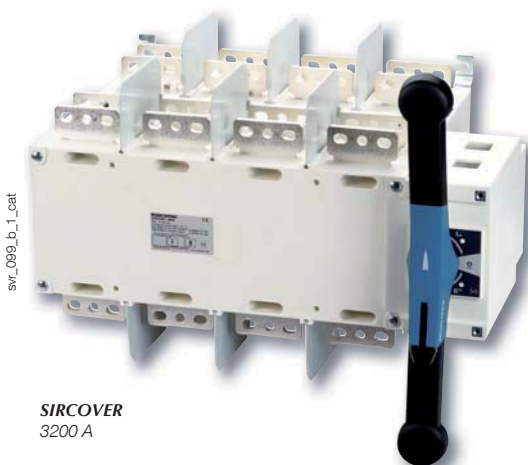




# SIRCOVER

Manual changeover switches  
from 125 to 3200 A



**SIRCOVER**  
3200 A



**SIRCOVER Bypass**  
125 A

## Function

**SIRCOVER** are manual multipolar changeover switches with positive break indication.

The family includes three ranges:

- **SIRCOVER AC** for dead time switching (I-0-II),
- **SIRCOVER** for overlapping contact switching (I-I+II-II), and
- **SIRCOVER Bypass**. This version is a combination of three interlocked switches enabling use with 3 + 6 poles or 4 + 8 poles.

They provide switching, source inversion and changeover under load for two low voltage power circuits, as well as their safety isolation by double breaking per pole.

## Advantages

### A complete product range

Three versions of the **SIRCOVER** are available to ensure compatibility with the maximum number of applications: **SIRCOVER AC** (I-0-II) with improved on load switching characteristics and isolation position, **SIRCOVER** with overlapping contacts (I-I+II-II) and a Bypass version.

### Easy connections

A copper bar connection kit is available for 2000 to 3200 A ratings. It enables various types of connection: Flat or edgewise connection with top or bottom bridging.

### Stable positions

**SIRCOVERs** have three stable positions which are not affected by voltage drops or vibrations, thus protecting your load against network interference.

### Improved on load switching

Thanks to its AC-23 and AC-33 characteristics, which are tested in accordance with standards IEC 60947-3 and IEC 60947-6-1, the **SIRCOVER AC** enables secure and reliable switching on all types of load, without the need for pre-breaking upstream.

## The solution for

- > Manufacturing industry.
- > Power distribution.



## Strong points

- > A complete range.
- > Easy connections.
- > Stable positions.
- > Improved on load switching.

## Specific features SIRCOVER AC I-0-II

- > On load switching AC-33.

## Conformity to standards

- > IEC 60947-3
- > IEC 60947-6-1



## Approvals and certifications<sup>(1)</sup>



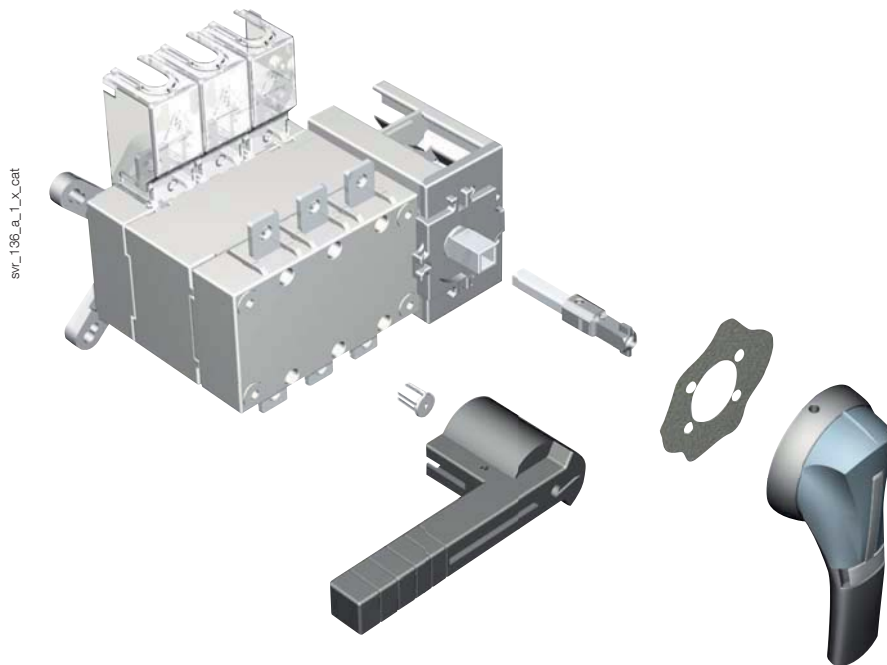
<sup>(1)</sup> Product reference on request.

## Enclosed solution

- > Available enclosed from 125 to 1600 A.

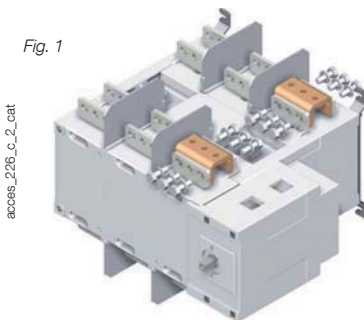
## What you need to know

- **SIRCOVER AC** (I-0-II) switches have **3 stable positions**, and are available as 3 or 4 pole devices from 125 to 3200 A. They are available enclosed in a steel or polyester enclosure from 125 to 1600 A.
- **SIRCOVER** with overlapping contacts (I-I+II-II) are 3 or 4 pole devices available from 125 to 1800 A. They are available in a steel enclosure from 125 to 1600 A.
- With 3 stable positions (I-0-II), **SIRCOVER Bypass** are a combination of three interlocked switches enabling the use with 3+6 poles or 4+8 poles from 125 to 1600 A. All ratings are available in a steel enclosure.
- All SIRCOVER can be utilised with a **direct front** or **external operation** handle.



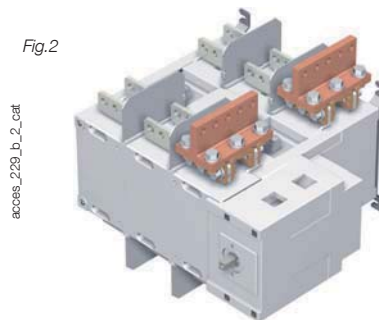
- **Copper bar connection kits** enable the connection between the two power terminals of the same pole (fig.1 & fig.2) and the bridging of the poles on the top or bottom side of the switch (fig.3), for ratings 2000, 2500 and 3200 A.

Fig. 1



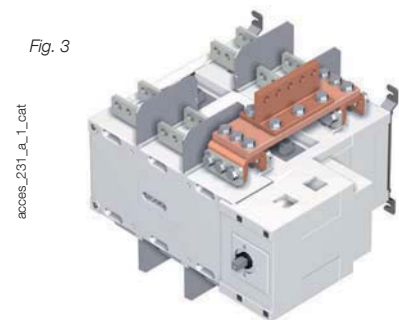
Top or bottom **flat connection**

Fig.2



Edgewise connection  
Top or bottom

Fig. 3



Top or bottom **bridging connection**

## References

### SIRCOVER AC I-0-II

| Rating (A) | No. of poles | Switch body | Direct handle                                    | External handle                                                              | Shaft for external handle                                 | Bridging bars                 | Auxiliary contact                                                             | Terminal shrouds                                                              | Terminal screens                                                                 |                                                                    |                                              |           |
|------------|--------------|-------------|--------------------------------------------------|------------------------------------------------------------------------------|-----------------------------------------------------------|-------------------------------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------|----------------------------------------------------------------------------------|--------------------------------------------------------------------|----------------------------------------------|-----------|
| 125 A      | 3 P          | 41AC 3013   | J2 type<br>Blue<br>1122 1111<br>Red<br>1123 1111 | S2 type<br>Black IP55<br>1421 2113<br>Black IP65<br>1423 2113 <sup>(1)</sup> | 200 mm<br>1400 1020<br>320 mm<br>1400 1032 <sup>(1)</sup> | 4109 0019                     | 1 <sup>st</sup> /2 <sup>nd</sup> contact<br>NO/NC<br>4109 0021 <sup>(2)</sup> | 3 P<br>2694 3014 <sup>(3)(4)</sup><br>4 P<br>2694 4014 <sup>(3)(4)</sup>      | 3 P<br>1509 3012<br>4 P<br>1509 4012                                             |                                                                    |                                              |           |
|            | 4 P          | 41AC 4013   |                                                  |                                                                              |                                                           |                               |                                                                               |                                                                               |                                                                                  |                                                                    |                                              |           |
| 160 A      | 3 P          | 41AC 3016   |                                                  |                                                                              |                                                           |                               |                                                                               |                                                                               |                                                                                  | 4 P                                                                | 41AC 4016                                    |           |
|            | 4 P          | 41AC 4016   |                                                  |                                                                              |                                                           |                               |                                                                               |                                                                               |                                                                                  |                                                                    |                                              |           |
| 200 A      | 3 P          | 41AC 3020   |                                                  |                                                                              |                                                           |                               |                                                                               |                                                                               |                                                                                  | 4 P                                                                | 41AC 4020                                    |           |
|            | 4 P          | 41AC 4020   |                                                  |                                                                              |                                                           |                               |                                                                               |                                                                               |                                                                                  |                                                                    |                                              |           |
| 250 A      | 3 P          | 41AC 3025   |                                                  |                                                                              |                                                           |                               |                                                                               |                                                                               |                                                                                  | 4 P                                                                | 41AC 4025                                    |           |
|            | 4 P          | 41AC 4025   |                                                  |                                                                              |                                                           |                               |                                                                               |                                                                               |                                                                                  |                                                                    |                                              |           |
| 315 A      | 3 P          | 41AC 3031   |                                                  |                                                                              |                                                           | 4 P                           |                                                                               | 41AC 4031                                                                     |                                                                                  |                                                                    |                                              |           |
|            | 4 P          | 41AC 4031   |                                                  |                                                                              |                                                           |                               |                                                                               |                                                                               |                                                                                  |                                                                    |                                              |           |
| 400 A      | 3 P          | 41AC 3039   |                                                  |                                                                              |                                                           | 4 P                           |                                                                               | 41AC 4039                                                                     |                                                                                  |                                                                    |                                              |           |
|            | 4 P          | 41AC 4039   |                                                  |                                                                              |                                                           |                               |                                                                               |                                                                               |                                                                                  |                                                                    |                                              |           |
| 500 A      | 3 P          | 41AC 3050   |                                                  |                                                                              |                                                           | 4 P                           |                                                                               | 41AC 4050                                                                     |                                                                                  |                                                                    |                                              |           |
|            | 4 P          | 41AC 4050   |                                                  |                                                                              |                                                           |                               |                                                                               |                                                                               |                                                                                  |                                                                    |                                              |           |
| 630 A      | 3 P          | 41AC 3063   |                                                  |                                                                              |                                                           | 4 P                           |                                                                               | 41AC 4063                                                                     |                                                                                  |                                                                    |                                              |           |
|            | 4 P          | 41AC 4063   |                                                  |                                                                              |                                                           |                               |                                                                               |                                                                               |                                                                                  |                                                                    |                                              |           |
| 800 A      | 3 P          | 41AC 3080   | J3 type<br>Blue<br>1132 1111<br>Red<br>1133 1111 | S4 type<br>Black IP65<br>1443 3113                                           | 200 mm<br>1401 1520<br>320 mm<br>1401 1532 <sup>(1)</sup> | 4109 0080                     |                                                                               | 1 <sup>st</sup> /2 <sup>nd</sup> contact<br>NO/NC<br>4109 0021 <sup>(2)</sup> | 3 P<br>2694 3051 <sup>(3)(4)</sup><br>4 P<br>2694 4051 <sup>(3)(4)</sup>         | 3 P<br>1509 3063 <sup>(5)</sup><br>4 P<br>1509 4063 <sup>(5)</sup> |                                              |           |
|            | 4 P          | 41AC 4080   |                                                  |                                                                              |                                                           |                               |                                                                               |                                                                               |                                                                                  |                                                                    |                                              |           |
| 1000 A     | 3 P          | 41AC 3100   |                                                  |                                                                              |                                                           |                               |                                                                               |                                                                               |                                                                                  |                                                                    | 4 P                                          | 41AC 4100 |
|            | 4 P          | 41AC 4100   |                                                  |                                                                              |                                                           |                               |                                                                               |                                                                               |                                                                                  |                                                                    |                                              |           |
| 1250 A     | 3 P          | 41AC 3120   |                                                  |                                                                              |                                                           |                               |                                                                               |                                                                               |                                                                                  |                                                                    | 4 P                                          | 41AC 4120 |
|            | 4 P          | 41AC 4120   |                                                  |                                                                              |                                                           |                               |                                                                               |                                                                               |                                                                                  |                                                                    |                                              |           |
| 1600 A     | 3 P          | 41AC 3160   |                                                  |                                                                              |                                                           |                               |                                                                               |                                                                               |                                                                                  |                                                                    | 4 P                                          | 41AC 4160 |
|            | 4 P          | 41AC 4160   |                                                  |                                                                              |                                                           |                               |                                                                               |                                                                               |                                                                                  |                                                                    |                                              |           |
| 1800 A     | 3 P          | 41AC 3180   |                                                  |                                                                              |                                                           | 4 P                           |                                                                               |                                                                               | 41AC 4180                                                                        |                                                                    |                                              |           |
|            | 4 P          | 41AC 4180   |                                                  |                                                                              |                                                           |                               |                                                                               |                                                                               |                                                                                  |                                                                    |                                              |           |
| 2000 A     | 3 P          | 41AC 3200   |                                                  |                                                                              |                                                           | 4 P                           | 41AC 4200                                                                     |                                                                               |                                                                                  |                                                                    |                                              |           |
|            | 4 P          | 41AC 4200   |                                                  |                                                                              |                                                           |                               |                                                                               |                                                                               |                                                                                  |                                                                    |                                              |           |
| 2500 A     | 3 P          | 41AC 3250   |                                                  |                                                                              |                                                           | S5 type<br>Black<br>2799 7042 | S5 type<br>Black IP65<br>1453 8113                                            |                                                                               | 200 mm<br>2799 3015<br>320 mm<br>2799 3018 <sup>(1)</sup><br>450 mm<br>2799 3019 | (6)                                                                | 1 <sup>st</sup> contact<br>NO/NC<br>included | included  |
|            | 4 P          | 41AC 4250   |                                                  |                                                                              |                                                           |                               |                                                                               |                                                                               |                                                                                  |                                                                    |                                              |           |
| 3200 A     | 3 P          | 41AC 3320   |                                                  |                                                                              |                                                           |                               |                                                                               |                                                                               |                                                                                  |                                                                    |                                              |           |
|            | 4 P          | 41AC 4320   |                                                  |                                                                              |                                                           |                               |                                                                               |                                                                               |                                                                                  |                                                                    |                                              |           |

(1) Standard.

(2) 2 pieces supplied, one for position I and one for position II.

(3) To fully shroud front, rear, top and bottom 4 references required.

(4) To shroud front switch top and bottom 2 references required.

(5) 2 pieces supplied, one for top side and another for bottom side.

(6) See "Copper bar connection kits" page 335.

SIRCOVER I - I+II - II

| Rating (A) | No. of poles | Switch body                     | Direct handle                            | External handle                                                                  | Shaft for external handle                                                        | Bridging bar                                                                     | Auxiliary contact                                                                    | Terminal shrouds                                                                       | Terminal screens                                                                 |                                                                                        |                                                                                        |                                                                                  |                                                                                  |                                                                                  |
|------------|--------------|---------------------------------|------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| 125 A      | 3 P          | 4190 <b>3013</b> <sup>(1)</sup> | Black<br>4199 <b>5012</b> <sup>(2)</sup> | S2 type<br>Black IP65<br>1423 <b>2114</b> <sup>(2)</sup>                         | 200 mm<br>1400 <b>1020</b><br>320 mm<br>1400 <b>1032</b> <sup>(2)</sup>          | 4109 <b>0019</b>                                                                 | 1 <sup>st</sup> /2 <sup>nd</sup> contact<br>NO/NC<br>4109 <b>0021</b> <sup>(3)</sup> | 3 P<br>2694 <b>3014</b> <sup>(4)(5)</sup><br>4 P<br>2694 <b>4014</b> <sup>(4)(5)</sup> | 3 P<br>1509 <b>3012</b><br>4 P<br>1509 <b>4012</b>                               |                                                                                        |                                                                                        |                                                                                  |                                                                                  |                                                                                  |
|            | 4 P          | 4190 <b>4013</b> <sup>(1)</sup> |                                          |                                                                                  |                                                                                  |                                                                                  |                                                                                      |                                                                                        |                                                                                  |                                                                                        |                                                                                        |                                                                                  |                                                                                  |                                                                                  |
| 160 A      | 3 P          | 4190 <b>3016</b> <sup>(1)</sup> |                                          |                                                                                  |                                                                                  |                                                                                  |                                                                                      |                                                                                        |                                                                                  | 4109 <b>0025</b>                                                                       | 3 P<br>2694 <b>3021</b> <sup>(4)(5)</sup><br>4 P<br>2694 <b>4021</b> <sup>(4)(5)</sup> | 3 P<br>1509 <b>3025</b><br>4 P<br>1509 <b>4025</b>                               |                                                                                  |                                                                                  |
|            | 4 P          | 4190 <b>4016</b> <sup>(1)</sup> |                                          |                                                                                  |                                                                                  |                                                                                  |                                                                                      |                                                                                        |                                                                                  |                                                                                        |                                                                                        |                                                                                  |                                                                                  |                                                                                  |
| 200 A      | 3 P          | 4190 <b>3019</b>                |                                          |                                                                                  |                                                                                  | 4109 <b>0039</b>                                                                 |                                                                                      |                                                                                        |                                                                                  | 3 P<br>2694 <b>3051</b> <sup>(4)(5)</sup><br>4 P<br>2694 <b>4051</b> <sup>(4)(5)</sup> |                                                                                        |                                                                                  | 3 P<br>1509 <b>3063</b> <sup>(6)</sup><br>4 P<br>1509 <b>4063</b> <sup>(6)</sup> |                                                                                  |
|            | 4 P          | 4190 <b>4019</b>                |                                          |                                                                                  |                                                                                  |                                                                                  |                                                                                      |                                                                                        |                                                                                  |                                                                                        |                                                                                        |                                                                                  |                                                                                  |                                                                                  |
| 250 A      | 3 P          | 4190 <b>3025</b> <sup>(1)</sup> |                                          |                                                                                  |                                                                                  |                                                                                  |                                                                                      | 4109 <b>0050</b>                                                                       | 3 P<br>1509 <b>3080</b> <sup>(6)</sup><br>4 P<br>1509 <b>4080</b> <sup>(6)</sup> |                                                                                        |                                                                                        |                                                                                  |                                                                                  | 3 P<br>1509 <b>3080</b> <sup>(6)</sup><br>4 P<br>1509 <b>4080</b> <sup>(6)</sup> |
|            | 4 P          | 4190 <b>4025</b> <sup>(1)</sup> |                                          |                                                                                  |                                                                                  |                                                                                  |                                                                                      |                                                                                        |                                                                                  |                                                                                        |                                                                                        |                                                                                  |                                                                                  |                                                                                  |
| 400 A      | 3 P          | 4190 <b>3039</b> <sup>(1)</sup> |                                          |                                                                                  |                                                                                  | 4109 <b>0063</b>                                                                 |                                                                                      |                                                                                        |                                                                                  |                                                                                        | 3 P<br>1509 <b>3160</b> <sup>(6)</sup><br>4 P<br>1509 <b>4160</b> <sup>(6)</sup>       | 3 P<br>1509 <b>3160</b> <sup>(6)</sup><br>4 P<br>1509 <b>4160</b> <sup>(6)</sup> |                                                                                  |                                                                                  |
|            | 4 P          | 4190 <b>4039</b> <sup>(1)</sup> |                                          |                                                                                  |                                                                                  |                                                                                  |                                                                                      |                                                                                        |                                                                                  |                                                                                        |                                                                                        |                                                                                  |                                                                                  |                                                                                  |
| 500 A      | 3 P          | 4190 <b>3050</b> <sup>(1)</sup> |                                          |                                                                                  |                                                                                  |                                                                                  |                                                                                      | 4109 <b>0080</b>                                                                       |                                                                                  | 3 P<br>1509 <b>3180</b><br>4 P<br>1509 <b>4180</b>                                     |                                                                                        |                                                                                  | 3 P<br>1509 <b>3180</b><br>4 P<br>1509 <b>4180</b>                               |                                                                                  |
|            | 4 P          | 4190 <b>4050</b> <sup>(1)</sup> |                                          |                                                                                  |                                                                                  |                                                                                  |                                                                                      |                                                                                        |                                                                                  |                                                                                        |                                                                                        |                                                                                  |                                                                                  |                                                                                  |
| 630 A      | 3 P          | 4190 <b>3063</b> <sup>(1)</sup> |                                          |                                                                                  |                                                                                  | 4109 <b>0120</b>                                                                 |                                                                                      | 3 P<br>1509 <b>3160</b> <sup>(6)</sup><br>4 P<br>1509 <b>4160</b> <sup>(6)</sup>       | 3 P<br>1509 <b>3160</b> <sup>(6)</sup><br>4 P<br>1509 <b>4160</b> <sup>(6)</sup> |                                                                                        |                                                                                        |                                                                                  |                                                                                  |                                                                                  |
|            | 4 P          | 4190 <b>4063</b> <sup>(1)</sup> |                                          |                                                                                  |                                                                                  |                                                                                  |                                                                                      |                                                                                        |                                                                                  |                                                                                        |                                                                                        |                                                                                  |                                                                                  |                                                                                  |
| 800 A      | 3 P          | 4190 <b>3080</b> <sup>(1)</sup> | 4109 <b>0160</b>                         | 3 P<br>1509 <b>3160</b> <sup>(6)</sup><br>4 P<br>1509 <b>4160</b> <sup>(6)</sup> | 3 P<br>1509 <b>3160</b> <sup>(6)</sup><br>4 P<br>1509 <b>4160</b> <sup>(6)</sup> |                                                                                  |                                                                                      |                                                                                        |                                                                                  |                                                                                        |                                                                                        |                                                                                  |                                                                                  |                                                                                  |
|            | 4 P          | 4190 <b>4080</b> <sup>(1)</sup> |                                          |                                                                                  |                                                                                  |                                                                                  |                                                                                      |                                                                                        |                                                                                  |                                                                                        |                                                                                        |                                                                                  |                                                                                  |                                                                                  |
| 1250 A     | 3 P          | 4190 <b>3120</b> <sup>(1)</sup> |                                          |                                                                                  |                                                                                  | 4109 <b>0160</b>                                                                 |                                                                                      |                                                                                        |                                                                                  | 3 P<br>1509 <b>3160</b> <sup>(6)</sup><br>4 P<br>1509 <b>4160</b> <sup>(6)</sup>       | 3 P<br>1509 <b>3160</b> <sup>(6)</sup><br>4 P<br>1509 <b>4160</b> <sup>(6)</sup>       |                                                                                  |                                                                                  |                                                                                  |
|            | 4 P          | 4190 <b>4120</b> <sup>(1)</sup> |                                          |                                                                                  |                                                                                  |                                                                                  |                                                                                      |                                                                                        |                                                                                  |                                                                                        |                                                                                        |                                                                                  |                                                                                  |                                                                                  |
| 1600 A     | 3 P          | 4190 <b>3160</b> <sup>(1)</sup> | 4109 <b>0160</b>                         |                                                                                  |                                                                                  | 3 P<br>1509 <b>3160</b> <sup>(6)</sup><br>4 P<br>1509 <b>4160</b> <sup>(6)</sup> |                                                                                      | 3 P<br>1509 <b>3160</b> <sup>(6)</sup><br>4 P<br>1509 <b>4160</b> <sup>(6)</sup>       |                                                                                  |                                                                                        |                                                                                        |                                                                                  |                                                                                  |                                                                                  |
|            | 4 P          | 4190 <b>4160</b> <sup>(1)</sup> |                                          |                                                                                  |                                                                                  |                                                                                  |                                                                                      |                                                                                        |                                                                                  |                                                                                        |                                                                                        |                                                                                  |                                                                                  |                                                                                  |
| 1800 A     | 3 P          | 4190 <b>3180</b>                | 4109 <b>0160</b>                         | 3 P<br>1509 <b>3160</b> <sup>(6)</sup><br>4 P<br>1509 <b>4160</b> <sup>(6)</sup> | 3 P<br>1509 <b>3160</b> <sup>(6)</sup><br>4 P<br>1509 <b>4160</b> <sup>(6)</sup> |                                                                                  |                                                                                      |                                                                                        |                                                                                  |                                                                                        |                                                                                        |                                                                                  |                                                                                  |                                                                                  |
|            | 4 P          | 4190 <b>4180</b>                |                                          |                                                                                  |                                                                                  |                                                                                  |                                                                                      |                                                                                        |                                                                                  |                                                                                        |                                                                                        |                                                                                  |                                                                                  |                                                                                  |

(1) Available enclosed (see "Enclosed changeover switches" page 625).

(2) Standard.

(3) 2 pieces supplied, one for position I and one for position II.

(4) To fully shroud front, rear, top and bottom 4 references required.

(5) To shroud front switch top and bottom 2 references required.

(6) 2 pieces supplied, one for top side and another for bottom side.

## References (continued)

### SIRCOVER Bypass

| Rating (A) | No. of poles | Switch body I-0-II              | Direct handle             | External handle                                                                            | Shaft for external handle                                                        | Bridging bar                                                                           | Auxiliary contact                                                                    | Terminal shrouds                                                                       | Terminal screens                                                                 |                                                                                        |                                                                                        |                                                    |
|------------|--------------|---------------------------------|---------------------------|--------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------|
| 125 A      | 3 + 6 P      | 4100 <b>7013</b> <sup>(1)</sup> | Black<br>4199 <b>5012</b> | S2 type<br>Black IP55<br>1421 <b>2113</b> <sup>(2)</sup><br>Black IP65<br>1423 <b>2113</b> | 200 mm<br>1400 <b>1020</b><br>320 mm<br>1400 <b>1032</b> <sup>(2)</sup>          | 4109 <b>0019</b>                                                                       | 1 <sup>st</sup> /2 <sup>nd</sup> contact<br>NO/NC<br>4109 <b>0021</b> <sup>(3)</sup> | 3 P<br>2694 <b>3014</b> <sup>(4)(5)</sup><br>4 P<br>2694 <b>4014</b> <sup>(4)(5)</sup> | 3 P<br>1509 <b>3012</b><br>4 P<br>1509 <b>4012</b>                               |                                                                                        |                                                                                        |                                                    |
|            | 4 + 8 P      | 4100 <b>9013</b> <sup>(1)</sup> |                           |                                                                                            |                                                                                  |                                                                                        |                                                                                      |                                                                                        |                                                                                  |                                                                                        |                                                                                        |                                                    |
| 160 A      | 3 + 6 P      | 4100 <b>7016</b> <sup>(1)</sup> |                           |                                                                                            |                                                                                  |                                                                                        |                                                                                      |                                                                                        |                                                                                  | 4109 <b>0019</b>                                                                       | 3 P<br>2694 <b>3014</b> <sup>(4)(5)</sup><br>4 P<br>2694 <b>4014</b> <sup>(4)(5)</sup> | 3 P<br>1509 <b>3012</b><br>4 P<br>1509 <b>4012</b> |
|            | 4 + 8 P      | 4100 <b>9016</b> <sup>(1)</sup> |                           |                                                                                            |                                                                                  |                                                                                        |                                                                                      |                                                                                        |                                                                                  |                                                                                        |                                                                                        |                                                    |
| 200 A      | 3 + 6 P      | 4100 <b>7019</b>                |                           |                                                                                            |                                                                                  |                                                                                        |                                                                                      |                                                                                        |                                                                                  | 4109 <b>0019</b>                                                                       | 3 P<br>2694 <b>3014</b> <sup>(4)(5)</sup><br>4 P<br>2694 <b>4014</b> <sup>(4)(5)</sup> | 3 P<br>1509 <b>3012</b><br>4 P<br>1509 <b>4012</b> |
|            | 4 + 8 P      | 4100 <b>9019</b>                |                           |                                                                                            |                                                                                  |                                                                                        |                                                                                      |                                                                                        |                                                                                  |                                                                                        |                                                                                        |                                                    |
| 250 A      | 3 + 6 P      | 4100 <b>7025</b> <sup>(1)</sup> | Black<br>2799 <b>7052</b> | S3 type<br>Black IP65<br>1433 <b>3113</b>                                                  | 200 mm<br>1401 <b>1520</b><br>320 mm<br>1401 <b>1532</b> <sup>(2)</sup>          | 4109 <b>0025</b>                                                                       |                                                                                      | 3 P<br>2694 <b>3021</b> <sup>(4)(5)</sup><br>4 P<br>2694 <b>4021</b> <sup>(4)(5)</sup> | 3 P<br>1509 <b>3025</b><br>4 P<br>1509 <b>4025</b>                               |                                                                                        |                                                                                        |                                                    |
|            | 4 + 8 P      | 4100 <b>9025</b> <sup>(1)</sup> |                           |                                                                                            |                                                                                  |                                                                                        |                                                                                      |                                                                                        |                                                                                  |                                                                                        |                                                                                        |                                                    |
| 400 A      | 3 + 6 P      | 4100 <b>7039</b> <sup>(1)</sup> |                           |                                                                                            |                                                                                  | 4109 <b>0039</b>                                                                       |                                                                                      |                                                                                        |                                                                                  | 3 P<br>2694 <b>3021</b> <sup>(4)(5)</sup><br>4 P<br>2694 <b>4021</b> <sup>(4)(5)</sup> | 3 P<br>1509 <b>3025</b><br>4 P<br>1509 <b>4025</b>                                     |                                                    |
|            | 4 + 8 P      | 4100 <b>9039</b> <sup>(1)</sup> |                           |                                                                                            |                                                                                  |                                                                                        |                                                                                      |                                                                                        |                                                                                  |                                                                                        |                                                                                        |                                                    |
| 500 A      | 3 + 6 P      | 4100 <b>7050</b> <sup>(1)</sup> |                           |                                                                                            |                                                                                  | 4109 <b>0050</b>                                                                       |                                                                                      | 3 P<br>2694 <b>3051</b> <sup>(4)(5)</sup><br>4 P<br>2694 <b>4051</b> <sup>(4)(5)</sup> | 3 P<br>1509 <b>3063</b> <sup>(6)</sup><br>4 P<br>1509 <b>4063</b> <sup>(6)</sup> |                                                                                        |                                                                                        |                                                    |
|            | 4 + 8 P      | 4100 <b>9050</b> <sup>(1)</sup> |                           |                                                                                            |                                                                                  |                                                                                        |                                                                                      |                                                                                        |                                                                                  |                                                                                        |                                                                                        |                                                    |
| 630 A      | 3 + 6 P      | 4100 <b>7063</b> <sup>(1)</sup> |                           |                                                                                            |                                                                                  | 4109 <b>0063</b>                                                                       |                                                                                      |                                                                                        |                                                                                  | 3 P<br>2694 <b>3051</b> <sup>(4)(5)</sup><br>4 P<br>2694 <b>4051</b> <sup>(4)(5)</sup> | 3 P<br>1509 <b>3063</b> <sup>(6)</sup><br>4 P<br>1509 <b>4063</b> <sup>(6)</sup>       |                                                    |
|            | 4 + 8 P      | 4100 <b>9063</b> <sup>(1)</sup> |                           |                                                                                            |                                                                                  |                                                                                        |                                                                                      |                                                                                        |                                                                                  |                                                                                        |                                                                                        |                                                    |
| 800 A      | 3 + 6 P      | 4100 <b>7080</b> <sup>(1)</sup> |                           |                                                                                            |                                                                                  | 4109 <b>0080</b>                                                                       |                                                                                      | 3 P<br>2694 <b>3051</b> <sup>(4)(5)</sup><br>4 P<br>2694 <b>4051</b> <sup>(4)(5)</sup> | 3 P<br>1509 <b>3063</b> <sup>(6)</sup><br>4 P<br>1509 <b>4063</b> <sup>(6)</sup> |                                                                                        |                                                                                        |                                                    |
|            | 4 + 8 P      | 4100 <b>9080</b> <sup>(1)</sup> |                           |                                                                                            |                                                                                  |                                                                                        |                                                                                      |                                                                                        |                                                                                  |                                                                                        |                                                                                        |                                                    |
| 1250 A     | 3 + 6 P      | 4100 <b>7120</b> <sup>(1)</sup> | 4109 <b>0120</b>          | 3 P<br>2694 <b>3051</b> <sup>(4)(5)</sup><br>4 P<br>2694 <b>4051</b> <sup>(4)(5)</sup>     | 3 P<br>1509 <b>3063</b> <sup>(6)</sup><br>4 P<br>1509 <b>4063</b> <sup>(6)</sup> |                                                                                        |                                                                                      |                                                                                        |                                                                                  |                                                                                        |                                                                                        |                                                    |
|            | 4 + 8 P      | 4100 <b>9120</b> <sup>(1)</sup> |                           |                                                                                            |                                                                                  |                                                                                        |                                                                                      |                                                                                        |                                                                                  |                                                                                        |                                                                                        |                                                    |
| 1600 A     | 3 + 6 P      | 4100 <b>7160</b> <sup>(1)</sup> | 4109 <b>0160</b>          |                                                                                            |                                                                                  | 3 P<br>2694 <b>3051</b> <sup>(4)(5)</sup><br>4 P<br>2694 <b>4051</b> <sup>(4)(5)</sup> |                                                                                      | 3 P<br>1509 <b>3063</b> <sup>(6)</sup><br>4 P<br>1509 <b>4063</b> <sup>(6)</sup>       |                                                                                  |                                                                                        |                                                                                        |                                                    |
|            | 4 + 8 P      | 4100 <b>9160</b> <sup>(1)</sup> |                           |                                                                                            |                                                                                  |                                                                                        |                                                                                      |                                                                                        |                                                                                  |                                                                                        |                                                                                        |                                                    |

(1) Available enclosed (see "Enclosed changeover switches" page 625).

(2) Standard.

(3) 2 pieces supplied, one for position I and one for position II.

(4) To shroud front switch top and bottom 3 references required.

(5) To fully shroud front, rear, top and bottom 6 references required.

(6) 2 pieces supplied, one for top side and another for bottom side.

## Accessories

### Direct operation handle

| SIRCOVER AC I-0-II |               |             |                                |
|--------------------|---------------|-------------|--------------------------------|
| Rating (A)         | Handle colour | Handle type | Reference                      |
| 125 ... 630        | Blue          | J2 type     | 1122 <b>1111</b>               |
| 125 ... 630        | Red           | J2 type     | 1123 <b>1111</b>               |
| 800 ... 1800       | Blue          | J3 type     | 1132 <b>1111</b>               |
| 800 ... 1800       | Red           | J3 type     | 1133 <b>1111</b>               |
| 2000 ... 3200      | Black         | S5 type     | 2799 <b>7042<sup>(1)</sup></b> |

| SIRCOVER I - I+II - II |               |             |                  |
|------------------------|---------------|-------------|------------------|
| Rating (A)             | Handle colour | Handle type | Reference        |
| 125 ... 630            | Black         | B3 type     | 4199 <b>5012</b> |
| 800 ... 1800           | Black         | C1 type     | 2799 <b>7052</b> |

| SIRCOVER Bypass |               |             |                                |
|-----------------|---------------|-------------|--------------------------------|
| Rating (A)      | Handle colour | Handle type | Reference                      |
| 125 ... 200     | Black         | B3 type     | 4199 <b>5012</b>               |
| 250 ... 630     | Black         | C1 type     | 2799 <b>7052</b>               |
| 800 ... 1600    | Black         | C2 type     | 2799 <b>7012<sup>(1)</sup></b> |

(1) Double lever handle



### External operation handle

#### Use

Door interlocked external front operation handles include an escutcheon, are padlockable and must be utilised with an extension shaft.

| SIRCOVER AC I-0-II and SIRCOVER I-I+II-II |                |                            |         |                                |
|-------------------------------------------|----------------|----------------------------|---------|--------------------------------|
| Rating (A)                                | Switching type | External IP <sup>(1)</sup> | Handle  | Reference                      |
| 125 ... 630                               | I - 0 - II     | IP55                       | S2 type | 1421 <b>2113</b>               |
| 125 ... 630                               | I - 0 - II     | IP65                       | S2 type | 1423 <b>2113</b>               |
| 125 ... 630                               | I - I+II - II  | IP65                       | S2 type | 1423 <b>2114</b>               |
| 800 ... 1800                              | I - 0 - II     | IP65                       | S4 type | 1443 <b>3113<sup>(2)</sup></b> |
| 800 ... 1800                              | I - I+II - II  | IP65                       | S4 type | 1443 <b>3114<sup>(2)</sup></b> |
| 2000 ... 3200                             | I - 0 - II     | IP65                       | S5 type | 1453 <b>8113<sup>(2)</sup></b> |

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

(2) Double lever handle.

| SIRCOVER Bypass |                |                            |         |                  |
|-----------------|----------------|----------------------------|---------|------------------|
| Rating (A)      | Switching type | External IP <sup>(1)</sup> | Handle  | Reference        |
| 125 ... 200     | I - 0 - II     | IP55                       | S2 type | 1421 <b>2113</b> |
| 125 ... 200     | I - 0 - II     | IP65                       | S2 type | 1423 <b>2113</b> |
| 250 ... 630     | I - 0 - II     | IP65                       | S3 type | 1433 <b>3113</b> |
| 800 ... 1600    | I - 0 - II     | IP65                       | V2 type | 4199 <b>7146</b> |

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



### Alternative S-type handle cover colours

#### Use

For single lever handles S1, S2, S3 type and for double lever handle S4 type.  
Other colours: Please consult us.

| Colour     | To be ordered in multiples of | Handle      | Reference        |
|------------|-------------------------------|-------------|------------------|
| Light grey | 50                            | S2, S3 type | 1401 <b>0001</b> |
| Dark grey  | 50                            | S2, S3 type | 1401 <b>0011</b> |
| Light grey | 50                            | S4 type     | 1401 <b>0031</b> |
| Dark grey  | 50                            | S4 type     | 1401 <b>0041</b> |



### S-type handle adapter

#### Use

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

#### Dimensions

Adds 12 mm to the depth.

| Colour | To be ordered in multiples of | External IP <sup>(1)</sup> | Reference        |
|--------|-------------------------------|----------------------------|------------------|
| Black  | 1                             | IP65                       | 1493 <b>0000</b> |

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



## Accessories (continued)

### Shaft guide for external operation

#### Use

To guide the shaft extension into the external handle.

This accessory enables handle to engage extension shaft with a misalignment of up to 15 mm.

Required for shaft lengths over 320 mm.



access\_260\_a\_2\_cat

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

### Shaft for external handle

#### Use

Standard lengths:

- 200 mm,
- 320 mm,
- 450 mm.

Other lengths: Please consult us.



access\_369\_a\_1\_cat

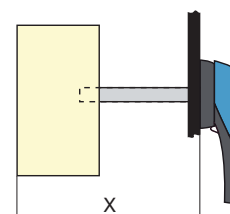


access\_144\_b\_1\_cat

| SIRCOVER AC I-0-II and SIRCOVER I-I+II-II |             |                  |           |
|-------------------------------------------|-------------|------------------|-----------|
| Rating (A)                                | Length (mm) | Dimension X (mm) | Reference |
| 125 ... 400                               | 200         | 210 ... 310      | 1400 1020 |
| 125 ... 400                               | 320         | 210 ... 430      | 1400 1032 |
| 500 ... 630                               | 200         | 280 ... 390      | 1400 1020 |
| 500 ... 630                               | 320         | 280 ... 510      | 1400 1032 |
| 800 ... 1800                              | 200         | 425 ... 577      | 1401 1520 |
| 800 ... 1800                              | 320         | 425 ... 697      | 1401 1532 |
| 2000 ... 3200                             | 200         | 653 ... 803      | 2799 3015 |
| 2000 ... 3200                             | 320         | 653 ... 923      | 2799 3018 |
| 2000 ... 3200                             | 450         | 653 ... 1053     | 2799 3019 |

#### SIRCOVER Bypass

| Rating (A)   | Length (mm) | Dimension X (mm) | Reference |
|--------------|-------------|------------------|-----------|
| 125 ... 200  | 200         | 320 ... 450      | 1400 1020 |
| 125 ... 200  | 320         | 320 ... 570      | 1400 1032 |
| 250 ... 400  | 200         | 298 ... 420      | 1401 1520 |
| 250 ... 400  | 320         | 298 ... 540      | 1401 1532 |
| 500 ... 630  | 200         | 417 ... 539      | 1401 1520 |
| 500 ... 630  | 320         | 417 ... 659      | 1401 1532 |
| 800 ... 1600 | 200         | 550 ... 680      | 2799 3015 |
| 800 ... 1600 | 320         | 550 ... 800      | 2799 3018 |
| 800 ... 1600 | 450         | 550 ... 930      | 2799 3019 |



access\_202\_a\_1\_x\_cat

### Bridging bars

#### Use

For creating a common connection between switches I & II, on the top or bottom side of the SIRCOVER, to enable, for example, the load to be fed from either incoming source (I or II).

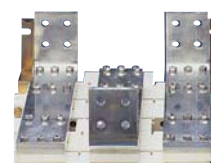
For SIRCOVER Bypass, two sets of bridging bars are needed as the switch is composed of three basic switch frames.

| Rating (A)    | Section (mm) | Reference |
|---------------|--------------|-----------|
| 125 ... 200   | 20 x 2.5     | 4109 0019 |
| 250           | 25 x 2.5     | 4109 0025 |
| 315 ... 400   | 32 x 5       | 4109 0039 |
| 500           | 32 x 5       | 4109 0050 |
| 630           | 50 x 5       | 4109 0063 |
| 800 ... 1000  | 50 x 6       | 4109 0080 |
| 1250          | 60 x 8       | 4109 0120 |
| 1600 ... 1800 | 90 x 10      | 4109 0160 |

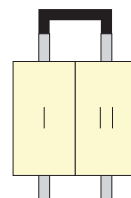
#### SIRCOVER AC I-0-II and SIRCOVER I-I+II-II



access\_205\_a\_2\_cat



access\_041\_a\_1\_cat

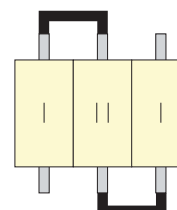


svr\_124\_a\_1\_cat

#### SIRCOVER Bypass



access\_208\_a\_2\_cat



svr\_068\_a\_1\_x\_cat



## Copper bar connection kits from 2000 to 3200 A - SIRCOVER

### Use

Enables:

- connection between the two power terminals of the same pole for 2000 to 3200 A ratings (Fig. 1 and Fig 2).
- top or bottom bridging connection (Fig. 3).

For 3200 A rating, the connection pieces (part A) are delivered bridged from factory. Bolt sets must be ordered separately.

Further details for these specific accessories are available in the user guide downloadable from [www.socomec.com](http://www.socomec.com).

Fig. 1



access\_226\_b\_1\_x\_cat

### Top or bottom flat connection - Fig. 1

| Rating (A)    | Piece               | Quantity to order per pole <sup>(1)</sup> | Reference        |
|---------------|---------------------|-------------------------------------------|------------------|
| 2000 ... 2500 | Connection - part A | 2                                         | 2619 <b>1200</b> |
| 2000 ... 2500 | Bolt set - part B   | 2                                         | 2699 <b>1200</b> |
| 3200          | Connection - part A |                                           | included         |
| 3200          | Bolt set - part B   | 2                                         | 2699 <b>1200</b> |

(1) Example for 3 pole device equipped upstream only: Order 3 times the indicated quantities.

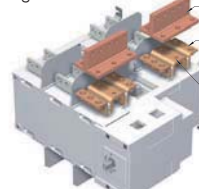
### Top or bottom edgewise connection - Fig. 2

| Rating (A)    | Piece               | Quantity to order per pole <sup>(1)</sup> | Reference                       |
|---------------|---------------------|-------------------------------------------|---------------------------------|
| 2000 ... 2500 | Connection - part A | 2                                         | 2619 <b>1200</b>                |
| 2000 ... 2500 | T piece - part C    | 2                                         | 2629 <b>1200</b> <sup>(2)</sup> |
| 2000 ... 2500 | Bracket - part D    | 2                                         | 2639 <b>1200</b> <sup>(2)</sup> |
| 3200          | Connection - part A |                                           | included                        |
| 3200          | T piece - part C    | 2                                         | 2629 <b>1200</b> <sup>(2)</sup> |
| 3200          | Bracket - part D    | 2                                         | 2639 <b>1200</b> <sup>(2)</sup> |

(1) Example for 3 pole device equipped upstream only: Order 3 times the indicated quantities.

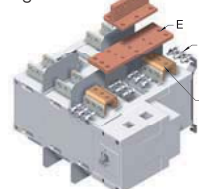
(2) Bolt set is provided with the accessories.

Fig.2



access\_228\_b\_1\_x\_cat

Fig. 3



access\_230\_b\_1\_x\_cat

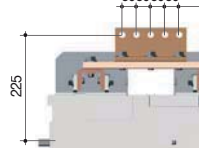
### Top or bottom bridging connection - Fig. 3

| Rating (A)    | Piece               | Quantity to order per pole <sup>(1)</sup> | Reference                       |
|---------------|---------------------|-------------------------------------------|---------------------------------|
| 2000 ... 2500 | Connection - part A | 2                                         | 2619 <b>1200</b>                |
| 2000 ... 2500 | Bolt set - part B   | 2                                         | 2699 <b>1200</b>                |
| 2000 ... 2500 | Bar - part E        | 1                                         | 4109 <b>0250</b> <sup>(2)</sup> |
| 2000 ... 2500 | T piece - part C    | 1                                         | 2629 <b>1200</b> <sup>(2)</sup> |
| 3200          | Connection - part A |                                           | included                        |
| 3200          | Bolt set - part B   | 2                                         | 2699 <b>1200</b>                |
| 3200          | Bar - part E        | 1                                         | 4109 <b>0320</b> <sup>(2)</sup> |
| 3200          | T piece - part C    | 1                                         | 2629 <b>1200</b> <sup>(2)</sup> |

(1) Example for 3 pole device equipped upstream only: Order 3 times the indicated quantities.

(2) Bolt set is provided with the accessories.

Fig. 3



access\_234\_a\_1\_cat

## Auxiliary contact

### Use

Pre breaking and signalling of positions I and II: 1 or 2 NO/NC auxiliary contacts in each position.  
Low level auxiliary contacts: Please consult us.

### Connection to the control circuit

6.35 mm fast-on terminal.

### Electrical characteristics

30 000 operations.

### Characteristics

| Rating (A)   | Nominal current (A) | Operating current I <sub>o</sub> (A) |                  |                 |                 |
|--------------|---------------------|--------------------------------------|------------------|-----------------|-----------------|
|              |                     | A - 250<br>13 VAC                    | 400 VAC<br>AC-13 | 24 VDC<br>DC-13 | 48 VDC<br>DC-13 |
| 125 ... 3200 | 16                  | 12                                   | 8                | 14              | 6               |

### NO/NC changeover contact

| Rating (A)    | Contact(s)                       | Reference        |
|---------------|----------------------------------|------------------|
| 125 ... 1800  | 1 <sup>st</sup> /2 <sup>nd</sup> | 4109 <b>0021</b> |
| 2000 ... 3200 | 1 <sup>st</sup>                  | included         |



svr\_0058\_a\_1\_cat



access\_065\_a\_1\_cat



### Accessories (continued)

#### Terminal shrouds

##### Use

Protection against direct contact with terminals or connecting parts.

##### Advantage

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

| Rating (A)  | No. of poles | Position                             | Reference                          |
|-------------|--------------|--------------------------------------|------------------------------------|
| 125 ... 200 | 3 P          | top / bottom / front (I) / rear (II) | 2694 <b>3014</b> <sup>(1)(2)</sup> |
| 125 ... 200 | 4 P          | top / bottom / front (I) / rear (II) | 2694 <b>4014</b> <sup>(1)(2)</sup> |
| 250 ... 400 | 3 P          | top / bottom / front (I) / rear (II) | 2694 <b>3021</b> <sup>(1)(2)</sup> |
| 250 ... 400 | 4 P          | top / bottom / front (I) / rear (II) | 2694 <b>4021</b> <sup>(1)(2)</sup> |
| 500 ... 630 | 3 P          | top / bottom / front (I) / rear (II) | 2694 <b>3051</b> <sup>(1)(2)</sup> |
| 500 ... 630 | 4 P          | top / bottom / front (I) / rear (II) | 2694 <b>4051</b> <sup>(1)(2)</sup> |

(1) To shroud front switch top and bottom 4 references required for a SIRCOVER and 6 references for a SIRCOVER Bypass.

(2) To shroud front switch top and bottom 2 references required for a SIRCOVER and a SIRCOVER Bypass.



access\_206\_a\_2\_cat

#### Terminal screens

##### Use

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

| Rating (A)    | No. of poles | Position     | Reference        |
|---------------|--------------|--------------|------------------|
| 125 ... 200   | 3 P          | top / bottom | 1509 <b>3012</b> |
| 125 ... 200   | 4 P          | top / bottom | 1509 <b>4012</b> |
| 250 ... 400   | 3 P          | top / bottom | 1509 <b>3025</b> |
| 250 ... 400   | 4 P          | top / bottom | 1509 <b>4025</b> |
| 500 ... 630   | 3 P          | top / bottom | 1509 <b>3063</b> |
| 500 ... 630   | 4 P          | top / bottom | 1509 <b>4063</b> |
| 800 ... 1250  | 3 P          | top / bottom | 1509 <b>3080</b> |
| 800 ... 1250  | 4 P          | top / bottom | 1509 <b>4080</b> |
| 1600 ... 1800 | 3 P          | top / bottom | 1509 <b>3160</b> |
| 1600 ... 1800 | 4 P          | top / bottom | 1509 <b>4160</b> |
| 2000 ... 3200 | 3 / 4 P      | top / bottom | included         |



access\_207\_a\_2\_cat

## Key handle interlocking system

### Padlocking in position I, 0 or II

| Rating (A)<br>SIRCOVER | Rating (A)<br>SIRCOVER<br>Bypass | Operation | Figure | Reference        |
|------------------------|----------------------------------|-----------|--------|------------------|
| 125 ... 630            | 125 ... 200                      | external  | 1      | 1423 <b>2813</b> |

### Locking using RONIS EL11AP lock in position 0 (not included)

| Rating (A)<br>SIRCOVER | Rating (A)<br>SIRCOVER<br>Bypass | Operation | Figure | Reference                      |
|------------------------|----------------------------------|-----------|--------|--------------------------------|
| 125 ... 630            | 125 ... 200                      | direct    | 2      | 4109 <b>1006<sup>(1)</sup></b> |
|                        | 250 ... 630                      | direct    | 3      | Please consult us              |
| 800 ... 1800           | 800 ... 1600                     | direct    | 3      | 4109 <b>1004<sup>(2)</sup></b> |
| 2000 ... 3200          |                                  | direct    | 3      | 4109 <b>2007<sup>(2)</sup></b> |
| 125 ... 1800           | 125 ... 630                      | external  | 4      | 1499 <b>7701<sup>(2)</sup></b> |
| 2000 ... 3200          | 800 ... 1600                     | external  | 4      | 2799 <b>7002<sup>(2)</sup></b> |

<sup>(1)</sup> Specific handle included.

<sup>(2)</sup> This locking facility can be configured by the user in the 3 positions.

### Locking using RONIS EL11AP lock in position I, 0, II (not included)

| Rating (A)<br>SIRCOVER | Rating (A)<br>SIRCOVER<br>Bypass | Operation | Figure | Reference                      |
|------------------------|----------------------------------|-----------|--------|--------------------------------|
| 125 ... 630            | 125 ... 200                      | direct    | 2      | 4109 <b>1002<sup>(1)</sup></b> |
|                        | 250 ... 630                      | direct    | 3      | Please consult us              |
| 800 ... 1800           | 800 ... 1600                     | direct    | 3      | 4109 <b>1004<sup>(2)</sup></b> |
| 2000 ... 3200          |                                  | direct    | 3      | 4109 <b>2007<sup>(2)</sup></b> |
| 125 ... 1800           | 125 ... 630                      | external  | 4      | 1499 <b>7701<sup>(2)</sup></b> |
| 2000 ... 3200          | 800 ... 1600                     | external  | 4      | 2799 <b>7002<sup>(2)</sup></b> |

<sup>(1)</sup> Specific handle included.

<sup>(2)</sup> This locking facility can be configured by the user in the 3 positions.

### Locking using 230 VAC undervoltage coil in position (factory fitted)

| Rating (A)<br>SIRCOVER | Rating (A)<br>SIRCOVER<br>Bypass | Operation | Figure | Reference         |
|------------------------|----------------------------------|-----------|--------|-------------------|
| 800 ... 3200           | 800 ... 1600                     | direct    | 3      | Please consult us |

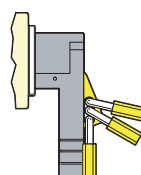
### Locking using type K CASTELL lock (not supplied)

| Rating (A)<br>SIRCOVER | Rating (A)<br>SIRCOVER<br>Bypass | Operation | Figure | Reference        |
|------------------------|----------------------------------|-----------|--------|------------------|
| 125 ... 1800           | 125 ... 630                      | external  | 4      | 1499 <b>7702</b> |
| 2000 ... 3200          | 800 ... 1600                     | external  | 4      | 2799 <b>7003</b> |

### Use

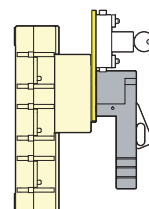
- Using padlock (not supplied). This device is factory mounted in the direct or external operation handle and allows the use of up to 3 padlocks.
- Locking:
  - - using lock (not supplied)
  - - using undervoltage coil.
- The interlocking positions are either determined as standard or configured by the user by removing the pre-formed tabs.
- Padlocking and locking can be combined.

Fig. 1



access\_061\_a\_1\_x\_cat

Fig.2



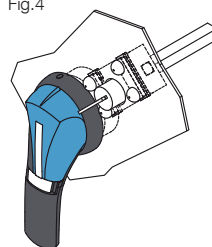
access\_001\_a\_1\_x\_cat

Fig. 3



access\_132\_a\_1\_x\_cat

Fig.4



access\_158\_a\_1\_x\_cat

## Other specific accessories



bd\_03\_04\_01

- Customised protection screens (for specific dimensions or high ambient temperatures).
- Inter phase barrier.
- Connection accessories.
- Low level auxiliary contacts.

## SIRCOVER AC I-0-II - Characteristics according to IEC 60947-3 and IEC 60947-6-1

### 125 to 630 A

| Thermal current $I_{th}$ at 40°C               | 125 A | 160 A | 200 A | 250 A | 315A | 400 A | 500 A | 630 A |
|------------------------------------------------|-------|-------|-------|-------|------|-------|-------|-------|
| 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    |

### Rated operational currents $I_e$ (A)

| Rated voltage          | Utilisation category | A/B <sup>(1)</sup> | A/B <sup>(1)</sup> | A/B <sup>(1)</sup> | A/B <sup>(1)</sup> | A/B <sup>(1)</sup> | A/B <sup>(1)</sup> | A/B <sup>(1)</sup> | A/B <sup>(1)</sup> |
|------------------------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| 415 VAC                | AC-20 A / AC-20 B    | 125/125            | 160/160            | 200/200            | 250/250            | 315/315            | 400/400            | 500/500            | 630/630            |
| 415 VAC                | AC-21 A / AC-21 B    | 125/125            | 160/160            | 200/200            | 250/250            | 315/315            | 400/400            | 500/500            | 630/630            |
| 415 VAC                | AC-22 A / AC-22 B    | 125/125            | 160/160            | 200/200            | 250/250            | 315/315            | 400/400            | 500/500            | 630/630            |
| 415 VAC                | AC-23 A / AC-23 B    | 125/125            | 160/160            | 200/200            | 200/200            | 315/315            | 400/400            | 500/500            | 630/630            |
| 500 VAC                | AC-20 A / AC-20 B    | 125/125            | 160/160            | 200/200            | 250/250            | 315/315            | 400/400            | 500/500            | 630/630            |
| 500 VAC                | AC-21 A / AC-21 B    | 125/125            | 160/160            | 200/200            | 250/250            | 315/315            | 400/400            | 500/500            | 630/630            |
| 500 VAC                | AC-22 A / AC-22 B    | 125/125            | 160/160            | 200/200            | 200/250            | 200/315            | 200/400            | 500/500            | 500/500            |
| 500 VAC                | AC-23 A / AC-23 B    | 80/80              | 80/80              | 80/80              | 200/200            | 200/200            | 200/200            | 400/400            | 400/400            |
| 690 VAC                | AC-20 A / AC-20 B    | 125/125            | 160/160            | 200/200            | 250/250            | 315/315            | 400/400            | 500/500            | 630/630            |
| 690 VAC                | AC-21 A / AC-21 B    | 125/125            | 160/160            | 200/200            | 200/200            | 200/200            | 200/200            | 500/500            | 500/500            |
| 690 VAC                | AC-22 A / AC-22 B    | 125/125            | 125/125            | 125/125            | 160/160            | 160/160            | 160/160            | 400/400            | 400/400            |
| 690 VAC                | AC-23 A / AC-23 B    | 63/80              | 63/80              | 63/80              | 125/125            | 125/125            | 125/125            | 400/400            | 400/400            |
| 220 VDC <sup>(2)</sup> | DC-20 A / DC-20 B    | 125/125            | 160/160            | 200/200            | 250/250            | 315/315            | 400/400            | 500/500            | 630/630            |
| 220 VDC <sup>(2)</sup> | DC-21 A / DC-21 B    | 125/125            | 160/160            | 200/200            | 250/250            | 250/250            | 250/250            | 500/500            | 630/630            |
| 220 VDC <sup>(2)</sup> | DC-22 A / DC-22 B    | 125/125            | 160/160            | 200/200            | 250/250            | 250/250            | 250/250            | 500/500            | 630/630            |
| 220 VDC <sup>(2)</sup> | DC-23 A / DC-23 B    | 125/125            | 125/125            | 125/125            | 200/200            | 200/200            | 200/200            | 500/500            | 630/630            |
| 440 VDC <sup>(2)</sup> | DC-20 A / DC-20 B    | 125/125            | 160/160            | 200/200            | 250/250            | 315/315            | 400/400            | 500/500            | 630/630            |
| 440 VDC <sup>(2)</sup> | DC-21 A / DC-21 B    | 125/125            | 125/125            | 125/125            | 200/200            | 200/200            | 200/200            | 500/500            | 630/630            |
| 440 VDC <sup>(2)</sup> | DC-22 A / DC-22 B    | 125/125            | 125/125            | 125/125            | 200/200            | 200/200            | 200/200            | 500/500            | 630/630            |
| 440 VDC <sup>(2)</sup> | DC-23 A / DC-23 B    | 125/125            | 125/125            | 125/125            | 200/200            | 200/200            | 200/200            | 500/500            | 630/630            |

### Operational power in AC-23 (kW)

|                                                   |       |       |       |         |         |         |         |         |
|---------------------------------------------------|-------|-------|-------|---------|---------|---------|---------|---------|
| At 400 VAC without pre-break in AC <sup>(3)</sup> | 63/63 | 80/80 | 80/80 | 132/132 | 132/132 | 280/280 | 280/280 | 450/450 |
| At 690 VAC without pre-break in AC <sup>(3)</sup> | 55/75 | 55/75 | 55/75 | 90/110  | 90/110  | 150/185 | 150/185 | 185/220 |

### Reactive power (kvar)

|                           |    |    |    |     |     |     |     |     |
|---------------------------|----|----|----|-----|-----|-----|-----|-----|
| At 400 VAC <sup>(5)</sup> | 55 | 75 | 90 | 115 | 145 | 185 | 230 | 290 |
|---------------------------|----|----|----|-----|-----|-----|-----|-----|

### Rated operational currents $I_e$ (A) according to IEC 60947-6-1

| Rated voltage | Utilisation category | A/B <sup>(1)</sup> | A/B <sup>(1)</sup> | A/B <sup>(1)</sup> | A/B <sup>(1)</sup> | A/B <sup>(1)</sup> | A/B <sup>(1)</sup> | A/B <sup>(1)</sup> | A/B <sup>(1)</sup> |
|---------------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| 415 VAC       | AC-31 A / AC-31 B    | 125                | 160                | 200                | 250                | 315                | 400                | 500                | 630                |
| 415 VAC       | AC-32 A / AC-32 B    |                    |                    |                    | 200                | 315                | 400                | 500                | 500                |
| 415 VAC       | AC-33 A / AC-33 B    |                    |                    |                    | 200                | 200                | 200                | 400                | 400                |

### Fuse protected short-circuit withstand as per IEC 60947-3 at 690 VAC

|                                            |                    |                    |                   |     |     |     |     |     |
|--------------------------------------------|--------------------|--------------------|-------------------|-----|-----|-----|-----|-----|
| Prospective short-circuit current (kA rms) | 100 <sup>(5)</sup> | 100 <sup>(5)</sup> | 50 <sup>(5)</sup> | 50  | 50  | 50  | 50  | 50  |
| Associated fuse rating (A)                 | 125                | 160                | 200               | 250 | 315 | 400 | 500 | 630 |

### Circuit breaker protected short-circuit withstand with any circuit breaker that ensures tripping in less than 0.3s<sup>(4)</sup>

|                                                      |                   |                   |                   |    |    |    |    |    |
|------------------------------------------------------|-------------------|-------------------|-------------------|----|----|----|----|----|
| Rated short-time withstand current 0.3s Icw (kA rms) | 12 <sup>(5)</sup> | 12 <sup>(5)</sup> | 12 <sup>(5)</sup> | 15 | 15 | 15 | 17 | 17 |
|------------------------------------------------------|-------------------|-------------------|-------------------|----|----|----|----|----|

### Short-circuit withstand without protection as per IEC 60947-3 at 690 VAC

|                                                                                      |                  |                  |                  |                   |                   |                   |    |      |
|--------------------------------------------------------------------------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|----|------|
| Rated short-time withstand current 1s Icw (kA rms)                                   | 7 <sup>(5)</sup> | 7 <sup>(5)</sup> | 7 <sup>(5)</sup> | 8                 | 8                 | 8                 | 10 | 10   |
| Rated short-circuit making capacity Icm (kA peak)                                    | 11.9             | 11.9             | 11.9             | 22                | 22                | 22                | 17 | 17   |
| Rated short-time withstand current 60ms Icw (kA rms) as per IEC 60947-6-1 at 415 VAC |                  |                  |                  | 10 <sup>(6)</sup> | 10 <sup>(6)</sup> | 10 <sup>(6)</sup> | 10 | 12.6 |

### Connection

|                                                    |      |      |      |       |       |       |         |            |
|----------------------------------------------------|------|------|------|-------|-------|-------|---------|------------|
| Minimum Cu cable cross-section (mm <sup>2</sup> )  | 35   | 50   | 70   | 95    | 150   | 185   | 240     | 2 x 150    |
| Minimum Cu busbar cross-section (mm <sup>2</sup> ) |      |      |      |       |       |       |         | 2 x 30 x 5 |
| Maximum Cu cable cross-section (mm <sup>2</sup> )  | 50   | 95   | 120  | 150   | 240   | 240   | 2 x 185 | 2 x 300    |
| Maximum Cu busbar width (mm)                       | 25   | 25   | 25   | 32    | 32    | 32    | 50      | 50         |
| Tightening torque mini / maxi (Nm)                 | 9/13 | 9/13 | 9/13 | 20/26 | 20/26 | 20/26 | 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)               | 2.9    | 2.9    | 2.9    | 3.8    | 3.9    | 3.9    | 8.6    | 9.1    |
| Weight of 4 P switch (kg)               | 4.1    | 4.1    | 4.1    | 4.6    | 4.9    | 4.9    | 10.4   | 11.1   |

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

(2) 3-pole device with 2 pole in series for the "+" and 1 pole for the "-". 4-pole device with 2 pole in series by polarity.

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

(4) Value for coordination with any circuit breaker that ensures tripping in less than 0.3s.

For coordination with specific circuit-breaker references, higher short-circuit current values are available. Please consult us.

(5) Data at 415 VAC

(6) Data at 30 ms

## 800 to 3200 A

| Thermal current $I_{th}$ at 40°C               | 800 A | 1000 A | 1250 A | 1600 A | 1800 A | 2000 A | 2500 A | 3200 A |
|------------------------------------------------|-------|--------|--------|--------|--------|--------|--------|--------|
| Rated insulation voltage $U_i$ (V)             | 1000  | 1000   | 1000   | 1000   | 1000   | 1000   | 1000   | 1000   |
| Rated impulse withstand voltage $U_{imp}$ (kV) | 12    | 12     | 12     | 12     | 12     | 12     | 12     | 12     |

### Rated operational currents $I_e$ (A)

| Rated voltage          | Utilisation category | A/B <sup>(1)</sup> | A/B <sup>(1)</sup> | A/B <sup>(1)</sup> | A/B <sup>(1)</sup> | A/B <sup>(1)</sup> | A/B <sup>(1)</sup> | A/B <sup>(1)</sup> | A/B <sup>(1)</sup> |
|------------------------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| 415 VAC                | AC-20 A / AC-20 B    | 800/800            | 1000/1000          | 1250/1250          | 1600/1600          | 1800/1800          | 2000/2000          | 2500/2500          | 3200/3200          |
| 415 VAC                | AC-21 A / AC-21 B    | 800/800            | 1000/1000          | 1250/1250          | 1600/1600          | 1800/1800          | -/2000             | -/2500             | -/3200             |
| 415 VAC                | AC-22 A / AC-22 B    | 800/800            | 1000/1000          | 1250/1250          | 1600/1600          | 1600/1600          | -/2000             | -/2500             | -/3200             |
| 415 VAC                | AC-23 A / AC-23 B    | 800/800            | 1000/1000          | 1250/1250          | 1250/1250          | 1250/1250          | -/1600             | -/1600             | -/1600             |
| 500 VAC                | AC-20 A / AC-20 B    | 800/800            | 1000/1000          | 1250/1250          | 1600/1600          | 1800/1800          | 2000/2000          | 2500/2500          | 3200/3200          |
| 500 VAC                | AC-21 A / AC-21 B    | 800/800            | 1000/1000          | 1250/1250          | 1600/1600          | 1600/1600          | -/2000             | -/2500             | -/3200             |
| 500 VAC                | AC-22 A / AC-22 B    | 630/630            | 800/800            | 1000/1000          | 1000/1000          | 1000/1000          |                    |                    |                    |
| 500 VAC                | AC-23 A / AC-23 B    | 400/400            | 630/630            | 800/800            | 800/800            | 800/800            |                    |                    |                    |
| 690 VAC                | AC-20 A / AC-20 B    | 800/800            | 1000/1000          | 1250/1250          | 1600/1600          | 1800/1800          | 2000/2000          | 2500/2500          | 3200/3200          |
| 690 VAC                | AC-21 A / AC-21 B    | 800/800            | 1000/1000          | 1250/1250          | 1600/1600          | 1600/1600          | -/2000             | -/2500             | -/3200             |
| 690 VAC                | AC-22 A / AC-22 B    | 630/630            | 800/800            | 1000/1000          | 1000/1000          | 1000/1000          |                    |                    |                    |
| 690 VAC                | AC-23 A / AC-23 B    | 400/400            | 630/630            | 800/800            | 1000/1000          | 1000/1000          |                    |                    |                    |
| 220 VDC <sup>(2)</sup> | DC-20 A / DC-20 B    | 800/800            | 1000/1000          | 1250/1250          | 1600/1600          | 1800/1800          |                    |                    |                    |
| 220 VDC <sup>(2)</sup> | DC-21 A / DC-21 B    | 800/800            | 1000/1000          | 1250/1250          | 1250/1250          | 1250/1250          |                    |                    |                    |
| 220 VDC <sup>(2)</sup> | DC-22 A / DC-22 B    | 800/800            | 1000/1000          | 1250/1250          | 1250/1250          | 1250/1250          |                    |                    |                    |
| 220 VDC <sup>(2)</sup> | DC-23 A / DC-23 B    | 800/800            | 1000/1000          | 1250/1250          | 1250/1250          | 1250/1250          |                    |                    |                    |
| 440 VDC <sup>(2)</sup> | DC-20 A / DC-20 B    | 800/800            | 1000/1000          | 1250/1250          | 1600/1600          | 1800/1800          |                    |                    |                    |
| 440 VDC <sup>(2)</sup> | DC-21 A / DC-21 B    | 800/800            | 1000/1000          | 1250/1250          | 1250/1250          | 1250/1250          |                    |                    |                    |
| 440 VDC <sup>(2)</sup> | DC-22 A / DC-22 B    | 800/800            | 1000/1000          | 1250/1250          | 1250/1250          | 1250/1250          |                    |                    |                    |
| 440 VDC <sup>(2)</sup> | DC-23 A / DC-23 B    | 800/800            | 1000/1000          | 1250/1250          | 1250/1250          | 1250/1250          |                    |                    |                    |

### Operational power in AC-23 (kW)

|                                                   |         |         |         |         |         |         |  |  |
|---------------------------------------------------|---------|---------|---------|---------|---------|---------|--|--|
| At 400 VAC without pre-break in AC <sup>(3)</sup> | 710/710 | 710/710 | 710/710 | 710/710 | 710/710 | 710/710 |  |  |
| At 690 VAC without pre-break in AC <sup>(3)</sup> | 185/220 | 475/475 | 475/475 | 750/750 | 750/750 | 750/750 |  |  |

### Reactive power (kvar)

|                           |     |     |     |  |  |  |  |  |
|---------------------------|-----|-----|-----|--|--|--|--|--|
| At 400 VAC <sup>(5)</sup> | 365 | 460 | 575 |  |  |  |  |  |
|---------------------------|-----|-----|-----|--|--|--|--|--|

### Rated operational currents $I_e$ (A) according to IEC 60947-6-1

| Rated voltage | Utilisation category | A/B <sup>(1)</sup> | A/B <sup>(1)</sup> | A/B <sup>(1)</sup> | A/B <sup>(1)</sup> | A/B <sup>(1)</sup> | A/B <sup>(1)</sup> | A/B <sup>(1)</sup> | A/B <sup>(1)</sup> |
|---------------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| 415 VAC       | AC-31 A / AC-31 B    | 800                | 1000               | 1250               | 1600               | 1800               | 2000               | 2500               | 3200               |
| 415 VAC       | AC-32 A / AC-32 B    | 800                | 1000               | 1250               | 1600               | 1600               | 2000               | 2000               | 2000               |
| 415 VAC       | AC-33 A / AC-33 B    | 800                | 800                | 800                | 1000               | 1000               | 1250               | 1250               | 1250               |

### Fuse protected short-circuit withstand as per IEC 60947-3 at 415 VAC

|                                            |     |      |      |         |         |  |  |  |
|--------------------------------------------|-----|------|------|---------|---------|--|--|--|
| Prospective short-circuit current (kA rms) | 50  | 100  | 100  | 100     | 100     |  |  |  |
| Associated fuse rating (A)                 | 800 | 1000 | 1250 | 2 x 800 | 2 x 800 |  |  |  |

### Circuit breaker protected short-circuit withstand with any circuit breaker that ensures tripping in less than 0.3s<sup>(4)</sup>

|                                                           |    |    |    |    |    |    |    |    |
|-----------------------------------------------------------|----|----|----|----|----|----|----|----|
| Rated short-time withstand current 0.3s $I_{cw}$ (kA rms) | 47 | 64 | 64 | 78 | 78 | 78 | 78 | 78 |
|-----------------------------------------------------------|----|----|----|----|----|----|----|----|

### Short-circuit withstand without protection as per IEC 60947-3 at 415 VAC

|                                                                                           |    |      |      |     |     |     |     |     |
|-------------------------------------------------------------------------------------------|----|------|------|-----|-----|-----|-----|-----|
| Rated short-time withstand current 1s $I_{cw}$ (kA rms)                                   | 26 | 35   | 35   | 50  | 50  | 50  | 50  | 50  |
| Rated short-circuit making capacity $I_{cm}$ (kA peak)                                    | 48 | 73.5 | 73.5 | 110 | 110 | 110 | 110 | 110 |
| Rated short-time withstand current 60ms $I_{cw}$ (kA rms) as per IEC 60947-6-1 at 415 VAC | 16 | 20   | 25   | 32  | 32  | 40  | 50  | 50  |

### Connection

|                                                    |            |            |            |            |             |              |              |              |
|----------------------------------------------------|------------|------------|------------|------------|-------------|--------------|--------------|--------------|
| Minimum Cu cable cross-section (mm <sup>2</sup> )  | 2 x 185    | 2 x 240    |            |            |             |              |              |              |
| Minimum Cu busbar cross-section (mm <sup>2</sup> ) | 2 x 40 x 5 | 2 x 50 x 5 | 2 x 60 x 5 | 2 x 80 x 5 | 3 x 100 x 5 | 2 x 100 x 10 | 2 x 100 x 10 | 2 x 100 x 10 |
| Maximum Cu cable cross-section (mm <sup>2</sup> )  | 2 x 300    | 4 x 185    | 4 x 185    | 6 x 185    | 6 x 185     |              |              |              |
| Maximum Cu busbar width (mm)                       | 63         | 63         | 63         | 100        | 100         | 100          | 100          | 100          |
| Tightening torque min (Nm)                         | 20/26      | 20/26      | 20/26      | 40/45      | 40/45       | 40/45        | 40/45        | 40/45        |

### 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)               | 20.5   | 21.0   | 21.6   | 25.7   | 25.7   | 42.0   | 42.0   | 52.3   |
| Weight of 4 P switch (kg)               | 24.8   | 25.6   | 26.2   | 32.0   | 32.0   | 52.9   | 52.9   | 66.6   |

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

(2) 3-pole device with 2 pole in series for the "+" and 1 pole for the "-". 4-pole device with 2 pole in series by polarity.

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

(4) Value for coordination with any circuit breaker that ensures tripping in less than 0.3s. For coordination with specific circuit-breaker references, higher short-circuit current values are available. Please consult us.

(5) Data at 415 VAC.

## SIRCOVER I-I+II -II and SIRCOVER Bypass - Characteristics according to IEC 60947-3

### 125 to 400 A

| Thermal current $I_{th}$ at 40°C               | 125 A | 160 A | 200 A | 250 A | 400 A |
|------------------------------------------------|-------|-------|-------|-------|-------|
| Rated insulation voltage $U_i$ (V)             | 800   | 800   | 800   | 800   | 800   |
| Rated impulse withstand voltage $U_{imp}$ (kV) | 8     | 8     | 8     | 8     | 8     |

#### Rated operational currents $I_e$ (A)

| Rated voltage          | Utilisation category | A/B <sup>(1)</sup>                     | A/B <sup>(1)</sup>                     | A/B <sup>(1)</sup>                     | A/B <sup>(1)</sup>                     | A/B <sup>(1)</sup>                     |
|------------------------|----------------------|----------------------------------------|----------------------------------------|----------------------------------------|----------------------------------------|----------------------------------------|
| 415 VAC                | AC-20 A / AC-20 B    | 125/125                                | 160/160                                | 200/200                                | 250/250                                | 400/400                                |
| 415 VAC                | AC-21 A / AC-21 B    | 125/125                                | 160/160                                | 200/200                                | 250/250                                | 400/400                                |
| 415 VAC                | AC-22 A / AC-22 B    | 125/125                                | 160/160                                | 160/160                                | 250/250                                | 250/250                                |
| 415 VAC                | AC-23 A / AC-23 B    | 125/125                                | 160/160                                | 160/160                                | 250/250                                | 250/250                                |
| 690 VAC <sup>(2)</sup> | AC-20 A / AC-20 B    | 125/125                                | 160/160                                | 200/200                                | 250/250                                | 400/400                                |
| 690 VAC <sup>(2)</sup> | AC-21 A / AC-21 B    | 125/125                                | 160/160                                | 160/160                                | 200/250                                | 200/250                                |
| 690 VAC <sup>(2)</sup> | AC-22 A / AC-22 B    | 125/125                                | 125/125                                | 125/125                                | 125/160                                | 125/160                                |
| 690 VAC <sup>(2)</sup> | AC-23 A / AC-23 B    | 63/80                                  | 63/80                                  | 63/80                                  | 100/125                                | 100/125                                |
| 220 VDC                | DC-20 A / DC-20 B    | 125/125                                | 160/160                                | 200/200                                | 250/250                                | 400/400                                |
| 220 VDC                | DC-21 A / DC-21 B    | 125/125                                | 160/160                                | 160/160                                | 250/250                                | 250/250                                |
| 220 VDC                | DC-22 A / DC-22 B    | 125/125                                | 160/160                                | 160/160                                | 250/250                                | 250/250                                |
| 220 VDC                | DC-23 A / DC-23 B    | 125/125                                | 125/125                                | 125/125                                | 200/200                                | 200/200                                |
| 440 VDC                | DC-20 A / DC-20 B    | 125/125                                | 160/160                                | 200/200                                | 250/250                                | 400/400                                |
| 440 VDC                | DC-21 A / DC-21 B    | 125 <sup>(3)</sup> /125 <sup>(3)</sup> | 125 <sup>(3)</sup> /125 <sup>(3)</sup> | 125 <sup>(3)</sup> /125 <sup>(3)</sup> | 200 <sup>(3)</sup> /200 <sup>(3)</sup> | 200 <sup>(3)</sup> /200 <sup>(3)</sup> |
| 440 VDC                | DC-22 A / DC-22 B    | 125 <sup>(3)</sup> /125 <sup>(3)</sup> | 125 <sup>(3)</sup> /125 <sup>(3)</sup> | 125 <sup>(3)</sup> /125 <sup>(3)</sup> | 200 <sup>(3)</sup> /200 <sup>(3)</sup> | 200 <sup>(3)</sup> /200 <sup>(3)</sup> |
| 440 VDC                | DC-23 A / DC-23 B    | 125 <sup>(4)</sup> /125 <sup>(4)</sup> | 125 <sup>(4)</sup> /125 <sup>(4)</sup> | 125 <sup>(4)</sup> /125 <sup>(4)</sup> | 200 <sup>(4)</sup> /200 <sup>(4)</sup> | 200 <sup>(4)</sup> /200 <sup>(4)</sup> |

#### Operational power in AC-23 (kW)

|                                                      |       |       |       |         |         |
|------------------------------------------------------|-------|-------|-------|---------|---------|
| At 400 VAC without pre-break in AC <sup>(1)(5)</sup> | 63/63 | 80/80 | 80/80 | 132/132 | 132/132 |
| At 690 VAC without pre-break in AC <sup>(1)(5)</sup> | 55/75 | 55/75 | 55/75 | 90/110  | 90/110  |

#### Reactive power (kvar)

|                           |    |    |    |     |     |
|---------------------------|----|----|----|-----|-----|
| At 400 VAC <sup>(5)</sup> | 55 | 75 | 90 | 115 | 185 |
|---------------------------|----|----|----|-----|-----|

#### Fuse protected short-circuit withstand as per IEC 60947-3 at 400 VAC

|                                            |     |     |     |     |     |
|--------------------------------------------|-----|-----|-----|-----|-----|
| Prospective short-circuit current (kA rms) | 100 | 100 | 50  | 50  | 18  |
| Associated fuse rating (A)                 | 125 | 160 | 200 | 250 | 400 |

#### Circuit breaker protected short-circuit withstand with any circuit breaker that ensures tripping in less than 0.3s<sup>(6)</sup>

|                                                                  |    |    |    |    |    |
|------------------------------------------------------------------|----|----|----|----|----|
| Rated short-time withstand current 0.3s I <sub>sc</sub> (kA rms) | 15 | 15 | 15 | 17 | 17 |
|------------------------------------------------------------------|----|----|----|----|----|

#### Short-circuit capacity (without protection)

|                                                                |   |   |   |   |   |
|----------------------------------------------------------------|---|---|---|---|---|
| Rated short-time withstand current 1s I <sub>sc</sub> (kA rms) | 8 | 8 | 8 | 9 | 9 |
|----------------------------------------------------------------|---|---|---|---|---|

#### Connection

|                                                    |    |    |    |    |     |
|----------------------------------------------------|----|----|----|----|-----|
| Minimum Cu cable cross-section (mm <sup>2</sup> )  | 35 | 50 | 50 | 95 | 185 |
| Minimum Cu busbar cross-section (mm <sup>2</sup> ) |    |    |    |    |     |
| Maximum Cu cable cross-section (mm <sup>2</sup> )  |    | 50 | 95 | 95 | 150 |
| Maximum Cu busbar width (mm)                       | 25 | 25 | 25 | 32 | 32  |
| Tightening torque min (Nm)                         | 9  | 9  | 9  | 20 | 20  |

#### Mechanical characteristics

|                                         |       |       |       |       |       |
|-----------------------------------------|-------|-------|-------|-------|-------|
| Durability (number of operating cycles) | 10000 | 10000 | 10000 | 10000 | 10000 |
| Weight of 3 P switch (kg)               | 2.9   | 2.9   | 2.9   | 3.8   | 3.9   |
| Weight of 4 P switch (kg)               | 4.1   | 4.1   | 4.1   | 4.6   | 4.9   |

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

(2) With terminal shrouds or phase barrier.

(3) 4-pole device with 2 poles in series per polarity.

(4) 3-pole device with 2 pole in series for the "+" and 1 pole for the "-".

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

(6) Value for coordination with any circuit breaker that ensures tripping in less than 0.3s.

For coordination with specific circuit-breaker references, higher short-circuit current values are available. Please consult us.

## 500 to 1800 A

| Thermal current $I_{th}$ at 40°C               | 500 A | 630 A | 800 A | 1250 A | 1600 A | 1800 A |
|------------------------------------------------|-------|-------|-------|--------|--------|--------|
| Rated insulation voltage $U_i$ (V)             | 800   | 1000  | 1000  | 1000   | 1000   | 1000   |
| Rated impulse withstand voltage $U_{imp}$ (kV) | 8     | 12    | 12    | 12     | 12     | 12     |

### Rated operational currents $I_e$ (A)

| Rated voltage          | Utilisation category | A/B <sup>(1)</sup>                     | A/B <sup>(1)</sup>                     | A/B <sup>(1)</sup>                     | A/B <sup>(1)</sup>                       | A/B <sup>(1)</sup>                       | A/B <sup>(1)</sup>                       |
|------------------------|----------------------|----------------------------------------|----------------------------------------|----------------------------------------|------------------------------------------|------------------------------------------|------------------------------------------|
| 415 VAC                | AC-20 A / AC-20 B    | 500/500                                | 630/630                                | 800/800                                | 1250/1250                                | 1600/1600                                | 1800/1800                                |
| 415 VAC                | AC-21 A / AC-21 B    | 500/500                                | 630/630                                | 800/800                                | 1250/1250                                | 1600/1600                                | 1800/1800                                |
| 415 VAC                | AC-22 A / AC-22 B    | 500/500                                | 630/630                                | 800/800                                | 1250/1250                                | 1600/1600                                | 1800/1800                                |
| 415 VAC                | AC-23 A / AC-23 B    | 500/500                                | 500/500                                | 800/800                                | 1250/1250                                | 1250/1250                                | 1250/1250                                |
| 690 VAC <sup>(2)</sup> | AC-20 A / AC-20 B    | 500/500                                | 630/630                                | 800/800                                | 1250/1250                                | 1600/1600                                | 1800/1800                                |
| 690 VAC <sup>(2)</sup> | AC-21 A / AC-21 B    | 400/400                                | 500/500                                | 800/800                                | 800/800                                  | 1000/1000                                | 1000/1000                                |
| 690 VAC <sup>(2)</sup> | AC-22 A / AC-22 B    | 250/315                                | 315/315                                | 800/800                                | 800/800                                  | 1000/1000                                | 1000/1000                                |
| 690 VAC <sup>(2)</sup> | AC-23 A / AC-23 B    | 160/200                                | 160/200                                | 200/250                                | 200/250                                  | 500/500                                  | 500/500                                  |
| 220 VDC                | DC-20 A / DC-20 B    | 500/500                                | 630/630                                | 800/800                                | 1250/1250                                | 1600/1600                                | 1800/1800                                |
| 220 VDC                | DC-21 A / DC-21 B    | 500/500                                | 630/630                                | 800/800                                | 1250/1250                                | 1250/1250                                | 1250/1250                                |
| 220 VDC                | DC-22 A / DC-22 B    | 400/500                                | 500/500                                | 800/800                                | 1250/1250                                | 1250/1250                                | 1250/1250                                |
| 220 VDC                | DC-23 A / DC-23 B    | 400/500                                | 500/500                                | 800/800                                | 1250/1250                                | 1250/1250                                | 1250/1250                                |
| 440 VDC                | DC-20 A / DC-20 B    | 500/500                                | 630/630                                | 800/800                                | 1250/1250                                | 1600/1600                                | 1800/1800                                |
| 440 VDC                | DC-21 A / DC-21 B    | 400 <sup>(3)</sup> /400 <sup>(3)</sup> | 500 <sup>(3)</sup> /500 <sup>(3)</sup> | 800 <sup>(3)</sup> /800 <sup>(3)</sup> | 1250 <sup>(3)</sup> /1250 <sup>(3)</sup> | 1250 <sup>(3)</sup> /1250 <sup>(3)</sup> | 1250 <sup>(3)</sup> /1250 <sup>(3)</sup> |
| 440 VDC                | DC-22 A / DC-22 B    | 315 <sup>(3)</sup> /400 <sup>(3)</sup> | 500 <sup>(3)</sup> /500 <sup>(3)</sup> | 800 <sup>(3)</sup> /800 <sup>(3)</sup> | 1250 <sup>(3)</sup> /1250 <sup>(3)</sup> | 1250 <sup>(3)</sup> /1250 <sup>(3)</sup> | 1250 <sup>(3)</sup> /1250 <sup>(3)</sup> |
| 440 VDC                | DC-23 A / DC-23 B    | 400 <sup>(4)</sup> /400 <sup>(4)</sup> | 500 <sup>(4)</sup> /500 <sup>(4)</sup> | 800 <sup>(3)</sup> /800 <sup>(3)</sup> | 1250 <sup>(3)</sup> /1250 <sup>(3)</sup> | 1250 <sup>(3)</sup> /1250 <sup>(3)</sup> | 1250 <sup>(3)</sup> /1250 <sup>(3)</sup> |

### Operational power in AC-23 (kW)

|                                                      |         |         |         |         |         |         |
|------------------------------------------------------|---------|---------|---------|---------|---------|---------|
| At 400 VAC without pre-break in AC <sup>(1)(5)</sup> | 280/280 | 280/280 | 450/450 | 710/710 | 710/710 | 710/710 |
| At 690 VAC without pre-break in AC <sup>(1)(5)</sup> | 150/185 | 150/185 | 185/220 | 185/220 | 475/475 | 475/475 |

### Reactive power (kvar)

|                           |     |     |     |     |  |  |
|---------------------------|-----|-----|-----|-----|--|--|
| At 400 VAC <sup>(5)</sup> | 230 | 290 | 365 | 575 |  |  |
|---------------------------|-----|-----|-----|-----|--|--|

### Fuse protected short-circuit withstand as per IEC 60947-3 at 400 VAC

|                                            |     |     |     |      |         |         |
|--------------------------------------------|-----|-----|-----|------|---------|---------|
| Prospective short-circuit current (kA rms) | 100 | 70  | 50  | 100  | 100     | 100     |
| Associated fuse rating (A)                 | 500 | 630 | 800 | 1250 | 2 x 800 | 2 x 800 |

### Circuit breaker protected short-circuit withstand with any circuit breaker that ensures tripping in less than 0.3s<sup>(6)</sup>

|                                                      |    |    |    |    |     |     |
|------------------------------------------------------|----|----|----|----|-----|-----|
| Rated short-time withstand current 0.3s low (kA rms) | 25 | 25 | 50 | 65 | 100 | 100 |
|------------------------------------------------------|----|----|----|----|-----|-----|

### Short-circuit capacity (without protection)

|                                                    |    |    |    |    |     |     |
|----------------------------------------------------|----|----|----|----|-----|-----|
| Rated short-time withstand current 1s low (kA rms) | 14 | 25 | 50 | 65 | 100 | 100 |
|----------------------------------------------------|----|----|----|----|-----|-----|

### Connection

|                                                    |     |            |            |            |            |            |
|----------------------------------------------------|-----|------------|------------|------------|------------|------------|
| Minimum Cu cable cross-section (mm <sup>2</sup> )  | 240 | 2 x 150    | 2 x 185    |            |            |            |
| Minimum Cu busbar cross-section (mm <sup>2</sup> ) |     | 2 x 30 x 5 | 2 x 40 x 5 | 2 x 60 x 5 | 2 x 80 x 5 | 2 x 80 x 5 |
| Maximum Cu cable cross-section (mm <sup>2</sup> )  | 240 | 240        | 2 x 300    | 2 x 300    | 4 x 185    | 6 x 185    |
| Maximum Cu busbar width (mm)                       | 40  | 50         | 63         | 63         | 100        | 100        |
| Tightening torque min (Nm)                         | 20  | 20         | 20         | 20         | 40         | 40         |

### Mechanical characteristics

|                                         |      |      |      |      |      |      |
|-----------------------------------------|------|------|------|------|------|------|
| Durability (number of operating cycles) | 5000 | 5000 | 3000 | 3000 | 3000 | 3000 |
| Weight of 3 P switch (kg)               | 9.1  | 9.1  | 20.5 | 21.6 | 25.7 | 25.7 |
| Weight of 4 P switch (kg)               | 11.1 | 11.1 | 24.8 | 26.2 | 32   | 32   |

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

(2) With terminal shrouds or phase barrier.

(3) 4-pole device with 2 poles in series per polarity.

(4) 3-pole device with 2 pole in series for the "+" and 1 pole for the "-".

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

(6) Value for coordination with any circuit breaker that ensures tripping in less than 0.3s. For coordination with specific circuit-breaker references, higher short-circuit current values are available. Please consult us.



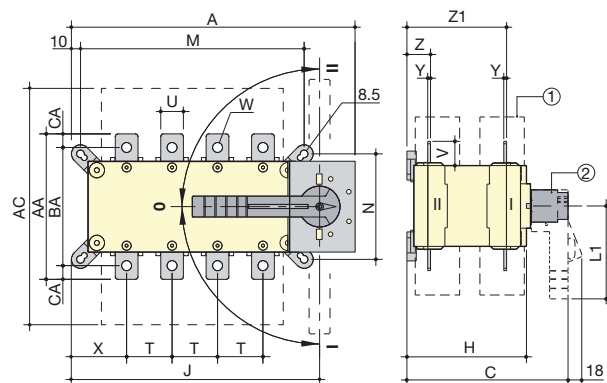
# SIRCOVER

Manual changeover switches  
from 125 to 3200 A

## Dimensions

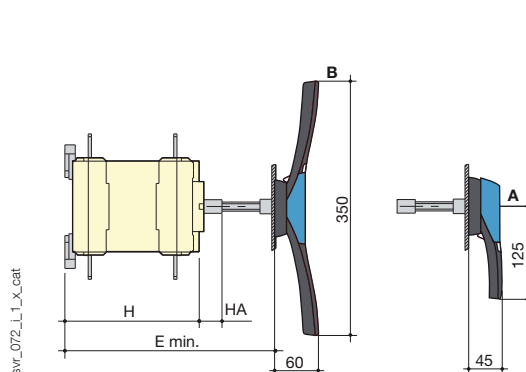
### SIRCOVER 125 to 1800 A

Direct front operation



A. S2 type handle for external operation: 125 to 630 A  
B. S4 type handle for external operation: 800 to 1800 A

External front operation

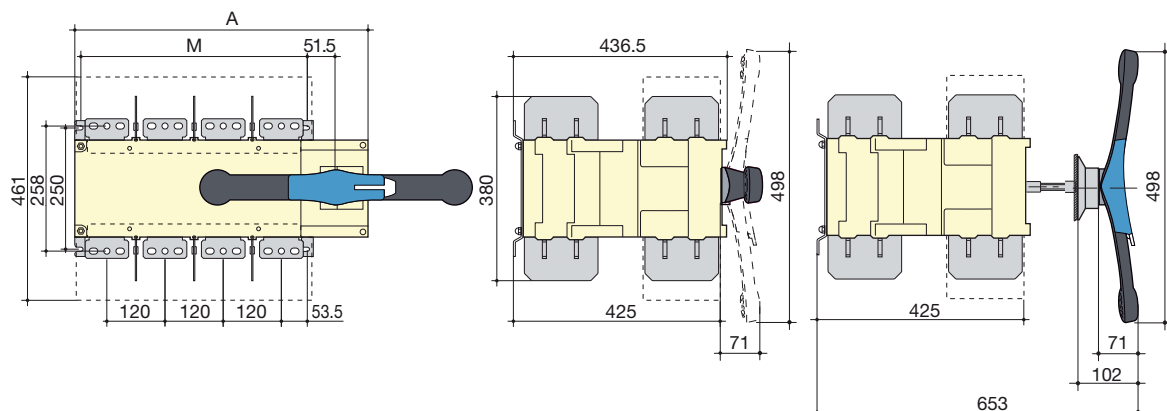


1. Terminal shrouds  
2. Direct handle operation:  
- 125 to 630 A: L1 = 140 mm,  
- 800 to 1800 A: L1 = 210 mm.

| Rating (A) | Overall dimensions |       |     |             | Terminal shrouds | Switch body |    |       |       | Switch mounting |       |       | Connection |    |      |        |      |       |       |      |       |     |     |      |
|------------|--------------------|-------|-----|-------------|------------------|-------------|----|-------|-------|-----------------|-------|-------|------------|----|------|--------|------|-------|-------|------|-------|-----|-----|------|
|            | A 3p.              | A 4p. | C   | E min       |                  | AC          | H  | HA    | J 3p. | J 4p.           | M 3p. | M 4p. | N          | T  | U    | V      | W    | X 3p. | X 4p. | Y    | Z     | Z1  | AA  | BA   |
| 125        | 221                | 251   | 218 | 208 ... 436 | 235              | 148         | 25 | 182   | 212   | 156             | 186   | 101   | 36         | 20 | 25   | 8.5    | 56   | 50    | 3.5   | 28   | 124   | 135 | 115 | 10   |
| 160        | 221                | 251   | 218 | 208 ... 436 | 235              | 148         | 25 | 182   | 212   | 156             | 186   | 101   | 36         | 20 | 25   | 8.5    | 56   | 50    | 3.5   | 28   | 124   | 135 | 115 | 10   |
| 200        | 221                | 251   | 218 | 208 ... 436 | 235              | 148         | 25 | 182   | 212   | 156             | 186   | 101   | 36         | 20 | 25   | 8.5    | 56   | 50    | 3.5   | 28   | 124   | 135 | 115 | 10   |
| 250        | 262                | 312   | 218 | 208 ... 436 | 280              | 148         | 25 | 223   | 273   | 196             | 246   | 116   | 50         | 25 | 30   | 11     | 61   | 61    | 3.5   | 30   | 124   | 160 | 130 | 15   |
| 315        | 262                | 312   | 218 | 208 ... 436 | 280              | 148         | 25 | 223   | 273   | 196             | 246   | 116   | 50         | 35 | 35   | 11     | 61   | 61    | 3.5   | 30   | 124   | 170 | 140 | 15   |
| 400        | 262                | 312   | 218 | 208 ... 436 | 280              | 148         | 25 | 223   | 273   | 196             | 246   | 116   | 50         | 35 | 35   | 11     | 61   | 61    | 3.5   | 30   | 124   | 170 | 140 | 15   |
| 500        | 319                | 379   | 295 | 285 ... 513 | 401              | 225         | 25 | 272   | 332   | 246             | 306   | 176   | 65         | 32 | 37   | 13     | 70.5 | 65.5  | 5     | 43   | 180   | 235 | 205 | 15   |
| 630        | 319                | 379   | 295 | 285 ... 513 | 400              | 225         | 25 | 272   | 332   | 246             | 306   | 176   | 65         | 45 | 50   | 13     | 70.5 | 65.5  | 5     | 43   | 180   | 260 | 220 | 20   |
| 800        | 386                | 466   | 375 | 425 ... 577 | 459              | 298         | 29 | 306.5 | 386.5 | 255             | 336   | 250   | 80         | 50 | 60.5 | 15     | 48   | 48    | 7     | 66.5 | 253.5 | 321 |     | 26.5 |
| 1000       | 386                | 466   | 375 | 425 ... 577 | 459              | 298         | 29 | 306.5 | 386.5 | 255             | 336   | 250   | 80         | 50 | 60.5 | 15     | 48   | 48    | 7     | 66.5 | 253.5 | 321 |     | 26.5 |
| 1250       | 386                | 466   | 375 | 425 ... 577 | 459              | 298         | 29 | 306.5 | 386.5 | 255             | 336   | 250   | 80         | 60 | 65   | 16x11  | 48   | 48    | 7     | 66.5 | 255.5 | 330 |     | 29.5 |
| 1600       | 478                | 598   | 375 | 425 ... 577 | 461              | 298         | 29 | 388.5 | 518.5 | 347             | 467   | 250   | 120        | 90 | 43.5 | 12.5x5 | 54   | 54    | 8     | 66.5 | 255.5 | 288 |     | 15   |
| 1800       | 478                | 598   | 375 | 425 ... 577 | 461              | 298         | 29 | 388.5 | 518.5 | 347             | 467   | 250   | 120        | 90 | 43.5 | 12.5x5 | 54   | 54    | 8     | 66.5 | 255.5 | 288 |     | 15   |

### SIRCOVER 2000 to 3200 A

Direct front operation



| Rating (A)    | Overall dimensions |       | Switch mounting |       |
|---------------|--------------------|-------|-----------------|-------|
|               | A 3p.              | A 4p. | M 3p.           | M 4p. |
| 2000 ... 3200 | 478                | 598   | 347             | 467   |



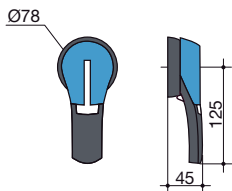
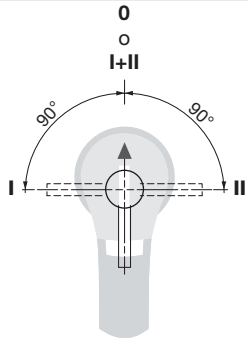
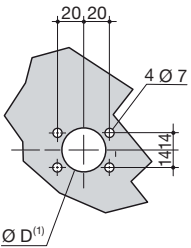
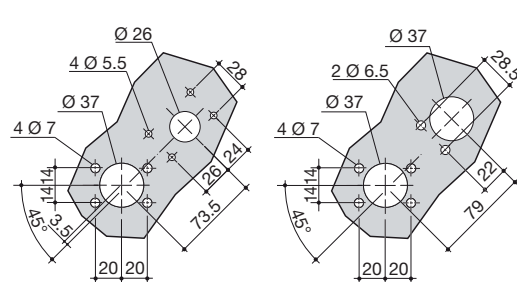
# SIRCOVER

## Manual changeover switches

from 125 to 3200 A

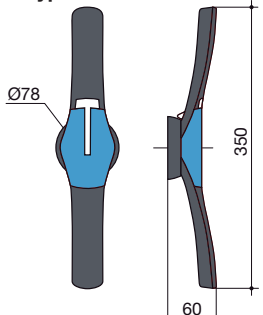
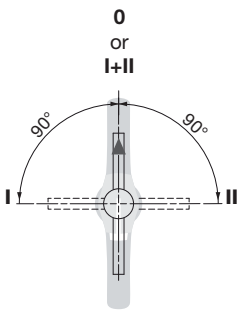
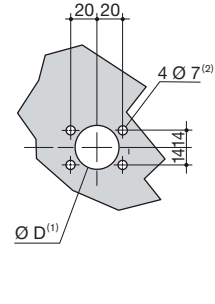
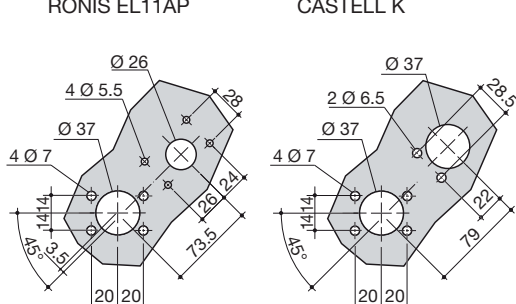
### Dimensions for external handles

#### SIRCOVER 125 to 630 A

| Handle type                                                                       | Direction of operation                                                            | Front operation                                                                   |                                                                                    |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| S2 type                                                                           |                                                                                   | Door drilling                                                                     |                                                                                    |
|  |  |                                                                                   |                                                                                    |
|                                                                                   |                                                                                   |  |  |

(1) Ø31 to Ø37: Rear screw mounting Ø37: front clip mounting.

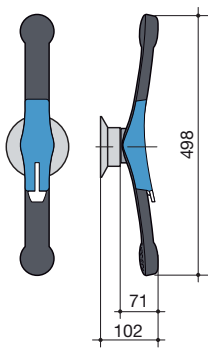
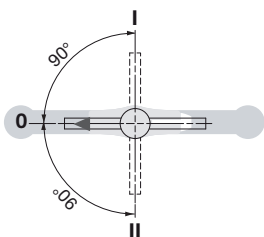
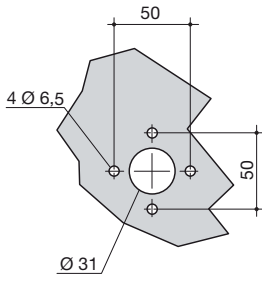
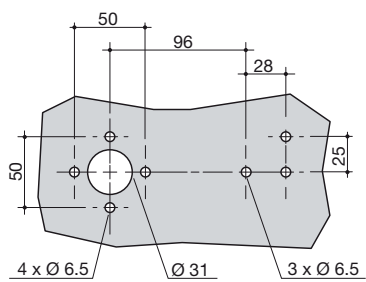
#### SIRCOVER 800 to 1800 A

| Handle type                                                                         | Direction of operation                                                              | Front operation                                                                     |                                                                                      |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| S4 type                                                                             |                                                                                     | Door drilling                                                                       |                                                                                      |
|  |  |                                                                                     |                                                                                      |
|                                                                                     |                                                                                     |  |  |

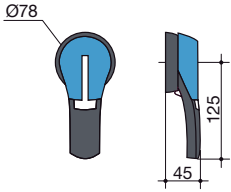
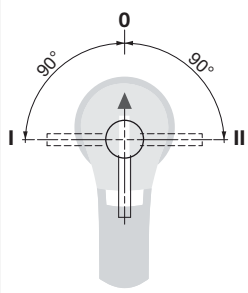
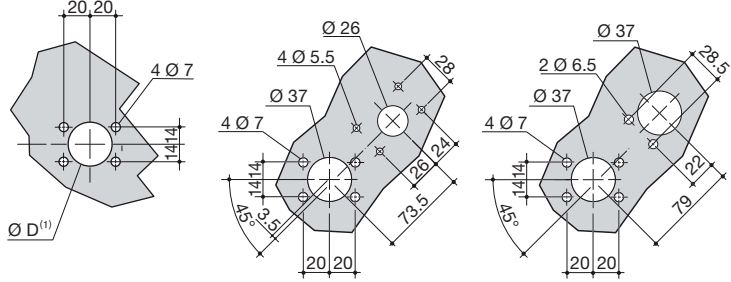
(1) Ø31 to Ø37: Rear screw mounting Ø37: front clip mounting.

(2) Ø6 to Ø7: clip mounting.

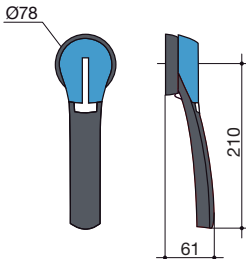
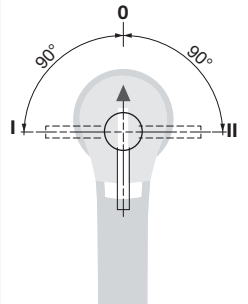
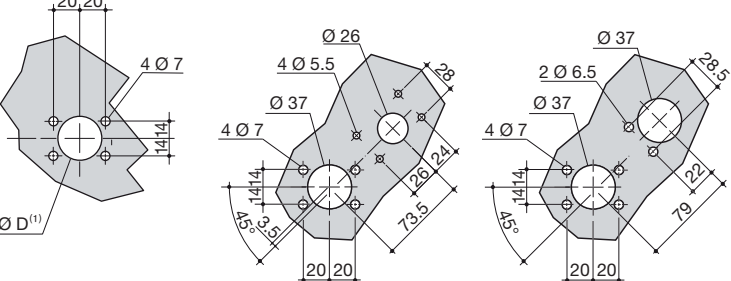
#### SIRCOVER 2000 to 3200 A

| Handle type                                                                         | Direction of operation                                                              | Front operation                                                                     |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| S5 type<br>with V Escutcheon                                                        |                                                                                     | Door drilling                                                                       |                                                                                       |
|  |  |                                                                                     |                                                                                       |
|                                                                                     |                                                                                     |  |  |

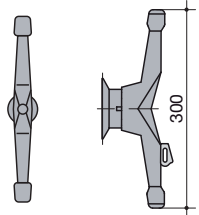
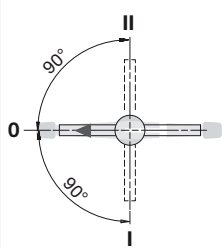
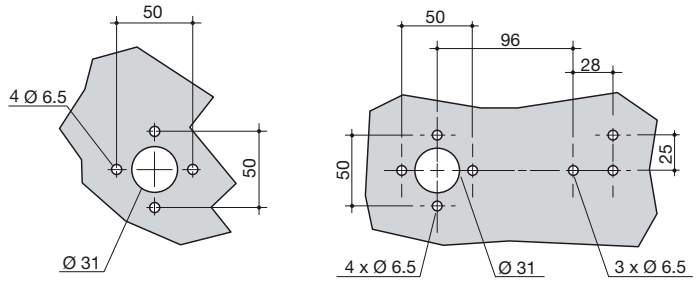
## SIRCOVER Bypass 125 to 200 A

| Handle type                                                                       | Direction of operation                                                            | Front operation                                                                    |  |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--|
| S2 type                                                                           |                                                                                   | Door drilling                                                                      |  |
|  |  |  |  |
|                                                                                   |                                                                                   | <p>(1) Ø31 to Ø37: Rear screw mounting Ø37: front clip mounting.</p>               |  |

## SIRCOVER Bypass 250 to 630 A

| Handle type                                                                         | Direction of operation                                                              | Front operation                                                                      |  |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--|
| S3 type                                                                             |                                                                                     | Door drilling                                                                        |  |
|  |  |  |  |
|                                                                                     |                                                                                     | <p>(1) Ø31 to Ø37: Rear screw mounting Ø37: front clip mounting.</p>                 |  |

## SIRCOVER Bypass 800 to 1600 A

| Handle type                                                                         | Direction of operation                                                              | Front operation                                                                      |  |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--|
| C type                                                                              |                                                                                     | Door drilling                                                                        |  |
|  |  |  |  |
|                                                                                     |                                                                                     | <p>(1) Ø31 to Ø37: Rear screw mounting Ø37: front clip mounting.</p>                 |  |