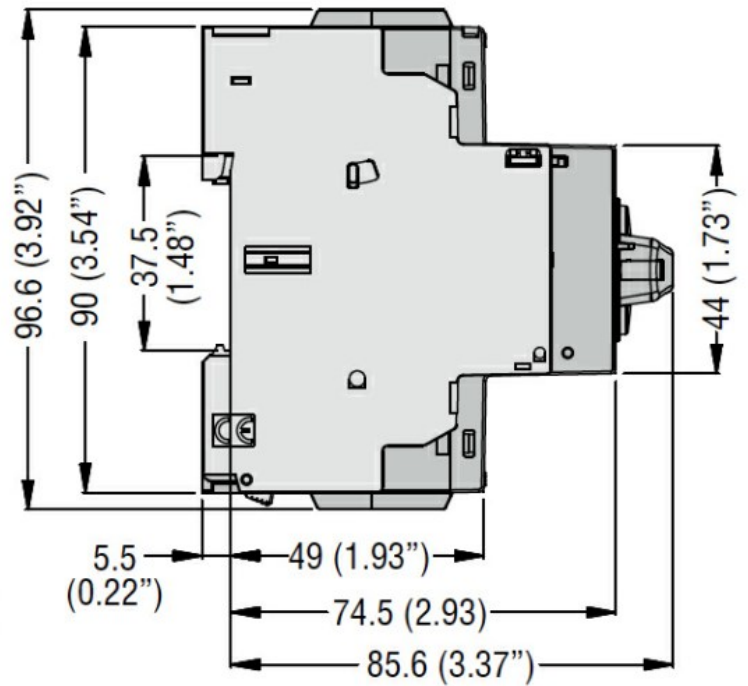
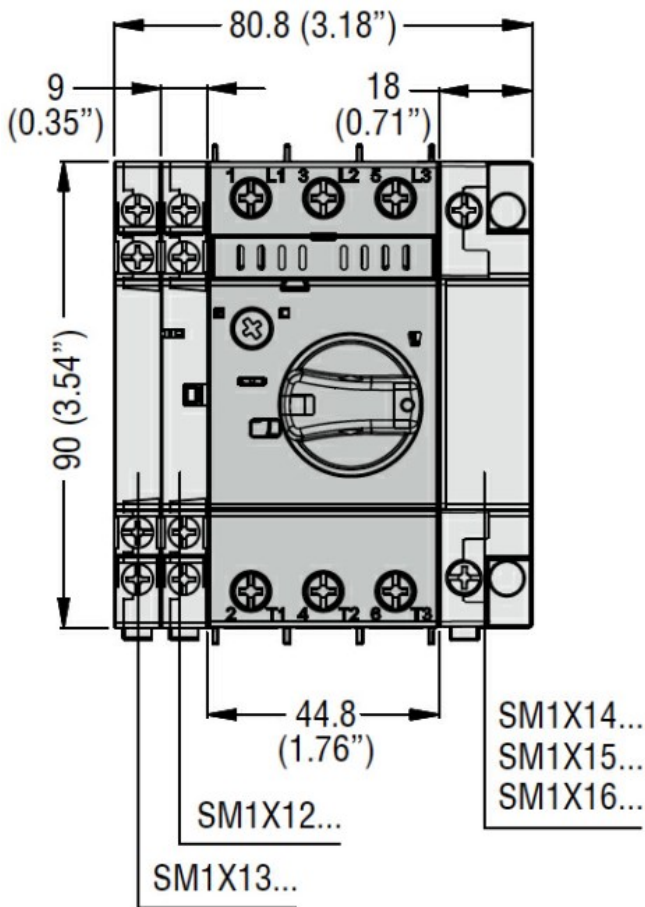
AWG/Kcmil

min	16
max	8

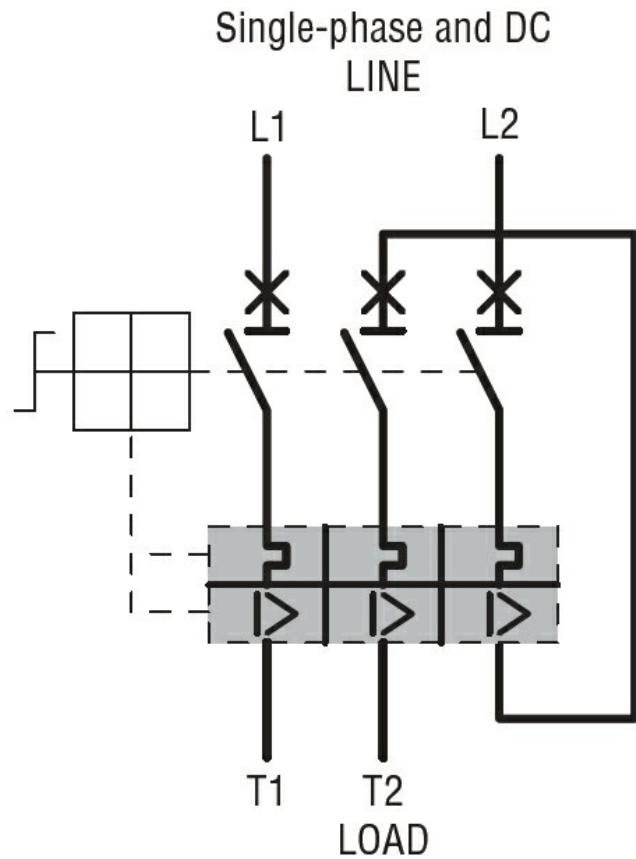
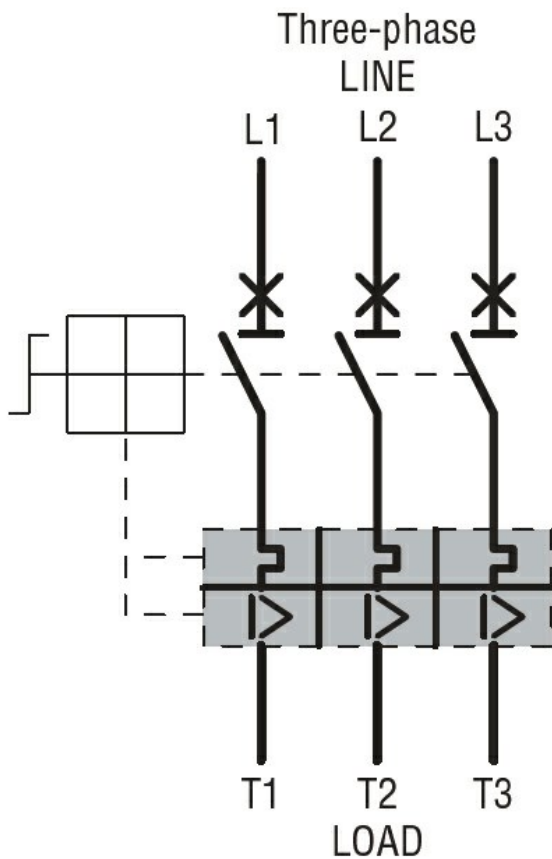
Flexible w/o lug conductor section

min	mm <sup>2</sup>	1
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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 allowable	Vertical plan	Any
Fixing		Screw / DIN rail	35mm
Weight		g	390
<b>UL technical data</b>			
Motor Disconnect	at 480V	kA	30
	at 600V	kA	30
	protection		200A class J
Group Motor Installation	at 480V	kA	30
	at 600V	kA	30
	protection		200A class J
Maximum UL/CSA horsepower ratings single-phase	110V-120V	hp	1
	220V-240V	hp	3
Maximum UL/CSA horsepower ratings three-phase, 3-pole	200V-208V	hp	5
	220V-240V	hp	5
	440V-480V	hp	10
	550V-600V	hp	15
<b>Dimensions</b>			



**Wiring diagrams**



**Certifications and compliance**

Certifications

CSA C22.2 n° 14

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IEC/EN 60947-1

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IEC/EN 60947-2

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IEC/EN 60947-4-1

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UL508

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Compliance

cULus

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EAC