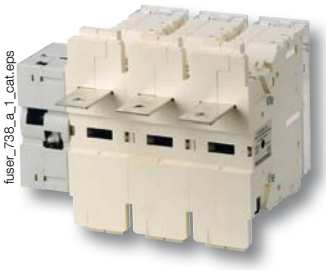


FUSERBLOC

Fuse combination switches with rear connection

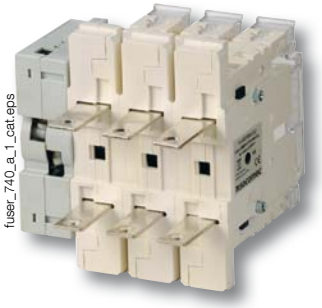
for industrial fuses up to 400 A





FUSERBLOC
REAR / FRONT connections 3 x 250 A





FUSERBLOC
REAR / REAR connections 3 x 100 A

Function

FUSERBLOC are manually operated multipolar fuse combination switches. They make and break on load and provide safety isolation and protection against overcurrent for any low voltage electrical circuit.

Advantages

Improved safety

- Complete isolation of the fuse with double breaking per pole (top and bottom of fuse).
- Positive break indication.
- IP2X protection with terminal shrouds front panel.

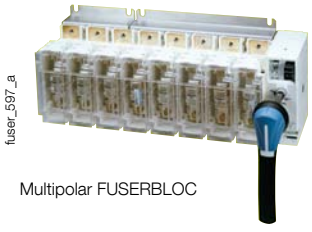
High breaking capacity

Protection against overloads and short-circuits thanks to high breaking capacity fuses (100 kA rms).

Specific functionalities for simplified use

- TEST position for testing control circuits without energising the power poles using U-type auxiliary contacts. In TEST position, the enclosure door can be opened.
- Mechanical or electronic fuse melting detection system (see DDMM or FMD

Customised solutions



Multipolar FUSERBLOC



Centred operation

The solution for

- Motor load break
- Protection of industrial processes



Strong points

- Improved safety
- High breaking capacity
- Specific functionalities for simplified use

Conformity to standards

- IEC 60947-3
- EN 60947-3
- BS EN 60947-3
- NBN EN 60947-3
- IEC 60269-1
- DIN EN 60269-1
- NF EN 60269-1
- IEC 60269-2
- VDE 0636-1
- VDE 0660-107

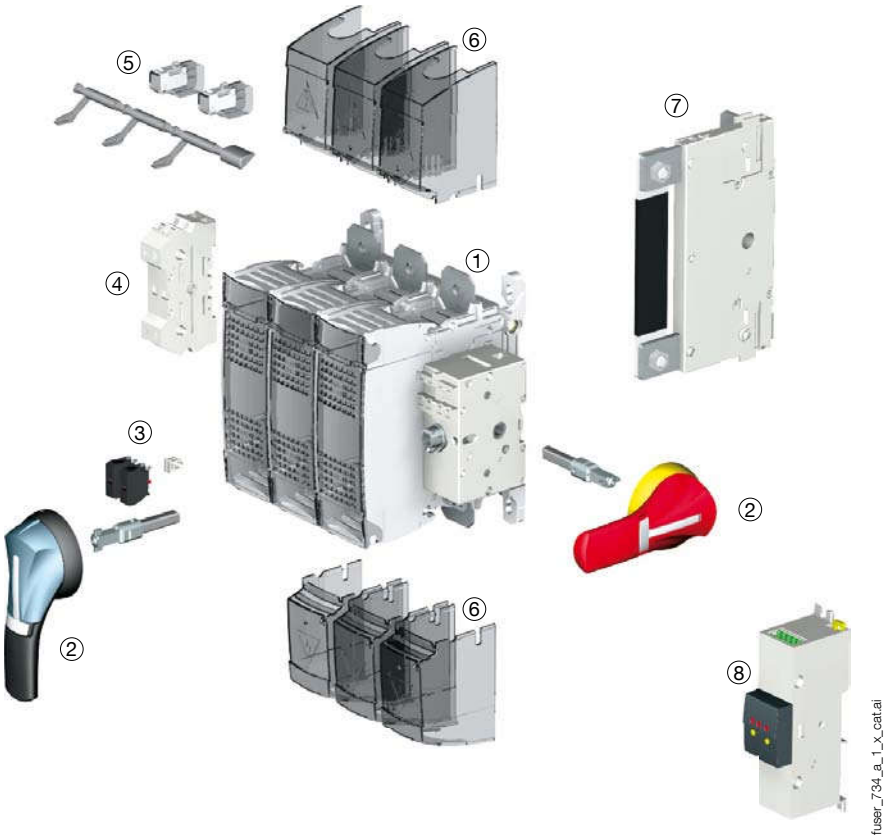
Available on request

- Fuserbloc with rear top plug-in connections
- Multipolar Fuserbloc with various coupling possibilities such as: 3 x 400 A + 3 x 50 A with front or side operation
- Fuserbloc switch fuses with centered operation
- Fuserbloc UL and CSA for North American markets

socomec
Innovative Power Solutions

What you need to know

- In addition to the FUSERBLOC rating, product selection also depends on the fuse characteristics and functional specifications, which need to be in accordance with the application. SOCOMEC FUSERBLOC are available for utilisation with **NFC, DIN or BS88 fuses.**



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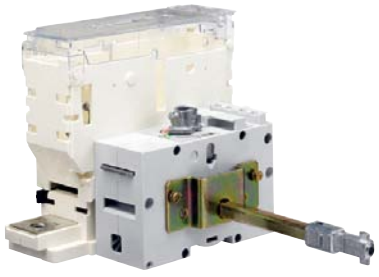
1. FUSERBLOC switch fuse
2. External front or side operation handle
3. U type auxiliary contact (pré-break and switch position signalling)
4. S and ST auxiliary equipment control and switch position signalling contacts
5. Melted fuse mechanical detection and indication device (DDMM)
6. Top and bottom terminal shrouds
7. Integrated solid neutral link
8. Electronic fuse monitoring device (FMD) detectes worked fuse and provides signals to operator, PLC or supervision systems. Compatible with BS88, DIN and UL fuse types.
   - LED visual indication
   - Bi-stable relay for PLC: alarm, remote device tripping, etc.
   - TEST button: any time functional product verification
   - FUSERBLOC direct mounting, either back plate, DIN-rail or door mounting

- For ratings 20 to 400 A, the **flat mounting kit** provides a compact solution ideally suited to withdrawable applications.



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References

BS 88 - External front and side operation - 32 to 400 A

Rating (A) Fuse size Frame size	No. of poles	Rear / Front Switch I - 0 -TEST	Rear / Rear Switch I - 0 -TEST	External front handle I - 0	TEST External front handle I - 0 - TEST	External right side handle I - 0	Shaft extensions for handle	Terminal shrouds[3]	U type A/C [2]	Integrated solid neutral link
32 A A1 11	3 P	3841 **3203**	3841 **3103**	S1 type Black IP65 1413 **2111**[1] Red/Yellow IP65 1414 **2111**	S1 type Black IP65 1413 **2115**[1] Red/Yellow IP65 1414 **2115**	S1 type Black IP65 1417 **2111**[1] Red/Yellow IP65 1418 **2111**	320 mm 1400 **1032**	IP2x as standard	1 contact NO 3999 **0701** 1 contact NC 3999 **0702**	3829 **9310**
	4 P	3841 **6203**	3841 **6103**							
63 A A2-A3 12	3 P	3841 **3206**	3841 **3106**							
	4 P	3841 **6206**	3841 **6106**							
100 A A4 [4] 13	3 P	3841 **3210**	3841 **3110**	S2 type Black IP65 1423 **2111**[1] Red/Yellow IP65 1424 **2111**	S2 type Black IP65 1423 **2115**[1] Red/Yellow IP65 1424 **2115**	S2 type Black IP65 1427 **2111**[1] Red/Yellow IP65 1428 **2111**				
	4 P	3841 **6210**	3841 **6110**							
160 A B1-B2 14	3 P	3841 **3216**	3841 **3116**							3829 **9320**
	4 P	3841 **6216**	3841 **6116**							
250 A B1-B2-B3 15	3 P	3841 **3224**	3841 **3124**							Rear / Front 3829 **2325**
	4 P	3841 **6224**	3841 **6124**							Rear / Rear 3829 **1325**
400 A B1-B2-B3-B4 16	3 P	3841 **3239**	3841 **3139**							Rear / Front 3829 **2339**
	4 P	3841 **6239**	3841 **6139**							Rear / Rear 3829 **1339**

(1) Standard.
(2) 4 auxiliary contacts as standard without additional contact holder.
(3) Top/bottom.
(4) For fuse size A4: max diameter 31 mm.

References

NFC and DIN - External front and right side operation - 50 to 400 A

Rating (A) Fuse size Frame size	No. of poles	Rear / Front Switch I - 0 - TEST	Rear / Rear Switch I - 0 - TEST	External front handle	TEST External front handle	External right side handle	Shaft for external handle	Auxiliary contacts[2]	Terminal shrouds[1]	Integrated solid neutral link
50 A 14 x 51 11	3 P	3831 **3205**	3831 **3105**	S1 type Black IP65 1413 **2111** Red/Yellow IP65 1414 **2111**	S1 type Black IP65 1413 **2115** Red/Yellow IP65 1414 **2115**	S1 type Black IP65 1417 **2111** Red/Yellow IP65 1418 **2111**	320 mm 1400 **1032**	U-type 1 contact NO 3999 **0701**	IP2x as standard	
	4 P	3831 **6205**	3831 **6105**							
100 A 22 x 58 13	3 P	3831 **3210**	3831 **3110**					1contact NC 3999 **0702**	2 P 3998 **2016** 3 P 3998 **3016** 4 P 3998 **4016**	3829 **9310**
	4 P	3831 **6210**	3831 **6110**							
160 A 00 13	3 P	3831 **3215**	3831 **3115**							
	4 P	3831 **6215**	3831 **6115**							
160 A 0 14	3 P	3831 **3216**	3831 **3116**	S2 type Black IP65 1423 **2111** Red/Yellow IP65 1424 **2111**	S2 type Black IP65 1423 **2115** Red/Yellow IP65 1424 **2115**	S2 type Black IP65 1427 **2111** Red/Yellow IP65 1428 **2111**		U-type 1 contact NO 3999 **0701** 1 contact NC 3999 **0702**	3 P 3998 **3016** 4 P 3998 **4016**	3829 **9320**
	4 P	3831 **6216**	3831 **6116**							
250 A 1 15	3 P	3831 **3224**	3831 **3124**						3 P 3998 **3025** 4 P 3998 **4025**	Rear / Front 3829 **2325** Rear / Rear 3829 **1325**
	4 P	3831 **6224**	3831 **6124**							
400 A 2 16	3 P	3831 **3239**	3831 **3139**							Rear / Front 3829 **2339** Rear / Rear 3829 **1339**
	4 P	3831 **6239**	3831 **6139**							

(1) Top/bottom.
(2) Maximum 4 contacts.

Accessories

Direct operation handle

For front operation Rating (A)	Frame size	Handle colour	Reference
32 ... 400	11 ... 16	Black	3629 **7910** (1)

(1) Direct operation handle for switches 3841 xxxx and 3831 xxxx.



External front operation handle

Padlockable handle in position 0 Rating (A)	Frame size	Handle type	Handle colour	Operation	External IP(1)	Defeatable handle	Reference
32 ... 63	11/12	S1	Black	I - 0	IP55	Yes	1411 **2111**
	11/12	S1	Black	I - 0	IP65	Yes	1413 **2111**
	11/12	S1	Red/Yellow	I - 0	IP65	Yes	1414 **2111**
	11/12	S1	Black	I - 0 - Test	IP65	Yes	1413 **2115**
	11/12	S1	Red/Yellow	I - 0 - Test	IP65	Yes	1414 **2115**
100 ... 400	13 ... 16	S2	Black	I - 0	IP55	Yes	1421 **2111**
	13 ... 16	S2	Black	I - 0	IP65	Yes	1423 **2111**
	13 ... 16	S2	Red/Yellow	I - 0	IP65	Yes	1424 **2111**
	13 ... 16	S2	Black	I - 0 - Test	IP65	Yes	1423 **2115**
	13 ... 16	S2	Red/Yellow	I - 0 - Test	IP65	Yes	1424 **2115**

(1) IP: protection degree according to IEC 60529 standard.



S1 type handle



S2 type handle

Padlockable handle in position 0 and I Rating (A)	Frame size	Handle type	Handle colour	External IP(1)	Reference
32 ... 63	11/12	S1	Black	IP65	1413 **2311**
100 ... 400	13 ... 16	S2	Black	IP65	1423 **2311**

(1) IP: protection degree according to IEC 60529 standard.

External right side operation handle

Rating (A)	Frame size	Handle type	Handle colour	External IP(1)	Reference
32 ... 63	11/12	S1	Black	IP55	1415 **2111**
	11/12	S1	Black	IP65	1417 **2111**
	11/12	S1	Red/Yellow	IP65	1418 **2111**
100 ... 400	13 ... 16	S2	Black	IP55	1425 **2111**
	13 ... 16	S2	Black	IP65	1427 **2111**
	13 ... 16	S2	Red/Yellow	IP65	1428 **2111**

(1) IP: protection degree according to IEC 60529 standard.



S1 type handle

External front operation handle with metal padlocking lever

Rating (A)	Frame size	Handle type	Handle colour	External IP(1)	Defeatable handle	Reference
32 ... 63	11/12	S1	Black	IP65	Yes	141D **2911**
	11/12	S1	Red/Yellow	IP65	Yes	141E **2911**
100 ... 400	13 ... 16	S2	Black	IP65	Yes	142D **2911**
	13 ... 16	S2	Red/Yellow	IP65	Yes	142E **2911**

(1) IP: protection degree according to IEC 60529 standard.



S2 type handle

S-type handle adapter

Use

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

Dimensions

Adds 12 mm to the depth of the handle.


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Handle colour	To be ordered in multiples of	External IP(1)	Reference
Black	1	IP65	1493 **0000**

(1) IP: protection degree according to IEC 60529 standard.

Alternative S-type handle cover colours

Use

For single lever handles S1 and S2 type.
Other colours: please consult us.


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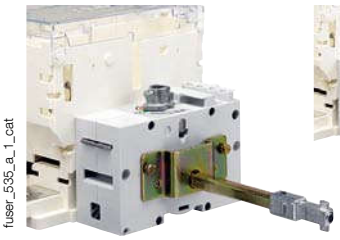
Handle colour	To be ordered in multiples of	Handle type	Reference
Light grey	50	S1, S2	1401 **0001**
Dark grey	50	S1, S2	1401 **0011**

Flat mounting kit

Use

The flat mounting providing compact solution ideally suited to withdrawable applications.
Kit to be used with a handle for flat mounting.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S2 type handle.
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Rating (A)	Frame size	Type	Reference
32 … 400	11 … 16	Kit + Shaft 200 mm	1429 **7710**(1)

(1) External operation handle to be ordered separately.

Accessories (continued)

Front operation shaft support accessory

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

Rating (A)	Frame size	Reference
32 … 400	11 … 16	3899 **0400**


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Shaft guide for external operation

Use
To guide the shaft extension into the external handle.
This accessory enables the handle to engage the extension shaft with a misalignment of up to 15 mm.
Required for a shaft lengths over 320 mm.

Description	Reference
Shaft guide	1429 **0000**


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Shaft for external front operation handle

Use
Standard lengths:
- 200 mm
- 320 mm
- 500 mm.

Other lengths: consult us.


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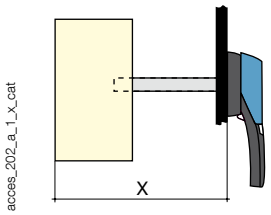
acces_369_a_1_cat

Rating (A)	Frame size	Shaft length (mm)	Reference
32 … 400	11 … 16	200	1400 **1020**
32 … 400	11 … 16	320	1400 **1032**
32 … 400	11 … 16	500	1400 **1050**(2)

(1) Use the shaft guide accessory for external operation.
(2) Use the front operation shaft support accessory.



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Dimension X (mm) for FUSERBLOC BS88

Rating (A)	32	63 … 100	160	250 … 400
Fuse size	A1	A2-A3/A4	B1-B2	B1-B2-B3
Frame size	11	12/13/14	14/15	15/16
Shaft length (mm)				
200	100 … 230	125 … 230	135 … 230	160 … 230
320	100 … 350	125 … 350	135 … 350	160 … 350
500	100 … 530	125 … 530	135 … 530	160 … 530

Dimension X (mm) for FUSERBLOC NFC and DIN

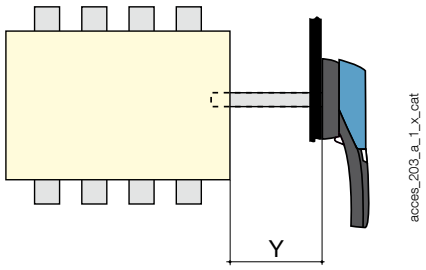
Rating (A)	50	100 … 160	160	250 … 400
Fuse size	14x51	22x58/00	0	1/2
Frame size	11	13	14	15/16
Shaft length (mm)				
200	100 … 230	135 … 230	145 … 230	160 … 230
320	100 … 350	135 … 350	145 … 350	160 … 350
500	100 … 530	135 … 530	145 … 530	160 … 530

Shaft extensions for external side operation

Use

Standard lengths, 200 mm.

Rating (A)	Frame size	Handle type	Dimension Y (mm)	Shaft length (mm)	Reference
32 ... 400	11 ... 16	S	36 ... 172	200	1400 **1020**



Integrated solid neutral link

Use

Fixing the solid neutral onto the mechanism produces a device with a solid neutral of the same size as a standard three-pole device (+ 6 mm).

Rating (A)	Switch body size	Bar rating (A)	Rear / Front Reference	Rear / Rear Reference
32 ... 125	11/12/13	125	3829 **9310**	3829 **9310**
160	13/14	200	3829 **9320**	3829 **9320**
250	15	250	3829 **2325**	3829 **1325**
400	16	400	3829 **2312**	3829 **3312**



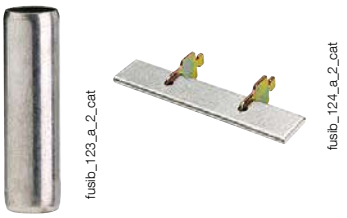
Solid links

BS88 switches

Rating (A)	Frame size	Fuse size	I_{max} (A)	Reference
32	11	A1	32	3629 **9003**
63	12	A2-A3	63	3629 **9006**
100	13	A4	160	3629 **9010**
160	14	B1-B2	200	3629 **9016**
250	15	B1-B2-B3	315	3629 **9025**
400	16	B1-B2-B3-B4	400	3629 **9040**

NFC and DIN switches

Rating (A)	Frame size	Fuse size	I_{max}(A)	Reference
50	11	14 x 51	50	6029 **0000**
100	13	22 x 58	125	6039 **0000**
160	13	00	160	6420 **0000**
160	14	0	160	6421 **0000**
250	15	1	250	6421 **0001**
400	16	2	400	6421 **0002**



Accessories (continued)

U-type auxiliary contacts[1]

Use
Compact universal type auxiliary contacts which can be configured for operation in either, or both, ON and TEST positions for CD 20 to 1250 A FUSERBLOC. Each slot can accommodate up to two interlocked A/Cs.

Connection to the control circuit
By terminals with max. section 2 x 2.5 mm².
For FUSERBLOC CD 20 to 400 A. Pre-break and signalling of positions 0, I and TEST.
For FUSERBLOC ≥ 630 A: Pre-break and position 0 and I signalling.



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References

NO auxiliary contacts

Rating (A)	Frame size	Contact(s)	Reference[1]
32 … 400	11 … 16	1	3999 **0701** [2]

NC auxiliary contacts

Rating (A)	Frame size	Contact(s)	Reference[1]
32 … 400	11 … 16	1	3999 **0702**[2]

(1) Cannot be mounted in direct operation CD20 - CD32 switches..
(2) 4 auxiliary contacts as standard without additional A/C holder.

Contact holder for additional auxiliary contacts

Rating (A)	Frame size	Contact(s)	Reference
32 … 400	11 … 16	4 (2 x 2 max)	3999 **0600**

Characteristics

	Operating current I_e (A)			
	250 VAC	400 VAC	24 VDC	48 VDC
Rating (A)	AC-15	AC-15	DC-13	DC-13
32 … 400	3	1.8	2.8	1.4

S and ST-type auxiliary contacts

Use
For FUSERBLOCs 32 to 1250 A, position 0 and I signalling by 1 to 4 NO + NC auxiliary contacts.

Electrical principle
The NO + NC S-type auxiliary contacts can be configured as 2 NC or 2 NO.

Connection
By terminals with max. cross-section 10 mm².

Mechanical characteristics
30 000 operations.


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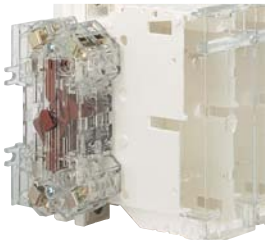
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References

S-type auxiliary contacts 0-I
for external front and right-side operation (Standard operation)

Rating (A)	Frame size	Contact type	S-type AC Reference	Drive shaft (optional) Reference
32 … 400	11 … 16	NC+NO	3999 **0041**[1]	3999 **0003**

ST-type auxiliary contacts I-0-TEST
for external front and right-side operation (TEST operation)

Rating (A)	Frame size	Contact type	Description	ST-type AC Reference	Drive shaft Reference
32 … 400	11 … 16	NC+NO	TEST + ON	3999 **0141**[2]	3999 **0103**
32 … 400	11 … 16	2 O	TEST + ON	3999 **0241** [2]	3999 **0103**

(1) Drive shaft included with S-type Auxiliary Contact.
(2) Drive shaft to be ordered in addition to the ST-type Auxiliary Contact.

Characteristics

		Operating current I_e (A)	
	Current	250 VAC	400 VAC
Rating (A)	nominal (A)	AC-13	AC-13
32 … 400	20	10	8

Terminal shrouds

Use

Top or bottom IP20 protection (on the front) against direct contact with terminals or connection parts.

Two sets required to fully shroud both incoming and outgoing terminals.

Rating (A)	Frame size	Position	No. of poles	Reference
32 … 63	11/12	top / bottom	3 / 4 P	integrated
100 … 160	13/14	top / bottom	3 P	3998 **3016**
100 … 160	13/14	top / bottom	4 P	3998 **4016**
200 … 400	15/16	top / bottom	3 P	3998 **3025**
200 … 400	15/16	top / bottom	4 P	3998 **4025**


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NFC and DIN worked fuse indication

Use

For fuse cartridge with striker (size 14 x 51 22 x 58 ; 0 ; 1 ; 2 ; 3 and 4).

Electrical principle

A NO/NC auxiliary contact detects that the fuse has blown.

Connection to the control circuit

6.35 mm fast-on terminal.

Mechanical characteristics

30 000 operations.

References

NO/NC type auxiliary contacts for 3 pole Rating (A)	Frame size	Fuses	Contact(s)	Reference
50	11	14 x 51	1st	3994 **0405**
100	13	22 x 58	1st	3994 **0310**
160	14	0	1st	3994 **0316**
250	15/16	1-2	1st	3994 **0325**
50 … 250	11		2nd	3994 **1901**
400	16	2	2nd	3994 **1902**

NO/NC type auxiliary contacts for 4 pole or 3 pole + neutral Rating (A)	Frame size	Fuses	Contact(s)	Reference
50	11	14 x 51	1st	3994 **0405**
100	13	22 x 58	1st	3994 **0410**
160	14	0	1st	3994 **0416**
250	15/16	1-2	1st	3994 **0425**
50 … 250	11		2nd	3994 **1901**
400	16	2	2nd	3994 **1902**


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DDMM for NH fuses

Characteristics

Rating (A)	Current nominal (A)	Operating current I_e (A) 250 VAC AC-13	400 VAC AC-13	24 VDC DC-13	48 VDC DC-13
32 … 400	16	4	3	12	2

Electronic fuse monitoring device (FMD)

Use

Provides fuse state monitoring and worked fuse indication even for fuse links without monitoring device strikers. Suitable for use with BS88, DIN and UL type fuses.

Principle

The Fuse Monitoring Device (FMD) detects the worked fuse and provides a signal via:
a relay and 1 LED (FMD10) or a bi-stable relay and 3 LEDs (FMD30).

The FMD can be DIN rail or back plate mounted close to the Fuserbloc, directly mounted on the FUSERBLOC, or it can be door mounted to provide information directly on the front of a panel.

References

For FUSERBLOC 32 to 400 A Nb of LEDs	Operating voltage Ph/Ph	Reference
1 (FMD10)	120 - 260 VAC	3899 **1120**
1 (FMD10)	380 - 690 VAC	3899 **1380**
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**


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1 LED version (FMD10)


acces_310_a

3 LED version (FMD30)

Relay characteristics

Rating (A)	Relay operating current I_e (A) AC-15	DC-13
63 ... 400	2.5 A	0.2

Cage terminals

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


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References

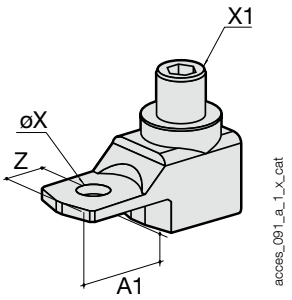
Rating max (A)	Frame size	No. of poles	Reference
32 … 63	11 … 12	3 / 4 P	integrated
100 … 160	13/14	3 P	5400 **3016**
100 … 160	13/14	4 P	5400 **4016**
250	15	3 P	5400 **3025**
250	15	4 P	5400 **4025**
400	16	3 P	5400 **3040**
400	16	4 P	5400 **4040**

Connections

Rating (A)	Flexible cable cross-section (mm^2)	Rigid cable cross-section (mm^2)	Flexible bar width (mm)	Stripped over (mm)
100 … 160	16 … 95	16 … 95	13	22
250	16 … 185	16 … 185	18	27
400	50 … 240	50 … 300	20	34

Dimensions

Rating (A)	A	A1	C	R	ØX	X1	Z
100 … 160	47.5	22.5	25	20	8.5	M12	10
250	62	31.5	31.5	25	10.5	M16	14
400	71.5	32	38	32	10.5	M20	15



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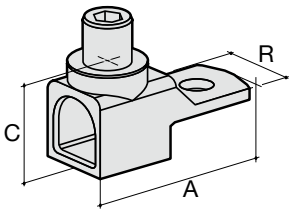

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Handle key interlocking accessories

Use
Locking in position 0 of the direct, front or right side operation:
- using a padlock (not supplied) in direct right side operation: integrated into the handle,
- using a padlock (not supplied): right-side or front operation switch from 32 to 1250 A, factory integrated
- using a padlock (not supplied) in external operation.

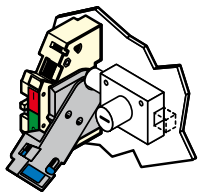
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Fig. 1

Locking using RONIS EL 11 AP lock (not supplied)

Rating (A)	Frame size	Operation	Figure n°	Reference
32 … 400	11 … 16	external front	2	1499 **7701**

Locking using K-type CASTELL lock (not supplied)

Rating (A)	Frame size	Operation	Figure n°	Reference
32 … 400	11 … 16	external front	3	1499 **7702**

Locking using FS-type CASTELL lock (not supplied)

Rating (A)	Frame size	Operation	Figure n°	Reference
32 … 400	11 … 16	external front	3	1499 **7703**

Locking using XOP (not supplied)

Rating (A)	Frame size	Operation	Reference
32 … 400	11 … 16	external front	1499 **7702**

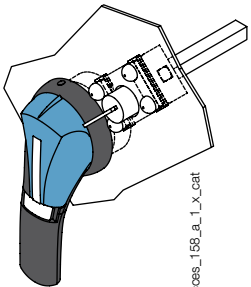
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Fig.2

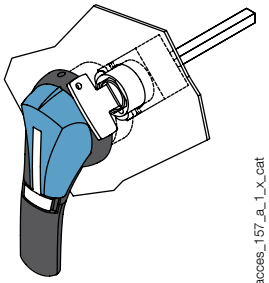
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Fig. 3

Characteristics according to IEC 60947-3

32 to 400 A

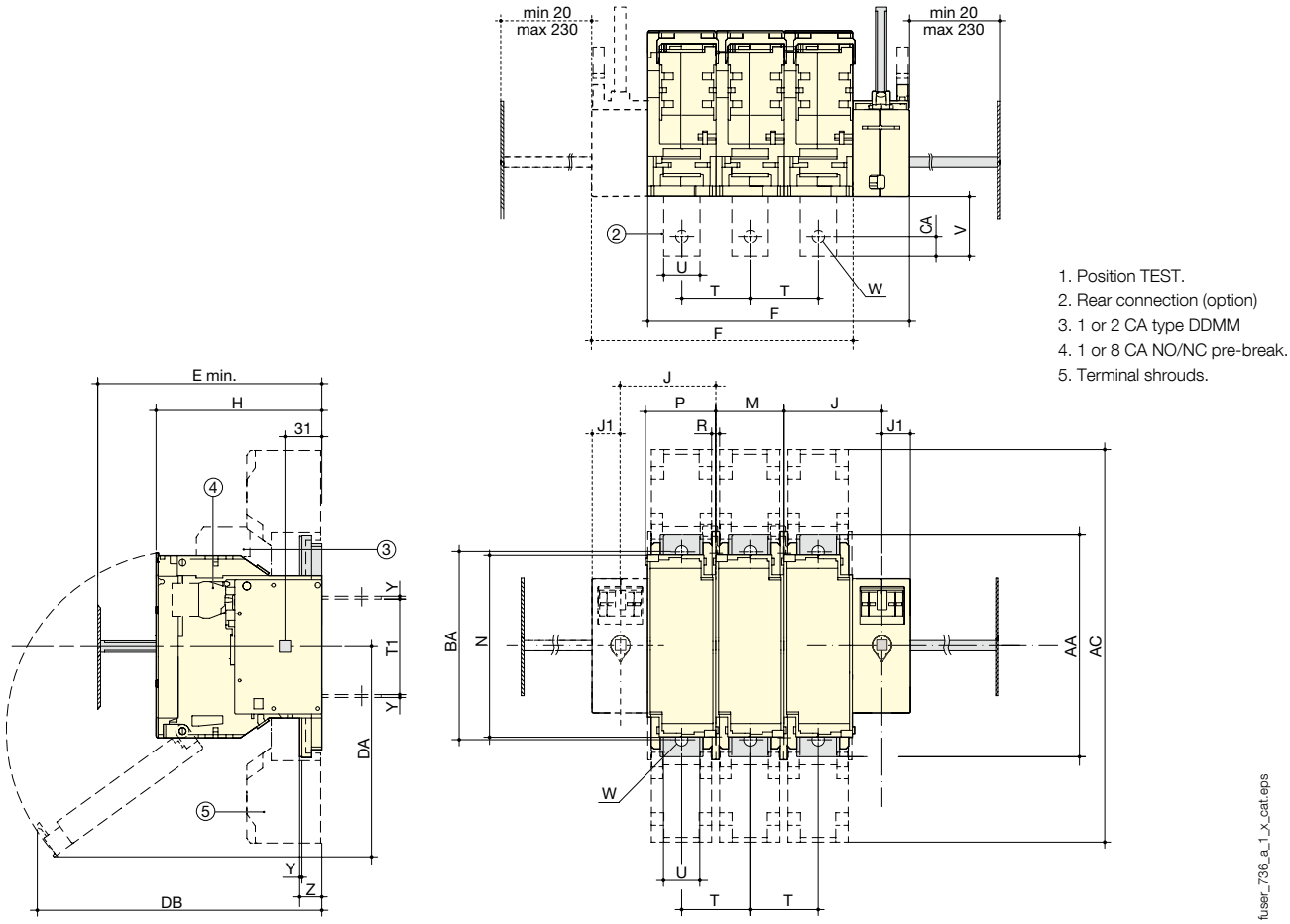
Thermal current I_{th} (40°C)		**32 A**	**50 A**	**63 A**	**100 A**	**160 A**	**160 A**	**250 A**	**400 A**
BS88/DIN fuse size		A1/-	-/14 x 51	A2-A3/00C	A4*/22 x 58	-/00	B1-B2	B1-B2-B3/1	B1-B2-B3-B4/2
Frame size for direct operation		1	1	2	3	3	4	5	6
Switch body size for front and side operation		11	11	12	13	13	14	15	16
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	**Utilisation category**	**A/B(1)**	**A/B(1)**	**A/B(1)**	**A/B(1)**	**A/B(1)**	**A/B(1)**	**A/B(1)**	**A/B(1)**
400 VAC	AC-22 A / AC-22 B	32/32	50/50	63/63	100/100	160/160	160/160	250/250	400/400
400 VAC	AC-23 A / AC-23 B	32/32	50/50	63/63	100/100	160/160	160/160	250/250	400/400
690 VAC	AC-22 A / AC-22 B	32/32	50/50	63/63	100(2)/100(2)	160(2)/160(2)	160(2)/160(2)	250(2)/250(2)	400/400
690 VAC	AC-23 A / AC-23 B	32/32	50/50	63/63	100(2)/100(2)	125(2)/125(2)	125(2)/125(2)	250(2)/250(2)	315/400
220 VDC	DC-20 A / DC-20 B	32/32	50/50	63/63	100/100	160/160	160/160	250/250	400/400
220 VDC	DC-21 A / DC-21 B	32/32	40/40	40/40	100/100	125/125	125/125	200/200	315/315
440 VDC	DC-20 A / DC-20 B	32(3)/32(3)	50(3)/50(3)	63(3)/63(3)	100(3)/100(3)	160(3)/160(3)	160(3)/160(3)	250(3) / 250(3)	315(3)/315(3)
440 VDC	DC-21 A / DC-21 B	32(3)/32(3)	40(3)/40(3)	40(3)/40(3)	100(3) / 100(3)	125(3)/125(3)	125(3)/125(3)	200(3) / 200(3)	250(3) / 315(3)
Operational power in AC-23 (kW)									
At 400 VAC without pre-break in AC(1)(5)		15/15	25/25	30/30	51/51	80/80	80/80	132/132	220/220
At 690 VAC without pre-break in AC(1)(5)		25/25	45/45	55/55	90/90	110/110	110/110	220/220	220/295
Reactive power (kvar)									
At 400 VAC(5)		15	23	28	45	75	75	115	185
Fuse protected short-circuit withstand BS88/DIN (kA rms prospective)									
Prospective short-circuit (kA rms)(6)		80/100	-/100	80/100	80/100	-/100 (50)	80/100	80/100	80/50
Associated fuse rating (A)(6)		32/32	-/50	63/63	100/100	-/125 (160)	160/160	250/250	400/400
Short-circuit capacity									
Rated peak withstand current (kA peak)(6)		9	7.6	10.6	20	20	22.7	32.5	40
Fuse selection (maximum fuse size)*									
SOCOMEC BS88 - Standard max		6A10 0032		6A30 0063	6A40 0100		6B20 0160	6B20 0250	6B40 0400
SOCOMEC BS88 - Motor max		6A1M 0032		6A3M 0080	6A4M 0125		6B1M 0200	6B2M 3015	6B4M 0500
SOCOMEC DIN - Distribution (gl - gG)			6022 0050	6600 0063	6032 0100	6692 0160		6712 0250	6722 0400
SOCOMEC DIN - Motor (aM)			6023 0050	6601 0063	6033 0100	6693 0160		6713 0250	6723 0400
BUSSMANN - Standard max		NITD 32		BAO 63	CEO 100		DD 160	ED 250	ED 400
BUSSMANN - Motor max		NITD 32M63		BAO 63M80	CEO 100M125		CD 100M200	DD 200M315	ED 400M500
LAWSON - Standard max		NIT 32		TIS 63	TCP 100		TF 160	TKF 250	TMF 400
LAWSON - Motor max		NIT 20M32		TIS 63M80	CTFP 100M125		TCP 100M200	TF 200M315	TMF 400M500
GE - Standard max		NET 32		TIS 63	TCP 100		TF 160	TKF 250	TMF 400
GE - Motor max		NET 32M63		TIS 63M80	OCP 100M125		TC 100M200	TF 200M315	TMF 400M450
Connection									
Minimum Cu cable cross-section (mm^2)		6	6	10	25	35	50	95	185
Maximum Cu cable cross-section (mm^2)		25	25	25	95	95	95	240	240
Maximum busbar width (mm)					20	20	20	32	45
Min. / Max. tightening torque min (Nm)		2.5/3	2.5/3	2.5/3	8.3/13	8.3/13	8.3/13	20/26	20/26
Mechanical characteristics									
Durability (number of operating cycles)		10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000
Weight of 3 P switch (kg)		0.80	0.80	1	1.5	1.8	1.8	3.2	4.8
Weight of 4 P switch (kg)		1	1	1.3	2	2.3	2.3	4.5	6.1
Weight of 1 P extra (kg)		0.2	0.2	0.3	0.5	0.5	0.5	1.3	1.3
Frame pitch (mm)		32	27	32	36	36	50	60	66

(1) Category with index A = frequent operation - Category with index B = infrequent operation.
(2) With terminal shrouds or terminal screen.
(3) 4-pole device with 2 pole in series by polarity.
(4) 3-pole device with 2 poles "+" in series and 1 pole "-".
(5) The power value is given for information only, the current values vary from one manufacturer to another.
(6) For a rated operational voltage U_e = 400 VAC.
** Please ensure that fuse let through current does not exceed short-circuit capacity of the switch (kA peak).*

Dimensions

External operation

BS88 32 to 400 A - NFC and DIN 50 to 250 A

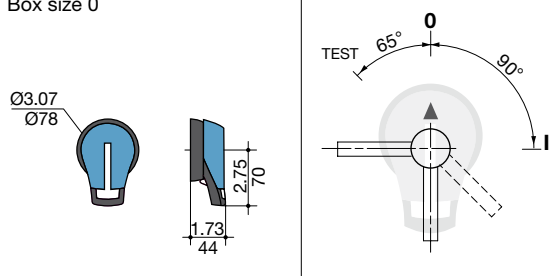
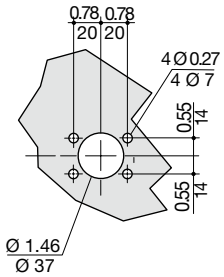
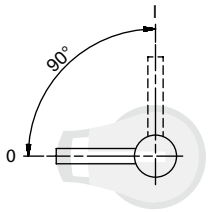
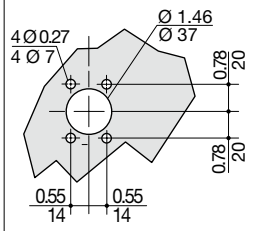


1. Position TEST.
2. Rear connection (option)
3. 1 or 2 CA type DDMM
4. 1 or 8 CA NO/NC pre-break.
5. Terminal shrouds.

Rating (A)	NFC/DIN Fuse size	BS88 Fuse size	Frame size	Overall dimensions E min	Terminal shrouds AC	Switch body							Switch mounting				Connection									
						F 3p.	F 4p.	H	J	J1	DA	DB	M	N	P	R	T	T1	U	W	Y	Z	AA	BA	CA	V
32	-	A1	11	100	-	121	148	87	45	18	85	153	27	106	31	6	27	59	12	-	2	-	118	-	6	15
50	14 x 51	-	11	100	-	121	148	87	45	18	85	153	27	106	31	6	27	59	12	-	2	-	118	-	6	15
63	00C	A2-A3	12	125	-	136	168	116	50	18	159	145	32	106	36	5.4	32	59	12	-	2	-	118	-	6	15
100	22 x 58	A4	13	135	268	148	184	116	54	18	141	179	36	127	40	5.4	36	62	20	8.5	2.5	19.5	162	141	8	41
160	00	-	13	135	268	148	184	126	54	18	141	189	36	127	40	5.4	36	62	20	8.5	2.5	19.5	162	141	8	41
160	0	B1-B2	14	145	268	190	240	136	64	18	174	229	50	140	54	5.4	50	62	20	8.5	2.5	19.5	162	141	8	41
250	1	B1-B2-B3	15	154	345	234	294	146	86	25	185	251	60	162	64	6.4	60	84	32	11	2.5	19.5	195	166	17	52
400	2	B1-B2-B3-B4	16	157	255	252	318	149	91	25	200	260	66	172	70	6.4	66	84	50	11	3	20	205	175	14.5	54

Dimensions for external operation handles

BS88 - 32 to 63 A - NFC and DIN - 63 A

Handle type	Front operation		Side operation	
	Direction of operation	Door drilling	Direction of operation	Door drilling
S1 type Box size 0				

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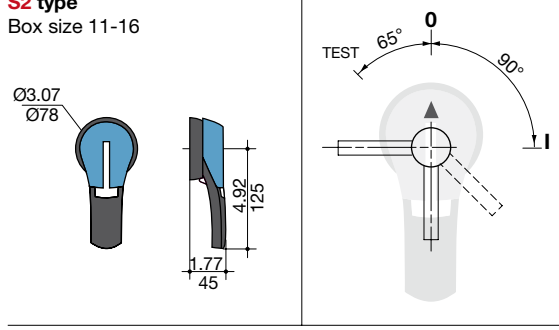
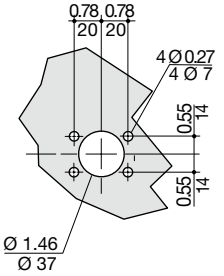
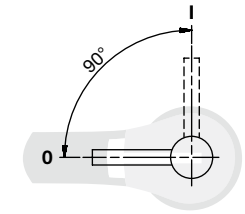
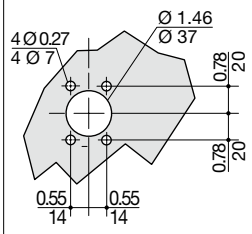
BS88 / NFC and DIN - 100 to 400 A

Handle type	Front operation		Side operation	
	Direction of operation	Door drilling	Direction of operation	Door drilling
S2 type Box size 11-16				

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