



Product designation

Motor protection  
circuit breaker  
SM1RT

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		0.16...0.25
Rated current ( $I_n$ )	A	0.25
Magnetic tripping		20 x $I_n$
Power dissipation per pole	min	W 0.81
	max	W 1.97

Operational short-circuit current breaking capacity ( $I_{cs}$ ) at AC

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

Maximum short-circuit current breaking capacity ( $I_{cu}$ ) 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	lbin	22
max	lbin	26.5

Max number of wires simultaneously connectable

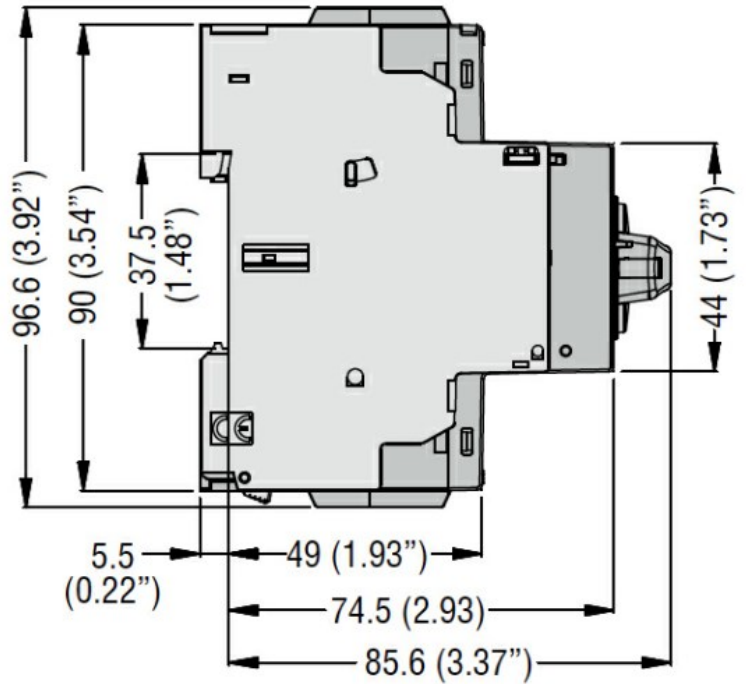
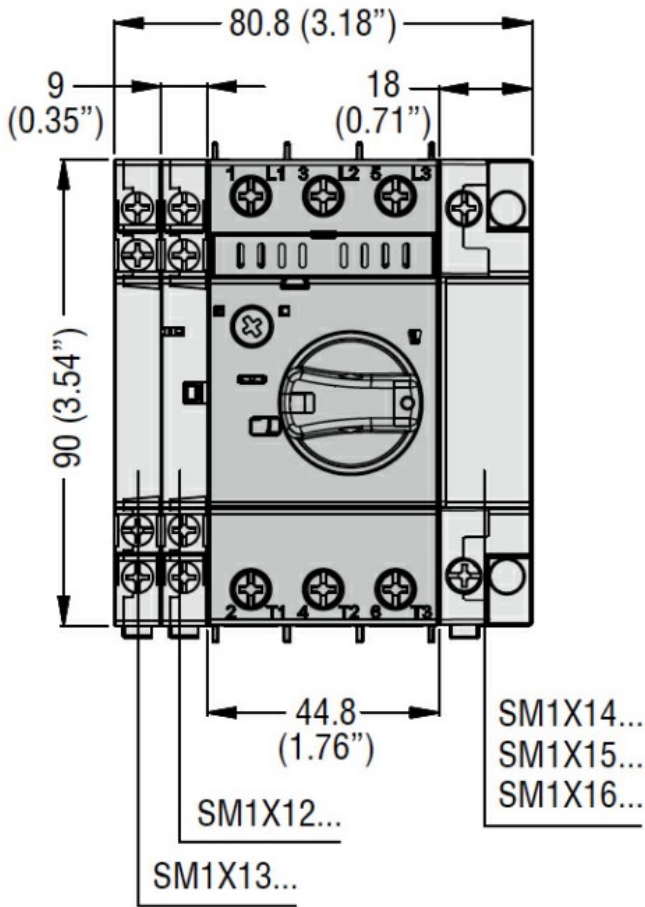
Nr. 2

Conductor section

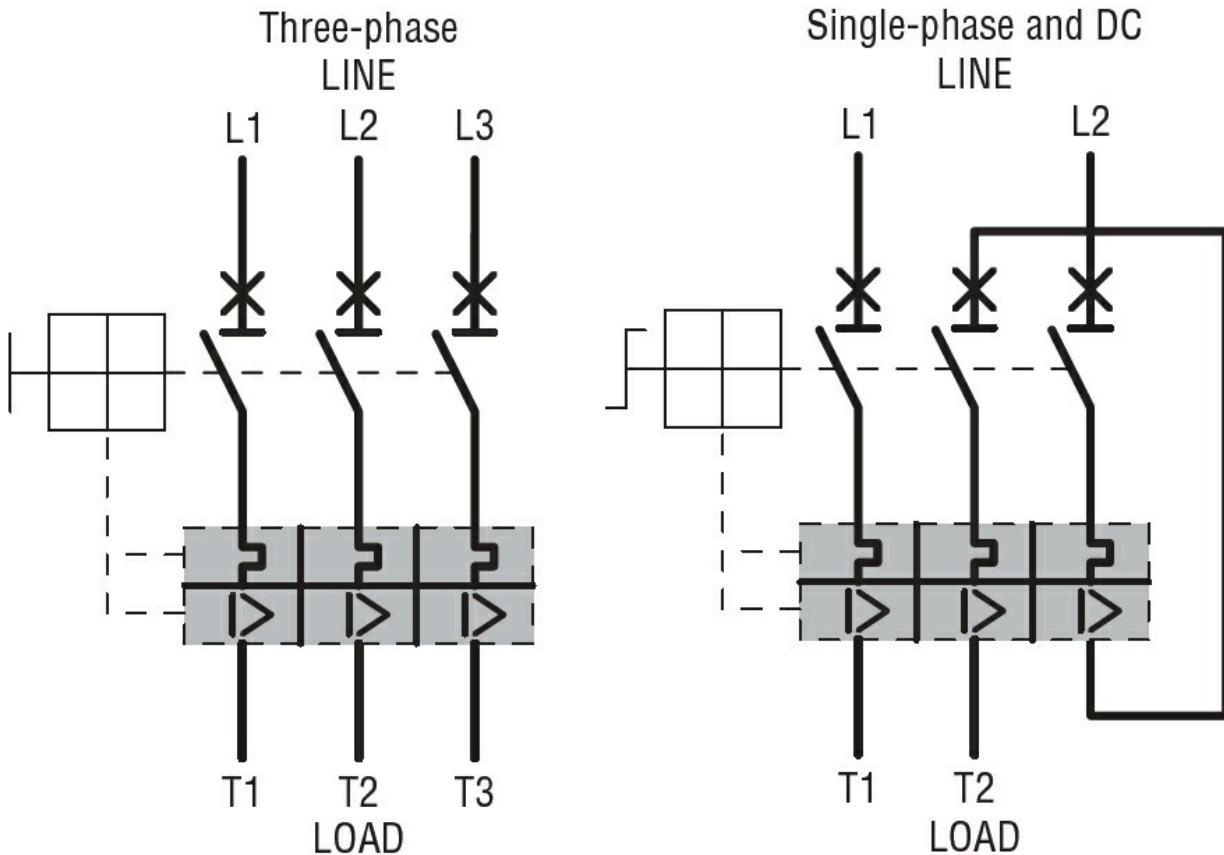
AWG/Kcmil

min	16
max	8

Flexible w/o lug conductor section	min	mm <sup>2</sup>	1
	max	mm <sup>2</sup>	10
Flexible c/w lug conductor section	min	mm <sup>2</sup>	1
	max	mm <sup>2</sup>	10
Flexible with insulated spade lug conductor section	min	mm <sup>2</sup>	1
	max	mm <sup>2</sup>	10
Screwdriver			PH2
Power terminal protection according to IEC/EN 60529			IP20 on front
Cable stripping length	main circuit	mm	12
<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	270
<b>UL technical data</b>			
Motor Disconnect	at 480V protection	kA	65 Fuse or CB
Group Motor Installation	at 480V protection	kA	65 Fuse or CB
Tap Conductor Protection	at 480Y/277V	kA	65
Maximum UL/CSA horsepower ratings single-phase	110V-120V	HP	-
	220V-240V	HP	-
Maximum UL/CSA horsepower ratings three-phase, 3-pole	200V-208V	HP	-
	220V-240V	HP	-
	440V-480V	HP	-
<b>Dimensions</b>			



Wiring diagrams



Certifications and compliance

Certifications

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN/BS 60947-1

IEC/EN/BS 60947-2

IEC/EN/BS 60947-4-1

UL 60947-4-1

Compliance

cULus

EAC

ETIM classification

ETIM 8.0

EC000074 -  
Motor protection  
circuit-breaker