

FUSERBLOC UL

Fusible disconnect switches UL and CSA

30 to 800 A







The solution for

- Motor load break.
- Protection of industrial cabinet.
- Electrical distribution.



Strong points

- Improved safety.
- High breaking capacity.
- A complet range of functions.

Conformity to standards(1)

- IEC 60947-3
- NFPA79 (2002 Edition)
- UL489, Guide WJAZ, file E255272 (Frame size 1 and 2)
- UL98, Guide WHTY, file E201138 (Frame sizes 3 to 8)
- CSA22.2 #5, Class 4652-06, file 112964 (Frame size 1 and 2)
- CSA22.2 #4, Class 4651-02, file 112964 (Frame sizes 3 to 8)

(1) Product reference on request.

Function

FUSERBLOC UL fusible disconnect switches are heavy duty switches that break and make power circuits on and off load.

The switches employ double break contacts per pole that ensure complete isolation of the fuse when the switch is in the “OFF” position. These switches are extremely durable and are tested and approved for use in the most demanding applications.

The TEST position function is enabled with handles with the TEST position. This function tests the control circuit auxiliaries without switching the main contacts. It is a simple alternative to a separately wired push button.

Advantages

Improved safety

- On load make and break power circuit applications.
- Double break by phase.
- Touch safe covers.

High breaking capacity.

- Up to 200 kA Short circuit rating.

A complet range of functions

- Compact footprints.
- Front or side operation.
- Flange operation.
- NFPA 79 compliant kits.
- Voltage sensing terminals.

socomec Innovative Power Solutions

References

Fusible disconnect

Rating (A) Fuses Frame size	No. of poles	Switch body	Direct handle	Front external handle	External right side handle	Shaft external handle	NFPA79 kit	U type auxiliary contacts	Terminal shrouds
CD 30 A CC 1	3 P	3710 **3003**	Black 3729 **4012**	S0 type Black IP65 I - 0 1, 3R, 12 1493 **0111** 4, 4X 149D **0111**		S0 type 200 mm 7.9 inches 1405 **0620** 320 mm 12.6 inches 1405 **0632** 400 mm 15.7 inches 1405 **0640**	3729 **4532**	1 contact NC 3999 **0701** 1 contact NO 3999 **0702**	standard
	3 P + switched neutral	3710 **4003**							
	3 P + solid neutral	3710 **5003**							
CD 30 A J 2	3 P	3710 **3004**	3729 **4014**	S1 type Black IP65 I - 0 1, 3R, 12 141F **2111** 4, 4X 141D **2111**		S1 type 200 mm 7.9 inches 1401 **0520** 320 mm 12.6 inches 1401 **0532** 400 mm 15.7 inches 1401 **0540**			
	3 P + switched neutral	3710 **4004**							
	3 P + solid neutral	3710 **5004**							
30 A J 4	2 P	3861 **2004**	Black 3629 **7910**	S1 type Black I - 0 1, 3R, 12 Defeatable 141F **2111** I - 0 4, 4X Defeatable 141D **2111** I - 0 - Test 4, 4X Defeatable 141D **2115**	S1 type Black I - 0 4, 4X 141H **6111** S1 type Red / yellow I - 0 4, 4X 141I **6111**	S1 type 200 mm 7.9 inches 1400 **1020** 320 mm 12.6 inches 1400 **1032**	3729 **7540**		
	3 P	3861 **3004**							
	4 P	3861 **6004**							
60 A J 4	2 P	3861 **2005**							
	3 P	3861 **3005**							
	4 P	3861 **6005**							

References (continued)

Rating (A) fuses Frame size	No. of poles	Switch body	Direct handle	Front external handles	External right side handle[1]	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** Black I - 0 4, 4X Defeatable 142D **2111** Black I - 0 - Test 4, 4X Defeatable 142D **2115**	S2 type Black I - 0 4, 4X 142H **6111** Red / yellow I - 0 4, 4X 142I **6111**	S1 type 200 mm 7.9 inches 1400 **1020** 320 mm 12.6 inches 1400 **1032**	3729 **7540**	1 contact type NC 3999 **0701** 1 contact type NO 3999 **0702**	standard
	3 P	3861 **3006**							
	4 P	3861 **6006**							
100 A J 5	2 P	3861 **2010**							
	3 P	3861 **3010**							
	4 P	3861 **6010**							
200 A J 6	2 P	3861 **2020**							3898 **2020**
	3 P	3861 **3020**							3898 **3020**
	4 P	3861 **6020**							3898 **4020**
400 A J 7	2 P	3861 **2038**					3729 **7544**		3898 **2038**
	3 P	3861 **3038**							3898 **3038**
	4 P	3861 **6038**							3898 **4038**
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**	3729 **7552**		2 P 3898 **2080** 3 P 3898 **3080** 4 P 3898 **4080**
	3 P	3850 **3060**							
	4 P	3850 **6060**							
800 A L 8	2 P	3850 **2080**							
	3 P	3850 **3080**							
	4 P	3850 **6080**							

(1) No door interlocking.

NFPA79 accessories

Flange handle for flange operation

Use

Meets both UL508A and NFPA79 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**(1)
30 … 200	Chrome plated handle	1, 3, 3R, 4, 4X, 12	3729 **9003**(1)

(1) Defeatable handle.


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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 A	Cable flange mechanism	3729 **9903**


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


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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**

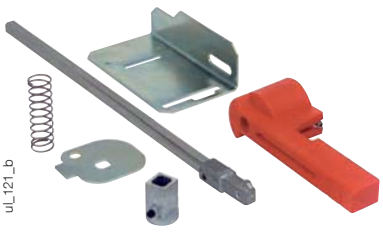

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NFPA79 "Through the door" kit

Use

Meets both UL508A and NFPA79 requirements.
Allows retrofitt of your installations for ratings from 30 to 800 A.
Please order an S-type external handle separately.

Rating (A)	Reference
CD 30, frame 1 - 2	3729 **4532**
30 … 200, frame 3 to 6	3729 **7540**
400, frame 7	3729 **7544**
600 … 800, frame 8	3729 **7552**


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Accessories

Direct handle

Rating (A)	Colour	fuses	Fig.	Reference
CD 30	Black	CC	1	3729 **4012**
CD 30	Black	J	1	3729 **4014**
30 ... 400	Black	J	2	3629 **7910**
600 ... 800	Black	J / L	2	3859 **6011**



Fig.1



Fig. 2

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 with the use of a tool (authorised persons only).

The interlocking function is restored when the door is re-closed.

Front operation

Rating (A)	Frame size	Handle	Nema type	Test	Handle colour	Standard Reference	Heavy duty Reference
CD 30	1	S0 type	1, 3R, 12	I - 0	Black	1493 **0111**	
CD 30	1	S0 type	1, 3R, 12	I - 0	Red/Yellow	1494 **0111**	
CD 30	1	S0 type	4, 4X	I - 0	Black	149D **0111**	
CD 30	1	S0 type	4, 4X	I - 0	Red/Yellow	149E **0111**	
CD 30 ... 60	3/4	S1 type	1, 3R, 12	I - 0	Black	141F **2111**	
CD 30 ... 60	3/4	S1 type	1, 3R, 12	I - 0	Red/Yellow	141G **2111**	
CD 30 ... 60	3/4	S1 type	4, 4X	I - 0	Black	141D **2111**	141D **2911**
CD 30 ... 60	3/4	S1 type	4, 4X	I - 0	Red/Yellow	141E **2111**	141E **2911**
CD 30 ... 60	3/4	S1 type	4, 4X	I - 0 - Test	Black	141D **2115**	141D **2915**
CD 30 ... 60	3/4	S1 type	4, 4X	I - 0 - Test	Red/Yellow	141E **2115**	141E **2915**
60...400	5/6/7	S2 type	1, 3R, 12	I - 0	Black	142F **2111**	
60...400	5/6/7	S2 type	1, 3R, 12	I - 0	Red/Yellow	142G **2111**	
60...400	5/6/7	S2 type	4, 4X	I - 0	Black	142D **2111**	142D **2911**
60...400	5/6/7	S2 type	4, 4X	I - 0	Red/Yellow	142E **2111**	142E **2911**
60...400	5/6/7	S2 type	4, 4X	I - 0 - Test	Black	142D **2115**	142D **2915**
60...400	5/6/7	S2 type	4, 4X	I - 0 - Test	Red/Yellow	142E **2115**	142E **2915**
600...800	8	S3 type	1, 3R, 12	I - 0	Black	143F **3111**	
600...800	8	S3 type	1, 3R, 12	I - 0	Red/Yellow	143G **3111**	
600...800	8	S3 type	4, 4X	I - 0	Black	143D **3111**	143D **3911**
600...800	8	S3 type	4, 4X	I - 0	Red/Yellow	143E **3111**	143E **3911**

Right side operation

Rating (A)	Frame size	Handle	Nema type	Test	Handle colour	Standard Reference	Heavy duty Reference
30 ... 60	3/4	S1 type	4, 4X	I - 0	Black	141H **6111**	141H **6911**
30 ... 60	3/4	S1 type	4, 4X	I - 0	Red/Yellow	141I **6111**	141I **6911**
100 ... 400	5/6/7	S2 type	4, 4X	I - 0	Black	142H **6111**	142H **6911**
100 ... 400	5/6/7	S2 type	4, 4X	I - 0	Red/Yellow	142I **6111**	142I **6911**
600 ... 800	8	S3 type	4, 4X	I - 0	Black	consult us	consult us
600 ... 800	8	S3 type	4, 4X	I - 0	Red/Yellow	consult us	consult us



S0 type handle



S1 type handle



S2 type handle



S3 type handle

S-type handle raiser

Use

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

Dimensions

Increases distance to door by 12 mm.



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

Alternative colour S-type handle cover

Use

For single lever handleS-type S1, S2, S3 and double lever handle, type S4.
Other colours: please consult us.



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

Shaft for external handle

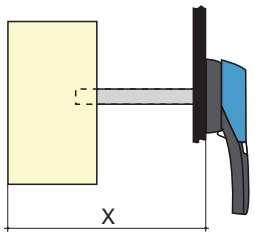
Use

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

Other lenghts: please consult us.







Rating (A)	Dimensions X (in)	Dimensions X (mm)	Handle	Length (inches)	Length (mm)	Reference
CD 30	4.02 ... 9.65	102 ... 245	S0-type	7.9	200	1405 **0620**
CD 30	4.02 ... 14.37	102 ... 365	S0-type	12.6	320	1405 **0632**
CD 30	4.02 ... 17.52	102 ... 445	S0-type	15.7	400	1405 **0640**
CD 30	4.02 ... 9.65	102 ... 245	S1 type	7.9	200	1401 **0520**
CD 30	4.02 ... 14.37	102 ... 365	S1 type	12.6	320	1401 **0532**
CD 30	4.02 ... 17.52	102 ... 445	S1 type	15.7	400	1401 **0540**
30 ... 100	5.3 ... 9.06	135 ... 230	S2, S3 Type	7.9	200	1400 **1020**
200	5.7 ... 9.06	145 ... 230	S2, S3 Type	7.9	200	1400 **1020**
400	7.87 ... 10.24	200 ... 260	S2, S3 Type	7.9	200	1400 **1020**
30 ... 100	5.3 ... 13.78	135 ... 350	S2, S3 Type	12.6	320	1400 **1032**
200	5.7 ... 13.78	145 ... 350	S2, S3 Type	12.6	320	1400 **1032**
400	7.87 ... 14.96	200 ... 380	S2, S3 Type	12.6	320	1400 **1032**
30 ... 100	5.3 ... 16.93	135 ... 430	S2, S3 Type	15.7	400	1400 **1040**
200	5.7 ... 16.93	145 ... 430	S2, S3 Type	15.7	400	1400 **1040**
400	7.87 ... 18.1	200 ... 460	S2, S3 Type	15.7	400	1400 **1040**
600 ... 800	10.63 ... 11.97	270 ... 304	S3 Type	7.9	200	1400 **1220**
600 ... 800	10.63 ... 16.69	270 ... 424	S3 Type	12.6	320	1400 **1232**
600 ... 800	10.63 ... 19.84	270 ... 504	S3 Type	15.7	400	1400 **1240**

Accessories (continued)

Shaft guide for external handle

Use

This accessory enables handle to engage shaft with a misalignment of up to 15 mm.
Required for a shaft length over 400 mm for S1 to S3 handles and for a shaft lenght from 320 mm for S0 handle.

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


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U type Auxiliary Contacts

Use

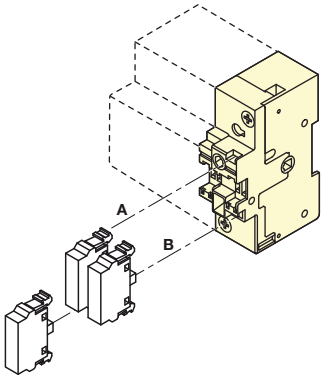
U type AC can be configured to be operated on both, standard and TEST position switches from CD 30 to 800 A.
Each slot can accommodate up to 2 interlocked ACs.

- 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.


acces_056_a_1_cat



acces_043_a_1_x_cat

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**

S-type auxiliary contacts

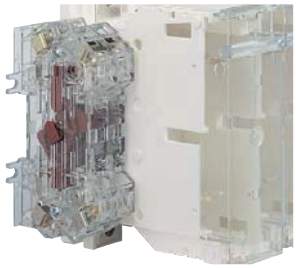
Use

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

Electrical characteristics

A600/D600.


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acces_083_a_1_cat

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

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[1]
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 **2038**
400	3 P	3898 **3038**
400	4 P	3898 **4038**
600 … 800	2 P	3898 **2080**
600 … 800	3 P	3898 **3080**
600 … 800	4 P	3898 **4080**

(1) Top or bottom.



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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
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	2 x (#2 - 600MCM)	1	2	Cu / Al	3954 **2060**
600	2 x (#2 - 600MCM)	2	3	Cu / Al	3954 **3060**
600	2 x (#2 - 600MCM)	2	4	Cu / Al	3954 **4060**



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Solid links

Rating (A)	Fuses	No of links per kit	Reference
60	J	3	3799 **9006**
60	J	4	3799 **8006**
100	J	3	3799 **9010**
100	J	4	3799 **8010**
200	J	3	3799 **9020**
200	J	4	3799 **8020**
400	J	3	3799 **9040**
400	J	4	3799 **8040**
600 … 800	J / L	3	3799 **9080**
600 … 800	J / L	4	3799 **8080**



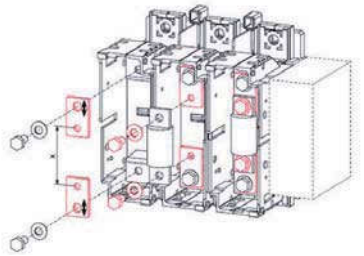
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Class T fuse adapter

Use

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

Rating (A)	Size Class T fuse (in/mm)	No. of poles	Reference
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**
100	2.34 / 59.5	4 P	3729 **9010**
200	2.48 / 63	4 P	3729 **9020**
400	2.71 / 69	4 P	3729 **9040**
600	2.95 / 75	4 P	3729 **9060**
800	3.17 / 80.5	4 P	3729 **9080**



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Characteristics according to UL98/CSA22.2 #4

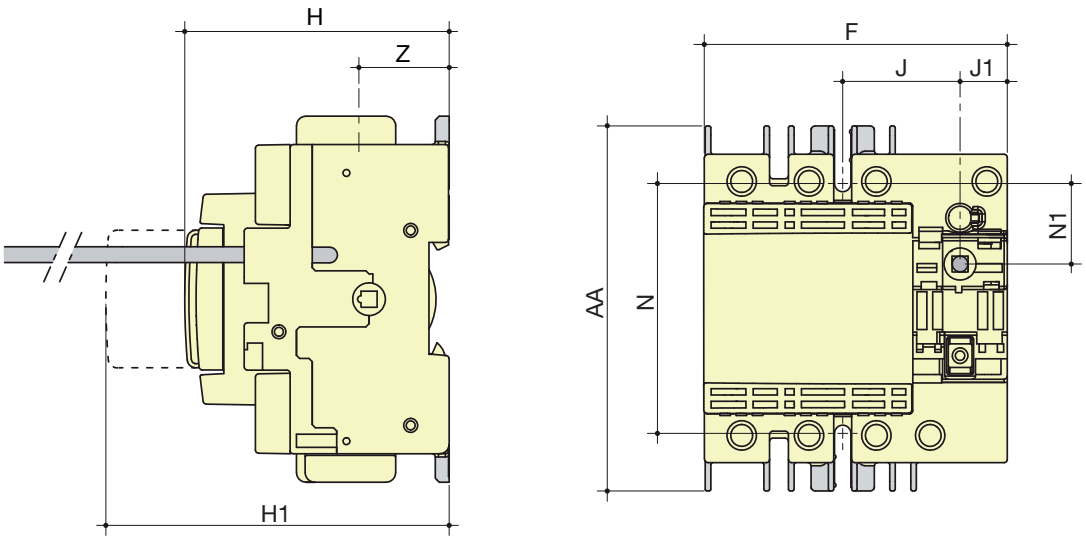
CD 30 to 800 A

Characteristics UL and CSA	CD 30A[3]	CD 30A[3]	30A	60A	60A	100A	200A	400A	600A	800A
Short circuit rating at 600 VAC (kA)	100	100	200	100	200	200	200	200	200	200
Type of fuse	CC	J	J	J	J	J	J	J	J	L
Max. fuse rating (A)	30	30	30	60	60	100	200	400	600	800
Operational power / current max Operational 3 ph										
220-240 VAC	7.5 / 22	7.5 / 22	7.5 / 22	15 / 42	15 / 42	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	125 / 156	250 / 302	500 / 590	500 / 590
600 VAC	20 / 22	20 / 22	20 / 22	50 / 52	50 / 52	75 / 77	150 / 144	350 / 336	500 / 472	500 / 472
125 VDC[1]	3 / 25	3 / 25	3 / 25	3 / 25	3 / 25	7.5 / 58	15 / 112	20 / 148		
250 VDC[2]	5 / 20	5 / 20	5 / 20	10 / 38	10 / 38	20 / 38	40 / 140	50 / 173		
Mechanical endurance										
Endurance (number of operating cycles)	10 000	10 000	10 000	10 000	10 000	10 000	8 000	6 000	5 000	5 000
Connection										
Min. connection cross-section/ (mm^2)[2]	#14	#14	#10	#10	#12	#12	#6	#2 or 2 x #6	2 x #2	2 x #2
Max. connection cross-section/ (mm^2)[2]	#10	#10	#6	#6	#1	#1	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.

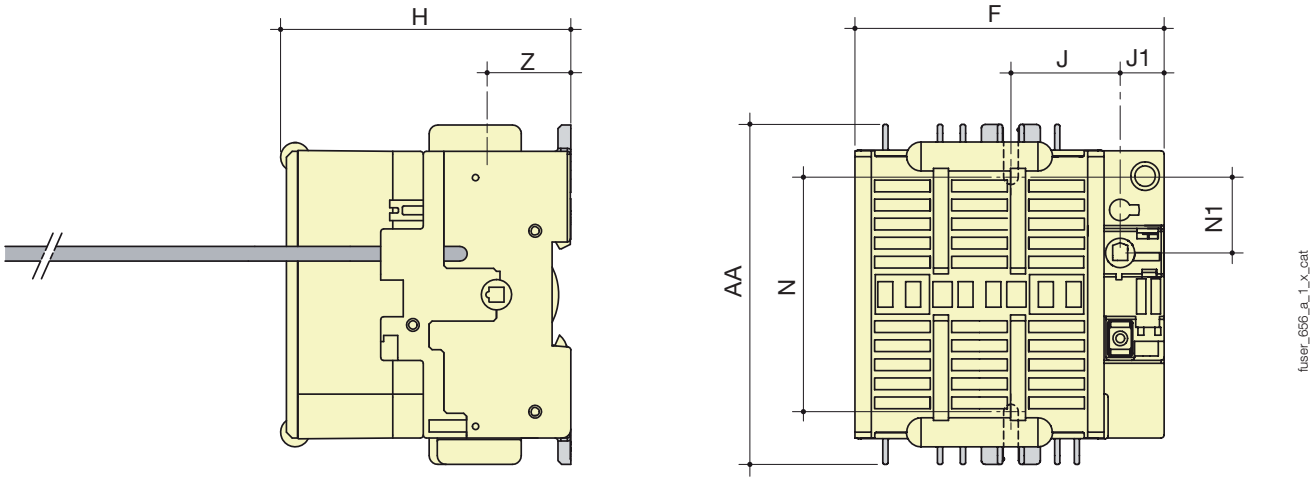
Dimensions (in/mm)

FUSERBLOC CD 30 A / CC - Frame size 1



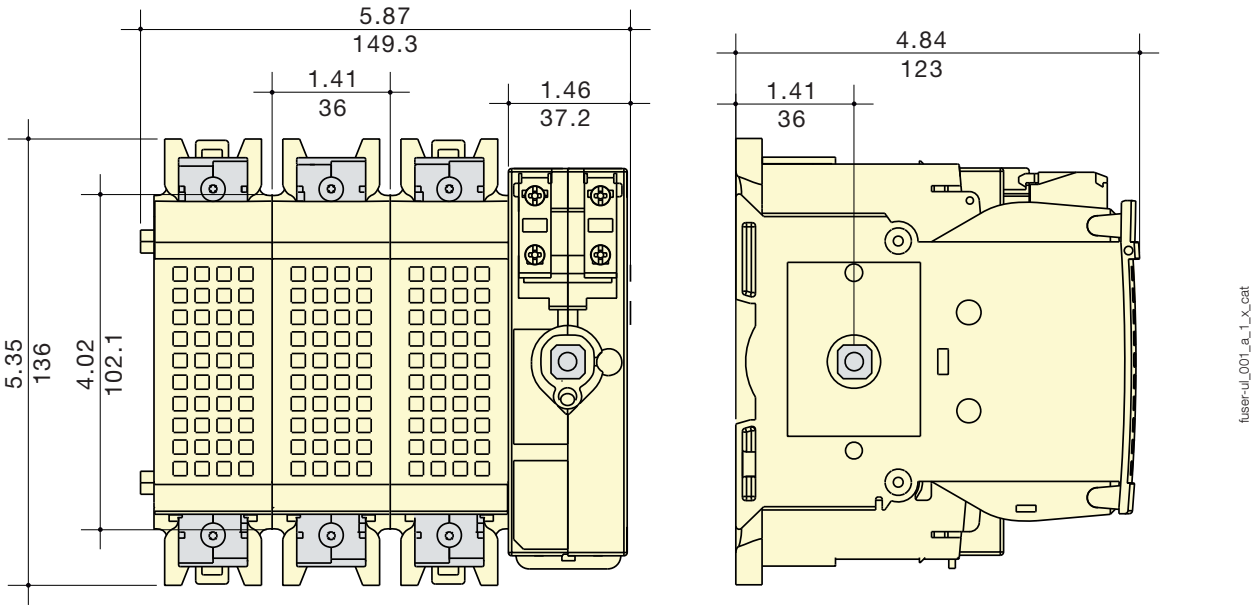
Rating (A) / Fuse	Unit	Switch body					Switch mounting		Connection	
		F	H	H1	J	J1	N	N1	AA	Z
CD 30 A / CC	in	3.78	3.28	5.19	1.47	0.59	3.13	1	4.56	1.12
	mm	96	83.5	132	37.5	15	79.5	25.5	116	28.5

FUSERBLOC CD 30 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

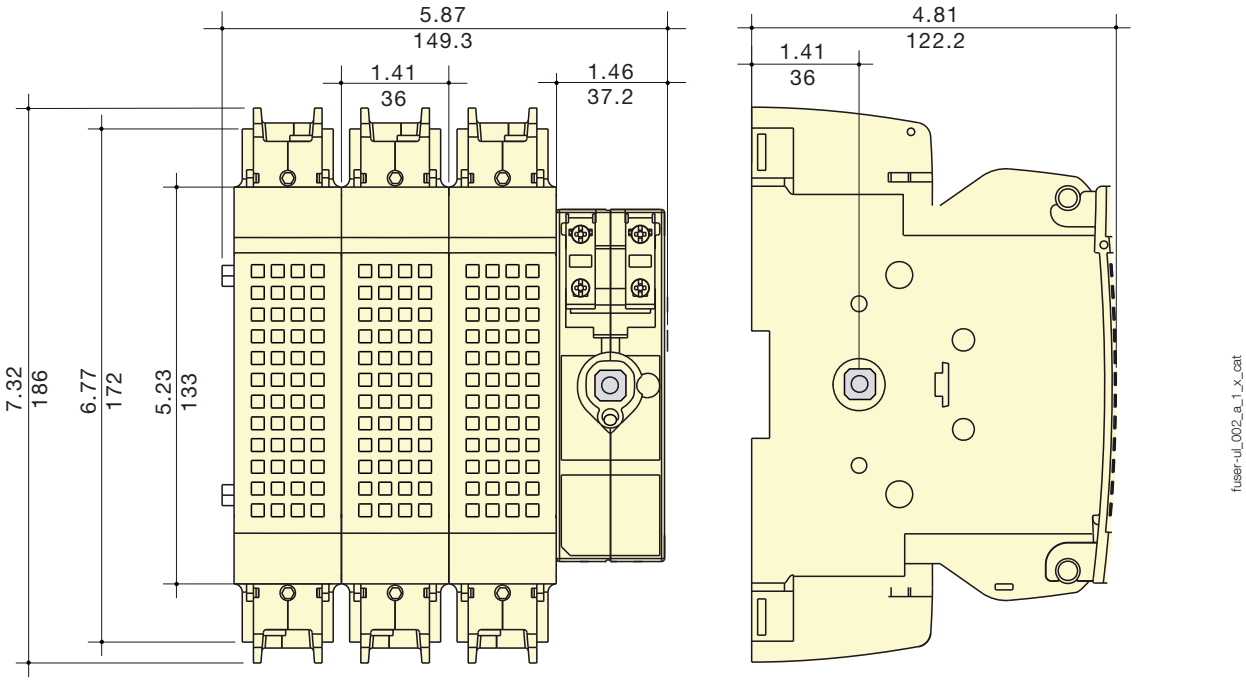
FUSERBLOC 30 to 60 A / J - Frame size 4



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

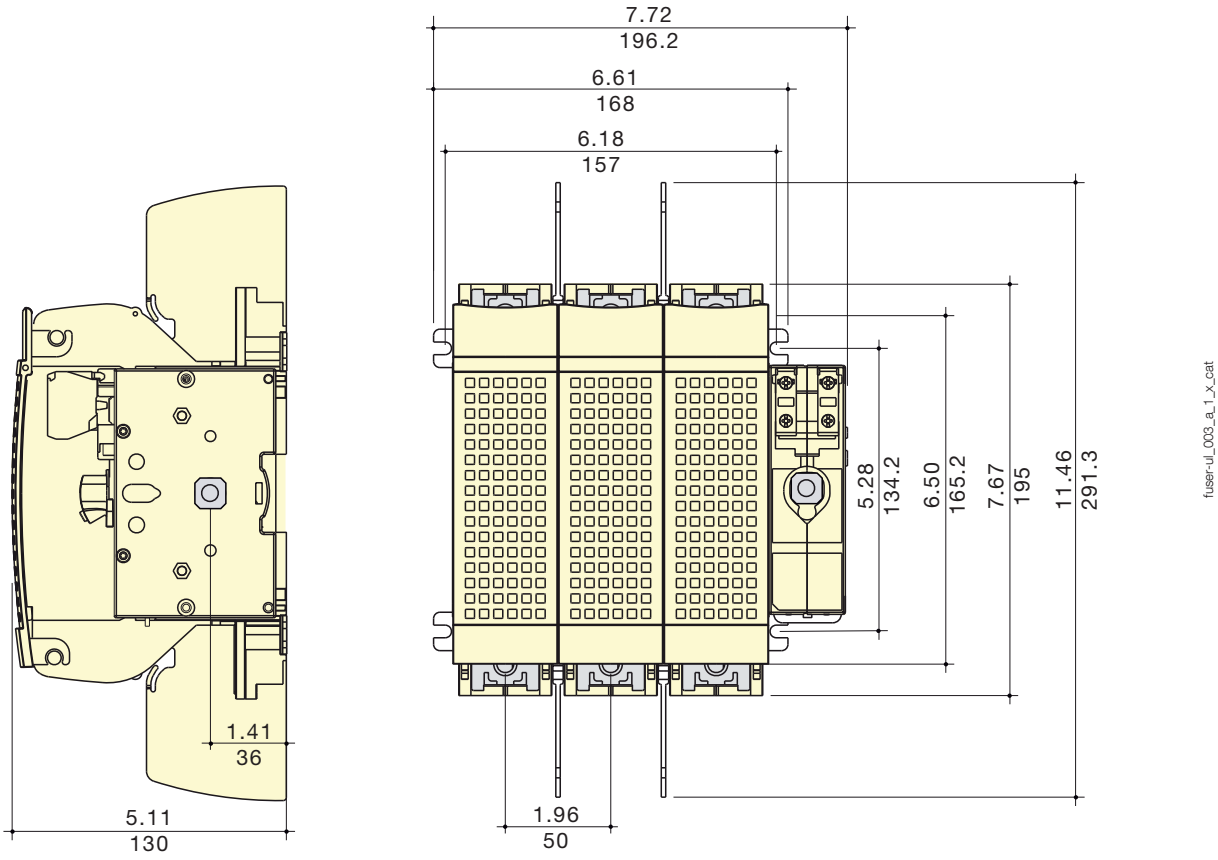
Dimensions (continued)

FUSERBLOC 60 to 100 A / J - Frame size 5



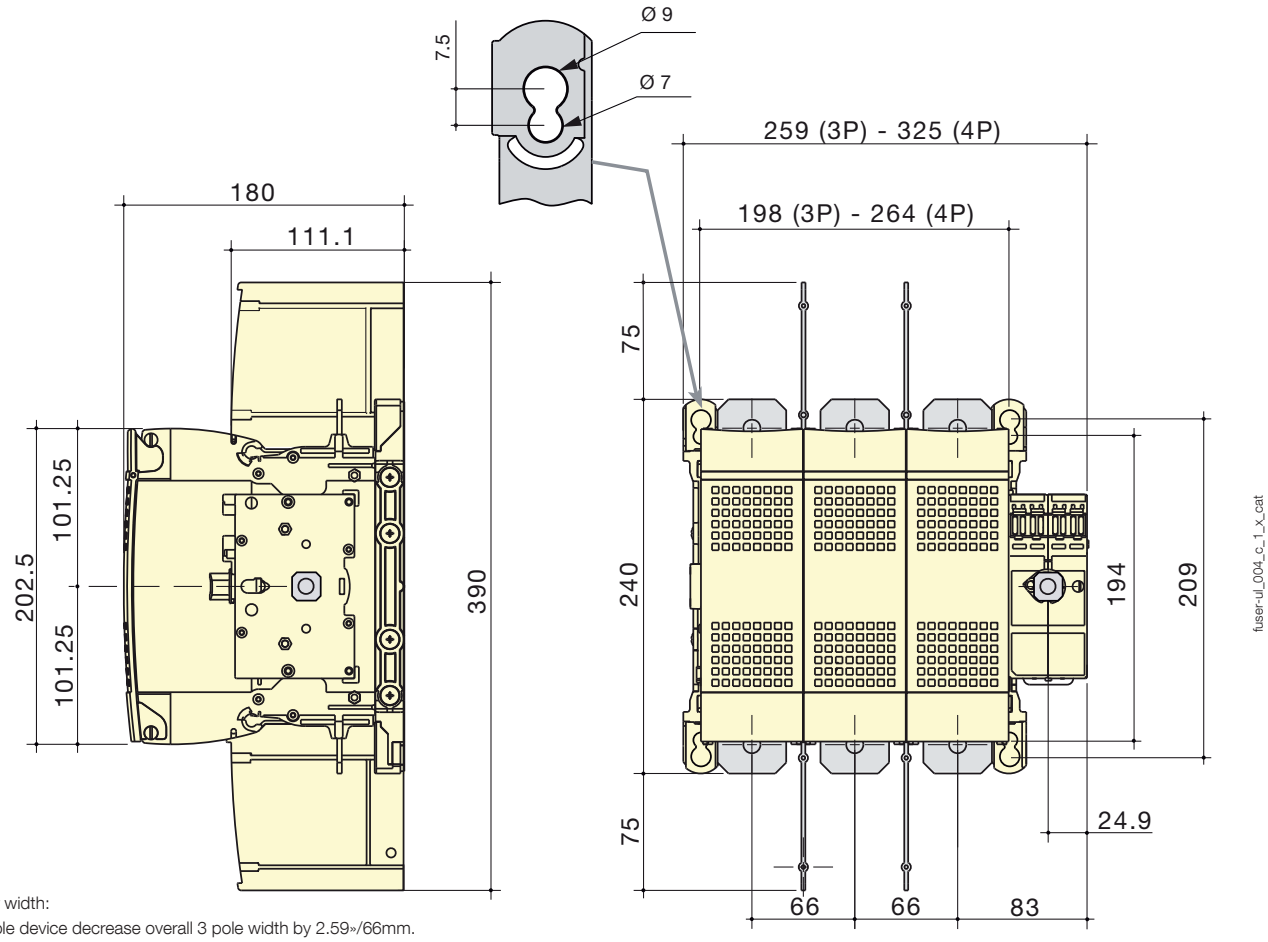
Note for width :
For 2 pole device decrease overall width by 1.41»/36mm.
For 4 pole device increase overall width by 1.41»/36mm.

FUSERBLOC 200 A / J - Frame size 6



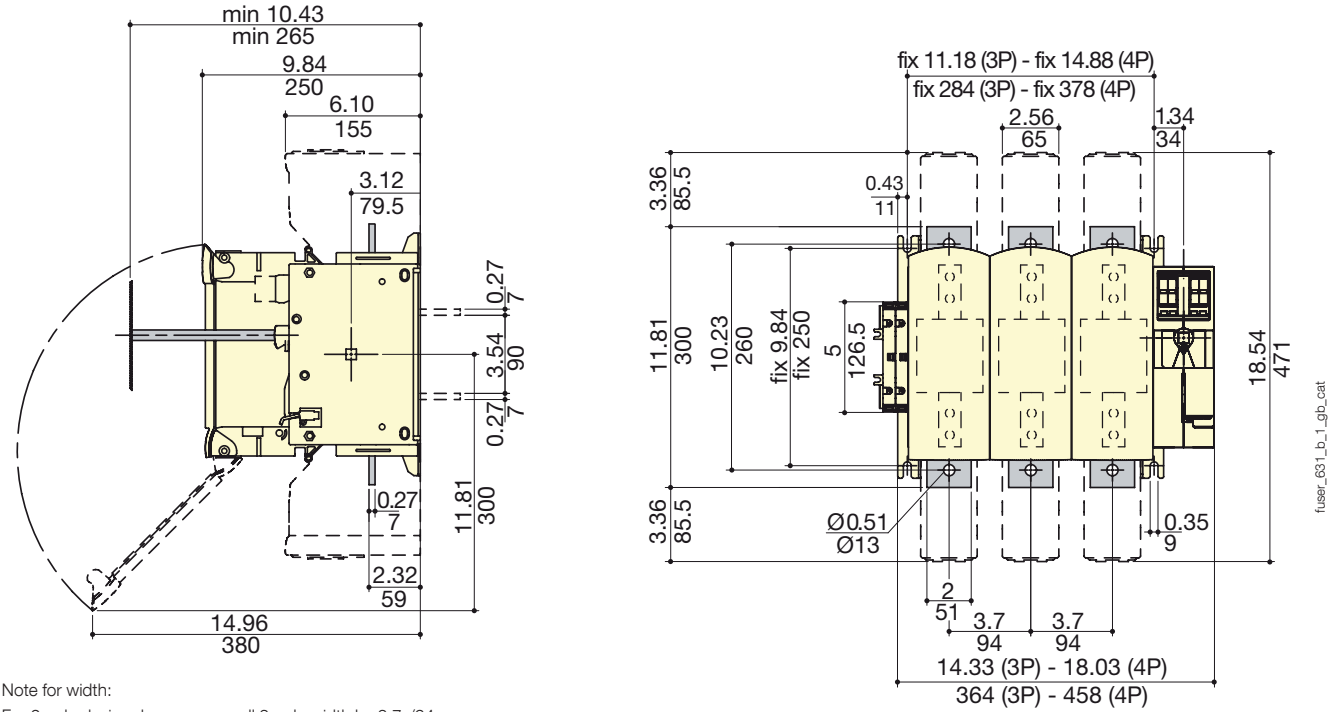
Note for width:
For 2 pole device decrease overall width by 1.96»/50mm.
For 4 pole device increase overall width by 1.96»/50mm.

FUSERBLOC 400 A / J - Frame size 7



Note for width:
For 2 pole device decrease overall 3 pole width by 2.59»/66mm.

FUSERBLOC 600 to 800 A / J - Frame size 8

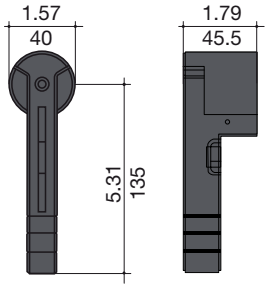


Note for width:
For 2 pole device decrease overall 3 pole width by 3.7»/94mm.

Dimensions (continued)

FUSERBLOC 30 to 400 A

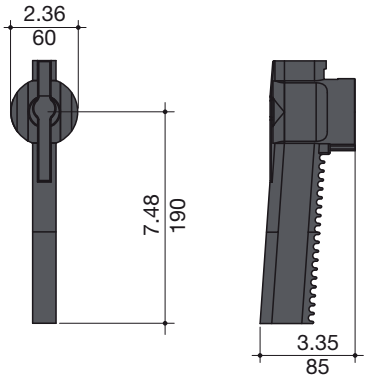
Front direct handle



sirco-ul_027_a_1_x_cat

FUSERBLOC 600 to 800 A

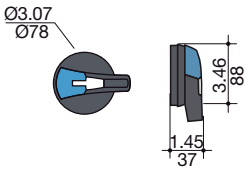
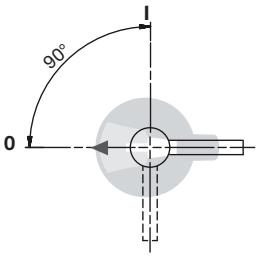
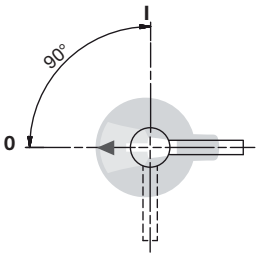
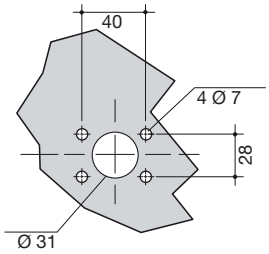
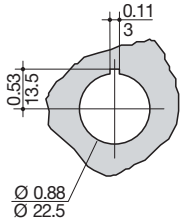
Front direct handle



sirco_267_b_1_x_cat

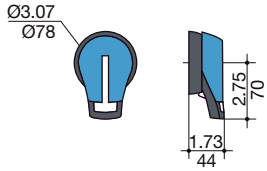
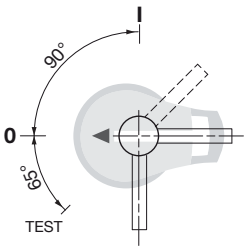
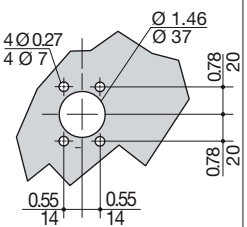
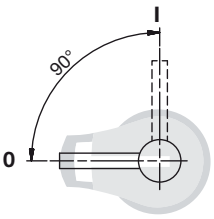
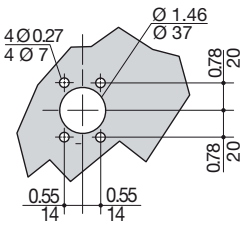
External handle dimensions (in / mm)

FUSERBLOC CD 30 A - Frames 1 / 2

Handle type	Front operation Direction of operation	Side operation Direction of operation	Door drilling
S0 type 			With 4 fixing screws  With fixing nut 

fuser-ul_015_a_1_gb_cat

FUSERBLOC CD 30 to 60 A - Frames 1 / 2 / 4

Handle type	Front operation Direction of operation	Front operation Door drilling	Side operation[1] Direction of operation	Side operation[1] Door drilling
S1 type 				

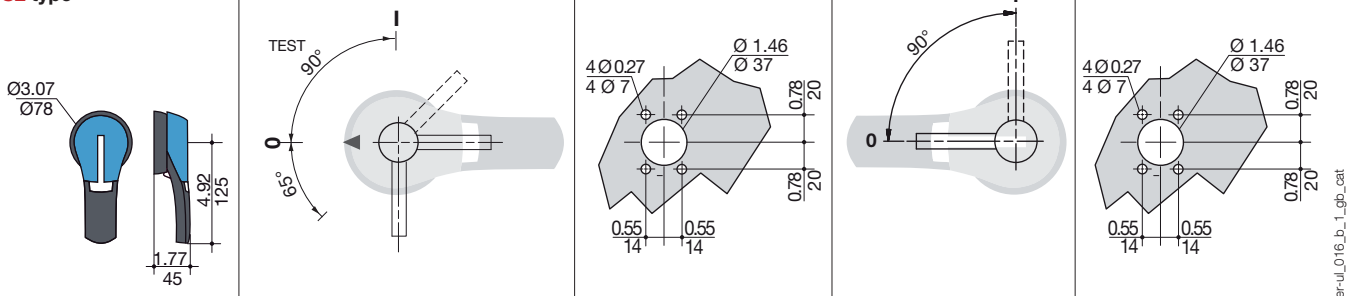
fuser-ul_015_b_1_gb_cat

(1) Not for frames 1 and 2.

External handle dimensions (in / mm)

FUSERBLOC 60 to 400 A - Frames 5 / 6 / 7

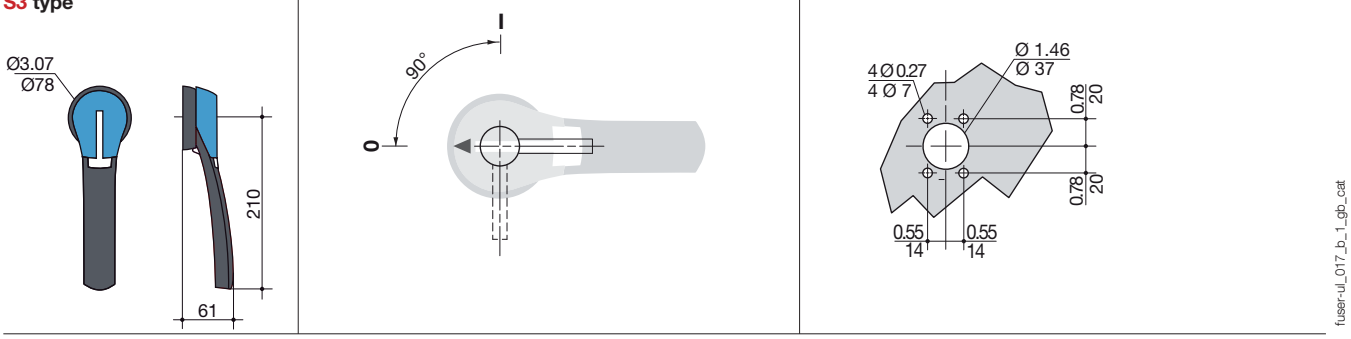
Handle type	Front operation		Side operation	
	Direction of operation	Door drilling	Direction of operation	Door drilling
S2 type				



fuser-ul_016_b_1_gb_cat

FUSERBLOC 600 and 800 A - Frame 8

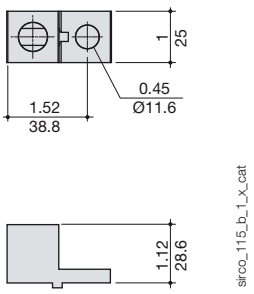
Handle type	Front operation	
	Direction of operation	Door drilling
S3 type		



fuser-ul_017_b_1_gb_cat

Terminal lugs (in / mm)

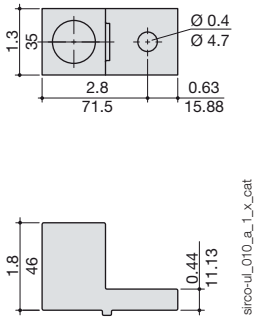
FUSERBLOC 200 A



sirco_115_b_1_x_cat

300 kcmil

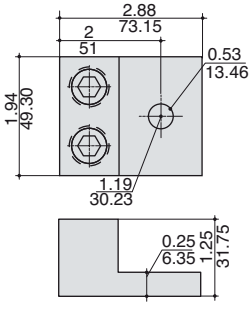
FUSERBLOC 400 A



sirco-ul_010_a_1_x_cat

600 kcmil

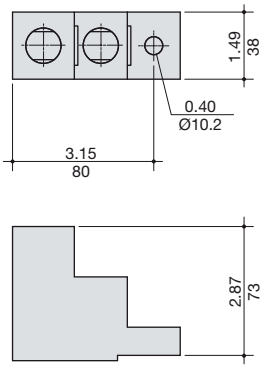
FUSERBLOC 400 A



sirco-ul_026_a_1_cat

2 x 350 kcmil

FUSERBLOC 600 to 800 A



sirco_116_b_1_x_cat

2 x 600 kcmil max