



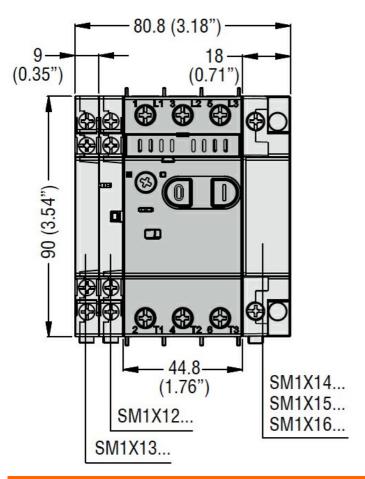
Product designation			Motor protection
· · · · · · · · · · · · · · · · · · ·			circuit breaker
Product type designation			SM1P
Electrical features			
Number of poles		Nr.	3
Magnetic protection			yes
Thermal protection			yes
Phase failure detection			yes
Rated insulation voltage Ui IEC/EN		V	690
Rated impulse withstand voltage Uimp		kV	6
Rated frequency		Hz	50/60
Thermal trip adjustment range			1723
Rated current (In)		Α	23
Magnetic tripping			13 x ln
Power dissipation per pole			
	min	W	1.86
	max	W	3.41
Operational short-circuit current breaking capacity (Ics) at AC			
	230V	kA	50
	400V	kA	5
	440V	kA	5
	500V	kA	5
	690V	kA	2
Maximum short-circuit current breaking capacity (Icu) at AC			
	230V	kA	50
	400V	kA	15
	440V	kA	10
	500V	kA	10
	690V	kA	2
Tripping class			10A
IEC Utilization category			Α
Operations			
Mechanical life		cycles	100000
Electrical life		cycles	100000
Mechanical features			
Tightening torque for terminals			
	min	Nm	2.5
	max	Nm	3
	min	Ibin	22
	max	Ibin	26.5
Max number of wires simultaneously connectable		Nr.	2
Conductor section			
AWG/Kcmil			
	min		16
	max		8

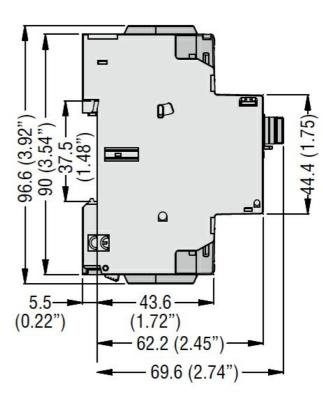


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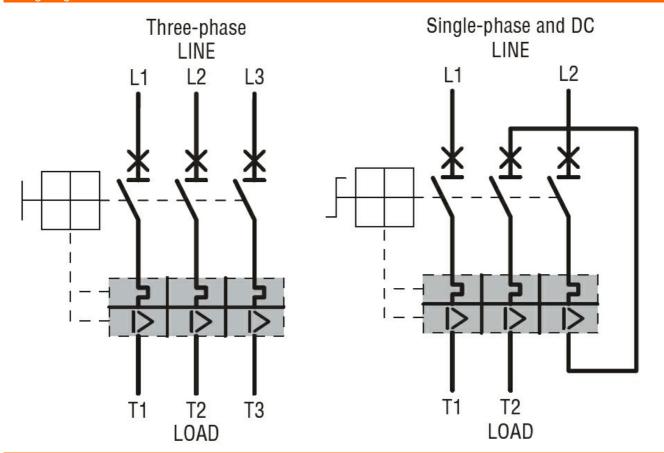
Flexible w/o lug conductor section					
Flexible c/w lug conductor section		Flexible w/o lug conductor section			
Flexible c/w lug conductor section			min	mm²	1
Part			max	mm²	10
Max		Flexible c/w lug conductor section			
Flexible with insulated spade lug conductor section			min		
Max a Max altitude   Max a Max a Max a Max a Max altitude   Max a Max altitude   Max altitude			max	mm²	10
Max   Max		Flexible with insulated spade lug conductor section			
PH2   Power terminal protection according to IEC/EN 60529			min		
Power terminal protection according to IEC/EN 60529	-		max	mm²	
Main circuit	Screwdriver				PH2
Main circuit   mm   12	Power terminal protect	tion according to IEC/EN 60529			IP20 on front
Ambient conditions   Temperature   Coperating temperature   Coperating temperature   Coperating temperature   Coperating temperature   Compensation   C	Cable stripping lenght				
Operating temperature			main circuit	mm	12
Operating temperature	Ambient conditions				
Min   C   -20 max   C   +60	Temperature				
Name		Operating temperature			
Storage temperature   min			min	°C	-20
Max   C   +50   max   C   +80		. <u></u>	max	°C	+60
Max   C   +50   max   C   +80		Storage temperature			
Compensation temperature			min	°C	-50
Max attitude         min max attitude         °C +50 mmax         +50 mmax         3000 mmax         Max attitude         m 3000 mmax         3000 mmax         Max attitude         m 3000 mmax         More max at 200 mmax         Max at 200 mmax <td></td> <td></td> <td>max</td> <td>°C</td> <td>+80</td>			max	°C	+80
Max altitude         max         °C         +50           Operating position         normal allowable         Vertical plan Any           Fixing         Screw / DIN rail 35mm           Weight         g         350           UL technical data         VkA         5 at 240V kA         5 at 480V kA         5 protection           Motor Disconnect         at 240V kA         5 protection         Fuse or CB           Group Motor Installation         at 240V kA         5 protection         5 protection           Tap Conductor Protection         at 480Y/277V kA         5 protection         Fuse or CB           Tap Conductor Protection         at 480Y/277V kA         50         50           Maximum UL/CSA horsepower ratings single-phase         110V-120V hP         1.5         5           Maximum UL/CSA horsepower ratings three-phase, 3-pole         200V-208V hP         5         220V-240V hP         7.5           Maximum UL/CSA horsepower ratings three-phase, 3-pole         220V-240V hP         7.5         440V-480V hP         15		Compensation temperature			
Max attitude         m         3000           Operating position         normal allowable         Vertical plan Any           Fixing         Screw/ DIN rail 35mm           Weight         g         350           UL technical data         UL technical data           Motor Disconnect         at 240V kA 5 at 480V kA 5 protection         5 at 480V kA 5 protection           Group Motor Installation         at 240V kA 5 protection         5 at 480V kA 5 protection           Tap Conductor Protection         at 480Y/277V kA 50         5 at 600Y/347V kA 50           Maximum UL/CSA horsepower ratings single-phase         110V-120V HP 1.5 at 220V-240V HP 3           Maximum UL/CSA horsepower ratings three-phase, 3-pole         200V-208V HP 5 5 at 220V-240V HP 7.5 at 440V-480V HP 7.5 at 440V-480V HP 7.5 at 440V-480V HP 7.5 at 440V-480V HP 7.5 at 220V-240V HP 7.5 at 440V-480V HP 7.5 at 220V-240V HP 7.5 at			min	°C	-20
Normal allowable   Normal allo			max	°C	+50
Normal allowable   Normal allowable   Normal Any	Max altitude			m	3000
Screw / DIN rail 35mm	Operating position				
Screw / DIN rail 35mm			normal		Vertical plan
Nation   N			allowable		Any
Motor Disconnect	Fixing				
Motor Disconnect	Weight			g	350
At 240V   KA   5   At 480V   At 50   At 50				J	
At 480V   KA   5   Fuse or CB	Motor Disconnect				
At 480V   KA   5   Fuse or CB			at 240V	kA	5
Protection   Fuse or CB					
At 240V   KA   5   at 480V   KA   5   protection   Tap Conductor Protection   at 480Y/277V   kA   50   at 600Y/347V   At 600					
at 240V       kA       5         at 480V       kA       5         protection       Fuse or CB         Tap Conductor Protection         at 480Y/277V       kA       50         at 600Y/347V       kA       50         Maximum UL/CSA horsepower ratings single-phase         110V-120V       HP       1.5         220V-240V       HP       3         Maximum UL/CSA horsepower ratings three-phase, 3-pole         200V-208V       HP       5         220V-240V       HP       7.5         440V-480V       HP       15	Group Motor Installation	on	•		
at 480V protection       kA 5 protection       5 Fuse or CB         Tap Conductor Protection         at 480Y/277V kA 50 at 600Y/347V kA 50         Maximum UL/CSA horsepower ratings single-phase         110V-120V HP 1.5 220V-240V HP 3         Maximum UL/CSA horsepower ratings three-phase, 3-pole         200V-208V HP 5 220V-240V HP 7.5 440V-480V HP 15	•		at 240V	kA	5
Protection   Fuse or CB					
Tap Conductor Protection  at 480Y/277V kA 50 at 600Y/347V kA 50  Maximum UL/CSA horsepower ratings single-phase  110V-120V HP 1.5 220V-240V HP 3  Maximum UL/CSA horsepower ratings three-phase, 3-pole  200V-208V HP 5 220V-240V HP 7.5 440V-480V HP 15					
at 480Y/277V at 600Y/347V     kA 50 at 600Y/347V       Maximum UL/CSA horsepower ratings single-phase     110V-120V HP 1.5 220V-240V HP 3       Maximum UL/CSA horsepower ratings three-phase, 3-pole     200V-208V HP 5 220V-240V HP 7.5 440V-480V HP 15	Tap Conductor Protec	tion	•		_
at 600Y/347V     kA     50       Maximum UL/CSA horsepower ratings single-phase     110V-120V     HP     1.5       220V-240V     HP     3       Maximum UL/CSA horsepower ratings three-phase, 3-pole     200V-208V     HP     5       220V-240V     HP     7.5       440V-480V     HP     15	•		at 480Y/277V	kA	50
Maximum UL/CSA horsepower ratings single-phase  110V-120V HP 1.5 220V-240V HP 3  Maximum UL/CSA horsepower ratings three-phase, 3-pole  200V-208V HP 5 220V-240V HP 7.5 440V-480V HP 15					
110V-120V   HP   1.5     220V-240V   HP   3     3	Maximum UL/CSA hor	rsepower ratings single-phase			
220V-240V   HP   3			110V-120V	HP	1.5
Maximum UL/CSA horsepower ratings three-phase, 3-pole  200V-208V HP 5 220V-240V HP 7.5 440V-480V HP 15					
200V-208V HP 5 220V-240V HP 7.5 440V-480V HP 15	Maximum UL/CSA hor	rsepower ratings three-phase. 3-pole			
220V-240V HP 7.5 	2 = 2 3	,	200V-208V	HP	5
440V-480V HP 15					
	Dimensions				







## Wiring diagrams









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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