



Motor protective 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 U_i IEC/EN		V	1000
Rated impulse withstand voltage U_{imp}		kV	6
Rated frequency		Hz	50/60
Thermal trip adjustment range			70...90
Rated current (I_n)		A	90
Magnetic tripping			13 x I_n
Operational short-circuit current breaking capacity (I_{cs}) at AC			
	230V	kA	100
	400V	kA	38
	440V	kA	30
	500V	kA	6
	690V	kA	4
Maximum short-circuit current breaking capacity (I_{cu}) 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			
Conductor section		nr.	2
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			
Power terminal protection according to IEC/EN 60529			Allen 4mm
Cable stripping length			IP20
	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			
Operating position			m 3000
			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

UL508 / UL 60947-4-1 Manual Self Protected Combination Motor Controller (Type E)	Short-circuit current at 240
UL508 / UL 60947-4-1 Manual Self Protected Combination Motor Controller (Type E)	Short-circuit current at 480

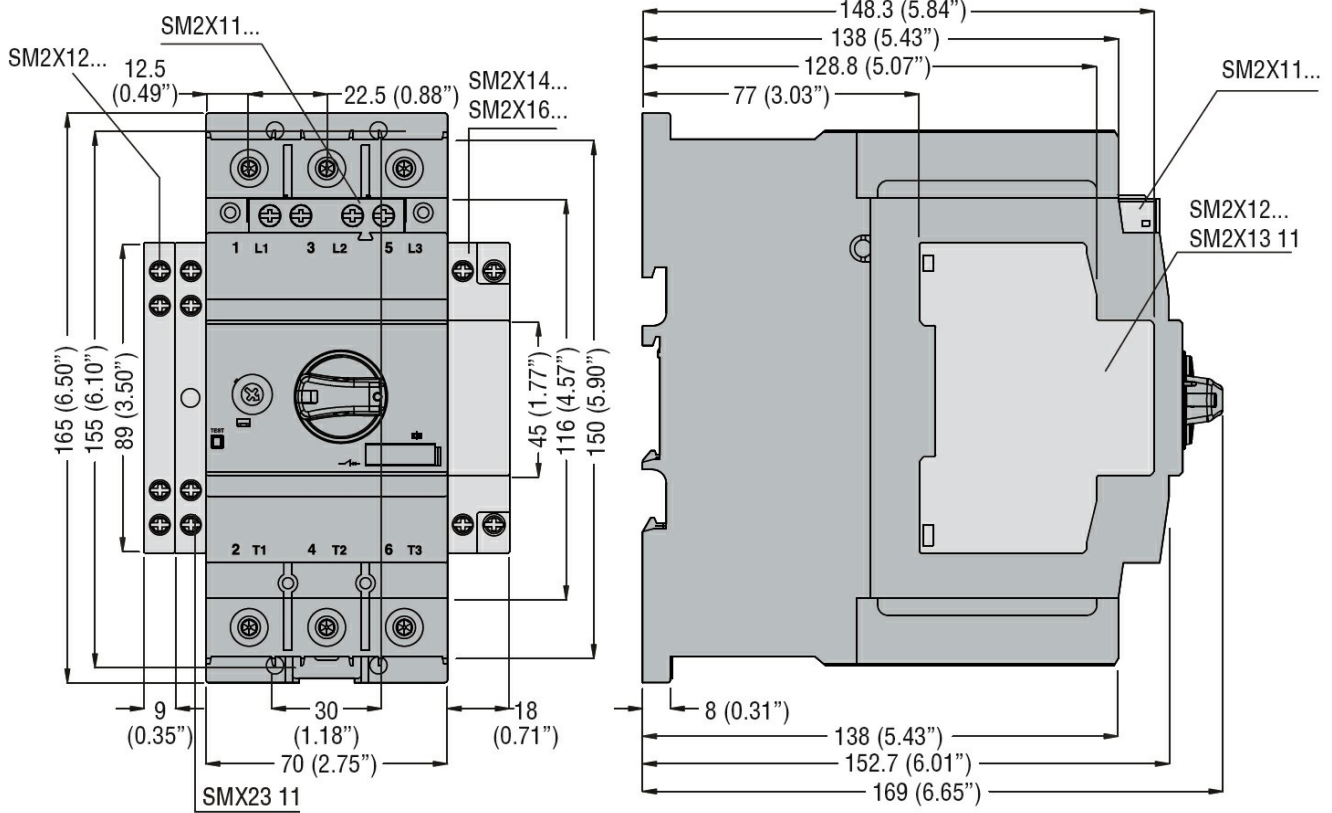
Maximum UL/CSA horsepower ratings single-phase

110V-120V	hp	7½
220V-240V	hp	20

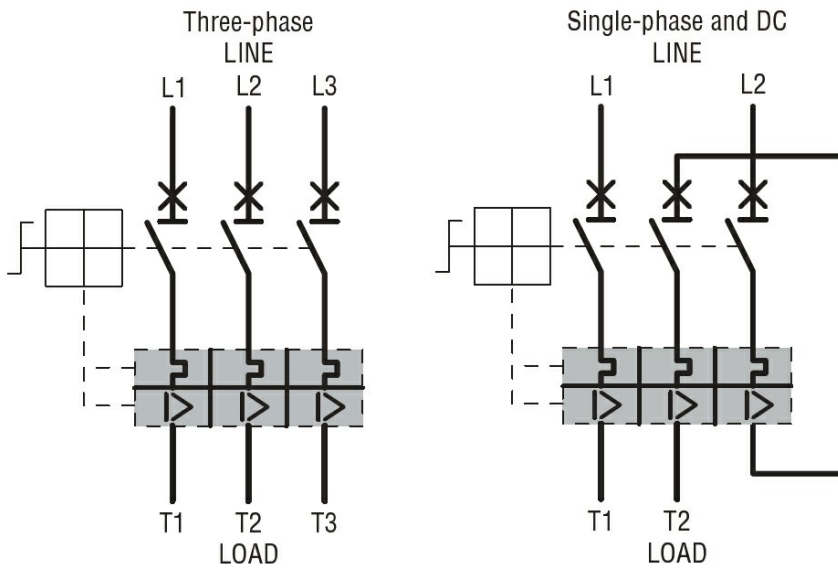
Maximum UL/CSA horsepower ratings three-phase, 3-pole

200V-208V	hp	25
220V-240V	hp	30
440V-480V	hp	60
550V-600V	hp	75

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