



Product designation

Motor protection
circuit breaker
SM1R

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		24...32
Rated current (I_n)	A	32
Magnetic tripping		13 x I_n
Power dissipation per pole	min	W 2.49
	max	W 4.42

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

230V	kA	100
400V	kA	25
440V	kA	5
500V	kA	5
690V	kA	2

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

230V	kA	100
400V	kA	50
440V	kA	10
500V	kA	10
690V	kA	4

Tripping class	10A
IEC Utilization category	A

Operations

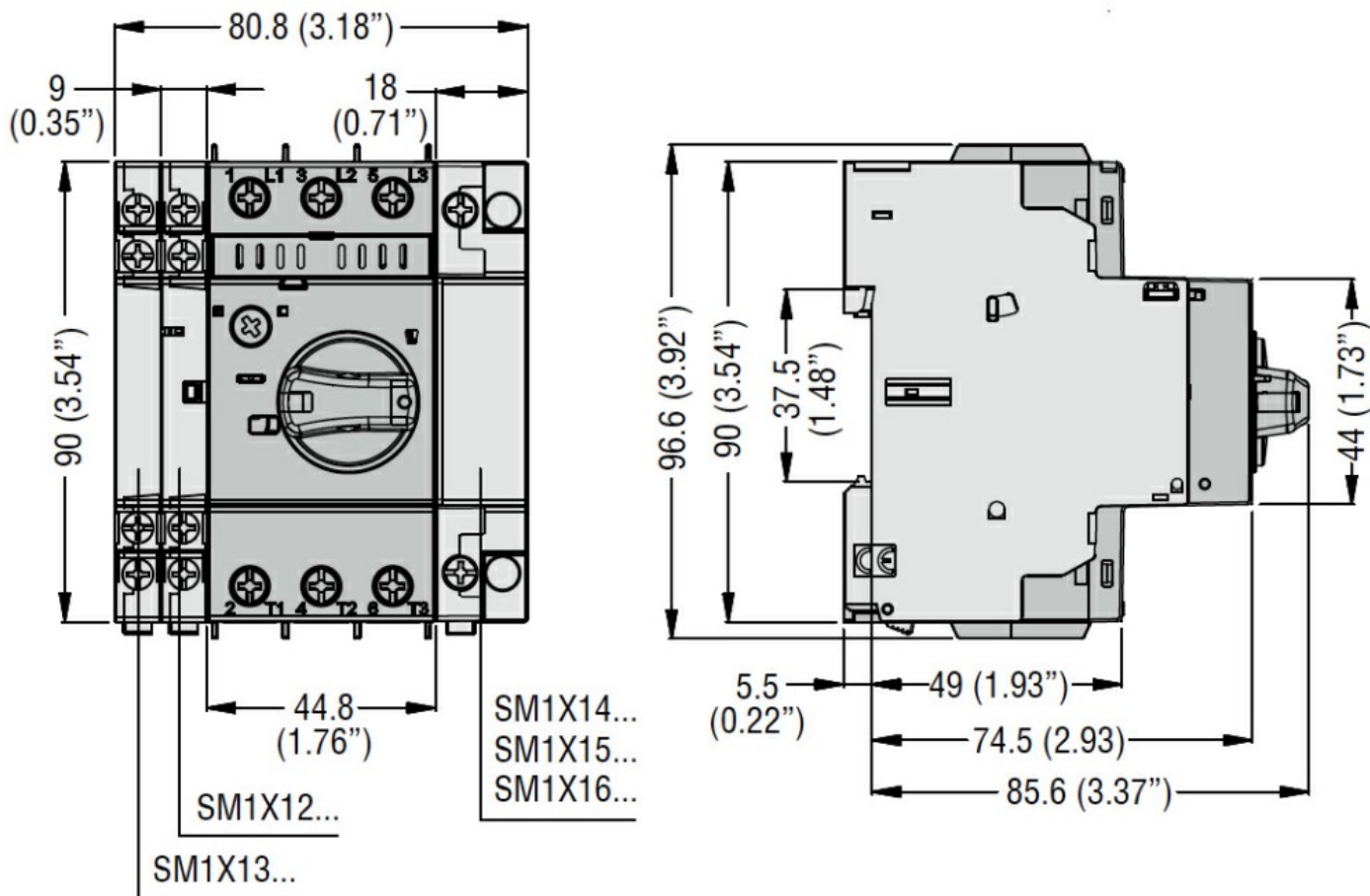
Mechanical life	cycles	100000
Electrical life	cycles	100000

Mechanical features

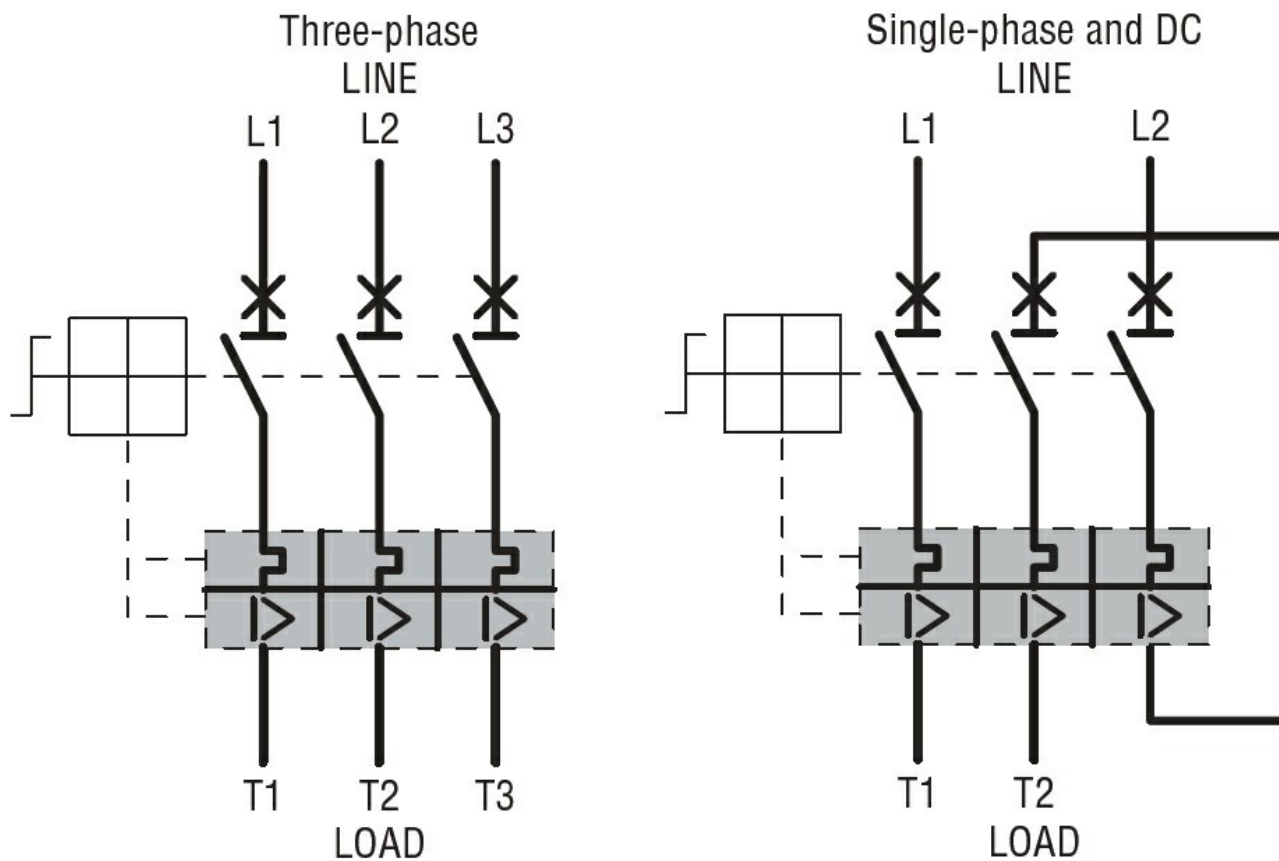
Tightening torque for terminals			
	min	Nm	2.5
	max	Nm	3
	min	lbin	22
	max	lbin	26.5
Max number of wires simultaneously connectable		Nr.	2
Conductor section			
AWG/Kcmil			
	min		16
	max		8

Flexible w/o lug conductor section			
	min	mm 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 on front
Cable stripping lenght			
	main circuit	mm	12
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	3000
Operating position			
	normal allowable		Vertical plan Any
Fixing			Screw / DIN rail 35mm
Weight		g	390
UL technical data			
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	2
	220V-240V	HP	5
Maximum UL/CSA horsepower ratings three-phase, 3-pole			
	200V-208V	HP	10
	220V-240V	HP	10
	440V-480V	HP	20
	550V-600V	HP	30

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 classification

ETIM 8.0

EC000074 -
Motor protection
circuit-breaker