



Motor protection
circuit breaker
SM3R

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	1000
Rated impulse withstand voltage Uimp	kV	6
Rated frequency	Hz	50/60
Thermal trip adjustment range		55...75
Rated current (In)	A	75
Magnetic tripping		13 x In

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

230V	kA	100
400V	kA	38
440V	kA	30
500V	kA	6
690V	kA	4

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

230V	kA	100
400V	kA	50
440V	kA	40
500V	kA	8
690V	kA	5

Tripping class

10A

IEC Utilization category

A

Operations

Mechanical life	cycles	50000
Electrical life	cycles	25000

Mechanical features

Tightening torque for terminals

min	Nm	4.5
max	Nm	4.5
min	lbin	4.4
max	lbin	4.4

Max number of wires simultaneously connectable

Nr. 2

Conductor section

AWG/Kcmil

min		18
max		3

Flexible c/w lug conductor section

min	mm ²	10
max	mm ²	50

Flexible with insulated spade lug conductor section

	min	mm ²	10
	max	mm ²	50
Screwdriver			Allen 4mm
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	+70

Storage temperature

min	°C	-50
max	°C	+80

Compensation temperature

min	°C	-50
max	°C	+40

Max altitude		m	3000
--------------	--	---	------

Operating position

normal allowable	Vertical plan Any
------------------	----------------------

Fixing

Screw / DIN rail
35mm

Weight		g	2200
--------	--	---	------

UL technical data

Motor Disconnect

at 480V	kA	40
at 600V	kA	10
protection		Fuse or CB

Group Motor Installation

at 480V	kA	40
at 600V	kA	10
protection		Fuse or CB

Tap Conductor Protection

at 480Y/277V	kA	40
at 600Y/347V	kA	10

UL508 / UL 60947-4-1 Manual Self Protected Combination Motor Controller (Type E) Short circuit current

at 240V	kA	100
at 480Y/277V	kA	40

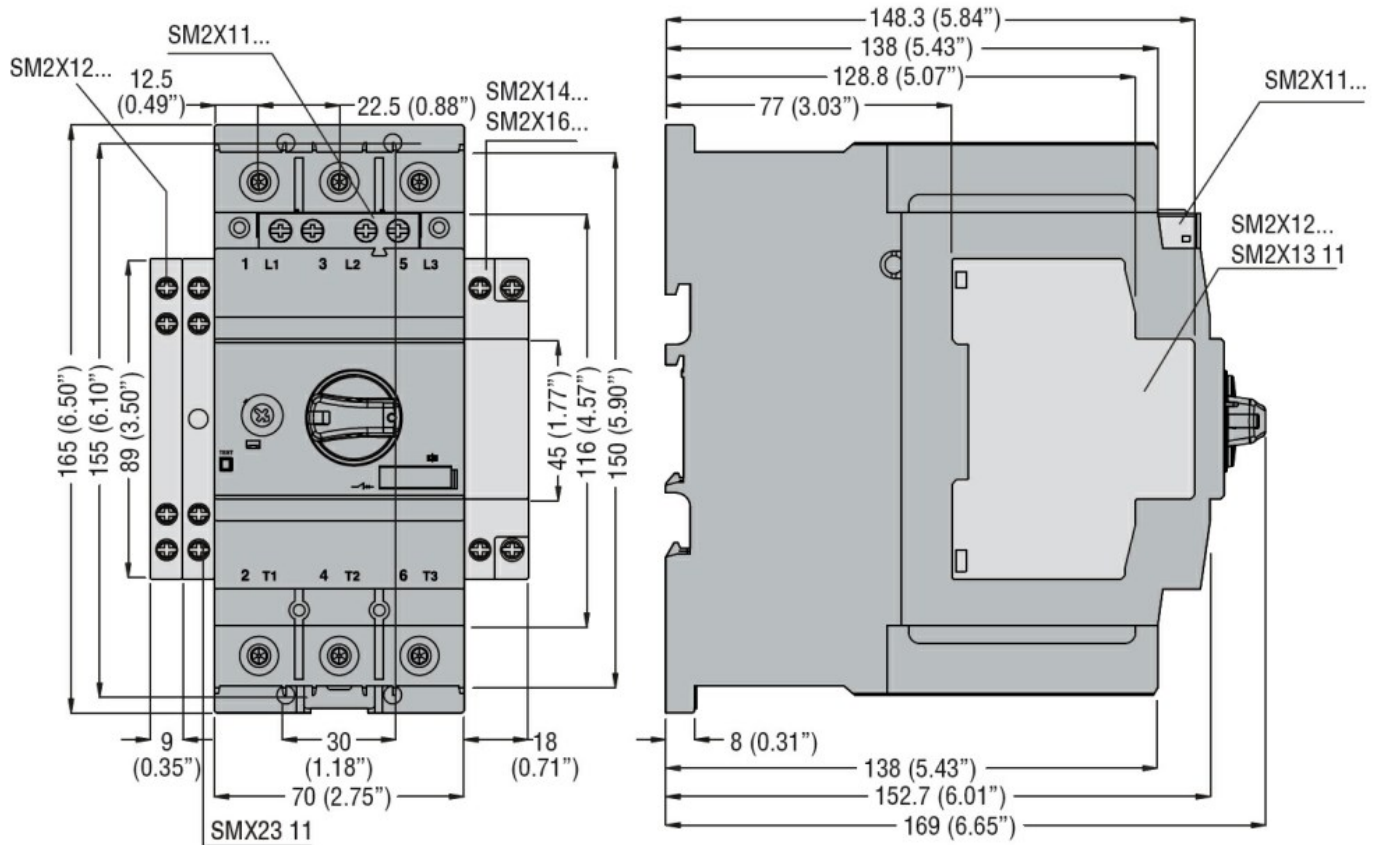
Maximum UL/CSA horsepower ratings single-phase

110V-120V	HP	5
220V-240V	HP	15

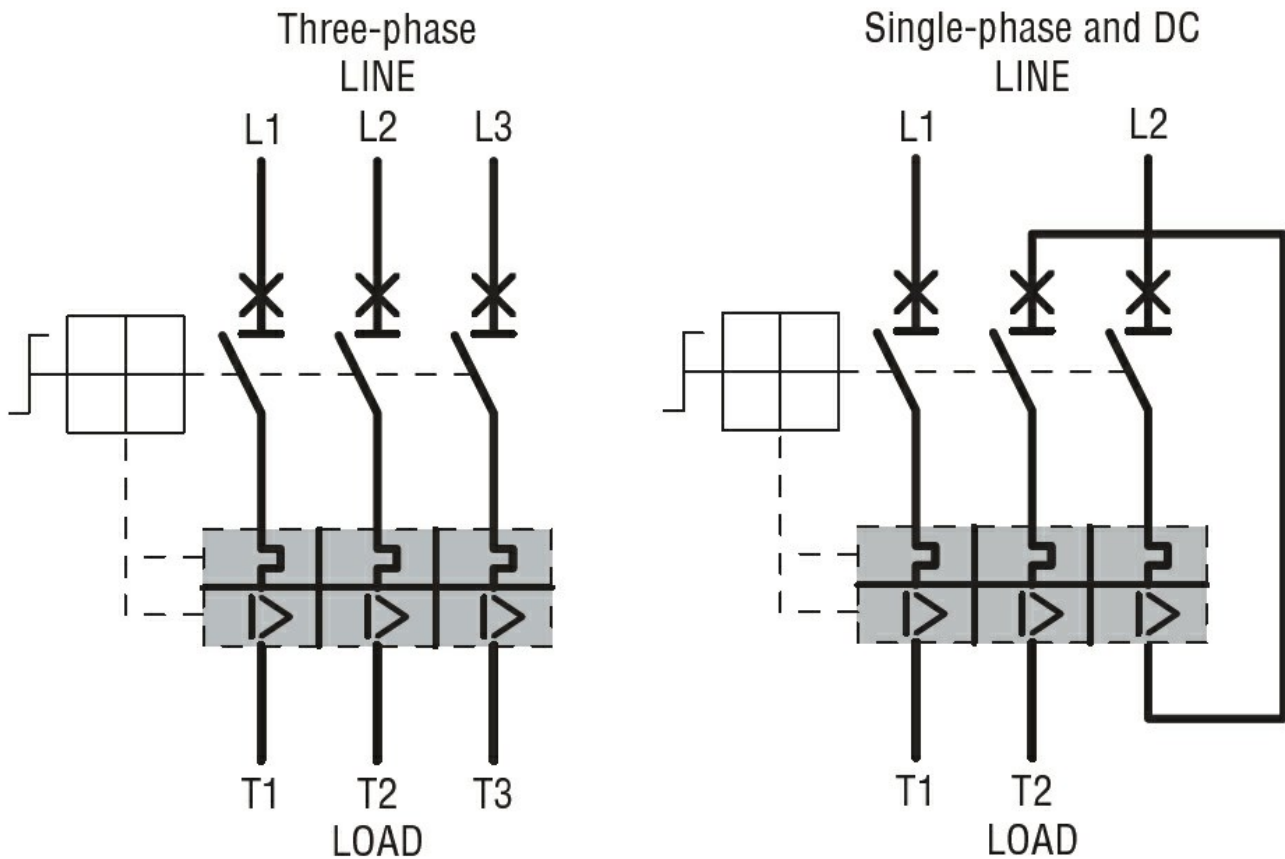
Maximum UL/CSA horsepower ratings three-phase, 3-pole

200V-208V	HP	20
220V-240V	HP	25
440V-480V	HP	50
550V-600V	HP	60

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