# FUSERBLOC NFC/DIN

## Fuse combination switches

for fuses up to 1250 A


*FUSERBLOC*
*630 to 1250 A*

### The solution for

- Data centres
- Healthcare
- Industry
- Buildings

### Strong points

- Optimum safety
- High breaking capacity
- Multi-use
- Simplified use

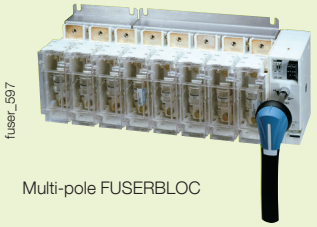
### Conformity to standards

- IEC 60947-3
- IEC 60269-1
- IEC 60269-2

### Approvals and certifications(1)

*(1) Product part numbers on request.*

### Customised solutions




Multi-pole FUSERBLOC

## Function

**FUSERBLOC NFC/DIN** 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.
This range is available in right front-side, left side and central front, direct or external operation, with 2, 3 and 4 poles and up to 1250 A.

## Advantages

**Optimum safety**
Complete isolation of the fuse with double breaking per pole (top and bottom of fuse) and positive break indication keep people and equipment protected from overcurrent.

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

**Multi-use**
Fuserbloc can be equipped with a front or side operation handle, mounted directly on the product, or externally on the door or on the side of an electrical enclosure or cabinet.

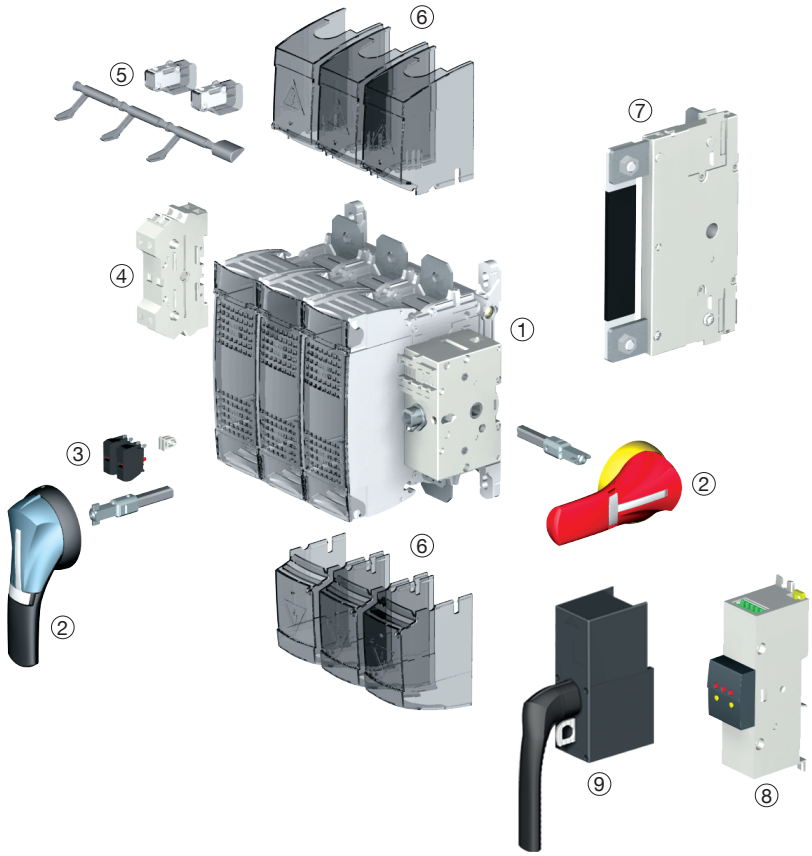
**Simplified use**
TEST position for testing control circuits without energising the power poles using U-type auxiliary contacts. In TEST position, the enclosure door can be opened.

## General characteristics

- Range 25 to 1250 A.
- 2P, 3P or 4P available.
- Up to 690 VAC.
- Up to 100 kA.
- Available in versions with right front-side, left side and central front operation handles.

## What you need to know

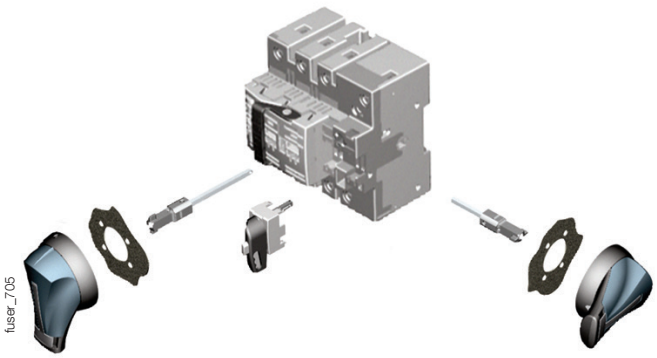
- In addition to the FUSERBLOC NFC/DIN rating, product selection also depends on the fuse characteristics and functional specifications. The SOCOMEC FUSERBLOC NFC/DIN can be equipped with **NFC/DIN** fuses (for BS fuses: please contact us))



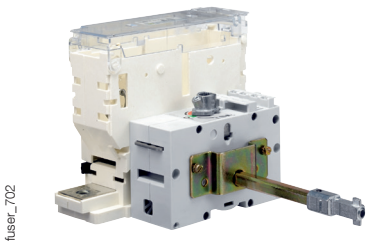

**1.** FUSERBLOC fused combination switches, right front-side operation
**2.** External front or side operation handle
**3.** U type auxiliary contact (pre-break and switch position signalling)
**4.** Auxiliary power contacts (position signalling)
**5.** Blown fuse mechanical detection and indication device (DDMM)
**6.** Incoming and outgoing terminal shrouds
**7.** Integrated solid neutral link
**8.** Electronic fuse monitoring device (FMD) detects fuse status and provides signals to operator, PLC or supervision systems. Compatible with BS88, DIN and UL fuses
- LED visual indication
- Bi-stable relay for PLC: alarm, remote device tripping, etc.
- TEST button: provides functional product verification
- Can be directly mounted to FUSERBLOC NFC/DIN, alternatively it can be DIN-rail, back-plate or door mounted

**9.** Direct operation accessory.

- Whether it is 3 pole + switched neutral or 3 pole + solid neutral, the CD 25 to CD 32 A **FUSERBLOC NFC/DIN** with **direct** and **external operation** is the best suited solution in a compact design.




- For ratings CD 25 to 400 A, the **flat mounting kit** is ideally suited to plug-in drawers.
- Maintenance of outputs from the DC common bus.



## References

### NFC and DIN Right front-side, left side and central operation 25 to 125 A

| Rating (A) Fuse size Frame size | No. of poles | Right front-side operation (6) | Left side operation (6) | Centred front operation (6) | Direct front handle I-0-TEST | External front handle I - 0 | External front TEST handle I - 0 - TEST | External right side handle I - 0 | Shaft for handle | Auxiliary contact | Terminal shroud | Electronic fuse monitoring device (5) FMD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CD 25 A 10 x 38 0 | 3 P | 3631 **3002** (1) | | | 3629 **4012** | S1 type Black IP55 1411 **2111** (2) Black IP65 1413 **2111** Red/Yellow IP65 1414 **2111** | S1 **type** Black IP65 1413 **2115** Red IP65 1414 **2115** | S1 type Black IP55 1415 **2111** (2) Black IP65 1417 **2111** Red/Yellow IP65 1418 **2111** | 200 mm 1401 **0520** 320 mm 1401 **0532** (2) | U type 1 NO contact 3999 **0701** (3) 1 NO contact 3999 **0702** (3) | | |
| | 3 P + switched neutral * | 3631 **4002** (1) | | | | | | | | | | |
| | 3 P + solid neutral * | 3631 **5002** (1) | | | | | | | | | | |
| CD 32 A 10 x 38 0 | 3 P | 3631 **3003** | | | | | | | | | | |
| | 3 P + switched neutral * | 3631 **4003** | | | | | | | | | | |
| | 3 P + solid neutral * | 3631 **5003** | | | | | | | | | | |
| CD 32 A 14 x 51 0 | 3 P | 3631 **3004** (1) | | | | | | | | | | |
| | 3 P + switched neutral * | 3631 **4004** (1) | | | | | | | | | | |
| | 3 P + solid neutral * | 3631 **5004** (1) | | | | | | | | | | |
| 50 A 14 x 51 11 | 2 P | 3831 **2005** | | | | | | | | | | |
| | 3 P | 3831 **3005** (1) | 3815 **3005** | | | | | | | | | |
| | 4 P | 3831 **6005** (1) | 3815 **6005** | | | | | | | | | |
| 63 A 00C 12 | 2 P | 3831 **2006** | | | 3999 **5020** | S2 type Black IP55 1421 **2111** (2) Black IP65 1423 **2111** Red IP65 1424 **2111** | S2 type Black IP65 1423 **2115** Red IP65 1424 **2115** | S2 type Black IP55 1425 **2111** (2) Black IP65 1427 **2111** Red IP65 1428 **2111** | 200 mm 1400 **1020** 320 mm 1400 **1032** (2) 500 mm 1400 **1050** | | 2 P 3998 **2016** (4) 3 P 3998 **3016** (4) 4 P 3998 **4016** (4) | 3 LEDs 155…260 VAC 3899 **3120** 3 LEDs 380 - 690 VAC 3899 **3380** |
| | 3 P | 3831 **3006** (1) | 3815 **3006** | | | | | | | | | |
| | 4 P | 3831 **6006** (1) | 3815 **6006** | | | | | | | | | |
| 100 A 22 x 58 13 | 2 P | 3831 **2010** | | | | | | | | | | |
| | 3 P | 3831 **3010** (1) | 3815 **3010** | | | | | | | | | |
| | 4 P | 3831 **6010** (1) | 3815 **6010** | | | | | | | | | |
| 125 A 22 x 58 13 | 2 P | 3831 **2011** | | | | | | | | | | |
| | 3 P | 3831 **3011** | 3815 **3011** | 3837 **3015** | | | | | | | | |
| | 4 P | 3831 **6011** | 3815 **6011** | | | | | | | | | |
| 125 A 00 13 | 2 P | 3831 **2012** | | | | | | | | | | 3 LEDs 155…260 VAC 3899 **3120** 3 LEDs 380…690 VAC 3899 **3380** |
| | 3 P | 3831 **3012** | 3815 **3012** | | | | | | | | | |
| | 4 P | 3831 **6012** | 3815 **6012** | | | | | | | | | |

*(1) Available enclosed (see "Enclosed fuse switches").*
*(2) Standard.*
*(3) Maximum 4 contacts.*
*(4) Incoming or outgoing. Provide 2 terminal shrouds for complete incoming and outgoing protection.*
*(5) Mechanical fuse blown auxiliary contact (DDMM), see "Accessories".*
*(6) Switch body.*
** NC= Switched neutral*
*NP = Solid Neutral.*

## NFC and DIN Right front-side, left side and central operation 160 à 1250 A

| Rating (A) Fuse size Frame size | No. of poles | Right front-side operation (7) | Left-side operation (7) | Centred front operation (7) | Direct front handle I-0-TEST | External front handle I - 0 | External front TEST handle I - 0 - TEST | External right side handle I - 0 | Shaft for handle | Auxiliary contact | Terminal shroud | Electronic fuse monitoring device (5) FMD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 160 A 00 13 | 2 P | 3831 **2015** | | | 3999 **5020** | S1 type Black IP55 1411 **2111** (2) Black IP65 1413 **2111** Red IP65 1424 **2111** | S2 **type** Black IP65 1423 **2115** Red IP65 1424 **2115** | S2 **type** Black IP55 1425 **2111** (2) Black IP65 1427 **2111** Red IP65 1428 **2111** | 200 mm 1400 **1020** 320 mm 1400 **1032** 500 mm 1400 **1050** | U t**y**pe 1 NC contact 3999 **0701** (3) 1 NO contact 3999 **0702** (3) | | 3 LEDs 155…260 VAC 3899 **3120** 3 LEDs 380…690 VAC 3899 **3380** |
| | 3 P | 3831 **3015** | 3815**3015** | | | | | | | | | |
| | 4 P | 3831 **6015** | 3815**6015** | | | | | | | | | |
| 160 A 0 14 | 2 P | 3831 **2016** | | | | | | | | | | |
| | 3 P | 3831 **3016** (1) | 3815**3016** | 3837**3016** | | | | | | | | |
| | 4 P | 3831 **6016** (1) | 3815**6016** | | | | | | | | | |
| 250 A 1 15 | 2 P | 3831 **2024** | | | 3999 **5021** | | | | | U t**y**pe 1 NC contact 3999 **0701** (4) 1 NO contact 3999 **0702** (4) | 2 P 3998 **2025** (5) 3 P 3998 **3025** (5) 4 P 3998 **4025** (5) | |
| | 3 P | 3831 **3024** (1) | 3815**3024** | 3837**3024** | | | | | | | | |
| | 4 P | 3831 **6024** (1) | 3815**6024** | 3837**6024** | | | | | | | | |
| 400 A 2 16 | 2 P | 3831 **2039** | | | | | | | | | | |
| | 3 P | 3831 **3039** (1) | 3815**3039** | 3837**3039** | | | | | | | | |
| | 4 P | 3831 **6039** (1) | 3815**6039** | 3837**6039** | | | | | | | | |
| 630 A 3 17 | 2 P | 3811 **2063** | | | 3899 **6011** | S3 **type** Black IP65 1433 **3111** (2) Red IP65 1434 **3111** | | S3 type Blac**k** IP65 1437 **7911** | 200 mm 1400 **1220** 320 mm 1400 **1232** 500 mm 1400 **1250** | | 2 P 3898 **2080** (5) 3 P 3898 **3080** (5) 4 P 3898 **4080** (5) | |
| | 3 P | 3811 **3063** (1) | 3815**3063** | 3817**3063** | | | | | | | | |
| | 4 P | 3811 **6063** (1) | 3815**6063** | 3817**6063** | | | | | | | | |
| 800 A 3 17 | 2 P | 3811 **2080** | | | | | | | | | | |
| | 3 P | 3811 **3080** | 3815**3080** | 3817**3080** | | | | | | | | |
| | 4 P | 3811 **6080** | 3815**6080** | | | | | | | | | |
| 800 A 4 18 | 2 P | 3811 **2081** | | | 1141 **3011** | S4 **type** Black IP65 1443 **3111** (2) Red IP65 1444 **3111** | | | | | 2 P 3898 **2120** (5) 3 P 3898 **3120** (5) 4 P 3898 **4120** (5) | |
| | 3 P | 3811 **3081** | | | | | | | | | | |
| | 4 P | 3811 **6081** | | | | | | | | | | |
| 1250 A 4 18 | 2 P | 3811 **2120** | | | | | | | | | | |
| | 3 P | 3811 **3120** | 3815**3120** | 3817**3120** | | | | | | | | |
| | 4 P | 3811 **6120** | 3815**6120** | | | | | | | | | |

*(1) Available enclosed (see "Enclosed fuse switches").*
*(2) Standard.*
*(3) Maximum 4 contacts.*
*(4) Maximum 8 contacts.*
*(5) Incoming or outgoing. Provide 2 terminal shrouds for complete incoming and outgoing protection.*
*(6) Mechanical fuse blown auxiliary contact (DDMM), see "Accessories".*
*(7) Switch body.*

## Accessories

### Direct front operation handle assembly

| Rating (A) | Frame size | Operating handle | Handle colour | References |
|---|---|---|---|---|
| 50 ... 160 | 11-12-13-14 | I-0-TEST | Black | 3999 **5020** |
| 250 ... 400 | 15-16 | I-0-TEST | Black | 3999 **5021** |

*Padlockable in position 0*


### Direct front operation handle

| Front operation | | | | |
|---|---|---|---|---|
| Rating (A) | Frame size | Figure n° | Handle colour | References |
| CD 25 ... CD 32 | 0 | 1 | Black | 3629 **4012** |
| CD 25 ... CD 32 | 0 | 1 | Red | 3629 **4013** |
| 630 ... 800 | 17 | 2 | Black | 3899 **6011** |
| 800 ... 1250 | 18 | 3 | Black | 1141 **3011** |


*Fig. 1*


*Fig. 2*


*Fig. 3*

### External front operation handle – Padlockable in position 0

| Handle padlockable in position 0 | | | | | | | |
|---|---|---|---|---|---|---|---|
| Rating (A) | Frame size | Handle type | Handle colour | Operating handle | External IP(1) | Defeatable handle | Reference |
| CD 25 ... 63 | 0/11/12 | S1 | Black | I - 0 | IP55 | Yes | 1411 **2111** |
| CD 25 ... 63 | 0/11/12 | S1 | Black | I - 0 | IP65 | Yes | 1413 **2111** |
| CD 25 ... 63 | 0/11/12 | S1 | Red/Yellow | I - 0 | IP65 | Yes | 1414 **2111** |
| CD 25 ... 63 | 0/11/12 | S1 | Black | I - 0 - Test | IP65 | Yes | 1413 **2115** |
| CD 25 ... 63 | 0/11/12 | S1 | Red/Yellow | I - 0 - Test | IP65 | Yes | 1414 **2115** |
| 100 ... 400 | 13 ... 16 | S2 | Black | I - 0 | IP55 | Yes | 1421 **2111** |
| 100 ... 400 | 13 ... 16 | S2 | Black | I - 0 | IP65 | Yes | 1423 **2111** |
| 100 ... 400 | 13 ... 16 | S2 | Red/Yellow | I - 0 | IP65 | Yes | 1424 **2111** |
| 100 ... 400 | 13 ... 16 | S2 | Black | I - 0 - Test | IP55 | Yes | 1423 **2115** |
| 100 ... 400 | 13 ... 16 | S2 | Red/Yellow | I - 0 - Test | IP65 | Yes | 1424 **2115** |
| 630 ... 800 | 17 | S3 | Black | I - 0 | IP65 | Yes | 1433 **3111** |
| 630 ... 800 | 17 | S3 | Red/Yellow | I - 0 | IP65 | Yes | 1434 **3111** |
| 800 ... 1250 | 18 | S4 | Black | I - 0 | IP65 | Yes | 1443 **3111** |
| 800 ... 1250 | 18 | S4 | Red/Yellow | I - 0 | IP65 | Yes | 1444 **3111** |

*(1) IP: Ingress Protection rating according to IEC 60529.*


S1 type handle

Handle type S2


S3 type handle

S4 type handle

### External front operation handle – Padlockable in positions 0 and I

| Handle padlockable in position 0 and I | | | | | |
|---|---|---|---|---|---|
| Rating (A) | Frame size | Handle type | Handle colour | External IP(1) | Reference |
| CD 25 ... 63 | 0/11/12 | S1 | Black | IP65 | 1413 **2311** |
| 100 ... 400 | 13 ... 16 | S2 | Black | IP65 | 1423 **2311** |

*(1) IP: Ingress Protection rating according to IEC 60529.*


S1 type handle

## External front operation handle with metal lever – Padlockable in positions 0 and I

| Rating (A) | Frame size | Handle type | Handle colour | External IP(1) | Defeatable handle | Reference |
|---|---|---|---|---|---|---|
| CD 25 … 63 | 0/11/12 | S1 | Black | IP65 | Yes | 141D **2911** |
| CD 25 … 63 | 0/11/12 | S1 | Red/Yellow | IP65 | Yes | 141E **2911** |
| 100 … 400 | 13 … 16 | S2 | Black | IP65 | Yes | 142D **2911** |
| 100 … 400 | 13 … 16 | S2 | Red/Yellow | IP65 | Yes | 142E **2911** |
| 600 …800 | 17 | S3 | Black | IP65 | Yes | 143D **3911** |
| 600 …800 | 17 | S3 | Red/Yellow | IP65 | Yes | 143E **3911** |
| 800 … 1250 | 18 | S4 | Black | IP65 | Yes | 144D **3911** |
| 800 … 1250 | 18 | S4 | Red/Yellow | IP65 | Yes | 144E **3911** |

*(1) IP: Ingress Protection rating according to IEC 60529.*

S1 type handle

S3 type handle

## External side operation handle – Padlockable in positions 0 and I

| Rating (A) | Frame size | Handle type | Handle colour | External IP(1) | Reference |
|---|---|---|---|---|---|
| CD 25 … 63 | 0/11/12 | S1 | Black | IP55 | 1415 **2111** |
| CD 25 … 63 | 0/11/12 | S1 | Black | IP65 | 1417 **2111** |
| CD 25 … 63 | 0/11/12 | S1 | Red/Yellow | IP65 | 1418 **2111** |
| 100 … 400 | 13 … 16 | S2 | Black | IP55 | 1425 **2111** |
| 100 … 400 | 13 … 16 | S2 | Black | IP65 | 1427 **2111** |
| 100 … 400 | 13 … 16 | S2 | Red/Yellow | IP65 | 1428 **2111** |
| 630 … 1250 | 17/18 | S3 | Black | IP65 | 1437 **3111** |
| 630 … 1250 | 17/18 | S3 | Red/Yellow | IP65 | 1438 **3111** |

*(1) IP: Ingress Protection rating according to IEC 60529.*


S1 type handle

S3 type handle

## S-type handle adaptor

### Use
Enables S-type handles to be fitted in place of existing older style Socomec handles(2).

### Dimensions
Adds 12 mm to the handle depth.

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

*(1) IP: Ingress Protection rating according to IEC 60529.*
*(2) Adapter can be utilised as a spacer to increase the distance between the panel door and the handle lever.*


## Alternative colour Type S handle cover

### Use
For single lever handles S1, S2, S3 types and double lever handle, S4 type.
Other colours - please contact us.

| Handle colour | Available for order in multiples of | Handle type | Reference |
|---|---|---|---|
| Light grey | 50 | S1, S2. S3 | 1401 **0001** |
| Dark grey | 50 | S1, S2. S3 | 1401 **0011** |
| Light grey | 50 | S4 | 1401 **0031** |
| Dark grey | 50 | S4 | 1401 **0041** |

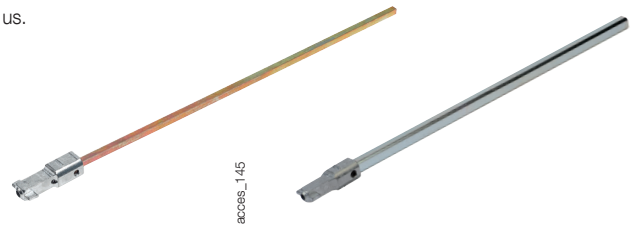
## Accessories (continued)

### Shaft for external front operation handle

**Use**

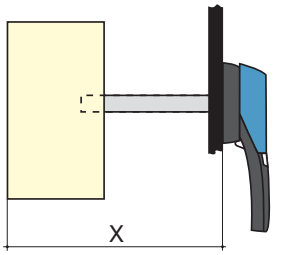
Shaft lengths:
- 200 mm
- 320 mm
- 400 mm
- 500 mm.

Other lengths - contact us.




| Rating (A) | Frame size | Shaft length (mm) | Reference |
|---|---|---|---|
| CD 25 …CD 32 | 0 | 200 | 1401 **0520** |
| CD 25 …CD 32 | 0 | 320 | 1401 **0532** |
| CD 25 …CD 32 | 0 | 400 | 1401 **0540**(1) |
| | | | |
| 50 … 400 | 11 … 16 | 200 | 1400 **1020** |
| 50 … 400 | 11 … 16 | 320 | 1400 **1032** |
| 50 … 400 | 11 … 16 | 500 | 1400 **1050**(2) |
| | | | |
| 630 …800 | 17 | 200 | 1400 **1220** |
| 630 …1250 | 17/18 | 320 | 1400 **1232** |
| 630 … 1250 | 17/18 | 500 | 1400 **1250**(1) |

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




**Dimension X (mm) for FUSERBLOC NFC and DIN**

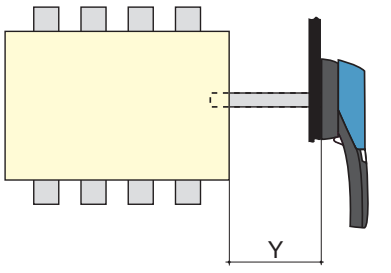
| Rating (A) | CD 25 …CD 32 | 50 | 63 | 100 … 160 | 160 | 250 …400 | 630 … 800 | 800 … 1250 |
|---|---|---|---|---|---|---|---|---|
| Fuse size | 10x38/14x51 | 14x51 | 00C | 22x58/00 | 0 | 1/2 | 3 | 4 |
| Frame size | 0 | 11 | 12 | 13 | 14 | 15/16 | 17 | 18 |
| **Shaft length (mm)** | | | | | | | | |
| 200 | 102 … 245 | 100 … 230 | 125 … 230 | 135 … 230 | 145 … 230 | 160 … 230 | 270 … 304 | |
| 320 | 102 … 365 | 100 … 350 | 125 … 350 | 135 … 350 | 145 … 350 | 160 … 350 | 270 … 424 | 304 … 424 |
| 400 | 102 … 445 | 100 … 430 | 125 … 430 | 135 … 430 | 145 … 430 | 160 … 430 | 270 … 504 | 304 … 504 |
| 500 | | 100 … 530 | 125 … 530 | 135 … 530 | 145 … 530 | 160 … 530 | 270 … 604 | 304 … 604 |

### Shaft for external side operation

**Use**

Shaft length, 200 mm.

| Rating (A) | Frame size | Handle type | Dimension Y (mm) | Shaft length (mm) | Reference |
|---|---|---|---|---|---|
| CD 25 …CD 32 | 0 | S | 36 … 159 | 200 | 1401 **0520** |
| 50 … 400 | 11 … 16 | S | 36 … 172 | 200 | 1400 **1020** |
| 630 … 1250 | 17/18 | S | 15 … 150 | 200 | 1400 **1220** |

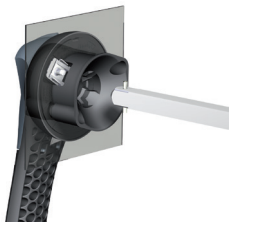



### Shaft guide for external operation

**Use**

For use with S Type handles, 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.
Recommended for a shaft length over 320 mm.

| Description | Reference |
|---|---|
| Shaft guide | 1429 **0000** |



## Operation lock-out device

**Use**

Lock-out in position 0 of the direct, front or right side operation:

- using a padlock (not supplied) in direct right side operation: factory integrated into the handle,
- using a padlock (not supplied): right front-side operation switch from 50 to 1250 A, factory integrated,
- using a lock (not supplied) in external operation.

**Locking using RONIS EL 11 AP lock (not supplied)**

| Rating (A) | Frame size | Operating handle | Figure n° | Reference |
|---|---|---|---|---|
| CD 25 … 1250 | 0 … 18 | external front | 1 | 1499 **7701** |

**Locking using Type K CASTELL lock (not supplied)**

| Rating (A) | Frame size | Operating handle | Figure n° | Reference |
|---|---|---|---|---|
| CD 25 … 1250 | 0 … 18 | external front | 2 | 1499 **7702** |

**Locking using Type FS CASTELL lock (not supplied)**

| Rating (A) | Frame size | Operating handle | Figure n° | Reference |
|---|---|---|---|---|
| CD 25 … 1250 | 0 … 18 | external front | 2 | 1499 **7703** |

**Locking using XOP (not supplied)**

| Rating (A) | Frame size | Operating handle | Reference |
|---|---|---|---|
| CD 25 … 1250 | 0 … 18 | external front | 1499 **7702** |

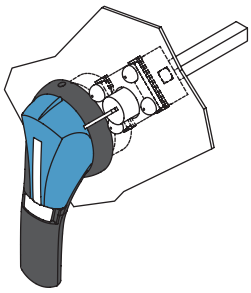

acces_158_a_1_x_cat

Fig. 1

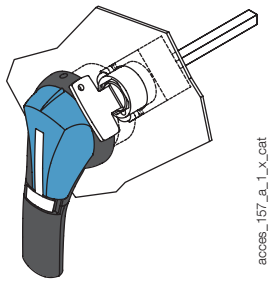

acces_157_a_1_x_cat

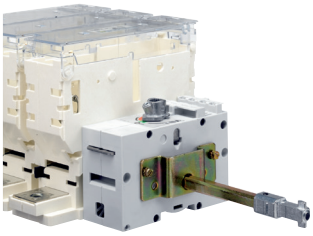
Fig. 2

## Flat mounting kit

**Use**

The flat mounting kit is ideally suited to plug-in drawers.
Kit to be used with a handle for flat mounting.

| Rating (A) | Frame size | Type | Reference |
|---|---|---|---|
| CD 25 …CD 32 | 0 | Kit + 200 mm shaft | 1429 **7709** |
| 50 … 400 | 11 … 16 | Kit + 200 mm shaft | 1429 **7710** |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## Handle for flat mounting kit

**Handle padlockable in position 0**

| Rating (A) | Frame size | Handle type | Handle colour | External IP(1) | Reference |
|---|---|---|---|---|---|
| CD 25 … 63 | 0/11/12 | S1 | Black | IP55 | 1411 **2111**(2) |
| CD 25 … 63 | 0/11/12 | S1 | Red/Yellow | IP65 | 1414 **2111**(2) |
| 100 … 400 | 13 … 16 | S2 | Black | IP55 | 1421 **2111**(2) |
| 100 … 400 | 13 … 16 | S2 | Red/Yellow | IP65 | 1424 **2111**(2) |

*(1) IP: Ingress Protection rating according to IEC 60529.*
*(2) Defeatable handle in position I.*


fuser_536

Handle type S2

## External front operation shaft support accessory

**Use**

When the shaft extensions are longer than 320 mm, this support holds the operating shaft facing the external handle.

| Rating (A) | Frame size | Reference |
|---|---|---|
| 50 … 400 | 11 … 16 | 3899 **0400** |


fuser_698

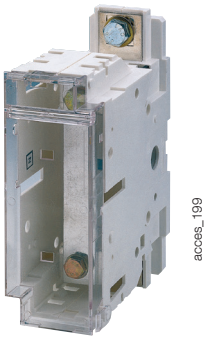
## Accessories (continued)

### 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).

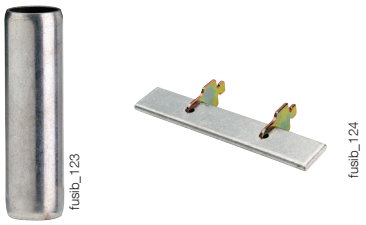

| For external front operation | | | |
|---|---|---|---|
| **Rating (A)** | **Frame size** | **Bar rating (A)** | **Reference** |
| 100 … 125 | 13 | 125 | 3829 **9310** |
| 160 | 13 | 160 | 3829 **9320** |
| 160 | 14 | 200 | 3829 **9320** |
| 250 | 15 | 250 | 3829 **9325** |
| 400 | 16 | 400 | 3829 **9339** |
| 630 … 800 | 17 | 800 | 3829 **9308** |
| 800 …1250 | 18 | 1250 | 3829 **9312** |

### Solid neutral module for front operation




| **Rating (A)** | **Frame size** | **$I_{max}$(A)** | **Distance (mm)** | **Reference** |
|---|---|---|---|---|
| 50 | 11 | 50 | 27 | 3629 **9227** |
| 63 | 12 | 63 | 32 | 3629 **9232** |
| 100 … 160 | 13 | 160 | 36 | 3629 **9236** |
| 160 | 14 | 160 | 50 | 3629 **9250** |
| 250 | 15 | 250 | 60 | 3629 **9260** |
| 400 | 16 | 400 | 66 | 3629 **9265** |
| 630 … 800 | 17 | 800 | 94 | 3629 **9294** |
| 800 … 1250 | 18 | 1250 | 120 | 3629 **9212** |

### Solid neutral link




| NFC and DIN devices | | | | |
|---|---|---|---|---|
| **Rating (A)** | **Frame size** | **Fuse size** | **$I_{max}$(A)** | **Reference** |
| 50 | 11 | 14 x 51 | 50 | 6029 **0000** |
| 100 … 125 | 13 | 22 x 58 | 125 | 6039 **0000** |
| 63 … 160 | 12/13 | 00C / 00 | 160 | 6420 **0000** |
| 160 | 14 | 0 | 160 | 6421 **0000** |
| 250 | 15 | 1 | 250 | 6421 **0001** |
| 400 | 16 | 2 | 400 | 6421 **0002** |
| 630 … 800 | 17 | 3 | 800 | 6421 **0003** |
| 800 ... 1250 | 18 | 4 | 1250 | 6441 **0005** |

### Terminal shroud

**Use**
Incoming or outgoing IP20 protection (on the front) against direct contact with terminals or connection parts.

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


| **Rating (A)** | **Frame size** | **Position** | **No. of poles** | **Reference** |
|---|---|---|---|---|
| CD 25 … 63 | 0/12 | top/bottom | 2 / 3 / 4 P | integrated |
| 100 … 160 | 13/14 | top/bottom | 2 P | 3998 **2016** |
| 100 … 160 | 13/14 | top/bottom | 3 P | 3998 **3016** |
| 100 … 160 | 13/14 | top/bottom | 4 P | 3998 **4016** |
| 250 … 400 | 15 | top/bottom | 2 P | 3998 **2025** |
| 250 … 400 | 15 | top/bottom | 3 P | 3998 **3025** |
| 250 … 400 | 15 | top/bottom | 4 P | 3998 **4025** |
| 400 | 16 | top/bottom | 2 P | 3898 **2040** |
| 400 | 16 | top/bottom | 3 P | 3898 **3040** |
| 400 | 16 | top/bottom | 4 P | 3898 **4040** |
| 630 … 800 | 17 | top/bottom | 2 P | 3898 **2080** |
| 600 … 800 | 17 | top/bottom | 3 P | 3898 **3080** |
| 600 … 800 | 17 | top/bottom | 4 P | 3898 **4080** |
| 800 … 1250 | 18 | top/bottom | 2 P | 3898 **2120** |
| 800 … 1250 | 18 | top/bottom | 3 P | 3898 **3120** |
| 800 … 1250 | 18 | top/bottom | 4 P | 3898 **4120** |

## S and ST-type auxiliary contacts

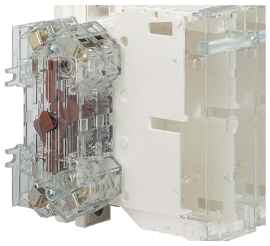
### Use
For FUSERBLOCs 50 to 1250 A, position 0 and I signalling by 1 to 4 NO + NC auxiliary contacts.

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

### Connection
By terminals with max. cross-section 10 mm$^2$

### Mechanical specifications
30,000 operations.


acces_051


acces_083

### References

**S-type auxiliary contacts 0-I position signalling for external front and right-side operation**

| Rating (A) | Frame size | Contact type | S-type auxiliary contact Reference | Actuating kit for auxiliary contact (optional) Reference |
|---|---|---|---|---|
| 50 … 1250 | 11 … 18 | 1 NC+ 1 NO | 3999 **0041** (1) | 3999 **0003** |

**ST-type auxiliary contacts I-0-TEST position signalling for external front and right-side operation**

| Rating (A) | Frame size | Contact type | Description | ST-type auxiliary contact Reference | Actuating kit for auxiliary contact Reference |
|---|---|---|---|---|---|
| 50 … 400 | 11 … 15 | 1 NC+ 1 NO | TEST + ON | 3999 **0141**(2) | 3999 **0103** |
| 50 … 400 | 11 … 16 | 2 NO | 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.*

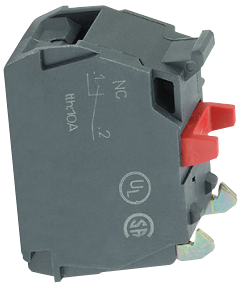
### Characteristics

| Rating (A) | Current current (A) | Operating current $I_e$ (A) 250 VAC AC-13 | 400 VAC AC-13 |
|---|---|---|---|
| 50 … 1250 | 20 | 10 | 8 |

## U type auxiliary contacts(1)

### Use
The different functions can be configured very easily by installing pushers (1 or 2 pushers per position). Each slot can accommodate up to 2 interlocked auxiliary contacts.

### Connection to the control circuit
By terminals with max. section 2 x 2.5 mm$^2$
For FUSERBLOC CD 25 to 400 A: pre-break and signalling of positions 0, I and Test
For FUSERBLOC ≥ 630 A: pre-break and signalling of positions 0 and I.



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### References

**NC auxiliary contacts**

| Rating (A) | Frame size | Contact | Reference(1) |
|---|---|---|---|
| CD 25 … 1250 | 0 … 18 | 1 | 3999 **0701** (2) |

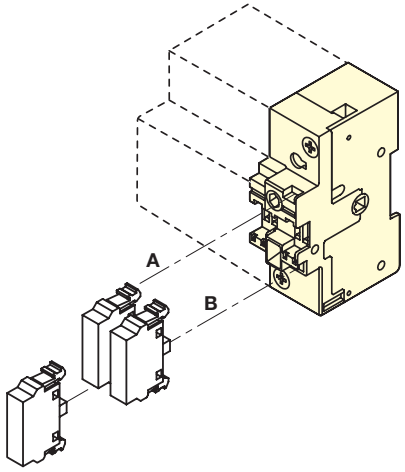
**NO auxiliary contacts**

| Rating (A) | Frame size | Contact | Reference(1) |
|---|---|---|---|
| CD 25 … 1250 | 0 … 18 | 1 | 3999 **0702** (2) |

*(1) CD 25 - CD 32: Cannot be mounted in direct operation.*
*(2) CD 25-160 A - 4 auxiliary contacts can be fitted without additional auxiliary contact holder.*
*250-400 A - 8 auxiliary contacts can be fitted without additional auxiliary contact holder.*

**Contact holder for additional auxiliary contacts**

| Rating (A) | Frame size | Contact | Reference |
|---|---|---|---|
| CD 25 …CD 32 | 0 | 4 (2 x 2 max) | 3999 **0710** |
| 50 … 400 | 11 … 16 | 4 (2 x 2 max) | 3999 **0600** |



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*(1) U-type auxiliary contacts can mounted on a device with an solid neutral.*

### Characteristics

| Rating (A) | Operating current $I_e$ (A) 250 VAC AC-15 | 400 VAC AC-15 | 24 VDC DC-13 | 48 VDC DC-13 |
|---|---|---|---|---|
| CD 25 … 1250 | 3 | 1.8 | 2.8 | 1.4 |

## Accessories (continued)

### Electronic fuse monitoring device (FMD)

**Use**
For BS88, DIN and UL fuse cartridge, with or without striker.

**Principle**
The Fuse Monitoring Device (FMD) detects fuse blowing using a bistable relay and a signalling LED
It can be mounted on a DIN rail, a back plate, next to the FUSERBLOC, or on the door.

3-LED version

**References**

| For FUSERBLOC 63 to 1250 A - size 000 to 4 | | |
|---|---|---|
| **No. of LEDs** | **Ph/Ph operating voltage** | **Reference** |
| 3 | 155 - 260 VAC | 3899 **3120** |
| 3 | 380…690 VAC | 3899 **3380** |

| **Accessories** | | **Reference** |
|---|---|---|
| Kit for connection accessories | Standard | 3819 **9120** |
| Kit for connection accessories | Door mounted | 3829 **9120** |

| **Relay characteristics** | **Relay operational current $I_c$ (A)** | |
|---|---|---|
| **Rating (A)** | **AC-15** | **DC-13** |
| 63 ... 1250 | 2.5 A | 0.2 |

### DDMM-type auxiliary contact for device with NFC/DIN fuse with striker

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

**Electrical principle**
An NO/NC auxiliary contact detects that the fuse has blown.

**Connection to the control circuit**
By 6.35 mm Fast-on terminal.

**Mechanical characteristics**
30,000 operations.

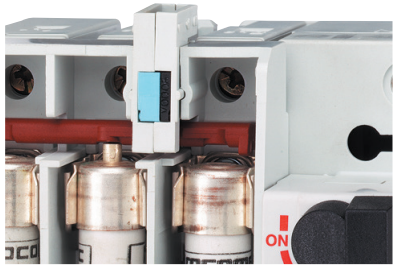
**References**

| NO/NC type auxiliary contacts for 2 poles | | | | |
|---|---|---|---|---|
| **Rating (A)** | **Frame size** | **Fuses(1)** | **Contact** | **Reference** |
| 50 | 11 | 14 x 51 | 1st | 3994 **0405** |
| 100 ... 125 | 13 | 22 x 58 | 1st | 3994 **0210** |
| 160 | 14 | NH0 | 1st | 3994 **0216** |
| 250 | 15 | NH1-NH2 | 1st | 3994 **0225** |
| 400(1) | 16 | NH2 | 1st | 3894 **0440** |
| 630 ... 800 | 17 | NH3 | 1st | 3894 **1206** |
| 800 ... 1250 | 18 | NH4 | 1st | 3894 **1212** |

| NO/NC type auxiliary contacts for 3 poles | | | | |
|---|---|---|---|---|
| **Rating (A)** | **Frame size** | **Fuses** | **Contact** | **Reference** |
| CD 32 | 0 | 14 x 51 | 1st | 3994 **0303** |
| 50 | 11 | 14 x 51 | 1st | 3994 **0405** |
| 100 ... 125 | 13 | 22 x 58 | 1st | 3994 **0310** |
| 160 | 14 | NH0 - NH00 | 1st | 3994 **0316** |
| 250 | 15 | NH1-NH2 | 1st | 3994 **0325** |
| 400(1) | 16 | NH2 | 1st | 3894 **0440** |
| 630 ... 800 | 17 | NH3 | 1st | 3894 **1306** |
| 800 ... 1250 | 18 | NH4 | 1st | 3894 **1312** |
| 50 ... 250 | 11/13/14/15 | 14x51 ... NH2 | 2nd | 3994 **1901** |
| 400 | 16 | NH2 | 2nd | 3994 **1902** |
| 630 ... 1250 | 17/18 | NH3-NH4 | 2nd | 3994 **1901** |

| NO/NC type auxiliary contacts for 4-pole or 3-pole + neutral | | | | |
|---|---|---|---|---|
| **Rating (A)** | **Frame size** | **Fuses** | **Contact** | **Reference** |
| 50 | 11 | 14 x 51 | 1st | 3994 **0405** |
| 100 ... 125 | 13 | 22 x 58 | 1st | 3994 **0410** |
| 160 | 14 | NH0 | 1st | 3994 **0416** |
| 250 | 15 | NH1-NH2 | 1st | 3994 **0425** |
| 400(1) | 16 | NH2 | 1st | 3894 **0440** |
| 630 ... 800 | 17 | NH3 | 1st | 3894 **1406** |
| 800 ... 1250 | 18 | NH4 | 1st | 3894 **1412** |
| 50 ... 250 | 11/13/14/15 | 14x51 ... NH2 | 2nd | 3994 **1901** |
| 400 | 16 | NH2 | 2nd | 3994 **1902** |
| 630 ... 1250 | 17/18 | NH3-NH4 | 2nd | 3994 **1901** |

*(1) NH00 fuse = size 00. NH4 fuse = size 4.*



*DDMM for cylindrical fuses*

*DDMM for NH fuses*

**Characteristics**

| | | Operating current $I_e$ (A) | | | |
|---|---|---|---|---|---|
| **Rating (A)** | **Current current (A)** | **250 VAC AC-13** | **400 VAC AC-13** | **24 VDC DC-13** | **48 VDC DC-13** |
| CD 32 ... 1250 | 16 | 4 | 3 | 12 | 2 |

## Cage terminals

### Use

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


### References

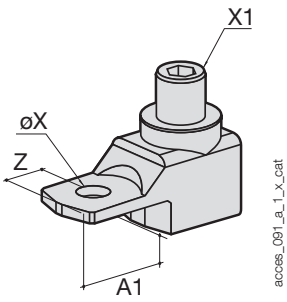
| Max. rating (A) | Frame size | No. of poles | Reference |
|---|---|---|---|
| CD 25 … 63 | 0 … 12 | 2 / 3 / 4 P | integrated |
| 100 … 160 | 13/14 | 3 P | 5400 **3016** |
| 100 … 160 | 13/14 | 4 P | 5400 **4016** |
| 250 | 15 | 3 P | 5400 **3025** |
| 250 | 15 | 4 P | 5400 **4025** |
| 400 | 16 | 3 P | 5400 **3040** |
| 400 | 16 | 4 P | 5400 **4040** |

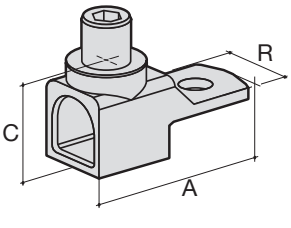
### Connections

| 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 |




## Label holder

### Use

Customisable sticker for device identification.

| Dimensions W x H (mm) | To be ordered in multiples of | Reference |
|---|---|---|
| 18 x 13 | 50 | 7769 **9999** |

## Characteristics according to IEC 60947-3

### 25 to 125 A

| **References**<br>*"x" is the digit of the pole number (2 = 2 P, 3 = 3 P, 6 = 4 P)* | **36xx x002** | **36xx x003** | **36xx x004** | **38xx x005** | **38xx x006** | **38xx x010** | **38xx x011** | **38xx x012** |
|---|---|---|---|---|---|---|---|---|
| **Type** | **CD 25 A** | **CD 32 A /** | **CD 32 A /** | **Mod. 50 A** | **Mod. 63 A** | **Mod. 100 A** | **Mod. 125 A** | **Mod. 125 A** |
| Frame size | 0 | 0 | 0 | 11 | 12 | 13 | 13 | 13 |
| Frame pitch per power pole (mm) | - | - | - | 27 | 32 | 36 | 36 | 36 |
| Number of poles | 3, 4(switched neutral), 4(solid neutral) | 3, 4(switched neutral), 4(solid neutral) | 3, 4(switched neutral), 4(solid neutral) | 2, 3, 4 | 2, 3, 4 | 2, 3, 4 | 2, 3, 4 | 2, 3, 4 |
| Rated thermal current $I_{th}$ (35 °C) | 25 A | 32 A | 32 A | 50 A | 63 A | 100 A | 125 A | 125 A |
| NFC/DIN fuse size | NFC 10 x 38 | NFC 10 x 38 | NFC 14 x 51 | NFC 14 x 51 | NH000 | NFC 22 x 58 | NFC 22 x 58 | NH00 |
| Rated operating voltage $U_e$ (V) | 690 V | 690 V | 690 V | 690 V | 690 V | 690 V | 690 V | 690 V |
| Rated insulation voltage $U_i$ (V) | 800 | 800 | 690 | 800 | 800 | 800 | 800 | 800 |
| Rated impulse withstand voltage $U_{imp}$ (kV) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| **Short-circuit characteristics** | | | | | | | | |
| Prospective short-circuit current at $U_e$ 400/415 VAC (kA rms) | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 50 |
| Prospective short-circuit current at $U_e$ 660/690 VAC (kA rms) | 100 | 100 | - | 100 | 100 | 100 | 100 | 50 |
| Rated peak withstand current in $I_{cc}$ $U_e$ 415 VAC (kA peak) (switch alone) | 5.5 | 5.5 | 5.5 | 5.52 | 7.3 | 11.9 | 13.6 | - |
| Rated peak withstand current in $I_{cc}$ $U_e$ 690 VAC (kA peak) (switch alone) | 5.2 | 6.1 | - | 6.5 | 7.3 | 15.8 | 20.4 | 10.4 |
| **Rated operating current Ie (A)** | | | | | | | | |
| **Nominal voltage** / **Operating 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)** |
| 415 VAC AC-21 A / AC-21 B | 25/25 | 32/32 | 32/32 | 50/50 | 63/63 | 100/100 | 125/125 | 125/125 |
| 415 VAC AC-22 A / AC-22 B | 25/25 | 32/32 | 32/32 | 50/50 | 63/63 | 100/100 | 125/125 | 125/125 |
| 415 VAC AC-23 A / AC-23 B | 25/25 | 32/32 | 32/32 | 50/50 | 63/63 | 100/100 | 125/125 | 125/125 |
| 500 VAC AC-21 A / AC-21 B | 25/25 | 32/32 | 32/32 | 50/50 | 63/63 | 100/100 | 125/125 | 125/125 |
| 500 VAC AC-22 A / AC-22 B | 25/25 | 32/32 | 32/32 | 50/50 | 63/63 | 100/100 | 125/125 | 125/125 |
| 500 VAC AC-23 A / AC-23 B | 25/25 | 32/32 | 32/32 | 50/50 | 63/63 | 100/100 | 125/125 | 125/125 |
| 690 VAC AC-20 A / AC-20 B | 25/25 | 32/32 | 32/32 | 50/50 | 63/63 | 100/100 | 125/125 | 125/125 |
| 690 VAC AC-21 A / AC-21 B | 25/25 | 32/32 | 32/32 | 50/50 | 63/63 | 100/100 | 100/100 | 125/125 |
| 690 VAC(2) AC-22 A / AC-22 B | 25/25 | 32/32 | 32/32 | 50/50 | 63/63 | 100/100 | 100/100 | 125/125 |
| 690 VAC(2) AC-23 A / AC-23 B | 25/25 | 32/32 | 32/32 | 50/50 | 63/63 | 100/100 | 100/100 | 125/125 |
| 220 VDC DC-21 A / DC-21 B | -/25 | -/32 | -/32 | - | -/63 | 100/100 | 100/100 | 125/125 |
| 220 VDC DC-22 A / DC-22 B | -/25 | -/32 | -/32 | - | - | 100/100 | 100/100 | 125/125 |
| 220 VDC DC-23 A / DC-23 B | -/25(3) | -/25(3) | -/25(3) | - | - | 100/100 | 100/100 | 125/125 |
| 440 VDC DC-21 A / DC-21 B | - | - | - | - | -/63(4) | 100(4)/100(4) | 100(4)/100(4) | 125(4)/125(4) |
| 440 VDC DC-22 A / DC-22 B | - | - | - | - | - | 100(4)/100(4) | 100(4)/100(4) | 125(4)/125(4) |
| 440 VDC DC-23 A / DC-23 B | - | - | - | - | - | 100(4)/100(4) | 100(4)/100(4) | 125(4)/125(4) |
| **Operational power in AC-23 (kW)** | | | | | | | | |
| At $U_e$ 415 VAC without pre-break auxiliary contact (1)(5) | 11/11 | 15/15 | 15/15 | 25/25 | 30/30 | 51/51 | 63/63 | 63/63 |
| At $U_e$ 690 VAC without pre-break auxiliary contact (1)(5) | 22/22 | 25/25 | 25/25 | 45/45 | 55/55 | 90/90 | 90/90 | 90/90 |
| **Reactive power (kvar)** | | | | | | | | |
| At $U_{e\ 415\ VAC}$ (5) | 11 | 15 | 15 | 23 | 28 | 45 | 55 | 55 |
| **Dissipated power (W / pole)** | | | | | | | | |
| Dissipated power | 3.1 | 4.1 | 5.9 | 7.3 | 8.4 | 14.5 | 19.9 | 20.3 |
| Power dissipated by fuse | 2.4 | 2.9 | 4.3 | 4.6 | 6 | 9 | 11 | 12.5 |
| Dissipated power, switch body | 0.7 | 1.2 | 1.6 | 2.45 | 4.35 | 6.8 | 8.63 | 6 |
| **Conductor connection capacity** | | | | | | | | |
| Minimum Cu cable cross-section ($mm^2$) | 2.5 | 2.5 | 2.5 | 6 | 10 | 25 | 35 | 35 |
| Minimum Cu cable cross-section ($mm^2$) | 16 | 16 | 16 | 25 | 25 | 95 | 95 | 95 |
| Maximum busbar width (mm) | - | - | - | - | - | 20 | 20 | 20 |
| Min. tightening torque (Nm) | 2 | 2 | 2 | 3 | 3 | 9 | 9 | 9 |
| **Mechanical characteristics** | | | | | | | | |
| Durability (number of operating cycles) | 10 000 | 10 000 | 10 000 | 10 000 | 10 000 | 10 000 | 10 000 | 10 000 |
| Operating torque (Nm) | 4.1 | 4.1 | 4.1 | 8.7 | 8.7 | 9.7 | 9.7 | 10.2 |
| Weight of a 3-pole device without accessories (kg) | 0.48 | 0.48 | 0.50 | 0.80 | 1 | 1.5 | 1.5 | 1.5 |
| Weight of a 4-pole device without accessories (kg) | 0.50 | 0.50 | 0.52 | 1 | 1.3 | 2 | 2 | 2 |
| Weight of 1 additional P (kg) | - | - | - | 0.2 | 0.3 | 0.5 | 0.5 | 0.5 |
| Storage temperature ( °C) | -50 …+85 | | | | | | | |
| Operating temperature ( °C) | -20…+70 | | | | | | | |
| Regulatory compliance | IEC 60947-3 | | | | | | | |
| Certification | IEC, KEMA, Lloyds and CCC | | | | | | | |
| Pollution Degree | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |

*(1) Category with index A = frequent operation / Category with index B = infrequent operation.*
*(2) With terminal shrouds or inter-phase barrier.*
*(3) 3-pole device with 2 poles in series for the '+' and 1 pole for the '-'.*
*(4) 4-pole device with 2 poles in series per polarity.*
*(5) The power value is given for information only; the current values vary from one manufacturer to another.*
*(6) For a rated operational voltage Ue = 400 VAC*

## 160 to 1250 A

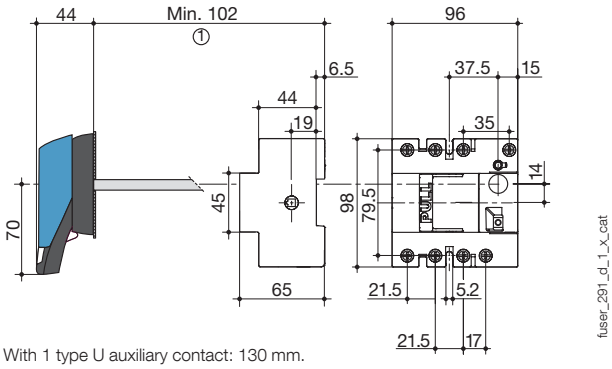
| **References**<br>*"x" is the digit of the pole number (2 = 2 P, 3 = 3 P, 6 = 4 P)* | | **38xx x015** | **38xx x016** | **38xx x024** | **38xx x038** | **38xx x063** | **38xx x080** | **38xx x081** | **38xx x120** |
|---|---|---|---|---|---|---|---|---|---|
| **Type** | | **Mod. 160 A** | **Mod. 160 A** | **Mod. 250 A** | **Mod. 400 A** | **Mod. 630 A** | **Mod. 800 A** | **Mod. 800 A** | **Mod. 1250 A** |
| Frame size | | 13 | 14 | 15 | 16 | 17 | 17 | 18 | 18 |
| Frame pitch per power pole (mm) | | 36 | 50 | 60 | 66 | 94 | 94 | 120 | 120 |
| Number of poles | | 2, 3, 4 | 2, 3, 4 | 2, 3, 4 | 2, 3, 4 | 2, 3, 4 | 2, 3, 4 | 2, 3, 4 | 2, 3, 4 |
| Rated thermal current $I_{th}$ (35 °C) | | 160 A | 160 A | 250 A | 400 A | 630 A | 800 A | 800 A | 1250 A |
| NFC/DIN fuse size | | NH00 | NH0 | NH1 | NH2 | NH3 | NH3 | NH4 | NH4 |
| Rated operating voltage $U_e$ (V) | | 690 V | 600 V | 690 V | 690 V | 690 V | 690 V | 415 V | 415 V |
| Rated insulation voltage $U_i$ (V) | | 800 | 800 | 800 | 1000 | 1000 | 1000 | 1000 | 1000 |
| Rated impulse withstand voltage $U_{imp}$ (kV) | | 8 | 8 | 8 | 12 | 12 | 12 | 12 | 12 |
| **Short-circuit characteristics** | | | | | | | | | |
| Prospective short-circuit current at $U_e$ 400/415 VAC (kA rms) | | 50 | 100 | 100 | 50 | 100 | 100 | 100 | 100 |
| Prospective short-circuit current at $U_e$ 660/690 VAC (kA rms) | | 50 | 50 | 50 | 50 | 100 | 100 | - | - |
| Rated peak withstand current in $I_{cc}$ $U_e$ 415 VAC (kA peak) (switch alone) | | 18.95 | 22.66 | 23.9 | 33.5 | 48 | 54.18 | 50.8 | 53.2 |
| Rated peak withstand current in $I_{cc}$ $U_e$ 690 VAC (kA peak) (switch alone) | | 13.5 | 14 | 29 | 29.9 | 58.7 | 58.7 | - | - |
| **Rated operating current Ie (A)** | | | | | | | | | |
| **Nominal voltage** | **Operating 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]** |
| 415 VAC | AC-21 A / AC-21 B | 160/160 | 160/160 | 250/250 | 400/400 | -/630 | -/800 | -/800 | -/1250 |
| 415 VAC | AC-22 A / AC-22 B | 160/160 | 160/160 | 250/250 | 400/400 | -/630 | -/800 | -/800 | -/1250 |
| 415 VAC | AC-23 A / AC-23 B | 160/160 | 160/160 | 250/250 | 400/400 | -/630 | -/800 | -/800 | -/1250 |
| 500 VAC | AC-21 A / AC-21 B | 160/160 | 160/160 | 250/250 | -/400 | -/630 | -/800 | -/800 | -/1250 |
| 500 VAC | AC-22 A / AC-22 B | 160/160 | 160/160 | 250/250 | -/400 | -/630 | -/800 | -/800 | -/1250 |
| 500 VAC | AC-23 A / AC-23 B | 160/160 | 160/160 | 250/250 | - | - | - | - | - |
| 690 VAC | AC-20 A / AC-20 B | 160/160 | 160/160 | 250/250 | 400/400 | 630/630 | 800/800 | 800/800 | 1250/1250 |
| 690 VAC | AC-21 A / AC-21 B | 160/160 | 160/160 | 250/250 | -/400 | -/630 | -/800 | -/800 | -/1250 |
| 690 VAC[2] | AC-22 A / AC-22 B | 160/160 | 160/160 | 250/250 | -/400 | -/630 | -/800 [6] | -/800 | -/1250 |
| 690 VAC[2] | AC-23 A / AC-23 B | 125/125 | 125/125 | 250/250 | 250/315 | - | - | - | - |
| 220 VDC | DC-21 A / DC-21 B | 160/160 | 160/160 | 250/250 | - | - | - | - | - |
| 220 VDC | DC-22 A / DC-22 B | 160/160 | 160/160 | 250/250 | - | - | - | - | - |
| 220 VDC | DC-23 A / DC-23 B | 125/125 | 125/125 | 200/200 | - | - | - | - | - |
| 440 VDC | DC-21 A / DC-21 B | 160[3]/160[3] | 160[3]/160[3] | 250[3]/250[3] | - | - | - | - | - |
| 440 VDC | DC-22 A / DC-22 B | 160[3]/160[3] | 160[3]/160[3] | 250[3]/250[3] | - | - | - | - | - |
| 440 VDC | DC-23 A / DC-23 B | 125[3]/125[3] | 125[3]/125[3] | 200[3]/200[3] | - | - | - | - | - |
| **Operational power in AC-23 (kW)** | | | | | | | | | |
| At $U_e$ 415 VAC without pre-break auxiliary contact [1][5] | | 80/80 | 80/80 | 132/132 | 220/220 | 355/355 | 450/450 | 450/450 | 560/560 |
| At $U_e$ 690 VAC without pre-break auxiliary contact [1][5] | | 110/110 | 110/110 | 220/220 | 220/295 | 295/400 | 400/400 | 400/400 | 400/475 |
| **Reactive power (kvar)** | | | | | | | | | |
| At $U_{e\ 415\ VAC}$ [5] | | 75 | 75 | 115 | 185 | 290 | 365 | 355 | 460 |
| **Dissipated power (W / pole)** | | | | | | | | | |
| Dissipated power | | 21.6 | 23 | 41.1 | 57.4 | 122 | 134 | | 264 |
| Power dissipated by fuse | | 12 | 15 | 23 | 33 | 60 | 65 | 70 | 110 |
| Dissipated power, switch body | | 10.4 | 10.4 | 19 | 24.4 | 61 | 68 | | 154 |
| **Conductor connection capacity** | | | | | | | | | |
| Minimum Cu cable cross-section ($mm^2$) | | 35 | 50 | 95 | 185 | 2 x 150 | 2 x 185 | | |
| Minimum Cu cable cross-section ($mm^2$) | | 95 | 95 | 240 | 240 | 2 x 300 | 2 x 300 | 4 x 185 | 4 x 185 |
| Maximum busbar width (mm) | | 20 | 20 | 32 | 45 | 63 | 63 | 80 | 80 |
| Min. tightening torque (Nm) | | 9 | 9 | 20 | 20 | 40 | 40 | 40 | 40 |
| **Mechanical characteristics** | | | | | | | | | |
| Durability (number of operating cycles) | | 10 000 | 10 000 | 10 000 | 10 000 | 5 000 | 8 000 | 3 000 | 3 000 |
| Operating torque (Nm) | | 10.2 | 9.7 | 13 | 17 | 56 | 57 | 62 | 62 |
| Weight of a 3-pole device without accessories (kg) | | 1.8 | 1.8 | 3.2 | 4.8 | 16 | 17 | 25 | 25 |
| Weight of a 4-pole device without accessories (kg) | | 2.3 | 2.3 | 4.5 | 6.1 | 20 | 21.5 | 30 | 30 |
| Weight of 1 additional P (kg) | | 0.5 | 0.5 | 1.3 | 1.3 | | | 3 | 3 |
| Storage temperature ( °C) | | -50 …+85 | | | | | | | |
| Operating temperature ( °C) | | -20…+70 | | | | | | | |
| Regulatory compliance | | IEC 60947-3 | | | | | | | |
| Certification | | IEC, KEMA, Lloyds and CCC | | | | | | | |
| Pollution Degree | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |

*(1) Category with index A = frequent operation / Category with index B = infrequent operation.*
*(2) With terminal shrouds or inter-phase barrier.*
*(3) 3-pole device with 2 poles in series for the '+' and 1 pole for the '-'.*
*(4) 4-pole device with 2 poles in series per polarity.*
*(5) The power value is given for information only; the current values vary from one manufacturer to another.*
*(6) For a rated operational voltage Ue = 400 VAC*

## Dimensions for external front-side operation

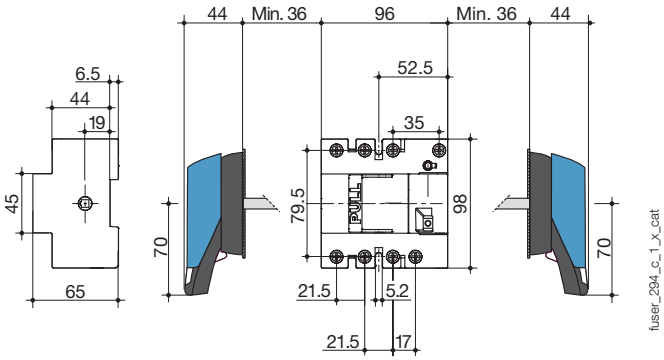
### 25 to 32 A (size 10 x 38)

External front operation




fuser_291_d_1_x_cat

External side operation

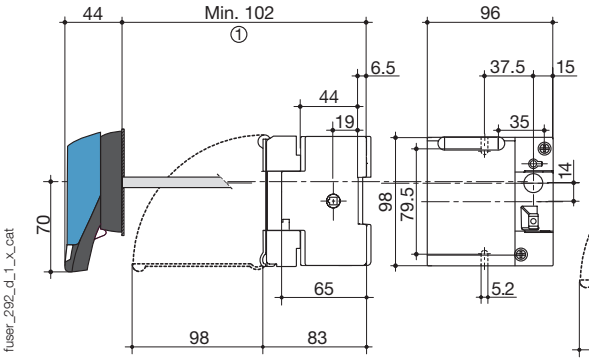



fuser_294_c_1_x_cat

1. With 1 type U auxiliary contact: 130 mm.
With 2 type U auxiliary contacts: 155 mm.

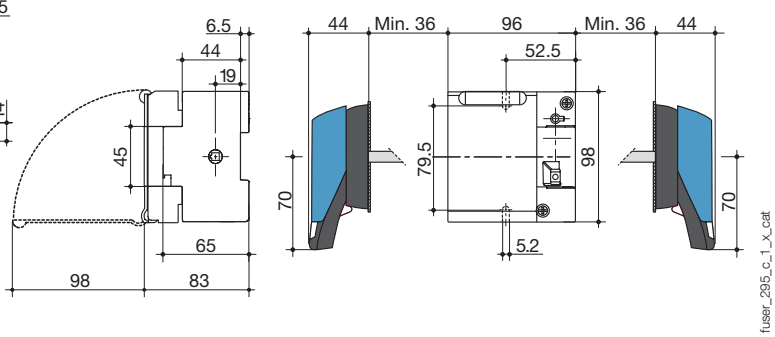
### 32 A (size 14 x 51)

External front operation




fuser_292_d_1_x_cat

External side operation

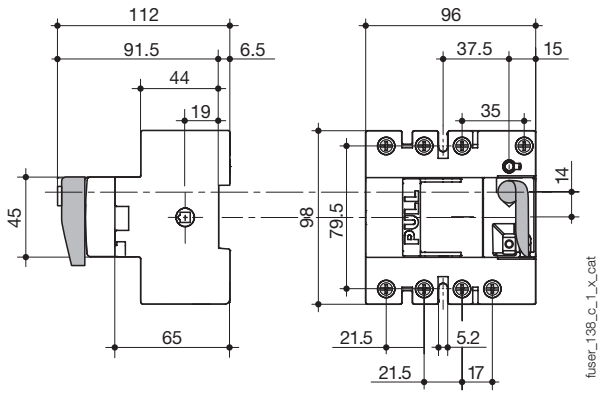



fuser_295_c_1_x_cat

1. With 1 type U auxiliary contact: 130 mm.
With 2 type U auxiliary contacts: 155 mm.

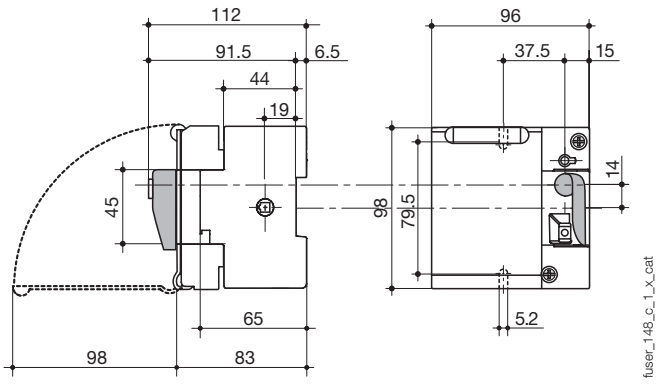
## Dimensions - direct operation

### 25 A (size 10 x 38)




fuser_138_c_1_x_cat

### 32 A (size 14 x 51)

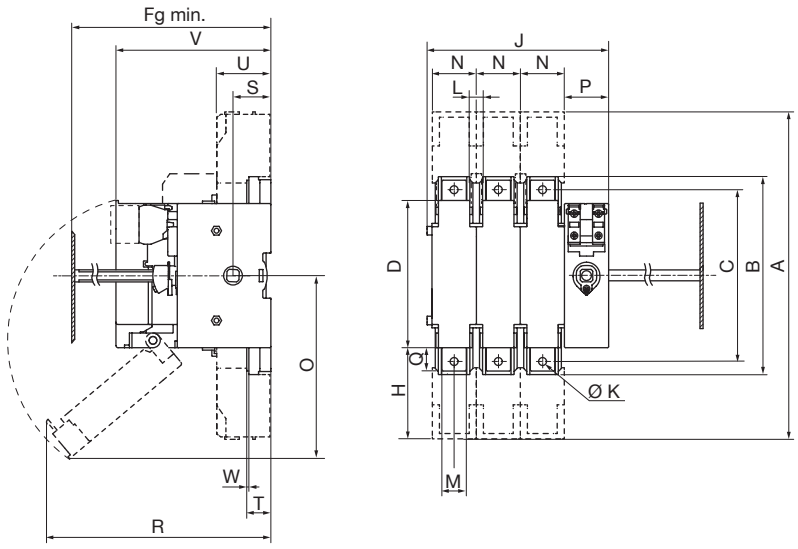



fuser_148_c_1_x_cat

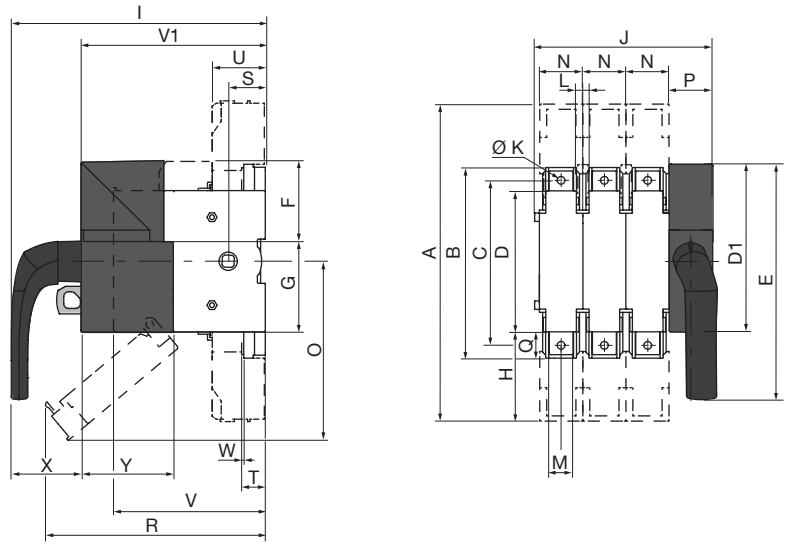
# Dimensions for right front-side operation

## 50 to 160 A

**50 - 63 A:** cage connection.
**100 - 160 A**: terminal connection.




fuser_751_a_1_x_cat.ai




fuser_752_a_1_x_cat.ai

| Rating (A) | Fuse size | Frame size | Fg min. | A | B | C | D | D1 | E | F | G | H | I | J | | K | L | M | N | O | P | Q | R | S | T | U | V | V1 | W | X | Y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | 3P | 4P | | | | | | | | | | | | | | | | |
| 50 | 14 x 51 | 11 | 100 | | 118 | | 106 | 143 | 200 | 67.5 | 75.5 | | 212.1 | 121 | 148 | 6.2 | 15 | 12 | 27 | 85 | 36.8 | 15 | 153 | 31 | | | 87 | 153.6 | 2 | 58.5 | 77 |
| 63 | 00C | 12 | 125 | | 118 | | 106 | 143 | 200 | 67.5 | 75.5 | | 212.1 | 136 | 168 | 6.2 | 20 | 12 | 32 | 159 | 36.8 | 15 | 145 | 31 | | | 116 | 153.6 | 2 | 58.5 | 77 |
| 100 | 22x58 | 13 | 135 | 268 | 162 | 141 | 127 | 143 | 200 | 67.5 | 75.5 | 75 | 212.1 | 148 | 184 | 8.5 | 16 | 20 | 36 | 141 | 36.8 | 41 | 187 | 31 | 19.5 | 43.5 | 116 | 153.6 | 2.5 | 58.5 | 77 |
| 125 | 22x58 | 13 | 135 | 268 | 162 | 141 | 127 | 143 | 200 | 67.5 | 75.5 | 75 | 212.1 | 148 | 184 | 8.5 | 16 | 20 | 36 | 141 | 36.8 | 41 | 179 | 31 | 19.5 | 43.6 | 116 | 153.6 | 2.5 | 58.5 | 77 |
| 125 | NH00 | 13 | 135 | 268 | 162 | 141 | 127 | 143 | 200 | 67.5 | 75.5 | 75 | 212.1 | 148 | 184 | 8.5 | 16 | 20 | 36 | 141 | 36.8 | 41 | 193 | 31 | 19.5 | 43.7 | 126 | 153.6 | 2.5 | 58.5 | 77 |
| 160 | NH00 | 13 | 135 | 268 | 162 | 141 | 127 | 143 | 200 | 67.5 | 75.5 | 75 | 212.1 | 148 | 184 | 8.5 | 16 | 20 | 36 | 141 | 36.8 | 41 | 193 | 31 | 19.5 | 43.8 | 126 | 153.6 | 2.5 | 58.5 | 77 |
| 160 | NH0 | 14 | 145 | 268 | 162 | 141 | 140 | 143 | 200 | 67.5 | 75.5 | 75 | 212.1 | 190 | 240 | 8.5 | 20 | 20 | 50 | 174 | 36.8 | 41 | 229 | 31 | 19.5 | 43.9 | 136 | 153.6 | 2.5 | 58.5 | 77 |

*Dimensions also valid for:*

*3P front operation*

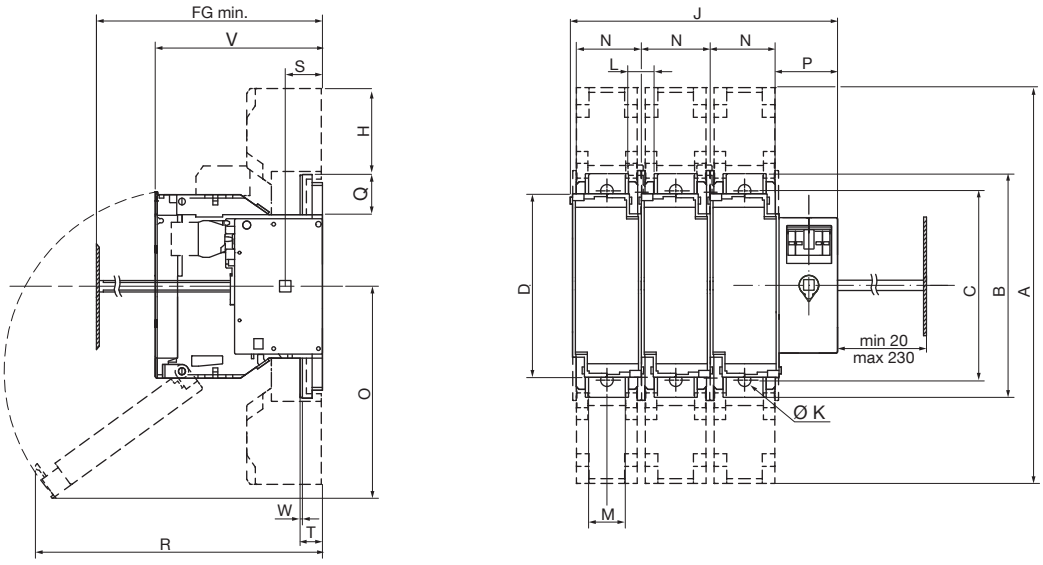
*4P front operation*

*3P left-side operation*

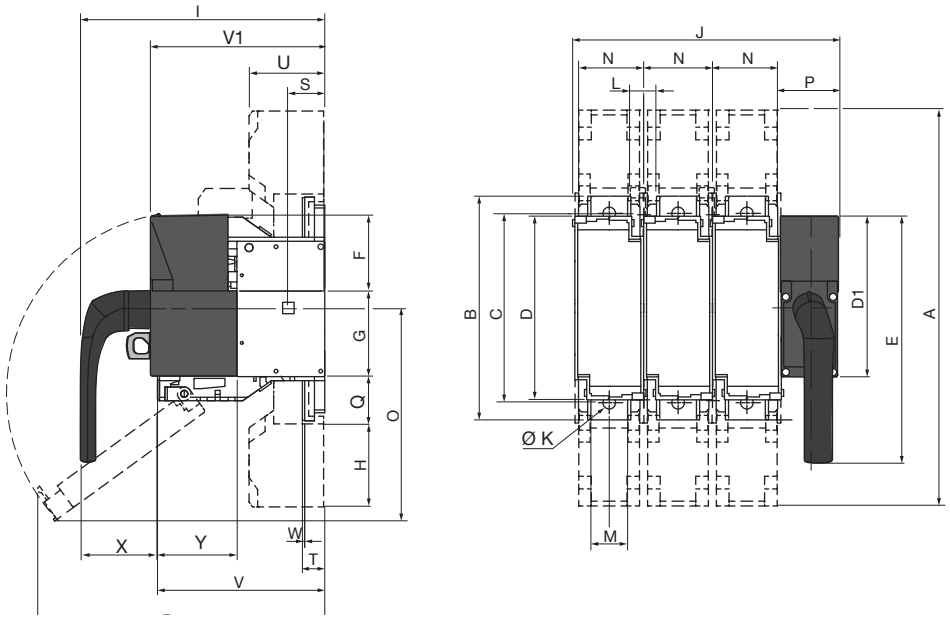
*4P left side operation*

## Right front-side operation dimensions (continued)

### 250 A




fuser_748_a_1_x_cat.ai




fuser_749_a_1_x_cat.ai

| Rating (A) | Fuse size | Frame size | Fg min. | A | B | C | D | D1 | E | F | G | H | I | J | | K | L | M | N | O | P | Q | R | S | T | U | V | V1 | W | X | Y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | 3P | 4P | | | | | | | | | | | | | | | | |
| 250 | NH1 | 15 | 154 | 345 | 195 | 166 | 162 | 143 | 220 | 67.5 | 75.5 | 110 | 212.1 | 234 | 294 | 8.5 | 28 | 32 | 60 | 185 | 51.6 | 52 | 251 | 31 | 19.5 | 65 | 146 | 142 | 2.5 | 58.5 | 77 |

*Dimensions also valid for:*

*3P front operation*

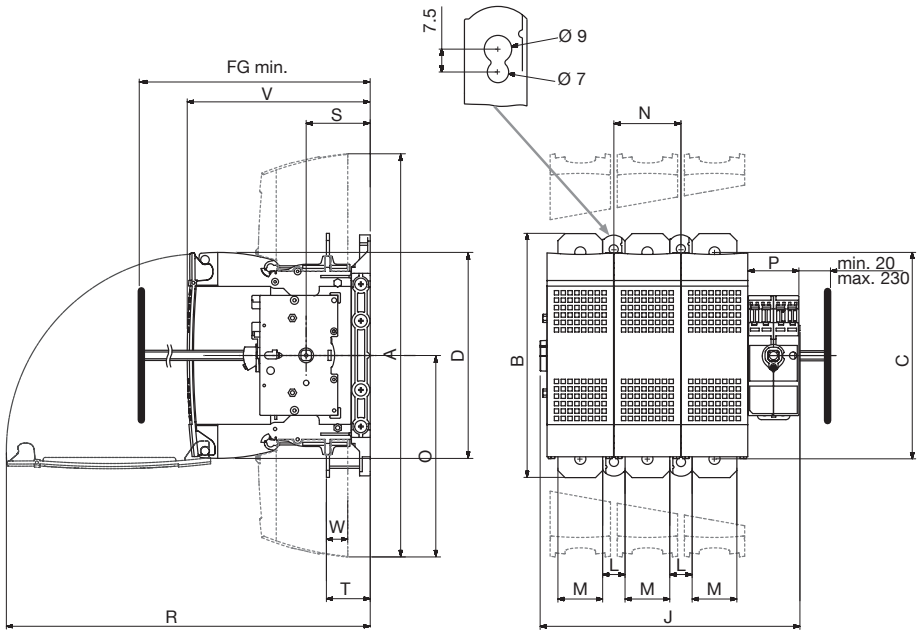
*4P front operation*

*3P left-side operation*

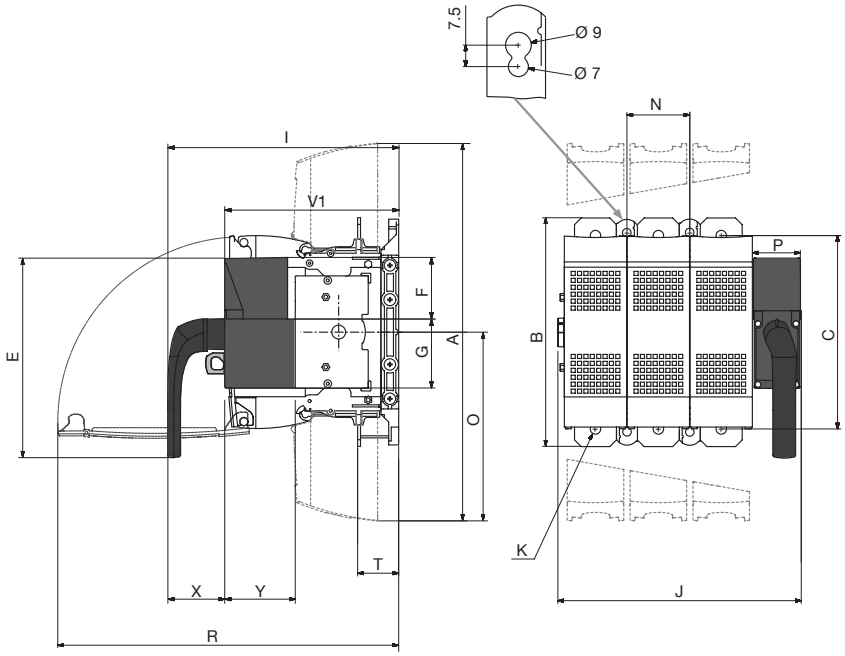
*4P left side operation*

# Right front-side operation dimensions (continued)

## 400 A




fuser_733_c_1_x_cat.ai




fuser_750_a_1_x_cat.ai

| Rating (A) | Fuse size | Frame size | Fg min. | A | B | C | D | D1 | E | F | G | I | J | | K | L | M | N | O | P | R | S | T | V | V1 | W | X | Y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | 3P | 4P | | | | | | | | | | | | | | |
| 400 | NH2 | 16 | 188 | 397 | 240 | 203 | 203 | 143 | 220 | 67.5 | 75.5 | 239 | 256 | 321 | 11 | 34 | 32 | 66 | 199 | 50 | 360 | 63 | 43 | 180 | 184 | 3 | 58.5 | 77 |

*Dimensions also valid for:*

*3P front operation*

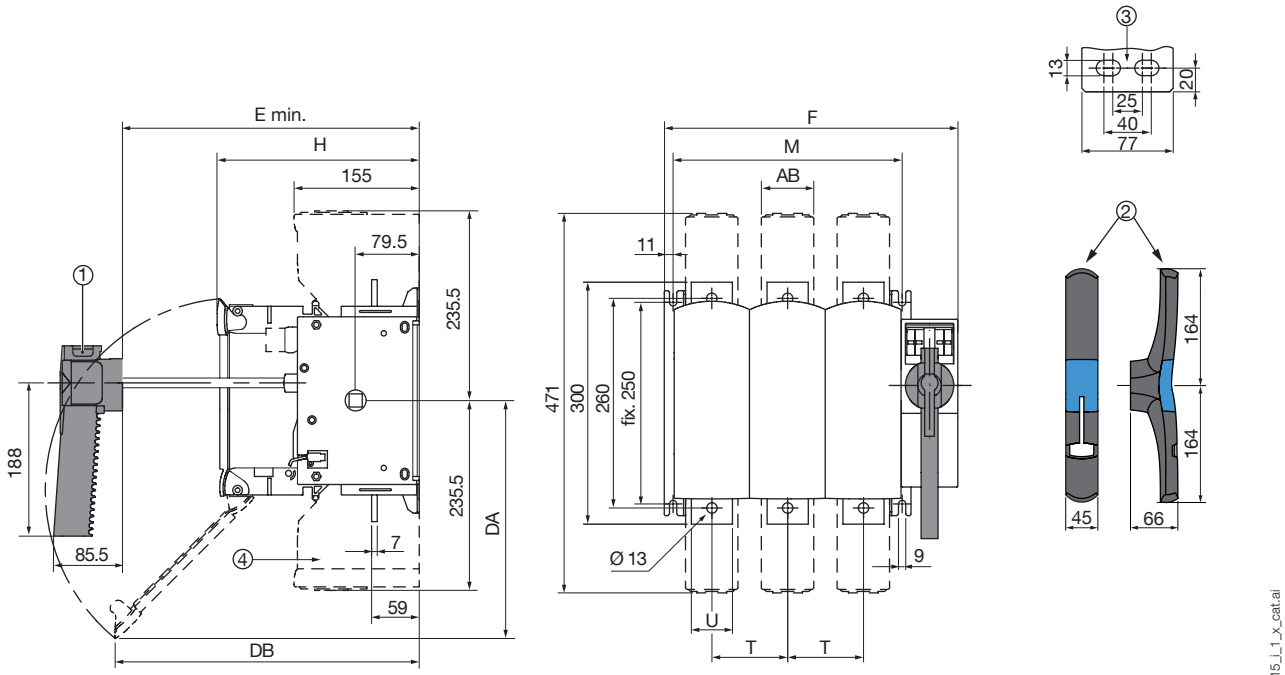
*4P front operation*

*3P left-side operation*

*4P left side operation*

## Dimensions for direct and external operation

### 630 to 1250 A




1. Handle for frame size 17.
2. Handle for frame size 18.
3. Connection terminals for frame size 18.
4. Terminal shroud.

| Rating (A) | Fuse size | Frame size | Overall dimensions | Case | | | | | Mounting accessory | | Connection | | Terminal shroud |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | E min. | F 3 P | F 4 P | H | DA | DB | M 3p. | M 4p. | T | U | AB |
| 630 | 3 | 17 | 265 | 364 | 458 | 250 | 300 | 380 | 284 | 378 | 94 | 51 | 65 |
| 800 | 3 | 17 | 265 | 364 | 458 | 250 | 300 | 380 | 284 | 378 | 94 | 51 | 65 |
| 800 | 4 | 18 | 304 | 442 | 562 | 289 | 355 | 295 | 362 | 482 | 120 | 77 | 88 |
| CD 1250 | 4 | 18 | 304 | 442 | 562 | 289 | 355 | 295 | 362 | 482 | 120 | 77 | 88 |

*Dimensions also valid for:*

*3P front operation*

*4P front operation*

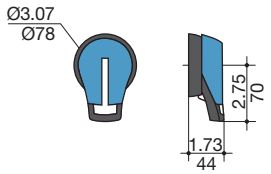
*3P left-side operation*

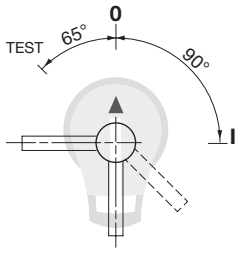
*4P left side operation*

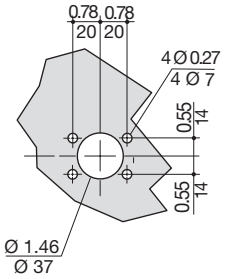
# Dimensions for external handles

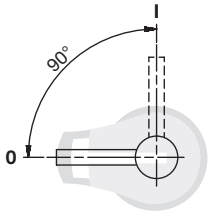
## 25 to 32 A

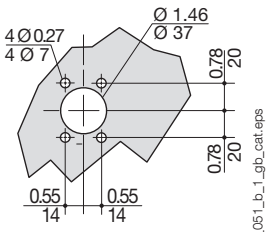
| Handle type | Front operation | | Right and left side operation | |
|---|---|---|---|---|
| | Direction of operation | Door drilling | Direction of operation | Door drilling |
| **S1 type**<br>Box size 0 | | | | |



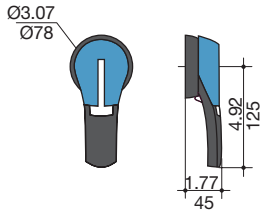



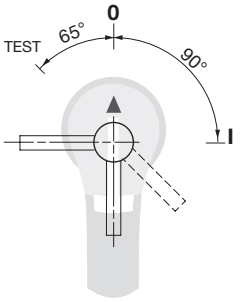



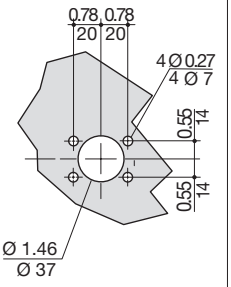

poign_051_b_1_gb_cat.eps

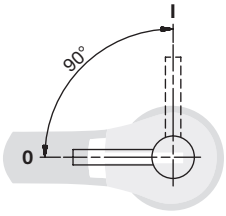
## 50 to 400 A

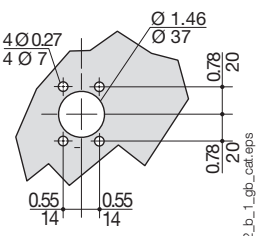
| Handle type | Front operation | | Right and left side operation | |
|---|---|---|---|---|
| | Direction of operation | Door drilling | Direction of operation | Door drilling |
| **S2 type**<br>Box size 11-16 | | | | |



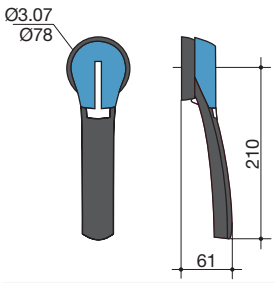



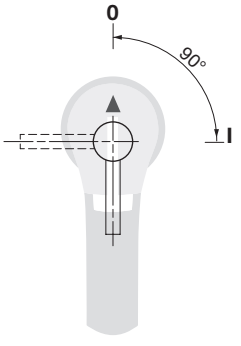



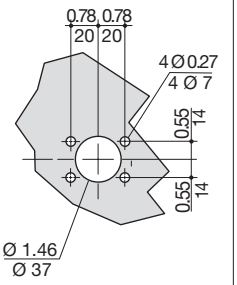

poign_052_b_1_gb_cat.eps

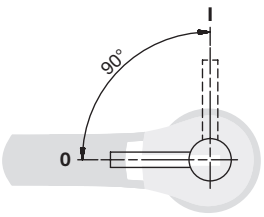
## 630 to 800 A

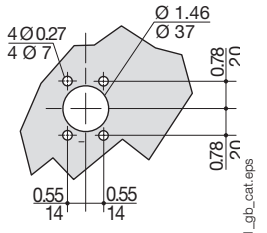
| Handle type | Front operation | | Right and left side operation | |
|---|---|---|---|---|
| | Direction of operation | Door drilling | Direction of operation | Door drilling |
| **S3 type**<br>Box size 17 | | | | |

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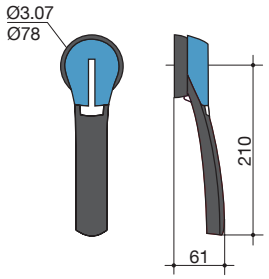
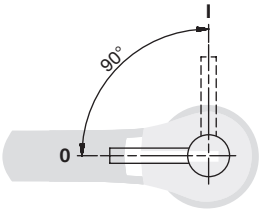
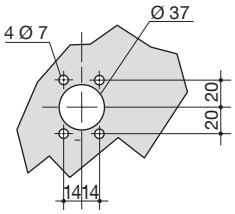
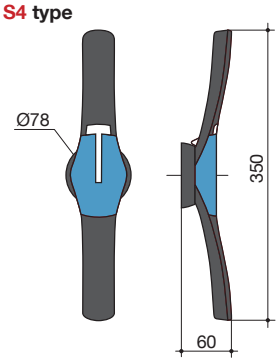
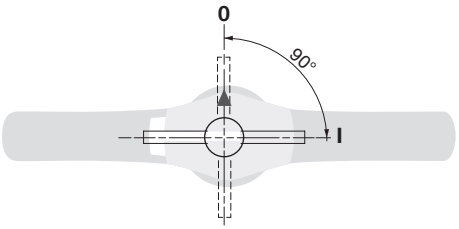
## Dimensions for external handles (continued)

### 800 to 1250 A

| Handle type | Front operation<br>Direction of operation | Right and left side operation<br>Direction of operation | Door drilling |
|---|---|---|---|
| **S3 type**<br>Box size 18<br>  | |  |  |
| **S4 type**<br>  |  | | |

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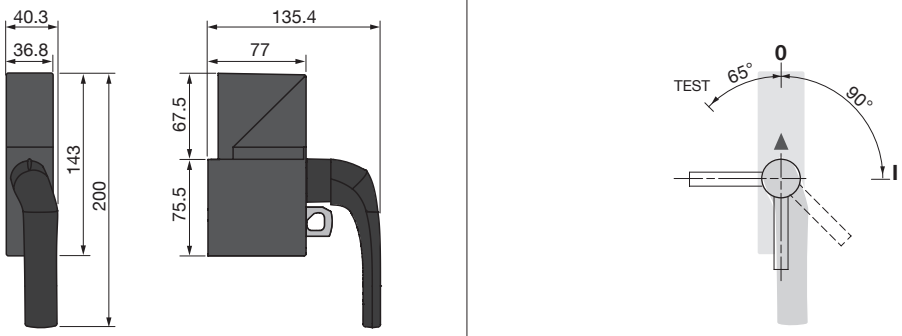
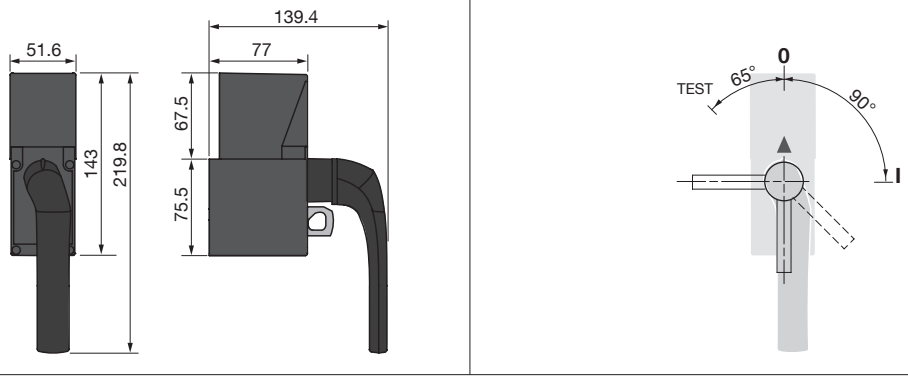
# Dimensions for direct front operation handle assembly

## 50 to 400 A

| Handle type | Direct operation<br>Operating direction |
|---|---|
| **50 to 160 A**<br>Case 11 to 14 |  |
| **250 to 400 A**<br>Case 15 to 16 |  |

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