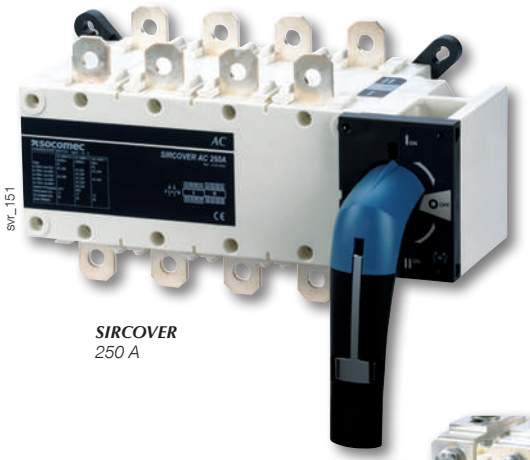
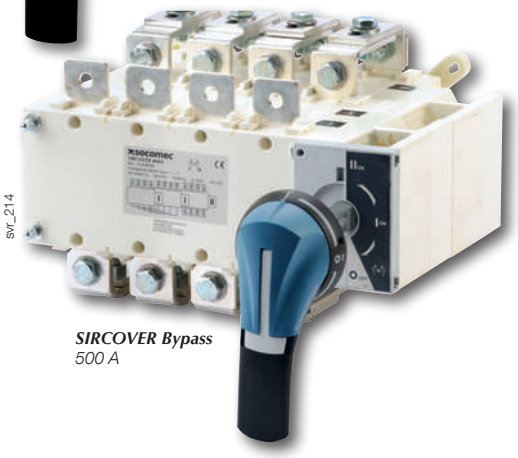


SIRCOVER

Manual Transfer Switching Equipment
from 125 to 3200 A



SIRCOVER
250 A



SIRCOVER Bypass
500 A

Function

SIRCOVER products are manually operated transfer switches with positive break indication.
There are 4 ranges in the series:

- **SIRCOVER** for open transition switching (I-0-II) available in 3 or 4 pole.
- **SIRCOVER** for overlapping contact switching (I-I+II-II). For applications where both sources are synchronised and there is to be no interruption to the load supply during transfer - available in 3 or 4 pole.
- **SIRCOVER Bypass**. This combination of three interlocked load break switches provides 3+6 or 4+8 poles for bypass applications.
- **SIRCOVER Bypass** for overlapping contact switching (I-I+II-II). This combination of three interlocked load break switches provides bypass to an UPS or other devices when sources are synchronised and the UPS is in static bypass mode.

They provide on-load transfer between two sources for any low voltage power circuit, as well as safety isolation by double breaking per pole. Other applications include source inversion (e.g. to change the direction of a motor) or grounding/earthing.

Advantages

A complete range
There are 4 SIRCOVER models to meet every need: The standard model I-0-II, the overlapping contact model I-I+II-II, the bypass model and the bypass with overlapping contact model I-I+II-II.

Easy to connect
For ratings of 2000 to 3200 A, we offer copper bar connection pieces. This gives you the option of different connection methods - flat, edgewise with top or bottom bridging.

Stable positions
SIRCOVER devices have three stable positions, unaffected by voltage fluctuations and vibrations, protecting your loads from network disturbances.

On-load switching
With its AC-23 and AC-33 characteristics, tested according to standards IEC 60947-3 and IEC 60947-6-1, the SIRCOVER enables safe on-load switching for any type of load. With its on-load transfer capabilities, it is not necessary to isolate loads prior to transfer therefore the SIRCOVER offers an economical solution.

The solution for
- Manufacturing
- Power distribution



Strong points
- Complete range
- Easy to connect
- Stable positions
- On-load switching

Conformity to standards
- IEC 60947-6,-1
- IEC 60947-3
- GB/T 14048-11

Approvals and certifications(1)

BUREAU VERITAS

(1) Product references on request.

SIRCOVER in enclosure

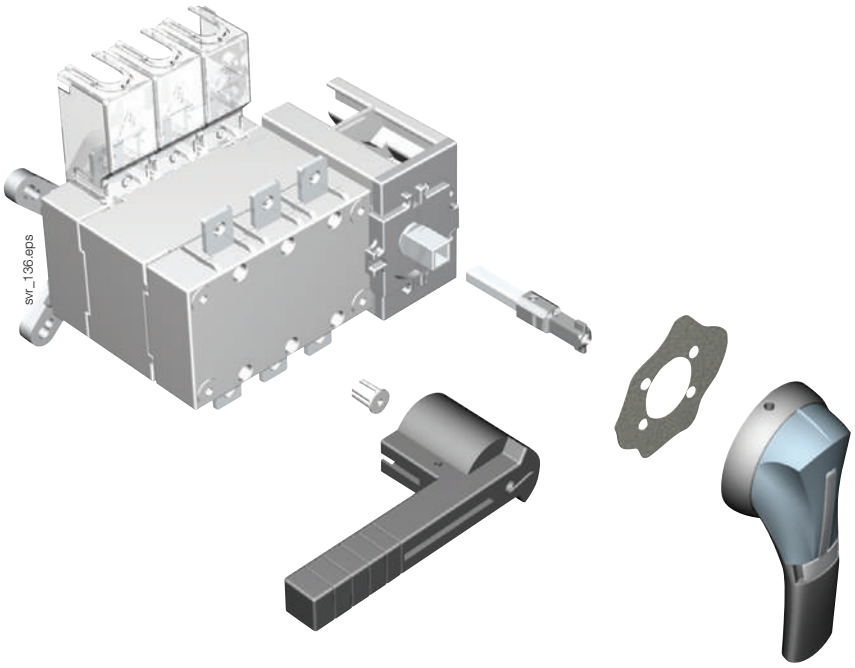


See "Enclosed transfer switches".

socomec Innovative Power Solutions

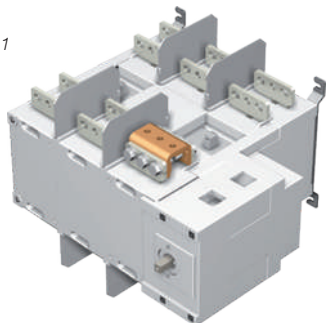
What you need to know

- SIRCOVER with **break-before-make contacts (I-0-II)** are available as 3 or 4 pole models with ratings of 125 to 3200 A.
  They are available in steel or polyester enclosures (125 to 1600 A).
- SIRCOVER switches with **3 overlapping contact positions (I-I+II-II)** are available as 3 or 4 pole models from 125 to 1600 A.
  They are available in steel enclosures.
- With **break-before-make (I-0-II)** or overlapping contact positions (I-I+II-II), SIRCOVER Bypass devices are a combination of three interlocked switches enabling the use with 3+6 or 4+8 poles from 125 to 1600 A. They are available in steel enclosures.
- All SIRCOVER can be operated with **direct front operation** or **external handles**.



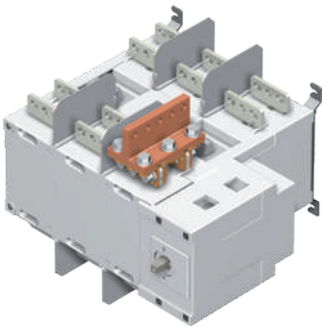
- **Connection pieces for copper bars** allows the connection between the 2 power terminals of the same pole (Fig. 1 and 2) and the bridging of switch I and switch II on the top or the bottom for ratings 2000, 2500 and 3200 A (Fig. 3).

Fig. 1



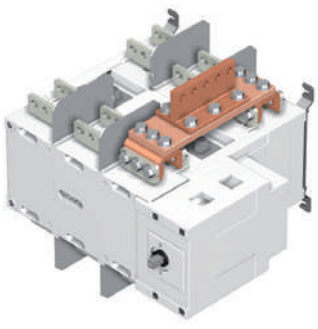
Top or bottom
flat connection

Fig. 2



Top or bottom
edgewise connection

Fig. 3



Top or bottom
bridging connection

References

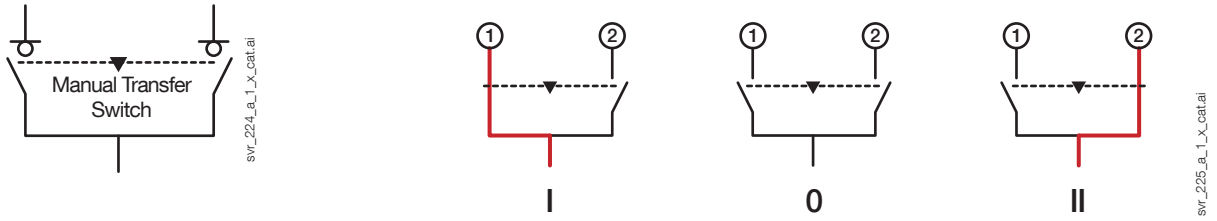
SIRCOVER I-0-II

Rating(A) / Frame size	No. of poles	Switch body	Direct handle	External handle	Shaft for external handle	Bridging bars[6]	Auxiliary contact	Terminal shrouds	Terminal screens
125 A / B3	3 P	41AC **3013**	J2 type Blue 1122 **1111** Red 1123 **1111**	S2 type Black IP55 1421 **2113** IP65 1423 **2113**[1]	200 mm 1400 **1020** 320 mm 1400 **1032**[1]	3 P 4109 **3019** 4 P 4109 **4019**	1st/2nd NO/NC contact 4109 **0021**[2]	3 P 2694 **3014**[3][4] 4 P 2694 **4014**[3][4]	3 P 1509 **3012** 4 P 1509 **4012**
	4 P	41AC **4013**							
160 A / B3	3 P	41AC **3016**							
	4 P	41AC **4016**							
200 A / B3	3 P	41AC **3020**							
	4 P	41AC **4020**							
250 A / B4	3 P	41AC **3025**				4109 **3025**		3 P 2694 **3021**[3][4] 4 P 2694 **4021**[3][4]	3 P 1509 **3025** 4 P 1509 **4025**
	4 P	41AC **4025**				4109 **4025**			
315 A / B4	3 P	41AC **3031**				3 P 4109 **3039** 4 P 4109 **4039**			
	4 P	41AC **4031**							
400 A / B4	3 P	41AC **3040**							
	4 P	41AC **4040**							
500 A / B5	3 P	41AC **3050**				4109 **3050**		3 P 2694 **3051**[3][4] 4 P 2694 **4051**[3][4]	3 P 1509 **3063** 4 P 1509 **4063**
	4 P	41AC **4050**				4109 **4050**			
630 A / B5	3 P	41AC **3063**				4109 **3063**			
	4 P	41AC **4063**				4109 **4063**			
800 A / B6	3 P	41AC **3080**	J3 type Black 1132 **1111**	S4 type Black IP65 1443 **3113**	200 mm 1401 **1520** 320 mm 1401 **1532**[1]	3 P 4109 **3080** 4 P 4109 **4080**			3 P 1509 **3080** 4 P 1509 **4080**
	4 P	41AC **4080**							
1000 A / B6	3 P	41AC **3100**							
	4 P	41AC **4100**							
1250 A / B6	3 P	41AC **3120**				4109 **3120**			
	4 P	41AC **4120**				4109 **4120**			
1600 A / B7	3 P	41AC **3160**				4109 **3160**			1509 **3160**
	4 P	41AC **4160**				4109 **4160**			1509 **4160**
2000 A / B8	3 P	41AC **3200**	S5 type Black 2799 **7042**	S5 type Black IP65 1453 **8113**	200 mm 2799 **3015** 320 mm 2799 **3018**[1] 450 mm 2799 **3019**	[5]	1st and 2nd NO/NC contact included		included
	4 P	41AC **4200**							
2500 A / B8	3 P	41AC **3250**							
	4 P	41AC **4250**							
3200 A / B8	3 P	41AC **3320**							
	4 P	41AC **4320**							

(1) Standard.
(2) 2 contacts supplied: one for position I and one for position II.
(3) For complete shrouding at front, rear, top and bottom, order quantity 4; if equipped with bridging bars order quantity 3.
(4) For top and bottom shrouding for the front only, order quantity 2.
(5) See "Copper bar connection pieces".
(6) For a 3 pole device order quantity 3 bridging bars, for a 4 pole device order quantity 4.

Operating principle

SIRCOVER I-0-II



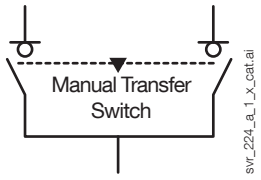
SIRCOVER I-I+II-II

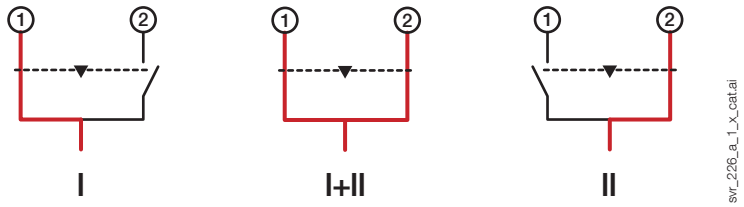
Rating (A) / Frame size	No. of poles	Switch body	Direct handle	External handle	Shaft for external handle	Bridging bars[6]	Auxiliary contact	Terminal shrouds	Terminal screens
125 A / B3	3 P	4190 **3013**	J2 type Blue 1122 **1111** Red 1123 **1111**	S2 type Blue IP65 1423 **2114**	200 mm 1400 **1020** 320 mm 1400 **1032**[1]	3 P 4109 **3019** 4 P 4109 **4019**	1st/2nd NO/NC contact 4109 **0021**[2]	3 P 2694 **3014** [3][4] 4 P 2694 **4014** [3][4]	3 P 1509 **3012** 4 P 1509 **4012**
	4 P	4190 **4013**							
160 A / B3	3 P	4190 **3016**							
	4 P	4190 **4016**							
200 A / B3	3 P	4190 **3019**							
	4 P	4190 **4019**							
250 A / B4	3 P	4190 **3025**				4109 **3025**		3 P 2694 **3021** [3][4] 4 P 2694 **4021** [3][4]	3 P 1509 **3025** 4 P 1509 **4025**
	4 P	4190 **4025**				4109 **4025**			
400 A / B4	3 P	4190 **3039**				4109 **3039**			
	4 P	4190 **4039**				4109 **4039**			
630 A / B5	3 P	4190 **3063**				4109 **3063**		2694 **3051**[3][4	1509 **3063**
	4 P	4190 **4063**				4109 **4063**		2694 **4051** [3][4]	1509 **4063**
800 A / B6	3 P	4190 **3080**	J3 type Black 1132 **1111**	S4 type Blue IP65 1443 **3114**	200 mm 1401 **1520** 320 mm 1401 **1532**[1]	4109 **3080**			3 P 1509 **3080** 4 P 1509 **4080**
	4 P	4190 **4080**				4109 **4080**			
1250 A / B6	3 P	4190 **3120**				4109 **3120**			
	4 P	4190 **4120**				4109 **4120**			
1600 A / B7	3 P	4190 **3160**				4109 **3160**			1509 **3160**
	4 P	4190 **4160**				4109 **4160**			1509 **4160**

(1) Standard.
(2) 2 contacts supplied: one for position I and one for position II.
(3) For complete shrouding at front, rear, top and bottom, order quantity 4; if equipped with bridging bars order quantity 3.
(4) For top and bottom shrouding for the front only, order quantity 2.
(5) See "Copper bar connection pieces".
(6) For a 3 pole device order quantity 3 bridging bars, for a 4 pole device order quantity 4.

Operating principle

SIRCOVER I-I+II-II





Warning: Please note that in position I+II contacts overlap.
In case of UPS, make sure it is working in static bypass mode before operating.

References (continued)

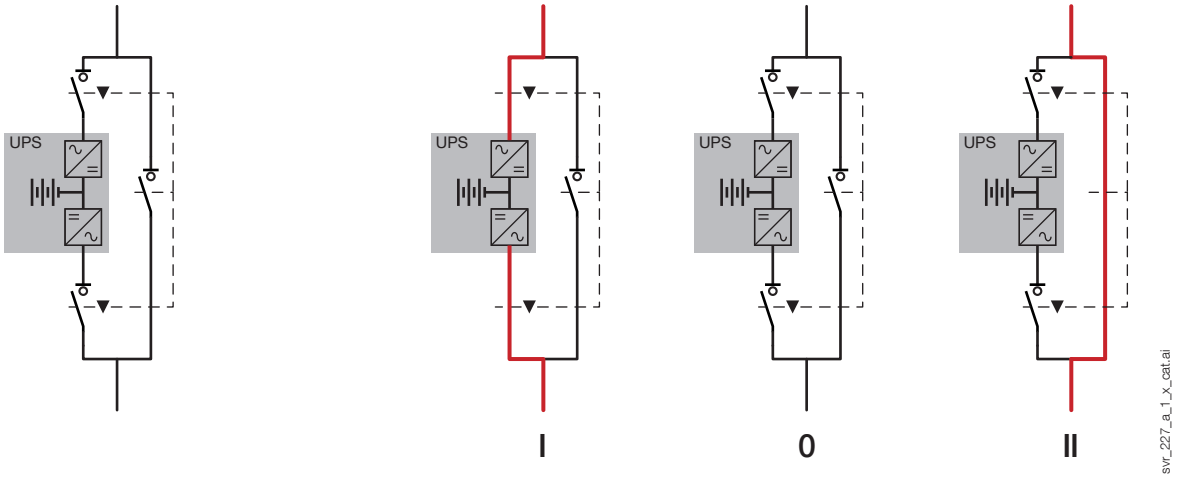
SIRCOVER Bypass I-0-II

Rating (A) / Frame size	No. of poles	Switch body	Direct handle	External handle	Shaft for external handle	Bridging bars[6]	Auxiliary contact	Terminal shrouds	Terminal screens
125 A / B3	3 P	41AC **7013**	J2 type Blue 1122 **1111** Red 1123 **1111**	S2 type Blue IP55 1421 **2113** Blue IP65 1423 **2113** [1]	200 mm 1400 **1020** 320 mm 1400 **1032**[1]	3 P 2x 4109 **3019** 4 P 2x 4109 **4019**	1st/2nd NO/NC contact 4109 **0021**[2]	3 P 2694 **3014** [3][4] 4 P 2694 **4014** [3][4]	3 P 1509 **3012** 4 P 1509 **4012**
	4 P	41AC **9013**							
160 A / B3	3 P	41AC **7016**							
	4 P	41AC **9016**							
200 A / B3	3 P	41AC **7020**							
	4 P	41AC **9020**							
250 A / B4	3 P	41AC **7025**	J3 type Black 1132 **1111**	S3 type Blue IP65 1433 **3113**	200 mm 1401 **1520** 320 mm 1401 **1532**[1]	2x 4109 **3025**		3 P 2694 **3021** [3][4] 4 P 2694 **4021** [3][4]	3 P 1509 **3025** 4 P 1509 **4025**
	4 P	41AC **9025**				2x 4109 **4025**			
400 A / B4	3 P	41AC **7040**				2x 4109 **3039**			
	4 P	41AC **9040**				2x 4109 **4039**			
630 A / B5	3 P	41AC **7063**				2x 4109 **3063**		2694 **3051** [3][4]	1509 **3063**
	4 P	41AC **9063**				2x 4109 **4063**		2694 **4051** [3][4]	1509 **4063**
800 A / B6	3 P	41AC **7080**	J4 type Black 1142 **1111** [5]	V2 type Black IP65 4199 **7146**	200 mm 2799 **3015** 320 mm 2799 **3018**[1] 450 mm 2799 **3019**	2x 4109 **3080**			3 P 1509 **3080** 4 P 1509 **4080**
	4 P	41AC **9080**				2x 4109 **4080**			
1250 A / B6	3 P	41AC **7120**				2x 4109 **3120**			
	4 P	41AC **9120**				2x 4109 **4120**			
1600 A / B7	3 P	41AC **7160**				2x 4109 **3160**			1509 **3160**
	4 P	41AC **9160**				2x 4109 **4160**			1509 **4160**

(1) Standard.
(2) 2 contacts supplied: one for position I and one for position II.
(3) For complete shrouding at front, rear, top and bottom, order quantity 6; if equipped with bridging bars order quantity 4.
(4) For top and bottom shrouding for the front only, order quantity 2.
(5) Double lever handle.
(6) For a 3 pole device order quantity 6 bridging bars, for a 4 pole device order quantity 8.

Operating principle

SIRCOVER Bypass I-0-II



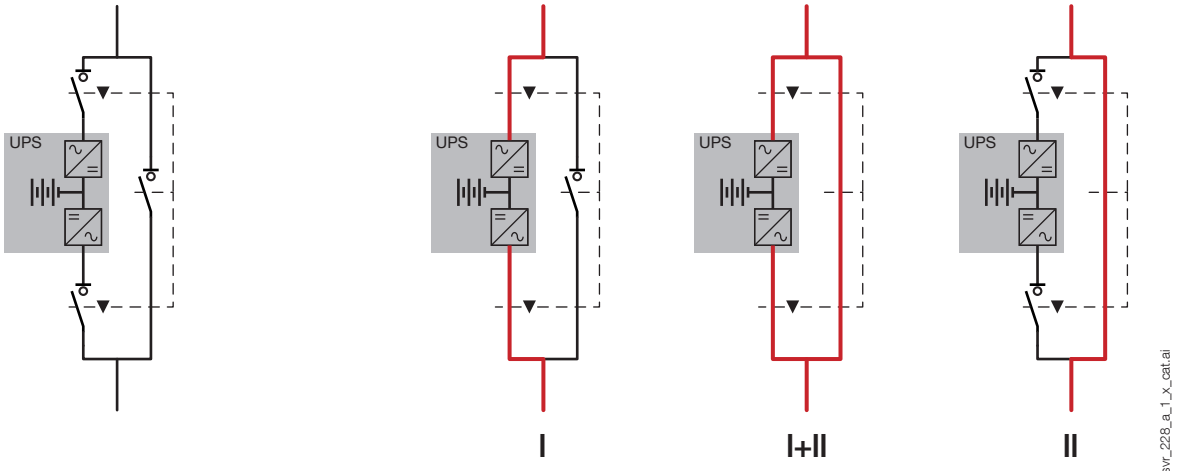
SIRCOVER Bypass I-I+II-II

Rating (A) / Frame size	No. of poles	Switch body	Direct handle	External handle	Shaft for external handle	Bridging bars[6]	Auxiliary contact	Terminal shrouds	Terminal screens
125 A / B3	3 P	46AC **7013**	J2 type Blue 1122 **1111** Red 1123 **1111**	S2 type Blue IP 65 1423 **2114** [1]	200 mm 1400 **1020** 320 mm 1400 **1032**[1]	3 P 2x 4109 **3019** 4 P 2x 4109 **4019**	1st/2nd NO/NC contact 4109 **0021**[2]	3 P 2694 **3014** [3][4] 4 P 2694 **4014** [3][4]	3 P 1509 **3012** 4 P 1509 **4012**
	4 P	46AC **9013**							
160 A / B3	3 P	46AC **7016**							
	4 P	46AC **9016**							
200 A / B3	3 P	46AC **7020**							
	4 P	46AC **9020**							
250 A / B4	3 P	46AC **7025**	J3 type Black 1132 **1111**	S3 type Blue IP65 1433 **3114**	200 mm 1401 **1520** 320 mm 1401 **1532**[1]	2x 4109 **3025**		3 P 2694 **3021** [3][4] 4 P 2694 **4021** [3][4]	3 P 1509 **3025** 4 P 1509 **4025**
	4 P	46AC **9025**				2x 4109 **4025**			
400 A / B4	3 P	46AC **7040**				2x 4109 **3039**			
	4 P	46AC **9040**				2x 4109 **4039**			
630 A / B5	3 P	46AC **7063**				2x 4109 **3063**		2694 **3051** [3][4]	1509 **3063**
	4 P	46AC **9063**				2x 4109 **4063**		2694 **4051** [3][4]	1509 **4063**
800 A / B6	3 P	46AC **7080**	J4 type Black 1142 **1111** [5]	V2 type Black I P65 4199 **7146**	200 mm 2799 **3015** 320 mm 2799 **3018**[1] 450 mm 2799 **3019**	2x 4109 **3080**			3 P 1509 **3080** 4 P 1509 **4080**
	4 P	46AC **9080**				2x 4109 **4080**			
1250 A / B6	3 P	46AC **7120**				2x 4109 **3120**			
	4 P	46AC **9120**				2x 4109 **4120**			
1600 A / B7	3 P	46AC **7160**				2x 4109 **3160**			1509 **3160**
	4 P	46AC **9160**				2x 4109 **4160**			1509 **4160**

(1) Standard.
(2) 2 contacts supplied: one for position I and one for position II.
(3) For complete shrouding at front, rear, top and bottom, order quantity 6; if equipped with bridging bars order quantity 4.
(4) For top and bottom shrouding for the front only, order quantity 2.
(5) Double lever handle.
(6) For a 3 pole device order quantity 6 bridging bars, for a 4 pole device order quantity 8.

Operating principle

SIRCOVER Bypass I-I+II-II



Warning: Please note that in position I+II contacts overlap.
In case of UPS, make sure it is working in static bypass mode before operating.

Accessories

Direct operation handle

SIRCOVER I-0-II and I-I+II-II				
Rating (A)	**Frame size**	**Handle colour**	**Handle type**	**Reference**
125 … 630	B3 … B5	Blue	J2	1122 **1111**
125 … 630	B3 … B5	Red	J2	1123 **1111**
800 … 1600	B6 … B7	Blue	J3	1132 **1111**
2000 … 3200	B8	Black	S5	2799 **7042**(1)

SIRCOVER Bypass				
Rating (A)	**Frame size**	**Handle colour**	**Handle type**	**Reference**
125 … 200	B3	Blue	J2	1122 **1111**
250 … 630	B4 … B5	Blue	J3	1132 **1111**
800 … 1600	B6 … B7	Blue	J4	1142 **1111**(1)

(1) Double lever handle.



J2 type handle *J3 type handle* *J4 type 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 I-0-II and I-I+II-II					
Rating (A)	**Frame size**	**Switching type**	**External IP**(1)	**Handle type**	**Reference**
125 … 630	B3 … B5	I - 0 - II	IP55	S2	1421 **2113**
125 … 630	B3 … B5	I - 0 - II	IP65	S2	1423 **2113**
125 … 630	B3 … B5	I - I+II - II	IP65	S2	1423 **2114**
800 … 1600	B6 … B7	I - 0 - II	IP65	S4	1443 **3113**(2)
800 … 1600	B6 … B7	I - I+II - II	IP65	S4	1443 **3114**(2)
2000 … 3200	B8	I - 0 - II	IP65	S5	1453 **8113**(2)

(1) IP: protection index according to IEC 60529.
(2) Double lever handle.

SIRCOVER Bypass					
Rating (A)	**Frame size**	**Switching type**	**External IP**(1)	**Handle type**	**Reference**
125 … 200	B3	I - 0 - II	IP55	S2	1421 **2113**
125 … 200	B3	I - 0 - II	IP65	S2	1423 **2113**
250 … 630	B4 … B5	I - 0 - II	IP65	S3	1433 **3113**
800 … 1600	B6 … B7	I - 0 - II	IP65	V2	4199 **7146**

(1) IP: protection index according to IEC 60529.



S2 type handle *S3 type handle* *S4 type handle* *S5 type handle*

Alternative S type handle cover colours

Use

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

Colour	To be ordered in multiples of	Handle type	Reference
Light grey	50	S2, S3	1401 **0001**
Dark grey	50	S2, S3	1401 **0011**
Light grey	50	S4	1401 **0031**
Dark grey	50	S4	1401 **0041**


acces_198.eps

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

Add 12 mm to the handle depth.

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

(1) IP: protection index according to IEC 60529.


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Shaft guide for external operation

Use

For use with S type handles, to guide the shaft extension into the external handle.
This accessory enables the handle to engage the extension shaft with a misalignment of up to 15 mm.
Recommended for a shaft length over 320 mm.

Designation	Reference
Shaft guide	1429 **0000**


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Accessories (continued)

Shaft for external operation

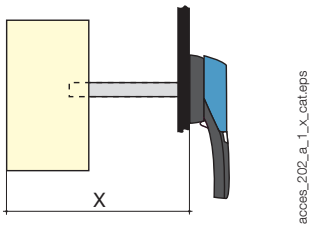
Use

Standard lengths:
- 200 mm,
- 320 mm,
- 450 mm.

Other lengths available: consult us.







SIRCOVER I-0-II and I-I+II-II				
Rating (A)	**Frame size**	**Length (mm)**	**Side X (mm)**	**Reference**
125 … 400	B3 … B4	200	210 … 310	1400 **1020**
125 … 400	B3 … B4	320	210 … 430	1400 **1032**
500 … 630	B5	200	280 … 390	1400 **1020**
500 … 630	B5	320	280 … 510	1400 **1032**
800 … 1600	B6 … B7	200	425 … 577	1401 **1520**
800 … 1600	B6 … B7	320	425 … 697	1401 **1532**
2000 … 3200	B8	200	653 ... 803	2799 **3015**
2000 … 3200	B8	320	653 … 923	2799 **3018**
2000 … 3200	B8	450	653 … 1053	2799 **3019**

SIRCOVER Bypass				
Rating (A)	**Frame size**	**Length (mm)**	**Side X (mm)**	**Reference**
125 … 200	B3	200	320 … 450	1400 **1020**
125 … 200	B3	320	320 … 570	1400 **1032**
250 … 400	B4	200	298 … 420	1401 **1520**
250 … 400	B4	320	298 … 540	1401 **1532**
630	B5	200	417 … 539	1401 **1520**
630	B5	320	417 … 659	1401 **1532**
800 … 1600	B6 … B7	200	550 ... 680	2799 **3015**
800 … 1600	B6 … B7	320	550 … 800	2799 **3018**
800 … 1600	B6 … B7	450	550 … 930	2799 **3019**

Bridging bars

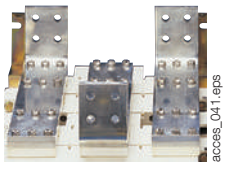
Use

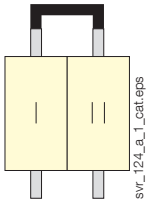
For creating a common connection between switches I & II, on the top or bottom side of the SIRCOVER, to enable, for example, the load to be fed from either incoming source (I or II).

For SIRCOVER Bypass, twice the quantity of bridging bars are required (6 for 3 pole device and 8 for 4 pole).

SIRCOVER I-0-II and SIRCOVER I-I+II-II

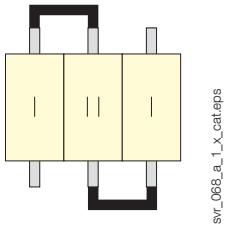






SIRCOVER Bypass





Rating (A)	Frame size	No. of poles	Diameter (mm)	Reference[1]
125 … 200	B3	3 P	20 x 2.5	4109 **3019**
125 … 200	B3	4 P	20 x 2.5	4109 **4019**
250	B4	3 P	25 x 2.5	4109 **3025**
250	B4	4 P	25 x 2.5	4109 **4025**
315 … 400	B4	3 P	32 x 5	4109 **3039**
315 … 400	B4	4 P	32 x 5	4109 **4039**
500	B5	3 P	32 x 5	4109 **3050**
500	B5	4 P	32 x 5	4109 **4050**
630	B5	3 P	50 x 5	4109 **3063**
630	B5	4 P	50 x 5	4109 **4063**
800 … 1000	B6	3 P	50 x 6	4109 **3080**
800 … 1000	B6	4 P	50 x 6	4109 **4080**
1250	B6	3 P	60 x 8	4109 **3120**
1250	B6	4 P	60 x 8	4109 **4120**
1600	B7	3 P	90 x 10	4109 **3160**
1600	B7	4 P	90 x 10	4109 **4160**

(1) SIRCOVER: For a 3 pole device order quantity 3 bridging bars, and for a 4 pole device order quantity 4.
SIRCOVER Bypass: For a 3 pole device order quantity 6 bridging bars, and for a 4 pole device order quantity 8.

Copper bar connection pieces

Use

For ratings 2000 to 3200 A.

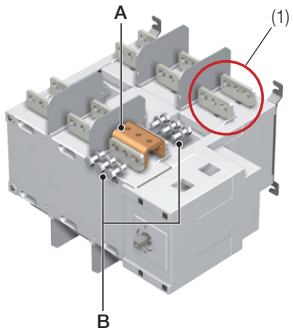
Enables:

- Flat connection: the connection pieces provide a link between the two power terminals of the same pole (Fig. 1).
- Edgewise connection: the connection pieces provide a link between the two power terminals of the same pole and an edgewise bar connection terminal.
- Top or bottom bridging between two poles (Fig. 3).

Once installed, the power terminal is connection ready.

For 3200 A rating, connection pieces (part A) are supplied as standard. Bolt sets must be ordered separately.

Fig. 1



acces_457_a_1_x_cat

(1) Single pole connection: 1 pole (top or bottom) comprises two power terminals which are to be linked with the copper connection kit.

Connection: the quantities given in the below table refer to the number of pieces required per pole, top or bottom.

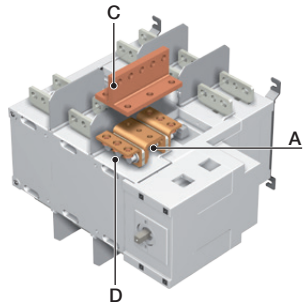
Bridging connection: the quantities given refer to the number of pieces required to complete a single bridging connection between two poles.

	Reference	2000 – 2500 A			3200 A		
		Fig. 1	Fig. 2	Fig. 3	Fig. 1	Fig. 2	Fig. 3
		Connection		Bridging connection I - II	Connection		Bridging connection I - II
		Flat	Edgewise		Flat	Edgewise	
Connection - part A	2619 **1200**	1	1	2(2)	included	included	included
Bolt kit 35 mm - part B	2699 **1201**	1(1)		2(2)	1(1)		2(2)
Bolt kit 45 mm - part B	2699 **1200**	1(1)			1(1)		
T + Bolt kit - part C	2629 **1200**		1	1		1	1
Bracket + Bolt kit - part D	2639 **1200**		1			1	
Bar + Bolt kit - part E	4109 **0320**			1			1

(1) Choose the bolt length according to the thickness of the bars being connected; if bar thickness is greater than 20 mm, 45 mm bolts are required.

(2) For bridging connections, quantity 2 pieces are required for creating the link between the two power terminals of the same pole for switch bodies I and II.

Fig. 2

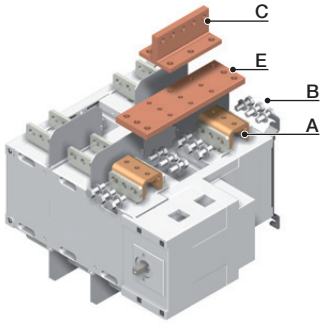


acces_457_a_1_x_cat

The quantities of the applicable pieces then need to be multiplied by the number of connection points (power terminals) in order to determine the total quantity required of each part.

Example: for a 4 pole 2500 A SIRCOVER with upstream edgewise connection (Fig. 2) and downstream bridging (Fig. 3), the following quantities will be required:

Fig. 3



acces_230_c_1_x_cat

Part	Upstream edgewise quantity	Downstream bridging quantity	Total quantity
A	8	8	16
B	0	8	8
C	8	4	12
D	8	0	8
E	0	4	4

Auxiliary contact

Use

Pre-breaking and signalling of positions I and II: 1 to 2 NO/NC auxiliary contacts in each position.

Low level AC: consult us.

Connection to the control circuit

By 6.35 mm fast-on terminal.

Electrical characteristics

30,000 operations.



svr_058_a_1_cat.eps



acces_065.eps

Characteristics

Rating (A)	Frame size	Nominal current (A)	Operating current I_e (A) 250 VAC AC-13	400 VAC AC-13	24 VDC DC-13	48 VDC DC-13
125 … 3200	B3... B8	16	12	8	14	6

NO/NC changeover contact			
Rating (A)	**Frame size**	**Contact(s)**	**Reference**
125 … 1600	B3 … B7	1st / 2nd	4109 **0021**
2000 … 3200	B8	1st / 2nd	included

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)	Frame size	No. of poles	Position	Reference
125 … 200	B3	3 P	top / bottom / front (I) / rear (II)	2694 **3014**(1)(2)
125 … 200	B3	4 P	top / bottom / front (I) / rear (II)	2694 **4014**(1)(2)
250 … 400	B4	3 P	top / bottom / front (I) / rear (II)	2694 **3021**(1)(2)
250 … 400	B4	4 P	top / bottom / front (I) / rear (II)	2694 **4021**(1)(2)
500 … 630	B5	3 P	top / bottom / front (I) / rear (II)	2694 **3051**(1)(2)
500 … 630	B5	4 P	top / bottom / front (I) / rear (II)	2694 **4051**(1)(2)

(1) For complete shrouding at front, rear, top and bottom, order 4 x for a SIRCOVER and 6 x for a SIRCOVER Bypass; if equipped with bridging bars order 3 x for a SIRCOVER and 4 x for a SIRCOVER Bypass.
(2) For top and bottom shrouding for the front only, order 2 x for a SIRCOVER and a SIRCOVER Bypass.

Terminal screens

Use
Upstream and downstream protection against direct contact with terminals or connection parts. For upstream and downstream protection, order quantity 1.



Rating (A)	Frame size	No. of poles	Position	Reference
125 … 200	B3	3 P	top / bottom	1509 **3012**
125 … 200	B3	4 P	top / bottom	1509 **4012**
250 … 400	B4	3 P	top / bottom	1509 **3025**
250 … 400	B4	4 P	top / bottom	1509 **4025**
500 … 630	B5	3 P	top / bottom	1509 **3063**
500 … 630	B5	4 P	top / bottom	1509 **4063**
800 … 1250	B6	3 P	top / bottom	1509 **3080**
800 … 1250	B6	4 P	top / bottom	1509 **4080**
1600	B7	3 P	top / bottom	1509 **3160**
1600	B7	4 P	top / bottom	1509 **4160**
2000 … 3200	B8	3 / 4 P	top / bottom	included

Inter-phase barrier

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

Rating (A)	Frame size	No. of poles	Reference
125 … 200	B3	3 P	2998 **0033**
125 … 200	B3	4 P	2998 **0034**
250 … 400	B4	3 P	2998 **0023**
250 … 400	B4	4 P	2998 **0024**
500 … 630	B5	3 P	2998 **0013**
500 … 630	B5	4 P	2998 **0014**
800 … 3200	B6 … B8	3/4 P	included

Key handle interlocking system

Padlocking in position I, 0 or II

SIRCOVER Rating (A) /Frame size	SIRCOVER Bypass Rating (A) / Frame size	Operation	Figure	Reference
125 … 630 / B3 ... B5	125 … 200 / B3	external	1	1423 **2813**

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

SIRCOVER Rating (A) / Frame size	SIRCOVER Bypass Rating (A) / Frame size	Operation	Figure	Reference
125 … 630 / B3 … B5	125 … 200 / B3	direct	2	4109 **1006**(1)
	250 … 630 / B4 ... B5	direct	3	consult us
800 … 1600 / B6 … B7	800 … 1600 / B6 ... B7	direct	3	4109 **1004**(2)
2000 … 3200 / B8		direct	3	4109 **2007**(2)
125 … 630 / B3 … B5	125 … 630 / B3 … B5	external	4	1499 **7701**(2)
2000 … 3200 / B8	800 … 1600 / B6 … B7	external	4	2799 **7002**(2)

(1) Specific handle included.
(2) 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)

SIRCOVER Rating (A) / Frame size	SIRCOVER Bypass Rating (A) / Frame size	Operation	Figure	Reference
125 … 630 / B3 … B5	125 … 200 / B3	direct	2	4109 **1002**(1)
	250 … 630 / B4 … B5	direct	3	consult us
800 … 1600 / B6 … B7	800 … 1600 / B6 … B7	direct	3	4109 **1004**(2)
2000 … 3200 / B8		direct	3	4109 **2007**(2)
125 … 630 / B3 … B5	125 … 630 / B3 … B5	external	4	1499 **7701**(2)
2000 … 3200	800 … 1600 / B6 … B7	external	4	2799 **7002**(2)

(1) Specific handle included.
(2) This locking facility can be configured by the user in the 3 positions.

Locking using 230 VAC undervoltage coil in position 0 (factory fitted)

SIRCOVER Rating (A) / Frame size	SIRCOVER Bypass Rating (A) Frame size	Operation	Figure	Reference
800 … 3200 / B6 … B8	800 … 1600 / B6 … B7	direct	3	consult us

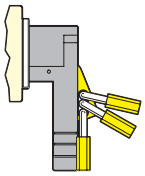
Locking using Type K CASTELL lock (not supplied)

SIRCOVER Rating (A) / Frame size	SIRCOVER Bypass Rating (A) / Frame size	Operation	Figure	Reference
125 … 1600 / B3 … B7	125 … 630 / B3 … B5	external	4	1499 **7702**
2000 … 3200 / B8	800 … 1600 / B6 … B7	external	4	2799 **7003**

Use

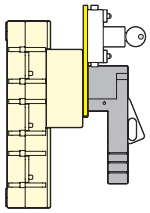
- Padlocked (padlock not included). This device is factory mounted in the direct or external operation handle and allows the use of up to 3 padlocks.
- Locking:
  - using lock (not supplied),
  - using undervoltage coil.
- The interlocking positions are either determined as standard or configured by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

Fig. 1



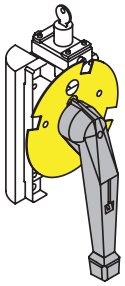
acces_061_a_1_x_cat

Fig. 2



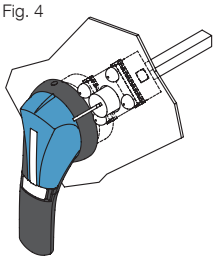
acces_001_a_1_x_cat

Fig. 3



acces_132_a_1_x_cat

Fig. 4



acces_158_a_1_x_cat

Other specific accessories



bd_03_04_01

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

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**	**315 A**	**400 A**	**500 A**	**630 A**
Frame size		**B3**	**B3**	**B3**	**B4**	**B4**	**B4**	**B5**	**B5**
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) according to IEC 60947-6-1									
Rated voltage	**Utilisation category**	**A/B(1)**	**A/B(1)**	**A/B(1)**	**A/B(1)**	**A/B(1)**	**A/B(1)**	**A/B(1)**	**A/B(1)**
415 VAC	AC-31 B	125	160	200	250	315	400	500	630
415 VAC	AC-32 B				200	315	400	500	500
415 VAC	AC-33 B				200	200	200	400	400
Rated operational currents I_e (A) according to IEC 60947-3									
Rated voltage	**Utilisation category**	**A/B(1)**	**A/B(1)**	**A/B(1)**	**A/B(1)**	**A/B(1)**	**A/B(1)**	**A/B(1)**	**A/B(1)**
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	500/630
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 (3)	AC-21 A / AC-21 B	125/125	160/160	200/200	200/200	200/200	200/200	500/500	500/500
690 VAC (3)	AC-22 A / AC-22 B	125/125	125/125	125/125	160/160	160/160	160/160	400/400	400/400
690 VAC (3)	AC-23 A / AC-23 B	63/80	63/80	63/80	125/125	125/125	125/125	400/400	400/400
220 VDC	DC-21 A / DC-21 B	125/125	160/160	200/200	250/250	250/250	250/250	500/500	630/630
220 VDC	DC-22 A / DC-22 B	125/125	160/160	200/200	250/250	250/250	250/250	500/500	630/630
220 VDC	DC-23 A / DC-23 B	125/125	125/125	125/125	200/200	200/200	200/200	500/500	630/630
440 VDC (2)	DC-21 A / DC-21 B	125/125	125/125	125/125	200/200	200/200	200/200	500/500	630/630
440 VDC (2)	DC-22 A / DC-22 B	125/125	125/125	125/125	200/200	200/200	200/200	500/500	630/630
440 VDC (2)	DC-23 A / DC-23 B	125/125	125/125	125/125	200/200	200/200	200/200	500/500	630/630
Operation power in AC-23 (kW) (4)									
At 415 VAC without AC pre-break		58/58	75/75	100/100	100/100	145/145	190/190	235/235	235/280
At 690 VAC without AC pre-break		50/62	50/62	50/62	90/90	90/90	90/90	310/310	310/310
Reactive power (kvar) (4)									
At 415 VAC (kvar)		60/60	75/75	100/100	125/125	150/150	200/200	250/250	250/300
Fuse protected short-circuit withstand as per IEC 60947-3 (kA rms prospective)									
Prospective short-circuit current with gG DIN fuses at 415 VAC (kA rms)		100	100	50	50	50	50	50	50
Prospective short-circuit current with gG DIN fuses at 690 VAC (kA rms)					50	50	50	50	50
Associated fuse rating (A)		125	160	200	250	315	400	500	630
Short-circuit withstand without protection as per IEC 60947-3									
Rated short-time withstand current 0.3s I_{cw} at 415 VAC (kA rms)		12	12	12	15 (5)	15 (5)	15 (5)	17 (5)	17 (5)
Rated short-time withstand current 1s I_{cw} at 415 VAC (kA rms)		7	7	7	8 (5)	8 (5)	8 (5)	11 (5)	10 (5)
Rated peak withstand current at 415 VAC (kA peak)		20	20	20	30	30	30	45	45
Short-circuit withstand without protection as per IEC 60947-6-1									
Rated short-time withstand current 30 ms I_{cw} at 415 VAC (kA rms)		10	10	10	10	10	10		
Rated short-time withstand current 60 ms I_{cw} at 415 VAC (kA rms)								10	12.6
Connection									
Minimum Cu cable cross-section as per IEC 60947-1 (mm^2)		35	35	50	95	120	185	2 x 95	2 x 120
Recommended Cu busbar cross-section (mm^2)								2 x 32 x 5	2 x 40 x 5
Maximum Cu cable cross-section (mm^2)		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
Min./max. tightening torque (Nm)		9/13	9/13	9/13	20/26	20/26	20/26	20/26	20/26
Mechanical specifications									
Durability (number of operating cycles)		10,000	10,000	10,000	8 ,000	8,000	8,000	5,000	5,000
Weight 3 P (kg)		2.9	2.9	2.9	3.8	3.9	3.9	8.6	9.1
Weight 4 P (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 "+" an 1 pole for the "-".
4-pole device with 2 poles in series by polarity.
(3) Interphase barriers must be installed on the products.
(4) The power value is given for information only, the current values vary from one manufacturer to another.
(5) Values given at 690 VAC.

800 to 3200 A

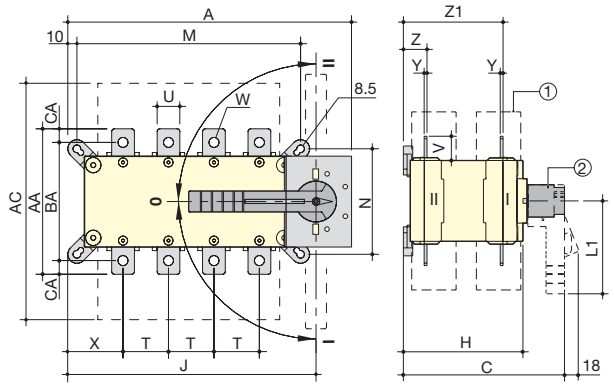
Thermal current I^{th} at 40°C		**800 A**	**1000 A**	**1250 A**	**1600 A**	**2000 A**	**2500 A**	**3200 A**
Frame size		**B6**	**B6**	**B6**	**B7**	**B8**	**B8**	**B8**
Rated insulation voltage U_i (V)		1000	1000	1000	1000	1000	1000	1000
Rated impulse withstand voltage U_{imp} (kV)		12	12	12	12	12	12	12
Rated operational currents I_e (A) according to IEC 60947-6-1								
Rated voltage	**Utilisation category**	**A/B(1)**	**A/B(1)**	**A/B(1)**	**A/B(1)**	**A/B(1)**	**A/B(1)**	**A/B(1)**
415 VAC	AC-31 B	800	1000	1250	1600	2000	2500	3200
415 VAC	AC-32 B	800	1000	1250	1250	2000	2000	2000
415 VAC	AC-33 B	800	1000	1000	1000	1250	1250	1250
Rated operational currents I_e (A) according to IEC 60947-3								
Rated voltage	**Utilisation category**	**A/B(1)**	**A/B(1)**	**A/B(1)**	**A/B(1)**	**A/B(1)**	**A/B(1)**	**A/B(1)**
415 VAC	AC-21 A / AC-21 B	800/800	1000/1000	1250/1250	1600/1600	-/2000	-/2500	-/3200
415 VAC	AC-22 A / AC-22 B	800/800	1000/1000	1250/1250	1600/1600	-/2000	-/2500	-/3200
415 VAC	AC-23 A / AC-23 B	800/800	1000/1000	1250/1250	1250/1250	-/1600	-/1600	-/1600
500 VAC	AC-21 A / AC-21 B	800/800	1000/1000	1250/1250	1600/1600	-/2000	-/2000	-/2000
500 VAC	AC-22 A / AC-22 B	630/630	800/800	1000/1000	1600/1600			
500 VAC	AC-23 A / AC-23 B	630/630	630/630	800/800	1000/1000			
690 VAC (3)	AC-21 A / AC-21 B	800/800	1000/1000	1250/1250	1600/1600	-/2000	-/2000	-/2000
690 VAC (3)	AC-22 A / AC-22 B	630/630	800/800	1000/1000	1000/1000			
690 VAC (3)	AC-23 A / AC-23 B	630/630	630/630	800/800	800/800			
220 VDC	DC-21 A / DC-21 B	800/800	1000/1000	1250/1250	1250/1250			
220 VDC	DC-22 A / DC-22 B	800/800	1000/1000	1250/1250	1250/1250			
220 VDC	DC-23 A / DC-23 B	800/800	1000/1000	1250/1250	1250/1250			
440 VDC (2)	DC-21 A / DC-21 B	800/800	1000/1000	1250/1250	1250/1250			
440 VDC (2)	DC-22 A / DC-22 B	800/800	1000/1000	1250/1250	1250/1250			
440 VDC (2)	DC-23 A / DC-23 B	800/800	1000/1000	1250/1250	1250/1250			
Operation power in AC-23 (kW) (4)								
At 415 VAC without AC pre-break		375/375	450/450	560/560	560/560	-/710	-/710	-/710
At 690 VAC without AC pre-break		475/475	475/475	620/620	620/620			
Reactive power (kvar) (4)								
At 415 VAC (kvar)		400/400	500/500	650/650	650/650	-/850	-/850	-/850
Fuse protected short-circuit withstand as per IEC 60947-3 (kA rms prospective)								
Prospective short-circuit current with gG DIN fuses at 415 VAC (kA rms)		50	50	100	100			
Prospective short-circuit current with gG DIN fuses at 690 VAC (kA rms)		50	50	50				
Associated fuse rating (A)		800	1000	1250	2x800			
Short-circuit withstand without protection as per IEC 60947-3								
Rated short-time withstand current 0.3s I_{cw} at 415 VAC (kA rms)		64	64	64	78	78	78	78
Rated short-time withstand current 1s I_{cw} at 415 VAC (kA rms)		35	35	35	50	50	50	50
Rated peak withstand current at 415 VAC (kA peak)		55	55	80	110	120	120	120
Short-circuit withstand without protection as per IEC 60947-6-1								
Rated short-time withstand current 30 ms I_{cw} at 415 VAC (kA rms)								
Rated short-time withstand current 60 ms I_{cw} at 415 VAC (kA rms)		20	20	25	32	50	50	50
Connection								
Minimum Cu cable cross-section as per IEC 60947-1 (mm^2)		2 x 185						
Recommended Cu busbar cross-section (mm^2)		2 x 50 x 5	2 x 63 x 5	2 x 60 x7	2 x 100 x 5	3 x 100 x 5	2 x 100 x 10	3 x 10 x 100
Maximum Cu cable cross-section (mm^2)		4 x 185	4 x 185	4 x 185	6 x 185			
Maximum Cu busbar width (mm)		63	63	63	100	100	100	100
Min./max. tightening torque (Nm)		20/26	20/26	20/26	40/45	40/45	40/45	40/45
Mechanical specifications								
Durability (number of operating cycles)		4,000	4,000	4,000	3,000	3,000	3,000	3,000
Weight 3 P (kg)		20.5	21.0	21.6	25.7	42.0	42.0	52.3
Weight 4 P (kg)		24.8	25.6	26.2	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 "+" an 1 pole for the "-".
4-pole device with 2 poles in series by polarity.
(3) Interphase barriers must be installed on the products.
(4) The power value is given for information only, the current values vary from one manufacturer to another.
(5) Values given at 690 VAC.

Dimensions

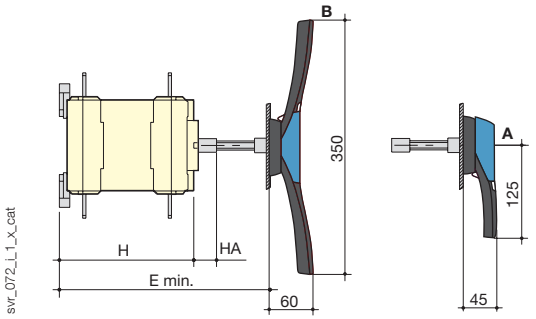
SIRCOVER 125 to 1600 A / B3 to B7

Direct front operation



A. S2 type handle for external operation: 125 to 630 A
B. S4 type handle for external operation: 800 to 1600 A

External front operation

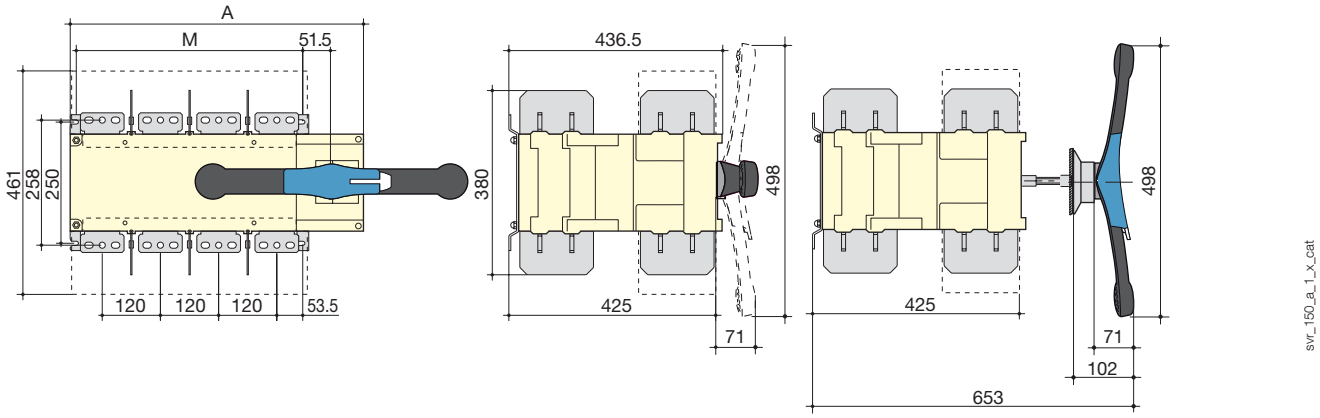


1. Terminal shrouds
2. Direct operation handle:
- 125 to 630 A: L1 = 140 mm,
- 800 to 1600 A: L1 = 210 mm.

Rating (A)/ Frame size	Overall dimensions A 3p.	A 4p.	C	E min	Terminal shrouds AC	Switch body H	HA	J 3p.	J 4p.	Switch mounting M 3p.	M 4p.	N	Connection T	U	V	W	X 3p.	X 4p.	Y	Z	Z1	AA	BA	AC
125 / B3	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 / B3	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 / B3	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 / B4	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 / B4	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 / B4	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 / B5	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 / B5	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 / B6	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 / B6	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 / B6	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/B7	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 / B8

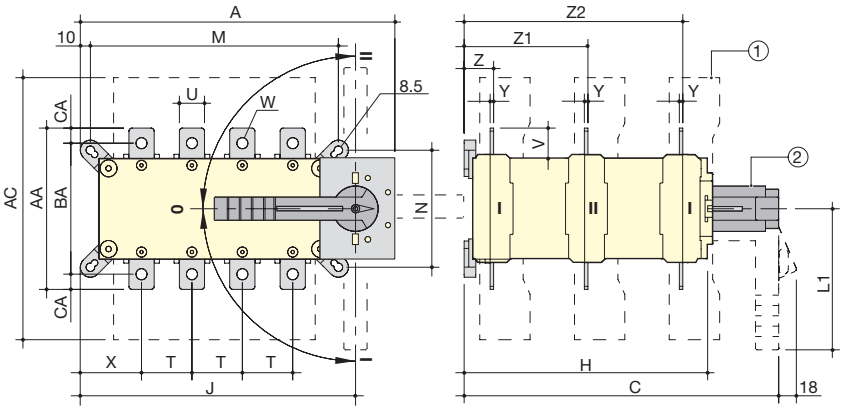
Direct front operation



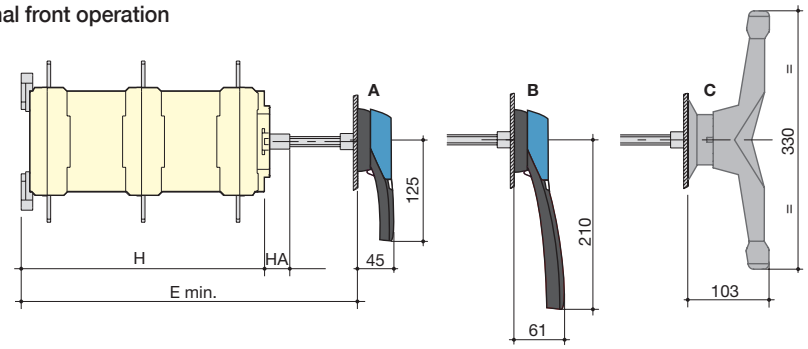
Rating (A) / Frame size	Overall dimensions A 3p.	A 4p.	Switch mounting M 3p.	M 4p.
2000 … 3200 / B8	478	598	347	467

SIRCOVER Bypass 125 to 1600 A / B3 to B7

Direct front operation



External front operation



svr_070_i_1_x_cat

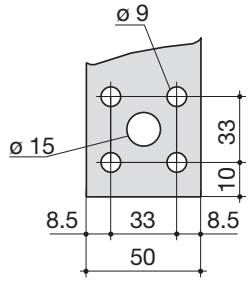
A. S2 type handle for external operation: 125 to 200 A
B. S3 type handle for external operation: 250 to 630 A
C. External double lever handle: 800 to 1600 A

1. Terminal shrouds
2. Direct operation handle:
- 125 to 200 A: L1 = 140 mm,
- 250 to 630 A: L1 = 210 mm,
- 800 to 1600 A: L1 = diameter 330 mm.

Rating (A) / Frame size	Overall dimensions				Terminal shrouds	Switch body				Switch mounting			Connection											
	A 3+6p.	A 4+8p.	C	E min	AC	H	HA	J 3+6p.	J 4+8p.	M 3+6p.	M 4+8p.	N	T	U	V	W	X 3+6p.	X 4+8p.	Y	Z	Z1	Z2	AA	BA	AC
125 / B3	221	251	313	320	235	243	25	182	212	156	186	101	36	20	25	8.5	56	50	3.5	28	124	219	135	115	10
160 / B3	221	251	313	320	235	243	25	182	212	156	186	101	36	20	25	8.5	56	50	3.5	28	124	219	135	115	10
200 / B3	221	251	313	320	235	243	25	182	212	156	186	101	36	20	25	8.5	56	50	3.5	28	124	219	135	115	10
250 / B4	262	312	313	298	280	243	25	223	273	196	246	116	50	25	30	11	61	61	3.5	30	124	219	160	130	10
400 / B4	262	312	313	298	280	243	25	223	273	196	246	116	50	35	35	11	61	61	3.5	30	124	219	170	140	15
630 / B5	319	379	432	417	400	362	25	272	332	246	306	176	65	45	50	13	70.5	65.5	5	43	180	317	260	220	20
800 / B6	386	466	560	550	459	479	29	306.5	386.5	255	335	250	80	50	60.5	15	48	48	7	66.5	253.5	439.5	321		26.5
1250 / B6	386	466	560	550	459	479	29	306.5	386.5	255	335	250	80	60	65	16x11	48	48	7	66.5	253.5	439.5	320		29.25
1600/B7	478	598	560	550	461	479	29	388.5	518.5	347	467	250	120	90	43.5	12.5x5	54	54	8	66.5	253.5	439.5	288		15

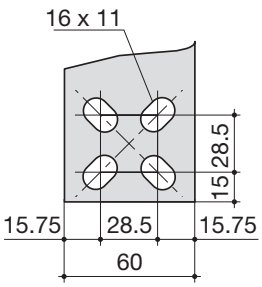
Connection terminals

SIRCOVER and SIRCOVER Bypass 800 A / B6



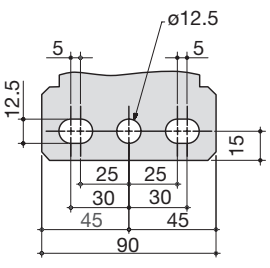
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SIRCOVER and SIRCOVER Bypass 1250 A / B6



svr_078_b_1_x_cat

SIRCOVER 1600 to 3200 A / B7 to B8 SIRCOVER Bypass 1600 A / B7

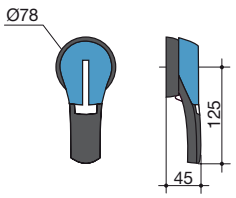


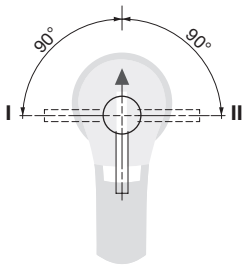
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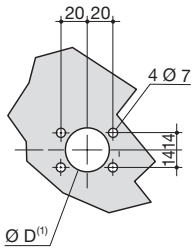
Dimensions for external handles

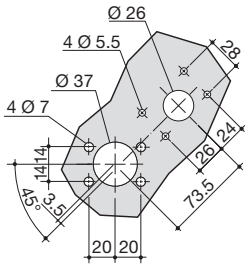
SIRCOVER 125 to 630 A / B3 to B5

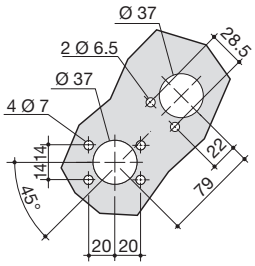
Handle type	Front operation Direction of operation	Door drilling
S2 type	**0** or **I+II**	With lock RONIS EL11AP With lock CASTELL K









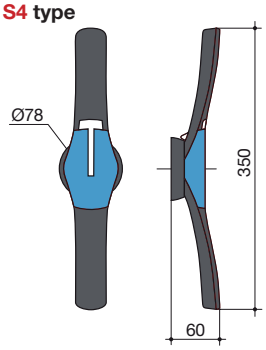


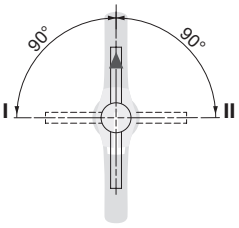
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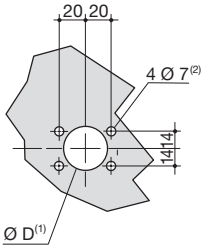
(1) Ø31 to Ø37: rear screw mounting,
Ø37: front clip mounting.

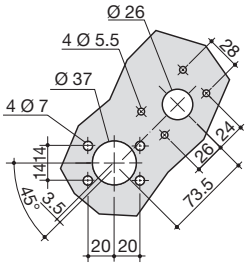
SIRCOVER 800 to 1600 A / B6 to B7

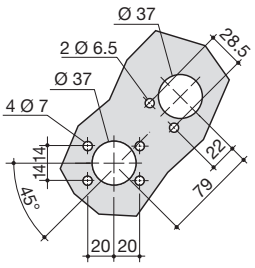
Handle type	Front operation Direction of operation	Door drilling
S4 type	**0** or **I+II**	With lock RONIS EL11AP With lock CASTELL K









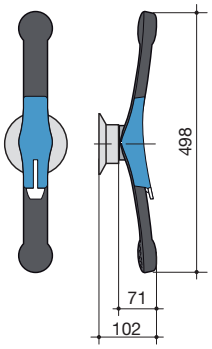


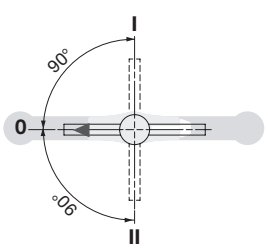
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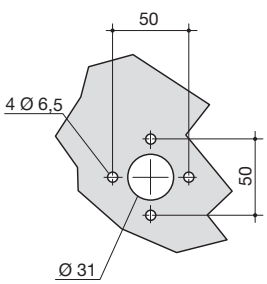
(1) Ø31 to Ø37: rear screw mounting,
Ø37: front clip mounting.
(2) Ø6 to Ø7: clip mounting

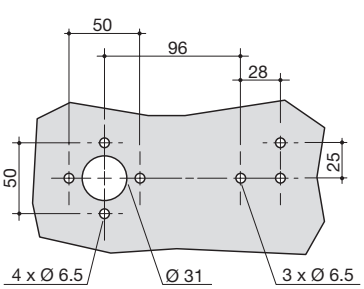
SIRCOVER 2000 to 3200 A / B8

Handle type	Front operation Direction of operation	Door drilling
S5 type with V Escutcheon		With lock CASTELL K





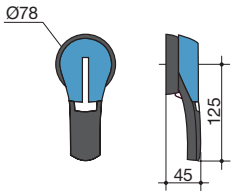


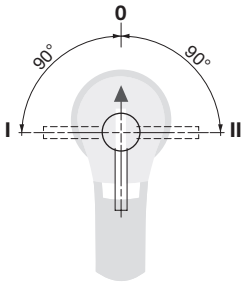


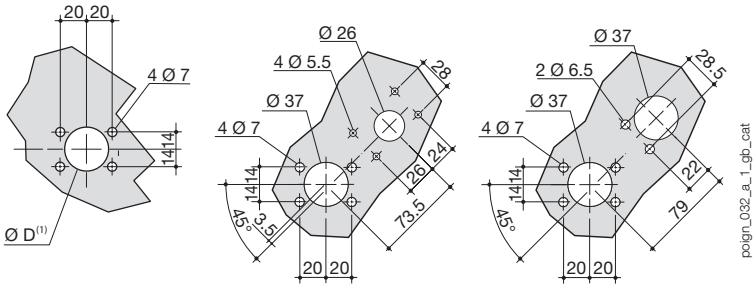
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SIRCOVER Bypass 125 to 200 A / B3

Handle type	Front operation Direction of operation	Door drilling
S2 type		With lock RONIS EL11AP With lock CASTELL K



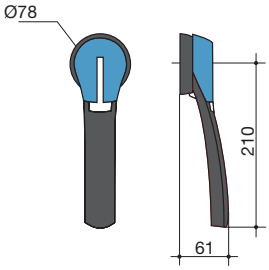


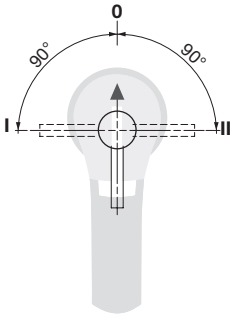


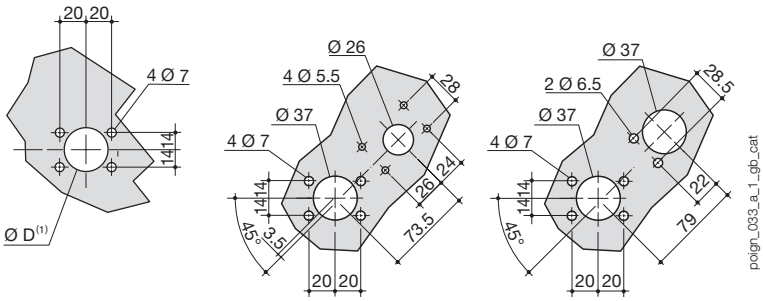
(1) Ø31 to Ø37: rear screw mounting, Ø37: front clip mounting.

SIRCOVER Bypass 250 to 630 A / B4 to B5

Handle type	Front operation Direction of operation	Door drilling
S3 type		With lock RONIS EL11AP With lock CASTELL K







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

SIRCOVER Bypass 800 to 1600 A / B6 to B7

Handle type	Front operation Direction of operation	Door drilling
J4 type		With lock CASTELL K

