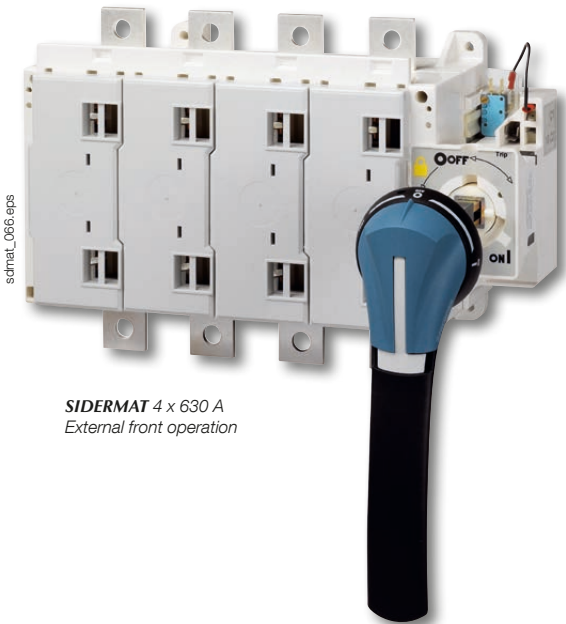


SIDERMAT

Load break switches for power distribution from 250 to 1800 A with tripping function



SIDERMAT 4 x 630 A
External front operation

The solution for

- > Main switchboard
- > Distribution panel
- > Motor load break



Strong points

- > Remote tripping
- > Safety with visible double breaking
- > Robustness in harsh conditions

Something to think about

- > SIDERMAT combination: Manually operated fuse switches which can be tripped remotely.

Function

SIDERMAT are manually operated 3 or 4 pole load break switches with visible breaking and a remote tripping function.

They make and break under load conditions and provide safety isolation for any low voltage circuit.

The tripping function assures the following:

- protection of persons against insulation faults through combination with toroids and differential relays
- protection against overloads through combination with CTs and thermal relays
- protection against short circuits with fuses (see "SIDERMAT fuse-combination switches")

Advantages

Remote tripping

Disconnection by a shunt trip device enables the power to the installation to be switched off with a remote pushbutton.

Safety with visible double breaking

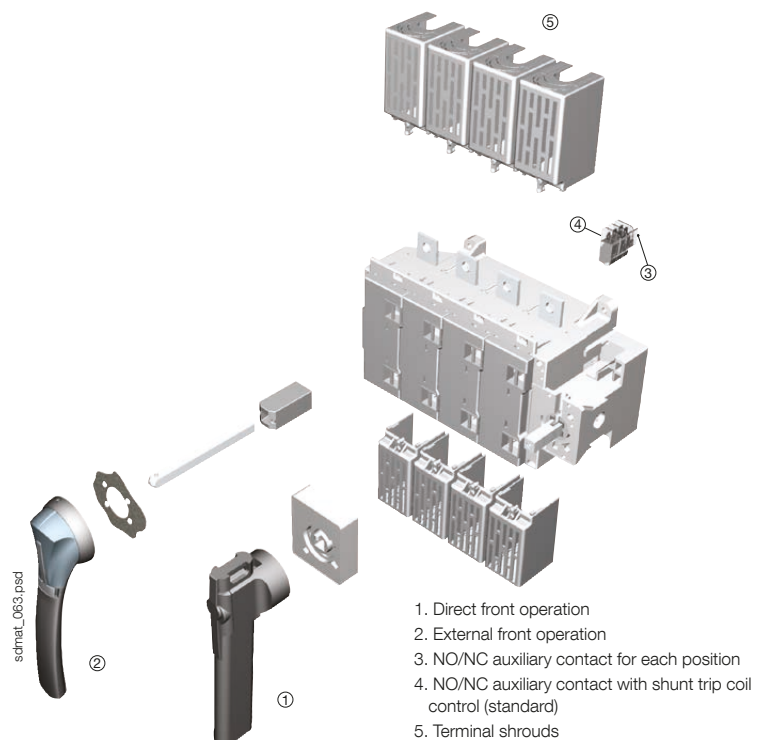
SIDERMATs are visible double breaking devices (quadruple up to 800 A) providing real and secure display.

Robustness in harsh conditions

By lowering the current via a limiting resistor, a SIDERMAT fitted with an undervoltage coil may be used in continuous processes or exposed to high ambient temperatures.

Functional diagram

For more details, please see the installation instructions supplied with the product.



1. Direct front operation
2. External front operation
3. NO/NC auxiliary contact for each position
4. NO/NC auxiliary contact with shunt trip coil control (standard)
5. Terminal shrouds

References

Front operation - Switch body with a shunt trip coil 230 VAC

| Rating (A) | No. of poles | Switch body | Direct handle | External handle | Shaft for external handle | Auxiliary contact position | Auxiliary contact tripping | Terminal shrouds | Terminal screens | Inter phase barrier | | | | | | | | |
|------------|--------------|------------------|---------------------------|---|---|--|--|--|--|--|--|--|--|--|--|--|--|----------|
| 250 A | 3 P | 3500 3026 | Black 3999 6203 | S3 type Black IP55 1431 3511 ⁽¹⁾ | 200 mm 1401 1520 320 mm 1401 1532 ⁽¹⁾ | 1 st contact NO/NC 3999 0051 2 nd contact NO/NC 3999 0052 | 1 contact NO/NC 3999 0031 | 3 P 3998 3040 ⁽²⁾ 4 P 3998 4040 ⁽²⁾ | | | | | | | | | | |
| | 4 P | 3500 4026 | | | | | | | | | | | | | | | | |
| 400 A | 3 P | 3500 3041 | | | | | | | | | | | | | | | | |
| | 4 P | 3500 4041 | | | | | | | | | | | | | | | | |
| 630 A | 3 P | 3500 3064 | | | | | | | | | | | | | | | | |
| | 4 P | 3500 4064 | | | | | | | | | | | | | | | | |
| 800 A | 3 P | 3500 3081 | | S3 type Red/Yellow IP55 1432 3511 | | | | | 3 P 3998 3063 ⁽²⁾ 4 P 3998 4063 ⁽²⁾ | | | | | | | | | |
| | 4 P | 3500 4081 | | | | | | | | | | | | | | | | |
| 1250 A | 3 P | 3500 3121 | | | | | | | | 3 P 2998 3120 ⁽²⁾ 4 P 2998 4120 ⁽²⁾ | 3 P 2998 0003 4 P 2998 0004 | | | | | | | |
| | 4 P | 3500 4121 | | | | | | | | | | | | | | | | |
| 1600 A | 3 P | 3500 3161 | | | | | | | | | | | | | | | | |
| | 4 P | 3500 4161 | | | | | | | | | | | | | | | | |
| 1800 A | 3 P | 3500 3180 | | | | | | | | | | | | | | | | included |
| | 4 P | 3500 4180 | | | | | | | | | | | | | | | | |

(1) Standard.

(2) Top/bottom.

Side operation - Switch body with a shunt trip coil 230 VAC

| Rating (A) | No. of poles | Switch body | Direct handle | External handle | Shaft for external handle | Auxiliary contact position | Auxiliary contact tripping | Terminal shrouds | Terminal screens | Inter phase barrier | | | | | | | | | |
|------------|--------------|------------------|---|---|----------------------------|--|--|--|------------------|--|--|--|--|--|--|--|--|--|----------|
| 250 A | 3 P | 3505 3026 | Black 3999 6012 ⁽¹⁾ Red 3999 6013 | S3 type Black IP55 1435 3511 ⁽¹⁾ | 200 mm 1403 1520 | 1 st contact NO/NC 3999 0051 2 nd contact NO/NC 3999 0052 | 1 contact NO/NC 3999 0031 | 3 P 3998 3040 ⁽²⁾ 4 P 3998 4040 ⁽²⁾ | | | | | | | | | | | |
| | 4 P | 3505 4026 | | | | | | | | | | | | | | | | | |
| 400 A | 3 P | 3505 3041 | | | | | | | | | | | | | | | | | |
| | 4 P | 3505 4041 | | | | | | | | | | | | | | | | | |
| 630 A | 3 P | 3505 3064 | | | | | | | | | S3 type Red IP55 1436 3511 | | | | | 3 P 3998 3063 ⁽²⁾ 4 P 3998 4063 ⁽²⁾ | | | |
| | 4 P | 3505 4064 | | | | | | | | | | | | | | | | | |
| 800 A | 3 P | 3505 3081 | | | | | | | | 3 P 2998 3120 ⁽²⁾ 4 P 2998 4120 ⁽²⁾ | 3 P 2998 0003 4 P 2998 0004 | | | | | | | | |
| | 4 P | 3505 4081 | | | | | | | | | | | | | | | | | |
| 1250 A | 3 P | 3505 3121 | | | | | | | | | | | | | | | | | |
| | 4 P | 3505 4121 | | | | | | | | | | | | | | | | | |
| 1600 A | 3 P | 3505 3161 | | | | | | | | | | | | | | | | | included |
| | 4 P | 3505 4161 | | | | | | | | | | | | | | | | | |
| 1800 A | 3 P | 3505 3180 | contact us | | | | | | | | | | | | | | | | |
| | 4 P | contact us | | | | | | | | | | | | | | | | | |

(1) Standard.

(2) Top/bottom.

SIDERMAT

Load break switches for power distribution
from 250 to 1800 A with tripping function

Accessories

External operation handle

| For front operation | | | | |
|---------------------|-------------|---------------|----------------------------|---------------------------------|
| Rating (A) | Handle type | Handle colour | External IP ⁽¹⁾ | Reference |
| 250 ... 1800 | S3 | Black | IP55 | 1431 3511 ⁽²⁾ |
| 250 ... 1800 | S3 | Red / Yellow | IP55 | 1432 3511 |

(1) IP: protection degree according to IEC 60529. (2) Standard.

| For side operation | | | | |
|--------------------|-------------|---------------|----------------------------|---------------------------------|
| Rating (A) | Handle type | Handle colour | External IP ⁽¹⁾ | Reference |
| 250 ... 1800 | S3 | Black | IP55 | 1435 3511 ⁽²⁾ |
| 250 ... 1800 | S3 | Red | IP55 | 1436 3511 |

(1) IP: protection degree according to IEC 60529. (2) Standard.



Handle type S3

Direct operation handle

| For front operation | | |
|---------------------|---------------|------------------|
| Rating (A) | Handle colour | Reference |
| 250 ... 1800 | Black | 3999 6203 |

| For side operation | | |
|--------------------|---------------|------------------|
| Rating (A) | Handle colour | Reference |
| 250 ... 1800 | Black | 3999 6012 |



access_156.eps

Alternative colour Type S handle cover

Use

For single lever S3 type handles.

Other colours: please contact us.

| Colour | To be ordered in multiples of | Handle type | Reference |
|------------|-------------------------------|-------------|------------------|
| Light grey | 50 | S3 | 1401 0001 |
| Dark grey | 50 | S3 | 1401 0011 |



access_138.eps

Type S handle adapter

Use

Enables S-type handles to be fitted in place of existing older style Socomec handles.

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: protection degree according to IEC 60529.



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Shaft for external operation

Use

Standard lengths:

- 200 mm,
- 320 mm.

Other lengths: please contact us.

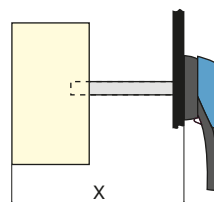
| For front operation | | | |
|---------------------|------------------|-------------------|---------------------------------|
| Rating (A) | Dimension X (mm) | Shaft length (mm) | Reference |
| 250 ... 630 | 275 ... 439 | 200 mm | 1401 1520 |
| 250 ... 630 | 275 ... 559 | 320 mm | 1401 1532 ⁽¹⁾ |
| 800 | 296 ... 460 | 200 mm | 1401 1520 |
| 800 | 296 ... 580 | 320 mm | 1401 1532 ⁽¹⁾ |
| 1250 ... 1800 | 291 ... 455 | 200 mm | 1401 1520 |
| 1250 ... 1800 | 291 ... 575 | 320 mm | 1401 1532 ⁽¹⁾ |

(1) Standard.

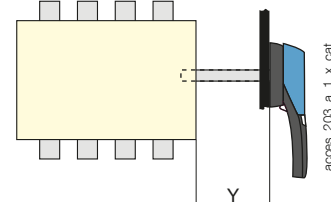
| For side operation | | | |
|--------------------|------------------|-------------------|------------------|
| Rating (A) | Dimension Y (mm) | Shaft length (mm) | Reference |
| 800 ... 1800 | 110 ... 279 | 200 | 1403 1520 |



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access_203_a_1_x_cat

Tripping coil

Use

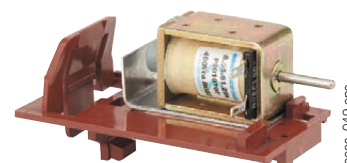
Omnipolar breaking remotely controlled by a shunt trip or undervoltage release coil.

Note: the shunt trip coil must not be supplied for more than 5s.

A 230 VAC shunt trip coil is fitted as standard to the switch body. To have an alternative coil, one of the references below must be ordered with the switch.

Examples of ordering

- SIDERMAT with 230 VAC shunt trip coil - 1 part number: SIDERMAT 250 A, 3-pole, front operation: 3500 3026.
- SIDERMAT with other coil type or voltage - 2 part numbers: SIDERMAT 250 A, 3-pole, front operation, with undervoltage trip coil 110 VAC: 3500 3026 + 3991 3110.



Shunt trip coil

access_049.eps



Undervoltage trip coil

access_050.eps

Characteristics

Shunt trip coil

| AC voltage (V) (+5% to -20%) ⁽¹⁾ | 24 | 48 | 110 | 230 | 400 |
|---|----|-----|-----|-----|-----|
| In-rush consumption (VA) | 80 | 100 | 100 | 120 | 120 |
| DC voltage (V) (+5% to -20%) | 12 | 24 | 48 | 110 | 220 |
| In-rush consumption (W) | 80 | 100 | 100 | 120 | 120 |

⁽¹⁾ Note: Note: the shunt trip coil must not be supplied for more than 5 s. A 230VAC shunt trip coil is fitted as standard.

AC undervoltage trip coil

| AC voltage (V) (+5% to -10%) | 24 | 48 | 110 | 230 | 400 |
|---------------------------------|----|----|-----|-----|-----|
| Continuous consumption (VA) | 13 | 13 | 13 | 13 | 20 |
| In-rush consumption (VA) | 13 | 13 | 13 | 13 | 20 |
| Minimum maintaining voltage (V) | 15 | 25 | 60 | 140 | 200 |

DC undervoltage trip coil

| Continuous voltage (V) (+5% to -10%) | 12 | 24 | 48 | 110 | 220 |
|--------------------------------------|----|----|----|-----|-----|
| Continuous consumption (W) | 13 | 13 | 13 | 13 | 13 |
| In-rush consumption (W) | 13 | 13 | 13 | 13 | 13 |
| Minimum maintaining voltage (V) | 6 | 15 | 25 | 60 | 140 |

Delayed undervoltage trip coil

| Voltage | Time (ms) | Reference |
|---------|-----------|--------------------------|
| 230 VAC | 430 | 3993 3230 ⁽¹⁾ |
| 400 VAC | 410 | 3993 3400 ⁽¹⁾ |

⁽¹⁾ To be ordered with the switch.

References

Shunt trip coil

| Voltage | Reference | Reference |
|---------|-----------|--------------------------|
| 24 VAC | 3990 1024 | 3991 1024 ⁽¹⁾ |
| 48 VAC | 3990 1048 | 3991 1048 ⁽¹⁾ |
| 110 VAC | 3990 1110 | 3991 1110 ⁽¹⁾ |
| 230 VAC | 3990 1220 | included |
| 400 VAC | 3990 1380 | 3991 1380 ⁽¹⁾ |
| 12 VDC | | 3991 2012 ⁽¹⁾ |
| 24 VDC | 3990 2024 | 3991 2024 ⁽¹⁾ |
| 48 VDC | 3990 2048 | 3991 2048 ⁽¹⁾ |
| 110 VDC | 3990 2220 | 3991 2220 ⁽¹⁾ |
| 220 VDC | | 3991 2220 ⁽¹⁾ |

⁽¹⁾ To be ordered with the switch.

Undervoltage trip coil

| Voltage | Replacement coil | Alternative coil |
|---------|------------------|--------------------------|
| | Reference | Reference |
| 24 VAC | 3990 3024 | 3991 3024 ⁽¹⁾ |
| 48 VAC | 3990 3048 | 3991 3048 ⁽¹⁾ |
| 110 VAC | 3990 3110 | 3991 3110 ⁽¹⁾ |
| 230 VAC | 3990 3220 | 3991 3220 ⁽¹⁾ |
| 400 VAC | 3990 3380 | 3991 3380 ⁽¹⁾ |
| 12 VDC | 3990 4012 | 3991 4012 ⁽¹⁾ |
| 24 VDC | 3990 4024 | 3991 4024 ⁽¹⁾ |
| 48 VDC | 3990 4048 | 3991 4048 ⁽¹⁾ |
| 110 VDC | 3990 4110 | 3991 4110 ⁽¹⁾ |
| 220 VDC | 3990 4220 | 3991 4220 ⁽¹⁾ |

⁽¹⁾ To be ordered with the switch.

Current-reducing resistor for undervoltage trip coil

Use

By limiting the current, the resistor reduces the effects on undervoltage trip coils used in continuous processes or those exposed to high ambient temperatures.

| Voltage | Reference |
|---------|-----------|
| 110 VAC | 3999 3112 |
| 230 VAC | 3999 3230 |
| 400 VAC | 3999 3400 |
| 110 VDC | 3999 4110 |

SIDERMAT

Load break switches for power distribution
from 250 to 1800 A with tripping function

Accessories (continued)

Auxiliary contact

Use

Pre-break and signalling of positions 0 and I:
1 to 2 NO / NC auxiliary contacts.

Coil tripping

1 to 2 NO / NC auxiliary contacts.

Connection to the control circuit

By 6.35 mm fast-on terminal.

Characteristics

NO / NC auxiliary contact: IP2.

Electrical characteristics:

30000 operations.



access_046.eps

Characteristics

NO / NC position contact

| Rating (A) | Rated current (A) | Operating current I _e (A) | | | |
|--------------|-------------------|--------------------------------------|------------------|-----------------|-----------------|
| | | 250 VAC AC-13 | 400 VAC AC-13 | 24 VDC DC-13 | 48 VDC DC-13 |
| 250 ... 1800 | 16 | 12 | 8 | 14 | 6 |

NO / NC coil trip signalling

| Rating (A) | Rated current (A) | Operating current I _e (A) | | | |
|--------------|-------------------|--------------------------------------|------------------|-----------------|-----------------|
| | | 250 VAC AC-13 | 400 VAC AC-13 | 24 VDC DC-13 | 48 VDC DC-13 |
| 250 ... 1800 | 16 | 12 | 8 | 12 | 2 |

References

NO / NC position contact

| Rating (A) | AC position | Reference |
|--------------|-----------------|-----------|
| 250 ... 1800 | 1 st | 3999 0051 |
| 250 ... 1800 | 2 nd | 3999 0052 |

NO / NC low level position contact

| Rating (A) | AC position | Reference |
|--------------|-----------------|-----------|
| 250 ... 1800 | 1 st | 3999 0111 |
| 250 ... 1800 | 2 nd | 3999 0112 |

NO / NC coil trip signalling

| Rating (A) | AC position | Reference |
|--------------|-------------|-----------|
| 250 ... 1800 | 1 | 3999 0031 |

Terminal shrouds

Use

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

Perforations allow remote thermographic
inspection without the need to remove the
shrouds.

Advantage

| Rating (A) | No. of poles | Position | Reference |
|-------------|--------------|---------------|-----------|
| 250 ... 630 | 3 P | top or bottom | 3998 3040 |
| 250 ... 630 | 4 P | top or bottom | 3998 4040 |
| 800 | 3 P | top or bottom | 3998 3063 |
| 800 | 4 P | top or bottom | 3998 4063 |



access_212.eps

Terminal screen

Use

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

| Rating (A) | No. of poles | Position | Reference |
|---------------|--------------|---------------|-----------|
| 1250 ... 1800 | 3 P | Top or bottom | 2998 3120 |
| 1250 ... 1800 | 4 P | Top or bottom | 2998 4120 |

Inter-phase barrier

Use

Safety isolation between the terminals, essential for use at 690 VAC or in
a polluted or dusty atmosphere.

| Rating (A) | No. of poles | Reference |
|---------------|--------------|-----------|
| 1250 ... 1600 | 3 P | 2998 0003 |
| 1250 ... 1600 | 4 P | 2998 0004 |
| 1800 | 3 / 4 P | included |



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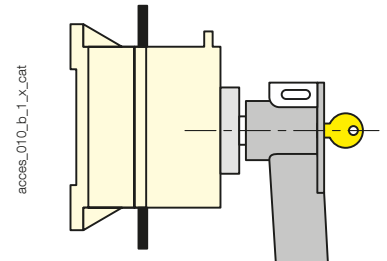
Key handle interlocking system

Use

Locking in position 0 of the front or side operation handle:

- using a padlock (not supplied) and standard padlocking function of the handle. Padlocking in external front operation interlocks the door.

- using a RONIS 1104A lock (key BC 3318) - to be mounted directly on the padlockable handle,
- using RONIS EL11AP lock (not supplied).



RONIS 1104A lock

Locking using RONIS 1104A (supplied)

| Rating (A) | Operation | Reference |
|--------------|-----------|-----------|
| 250 ... 1800 | direct | 3999 8104 |

Locking using RONIS EL11AP lock (not supplied)

| Rating (A) | Operation | Reference |
|--------------|-----------|-----------|
| 250 ... 1800 | external | 1499 7701 |

Cage terminals

Use

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

Connections

| Rating (A) | Flexible cable cross-section (mm ²) | Rigid cable cross-section (mm ²) | Flexible bar width (mm) | Stripped over (mm) |
|------------|---|--|-------------------------|--------------------|
| 250 | 16 ... 185 | 16 ... 185 | 18 | 27 |
| 400 | 50 ... 240 | 50 ... 300 | 20 | 34 |
| 630 | 70 ... 300 | 70 ... 300 | 24 | 34 |

Dimensions

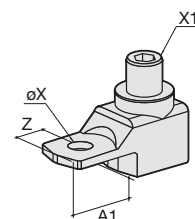
| Rating (A) | A | A1 | C | R | ØX | X1 | Z |
|------------|------|------|------|----|------|-----|----|
| 250 | 62 | 31.5 | 31.5 | 25 | 10.5 | M16 | 14 |
| 400 | 71.5 | 32 | 38 | 32 | 10.5 | M20 | 15 |
| 630 | 76.5 | 37 | 38 | 40 | 12.5 | M20 | 15 |

References

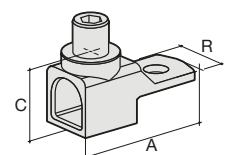
| Rating (A) | No. of poles | Reference |
|------------|--------------|-----------|
| 250 | 3 P | 5400 3025 |
| 250 | 4 P | 5400 4025 |
| 400 | 3 P | 5400 3040 |
| 400 | 4 P | 5400 4040 |
| 630 | 3 P | 5400 3063 |
| 630 | 4 P | 5400 4063 |



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access_092_a_1_x_cat

Other specific accessories

- Connection accessories.
- Mounting plates for standard systems.
- Special construction available for specific environments.

SIDERMAT

Load break switches for power distribution
from 250 to 1800 A with tripping function

Characteristics according to IEC 60947-3

250 to 1800 A

| Thermal current I_{th} at 40°C | | 250 A | 400 A | 630 A | 800 A | 1250 A | 1600 A | 1800 A |
|--|----------------------|--------------------|------------------------|------------------------|------------------------|--------------------------|--------------------------|--------------------------|
| Rated insulation voltage U_i (V) | | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| Rated impulse withstand voltage U_{imp} (kV) | | 8 | 12 | 12 | 12 | 12 | 12 | 12 |
| 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⁾ |
| 400 VAC | AC-22 A / AC-22 B | 250/250 | 400/400 | 630/630 | 800/800 | 1250/1250 | 1600/1600 | 1600/1800 |
| 400 VAC | AC-23 A / AC-23 B | 250/250 | 400/400 | 630/630 | 630/630 | 1250/1250 | 1600/1600 | 1600/1600 |
| 500 VAC | AC-22 A / AC-22 B | 250/250 | 400/400 | 630/630 | 800/800 | 1250/1250 | 1600/1600 | 1600/1600 |
| 500 VAC | AC-23 A / AC-23 B | 200/250 | 315/400 | 500/630 | 630/630 | 1000/1000 | 1250/1250 | 1250/1250 |
| 690 VAC ⁽²⁾ | AC-21 A / AC-21 B | 250/250 | 400/400 | 630/630 | 800/800 | 1250/1250 | 1600/1600 | 1600/1600 |
| 690 VAC ⁽²⁾ | AC-22 A / AC-22 B | 250/250 | 400/400 | 500/630 | 630/800 | 1000/1000 | 1250/1250 | 1250/1250 |
| 690 VAC ⁽²⁾ | AC-23 A / AC-23 B | 200/250 | 315/400 | 400/500 | 500/500 | 800/800 | 1000/1000 | 1000/1000 |
| 400 VDC | DC-20 A / DC-20 B | 250/250 | 400/400 | 630/630 | 800/800 | 1250/1250 | 1600/1600 | 1800/1800 |
| 400 VDC | DC-21 A / DC-21 B | 250/250 | 400/400 | 630/630 | 800/800 | 1250/1250 | 1600/1600 | 1600/1600 |
| 400 VDC | DC-22 A / DC-22 B | 250/250 | 400/400 ⁽³⁾ | 630/630 ⁽³⁾ | 800/800 ⁽³⁾ | 1250/1250 ⁽⁴⁾ | 1600/1600 ⁽⁴⁾ | 1600/1600 ⁽⁴⁾ |
| 400 VDC | DC-23 A / DC-23 B | 200/250 | 315/400 ⁽³⁾ | 500/630 ⁽³⁾ | 630/800 ⁽³⁾ | 1250/1250 ⁽⁴⁾ | 1250/1250 ⁽⁴⁾ | 1250/1250 ⁽⁴⁾ |
| Operational power in AC-23 (kW) | | | | | | | | |
| At 400 VAC without pre-break in AC-23 (kW) ⁽¹⁾⁽⁵⁾ | | 132/132 | 220/220 | 355/355 | 355/355 | 710/710 | 900/900 | 900/900 |
| At 690 VAC without pre-break in AC-23 (kW) ⁽¹⁾⁽⁵⁾ | | 185/220 | 295/400 | 400/475 | 475/475 | 750/750 | 900/900 | 900/900 |
| Reactive power (kvar) | | | | | | | | |
| At 400 VAC (kvar) ⁽⁵⁾ | | 115 | 185 | 290 | 365 | 575 | | |
| Fuse protected short-circuit withstand (kA rms prospective) | | | | | | | | |
| Prospective short-circuit (kA rms) ⁽⁶⁾ | | 100 | 100 | 100 | 100 | 100 | 120 | 120 |
| Associated fuse rating (A) ⁽⁶⁾ | | 250 | 400 | 630 | 800 | 1250 | 2 x 800 | 2 x 900 |
| Short-circuit capacity (without protection) | | | | | | | | |
| Rated short-time withstand current 0.3 s. I_{CW} (kA rms) | | 17 | 25 | 50 | 65 | 65 | 80 | 80 |
| Rated peak withstand current (kA peak) ⁽⁶⁾ | | 30 | 45 | 55 | 80 | 100 | 120 | 120 |
| Connection | | | | | | | | |
| Minimum Cu cable cross-section (mm ²) | | 95 | 185 | 2 x 150 | 2 x 185 | | | 4 x 240 |
| Minimum Cu busbar cross-section (mm ²) | | | | 2 x 30 x 5 | 2 x 40 x 5 | 2 x 60 x 5 | 2 x 80 x 5 | |
| Maximum Cu cable cross-section (mm ²) | | 240 | 240 | 2 x 300 | 2 x 300 | 4 x 185 | 6 x 240 | 8 x 240 |
| Maximum Cu busbar width (mm) | | 40 | 40 | 50 | 63 | 100 | 100 | 100 |
| Tightening torque min (Nm) | | 20 | 40 | 40 | | 20 | 40 | 40 |
| Mechanical characteristics | | | | | | | | |
| Durability (number of operating cycles) | | 8000 | 8000 | 5000 | 5000 | 5000 | 3000 | 3000 |
| Weight of a 3 pole device (kg) | | 6.5 | 7 | 8 | 11 | 14 | 19 | 21 |
| Weight of a 4 pole device (kg) | | 7.5 | 8 | 9.5 | 13 | 16 | 21.5 | 23.5 |

(1) Category with index A = frequent operation - Category with index B = infrequent operation.

(2) With terminal shrouds or phase barrier.

(3) Poles cannot be juxtaposed.

(4) 4-pole device with 2 poles in series per polarity.

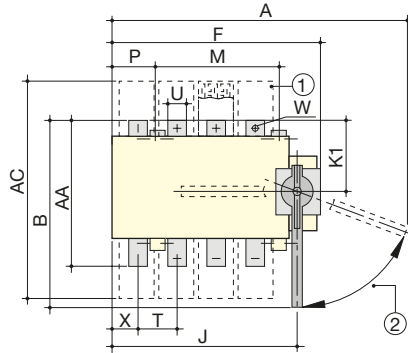
(5) The power value is given for information only, the current values vary from one manufacturer to another.

(6) For a rated operational voltage $U_e = 400$ VAC.

Dimensions - Front operation

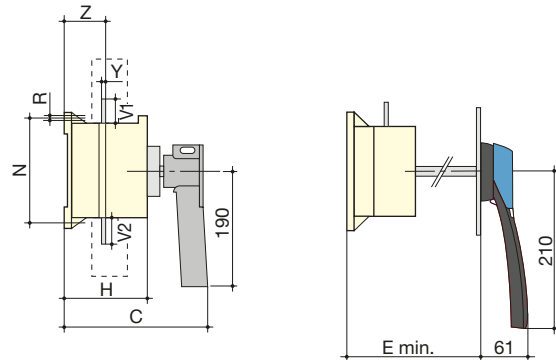
250 to 800 A

Direct front operation



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External front operation

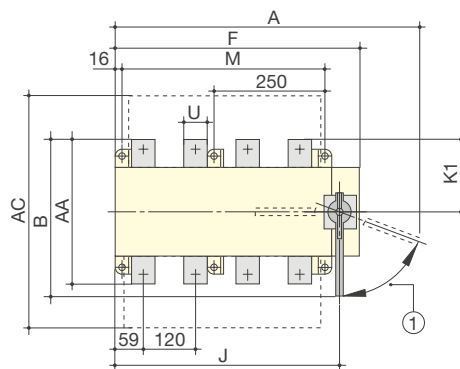


1. Terminal shroud 2. 70° reset

| Rating (A) | Overall dimensions | | | | | Terminal shrouds | Switch body | | | | | Switch mounting | | | | Connection | | | | | | | | | | | |
|------------|--------------------|-------|-------|-----|-------|------------------|-------------|-------|-----|-------|-------|-----------------|-----|-----|-------|------------|---|----|----|----|----|----|-------|-------|---|----|-----|
| | A 3p. | A 4p. | W | C | E min | AC | F 3p. | F 4p. | H | J 3p. | J 4p. | K1 | M | N | P 3p. | P 4p. | R | T | U | V1 | V2 | W | X 3p. | X 4p. | Y | Z | AA |
| 250 | 435 | 495 | 309 | 248 | 275 | 388 | 285 | 345 | 148 | 253 | 313 | 115 | 210 | 180 | 10 | 70 | 7 | 65 | 32 | 35 | 43 | 11 | 31 | 46 | 3 | 67 | 238 |
| 400 | 435 | 495 | 309 | 248 | 275 | 388 | 285 | 345 | 148 | 253 | 313 | 115 | 210 | 180 | 10 | 70 | 7 | 65 | 32 | 35 | 43 | 13 | 31 | 46 | 5 | 69 | 238 |
| 630 | 435 | 495 | 318.5 | 248 | 275 | 388 | 285 | 345 | 148 | 253 | 313 | 115 | 210 | 180 | 10 | 70 | 7 | 65 | 32 | 35 | 43 | 13 | 31 | 46 | 8 | 72 | 257 |
| 800 | 491 | 570 | 350 | 262 | 296 | 470 | 346 | 426 | 178 | 308 | 388 | 160 | 250 | 250 | 20 | 100 | 9 | 80 | 50 | 60 | 60 | 15 | 36 | 65 | 7 | 72 | 320 |

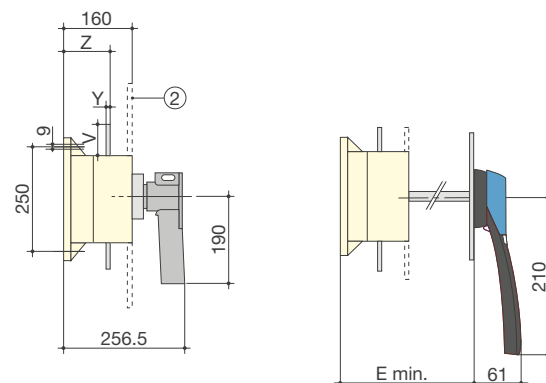
1250 to 1800 A

Direct front operation



sdmat_062_c_c_1_x_cat

External front operation



1. 70° reset
2. Terminal screens

| Rating (A) | Overall dimensions | | | | Terminal shrouds | Switch body | | | | | Switch mounting | | Connection | | | | | |
|------------|--------------------|-------|-----|-------|------------------|-------------|-------|-------|-------|-----|-----------------|-------|------------|----|----|-----|-----|--|
| | A 3p. | A 4p. | B | E min | AC | F 3p. | F 4p. | J 3p. | J 4p. | K1 | M 3p. | M 4p. | U | V | Y | Z | AA | |
| 1250 | 582 | 702 | 355 | 250 | 480 | 437 | 557 | 400 | 520 | 165 | 345 | 465 | 63 | 65 | 7 | 106 | 330 | |
| 1600 | 582 | 702 | 370 | 250 | 480 | 437 | 557 | 400 | 520 | 180 | 345 | 465 | 80 | 80 | 15 | 110 | 360 | |
| 1800 | 582 | 702 | 370 | 250 | 480 | 437 | 557 | 400 | 520 | 180 | 345 | 465 | 100 | 80 | 15 | 110 | 360 | |

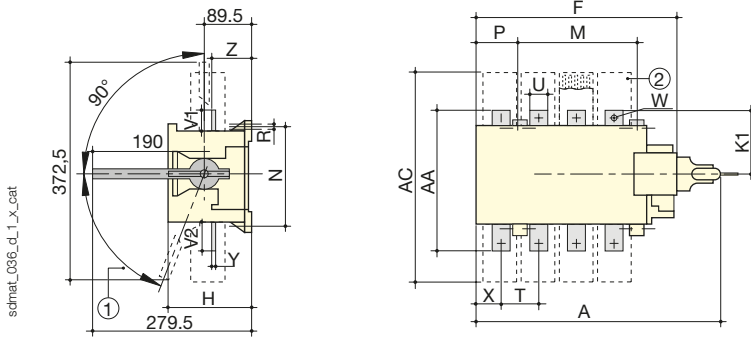
SIDERMAT

Load break switches for power distribution
from 250 to 1800 A with tripping function

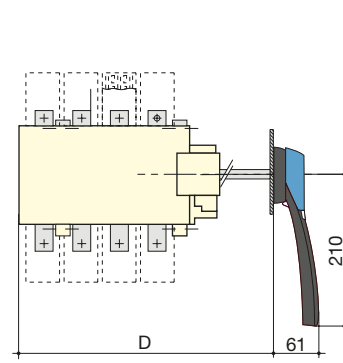
Dimensions for side operation

250 to 800 A

Direct side operation



External side operation

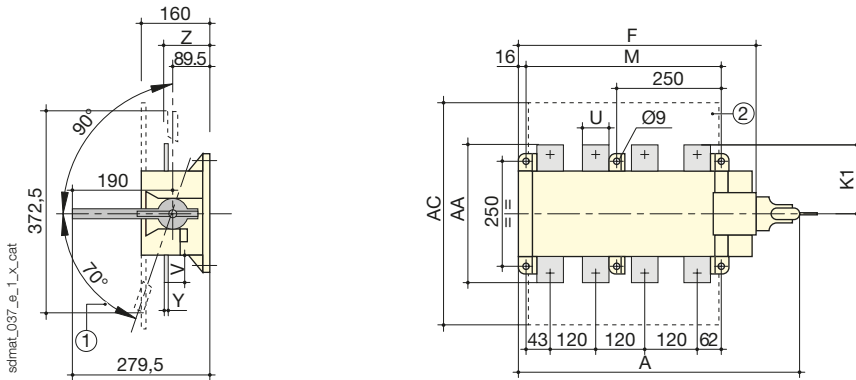


- 1. 70° reset
- 2. Terminal shrouds

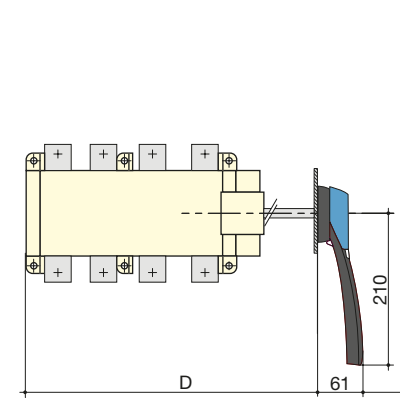
| Rating (A) | Overall dimensions | | | | Terminal shrouds | Switch body | | | | Switch mounting | | | | Connection | | | | | | | | | | |
|------------|--------------------|-------|-------|-------|------------------|-------------|-------|-----|-----|-----------------|-----|-------|-------|------------|----|----|----|----|----|-------|-------|---|----|-----|
| | A 3p. | A 4p. | D 3p. | D 4p. | AC | F 3p. | F 4p. | H | K1 | M | N | P 3p. | P 4p. | R | T | U | V1 | V2 | W | X 3p. | X 4p. | Y | Z | AA |
| 250 | 365 | 425 | 357 | 417 | 388 | 285 | 345 | 148 | 115 | 210 | 180 | 10 | 70 | 7 | 65 | 32 | 35 | 43 | 11 | 31 | 46 | 3 | 67 | 238 |
| 400 | 365 | 425 | 357 | 417 | 388 | 285 | 345 | 148 | 115 | 210 | 180 | 10 | 70 | 7 | 65 | 32 | 35 | 43 | 13 | 31 | 46 | 5 | 69 | 238 |
| 630 | 365 | 425 | 357 | 417 | 388 | 285 | 345 | 148 | 129 | 210 | 180 | 10 | 70 | 7 | 65 | 45 | 49 | 49 | 13 | 31 | 46 | 8 | 72 | 257 |
| 800 | 421 | 501 | 413 | 493 | 470 | 346 | 426 | 178 | 160 | 250 | 250 | 20 | 100 | 9 | 80 | 50 | 60 | 60 | 15 | 36 | 65 | 7 | 72 | 320 |

1250 to 1800 A

Direct side operation



External side operation

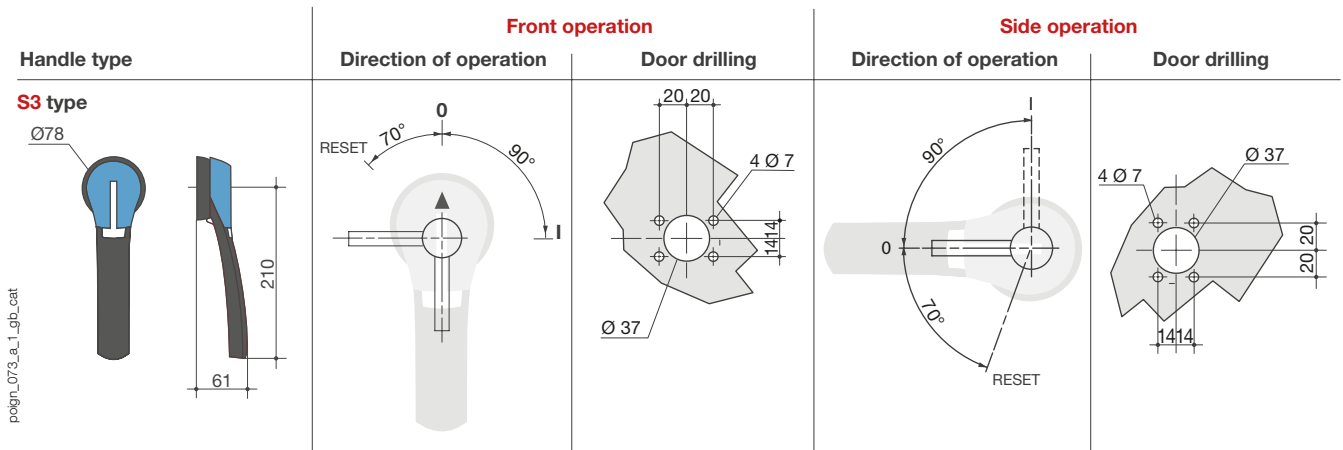


- 1. 70° reset
- 2. Terminal screens

| Rating (A) | Overall dimensions | | | | Terminal shrouds | Switch body | | Switch mounting | | Connection | | | | |
|------------|--------------------|-------|-------|-------|------------------|-------------|-------|-----------------|-------|------------|----|----|-----|-----|
| | A 3p. | A 4p. | D 3p. | D 4p. | AC | F 3p. | F 4p. | M 3p. | M 4p. | U | V | Y | Z | AA |
| 1250 | 522 | 641 | 504 | 624 | 480 | 437 | 557 | 345 | 465 | 63 | 65 | 7 | 106 | 330 |
| 1600 | 522 | 641 | 504 | 624 | 479 | 437 | 557 | 345 | 465 | 80 | 80 | 15 | 110 | 360 |
| 1800 | 522 | 641 | 504 | 624 | 479 | 437 | 557 | 345 | 465 | 100 | 80 | 15 | 110 | 360 |

Dimensions for external handles

800 to 1800 A



Connection terminal

800 A

1250 A

1600 A

1800 A

