



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		1,6...2,5
Rated current (I_n)	A	3
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
--	-----	---

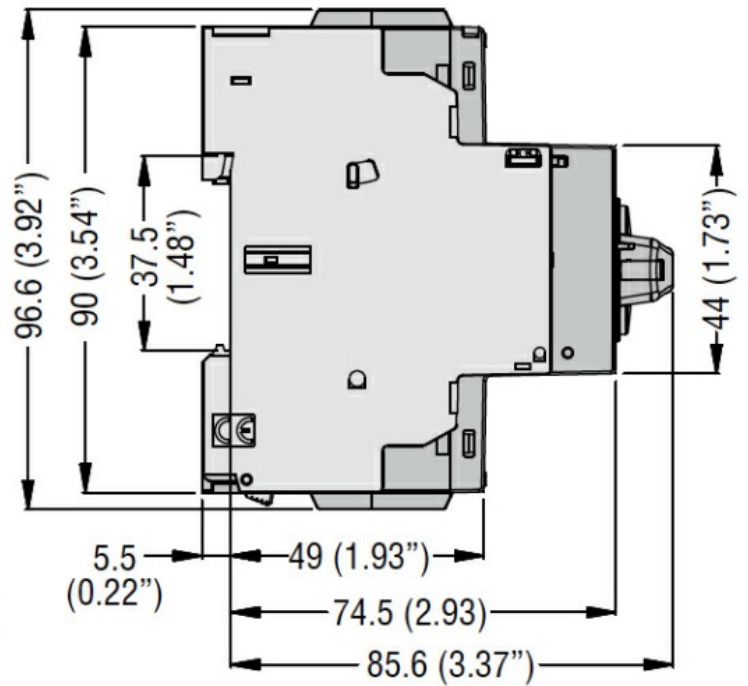
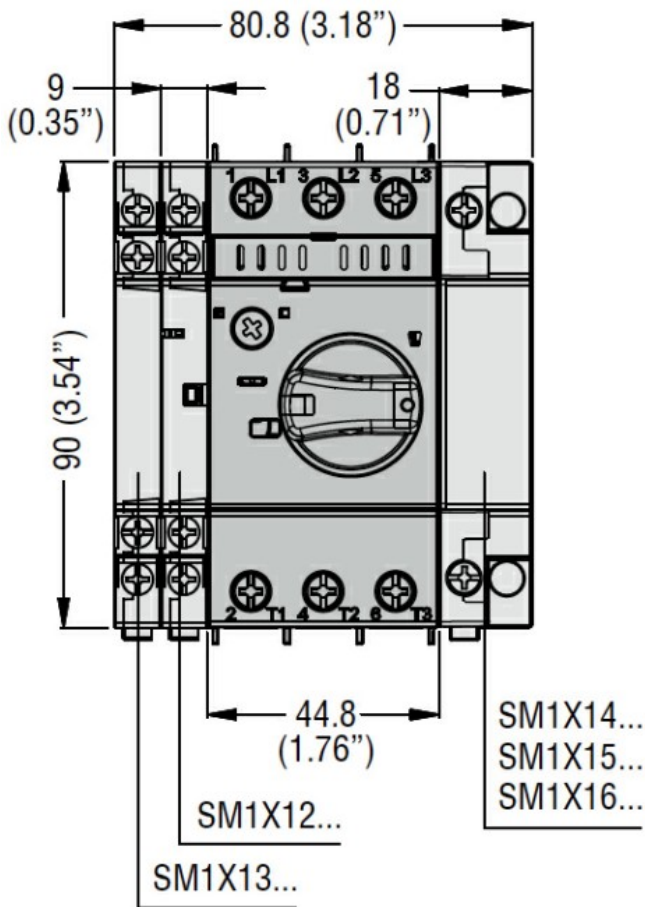
Conductor section	AWG	min	16
		max	8

Flexible w/o lug conductor section	min	mm ²	1
	max	mm ²	10

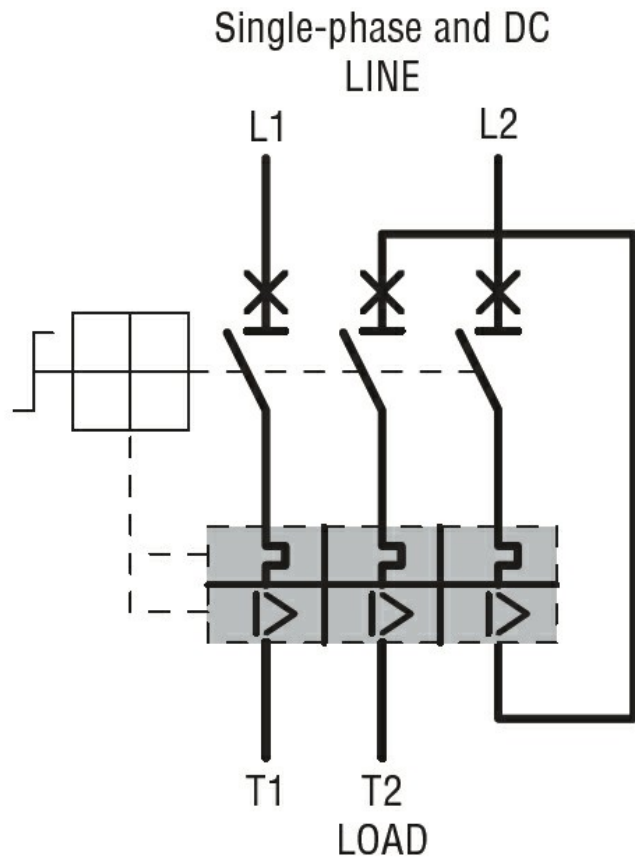
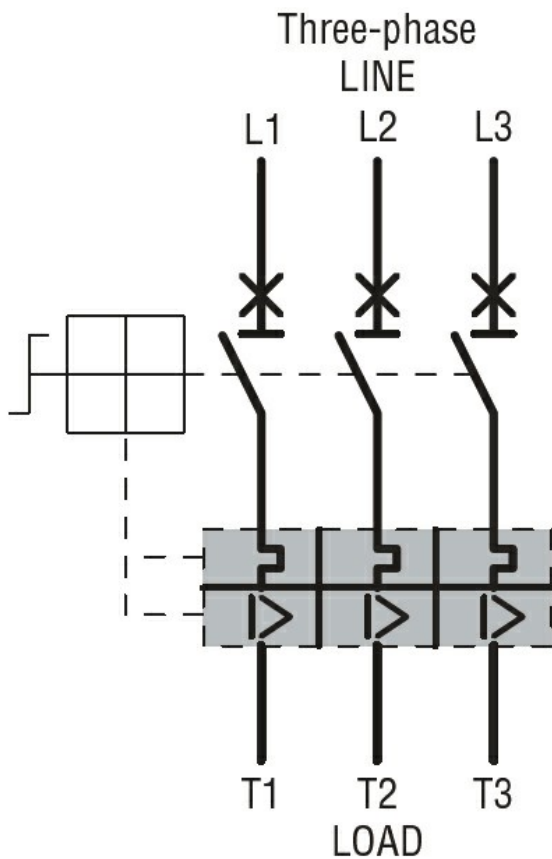
Flexible c/w lug conductor section	min	mm ²	1
------------------------------------	-----	-----------------	---

	max	mm ²	10
Flexible with insulated spade lug conductor section	min	mm ²	1
	max	mm ²	10
Screwdriver			PH2
Power terminal protection according to IEC/EN 60529			IP20
Cable stripping length	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	320
UL technical data			
UL508 / UL60947-4-1 Manual Motor Controller - Short circuit current			
Motor Disconnect			
	at 480V	kA	30
	at 600V	kA	30
	protection		Fuse or CB
Group Motor Installation			
	at 480V	kA	30
	at 600V	kA	30
	protection		Fuse or CB
Tap Conductor Protection			
	at 480Y/277V	kA	30
	at 600Y/347V	kA	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	hp	1
	at 220V-240V	hp	2
Maximum UL/CSA horsepower ratings three-phase, 3-pole			
	at 200V-208V	hp	3
	at 220V-240V	hp	3
	at 440V-480V	hp	10
	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

UL508

Compliance

cULus

EAC

ETIM 6 classification