



Motor protective circuit breaker
SM2R

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 U_i IEC/EN	V	1000	
Rated impulse withstand voltage U_{imp}	kV	6	
Rated frequency	Hz	50/60	
Thermal trip adjustment range		45...63	
Rated current (I_n)	A	63	
Magnetic tripping		13 x I_n	
Operational short-circuit current breaking capacity (I_{cs}) at AC	230V	kA	100
	400V	kA	50
	440V	kA	27
	500V	kA	8
	690V	kA	5

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

230V	kA	100
400V	kA	50
440V	kA	35
500V	kA	10
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	3.3
max	lbin	3.3

Max number of wires simultaneously connectable

nr.

2

Conductor section

AWG/Kcmil

min		18
max		3

Flexible w/o lug conductor section

min	mm ²	0.75
max	mm ²	25

Flexible c/w lug conductor section

min	mm ²	0.75
max	mm ²	25

Flexible with insulated spade lug conductor section

min	mm ²	0.75
max	mm ²	25

Screwdriver

PZ2

Power terminal protection according to IEC/EN 60529

IP20

Cable stripping length

main circuit	mm	1
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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	Vertical plan
allowable	Any

Fixing

Screw / DIN rail 35mm

Weight

g

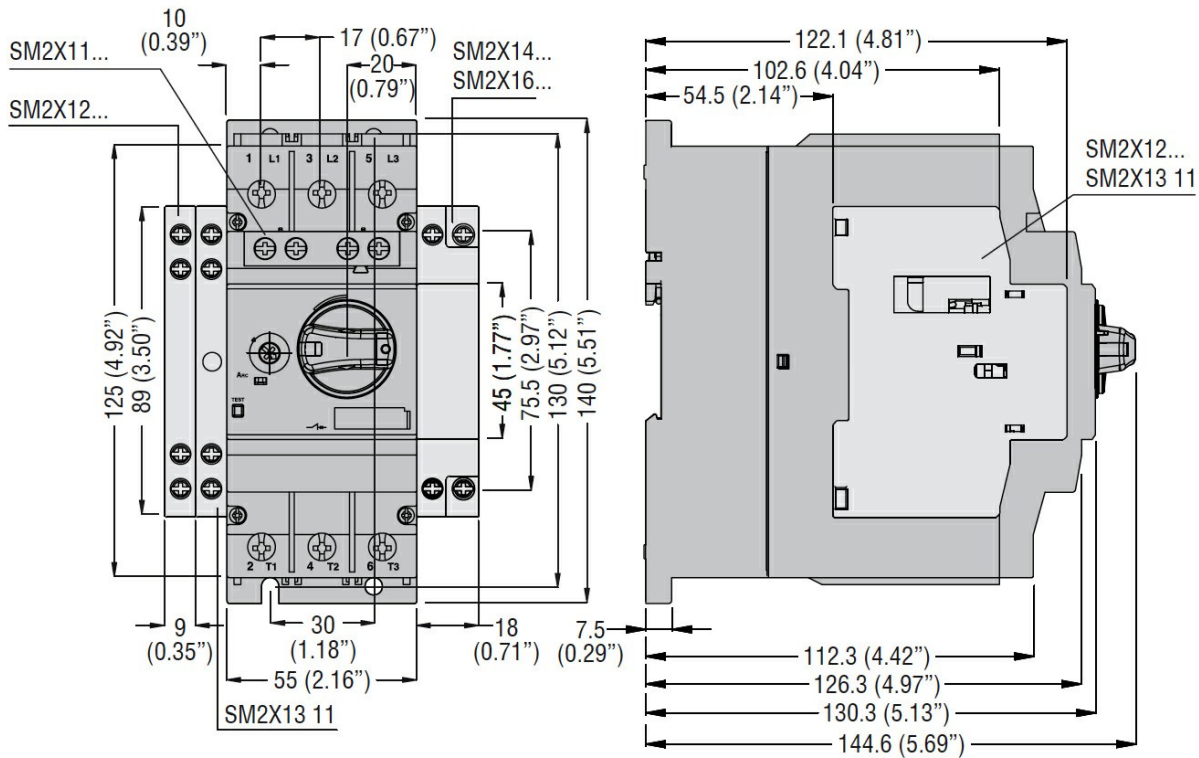
1000

UL technical data

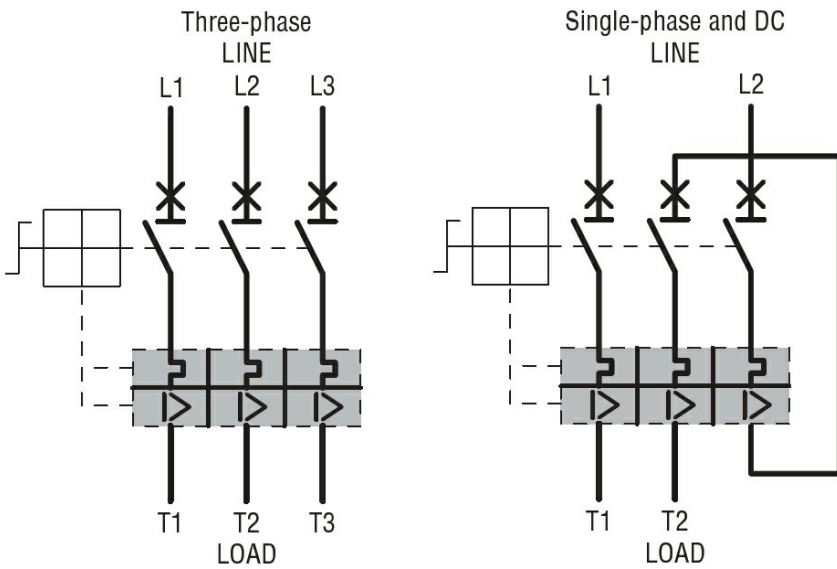
Motor Disconnect

	at 480V protection	kA	50
	at 600V protection	kA	10
Group Motor Installation			Fuse or CB
	at 480V protection	kA	50
	at 600V protection	kA	10
Tap Conductor Protection			Fuse or CB
	at 480Y/277V	kA	50
	at 600Y/347V	kA	10
UL508 / UL 60947-4-1 Manual Self Protected Combination Motor Controller (Type E) Short circuit current			
UL508 / UL 60947-4-1 Manual Self Protected Combination Motor Controller (Type E) Short-circuit current at 240V		kA	10
UL508 / UL 60947-4-1 Manual Self Protected Combination Motor Controller (Type E) Short-circuit current at 480V		kA	10
Maximum UL/CSA horsepower ratings single-phase			
	110V-120V	hp	5
	220V-240V	hp	10
Maximum UL/CSA horsepower ratings three-phase, 3-pole			
	200V-208V	hp	20
	220V-240V	hp	20
	440V-480V	hp	40
	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