

## MOTOR PROTECTION CIRCUIT BREAKER, IEC BREAKING CAPACITY ICU 100KA AT 400V, 6.3...10A



Product type designation	Product designation			Motor protection circuit breaker
Number of poles	Product type designation			
Magnetic protection				
Thermal protection	Number of poles		Nr.	3
Phase failure detection         yes           Rated insulation voltage Ui IEC/EN         V 690           Rated insulation voltage Uimp         kV 6           Rated frequency         Hz 50/60           Thermal trip adjustment range         6.310           Rated current (In)         A 10           Magnetic tripping         13 x In           Power dissipation per pole         min W 1.03 max W 2.61           Operational short-circuit current breaking capacity (Ics) at AC         230V kA 100 440V kA 100 440V kA 100 440V kA 120 690V kA 22           Maximum short-circuit current breaking capacity (Icu) at AC         230V kA 100 440V kA 10	Magnetic protection			yes
Rated insulation voltage Ui IEC/EN	Thermal protection			yes
Rated impulse withstand voltage Uimp   Rated frequency   Hz   50/60	Phase failure detection			yes
Rated frequency         Hz         50/60           Thermal trip adjustment range         6.310           Rated current (In)         A         10           Magnetic tripping         3 1x In           Power dissipation per pole         min         W         1.03           max         W         2.61           Operational short-circuit current breaking capacity (Ics) at AC         230V         kA         100           440V         kA         100         440V         kA         2           Maximum short-circuit current breaking capacity (Icu) at AC         230V         kA         100         400V         kA         100         40V         kA         40V         kA         100         40V         kA         40V         4	Rated insulation voltage Ui IEC/EN		V	690
Thermal trip adjustment range   Rated current (In)			kV	6
Rated current (In)	Rated frequency		Hz	50/60
Magnetic tripping	Thermal trip adjustment range			6.310
Power dissipation per pole	Rated current (In)		Α	10
Power dissipation per pole	Magnetic tripping			13 x ln
Max	Power dissipation per pole			
Command Short-circuit current breaking capacity (lcs) at AC		min	W	1.03
230V   KA   100   400V   KA   100   440V   KA   42   500V   KA   42   690V   KA   2   2   2   2   2   2   2   2   2		max	W	2.61
A00V	Operational short-circuit current breaking capacity (Ics) at AC			
A440V		230V	kA	100
S00V   KA   42   690V   KA   2   2   2   2   2   2   2   2   2		400V	kA	100
Maximum short-circuit current breaking capacity (Icu) at AC           230V         kA         100           400V         kA         100           440V         kA         100           500V         kA         42           690V         kA         4           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         2.5           max         lbin         26.5           Max number of wires simultaneously connectable         Nr.         2           Conductor section         AWG/Kcmil         min         16		440V	kA	42
Maximum short-circuit current breaking capacity (Icu) at AC         230V kA 100 400V kA 100 440V kA 100 500V kA 42 690V kA 42 690V kA 4           Fripping class         10A           IEC Utilization category         A           Mechanical life         cycles 100000           Electrical life         cycles 100000           Mechanical features         min Nm 2.5 max Nm 3 min 1bin 22 max 1bin 26.5           Max number of wires simultaneously connectable         Nr. 2           Conductor section         AWG/Kcmil		500V	kA	42
230V		690V	kA	2
A00V   KA   100   440V   KA   100   500V   KA   42   690V   KA   42   690V   KA   4   4   4   4   4   4   4   4   4	Maximum short-circuit current breaking capacity (Icu) at AC			
A440V   KA   100   500V   KA   42   690V   KA   42   690V   KA   4   4   4   4   690V   KA   4   4   4   690V   KA   4   4   690V   KA   690		230V	kA	100
Soov   KA   42   690V   kA   4   4   4   4   4   4   4   4   4		400V	kA	100
Tripping class         10A           IEC Utilization category         A           Operations         Cycles         100000           Mechanical life         cycles         100000           Electrical life         cycles         100000           Mechanical features         Tightening torque for terminals           Imax         Nm         2.5           max         Nm         3           min         lbin         22           Max number of wires simultaneously connectable         Nr.         2           Conductor section         AWG/Kcmil         min         16		440V	kA	100
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         22           max         lbin         26.5           Max number of wires simultaneously connectable         Nr.         2           Conductor section         AWG/Kcmil         min         16		500V	kA	42
IEC Utilization category		690V	kA	4
Operations           Mechanical life         cycles         100000           Electrical life         cycles         100000           Mechanical features         Tightening torque for terminals           min         Nm         2.5           max         Nm         3           min         lbin         22           max         lbin         26.5           Max number of wires simultaneously connectable         Nr.         2           Conductor section         AWG/Kcmil         min         16	Tripping class			10A
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				Α
Electrical life	Operations			
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  Conductor section  AWG/Kcmil  min 16	Mechanical life		cycles	100000
Tightening torque for terminals    min   Nm   2.5   max   Nm   3   min   Ibin   22   max   Ibin   26.5	Electrical life		cycles	100000
min Nm   2.5   max Nm   3   min   lbin   22   max   lbin   26.5	Mechanical features			
Max number of wires simultaneously connectableMr.2Conductor sectionNr.2AWG/Kcmilmin16	Tightening torque for terminals			
Max number of wires simultaneously connectableNr.2Conductor sectionNr.2AWG/Kcmilmin16		min	Nm	2.5
Max number of wires simultaneously connectable  Conductor section  AWG/Kcmil  min 16		max	Nm	3
Max number of wires simultaneously connectable  Conductor section  AWG/Kcmil  min 16		min	lbin	
Conductor section  AWG/Kcmil  min 16		max		
AWG/Kcmil min 16	Max number of wires simultaneously connectable		Nr.	2
min 16				
	AWG/Kcmil			
max 8		min		
		max		8



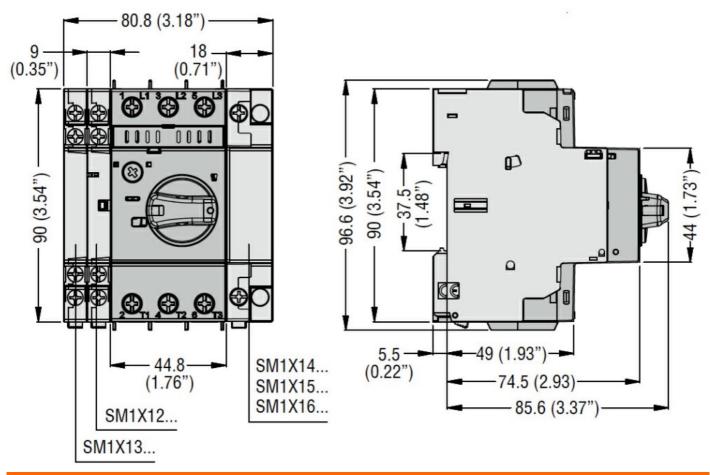


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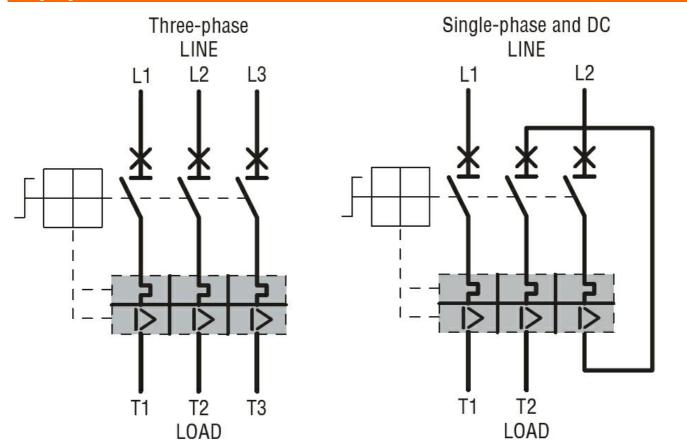
	Flexible w/o lug conductor section		_
	min	mm²	1
	max	mm²	10
	Flexible c/w lug conductor section		
	min	mm²	1
	max	mm²	10
	Flexible with insulated spade lug conductor section		
	min	mm²	1
	max	mm²	10
Screwdriver			PH2
Power terminal protect	tion according to IEC/EN 60529		IP20
Cable stripping lenght			
	main circuit	mm	12
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
Operating position			
	normal		Vertical plan
	allowable		Any
Fixing			Screw / DIN rail
\\\aightaight			35mm
Weight		g	390
UL technical data			
Motor Disconnect	~* 400V	LεA	20
	at 480V at 600V	kA kA	30 30
		KA	
UL technical data	protection		100A class J
OL technical data	Croup Motor Installation of 4001/	LΛ	20
	Group Motor Installation at 480V Group Motor Installation at 600V	kA kA	30 30
	Group Motor Installation protection	KΑ	100A class J
Maximum III /CSA bor	sepower ratings single-phase		1007 Class 1
MAXIMUM OL/COA NOI	sepower ratings single-priase 110V-120V	HP	1/2
	220V-240V	HP	1.5
Maximum III /CCA har	sepower ratings three-phase, 3-pole	ПР	1.0
IVIAXIIIIUIII UL/USA NOI	·	ПD	2
	200V-208V 220V-240V	HP HP	2
	220V-240V 440V-480V	HP HP	3
	550V-600V	HP	5 7.5
Dimensions		1 IF	1.0
Difficialities			



**ENERGY AND AUTOMATION** 



## Wiring diagrams





## SM1R1000

MOTOR PROTECTION CIRCUIT BREAKER, IEC BREAKING CAPACITY ICU 100KA AT 400V,

**ENERGY AND AUTOMATION** 

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