

# FUSERBLOC UL

## Fusible disconnect switches

from 30 to 800 A



ul\_004\_a

### Function

FUSERBLOC UL units are manually-operated multipole fusible disconnect switches with the external right front-side operation and comply with UL and CSA standards.

They provide make-and-break on load, safety isolation, and protection against overcurrent for any low-voltage electrical circuit. The switches use double-pole isolator contacts to ensure complete fuse isolation when the switch is in the "OFF" position.

These devices are suitable for use as disconnectors for motors and industrial control panels on service entrance equipment, final panelboards, distribution switchboards, industrial control equipment or motor control centers.

This range is available in right front-side, direct or external control, in 2, 3 and 4 poles and up to 800 A.

### Advantages

#### Improved safety

The double-phase isolator (upstream-downstream of the fuse) and fully visible isolation guarantees the safety of people and equipment against overcurrents.

#### High breaking capacity

High breaking capacity fuses (200 kA rms) provide protection against overloads and shortcircuits.

#### Multi-use

The device can be equipped with a "Flange" type front or side operation handles, fitted directly on the product or externally, possibly installed on the door or the side of the electrical box or cabinet. The device is also equipped with voltage measurement terminals for taking measurements and an NFPA 79 compliance kit available as an option.

#### Simplified use

The TEST position enables testing of the control circuits without turning on the power, thanks to U-type auxiliary contacts. In the TEST position, the cabinet door can be opened.

### General characteristics

- For fuses up to 800 A.
- Up to 200 kA.
- AC voltage from 208 V to 600 V.
- Accepts Class CC, J, L and T-fuses.
- 2P, 3P or 4P available.

### The solution for data centers

- > Data center
- > Healthcare
- > Industry
- > Building



### Strong points

- > Improved safety
- > High breaking capacity
- > Multi-use
- > Simplified use

### Conformity to standards<sup>(1)</sup>

- > UL489 (box 1 and 2)



- > UL 98 (box 4 to 8)



- > CSA 22.2 #4 (box 1 and 2)

- > CSA 22.2 #5 (box 4 to 8)

- > NFPA 79 (2002 version)

### Enclosures

- > Enclosed fusible disconnect switch available



coff-ul\_002.psd

## References

### Fusible disconnect

Rating (A) Fuses Frame size	No. of poles	Switch body	Direct handle	Front external handle	External right side handle <sup>(1)</sup>	Shaft external handle	NFPA79 kit	U-type auxiliary contacts	Terminal shrouds	
CD 30 A CC 1	3 P	3710 <b>3003</b>	Black 3729 <b>4012</b>	S0 type Black I - 0		S0 type 200 mm 7.9 inches 1405 <b>0620</b>	3729 <b>4532</b> <sup>(2)</sup>			
	3 P + switched neutral	3710 <b>4003</b>		1, 3R, 12 1493 <b>0111</b>		320 mm 12.6 inches 1405 <b>0632</b>				
	3 P + solid neutral	3710 <b>5003</b>		4, 4X 149D <b>0111</b>		400 mm 15.7 inches 1405 <b>0640</b>				
CD 30 A J 2	3 P	3710 <b>3004</b>	3729 <b>4014</b>	S1 type Black I - 0		S1 type 200 mm 7.9 inches 1401 <b>0520</b>		1 contact NO 3999 <b>0701</b> 1 contact NC 3999 <b>0702</b>	not required	
	3 P + switched neutral	3710 <b>4004</b>		1, 3R, 12 141F <b>2111</b>		320 mm 12.6 inches 1401 <b>0532</b>				
	3 P + solid neutral	3710 <b>5004</b>		4, 4X 141D <b>2111</b>		400 mm 15.7 inches 1401 <b>0540</b>				
30 A J 4	2 P	3861 <b>2004</b>	Black 3629 <b>7910</b>	S1 type Black	S1 type Black	S1 type	3729 <b>7540</b>			
	3 P	3861 <b>3004</b>		I - 0 1, 3R, 12 Defeatable 141F <b>2111</b>		I - 0 4, 4X 141H <b>6111</b>				200 mm 7.9 inches 1400 <b>1020</b>
	4 P	3861 <b>6004</b>		I - 0 4, 4X Defeatable 141D <b>2111</b>		S1 type Red / yellow				320 mm 12.6 inches 1400 <b>1032</b>
60 A J 4	2 P	3861 <b>2005</b>		I - 0 4, 4X Defeatable 141D <b>2111</b>	S1 type Red / yellow	400 mm 15.7 inches 1400 <b>1040</b>				
	3 P	3861 <b>3005</b>		I - 0 - Test 4, 4X Defeatable 141D <b>2115</b>		I - 0 4, 4X 141I <b>6111</b>				400 mm 15.7 inches 1400 <b>1040</b>
	4 P	3861 <b>6005</b>								

Common accessories - more available on next pages.

(1) No door interlocking.

(2) Please use with S1 handle

# FUSERBLOC UL

Fusible Disconnect Switches UL and CSA  
from 30 to 800 A

## References (continued)

### Fusible Disconnect Switches

Rating (A) fuses Frame size	No. of poles	Switch body	Direct handle	Front external handles	External right side handle <sup>(1)</sup>	Shaft for external handle	NFPA79 kit	U-type auxiliary contacts	Terminal shrouds																		
60 A J 5	2 P	3861 2006	Black 3629 7910	S2 type Black I - 0  1, 3R, 12 Defeatable 142F 2111  4, 4X Defeatable 142D 2111	S2 type Black I - 0  4, 4X 142H 6111  Red / yellow I - 0  4, 4X 142I 6111	S2 type  200 mm 7.9 inches 1400 1020  320 mm 12.6 inches 1400 1032  400 mm 15.7 inches 1400 1040	3729 7540	1 contact type NO 3999 0701 1 contact type NC 3999 0702	not required																		
	3 P	3861 3006																									
	4 P	3861 6006																									
100 A J 5	2 P	3861 2010 <sup>(2)</sup>							Black 3629 7910	S2 type Black I - 0  1, 3R, 12 Defeatable 142F 2111  4, 4X Defeatable 142D 2111	S2 type Black I - 0  4, 4X 142H 6111  Red / yellow I - 0  4, 4X 142I 6111	S2 type  200 mm 7.9 inches 1400 1020  320 mm 12.6 inches 1400 1032  400 mm 15.7 inches 1400 1040	3729 7540	1 contact type NO 3999 0701 1 contact type NC 3999 0702	not available												
	3 P	3861 3011 <sup>(3)</sup>													not required												
	4 P	3861 6010 <sup>(2)</sup>													3898 2020												
200 A J 6	2 P	3861 2020													Black 3629 7910	S2 type Black I - 0  1, 3R, 12 Defeatable 142F 2111  4, 4X Defeatable 142D 2111	S2 type Black I - 0  4, 4X 142H 6111  Red / yellow I - 0  4, 4X 142I 6111	S2 type  200 mm 7.9 inches 1400 1020  320 mm 12.6 inches 1400 1032  400 mm 15.7 inches 1400 1040	3729 7540	1 contact type NO 3999 0701 1 contact type NC 3999 0702	3898 3020						
	3 P	3861 3020																			3898 4020						
	4 P	3861 6020																			3898 2040						
400 A J 7	2 P	3851 2038																			Black 3629 7910	S2 type Black I - 0  1, 3R, 12 Defeatable 142F 2111  4, 4X Defeatable 142D 2111	S2 type Black I - 0  4, 4X 142H 6111  Red / yellow I - 0  4, 4X 142I 6111	S2 type  200 mm 7.9 inches 1400 1020  320 mm 12.6 inches 1400 1032  400 mm 15.7 inches 1400 1040	3729 7544	1 contact type NO 3999 0701 1 contact type NC 3999 0702	3898 3040
	3 P	3851 3038																									3898 6040
	4 P	3851 6038																									
600 A J 8	2 P	3850 2060	Black 3859 6011	S3 type Black I - 0  1, 3R, 12 Defeatable 143F 3111  4, 4X Defeatable 143D 3111	S3 type  200 mm 7.9 inches 1400 1220  320 mm 12.6 inches 1400 1232  400 mm 15.7 inches 1400 1240	S3 type  200 mm 7.9 inches 1400 1220  320 mm 12.6 inches 1400 1232  400 mm 15.7 inches 1400 1240	3729 7552	1 contact type NO 3999 0701 1 contact type NC 3999 0702																			2 P 3898 2080
	3 P	3850 3060																									3 P 3898 3080
	4 P	3850 6060																									4 P 3898 4080
800 A L 8	2 P	3850 2080							Black 3859 6011	S3 type Black I - 0  1, 3R, 12 Defeatable 143F 3111  4, 4X Defeatable 143D 3111	S3 type  200 mm 7.9 inches 1400 1220  320 mm 12.6 inches 1400 1232  400 mm 15.7 inches 1400 1240	S3 type  200 mm 7.9 inches 1400 1220  320 mm 12.6 inches 1400 1232  400 mm 15.7 inches 1400 1240	3729 7552	1 contact type NO 3999 0701 1 contact type NC 3999 0702													
	3 P	3850 3080																									
	4 P	3850 6080																									

Common accessories - more available on next pages.

(1) No door interlocking.

(2) cage terminal connection

(3) terminal connection

## Accessories

### Electronic fuse operation indication (FMD)

#### Use

For fuse cartridge BS88, DIN and UL.

#### Principle

The FMD detects fuse operation using a bistable relay and a signaling LED.

It can be mounted on a DIN rail, a back plate, next to the FUSERBLOC, or on the door.

#### References

For FUSERBLOC 100 to 800 A			
Nb of leds	Type	Operating voltage Ph/Ph	Reference
3	FMD30	120 - 260 VAC	3899 3120
3	FMD30	380 - 690 VAC	3899 3380
Accessories			Reference
Kit for connection accessories		Standard	3819 9120
Kit for connection accessories		Door mounted	3829 9120

#### Relay characteristics

Type	Relay operating current I <sub>c</sub> (A)	
	AC-15	DC-13
FMD30	2.5 A	0.2



## NFPA79 accessories

### Flange handle for flange operation

**Use**

Meets both UL 508A and NFPA 79 requirements.  
 The handle will operate the switch by cable or rod.

Rating (A)	Type	Nema type	Reference
30 ... 200	Standard handle	1, 3, 3R, 4, 12	3729 9002 <sup>(1)</sup>
30 ... 200	Chrome plated handle	1, 3, 3R, 4, 4X, 12	3729 9003 <sup>(1)</sup>

For 400 A rating, please consult us.  
 (1) Defeatable handle.



siroco\_246\_a\_1\_us\_cat

### Cable operator

**Use**

Link between the flange handle and the switch, please order the flange handle, the mechanism and a cable length of your choice.

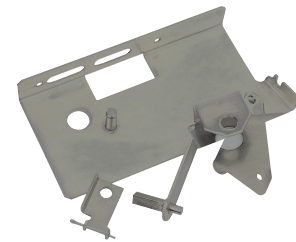
Rating (A)	Description	Reference
30 ... 200	Cable flange mechanism	3729 9903

Cable length (inches)	Cable length (mm)	Reference
36	900	3729 9992
60	1500	3729 9993
120	3000	3729 9994

For 400 A rating, please consult us.



siroco\_247\_a\_1\_cat



ul\_042\_b\_1

### Rod operator

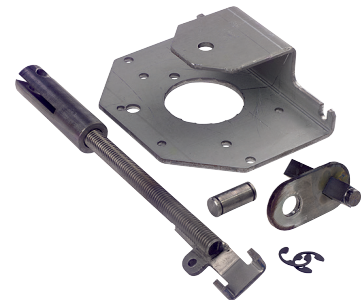
**Use**

Link between the flange handle and the switch. The rod flange is an economical solution, please order the flange handle and a rod kit.

**Rating 30 ... 200 A**

For enclosure depth (inches)	For enclosure depth (mm)	Reference
8 ... 24	203 ... 613	3729 9904

For 400 A rating, please consult us.



ul\_043\_a

### NFPA 79 “Through the door” kit

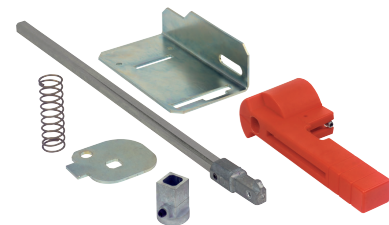
**Use**

Meets both UL 508A and NFPA 79 requirements.  
 Allows retrofit of your installations for ratings from 30 to 800 A.  
 Please order an S-type external handle separately.

Number of auxiliary contact installed on the switch will be limited to 1 layer (instead of 2).  
 If more needed please use the S type auxiliary contacts.  
 Delivered with a 12.6 in / 320 mm shaft.  
 For longer shafts, please consult us.

Rating (A)	Frame size	Reference
CD 30	1/2	3729 4532 <sup>(1)</sup>
30 ... 200	3 ... 6	3729 7540
400	7	3729 7544
600 ... 800	8	3729 7552

(1) Please use with S1 handle.



ul\_121\_b

# FUSERBLOC UL

Fusible Disconnect Switches UL and CSA  
from 30 to 800 A

## Accessories

### Direct handle

Rating (A)	Color	Fuses	Fig.	Reference
CD 30	Black	CC	1	3729 <b>4012</b>
CD 30	Black	J	1	3729 <b>4014</b>
30 ... 400	Black	J	2	3629 <b>7910</b>
600 ... 800	Black	J / L	2	3859 <b>6011</b>



### External handle

#### Use

The locking function of the front external handle prevents the user from opening the door of the enclosure when the switch is in the "ON" position and when the switch is padlocked in the "OFF" position (S1, S2, S3 and S4 type handles only).

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



S0-type handle

access\_263\_a\_2\_cat



S-type handle

access\_149\_a\_2\_cat



S2-type handle

access\_164\_a\_2\_cat



S3-type handle

access\_151\_a\_1\_cat



Heavy-duty handle

access\_236\_psd

### Front operation

Rating (A)	Frame size	Handle type	Nema type	Test	Handle color	Reference
CD 30	1/2	S0 <sup>(1)</sup>	1, 3R, 12	I - 0	Black	1493 <b>0111</b>
CD 30	1/2	S0 <sup>(1)</sup>	1, 3R, 12	I - 0	Red/Yellow	1494 <b>0111</b>
CD 30	1/2	S0 <sup>(1)</sup>	4, 4X	I - 0	Black	149D <b>0111</b>
CD 30	1/2	S0	4, 4X	I - 0	Red/Yellow	149E <b>0111</b>
CD 30 ... 60	1/2/4	S1	1, 3R, 12	I - 0	Black	141F <b>2111</b>
CD 30 ... 60	1/2/4	S1	1, 3R, 12	I - 0	Red/Yellow	141G <b>2111</b>
CD 30 ... 60	1/2/4	S1	4, 4X	I - 0	Black	141D <b>2111</b>
CD 30 ... 60	1/2/4	S1	4, 4X	I - 0	Red/Yellow	141E <b>2111</b>
CD 30 ... 60	1/2/4	S1	4, 4X	I - 0 - Test	Black	141D <b>2115</b>
CD 30 ... 60	1/2/4	S1	4, 4X	I - 0 - Test	Red/Yellow	141E <b>2115</b>
60 ... 200	5 ... 7	S2	4, 4X	I - 0 - Test	Black	142D <b>2115</b>
60 ... 200	5 ... 7	S2	4, 4X	I - 0 - Test	Red/Yellow	142E <b>2115</b>
60 ... 400	5 ... 7	S2	1, 3R, 12	I - 0	Black	142F <b>2111</b>
60 ... 400	5 ... 7	S2	1, 3R, 12	I - 0	Red/Yellow	142G <b>2111</b>
60 ... 400	5 ... 7	S2	4, 4X	I - 0	Black	142D <b>2111</b>
60 ... 400	5 ... 7	S2	4, 4X	I - 0	Red/Yellow	142E <b>2111</b>
600 ... 800	8	S3	1, 3R, 12	I - 0	Black	143F <b>3111</b>
600 ... 800	8	S3	1, 3R, 12	I - 0	Red/Yellow	143G <b>3111</b>
600 ... 800	8	S3	4, 4X	I - 0	Black	143D <b>3111</b>
600 ... 800	8	S3	4, 4X	I - 0	Red/Yellow	143E <b>3111</b>

(1) S0: No interlock in the OFF position.

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

Rating (A)	Frame size	Handle type	Nema type	Test	Handle color	Reference
CD 30 ... 60	1/2/4	S1	4, 4X	I - 0	Black	141D <b>2911</b>
CD 30 ... 60	1/2/4	S1	4, 4X	I - 0	Red/Yellow	141E <b>2911</b>
60 ... 400	5 ... 7	S2	4, 4X	I - 0	Black	142D <b>2911</b>
60 ... 400	5 ... 7	S2	4, 4X	I - 0	Red/Yellow	142E <b>2911</b>
600 ... 800	8	S3	4, 4X	I - 0	Black	143D <b>3911</b>
600 ... 800	8	S3	4, 4X	I - 0	Red/Yellow	143E <b>3911</b>

### Right side operation

Rating (A)	Frame size	Handle type	Nema type	Test	Handle color	Reference
30 ... 60	4	S1	4, 4X	I - 0	Black	141H <b>6111</b>
30 ... 60	4	S1	4, 4X	I - 0	Red/Yellow	141I <b>6111</b>
100 ... 400	5 ... 7	S2	4, 4X	I - 0	Black	142H <b>6111</b>
100 ... 400	5 ... 7	S2	4, 4X	I - 0	Red/Yellow	142I <b>6111</b>
600 ... 800	8	S3	4, 4X	I - 0	Black	consult us
600 ... 800	8	S3	4, 4X	I - 0	Red/Yellow	consult us

### S-type handle raiser

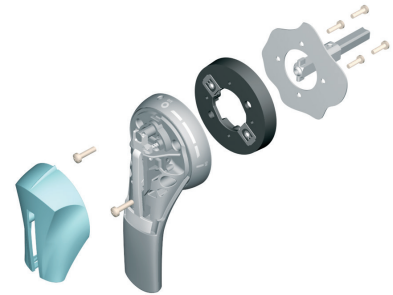
#### Use

Enables S-type handles to be fitted in place of older-style SOCOMEC handles. An adapter can also be used as a spacer to increase the distance between the panel door and the handle lever.

#### Dimensions

Increases distance to door by 0.47 in / 12 mm.

Handle color	Pack qty	External degree of protection (IP)	Reference
Black	10	IP65	1493 0000



access\_187\_a\_1\_cat

### Alternative color S-type handle cover

#### Use

For single lever handle S-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	S2, S3	1401 0001
Dark grey	50	S2, S3	1401 0011
Light grey	50	S4	1401 0031
Dark grey	50	S4	1401 0041



access\_198\_a\_1\_cat

### Shaft for external handle

#### Use

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

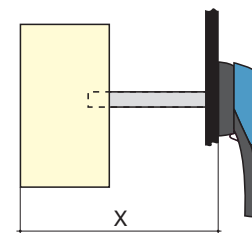
Other lengths: please consult us.

Rating (A)	Dimensions X		Length		Reference
	(in)	(mm)	(in)	(mm)	
CD 30	4.02 ... 9.65	102 ... 245	7.9	200	1405 0620
CD 30	4.02 ... 14.37	102 ... 365	12.6	320	1405 0632
CD 30	4.02 ... 17.52	102 ... 445	15.7	400	1405 0640
CD 30	4.02 ... 9.65	102 ... 245	7.9	200	1401 0520
CD 30	4.02 ... 14.37	102 ... 365	12.6	320	1401 0532
CD 30	4.02 ... 17.52	102 ... 445	15.7	400	1401 0540
30 ... 100	5.3 ... 9.06	135 ... 230	7.9	200	1400 1020
30 ... 100	5.3 ... 13.78	135 ... 350	12.6	320	1400 1032
30 ... 100	5.3 ... 16.93	135 ... 430	15.7	400	1400 1040
30 ... 100	5.3 ... 20.87	135 ... 530	19.7	500	1400 1050
200	5.7 ... 9.06	145 ... 230	7.9	200	1400 1020
200	5.7 ... 13.78	145 ... 350	12.6	320	1400 1032
200	5.7 ... 16.93	145 ... 430	15.7	400	1400 1040
200	5.7 ... 20.87	145 ... 530	19.7	500	1400 1050
400	7.87 ... 10.24	200 ... 260	7.9	200	1400 1020
400	7.87 ... 14.96	200 ... 380	12.6	320	1400 1032
400	7.87 ... 18.1	200 ... 460	15.7	400	1400 1040
400	7.87 ... 22	200 ... 560	19.7	500	1400 1050
600 ... 800	10.63 ... 11.97	270 ... 304	7.9	200	1400 1220
600 ... 800	10.63 ... 16.69	270 ... 424	12.6	320	1400 1232
600 ... 800	10.63 ... 19.84	270 ... 504	15.7	400	1400 1240
600 ... 800	10.63 ... 23.78	270 ... 604	19.7	500	1400 1250



access\_145\_b\_1\_cat

access\_369\_a\_1\_cat



access\_202\_a\_1\_cat

# FUSERBLOC UL

Fusible Disconnect Switches UL and CSA  
from 30 to 800 A

## Accessories (continued)

### External front operation shaft support accessory

#### Use

This support maintains shaft position for extension shafts greater than 12.6 in / 320 mm in length.

Rating (A)	Frame size	Reference
50 ... 400	11 ... 16	3899 0400



fuser\_698\_a\_2\_cat

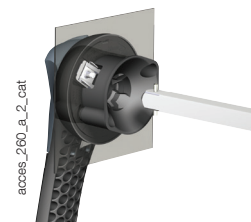
### Shaft guide for external handle

#### Use

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

Required for a shaft length over 400 mm for S1 to S3 handles and for a shaft from 12.6 in / 320 mm for S0 handle.

Description	Reference
Shaft guide for S1 to S3 handles	1429 0000
Shaft guide for S0 handle	1419 0000



access\_260\_a\_2\_cat

### U-type auxiliary contacts

#### Use

U-type AC can be configured to be operated on both standard and TEST position switches from CD 30 to 800 A. Each slot can accommodate up to 2 interlocked ACs.

- For CD 30A/CC, a maximum of 4 ACs (8 with an additional holder);
- For CD 30A/J, maximum 2 ACs (6 with an additional holder),
- For 30 to 200A/J, maximum 4 ACs.
- For 400 to 800A/L, maximum 8 ACs.

#### Electrical characteristics

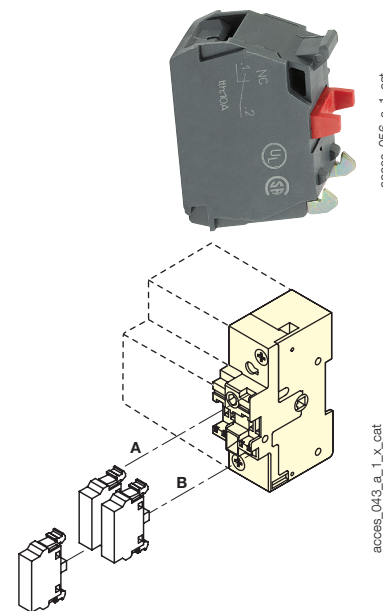
A600.

When FUSERBLOC is front operated, ACs are prebreak and signaling position I and 0. When FUSERBLOC is side operated, ACs are signaling positions I and 0.

NO auxiliary contacts		
Rating (A)	Number of contacts	Reference
CD 30 ... 800	1	3999 0701

NC auxiliary contacts		
Rating (A)	Number of contacts	Reference
CD 30 ... 800	1	3999 0702

Contact holder for additional auxiliary contacts		
Rating (A)	Fuses	Reference
CD 30	CC	3999 0710
CD 30	J	3999 0710



access\_066\_a\_1\_cat

access\_043\_a\_1\_LX\_cat

CD 30 : U-type auxiliary contacts cannot be mounted on switches with direct operation handle

### S-type auxiliary contacts

#### Use

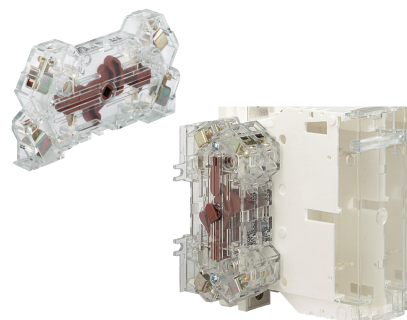
Side-operated auxiliary contacts for FUSERBLOC 30 to 400 A, position OFF and ON signaled by 1 to 4 NO + NC auxiliary contacts.

#### Electrical characteristics

A600/D600.

S-type auxiliary contacts are signaling position I and 0.

NO+NC auxiliary contacts		
Rating (A)	Number of contacts	Reference
30 ... 800	1	3999 U041
30 ... 800	2	3999 U042



access\_051\_a\_1\_cat

access\_083\_a\_1\_cat

## Terminal shrouds

### Use

Top or bottom protection against direct contact with terminals or connection parts.  
 2 sets required to fully shroud both line and load terminals.

Front and side operation		
Rating (A)	No. of poles	Reference <sup>(1)</sup>
30 ... 100	2/3/4 P	as standard
200	2 P	3898 2020
200	3 P	3898 3020
200	4 P	3898 4020
400	2 P	3898 2040 <sup>(2)</sup>
400	3 P	3898 3040 <sup>(2)</sup>
400	4 P	3898 6040 <sup>(2)</sup>
600 ... 800	2 P	3898 2080 <sup>(3)</sup>
600 ... 800	3 P	3898 3080 <sup>(3)</sup>
600 ... 800	4 P	3898 4080 <sup>(3)</sup>

(1) Top or bottom. (2) Not compatible with 2 wire lugs (3954x041). (3) Line side delivered as standard.



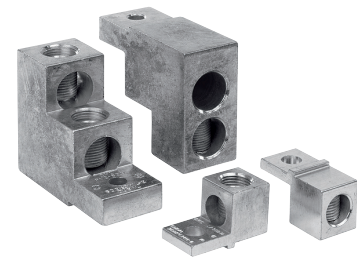
fuser\_314\_a\_1\_cat

## Terminals lugs

### Use

Connection of cables to the terminals.

Rating (A)	Wires range	No wires per lug	Lugs per kit	Wires	Reference
CD 30	#14 - #10	1		Cu	as standard
30	#14 - #10	1		Cu	as standard
30 ... 60	#10 - #6	1		Cu	as standard
60 ... 100	#12 - #1	1		Cu	as standard
100	#14 - #2/0	1	3	Cu / Al	3954 3011
200	#6 - 300MCM	1	2	Cu / Al	3954 2020
200	#6 - 300MCM	1	3	Cu / Al	3954 3020
200	#6 - 300MCM	1	4	Cu / Al	3954 4020
400	#2 - 600MCM	1	2	Cu / Al	3954 2040
400	#2 - 600MCM	1	3	Cu / Al	3954 3040
400	#2 - 600MCM	1	4	Cu / Al	3954 4040
400	2 x (#6 - 350 MCM)	2	2	Cu / Al	3954 2041
400	2 x (#6 - 350 MCM)	2	3	Cu / Al	3954 3041
400	2 x (#6 - 350 MCM)	2	4	Cu / Al	3954 4041
600 ... 800	2 x (#2 - 600MCM)	1	2	Cu / Al	3954 2060
600 ... 800	2 x (#2 - 600MCM)	2	3	Cu / Al	3954 3060
600 ... 800	2 x (#2 - 600MCM)	2	4	Cu / Al	3954 4060



u\_l\_032\_a

## Solid links

Rating (A)	Fuses	No of links per kit	Reference
100	J	3	3799 9010
200	J	3	3799 9020
400	J	3	3799 9040
600 ... 800	J / L	3	3799 9080



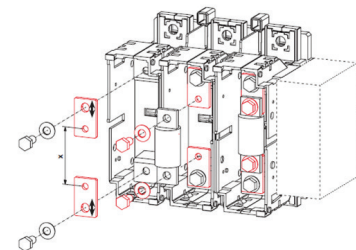
fuser-ul\_019\_a\_1\_cat

## Class T fuse adapter

### Use

The adapter makes it possible to fit class T fuses in the FUSERBLOC fuse switches.

Rating (A)	Size Class T fuse		No. of poles	Reference
	(in)	(mm)		
100	2.34	59.5	3 P	3729 8010
200	2.48	63	3 P	3729 8020
400	2.71	69	3 P	3729 8040
600	2.95	75	3 P	3729 8060
800	3.17	80.5	3 P	3729 8080



fuser-ul\_014\_b\_1\_cat

# FUSERBLOC UL

Fusible Disconnect Switches UL and CSA  
from 30 to 800 A

## Characteristics according to UL 98/CSA 22.2 #4

### CD 30 to 800 A

Characteristics UL and CSA	CD 30 A <sup>(3)</sup>	CD 30 A <sup>(3)</sup>	30 A	60 A	60 A	100 A	100 A	200 A	400 A	600 A	800 A
Frame size	1	2	4	4	5	5	5	6	7	8	8
Short circuit rating at 600 VAC (kA)	100	100	200	100	200	200	200	200	200	200	200
Type of fuse	CC	J	J	J	J	J	J	J	J	J	L
Max. fuse rating (A)	30	30	30	60	60	100	100	200	400	600	800
<b>Max. motor hp / FLA 1 ph motor max.</b>											
120 VAC	2 / 24	2 / 24	2 / 24	5 / 56	5 / 56	7.5 / 80	7.5 / 80	15 / 135	-	-	-
240 VAC	5 / 28	5 / 28	5 / 28	10 / 50	10 / 50	20 / 88	20 / 88	40 / 176	50 / 216	-	-
<b>Max. motor hp / FLA 3 ph motor max.</b>											
220-240 VAC	7.5 / 22	7.5 / 22	7.5 / 22	15 / 42	15 / 42	30 / 80	30 / 80	60 / 154	125 / 312	200 / 480	200 / 480
440-480 VAC	15 / 21	15 / 21	15 / 21	30 / 40	30 / 40	60 / 77	60 / 77	125 / 156	250 / 302	500 / 590	500 / 590
600 VAC	20 / 22	20 / 22	20 / 22	50 / 52	50 / 52	75 / 77	75 / 77	150 / 144	350 / 336	500 / 472	500 / 472
125 VDC <sup>(1)</sup>	3 / 25	3 / 25	3 / 25	3 / 25	3 / 25	7.5 / 58	7.5 / 58	15 / 112	20 / 148	-	-
250 VDC <sup>(2)</sup>	5 / 20	5 / 20	5 / 20	10 / 38	10 / 38	20 / 38	20 / 38	40 / 140	50 / 173	-	-
<b>Mechanical endurance</b>											
Endurance (number of operating cycles)	10 000	10 000	10 000	10 000	10 000	10 000	10 000	8 000	6 000	5 000	5 000
Operating torque (lbs.in / Nm)	31 / 3.5	31 / 3.5	71 / 8	71 / 8	71 / 8	71 / 8	71 / 8	90 / 10.2	150 / 17	586 / 66.2	586 / 66.2
<b>Connection</b>											
Connection type	Cage	Cage	Cage	Cage	Cage	Cage	Terminal	Terminal	Terminal	Terminal	Terminal
Min. connection cross-section/ (mm <sup>2</sup> ) <sup>(3)</sup>	#14	#14	#14 <sup>(4)(5)</sup>	#14 <sup>(4)(5)</sup>	#10	#10	#14	#6	#2 or 2 x #6	2 x #2	2 x #2
Max. connection cross-section/ (mm <sup>2</sup> ) <sup>(3)</sup>	#10	#10	#10 <sup>(4)(6)</sup>	#10 <sup>(4)(6)</sup>	#2/0	#2/0	#2/0	300MCM	600MCM or 2 x 350MCM	2 x 600MCM	2 x 600MCM

(1) 2 pole in series.

(2) 3 pole in series.

(3) UL 489/CSA22.2 #5.

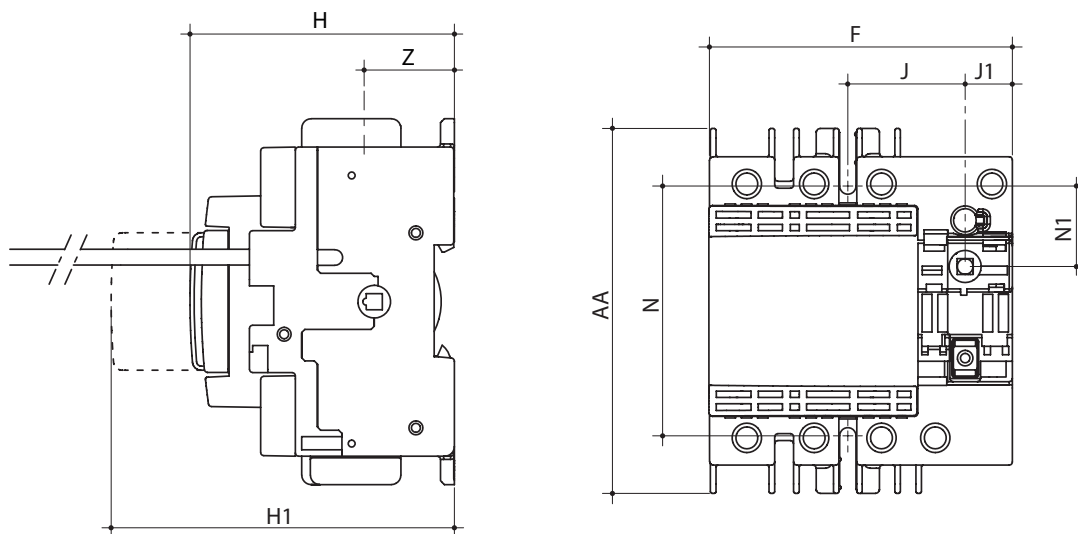
(4) Double wire solid Cu min and max 2 x #10

(5) Double wire stranded Cu min 2 x #12

(6) Double wire stranded Cu max 2 x #10

## Dimensions (in/mm)

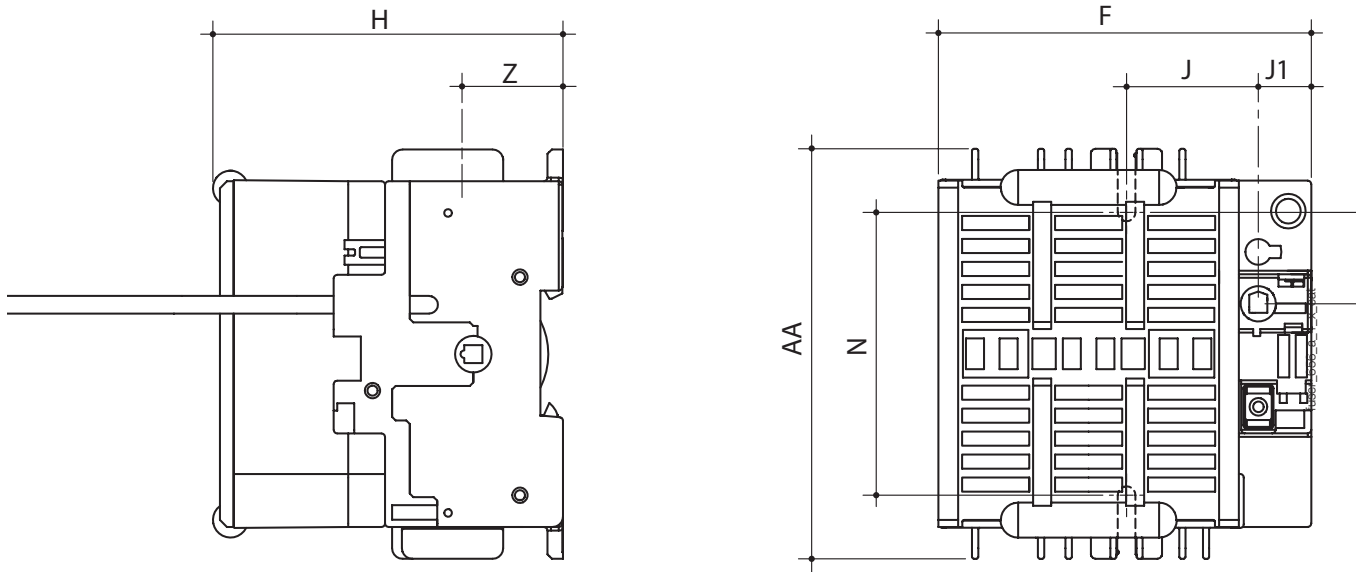
### CD 30 A / CC - Frame size 1



fuser\_655\_a\_1\_x\_cat

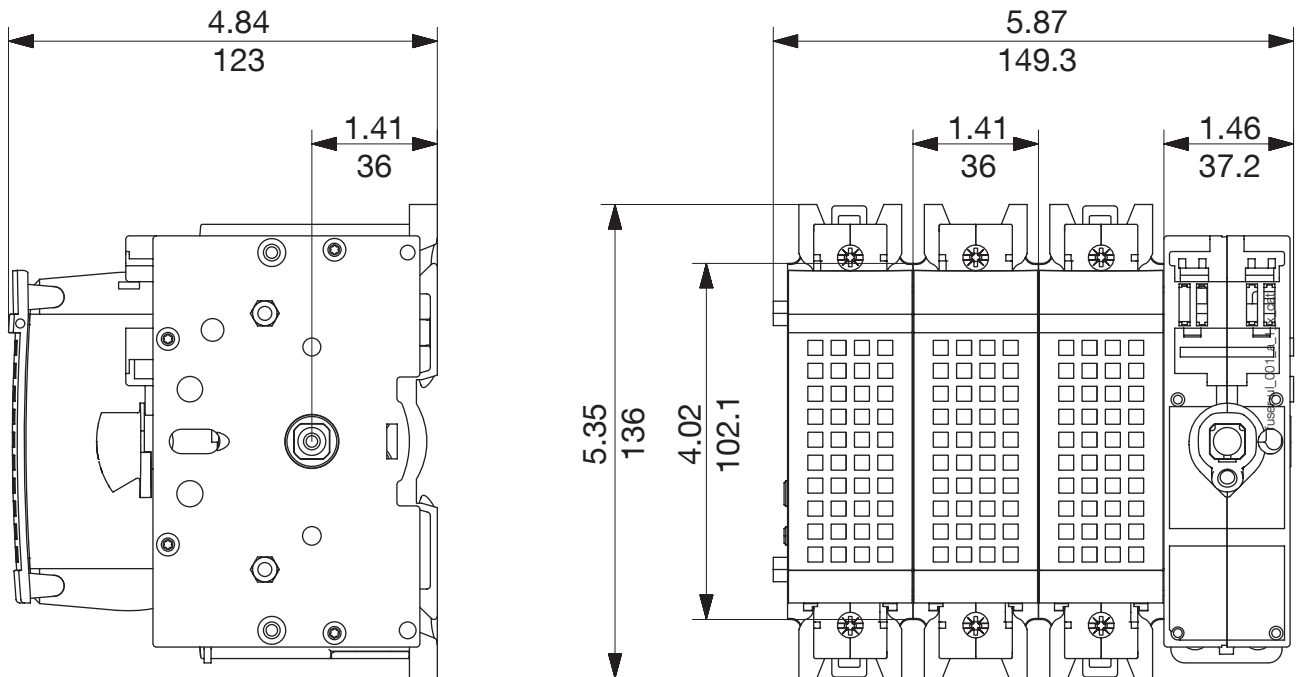
Rating (A) / Fuse	Unit	Switch body					Switch mounting		Connection	
		F	H	H1	J	J1	N	N1	AA	Z
CD 30 A / CC	in	3.78	3.28	5.19	1.47	0.59	3.13	1	4.56	1.12
	mm	96	83.5	132	37.5	15	79.5	25.5	116	28.5

30 to 60 A / J - Frame size 2



Rating (A) / Fuse	Unit	Switch body				Switch mounting		Connection	
		F	H	J	J1	N	N1	AA	Z
CD 30 A / J	in	4.13	3.89	1.47	0.59	3.30	1	4.56	1.12
	mm	105	99	37.5	15	84	25.5	116	28.5

30 to 60 A / J - Frame size 4



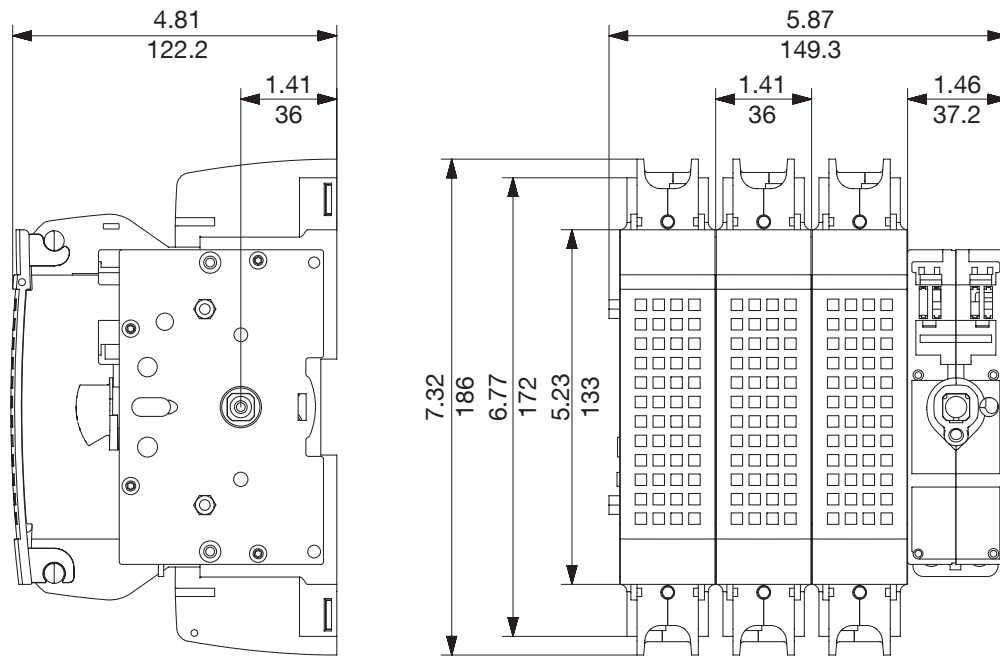
Note for width:  
 For 2 pole device decrease overall width by 1.41 in / 36 mm.  
 For 4 pole device increase overall width by 1.41 in / 36 mm.

# FUSERBLOC UL

Fusible Disconnect Switches UL and CSA  
from 30 to 800 A

## Dimensions (in/mm) (continued)

60 to 100 A / J - Frame size 5 - cage connection



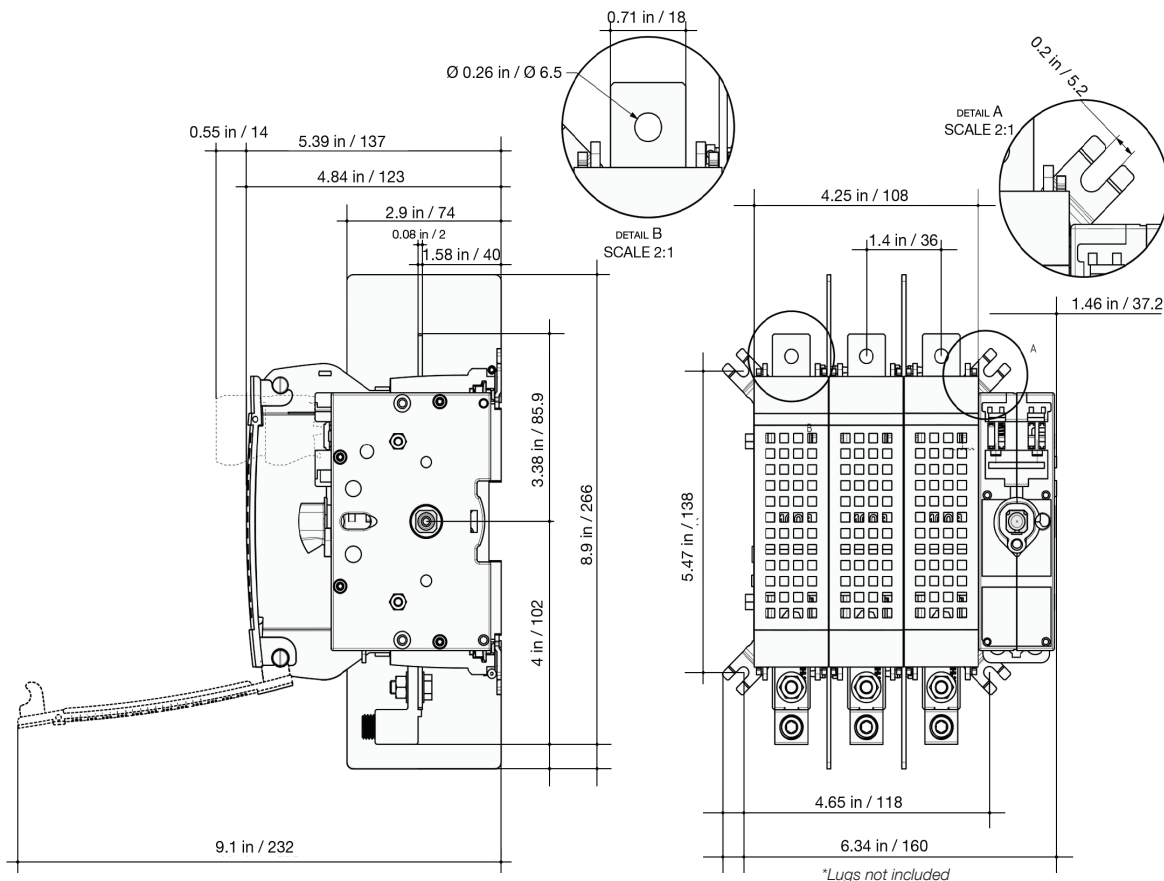
Note for width:

For 2 pole device decrease overall width by 1.41 in / 36 mm.

For 4 pole device increase overall width by 1.41 in / 36 mm.

fuser-ul\_002\_a\_1\_x\_cat

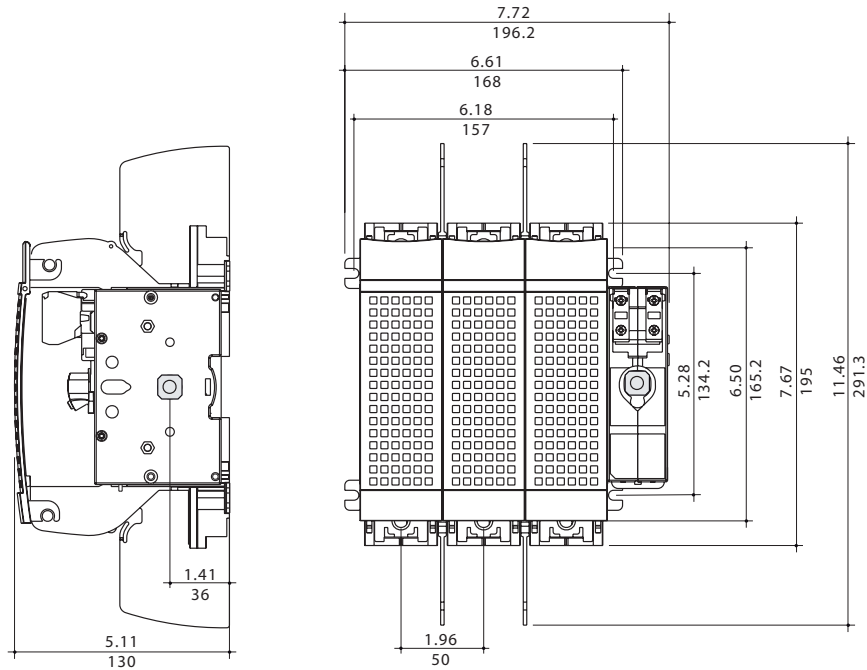
100 A / J - Frame size 5 - terminal connection



\*Lugs not included

52530F01 (1).ai

200 A / J - Frame size 6



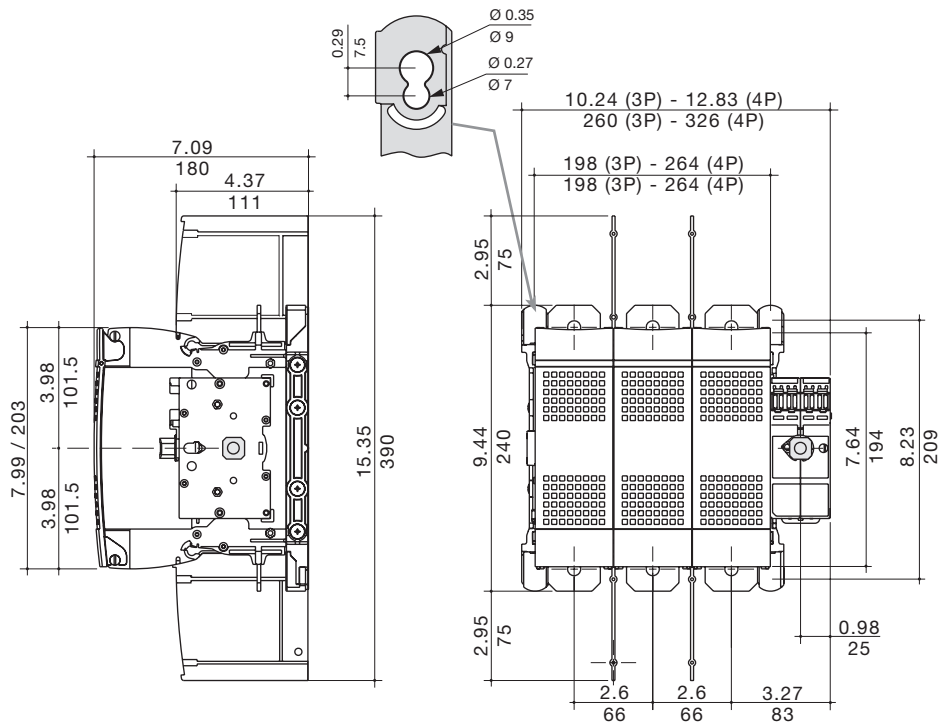
Note for width:

For 2 pole device decrease overall width by 1.96 in / 50 mm.

For 4 pole device increase overall width by 1.96 in / 50 mm.

fuser-ul\_003\_a\_1\_x\_cat

400 A / J - Frame size 7



Note for width:

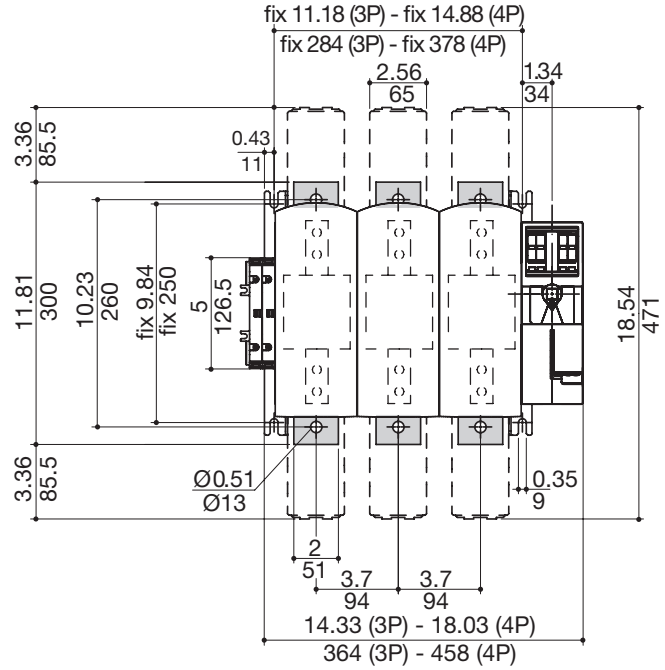
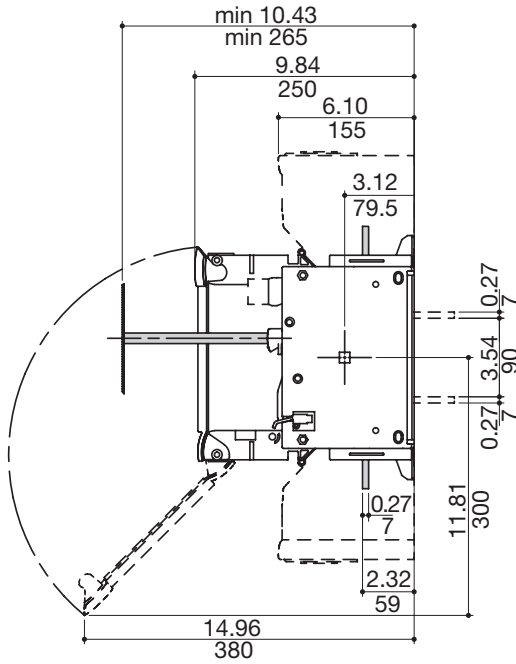
For 2 pole device decrease overall 3 pole width by 2.59 in / 66 mm.

fuser-ul\_004\_d\_1\_x\_cat

# FUSERBLOC UL

Fusible Disconnect Switches UL and CSA  
from 30 to 800 A

600 to 800 A / J - Frame size 8



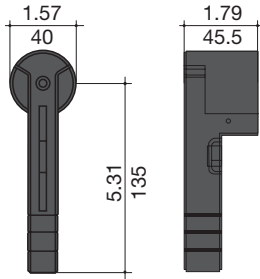
Note for width:  
For 2 pole device decrease overall 3 pole width by 3.7 in / 94 mm.

fuser\_631\_b\_1\_gb\_cat

Dimensions (in/mm) (continued)

30 to 400 A

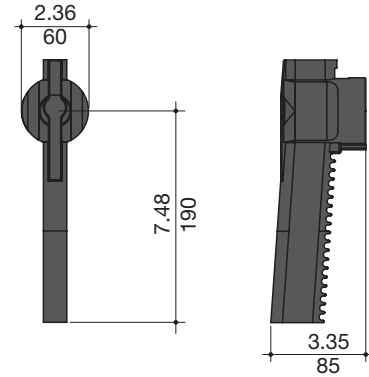
Front direct handle



siroco-ul\_027\_a\_1\_x\_cat

600 to 800 A

Front direct handle



siroco\_267\_b\_1\_x\_cat

External handle dimensions (in/mm)

CD 30 A - Frame size 1 / 2

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

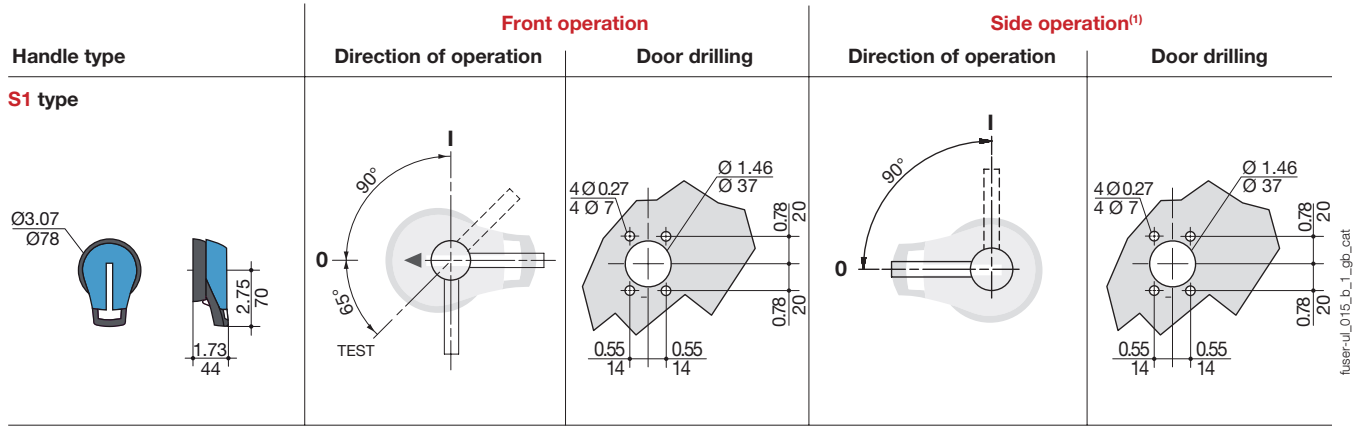
fuser-ul\_015\_a\_1\_gb\_cat

# FUSERBLOC UL

Fusible Disconnect Switches UL and CSA  
from 30 to 800 A

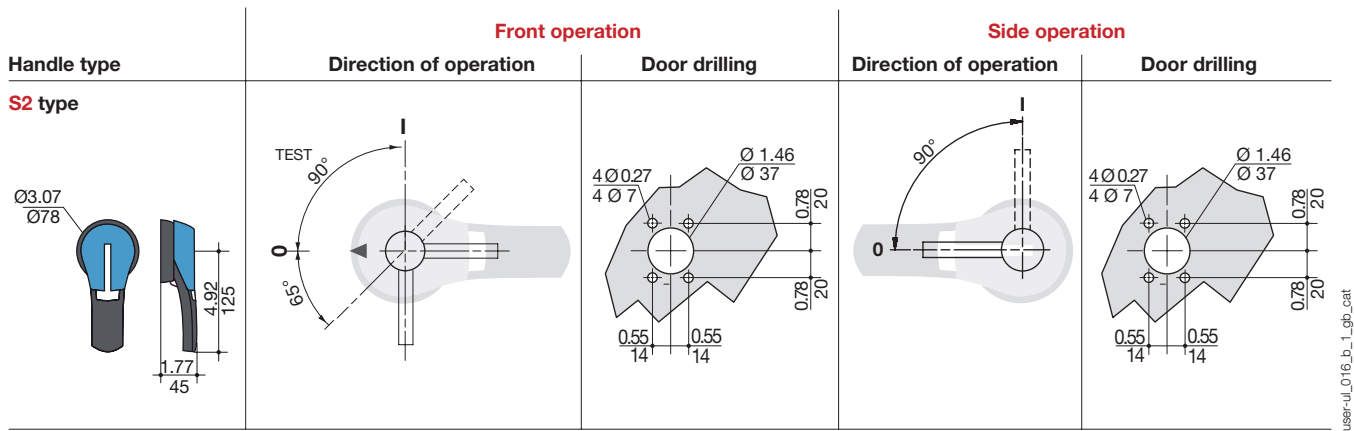
## External handle dimensions (in/mm)

CD 30 to 60 A - Frame size 1 / 2 / 4

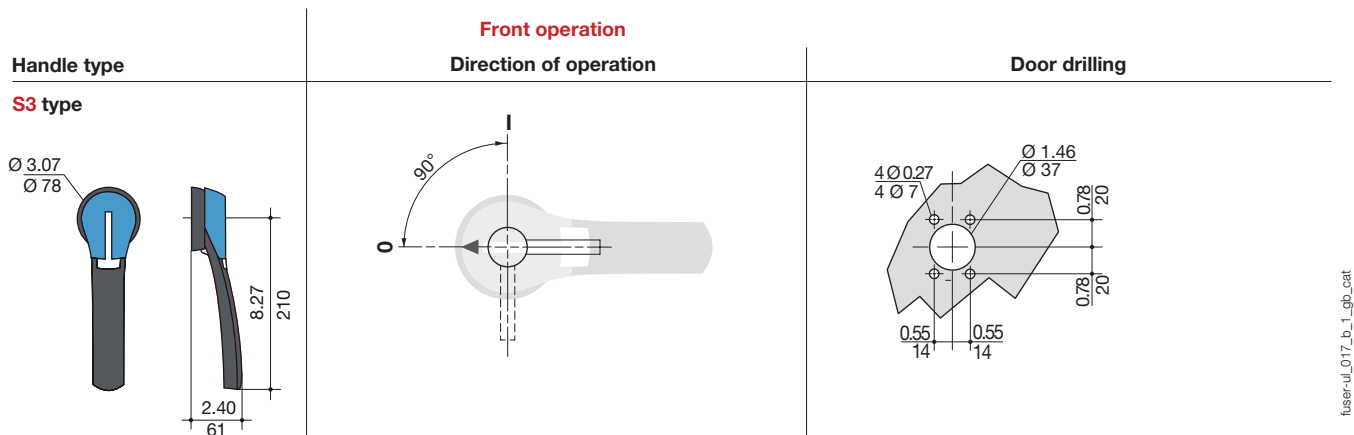


(1) Not for frames 1 and 2.

60 to 400 A - Frame size 5 / 6 / 7

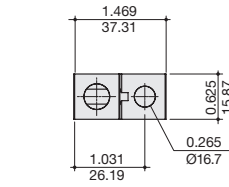


600 and 800 A - Frame size 8



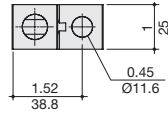
Terminal lugs (in/mm)

100 A



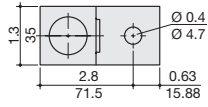
siroco\_115\_b\_1\_us\_cat\_V2.ai

200 A



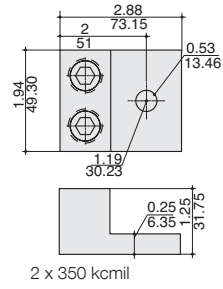
siroco\_115\_b\_1\_us\_cat

400 A



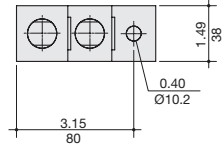
siroco-ul\_010\_a\_1\_us\_cat

400 A



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

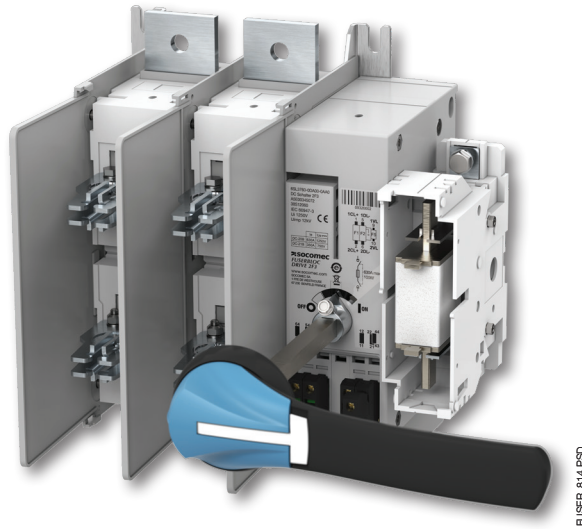
600 to 800 A



siroco\_116\_b\_1\_us\_cat

# FUSERBLOC DRIVE 1PP

Single-pole pre-charge fuse combination switches for variable speed drives from 600 to 1700 A



FUSERBLOC 1PP

## The Solution For

- > Energy
- > Industry

## Strong points

- > Simple and compact
- > Automatic pre-charging
- > Optimized maintenance
- > Optimized safety

## Conformity to Standards

- > IEC 60947-3
- > UL 98

## Function

**FUSERBLOC DRIVE** units with manual front operation are multipole DC fuse load break switches. They offer short circuit protection for all low-voltage electrical circuits of capacitive loads (capacitor) by limiting the high inrush current during circuit power-up and are designed to allow maintenance work on DC/AC variable speed drives or PV inverters without shutting down the entire installation. The range is available in direct and external operation, with 2 power poles + 1 pre-charge pole, up to 1700 A.

## Advantages

### Simple and compact

The FUSERBLOC Drive unit is the most compact and simple solution in the market for variable speed drives under a common DC bus. This product combines 3 functions, namely disconnection, protection and precharging in one and the same device.

### Automatic pre-charging

After servicing operations, pre-charging of inverter capacitors is managed automatically via a coil. Further, the opening of the precharging poles and closing of the power poles is also carried out automatically.

### Optimized maintenance

This multifunction device enables maintenance work to be done on part of the power system while leaving the rest of the equipment powered on.

### Optimized safety

Double phase isolation (upstream-downstream from the fuse), disconnection and padlocking keep personnel completely safe while replacing a fuse. The device is capable of maintaining the OFF, pre-charge or ON position in the event of power failure.

## General characteristics

- For high-speed fuses up to 1700 A.
- Up to 1250 VAC, 1000 VDC.
- Up to 100 kA.
- Utilisation category DC 20B.
- 2 power poles + 1 pre-charge pole.

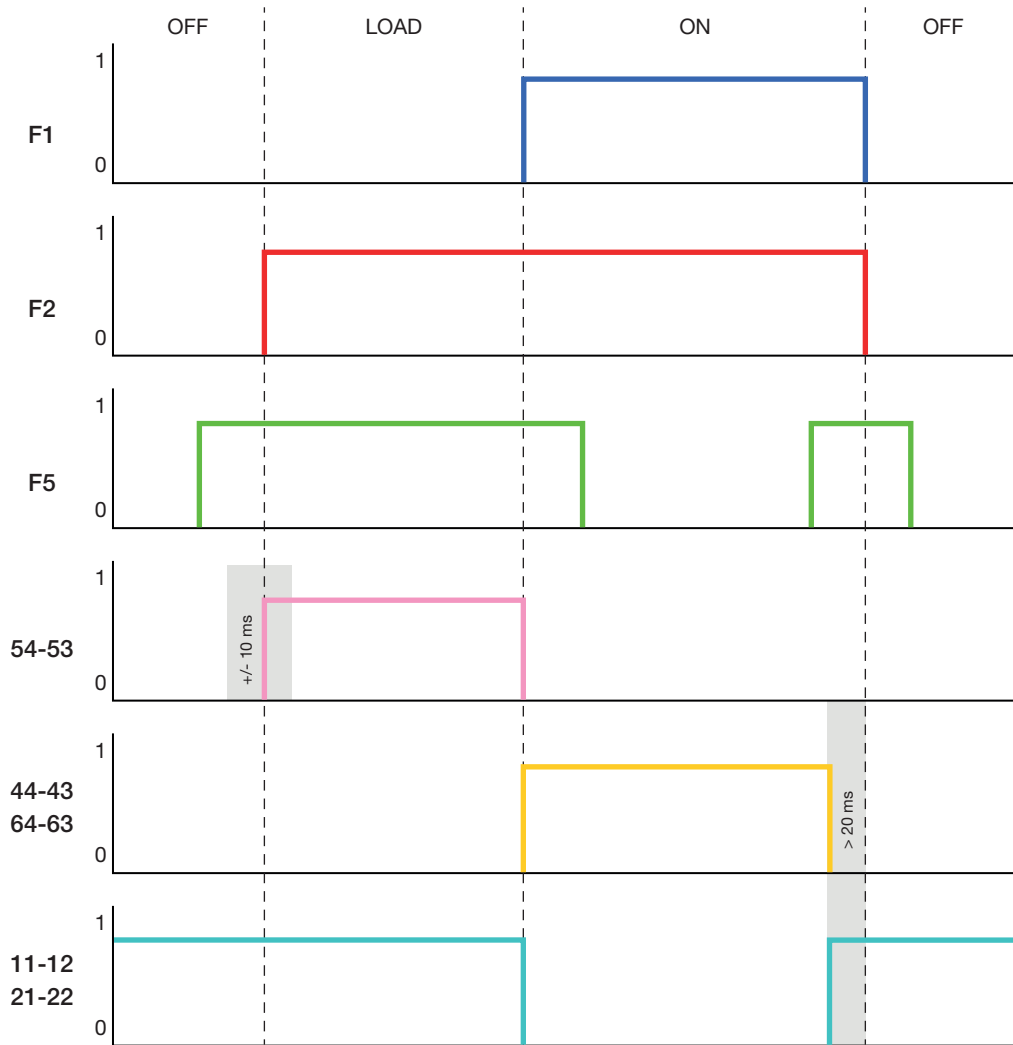
## References

### External / direct operation 630 to 1700 A

Rating (A)	Frame size	Main poles			Pre-charge poles			Reference	External front handle	Shaft for external front handle	Coil	Auxiliary contacts
		No. of poles	Fuse size	Fuse type	No. of poles	Fuse size	Fuse type					
630 A	2F3	2	Size 3	KN/110 or DIN 43620	1	Size 0	DIN 43620	38S1 2060	1433 3111	1402 1240	Pre-mounted (24VDC)	Pre-mounted 3NO+2NC
800 A	2F4	2	Size 3	KN/110 or DIN 43620	1	Size 0	DIN 43620	38S1 2080				
1200 A	2x2F3	4 (2//)	Size 3	KN/110 or DIN 43620	1	Size 0	DIN 43620	38S1 4100				
1700 A	2x2F4	4 (2//)	Size 3	KN/110 or DIN 43620	1	Size 0	DIN 43620	38S1 4160				

## Operating diagram

### Main poles and auxiliary contacts



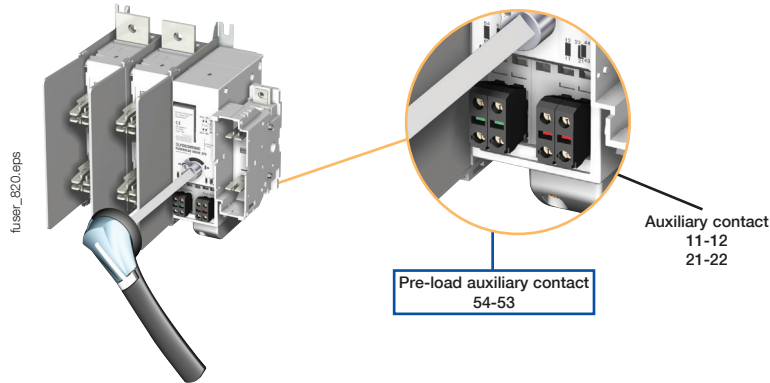
FUSERBLOC\_19\_A-A

# FUSERBLOC DRIVE 1PP

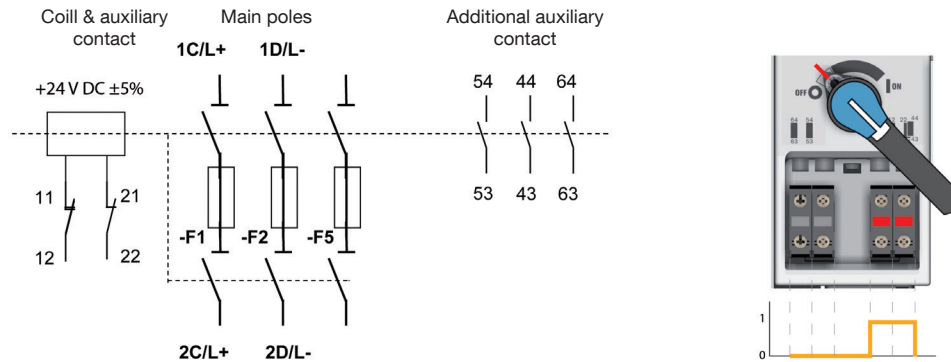
Single-pole pre-charge fuse combination switches for variable speed drives  
from 600 to 1700 A

## Operating diagram

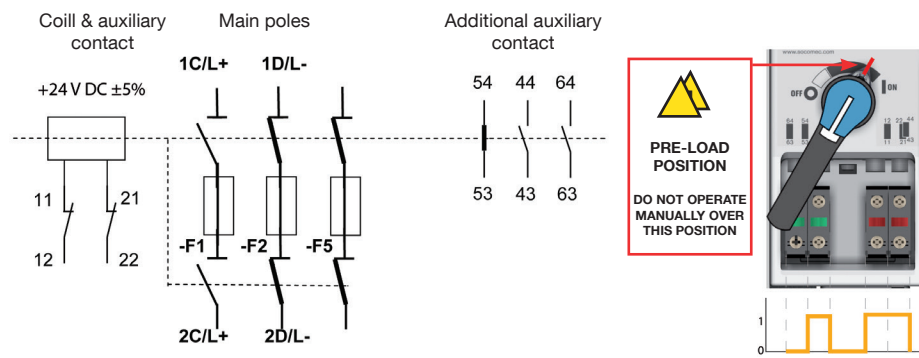
### Main poles and auxiliary contacts



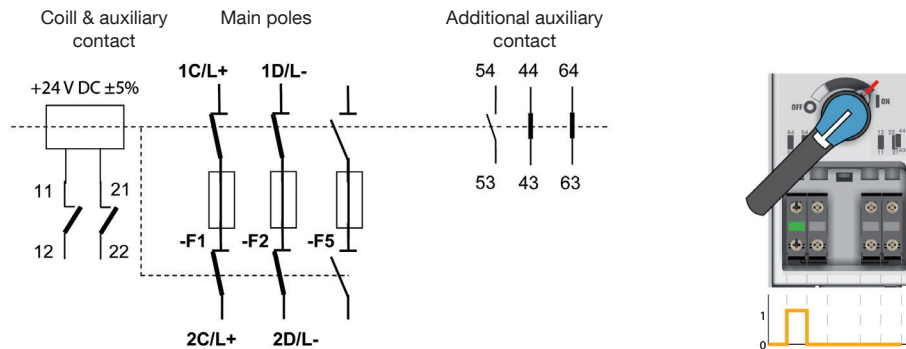
#### MANUAL - Step 1



#### MANUAL - Step 2



#### AUTO - Step 3



fuser\_820.eps

fuser\_821\_a\_en1

fuser\_822\_b\_1\_cat.eps

fuser\_823\_a\_en1

## Characteristics according to IEC characteristics 60947-3

### 630 to 1700 A

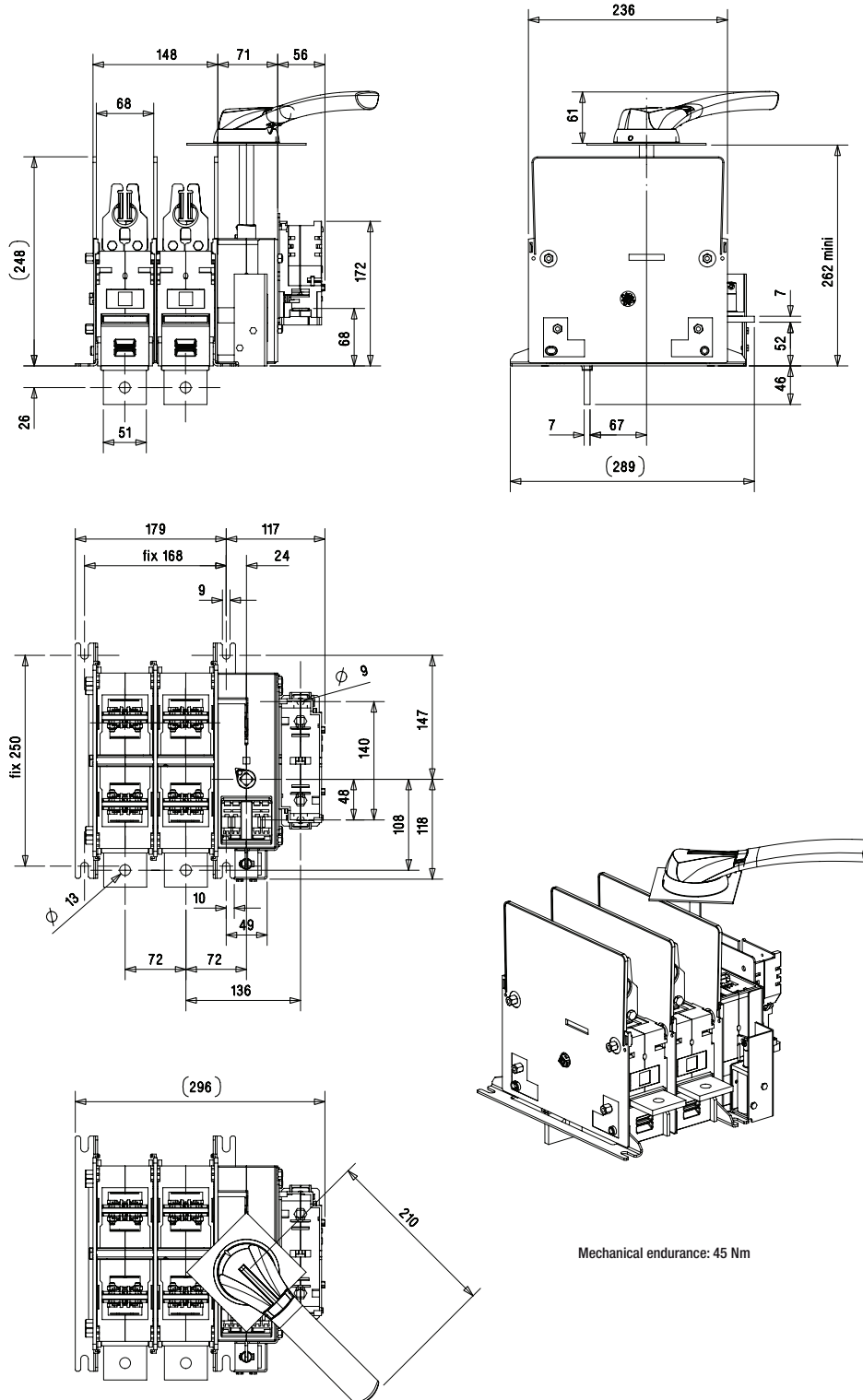
Rating (A)	630	800	1200	1700
References	38S1 2060	38S1 2080	38S1 4100	38S1 4160
Frame size	2F3	2F4	2x2F3	2x2F4
<b>Main poles</b>				
<b>No. of poles</b>	2	2	4(2//)	4(2//)
Thermal current I <sub>th</sub> at 40°C (A)	630	800	1200	1700
Fuse DIN size	Size 3	Size 3	Size 3	Size 3
Fuse type	KN/110 or DIN 43620	KN/110 or DIN 43620	KN/110 or DIN 43620	KN/110 or DIN 43620
Rated voltage U <sub>e</sub> (V)	1035	1035	1035	1035
Rated insulation voltage U <sub>i</sub> (V)	1250	1250	1250	1250
Rated impulse withstand voltage U <sub>imp</sub> (kV)	12	12	12	12
Load duty category	DC-20B	DC-20B	DC-20B	DC-20B
Prospective short-circuit current (kA rms)(1)	35	35	35	35
Maximum switch heat dissipation per pole (W)	100	130	100	165
<b>Mechanical characteristics</b>				
Coil voltage ± 5% (V DC)	24	24	24	24
Operating force (Nm)	45	45	45	60
Heat dissipation per pole (W)	149	300	/	/
Endurance (number of operating cycles)	1000	1000	1000	1000
Coil maximum current under 24 VDC (with coil of 400 W) ± 10% (A)	15	15	15	15
<b>Pre-charge poles</b>				
<b>No. of poles</b>	1	1	1	1
Thermal current I <sub>th</sub> at 40°C (A)	160	160	160	160
Fuse DIN size	Size 0	Size 0	Size 0	Size 0
Fuse type	DIN 43620	DIN 43620	DIN 43620	DIN 43620
Rated insulation voltage U <sub>i</sub> (V) (operation circuit)	1000	1000	1000	1000
Rated impulse withstand voltage U <sub>imp</sub> (kV) (operation circuit)	8	8	8	8
Load duty category	DC-20B	DC-20B	DC-20B	DC-20B
Prospective short-circuit current (kA rms)(1)	20	20	20	20
Maximum switch heat dissipation per pole (W)	23	23	23	23
<b>Mechanical characteristics</b>				
Endurance (number of operating cycles)(2)	1500	1500	1500	1500
Operating force (Nm)	45	45	45	60
Maximum connexion capacity per pole (mm <sup>2</sup> )	95	95	95	95
Minimum connexion capacity per pole (mm <sup>2</sup> )	50	50	50	50
<b>Coil</b>				
<b>Coil</b>	Pre-mounted (24VDC)	Pre-mounted (24VDC)	Pre-mounted (24VDC)	Pre-mounted (24VDC)
U <sub>e</sub> (VDC)	24	24	24	24
Rated insulation voltage U <sub>i</sub> (V)	1000V	1000V	1000V	1000V
I <sub>e</sub> (A) for 400W coil	15	15	15	15
Maximum power	400W	400W	400W	400W
<b>Auxiliary contacts</b>				
Auxiliary contact type	3NO+2NC	3NO+2NC	3NO+2NC	3NO+2NC
Thermal current I <sub>th</sub> at 40°C (A)	10A	10A	10A	10A
Rated Operating Current I <sub>e</sub>	5A	5A	5A	5A
Rated voltage U <sub>e</sub> (V)	240VAC/24VDC	240VAC/24VDC	240VAC/24VDC	240VAC/24VDC
Load duty category	AC15/DC-13	AC15/DC-13	AC15/DC-13	AC15/DC-13
<b>Approvals &amp; Conformity</b>				
Approvals and certifications	IEC-CCC	IEC-CCC	IEC-CCC	IEC-CCC
Conformity to standards	GB/T14048-3	GB/T14048-3	GB/T14048-3	GB/T14048-3
	IEC60947-3	IEC60947-3	IEC60947-3	IEC60947-3

# FUSERBLOC DRIVE 1PP

Single-pole pre-charge fuse combination switches for variable speed drives  
from 600 to 1700 A

## Dimensions

DC switches 630 A



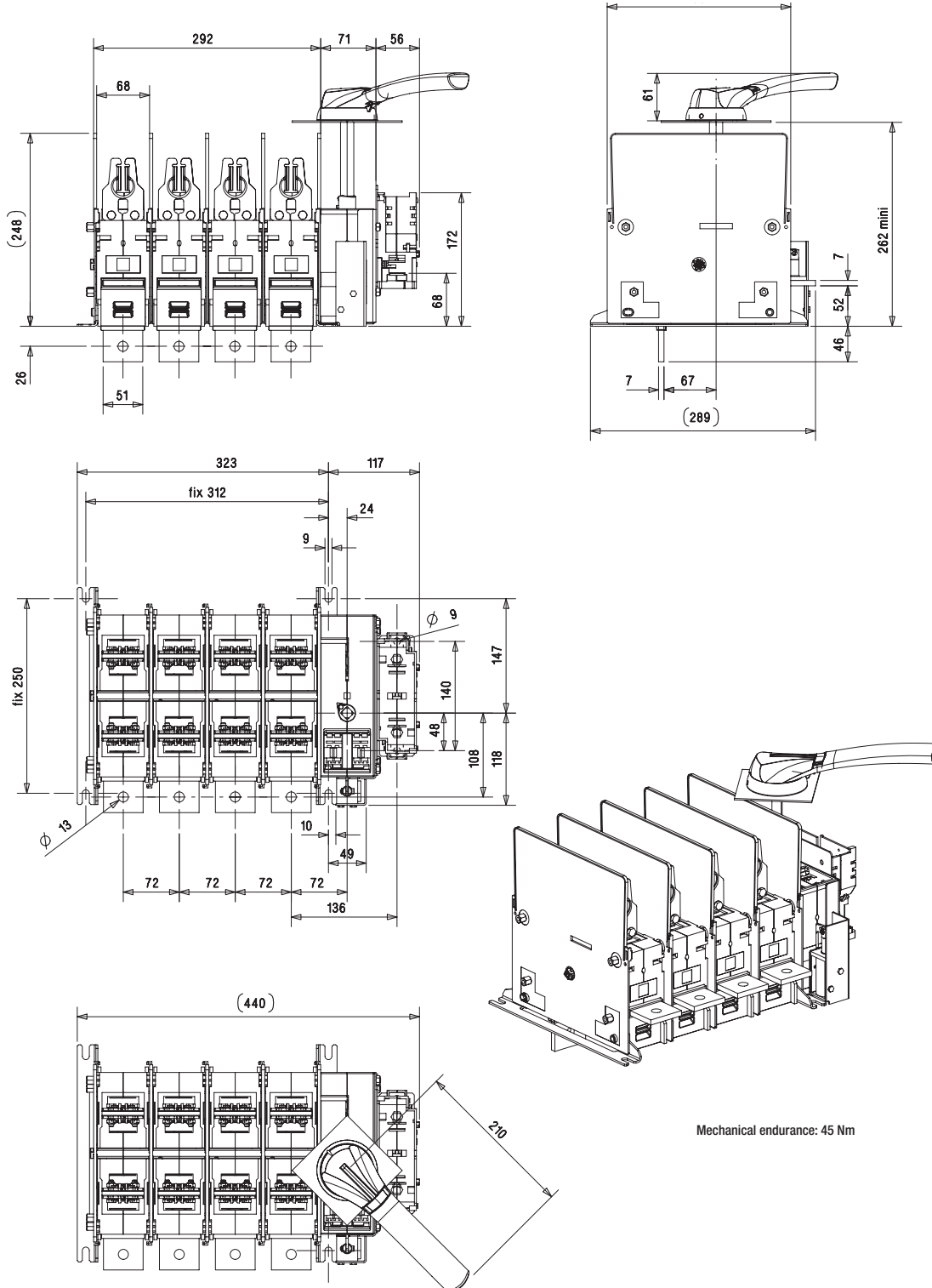
Mechanical endurance: 45 Nm

fuser\_675\_a\_1\_gb\_cat.eps

# FUSERBLOC DRIVE 1PP

Single-pole pre-charge fuse combination switches for variable speed drives  
from 600 to 1700 A

DC switches 1200 A



Mechanical endurance: 45 Nm

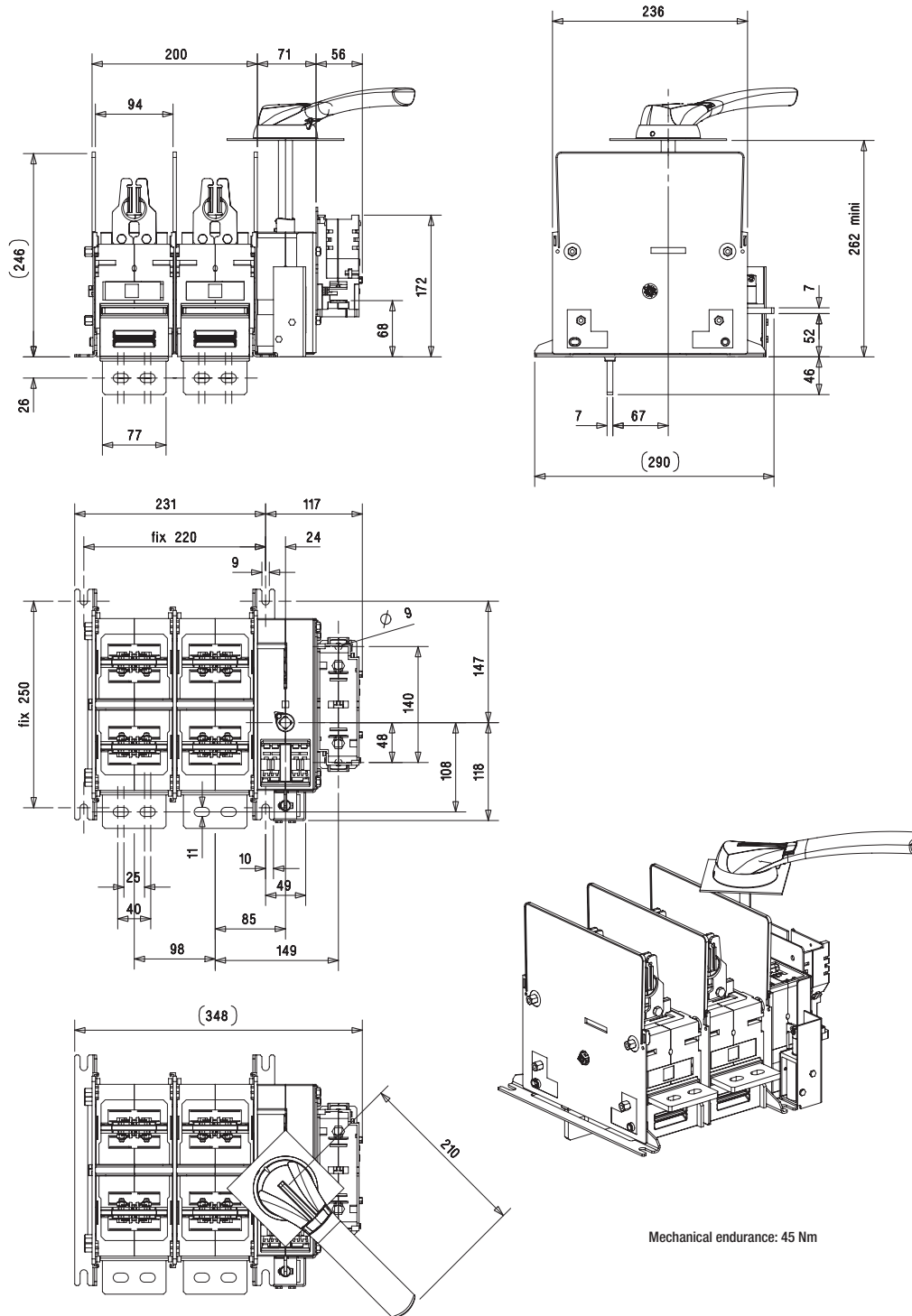
fuser\_677\_a\_1\_gb\_cat.eps

# FUSERBLOC DRIVE 1PP

Single-pole pre-charge fuse combination switches for variable speed drives  
from 600 to 1700 A

## Dimensions

DC switches 800 A



Mechanical endurance: 45 Nm

fuser\_676\_a\_1\_gh\_cat.eps

