



Motor protection  
circuit breaker  
SM1P

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		9...14
Rated current (In)	A	14
Magnetic tripping		13 x In
Total power dissipation	W	2.73

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

230V	kA	100
400V	kA	12.5
440V	kA	5
500V	kA	5
690V	kA	3

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

230V	kA	100
400V	kA	25
440V	kA	10
500V	kA	10
690V	kA	3

Breaking capacity short-circuit current (Icn) at DC

150V	kA	0
300V	kA	0
450V	kA	0

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	1.8
max	lbin	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
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

**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
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Operating position

normal allowable	Vertical plan Any
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Fixing

Screw / DIN rail 35mm
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Weight

g	350
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**UL technical data**

Motor Disconnect

at 240V	kA	30
at 480V	kA	30
at 600V	kA	30
protection		100A class J

Group Motor Installation

at 240V	kA	30
at 480V	kA	30
at 600V	kA	30
protection		100A class J

Tap Conductor Protection

at 480Y/277V	kA	50
at 600Y/347V	kA	50

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

at 240V	kA	50
at 480Y/277V	kA	50
at 600Y/347V	kA	50

Maximum UL/CSA horsepower ratings single-phase

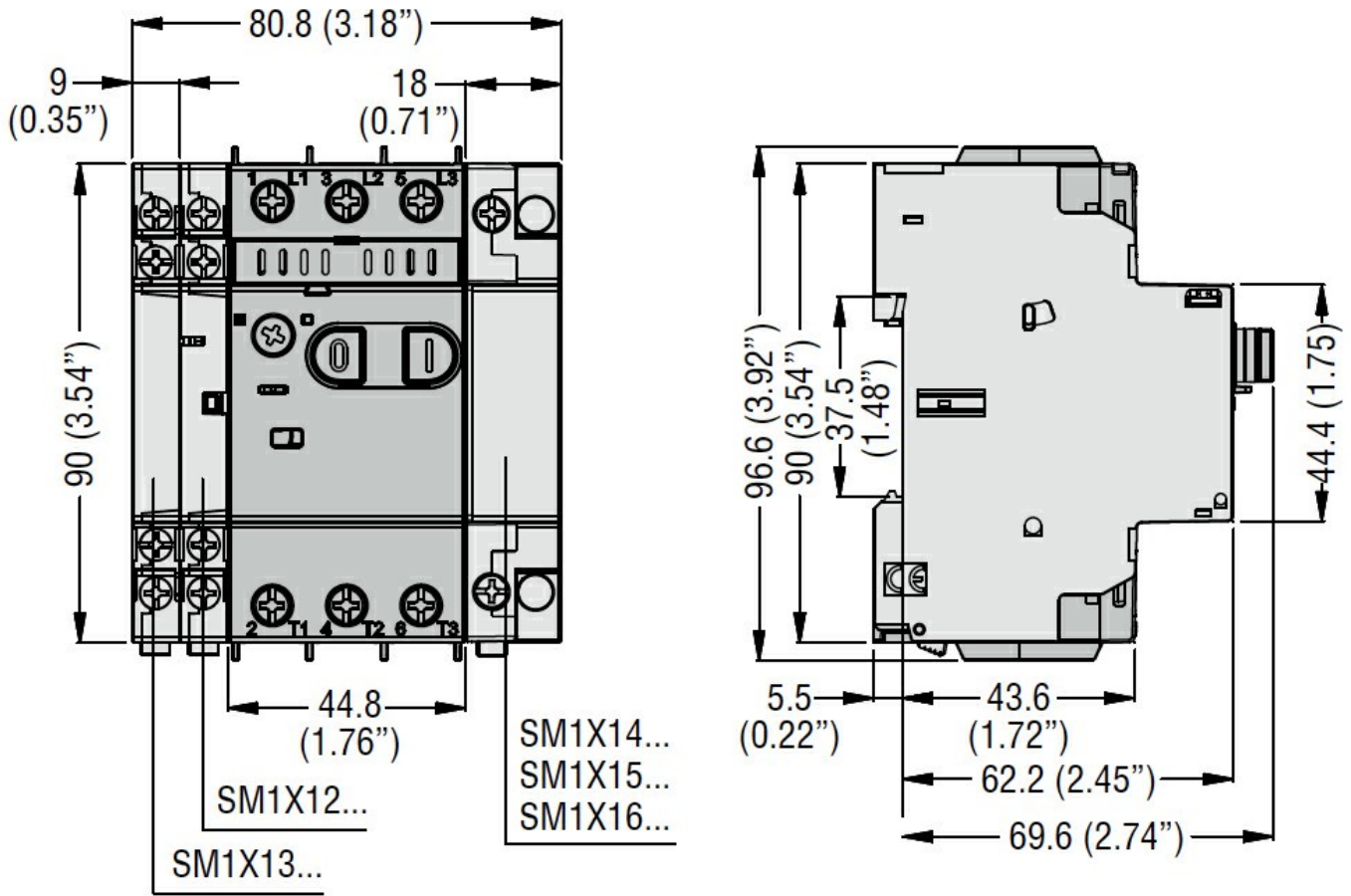
110V-120V	HP	3/4
220V-240V	HP	2

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

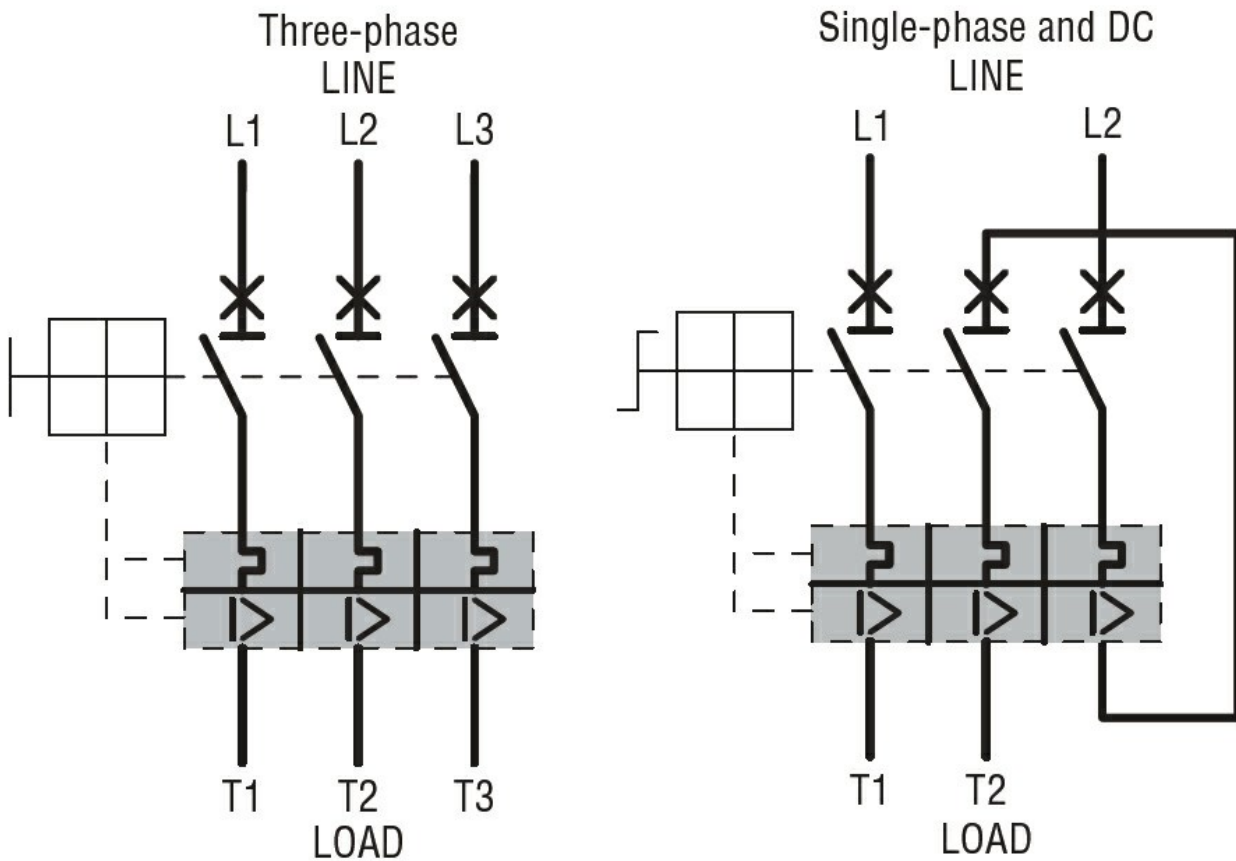
200V-208V	HP	3
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220V-240V	HP	3
440V-480V	HP	10

**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