

Contents

An independent manufacturer p. 3
Your energy, our expertise p. 4
Experts in Power Conversion p. 6

Expert Services your partner p. 7
A cutting-edge laboratory p. 5
References list p. 353



Non-fusible disconnect switches

Non-fusible disconnect switches for machine control and power distribution p. 9



SIRCO M
UL 508
p. 13



Photovoltaic range

Photovoltaic non-fusible disconnect switches, fuse bases and fuses p. 53



SIRCO MC PV
UL 508i
p. 57



Fusible disconnect switches

Fusible disconnect switches, fuses and fuse bases p. 109



FUSERBLOC
UL
p. 113



Transfer switches

Manual & non-automatic & automatic transfer switches p. 139



COMO CS
p. 143

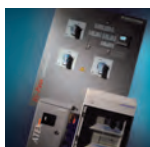


Mounting, cable & accessories

All the components to facilitate the use of your electrical equipment p. 181



Power distribution blocks
p. 183



Integrated products & solutions

Enclosed protection and switching devices p. 207



Enclosed disconnect switches
p. 209



Metering, monitoring & power quality

Measurement and monitoring system, multifunction meters & supervision software p. 217



DIRIS Digiware
p. 235



UPS & Energy Storage solutions

UPS & Energy Storage Solutions p. 319



MODULYS GP-UL
p. 321



SIRCO M
UL 98
p. 21



SIRCO
UL 98
p. 27



SIRCO V
p. 35



SIRCO
UL 98C
p. 45



INOSYS LBS
UL 98B
p. 65



SIRCO PV
UL 98B
p. 77



SIRCO MOT PV
p. 103



RM PV UL
p. 107



RM CC
p. 127



RM-RMS
p. 131



SPECIFIC PRODUCTS
Fuse combination switches
for specific applications.
p. 137



SIRCOVER
UL 98 & 1008
p. 149



ATyS
UL 1008
p. 161



ATyS FT/DT
p. 171



ATyS C66
p. 179



Rigid
copper bars
p. 187



Flexible
copper bars
p. 189



Insulated
copper braids
p. 191



Busbar
supports
p. 193



TE / TR / iTR / TF
current sensors
p. 257



DIGIBOX M
p. 279



DIRIS A
p. 289



DIGIBOX A
p. 293



DIRIS B
p. 281



DATALOGGER
p.313



STATYS Integrable
p. 327



SUNSYS PCS²
p. 329



SUNSYS Xtend ESS
p. 331

AC non-fusible disconnect switches

Selection guide.....p. 11

Non-fusible disconnect switches



SIRCO M UL
508
16 to 100 A
p. 13



SIRCO M
UL 98
30 to 100 A
p. 21



SIRCO
UL 98
100 to 1200 A
p. 27



SIRCO V
UL 98
30 to 400 A
p. 35



SIRCO
UL 98C
400 to 800 A
p. 45

Enclosed solution

SOCOMEC offers a range of pre-equipped enclosure in polyester, polycarbonate, stainless steel or painted steel.





Selection guide

Non-fusible disconnect switches

UL/CSA standards for disconnect switches

UL 98 - Enclosed and dead front switches (equivalent to CSA-C22.2 no 4)

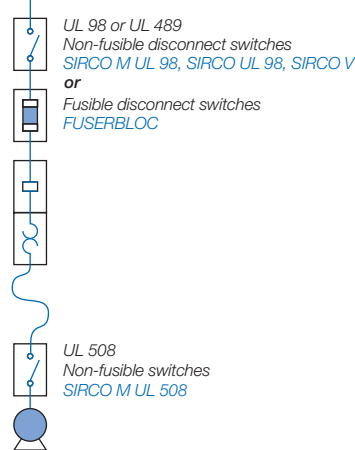
These requirements cover enclosed or dead front switches doesn't need to be capitalized, with or without provision for fuses, at 600 V or less.

These products are used as disconnecting means without restrictions; they are heavy duty products requiring 2 inches (50 mm) minimum of creepage distance, which gives a maximum safety for users and installation. The short circuit withstand of those products goes up to 200 kA.

UL 489 - Molded case switches (equivalent to CSA-C22.2 no 5)

This requirements cover Molded-case Circuit Breaker, Molded case switches and fused Molded-case switches, rated at 600 volts or less and 6 000 amperes or less.

Typical control panel



sirco-ul_022_b_1_cat



sircom_174_a

UL standards for electrical machinery

UL 508 - Industrial Control Equipment (equivalent to CSA-C22.2 no 14)

These requirements cover manual, starter, controllers, and overload don't need to be capitalized.

These products are IEC type products, requiring only a creepage distance between phases of 1/2 inch. UL 508 standard requested only 5 kA or 10 kA as short circuit withstand with fuse protection. Their use as a disconnecting mean is therefore limited to local disconnection of motors. These products can only be used as a disconnect mean when they have been additionally tested "suitable as motor disconnect". This additional testing ensures that the switch as a proper closing capacity on short circuit. UL 508 (switches or Circuit breakers) can not be used as main disconnect of a electrical panel. (i.e. in entrance of control panels).






A manual motor controller marked "Suitable as motor disconnect" shall be installed only on the load side of the branch circuit protective device (UL 508A 30.3.3 and NEC 430.109(6)).

Which application?

Which function?

Which operation handle?

Which type of breaking?

Machine control		Power distribution		
				
SIRCO M UL 508 16 to 100 A	SIRCO M UL 98 30 to 100 A	SIRCO UL 98 100 to 1200 A	SIRCO V 30 to 400 A	SIRCO UL 98C 400 to 800 A

Applications

Main switchboard	•	•	•	•	
Distribution panel	•	•	•	•	
Emergency disconnect	•	•	•	•	
Genset output		•	•	•	
Network coupling		•	•	•	
Local safety disconnect	•	•	•	•	
Machine control	•	•		•	
Photovoltaic disconnect					•
Enclosed switches	•	•	•	•	

Functions

3/4 pole non-fusible disconnect switch	•	•	•	•	•
6/8 pole non-fusible disconnect switch	•				
3/4 pole changeover switch (I-0-II)	•				
3/4 pole changeover switch (I-I+II-II)	•				

Characteristics

Rating					
600 VAC	•	•	•	•	
800 VAC					•
Operation					
Manual (rotating)	•	•	•	•	•
Manual flange				•	
Manual toggle	•				
Direct operation handle					
Front	•	•	•	•	•
External operation handle					
Front	•	•	•	•	•
Right side	•	•		•	
Flange				•	
Indication of breaking					
Positive break indication	•	•	•	•	•
Switch body					
Modular	•	•			

SIRCO M UL 508

Non-fusible disconnect switches standards UL and CSA
from 16 to 100 A



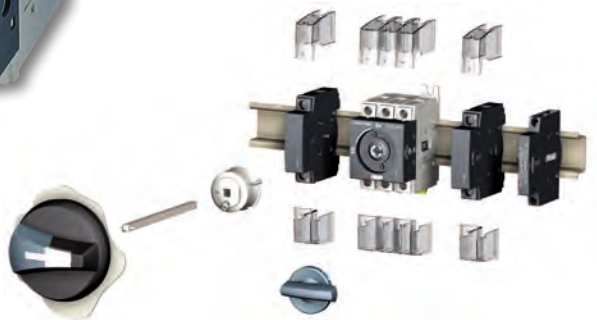
Rotary switch
SIRCO M 3 x 80 A



Toggle switch
SIRCO M 3 x 80 A + 2 auxiliary contacts



Rotary switch
SIRCO M 3 x 80 A



The solution for

- OEM/Machine Builders
- Industrial Control Panels Manufacturers (UL 508A)
- Switchboards Manufacturers (UL 891)
- Distributors



Strong points

- Positive break indication
- Direct or external operation
- Compact footprint
- DIN-rail or base mounting
- Wide range of accessories
- Up to 8 pole or 4 pole MTS

Conformity to standards

- UL 508, CSA-C22.2 No. 14 Guide NLRV, File E173959
- CSA-C22.2 No. 14, Class 3211-05, File 112964
- IEC 60947-3

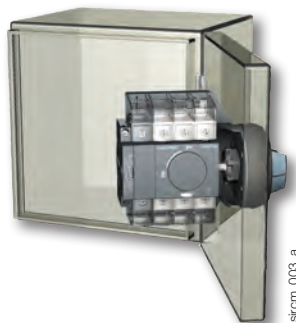


Function

SIRCO M UL/CSA are compact and modular non-fusible disconnect switches. They make and break under all types of load conditions and provide safe isolation for any low voltage circuit, especially for machine control circuits.

General characteristics

- Positive break indication.
- Direct or external operation.
- Compact footprint.
- DIN-rail, base or door mounting.
- Wide range of accessories.
- Up to 8 pole or 4 pole MTS.



UL 508 manual motor controller “Suitable as motor disconnect”

References

Rating (A)	No. of poles	Toggle switch (direct handle included)	Rotary switch	Direct handle	External front and right side handles ⁽⁴⁾	Shaft for external handles	Switched fourth pole module	Auxiliary contacts	Terminal shrouds	Door mounting kit
16 A	3 P	2205 3000	2200 3000	Blue 2299 5012	S00 type I - 0 Black 3R, 12 1473 1111	S00/S0 type 5.9 in 150 mm 1407 0515 7.9 in 200 mm 1407 0520 12.6 in 320 mm 1407 0532 ⁽²⁾	1 P 2200 1000	M type 1 AC NO + NC 2299 0001 1 AC 2 NC 2299 0011	1 P 2294 1005 ⁽³⁾ 3 P 2294 3005 ⁽³⁾	2299 3409
20 A	3 P	2205 3001	2200 3001		1 P 2200 1001					
25 A	3 P	2205 3002	2200 3002		Red/Yellow 3R, 12 ⁽¹⁾ 1474 1111		1 P 2200 1002			
32 A	3 P	2205 3003	2200 3003		Black 4, 4X ⁽¹⁾ 147D 1111		1 P 2200 1003			
40 A	3 P	2205 3004	2200 3004		Red/Yellow 4, 4X ⁽¹⁾ 147E 1111		1 P 2200 1004			
63 A	3 P	2205 3006	2200 3006		S0 type I - 0 Black 1, 3R, 12 ⁽¹⁾ 1483 1111		1 P 2200 1006			
80 A	3 P	2205 3008	2200 3008		Red/Yellow 1, 3R, 12 ⁽¹⁾ 1484 1111		1 P 2200 1008			
100 A CD	3 P		2200 3009		Black 4, 4X ⁽¹⁾ 148D 1111		1 P 2200 1009			
					Red/Yellow 4, 4X ⁽¹⁾ 148E 1111					

Common accessories - more available on next pages.

(1) Please order the shaft guide: 1419 0000 with the shaft.

(2) Top and bottom.

(3) There is no door interlocking when the switch is fitted on the side of the enclosure.

UL 508 non-metallic polycarbonate 4, 4X enclosed SIRCO M



Function

Enclosed SIRCO M switches allow safe control and disconnection of any motor application.

General characteristics

- Grey enclosure with red handle.
- Equipped with a 3 pole SIRCO M UL 508.
- 1 removable ground terminal.
- Possibility of adding 1 power pole and 1 auxiliary contact.
- Nema/UL type 1, 3R, 12, 4, 4X.

Conformity to standards⁽¹⁾

- > UL 508, CSA-C22.2 No. 14 Guide NLRV, File E173959
- > CSA-C22.2 No. 14, Class 3211-05, File 112964
- > IEC 60947-3



(1) Product reference on request.

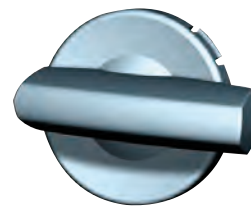
SIRCO M UL 508

Non-fusible disconnect switches standards UL and CSA
from 16 to 100 A

Accessories

Direct operation handle

Rating (A)	Handle color	Handle type	Reference
16 ... 100 CD	Blue	M00	2299 5012



M00 handle

access_277_a_2_cat

External operation handle

Use

The handle locking function prevents the user from opening the door of the enclosure when the switch is in the "ON" position (only if the handle is fitted on the door).

No interlock in the "OFF" position for S00 and S0 handles.

Opening the door when the switch is in the "ON" position is possible by defeating the interlocking function with the use of a tool (authorized persons only). The interlocking function is restored when the door is closed. The handle is padlockable with 3 padlocks.



S00 handle

access_264_a_2_cat

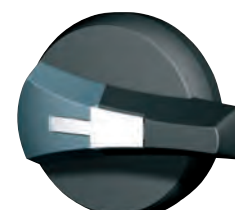
Front and right side handles I - 0

Rating (A)	Handle color	Handle type	Nema/UL type	Reference
16 ... 100 CD	Black	S00	3R, 12	1473 1111
16 ... 100 CD	Red/Yellow	S00	3R, 12	1474 1111
16 ... 100 CD	Black	S00	4, 4X	147D 1111
16 ... 100 CD	Red/Yellow	S00	4, 4X	147E 1111
16 ... 100 CD	Black	S0	1, 3R, 12	1483 1111
16 ... 100 CD	Red/Yellow	S0	1, 3R, 12	1484 1111
16 ... 100 CD	Black	S0	4, 4X	148D 1111
16 ... 100 CD	Red/Yellow	S0	4, 4X	148E 1111
16 ... 100 CD	Black	S01 ⁽¹⁾	3R, 12	140F 2111
16 ... 100 CD	Red/Yellow	S01 ⁽¹⁾	3R, 12	140G 2111
16 ... 100 CD	Black	S01 ⁽¹⁾	4, 4X	140D 2111
16 ... 100 CD	Red/Yellow	S01 ⁽¹⁾	4, 4X	140E 2111

(1) Not compatible with door mounting kit.

Front handle for heavy duty I - 0 with metallic lever

Rating (A)	Handle color	Handle type	Nema/UL type	Reference
16 ... 100 CD	Black	S01	4, 4X	140D 2911
16 ... 100 CD	Red/Yellow	S01	4, 4X	140E 2911



S0 handle

access_279_a_2_cat



S01 handle

access_304_a_2_cat

Front handle for transfer switches I - 0 - II

Rating (A)	Handle color	Handle type	Nema/UL type	Reference
16 ... 100 CD	Black	S00	4, 4X	1473 1113 ⁽¹⁾

(1) Not UL.

Shafts for external handle

Use

Standard lengths:

- 5.9 in / 150 mm
- 7.9 in / 200 mm
- 12.6 in / 320 mm

Other lengths: please consult us.

For 3/4 pole switches, shaft extensions for external front and side handle.

For 6/8 pole switches and SIRCO M transfer switches.



access_280_a_2_cat

For 3/4 pole

Ratg (A)	Handle type	Length		Reference
		(in)	(mm)	
16 ... 100 CD	S00/S0	5.9	150	1407 0515
16 ... 100 CD	S00/S0	7.9	200	1407 0520
16 ... 100 CD	S00/S0	12.6	320	1407 0532
16 ... 100 CD	S01	7.9	200	1404 0520
16 ... 100 CD	S01	12.6	320	1404 0532
16 ... 100 CD	S01	15.7	400	1404 0540

For 6/8 pole

Rating (A)	Handle type	Length		Reference
		(in)	(mm)	
16 ... 100 CD	S00/S0	5.9	150	1407 0515
16 ... 100 CD	S00/S0	7.9	200	1407 0520
16 ... 100 CD	S00/S0	12.6	320	1407 0532

Accessories (continued)

Shaft guide for external handle

Use

This accessory enables handle to engage extension shaft with a misalignment of up to 0.59 in/15 mm.

Required for a shaft length from 12.6 in/320 mm.

Handle type	Reference
S00 and S0	1419 0000



access_260_a_2_cat

Additional pole

4th pole

Rating (A)	No. of poles	Type	Reference
16	1 P	switched	2200 1000
20	1 P	switched	2200 1001
25	1 P	switched	2200 1002
32	1 P	switched	2200 1003
40	1 P	switched	2200 1004
63	1 P	switched	2200 1006 ⁽¹⁾
80	1 P	switched	2200 1008 ⁽¹⁾
100 CD	1 P	switched	2200 1009 ⁽¹⁾

⁽¹⁾ Not UL.

Use

Transforms:

- 3 pole SIRCO M non-fusible disconnect switch into a 4 pole,
- 3 pole SIRCO M transfer switch into a 4 pole.



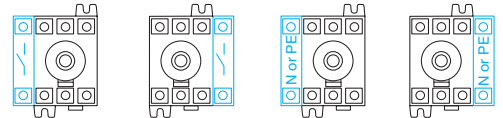
sircm_072_b_1_cat

Solid neutral pole

Rating (A)	No. of poles	Type	Reference
16 ... 40	1 P	unswitched	2200 5005
63 ... 100 CD	1 P	unswitched	2200 5009

Use

Transforms the 3-pole switch into a 3-pole + solid neutral.



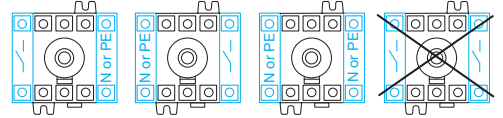
sircm_078_a_1_gb_cat

Ground module

Rating (A)	No. of poles	Type	Reference
16 ... 40	1 P	unswitched	2200 9005
63 ... 100 CD	1 P	unswitched	2200 9009

Use

Adds 1 protective ground module pole to the non-fusible disconnect switch.



Terminal shrouds

Use

Top and bottom additional protection against direct contact with the terminals or connection parts.
1 or 3 poles are available.

Perforation on each terminal cover enables remote thermographic inspection without dismantling.

Rating (A)	No. of poles	Position	Reference
16 ... 40	1 P	top and bottom	2294 1005
16 ... 40	3 P	top and bottom	2294 3005
63 ... 100 CD	1 P	top and bottom	2294 1009
63 ... 100 CD	3 P	top and bottom	2294 3009



sircm_048_a_1_cat

SIRCO M UL 508

Non-fusible disconnect switches standards UL and CSA
from 16 to 100 A

M type Auxiliary Contacts

Use

Pre-break and signaling of positions 0 and I by NO+NC or 2 NO Auxiliary Contacts.

They can be mounted on the left or on the right side of the device.

Max 4 Auxiliary Contacts per product (2 modules).

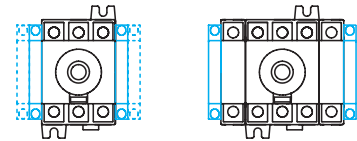
Characteristics

A300.

Rating (A)	No. of AC	AC type	Reference
16 ... 100 CD	1 AC	NO + NC	2299 0001
16 ... 100 CD	1 AC	2 NO	2299 0011



sircm_075_b_2_cat



sircm_081_a_1_x_cat

Auxiliary contacts configurations for SIRCO M

Conversion kit

Use

These accessories enable the assembly of

2 switches in order to achieve:

- 6 or 8 pole switches
- 3 or 4 pole open or close transition transfer switches.

Rating (A)	Type	Reference
16 ... 100 CD	Non-fusible disconnect switches 6/8 pole	2269 6009
16 ... 100 CD	Transfer switch 3/4 pole (I - 0 - II)	2209 6009
16 ... 100 CD	Transfer switch 3/4 pole (I - I+II - II)	2299 6009 (1)

(1) Not UL.



sircm_060_c_2_cat



sircm_097_b_2_x_cat

Conversion kit for 6 or 8 pole non-fusible disconnect switches

Conversion kit for 3 and 4-pole transfer switches (I - 0 - II) or (I - I+II - II)



sircm_086_b_1_cat

Door mounting kit

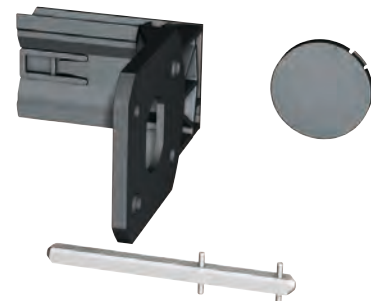
Use

This kit enables direct mounting of the switch on the panel door or on the right or left side of the panel with S00 and S0 handles.

The S0 and S00 external handles are quick and easy to install due to an internal locking nut mounted on the inside of the enclosure.

Rating (A)	No. of poles	Reference
16 ... 100 CD	3/4 P	2299 3409

Not compatible with S01 handle.
No need of external shaft.



sircm_051_b_2_cat

Characteristics

Characteristics according to UL 508 and CSA-C22.2 No. 14

General use rating (A)	16 A	20 A	25 A	32 A	40 A	63 A	80 A	100 A CD
Short circuit rating at 600 VAC (kA)	65	65	65	65	10/65	50/65	50/65	50/65
Type of fuse	J	J	J	J	J	J	J	J
Max fuse rating (A)	30	30	30	30	60/30	100/60	100/60	100/60

Max. motor hp/FLA 3 ph motor max.

208 VAC	3/0.6	5/16.7	7.5/24.2	7.5/24.2	7.5/24.2	15/46.2	15/46.2	15/46.2
220-240 VAC	5/15.2	5/15.2	7.5/22	7.5/22	7.5/22	20/54	20/54	20/54
440-480 VAC	10/14	10/14	15/21	20/27	20/27	40/52	40/52	40/52
600 VAC	10/11	15/17	20/22	25/27	25/27	40/41	40/41	40/41

Connection terminals

Solid - 1 wire	#14 - #10	#14 - #10	#14 - #10	#14 - #10	#14 - #10	#14 - #10	#14 - #10	#8 - #2
Solid - 2 wires	2 x #12	2 x #12	2 x #12	2 x #12	2 x #12	2 x #12	2x #12	2x - #12
Stranded - 1 wire	#14 - #4	#14 - #4	#14 - #4	#14 - #4	#14 - #4	#14 - #1	#14 - #1	#14 - #10
Stranded - 2 wires	2 x (#14 - #12)	2 x (#14 - #12)	2 x (#14 - #12)	2 x (#14 - #12)	2 x (#14 - #12)	2 x (#10 - #6)	2 x (#10 - #6)	2 x - (#10-#6)

Auxiliary contacts

Electrical characteristics	A300	A300	A300	A300	A300	A300	A300	A300
----------------------------	------	------	------	------	------	------	------	------

Mechanical characteristics

Endurance (number of operating cycles)	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Operating torque (lbs.in./Nm)	7/0.8	7/0.8	7/0.8	7/0.8	7/0.8	8.9/1	8.9/1	8.9/1

Characteristics according to IEC 60947-3

Thermal current I_{th} (40°C)	16 A	20 A	25 A	32 A	40 A	63 A	80 A	100 A CD
Rated insulation voltage U_i (V)	800	800	800	800	800	800	800	800
Rated impulse withstand voltage U_{imp} (kV)	8	8	8	8	8	8	8	8

Rated operational currents I_e (A)

Rated voltage	Utilization	A/B ⁽¹⁾	A/B ⁽¹⁾	A/B ⁽¹⁾	A/B ⁽¹⁾	A/B ⁽¹⁾	A/B ⁽¹⁾	A/B ⁽¹⁾	A/B ⁽¹⁾
415 VAC	AC-23 A/AC-23 B	16/16	20/20	25/25	32/32	40/40	63/63	80/80	80/80
500 VAC	AC-22 A/AC-22 B	16/16	20/20	25/25	32/32	40/40	63/63	80/80	-
500 VAC	AC-23 A/AC-23 B	16/16	20/20	25/25	25/25	25/25	63/63	63/63	-
690 VAC	AC-21 A/AC-21 B	16/16	20/20	25/25	32/32	40/40	63/63	80/80	100/100
690 VAC	AC-22 A/AC-22 B	16/16	20/20	25/25	32/32	32/40	40/63	63/80	-
690 VAC	AC-23 A/AC-23 B	16/16	20/20	25/25	25/25	25/25	40/40	40/40	-

Operational power in AC-23 (kW)

At 400 VAC without prebreaking AC in AC-23 (kW) ⁽¹⁾⁽²⁾	7.5	9	11	15	18.5	30	37	-
At 500 VAC without prebreaking AC in AC-23 (kW) ⁽¹⁾⁽²⁾	7.5	9	11	15	15	30	37	-
At 690 VAC without prebreaking AC in AC-23 (kW) ⁽¹⁾⁽²⁾	7.5	11	15	18.5	18.5	30	37	-

Fuse protected short-circuit withstand (kA rms prospective)

Prospective short-circuit current (kA rms) ⁽³⁾	50	50	50	50	50	50	50	25
Associated fuse rating (A) ⁽³⁾	16	20	25	32	40	63	80	100

Overload capacity (U_e 415 VAC)

Rated short-time withstand current 0.3 s. I_{cw} (kA rms) ⁽³⁾	2.5	2.5	2.5	2.5	2.5	3	3	1.5
Rated short-circuit making capacity I_{cm} (kA peak) ⁽³⁾	6	6	6	6	6	9	9	2.1

Connection

Minimum Cu cable cross section (mm ²)	1.5	1.5	1.5	1.5	1.5	2.5	2.5	2.5
Maximum Cu cable section (mm ²)	16	16	16	16	16	35	35	35
Tightening torque min/ max (Nm)	2/2.2	2/2.2	2/2.2	2/2.2	2/2.2	3.5/3.85	3.5/3.85	3.5/3.85

(1) A/B: Category with index A = frequent operation - Category with index B = infrequent operation.

(2) The power value is given for information only, the current values vary from one manufacturer to another.

(3) For a rated operating voltage $U_e = 400$ VAC.

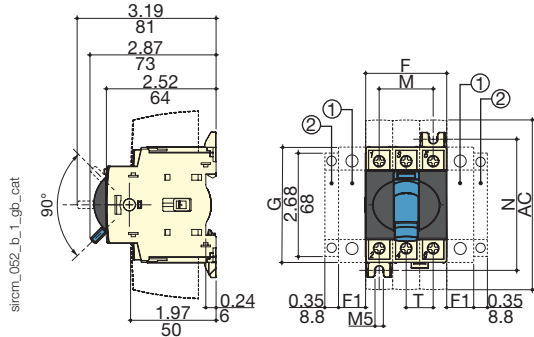
SIRCO M UL 508

Non-fusible disconnect switches standards UL and CSA
from 16 to 100 A

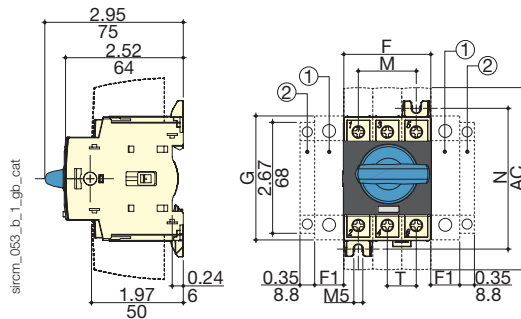
Dimensions (in/mm)

16 to 100 A

Toggle operation



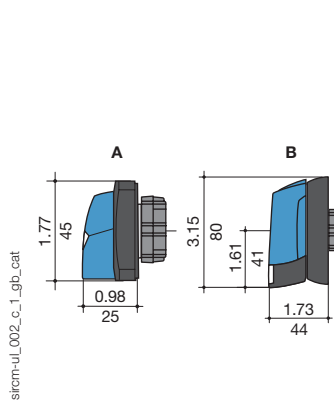
Direct operation with handle



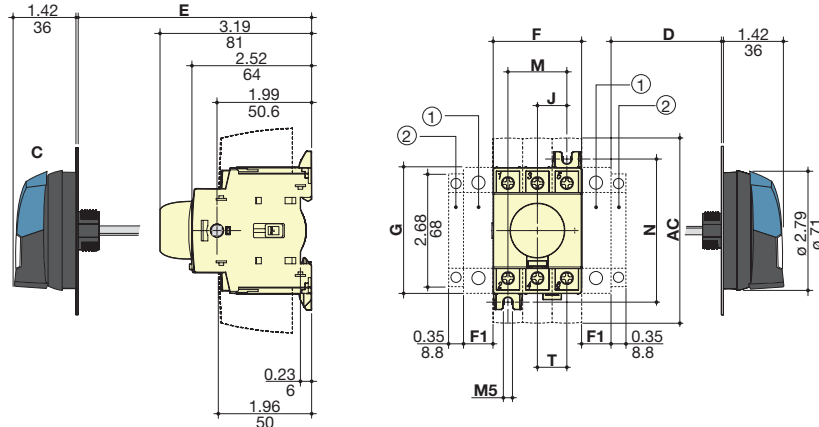
1. Position for 1 switched fourth pole module (1 per device max.) or 1 unswitched neutral pole or 1 protective ground module or 1 auxiliary contact.
2. Position for 1 auxiliary contact only.

Note: Maximum of 4 additional blocks.

External front handle



External side handle

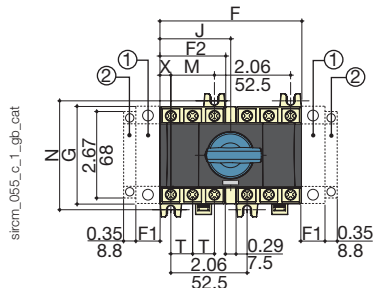


1. Position for 1 switched fourth pole module (1 per device max.) or 1 unswitched neutral pole or 1 ground module or 1 auxiliary contact.
2. Position for 1 auxiliary contact only.

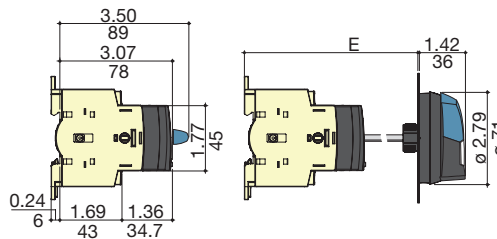
Note: Maximum of 4 additional blocks.

Rating (A)	Units	Overall dimensions				Terminal shrouds		Switch body				Switch mounting		Connection
		D min	D max	E min	E max	AC	F	F1	G	J	M	N	T	
16 ... 40	in	1.18	9.25	3.94	14.64	4.33	1.77	0.59	2.67	0.59	1.18	2.95	0.59	
	mm	30	235	100	372	110	45	15	68	15	30	75	15	
63 ... 100 CD	in	1.18	9.25	3.93	14.64	4.33	2.06	0.69	2.99	0.69	1.38	3.35	0.69	
	mm	30	235	100	372	110	52.5	17.5	76	17.5	35	85	17.5	

Direct front handle for 6/8-pole non-fusible disconnect switches
or 3/4-pole transfer switches



External front handle for 6/8-pole non-fusible disconnect switches
or 3/4-pole transfer switches



1. Position for 1 switched fourth pole module (1 per device max.) or 1 unswitched neutral pole or 1 ground module or 1 auxiliary contact.
2. Position for 1 auxiliary contact only.

Note: Maximum of 4 additional blocks.

Rating (A)	Units	Overall dimensions		Switch body					Switch mounting		Connection	
		E min	E max	F	F1	F2	G	J	M	N	T	X
16 ... 40	in	4.13	14.64	3.83	0.59	1.77	2.67	1.92	1.18	2.95	0.59	0.29
	mm	105	372	97.5	15	45	68	48.75	30	75	15	7.5
63 ... 100 CD	in	4.13	14.65	4.13	0.69	2.06	2.99	2.06	1.38	3.35	0.69	0.34
	mm	105	372	105	17.5	52.5	76	52.5	35	85	17.5	8.75

External handles dimensions (in/mm)

16 to 100 A

Handle type	Front operation Direction of operation	Side operation Direction of operation	Door drilling
<p>S00 type</p>			<p>With 4 fixing screws</p> <p>With fixing nut</p>
<p>S0 type</p>			<p>With 4 fixing screws</p> <p>With fixing nut</p>
<p>S01 type</p>			<p>With 4 fixing screws</p>
<p>S00 type Transfer switches</p>	<p>Front operation Direction of operation</p>	<p>Side operation Direction of operation</p>	<p>With 4 fixing screws</p> <p>With fixing nut</p>

poign_069_c_1_us_cat

poign_060_a_1_us_cat

poign_018_a_1_gb_cat

poign_070_a_1_gb_cat



SIRCO M UL 98

Non-fusible disconnect switches standards UL and CSA
from 30 to 100 A



sircm_100_a_1_cat

Rotary switch
SIRCO M 3 x 100 A

Function

SIRCO M UL 98 are compact non-fusible disconnect switches that make and break under on and off load conditions and provide safe isolation.

These switches are extremely durable and are tested and approved for use in the most demanding applications.

General characteristics

- Positive break indication.
- Touch safe.
- DIN rail or back plate-mounted.
- Direct or external operation handle.

Specific characteristics

- Contact point technology.

References

UL 98 non-fusible disconnect switches

Rating (A)	No. of poles	Switch body	Direct handle	External front and right side handles	Shafts for external front and side handles	Switched fourth pole module	Unswitched neutral pole	Ground module	Auxiliary contacts	Terminal shrouds
30 A	3 P	2201 3003			5.9 in 150 mm 1407 0515	1 P 2201 1003				
60 A	3 P	2201 3006	Blue 2299 5032	Black 4, 4X 148D 1111 Red/Yellow 4, 4X 148E 1111	7.9 in 200 mm 1407 0520	1 P 2201 1006	1 P 2200 5011	1 P 2200 9011	M type 1 AC NO + NC 2299 0001	1 P 2294 1011 ⁽²⁾ 3 P 2294 3016 ⁽²⁾
100 A	3 P	2200 3010			12.6 in 320 mm 1407 0532 ⁽¹⁾	1 P 2200 1010			M type 1 AC 2 NC 2299 0011	

Common accessories - more available on next pages.

(1) Shaft guide reference 14190000, is required for shaft length over 12.6 in / 320 mm.

(2) Top and bottom.

The solution for

- > OEM/Machine Builders
- > Industrial Control Panels Manufacturers (UL 508A)
- > Switchboards Manufacturers (UL 891)
- > Distributors



Strong points

- > Positive break indication
- > Touch safe
- > DIN rail or back plate-mounted
- > Direct or external operation handle
- > Contact point technology

Conformity to standards

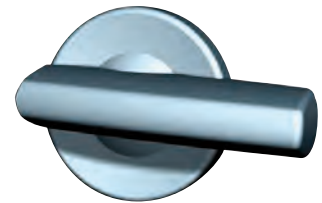
- > UL 98, CSA-C22.2 No. 4, Guide WHTY, File E201138
- > CSA-C22.2 No. 4, Class 4651-02, File 112964
- > IEC 60947-3



Accessories

Direct operation handle

Rating (A)	Handle color	Handle type	Reference
30 ... 100	Blue	M01	2299 5032



M01 handle

access_283_a_2_cat

External operation handle

Use

The handle locking function prevents the user from opening the door of the enclosure when the switch is in the "ON" position (only if the handle is fitted on the door).

No interlock in the "OFF" position for S0 handles.

Opening the door when the switch is in the "ON" position is possible by defeating the interlocking function with the use of a tool (authorized persons only). The interlocking function is restored when the door is closed. The handle is padlockable with 3 padlocks.



S0 handle

access_279_a_2_cat

Front and right side handles I - 0

Rating (A)	Handle color	Handle type	Nema/UL type	Reference
30 ... 100	Black	S0	1, 3R, 12	1483 1111
30 ... 100	Red/Yellow	S0	1, 3R, 12	1484 1111
30 ... 100	Black	S0	4, 4X	148D 1111
30 ... 100	Red/Yellow	S0	4, 4X	148E 1111
30 ... 100	Black	S01	3R, 12	140F 2111
30 ... 100	Red/Yellow	S01	3R, 12	140G 2111
30 ... 100	Black	S01	4, 4X	140D 2111
30 ... 100	Red/Yellow	S01	4, 4X	140E 2111



S01 handle

access_304_a_2_cat

Front handle for heavy duty I - 0 with metallic lever

Rating (A)	Handle color	Handle type	Nema/UL type	Reference
16 ... 100 CD	Black	S01	4, 4X	140D 2911
16 ... 100 CD	Red/Yellow	S01	4, 4X	140E 2911

Shafts for external handle

Use

Standard lengths:

- 5.9 in / 150 mm,
- 7.9 in / 200 mm,
- 12.6 in / 320 mm,
- 15.7 in / 400 mm.

Other lengths: please consult us.

For 3/4 pole switches, shaft extensions for external front and side handle.



access_280_a_2_cat

For 3/4 pole

Rating (A)	Handle type	Length		Reference
		(inches)	(mm)	
30 ... 100	S0	5.9	150	1407 0515
30 ... 100	S0	7.9	200	1407 0520
30 ... 100	S0	12.6	320	1407 0532
30 ... 100	S01	7.9	200	1404 0520
30 ... 100	S01	12.6	320	1404 0532
30 ... 100	S01	15.7	400	1404 0540

SIRCO M UL 98

Non-fusible disconnect switches
from 30 to 100 A

Accessories (continued)

Shaft guide for external handle

Use

This accessory makes shaft introduction easier with up to 0.59 in / 15 mm misalignment.
Required for a shaft length over 12.6 in / 320 mm.

Handle type	Reference
S0	1419 0000



access_260_a_2_cat

Additional pole for SIRCO M

4th pole

Rating (A)	No. of poles	Type	Reference
30	1 P	switched	2201 1003
60	1 P	switched	2201 1006
100	1 P	switched	2200 1010

Use

Adding one or two additional poles transforms a non-fusible disconnect switch from 3 poles to 4 poles.



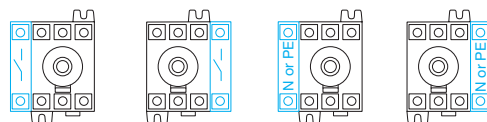
sircm_072_b_1_cat

Solid neutral pole

Rating (A)	No. of poles	Type	Reference
30 ... 100	1 P	unswitched	2200 5011

Use

Transforms the 3-pole switch into a 3-pole + solid neutral.



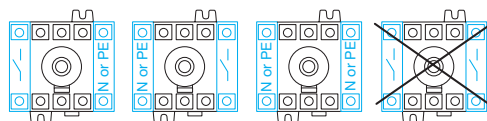
sircm_078_a_1_gb_cat

Ground module

Rating (A)	No. of poles	Type	Reference
30 ... 100	1 P	unswitched	2200 9011

Use

Adds 1 ground module pole to the switch-disconnector.



Terminal shrouds

Use

Top and bottom additional protection against direct contact with the terminals or connection parts. 1 or 3 pole are available.

Perforation on each terminal cover enables remote thermographic inspection without dismantling.

Rating (A)	No. of poles	Position	Reference
30 ... 100	1 P	top and bottom	2294 1011
30 ... 100	3 P	top and bottom	2294 3016



sircm_049_a_1_cat

M type auxiliary contacts

Use

Pre-break and signaling of positions 0 and I by NO+NC or 2 NO auxiliary contacts.

They can be mounted on the left or on the right side of the switch.

Max 4 auxiliary contacts (2 modules).

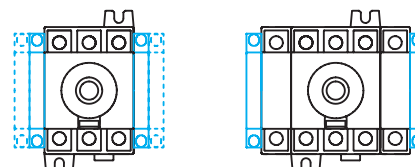
Characteristics

A300.

Rating (A)	No. of AC	AC type	Reference
30 ... 100	1 AC	NO + NC	2299 0001
30 ... 100	1 AC	2 NO	2299 0011



sircm_075_b_2_cat



sircm_081_a_1_x_cat

Auxiliary contacts configurations for SIRCO M

Characteristics

Characteristics according to UL 98 and CSA-C22.2 No. 4

General use rating	30 A	60 A	100 A
Short-circuit rating at 480 VAC (kA)	100	100	100
Short circuit rating at 600 VAC (kA)	100	100	25
Type of fuse	J	J	J
Max fuse rating (A)	30	60	100
Max. motor hp / FLA 3 ph motor max.			
220-240 VAC	10 / 28	20 / 54	20 / 54
440-480 VAC	20 / 27	40 / 52	50 / 65
600 VAC	25 / 27	50 / 52	50 / 52
Max. motor hp / FLA 1 ph motor max.			
120 VAC	2 / 24	3 / 34	5 / 56
240 VAC	5 / 28	10 / 50	10 / 50
Connection terminals			
Solid - 1 wire	#10	#10	#10
Stranded - 1 wire	#10 - 2/0	#10 - 2/0	#10 - 2/0
Solid - 2 wires	2 x #10	2 x #10	2 x #10
Stranded - 2 wires	2 x (#10 - #1)	2 x (#10 - #1)	2 x (#10 - #1)
Mechanical characteristics			
Endurance (number of operating cycles)	10000	10000	10000
Operating torque (lbs.in/Nm)	12.4 / 1.4	12.4 / 1.4	12.4 / 1.4
Auxiliary contacts			
Electrical characteristics	A300	A300	A300

Characteristics according to IEC 60647-3

Thermal current I_{th} at 40°C (A)	30 A	60 A	100 A	
Rated insulation voltage U _i (V)	800	800	800	
Rated impulse withstand voltage U _{imp} (kV)	8	8	8	
Rated operational currents I_e (A)				
Rated voltage	Utilization category	A⁽¹⁾	A⁽¹⁾	A⁽¹⁾
400 VAC	AC-22 A	32	63	100
400 VAC	AC-23 A	32	63	100
690 VAC	AC-22 A	32	63	80
690 VAC	AC-23 A	32	63	63
Operational power in AC-23 (kW)				
At 400 VAC without prebreak AC in AC23 (kW) ⁽²⁾⁽³⁾	15	30	45	
At 500VAC without prebreak AC in AC23 (kW) ⁽²⁾⁽³⁾	15	30	45	
At 690VAC without prebreak AC in AC23 (kW) ⁽²⁾⁽³⁾	18.5	30	45	
Overload capacity (U_e 415 VAC)				
Rated short-circuit making capacity I _{cm} (kA peak) ⁽⁴⁾	12	12	12	
Connection				
Min. connection section/ (mm ²)	2.5	2.5	10	
Max. connection section/ (mm ²)	70	70	70	

(1) Category with index A = frequent operation.

(2) A/B: Category with index A = frequent operation - Category with index B = infrequent operation.

(3) The power value is given for information only, the current values vary from one manufacturer to another.

(4) For a rated operating voltage U_e = 400 VAC.

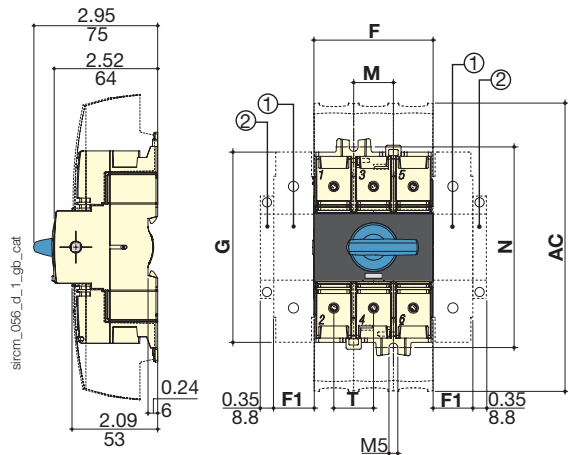
SIRCO M UL 98

Non-fusible disconnect switches
from 30 to 100 A

Dimensions (in/mm)

30 to 100 A

Direct operation with handle

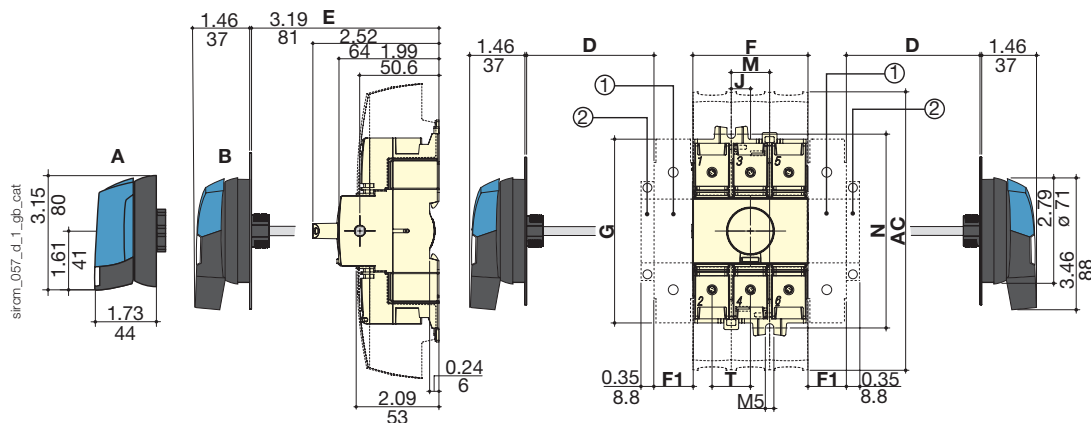


1. Location for: 1 switched fourth pole module (1 per device max.) or 1 unswitched neutral pole or 1 protective earth module or 1 auxiliary contact.
2. Position for 1 auxiliary contact module only.

Note: max 2 additional blocks.

External front operation

External side operation



1. Location for: 1 switched fourth pole module (1 per device max.) or 1 unswitched neutral pole or 1 protective earth module or 1 auxiliary contact.

2. Position for 1 auxiliary contact module only.

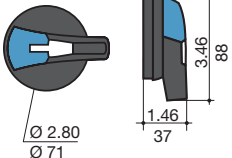
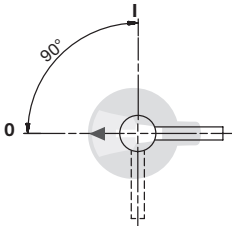
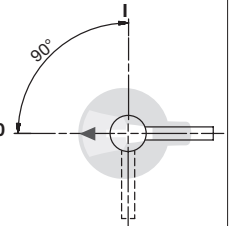
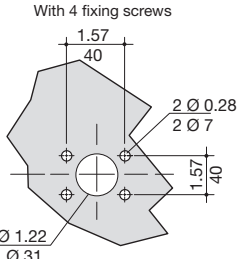
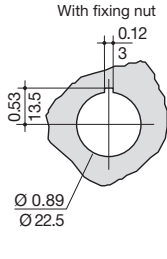
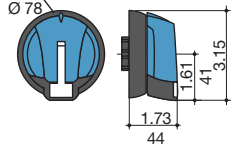
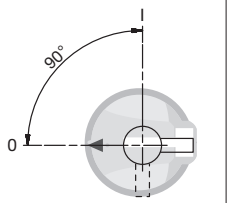
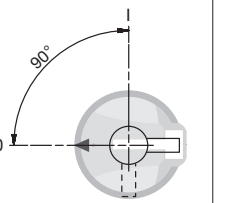
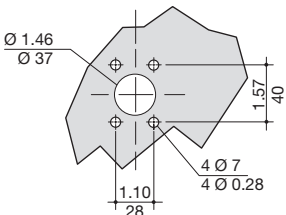
Note: max 2 additional blocks.

- A. S01 handle
B. S00 handle

Rating (A) / Frame size	Overall dimensions				Terminal shrouds		Switch body				Switch mounting		Connection
	D min	D max	E min	E max	AC	F	F1	G	J	M	N	T	
30 ... 100 / M3	mm	30	201	100	372	189	78	26	124.6	13	26	131.4	26
	in	1.18	7.93	3.94	14.64	7.44	3.07	1.02	4.90	0.51	1.02	5.17	1.02

External handles dimensions (in/mm)

30 to 100 A

Handle type	Front operation Direction of operation	Side operation Direction of operation	Door drilling
<p>S0 type</p> 			<p>With 4 fixing screws</p>  <p>With fixing nut</p> 
<p>S01 type</p> 			<p>With 4 fixing screws</p> 

polign_060_a_1_us_cat

polign_018_a_1_us_cat



AC non-fusible disconnect switches

SIRCO UL 98

Non-fusible switches standards UL and CSA

100 to 1200 A



SIRCO
3 x 600 A



SIRCO
3 x 200 A

The solution for

- > OEM/Machine Builders
- > Industrial Control Panels Manufacturers (UL 508A)
- > Switchboards Manufacturers (UL 891)
- > AC Combiners Builders
- > Distributors



Strong points

- > Reliability
- > Safety of property and personnel
- > Simplicity
- > Easy assembling

Conformity to standards⁽¹⁾

- > UL 98, CSA-C22.2 No. 4, Guide WHTY, File E201138
- > CSA-C22.2 No. 4, Class 4651-02, File 112964
- > IEC 60947-3



⁽¹⁾ Product reference on request.

Customized solutions

- > Please consult us

Enclosed Disconnect Standards

- > cULus 508A
- > UL 98, Guide WHTY, File E201138
- > CSA 22.2 No. 4, Class 4652-04, File 112964
- > IEC 60947-3



Function

SIRCO non-fusible disconnect switches are heavy duty switches that break and make power circuits on and off load and provide safety isolation.

These switches are extremely durable and are tested and approved for use in the most demanding applications.

General characteristics

- Positive break indication.
- Fully visualized disconnection.
- High thermal and dynamic withstand.
- Severe utilization categories.
- High electrical and mechanical endurance.

UL 508A painted steel NEMA 3R, 12 enclosed SIRCO UL 98



coff-ul_032

Function

Enclosed SIRCO UL 98 allow safe disconnection of power sources.

General Characteristics

- Painted steel enclosure with red handle.
- Fitted with a heavy duty handle that has a metallic padlock hup.
- Equipped with a 3 pole SIRCO UL 98 switch.
- Possibility of adding unswitched neutral pole auxiliary contacts, and terminal screens.
- Nema 3R, 12 up to 1200 A.

References

Rating (A)	No. of poles	Switch body	Direct handle	External handle	Shaft for external handle	Auxiliary contacts	Terminal protection screens	Terminal Lugs kits					
100 A	3 P	2700 3011	Black 2699 5052	S2 type Black 1, 3R, 12 142F 2111 ⁽¹⁾	7.9 in 200 mm 1400 1020	1 st contact NO/NC 2799 0021 2 nd contact NO/NC 2799 0022	3 P 2798 3021 ⁽²⁾	3 P 3954 3020 ⁽⁴⁾ 4 P 3954 4020 ⁽⁴⁾					
	4 P	2700 4011		Red/Yellow 1, 3R, 12 142G 2111 ⁽¹⁾			3 P 2798 8021 ⁽³⁾ 4 P 2798 4021 ⁽⁴⁾						
200 A	3 P	2700 3021		Black 3799 6012	Black 4, 4X 142D 2111 ⁽¹⁾		12.6 in 320 mm 1400 1032	3 P 2798 3041 ⁽²⁾	3 P 3954 3040 ⁽⁴⁾ 4 P 3954 4040 ⁽⁴⁾				
	4 P	2700 4021			Red/Yellow 4, 4X 142E 2111 ⁽¹⁾			3 P 2798 8041 ⁽³⁾ 4 P 2798 4041 ⁽⁴⁾					
400 A	3 P	2700 3041			Black 3799 6012		Black 4, 4X 143D 3111 ⁽¹⁾	7.9 in 200 mm 1401 1520	3 P 2798 3060 ⁽⁴⁾	3 P 3954 3060 4 P 3954 4060			
	4 P	2700 4041					Red/Yellow 4, 4X 143E 3111 ⁽¹⁾		3 P 2798 3120 ⁽⁴⁾ 4 P 2798 4120 ⁽⁴⁾				
600 A	3 P	2700 3060					Black 3799 6012	Black 4, 4X 143D 3111 ⁽¹⁾	12.6 in 320 mm 1401 1532	3 P 2798 3120 ⁽⁴⁾	3 P 3954 3120 4 P 3954 4120		
	4 P	2700 4060						Red/Yellow 4, 4X 143E 3111 ⁽¹⁾		3 P 2798 4120 ⁽⁴⁾			
800 A	3 P	2700 3080						Black 3799 6012	Black 4, 4X 143D 3111 ⁽¹⁾	15.7 in 400 mm 1401 1540	3 P 2798 3120 ⁽⁴⁾	3 P 3954 3120 4 P 3954 4120	
	4 P	2700 4080							Red/Yellow 4, 4X 143E 3111 ⁽¹⁾		3 P 2798 4120 ⁽⁴⁾		
1000 A	3 P	2700 3100							Black 3799 6012	Black 4, 4X 143D 3111 ⁽¹⁾	15.7 in 400 mm 1401 1540	3 P 2798 3120 ⁽⁴⁾	3 P 3954 3120 4 P 3954 4120
	4 P	2700 4100								Red/Yellow 4, 4X 143E 3111 ⁽¹⁾		3 P 2798 4120 ⁽⁴⁾	
1200 A	3 P	2700 3120	Black 3799 6012			Black 4, 4X 143D 3111 ⁽¹⁾				15.7 in 400 mm 1401 1540	3 P 2798 3120 ⁽⁴⁾	3 P 3954 3120 4 P 3954 4120	
	4 P	2700 4120				Red/Yellow 4, 4X 143E 3111 ⁽¹⁾					3 P 2798 4120 ⁽⁴⁾		

Common accessories - more available on next pages

- (1) Defeatable handle.
- (2) Top.
- (3) Bottom.
- (4) Top or bottom.
- (5) Max. 4 ACs.

Accessories

Direct operation handle

Rating (A)	Color	Handle type	Reference
100 ... 400	Black	B	2699 5052
600 ... 1200	Black	H	3799 6012



H type handle

B type handle

SIRCO UL 98

Non-fusible disconnect switches

100 to 1200 A

Accessories (continued)

External operation handle

Use

The interlocking function of the front external handle prevents the user from opening the door of the enclosure when the switch is in the "ON" position or when the switch is padlocked in the "OFF" position.

Opening the door when the switch is in the "ON" position is possible by defeating the interlocking function with the use of a tool (authorized persons only). The interlocking function is restored when the door is closed.

Front handle I - 0

Rating (A)	Handle type	Color	Nema type	Reference
100 ... 400	S2	Black	1, 3R, 12	142F 2111
100 ... 400	S2	Red/Yellow	1, 3R, 12	142G 2111
100 ... 400	S2	Black	4, 4X	142D 2111
100 ... 400	S2	Red/Yellow	4, 4X	142E 2111
600 ... 1200	S3	Black	4, 4X	143D 3111
600 ... 1200	S3	Red/Yellow	4, 4X	143E 3111
600 ... 1200	S4	Black	4, 4X	144D 3111
600 ... 1200	S4	Red/Yellow	4, 4X	144E 3111

Front handle heavy duty I - 0 with metallic lever

Rating (A)	Handle type	Color	Nema type	Reference
100 ... 400	S2	Black	4, 4X	142D 2911
100 ... 400	S2	Red/Yellow	4, 4X	142E 2911
600 ... 1200	S3	Black	4, 4X	143D 3911
600 ... 1200	S3	Red/Yellow	4, 4X	143E 3911
600 ... 1200	S4	Black	4, 4X	144D 3911
600 ... 1200	S4	Red/Yellow	4, 4X	144E 3911



S2 type handle

access_150



S3 type handle

access_166



S4 type handle

access_152



Heavy duty S2 type handle

access_236

Shaft for external handle

Use

Standard lengths:

- 7.9 in / 200 mm,
- 12.6 in / 320 mm,
- 15.7 in / 400 mm.

Other lengths: please consult us.

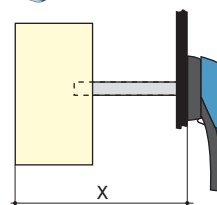
Rating (A)	Dimension X (in)	Dimension X (mm)	Handle type	Length (inches)	Length (mm)	Reference
100 ... 400	5.31 ... 10.43	135 ... 265	S2	7.9	200	1400 1020
100 ... 400	5.31 ... 15.16	135 ... 385	S2	12.6	320	1400 1032
100 ... 400	5.31 ... 18.31	135 ... 465	S2	15.7	400	1400 1040
100 ... 400	5.31 ... 22.25	135 ... 565	S2	19.7	500	1400 1050
600 ... 1200	8.70 ... 13.50	221 ... 343	S3, S4	7.9	200	1401 1520
600 ... 1200	8.70 ... 18.23	221 ... 463	S3, S4	12.6	320	1401 1532
600 ... 1200	8.70 ... 21.38	221 ... 543	S3, S4	15.7	400	1401 1540
600 ... 1200	8.70 ... 26.73	221 ... 679	S3, S4	19.7	536	1401 1554 ⁽¹⁾

(1) UL pending, please consult us.



access_369

access_144



access_202_a

Alternative color S-type handle cover

Use

For single lever handles type S1, S2, S3 and double lever handle, type S4.

Other colors: please consult us.

Handle color	Pack qty	Handle type	Reference
Light grey	50	S1, S2, S3	1401 0001
Dark grey	50	S1, S2, S3	1401 0011
Light grey	50	S4	1401 0031
Dark grey	50	S4	1401 0041



access_198

S-type handle raiser

Use

Enables S-type handles to be fitted in place of existing older style Socomec handles. Adapter can also be utilized as a spacer to increase the distance between the panel door and the handle lever.

Dimensions

Adds 0.47 in / 12 mm to the depth.

Handle color	Pack qty	Nema type	Reference
Black	10	1, 3R, 12	1493 0000



access_187

Shaft guide for external handle

Use

This accessory makes shaft introduction easier with up to 0.59 in / 15 mm misalignment.

Required for a shaft length over 12.6 in / 320 mm.



access_260

Description	Reference
Shaft guide	1429 0000

Auxiliary contacts

Use

Pre-break and color of positions 0 and I.
To have 2 NO/NC contacts per switch, please order 1st and 2nd auxiliary contacts per switch. 1st contact is mandatory to operate the 2nd one.

Electrical characteristics

A300 for 100 to 400 A.
A600 for 600 to 1200 A.



access_076

NO/NC contact for 100 to 1200 A

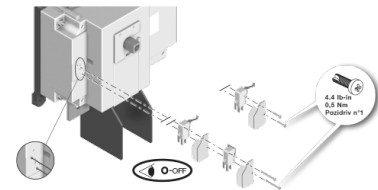
These auxiliary contacts are for an application of 125-250VAC, 60Hz, general use 10A, 1A 1/2 HP.

Rating (A)	No. of AC	Reference
100 ... 1200	1 st	2799 0021
100 ... 1200	2 nd	2799 0022

Low level NO/NC contact for 100 to 1200 A

Low level auxiliary contacts are for an application of 125VAC, 60Hz, general use 1A.

Rating (A)	No. of AC	Reference
100 ... 1200	1 st	2799 0121
100 ... 1200	2 nd	2799 0122



Terminal screens

Use

Top or bottom protection against direct contact with terminals or connection parts.

Rating (A)	No. of poles	Position	Reference
100 ... 200	3 P	top	2798 3021
100 ... 200	3 P	bottom	2798 8021
100 ... 200	4 P	top / bottom	2798 4021
400	3 P	top	2798 3041
400	3 P	bottom	2798 8041
400	4 P	top / bottom	2798 4041
600	3 P	bottom	2798 3060 ⁽¹⁾
600	4 P	bottom	2798 4060 ⁽¹⁾
800 ... 1200	3 P	bottom	2798 3120 ⁽¹⁾
800 ... 1200	4 P	bottom	2798 4120 ⁽¹⁾



access_079

(1) Load side screen, the line side is included with the switch.

Terminal lugs

Use

Connection of bare copper cables onto the lugs (without lugs).

Rating max (A)	Wires range	No wires per lug	Lugs per kit	Wires	Reference
100 ... 200	#6 - 300MCM	1	2	Cu / Al	3954 2020
100 ... 200	#6 - 300MCM	1	3	Cu / Al	3954 3020
100 ... 200	#6 - 300MCM	1	4	Cu / Al	3954 4020
400	#4 - 600MCM	1	2	Cu / Al	3954 2040
400	#4 - 600MCM	1	3	Cu / Al	3954 3040
400	#4 - 600MCM	1	4	Cu / Al	3954 4040
400	2x (#6 - 350MCM)	2	2	Cu / Al	3954 2041
400	2x (#6 - 350MCM)	2	3	Cu / Al	3954 3041
400	2x (#6 - 350MCM)	2	4	Cu / Al	3954 4041
600	2x (#2 - 600MCM)	1	2	Cu / Al	3954 2060
600	2x (#2 - 600MCM)	2	3	Cu / Al	3954 3060
600	2x (#2 - 600MCM)	2	4	Cu / Al	3954 4060
800 ... 1200 ⁽¹⁾	4x (#2 - 600MCM)	2	6	Cu / Al	3954 3120
800 ... 1200 ⁽¹⁾	4x (#2 - 600MCM)	2	8	Cu / Al	3954 4120



ul_032_a

(1) Two lugs per a pole are provided to put side by side per a pole.

SIRCO UL 98

Non-fusible disconnect switches

100 to 1200 A

Characteristics

Characteristics according to UL 98 and CSA-C22.2 No. 4

SIRCO UL 98 - 100 to 1200 A							
General use rating (A)	100 A	200 A	400 A	600 A	800 A	1000 A	1200 A
Short circuit rating at 600 VAC (kA)	200	200	200	200	100	100	100
Type of fuse	J	J	J	J	L	L	L
Max. fuse rating (A)	100	200	400	600	800	1000	1200
Max. motor hp / FLA 3 ph motor max.							
220-240 VAC	30 / 80	75 / 196	125 / 312	200 / 480	200 / 480	200 / 480	200 / 480
440-480 VAC	75 / 96	150 / 180	250 / 302	400 / 477	500 / 590	500 / 590	500 / 590
600 VAC	100 / 99	200 / 192	350 / 336	350 / 336	500 / 472	500 / 472	500 / 472
Max. motor hp / FLA 1 ph motor max.							
220-240 VAC	10/50	10/50					
Max. motor hp / DC FLA motor max.							
125 VDC ⁽¹⁾	10 / 76	15 / 112	20 / 148	20 / 148			
250 VDC ⁽²⁾	15 / 55	15 / 55	50 / 173	50 / 173			
Connection terminals							
Min. connection section / AWG	#6	#6	2x #6 / #4	2x #2	4x #2	4x #2	4x #2
Max. connection section / AWG	300MCM	300MCM	2x 350 / 600MCM	2x 600MCM	4x 600MCM	4x 600MCM	4x 600MCM
Mechanical characteristics							
Endurance (number of operating cycles)	10000	8000	6000	6000	3500	3500	3500
Operating torque (lbs.in/Nm)	88.5/10	88.5/10	128.3/14.5	327.5/37	442.5/50	442.5/50	442.5/50
Auxiliary contacts							
Electrical characteristics	A300	A300	A300	A600	A600	A600	A600

(1) 2 pole in series.

(2) 3 pole in series.

Characteristics according to IEC 60947-3

SIRCO UL 98 - 600 to 1200 A					
Thermal current I_{th} (40°C)		600 A	800 A	1000 A	1200 A
Rated insulation voltage U_i (V)		1000	1000	1000	1000
Rated impulse withstand voltage U_{imp} (kV)		12	12	12	12
Rated operational currents I_e (A)					
Rated voltage	Utilization category	A⁽¹⁾	A⁽¹⁾	A⁽¹⁾	A⁽¹⁾
400 VAC	AC-22 A	630	800	1000	1200
400 VAC	AC-23 A	630	800	1000	1000
690 VAC	AC-22 A	500	630	630	630
690 VAC	AC-23 A	200	400	400	400
Connection					
Min. Cu cable cross section (mm ²)		2 x 150	2 x 185	2 x 240	
Min. Cu busbar section (mm ²)		2 x 30 x 5	2 x 40 x 5	2 x 50 x 5	2 x 60 x 5
Operational power in AC-23 (kW)					
At 400 VAC without prebreaking AC in AC23 (kW) ⁽²⁾⁽³⁾		355	450	560	560
At 500 VAC without prebreaking AC in AC23 (kW) ⁽²⁾⁽³⁾		450	560	560	560
At 690 VAC without prebreaking AC in AC23 (kW) ⁽²⁾⁽³⁾		185	400	400	400
Overload capacity (U_e 415 VAC)					
Rated short-circuit making capacity I_{cm} (kA peak) ⁽⁴⁾		48	75	48	75

(1) Category with index A = frequent operation.

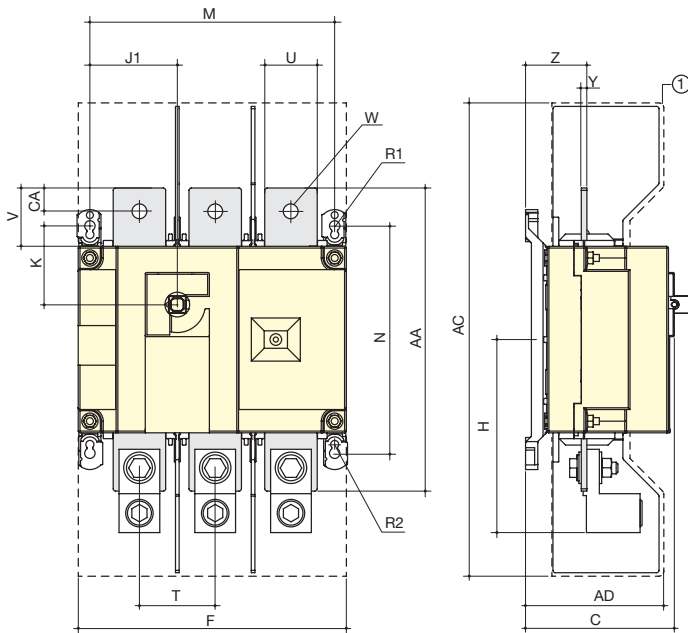
(2) A/B: Category with index A = frequent operation - Category with index B = infrequent operation.

(3) The power value is given for information only, the current values vary from one manufacturer to another.

(4) For a rated operating voltage $U_e = 400$ VAC.

Dimensions (in/mm)

100 and 200 A

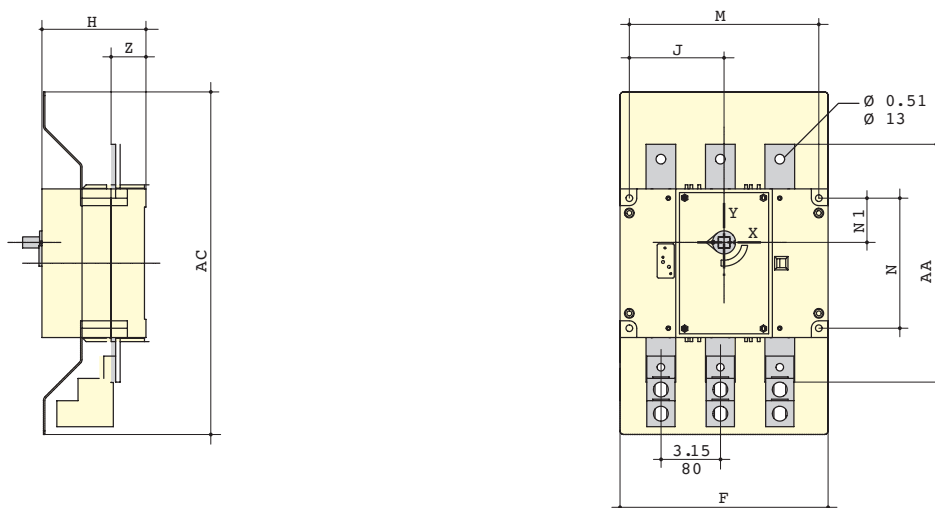


1. Terminal shrouds

sirco-ul_011_a_2_x_cat

Rating (A)	Unit	Overall dimensions	Terminal shrouds		Switch body						Switch mounting				Connection								
		C	AC	AD	F 3p.	F 4p.	H	J1 3p.	J1 4p.	K	M 3p.	M 4p.	N	R1	R2	T	U	V	W	Y	Z	AA	CA
100	in	3.72	10.1	3.05	7.09	9.06	4.22	2.17	4.13	1.8	6.3	8.27	5.31	0.35	0.27	1.97	0.98	1.18	0.43	0.14	1.35	6.3	0.6
	mm	94.6	256	77.5	180	230	107	55	105	45.6	160	210	135	9	7	50	25	30	11	3.5	34.4	160	15
200	in	3.72	10.1	3.05	7.09	9.06	4.22	2.17	4.13	1.8	6.3	8.27	5.31	0.35	0.27	1.97	0.98	1.18	0.43	0.14	1.35	6.3	0.6
	mm	94.6	256	77.5	180	230	107	55	105	45.6	160	210	135	9	7	50	25	30	11	3.5	34.4	160	15

400 and 600 A



sirco_107_d1_x_cat

Rating (A)	Unit	Terminal shrouds	Switch body				Switch mounting				Connection		
		AC	F 3p.	F 4p.	H	J 3p.	J 4p.	M 3p.	M 4p.	N	N1	AA	Z
400	in	18.12	11	14.17	5.5	5	6.59	10.04	13.19	6.88	2.34	11.81	1.85
	mm	460	280	360	140	127.5	167.5	255	335	175	59.5	300	47
600	in	18.12	11	14.17	5.5	5	6.59	10.03	13.19	6.88	2.34	12.6	1.85
	mm	460	280	360	140	127.5	167.5	255	335	175	59.5	320	47

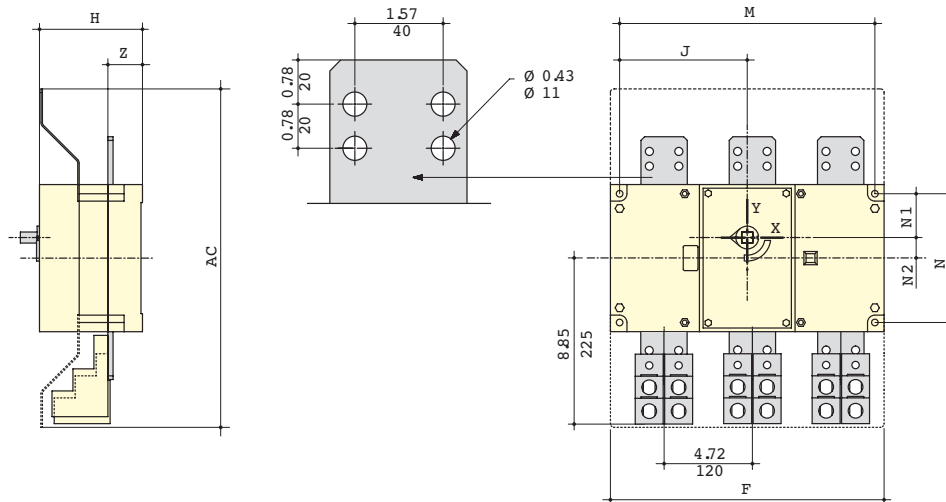
SIRCO UL 98

Non-fusible disconnect switches

100 to 1200 A

Dimensions (in/mm) (continued)

800 to 1200 A

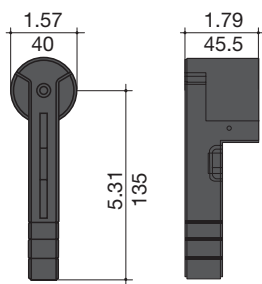


sirco_228_d_1_x_cat

Rating (A)	Unit	Terminal shrouds		Switch body				Switch mounting			
		AC	F 3p.	F 4p.	H	J 3p.	J 4p.	M 3p.	M 4p.	N	N1
800	in	18.12	14.64	19.37	5.5	6.83	9.19	13.66	18.38	6.88	2.34
	mm	460	372	492	140	173.5	233.5	347	467	175	59.5
1 000	in	18.12	14.64	19.37	5.5	6.83	9.19	13.66	18.38	6.88	2.34
	mm	460	372	492	140	173.5	233.5	347	467	175	59.5
1 200	in	18.12	14.64	19.37	5.5	6.83	9.19	13.66	18.38	6.88	2.34
	mm	460	372	492	140	173.5	233.5	347	467	175	59.5

100 to 400 A

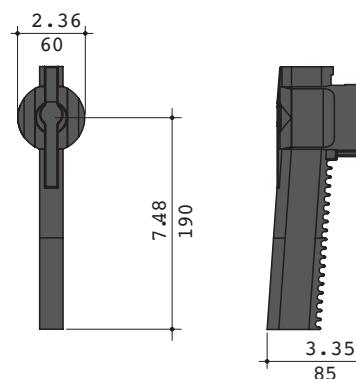
Front direct handle



sirco-ul_027_a_1_x_cat

600 to 1200 A

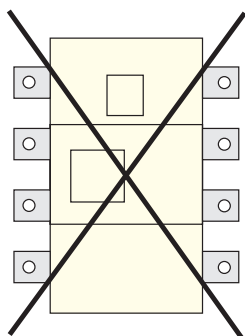
Front direct handle



sirco_267_b_1_x_cat

Mounting orientation

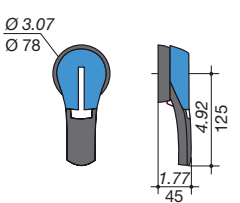
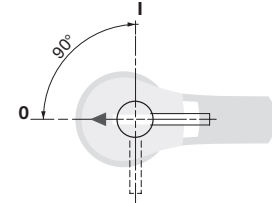
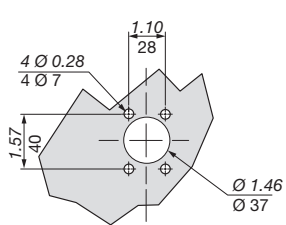
3/4 pole



sirco-ul_028_a_1_x_cat

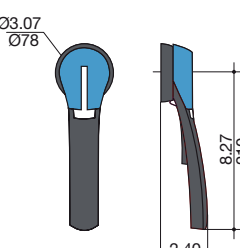
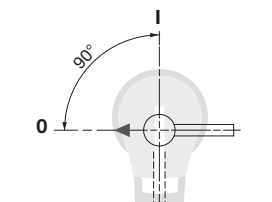
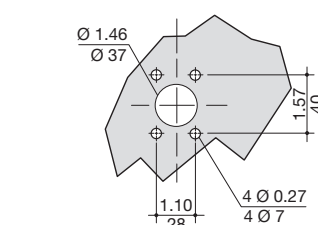
External handles dimensions (in/mm)

100 to 400 A

Handle type	Front operation Direction of operation	Door drilling
S2 type 		

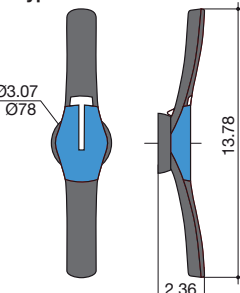
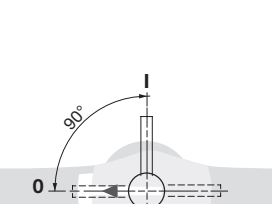
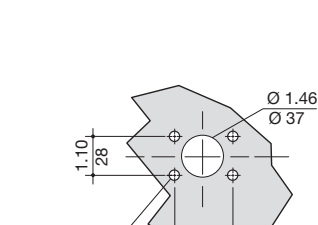
poign_013_a_1_us_cat

600 to 1200 A

Handle type	Front operation Direction of operation	Door drilling
S3 type 		

poign_046_a_1_gb_cat

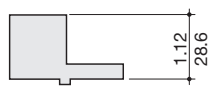
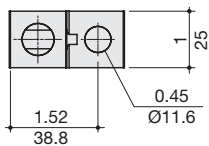
600 to 1200 A

Handle type	Front operation Direction of operation	Door drilling
S4 type 		

poign_036_a_1_us_cat

Terminal lugs (in/mm)

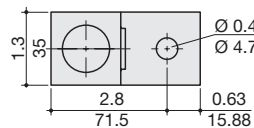
100 to 200 A



300 kcmil

sirco-ul_115_b_1_us_cat

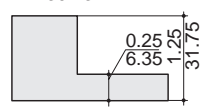
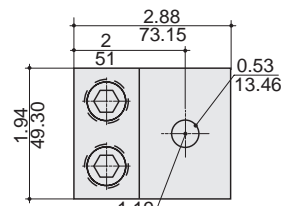
400 A



600 kcmil

sirco-ul_010_b_1_us_cat

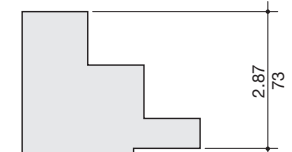
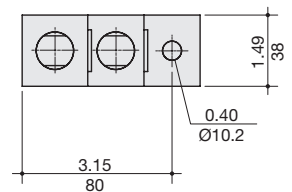
400 A



2 x 350 kcmil

sirco-ul_028_b_1_us_cat

600 to 1200 A



2 x 600 kcmil

sirco-ul_116_b_1_us_cat