



# SIRCO UL 98C

Non-fusible switches standards UL and CSA

400 to 800 A

sirco-ul\_022



**SIRCO**  
3 x 800 A

## Function

**SIRCO** non-fusible disconnect switches are heavy duty switches that break and make power circuits on and off load and provide safety isolation up to 800 VAC.

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.

## The solution for

- > AC Combiners Builders
- > String Inverters Manufacturers
- > Industrial Control Panels Manufacturers (UL 508A)
- > Switchboards Manufacturers (UL 891)
- > Distributors



## Strong points

- > Up to 65 kA short circuit rating
- > Reliability
- > Safety of property and personnel
- > Simplicity
- > Easy assembling

## Conformity to standards

- > UL 98C  
Guide WHTY2  
File E201138



## References

Rating (A)	No. of Poles	Switch Body	Direct handle	External handle	Shaft for external handle	Auxiliary contacts	Terminal protection screens	Terminal lugs kits			
400 A	3 P	2700 3042	2699 5052	S2 type Black 1, 3R, 12 142F 2111 <sup>(1)</sup>	7.9 in 200 mm 1400 1020	1 <sup>st</sup> contact NO/NC 2799 0021  2 <sup>nd</sup> contact NO/NC 2799 0022	3 P 2798 3041 <sup>(2)</sup> 2798 8041 <sup>(3)</sup>	3 P 3954 3040 <sup>(4)</sup>			
	4 P			Red/Yellow 1, 3R, 12 142G 2111 <sup>(1)</sup>	12.6 in 320 mm 1400 1032						
800 A	3 P	2700 3082	3799 6012	Black 4, 4X 142D 2111 <sup>(1)</sup>	15.7 in 400 mm 1400 1040			3 P 2798 3120 <sup>(5)</sup>	3 P 3954 3120		
	4 P	2700 4082		Red/Yellow 4, 4X 142E 2111 <sup>(1)</sup>	7.9 in 200 mm 1401 1520						
	3 P			S3 type Black 4, 4X 143D 3111 <sup>(1)</sup>	12.6 in 320 mm 1401 1532						
	4 P			Red/Yellow 4w, 4X 143E 3111 <sup>(1)</sup>	15.7 in 400 mm 1401 1540						

Common accessories - more available on next pages

(1) Defeatable handle.

(2) Top.

(3) Bottom.

(4) Top or bottom.

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

## Accessories

### Direct operation handle

Rating (A)	Color	Handle type	Reference
400	Black	B	2699 5052
800	Black	H	3799 6012



access\_114

B type handle



access\_135

H type handle

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## 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.



S2 type handle

access\_150



S3 type handle

access\_166



Heavy duty S2 type handle

access\_236

#### Front handle I - 0

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

#### Front handle heavy duty I - 0 with metallic lever

Rating (A)	Handle type	Color	Nema type	Reference
400	S2	Black	4, 4X	142D 2911
400	S2	Red/Yellow	4, 4X	142E 2911
800	S3	Black	4, 4X	143D 3911
800	S3	Red/Yellow	4, 4X	143E 3911

### Shaft for external handle

#### Use

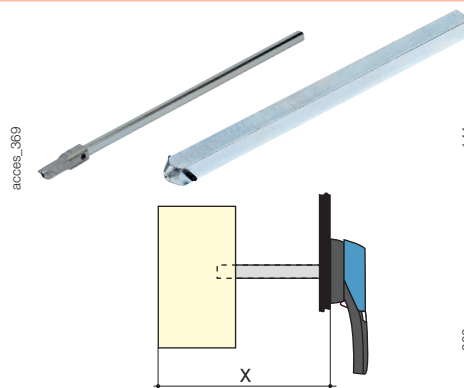
Standard lengths:

- 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
400	5.31 ... 10.43	135 ... 265	S2	7.9	200	1400 1020
400	5.31 ... 15.16	135 ... 385	S2	12.6	320	1400 1032
400	5.31 ... 18.31	135 ... 465	S2	15.7	400	1400 1040
400	5.31 ... 22.25	135 ... 565	S2	19.7	500	1400 1050
800	8.70 ... 13.50	221 ... 343	S3	7.9	200	1401 1520
800	8.70 ... 18.23	221 ... 463	S3	12.6	320	1401 1532
800	8.70 ... 21.38	221 ... 543	S3	15.7	400	1401 1540
800	8.70 ... 26.73	221 ... 679	S3	19.7	536	1401 1554 <sup>(1)</sup>

(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 S2 and S3.

Other colors: please consult us.

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



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



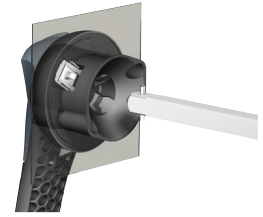
access\_187

### 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 signaling of positions 0 and I. To have 2 NO/NC contacts per switch, please order 1<sup>st</sup> and 2<sup>nd</sup> auxiliary contacts per switch. 1<sup>st</sup> contact is mandatory to operate the 2<sup>nd</sup> one.

**Electrical characteristics**

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



access\_076

**NO/NC contact for 400 to 800 A**

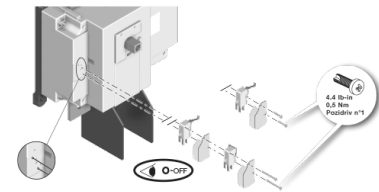
These auxiliary contacts are for an application of 125-250VAC, 60Hz, general use 10A, 1A 1/2 HP.

Rating (A)	No. of AC	Reference
400 ... 800	1 <sup>st</sup>	2799 0021
400 ... 800	2 <sup>nd</sup>	2799 0022

**Low level NO/NC contact for 400 to 800 A**

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

Rating (A)	No. of AC	Reference
400 ... 800	1 <sup>st</sup>	2799 0121
400 ... 800	2 <sup>nd</sup>	2799 0122



### Terminal screens

**Use**

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

Rating (A)	No. of poles	Position	Reference
400	3 P	top	2798 3041
400	3 P	bottom	2798 8041
800	3 P	bottom	2798 3120 <sup>(1)</sup>

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



access\_079

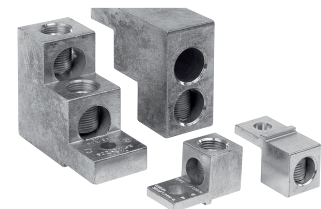
### Terminal lugs

**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
400	#4 - 600MCM	1	3	Cu / Al	3954 3040
400	2x (#6 - 350MCM)	2	3	Cu / Al	3954 3041
800 <sup>(1)</sup>	4x (#2 - 600MCM)	2	6	Cu / Al	3954 3120

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



ul\_032\_a

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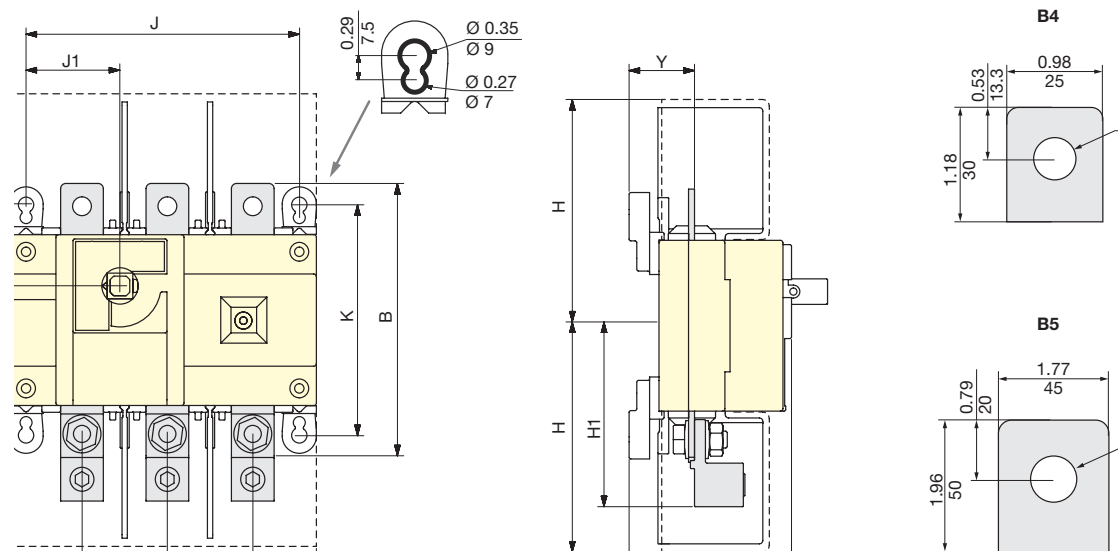
## Characteristics

### Characteristics according to UL 98C

General use rating (A)	400 A	800 A
Short circuit rating at 800 VAC (kA)	65	65
Type of fuse	170M7402	170M6546
Max. fuse rating (A)	400	800
<b>Connection terminals</b>		
Min. connection section / AWG	2x #6 / #4	4x #2
Max. connection section / AWG	2x 350 / 600MCM	4x 600MCM
<b>Mechanical characteristics</b>		
Endurance (number of operating cycles)	6000	3500
Operating torque (lbs.in/Nm)	128.3/14.5	442.5/50
<b>Auxiliary contacts</b>		
Electrical characteristics	A300	A600

## Dimensions (in/mm)

### 400 A

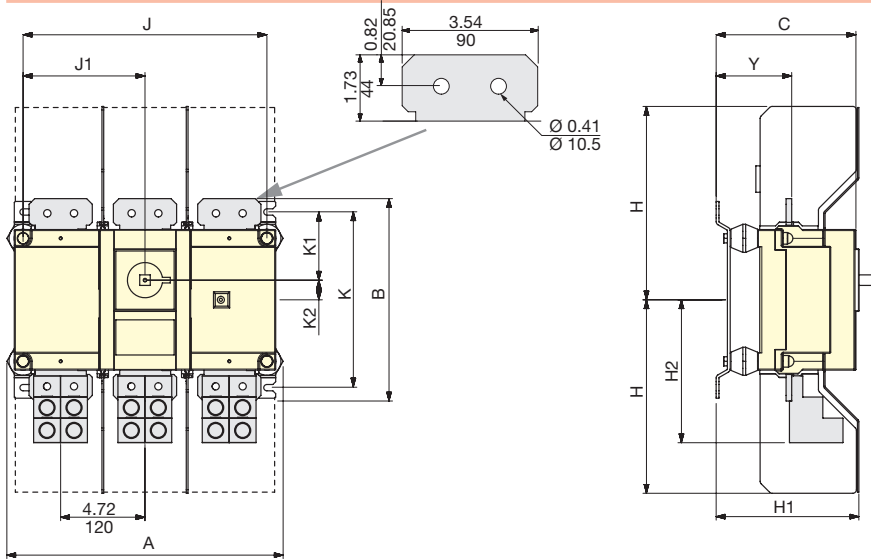


sirco-ul\_064\_la\_1\_x\_cat

Frame Size	No. of poles	Unit	A	B	C	H	H1 max.	J	J1	J2	K	K1	Y
B5	3 P	in	9.05	10.23	4.98	8	6.53	8.26	2.95	2.56	7.67	2.65	2.02
		mm	230	260	126.5	203	166	210	75	65	195	67.5	51.5

Dimensions (in/mm) (continued)

800 A

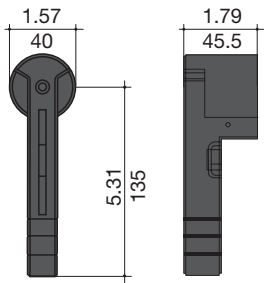


sirco-ul\_059\_a\_1\_x\_cat

Frame Size	No. of poles	Unit	A	B	C	H	H1	H2	H3	J	J1	K	K1	K2	Y
B7	3 P	in	15.47	11.33	7.98	10.83	8.30	8.01	9.43	13.68	6.83	9.84	3.82	1.10	4.23
		mm	393	288	200	275	211	203.5	293.5	347	173.5	250	97	28	107.5

400 A

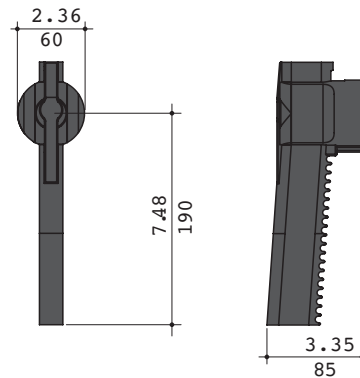
Front direct handle



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800 A

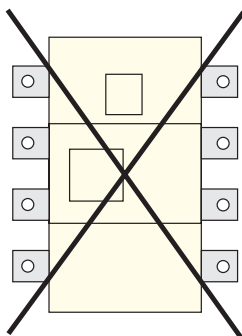
Front direct handle



sirco\_267\_b\_1\_x\_cat

Mounting orientation

400 and 800 A



sirco-ul\_028\_a\_1\_x\_cat

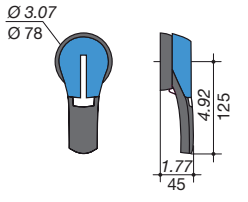
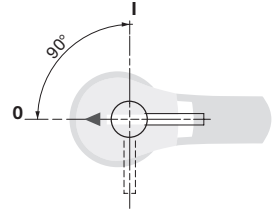
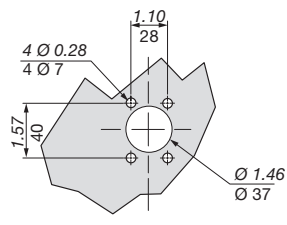
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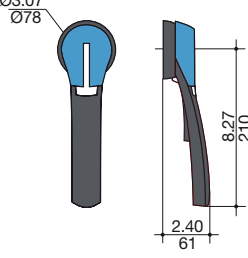
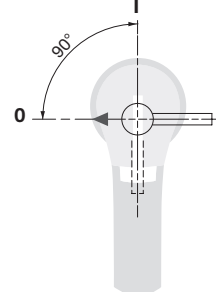
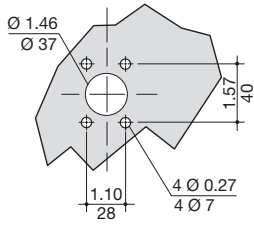
## External handles dimensions (in/mm)

### 400 A

Handle type	Front operation Direction of operation	Door drilling
<p><b>S2 type</b></p> 		

poign\_013\_a\_1\_us\_cat

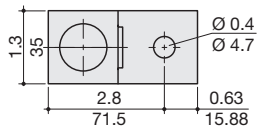
### 800 A

Handle type	Front operation Direction of operation	Door drilling
<p><b>S3 type</b></p> 		

poign\_046\_a\_1\_gb\_cat

Terminal lugs (in/mm)

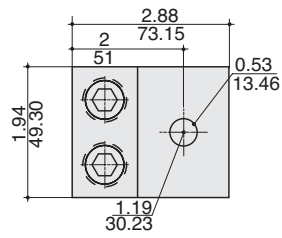
400 A



sirco-ul\_010\_b\_1\_us\_cat

600 kcmil

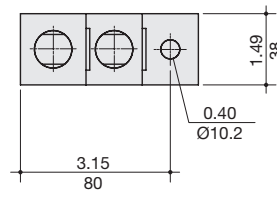
400 A



sirco-ul\_026\_b\_1\_us\_cat

2 x 350 kcmil

800 A



sirco\_116\_b\_1\_us\_cat

2 x 600 kcmil