



# SIRCORDER

Manually operated transfer switching equipment  
from 63 to 3200 A

Transfer switches



SIRCORDER  
4 P 400 A



SIRCORDER Bypass  
500 A

## Function

SIRCORDER products are manually operated transfer switches with positive break indication. There are 3 ranges in the series:

- SIRCORDER for open transition switching (I-0-II) available in 3 or 4 pole,
- SIRCORDER 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,

- SIRCORDER Bypass. This combination of three interlocked load break switches provides 3+6 or 4+8 poles for bypass applications.

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.

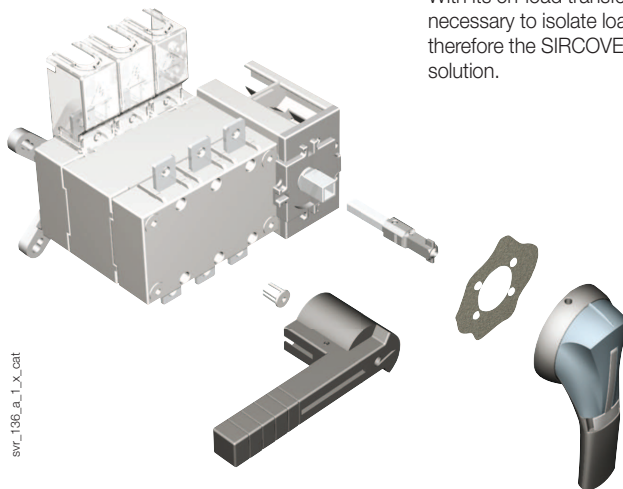
## Advantages

### A complete range

There are 3 SIRCORDER models to meet every need: The standard model I-0-II, the overlapping contact model I-I+II-II and the Bypass model.

### 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.



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### Stable positions

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

### On-load and isolation switching

With its AC-23 and AC-33 characteristics, tested according to standards IEC 60947-3 and IEC 60947-6-1, the SIRCORDER 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 SIRCORDER offers an economical solution.

## The solution for

- Manufacturing
- Power distribution



## Strong points

- Complete range
- Easy to connect
- Stable positions
- On-load and isolation switching

## Conformity to standards

- IEC 60947-6-1
- IS/IEC 60947-3



## Enclosed solutions

- Adapted to harsh mechanical risk and dust hazards
- Isolation and padlocking
- Top and bottom extension boxes available
- Colour: STR RAL 7035
- Cable gland plates: top & bottom
- Steel, thickness 1.2 to 2.0 mm
- Coating: epoxy polyester powder
- 4 wall mounting brackets provided
- Door: solid with hinges
- Metal cam lock



## References - SIRCOVER kit and enclosed solutions

### SIRCOVER I-0-II

Rating (A) / Frame size	No. of poles	Kit 1 with direct handle <sup>(1)</sup>	Kit 2 with external handle <sup>(2)</sup>	Enclosed solutions		
				Enclosure size	Enclosed switch	Top or bottom extension box <sup>(5)</sup>
63 A / B2	4 P	41K1 4006A <sup>(3)</sup>	41K2 4006A <sup>(3)</sup>	Size 1	41E1 4006A	41E1 0001A
100 A / B2	4 P	41K1 4010A <sup>(3)</sup>	41K2 4010A <sup>(3)</sup>		41E1 4010A	
CD 125 A / B2	4 P	41K1 4011A <sup>(3)</sup>	41K2 4011A <sup>(3)</sup>		41E1 4011A	
125 A / B3	3 P	41K1 3013A	41K2 3013A	Size 2	41E1 3013A	41E1 0002A
	4 P	41K1 4013A	41K2 4013A		41E1 4013A	
160 A / B3	3 P	41K1 3016A	41K2 3016A		41E1 3016A	
	4 P	41K1 4016A	41K2 4016A		41E1 4016A	
200 A / B3	3 P	41K1 3020A	41K2 3020A		41E1 3020A	
	4 P	41K1 4020A	41K2 4020A		41E1 4020A	
250 A / B4	3 P	41K1 3025A	41K2 3025A	Size 3	41E1 3025A	41E1 0003A
	4 P	41K1 4025A	41K2 4025A		41E1 4025A	
315 A / B4	3 P	41K1 3031A	41K2 3031A		41E1 3031A	
	4 P	41K1 4031A	41K2 4031A	41E1 4031A		
400 A / B4	3 P	41K1 3040A	41K2 3040A	Size 4	41E1 3040A	41E1 0004A
	4 P	41K1 4040A	41K2 4040A		41E1 4040A	
500 A / B5	3 P	41K1 3050A	41K2 3050A	Size 5	41E1 3050A	41E1 0005A
	4 P	41K1 4050A	41K2 4050A		41E1 4050A	
630 A / B5	3 P	41K1 3063A	41K2 3063A		41E1 3063A	
	4 P	41K1 4063A	41K2 4063A		41E1 4063A	
CD 800 A / B5	3 P	41K1 3079A	41K2 3079A		41E1 3079A	
	4 P	41K1 4079A	41K2 4079A		41E1 4079A	
800 A / B6	3 P	41K1 3080A	41K2 3080A	Size 6	41E1 3080A	41E1 0006A
	4 P	41K1 4080A	41K2 4080A		41E1 4080A	
1000 A / B6	3 P	41K1 3100A	41K2 3100A		41E1 3100A	
	4 P	41K1 4100A	41K2 4100A	41E1 4100A		
1250 A / B6	3 P	41K1 3120A	41K2 3120A	Size 7	41E1 3120A	41E1 0007A
	4 P	41K1 4120A	41K2 4120A		41E1 4120A	
1600 A / B7	3 P	41K1 3160A	41K2 3160A		41E1 3160A	
	4 P	41K1 4160A	41K2 4160A	41E1 4160A		
2000 A / B8	3 P	41K1 3200A <sup>(4)</sup>	41K2 3200A <sup>(4)</sup>	Size 8	41E1 3200A	41E1 0008A
	4 P	41K1 4200A <sup>(4)</sup>	41K2 4200A <sup>(4)</sup>		41E1 4200A	
2500 A / B8	3 P	41K1 3250A <sup>(4)</sup>	41K2 3250A <sup>(4)</sup>		41E1 3250A	
	4 P	41K1 4250A <sup>(4)</sup>	41K2 4250A <sup>(4)</sup>		41E1 4250A	
3200 A / B8	3 P	41K1 3320A <sup>(4)</sup>	41K2 3320A <sup>(4)</sup>		41E1 3320A	
	4 P	41K1 4320A <sup>(4)</sup>	41K2 4320A <sup>(4)</sup>		41E1 4320A	

(1) Kit 1 includes: Switch body + direct handle + interphase barriers + bridging bars.

(2) Kit 2 includes Switch body + external handle + 200 mm shaft + interphase barriers + bridging bars.

(3) Without interphase barriers.

(4) Without bridging bars.

(5) Optional extension boxes may be attached to the Top and/or Bottom of the enclosure.

### Also available<sup>(1)</sup>

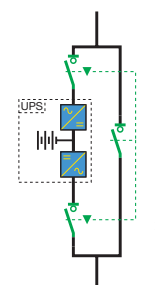
#### SIRCOVER I-I+II-II

From 125 to 1600 A: with these manual changeover switches you can transfer a normal source to a backup source without any interruption. All you have to do is ensure that both sources are synchronised.

(1) For any request on these ranges please consult us.

#### SIRCOVER Bypass

From 125 to 1600 A: This combination of three interlocked load break switches provides 3+6 or 4+8 poles for bypass applications. They provide on-load transfer of any low voltage power circuit, as well as safety isolation by double breaking per pole. Other applications include Servo Stabilizer



# SIRCOVER

Manually operated transfer switching equipment  
from 63 to 3200 A

## References (continued)

### SIRCOVER Bypass I-0-II

Rating (A) / Frame size	No. of poles	KIT 2 <sup>(1)</sup>	Auxiliary contact	Terminal shrouds	Terminal screens
125 A / B3	4 P	41K2 9013A	1 <sup>st</sup> /2 <sup>nd</sup> NO/NC contact 4109 0021 <sup>(2)</sup>	3 P 2694 3014 <sup>(3)(4)</sup>	3 P 1509 3012
160 A / B3	4 P	41K2 9016A		4 P 2694 4014 <sup>(3)(4)</sup>	4 P 1509 4012
200 A / B3	4 P	41K2 9019A		3 P 2694 3021 <sup>(3)(4)</sup>	3 P 1509 3025
250 A / B4	4 P	41K2 9025A		4 P 2694 4021 <sup>(3)(4)</sup>	4 P 1509 4025
400 A / B4	4 P	41K2 9039A		3 P 2694 3051 <sup>(3)(4)</sup>	3 P 1509 3063
500 A / B5	4 P	41K2 9050A		4 P 2694 4051 <sup>(3)(4)</sup>	4 P 1509 4063
630 A / B5	4 P	41K2 9063A			
800 A / B6	4 P	41K2 9080A			
1000 A / B6	4P	41K2 9100A			
1250 A / B6	4 P	41K2 9120A			
1600 A / B7	4 P	41K2 9160A			3 P 1509 3080
					4 P 1509 4080
					3 P 1509 3160
				4 P 1509 4160	

(1) KIT 2 includes: Switch + External handle + shaft + Bridging bars & interphase barriers.

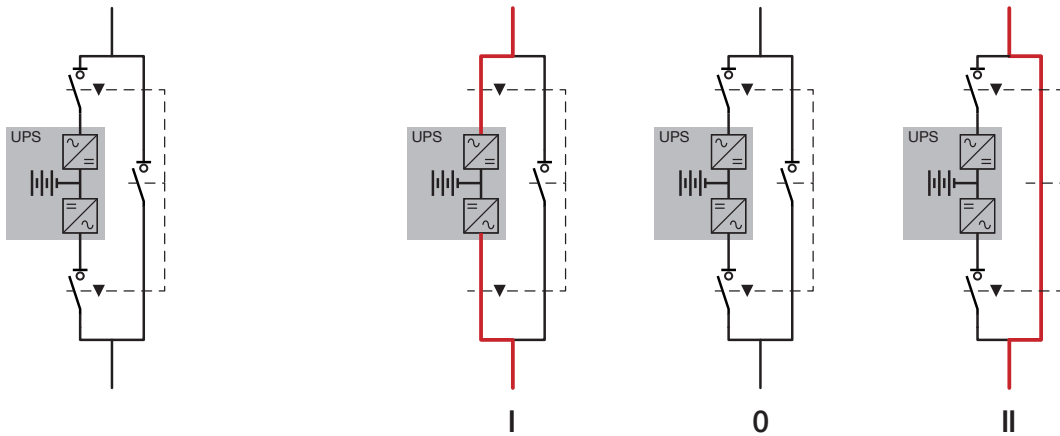
(2) 2 contacts supplied: one for position I and one for position II.

(3) To fully shroud the front and rear at the top and bottom, order quantity 6 (or 4 if using bridging bars).

(4) To shroud front switch top and bottom, order quantity 2.

## Operating principle

### SIRCOVER Bypass I-0-II



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## Accessories

### Handle

#### Sircover

Rating (A) / Frame size	Direct Handle	External Handle IP 55	External Handle IP 65
63A...CD125A/B2	42990002A	-	-
125A...CD800/B3...B5	41995012A	14212113A	14232113A
800A...1600A/B6..B7	27997052A	-	14433113A
2000A...3200A/B8	27997012A	-	14538113A

#### Sircover Bypass

Rating (A) / Frame size	Direct Handle	External Handle IP 55	External Handle IP 65
125...200A/B3	11221111A	14212113A	14232113A
250 ... 630/B4..B5	27997052A	-	14333113A
800 ... 1600/B6..B7	27997012A	-	41997146A



### Shaft for external operation

#### Use

Standard lengths:

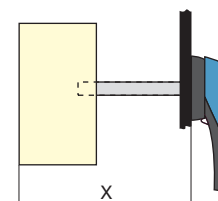
- 200 mm,
- 320 mm.

Other lengths available: consult us

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



SIRCOVER Bypass				
Rating (A)	Frame size	Length (mm)	Side X (mm)	Reference
125 ... 200	B3	200	320 ... 450	1400 1020A
125 ... 200	B3	320	320 ... 570	1400 1032A
250 ... 400	B4	200	298 ... 420	1401 1520A
250 ... 400	B4	320	298 ... 540	1401 1532A
500 ... 630	B5	200	417 ... 539	1401 1520A
500 ... 630	B5	320	417 ... 659	1401 1532A
800 ... 1600	B6 ... B7	200	550 ... 680	2799 3015A
800 ... 1600	B6 ... B7	320	550 ... 800	2799 3018A
800 ... 1600	B6 ... B7	450	550 ... 930	2799 3019A



### 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**

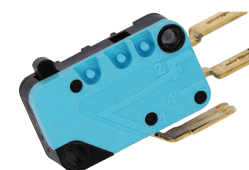
By 6.35 mm fast-on terminal.

#### Characteristics

Rating (A)	Frame size	Nominal current (A)	Operating current I <sub>o</sub> (A)				Electrical endurance
			250 VAC AC-13	400 VAC AC-13	24 VDC DC-13	48 VDC DC-13	
63 ... 125	B2	16	16 (EN 61058-1)	-	-	-	10 000
125 ... 3200	B3 ... B8	16	12	8	14	6	30 000

#### NO/NC changeover contact

Rating (A)	Frame size	Contact(s)	Reference
63 ... 125	B2	1 <sup>st</sup> / 2 <sup>nd</sup>	4209 1030A
125 ... 1600	B3 ... B7	1 <sup>st</sup> / 2 <sup>nd</sup>	4109 0021A
2000 ... 3200	B8	1 <sup>st</sup> / 2 <sup>nd</sup>	included



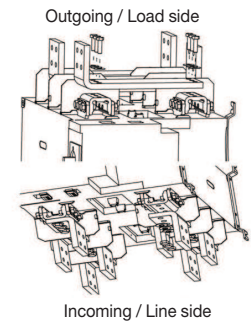
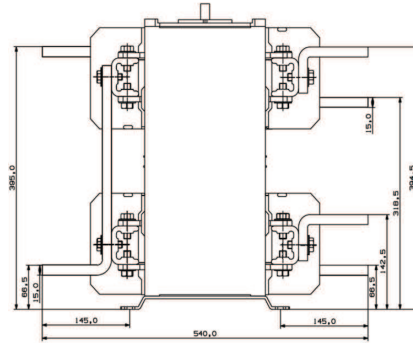
# SIRCOVER

Manually operated transfer switching equipment  
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## Bridging bars kit

For ratings 2000 to 2500 A.

S.No	FG Codes	Description	Req. Qty / Switch
1	26194251A	Bridging bar B8 4P Line side	1
2	41094250A	4P Bridging bar B8 load side	1
3	26191200A	U bridge 1Pole connector B8 CU	16



For ratings 3200 A.

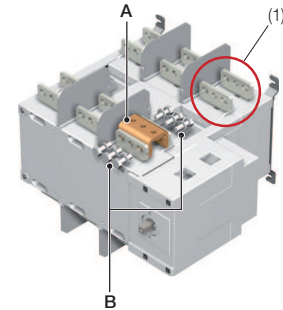
Enables:

- 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



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(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.

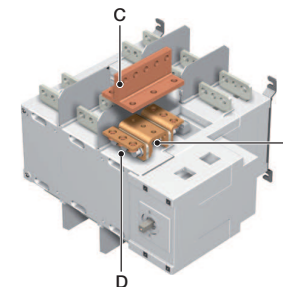
Bridging connection: The quantities given refer to the number of pieces required to complete a single bridging connection between two poles.

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

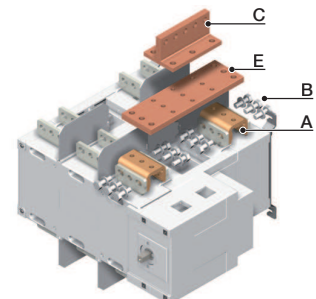
(2) For bridging connections, quantity 2 pieces are required for creating the link between the two power terminals of the same pole for switch bodies I and II.

Fig. 2



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Fig. 3



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The Below items are required to order for one SIRCOVER Switch (3200A)

	Reference	Total quality
Bolt kit 45 mm - part B	2699 1200	16
T + Bolt kit - part C	2629 1200	12
Bracket + Bolt kit - part D	2639 1200	8
Bar + Bolt kit - part E	4109 0320	4

## 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
63 ... 125	B2	4 P	top / bottom / front (I) / rear (II)	2994 4008A <sup>(1)(2)</sup>
125 ... 200	B3	3 P	top / bottom / front (I) / rear (II)	2694 3014A <sup>(1)(2)</sup>
125 ... 200	B3	4 P	top / bottom / front (I) / rear (II)	2694 4014A <sup>(1)(2)</sup>
250 ... 400	B4	3 P	top / bottom / front (I) / rear (II)	2694 3021A <sup>(1)(2)</sup>
250 ... 400	B4	4 P	top / bottom / front (I) / rear (II)	2694 4021A <sup>(1)(2)</sup>
500 ... 630	B5	3 P	top / bottom / front (I) / rear (II)	2694 3051A <sup>(1)(2)</sup>
500 ... 630	B5	4 P	top / bottom / front (I) / rear (II)	2694 4051A <sup>(1)(2)</sup>



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

### Terminal screens

Rating (A) / Frame size	No. of poles	Position	Type of screens	Reference
125 ... 200 / B3	3 P	Top and bottom	Standard	1509 3012A
	4 P			1509 4012A
	3 P		Wide	1509 3013A
	4 P			1509 4013A
250 ... 400 / B4	3 P		Standard	1509 3025A
	4 P			1509 4025A
	3 P			Wide
	4 P		1509 4026A	
	3 P		Standard	
	4 P			1509 4063A
3 P	Wide			1509 3064A
4 P			1509 4064A	
800 ... 1250 / B6		3 P	Standard	1509 3080A
	4 P	1509 4080A		
	3 P	Wide		1509 3081A
	4 P			1509 4081A
1600 / B7	3 P	Standard	1509 3160A	
	4 P		1509 4160A	
2000 ... 3200 / B8	3 P	Standard	Included	
	4 P			

#### Use

Upstream and downstream protection against direct contact with terminals or connection parts. In case of use of spreaders, use the wide screens.

For upstream and downstream protection, order quantity one.



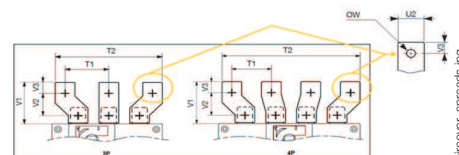
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### Spreaders

Rating (A) / Frame size	No. of poles	Reference
125 ... 200 / B3	3 P	4106 3016A
	4 P	4106 4016A
250 / B4	3 P	4106 3025A
	4 P	4106 4025A
315 ... 400 / B4	3 P	4106 3040A
	4 P	4106 4040A
500 / B5	3 P	4106 3050A
	4 P	4106 4050A
630...CD 800 A / B5	3 P	4106 3063A
	4 P	4106 4063A

#### Use

They widen the terminals of the products, therefore enabling bigger Aluminium connections.



sircover\_spreads.jpg

Frame	Sircover rating (A)	Part Nr.											
		Spreaders 3P	Spreaders 4P	U2	W	T1 3P	T1 4P	T2 3P	T2 4P	V1	V2	V3	
B3	125 A, 160 A, 200 A	4106 3016A	4106 4016A	25	8,5	49,5	45	124	160	59,3	28,8	14,5	
B4a	250 A	4106 3025A	4106 4025A	32	12,5	71,2	64	174,4	224,4	78	41	20	
B4b	315 A, 400 A / B4	4106 3040A	4106 4040A	40	12,5	83	72	206	256	98	52,7	25	
B5a	400 A, 500 A	4106 3050A	4106 4050A	49,5	12,5	81,7	76	213	278	111	68,5	20	
B5b	630 A, 800 A CD	4106 3063A	4106 4063A	51,5	12,5	89	81	230	295	119,8	63,3	26,5	



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## Characteristics according to IEC 60947-3 and IEC 60947-6-1

### 63 to 400 A

Thermal current I <sup>th</sup> at 40°C	63 A	100 A	CD 125 A	125 A	160 A	200 A	250 A	315 A	400 A		
<b>Frame size</b>	<b>B2</b>	<b>B2</b>	<b>B2</b>	<b>B3</b>	<b>B3</b>	<b>B3</b>	<b>B4</b>	<b>B4</b>	<b>B4</b>		
Rated insulation voltage U <sub>i</sub> (V)	800	800	800	800	800	800	1000	1000	1000		
Rated impulse withstand voltage U <sub>imp</sub> (kV)	6	6	6	8	8	8	12	12	12		
<b>Rated operational currents I<sub>e</sub> (A) according to IEC 60947-6-1</b>											
<b>Rated voltage</b>	<b>Utilisation category</b>		<b>A/B<sup>(1)</sup></b>	<b>A/B<sup>(1)</sup></b>	<b>A/B<sup>(1)</sup></b>	<b>A/B<sup>(1)</sup></b>	<b>A/B<sup>(1)</sup></b>	<b>A/B<sup>(1)</sup></b>	<b>A/B<sup>(1)</sup></b>	<b>A/B<sup>(1)</sup></b>	
415 VAC	AC-31 B		63	100	125	125	160	200	250	315	400
415 VAC	AC-32 B		63	80	80				200	315	400
415 VAC	AC-33 B							200	200	200	
<b>Rated operational currents I<sub>e</sub> (A) according to IEC 60947-3</b>											
<b>Rated voltage</b>	<b>Utilisation category</b>		<b>A/B<sup>(1)</sup></b>	<b>A/B<sup>(1)</sup></b>	<b>A/B<sup>(1)</sup></b>	<b>A/B<sup>(1)</sup></b>	<b>A/B<sup>(1)</sup></b>	<b>A/B<sup>(1)</sup></b>	<b>A/B<sup>(1)</sup></b>	<b>A/B<sup>(1)</sup></b>	
415 VAC	AC-21 A / AC-21 B		63/63	100/100	100/125	125/125	160/160	200/200	250/250	315/315	400/400
415 VAC	AC-22 A / AC-22 B		63/63	100/100	100/125	125/125	160/160	200/200	250/250	315/315	400/400
415 VAC	AC-23 A / AC-23 B		-/63	-/63	-/63	125/125	125/125	125/125	200/200	315/315	400/400
500 VAC	AC-21 A / AC-21 B					125/125	160/160	200/200	250/250	315/315	400/400
500 VAC	AC-22 A / AC-22 B					125/125	160/160	200/200	200/250	200/315	200/400
500 VAC	AC-23 A / AC-23 B					80/80	80/80	80/80	200/200	200/200	200/200
690 VAC <sup>(3)</sup>	AC-21 A / AC-21 B					125/125	160/160	200/200	200/200	200/200	200/200
690 VAC <sup>(3)</sup>	AC-22 A / AC-22 B					125/125	125/125	125/125	160/160	160/160	160/160
690 VAC <sup>(3)</sup>	AC-23 A / AC-23 B					63/80	63/80	63/80	125/125	125/125	125/125
220 VDC	DC-21 A / DC-21 B					125/125	160/160	200/200	250/250	250/250	250/250
220 VDC	DC-22 A / DC-22 B					125/125	160/160	200/200	250/250	250/250	250/250
220 VDC	DC-23 A / DC-23 B					125/125	125/125	125/125	200/200	200/200	200/200
440 VDC <sup>(2)</sup>	DC-21 A / DC-21 B					125/125	125/125	125/125	200/200	200/200	200/200
440 VDC <sup>(2)</sup>	DC-22 A / DC-22 B					125/125	125/125	125/125	200/200	200/200	200/200
440 VDC <sup>(2)</sup>	DC-23 A / DC-23 B					125/125	125/125	125/125	200/200	200/200	200/200
<b>Operation power in AC-23 (kW)<sup>(4)</sup></b>											
At 415 VAC without AC pre-break	30	30	30	58	75	100	100	145	190		
At 690 VAC without AC pre-break				50/62	50/62	50/62	90/90	90/90	90/90		
<b>Reactive power (kvar)<sup>(4)</sup></b>											
At 415 VAC (kvar)	30	30	30	60	75	100	125	150	200		
<b>Fuse protected short-circuit withstand as per IEC 60947-3 (kA rms prospective)</b>											
Prospective short-circuit current with gG DIN fuses at 415 VAC (kA rms)	50	25	15	100	100	50	50	50	50		
Prospective short-circuit current with gG DIN fuses at 690 VAC (kA rms)							50	50	50		
Associated fuse rating (A)	63	100	125	125	160	200	250	315	400		
<b>Short-circuit withstand without protection as per IEC 60947-3</b>											
Rated short-time withstand current 0.3s I <sub>sw</sub> at 415 VAC (kA rms)	3.5	3.5	3.5	12	12	12	15 <sup>(5)</sup>	15 <sup>(5)</sup>	15 <sup>(5)</sup>		
Rated short-time withstand current 1s I <sub>sw</sub> at 415 VAC (kA rms)	2.5	2.5	2.5	7	7	7	8 <sup>(5)</sup>	8 <sup>(5)</sup>	8 <sup>(5)</sup>		
Rated peak withstand current at 415 VAC (kA peak)	15	15	15	20	20	20	30	30	30		
<b>Short-circuit withstand without protection as per IEC 60947-6-1</b>											
Rated short-time withstand current 30 ms I <sub>sw</sub> at 415 VAC (kA rms)	5	5	5	10	10	10	10	10	10		
<b>Connection</b>											
Minimum Cu cable cross-section (mm <sup>2</sup> )	10	10	10	35	35	50	95	120	185		
Recommended Al cable cross-section (mm <sup>2</sup> )	35	50	50	70	95	150	185	240	300		
Recommended Al busbar cross-section (mm <sup>2</sup> )				20x8	20x8	25x10	25x10	40x10	40x12		
Maximum Cu cable cross-section (mm <sup>2</sup> )	50	50	50	50	95	120	150	240	240		
Maximum busbar width (mm)				25	25	25	25	32	50		
Maximum busbar width with spreaders (mm)				25	25	25	32	40	40		
Tightening torque min/max (Nm)	1,2/3	1,2/3	1,2/3	9/13	9/13	9/13	20/26	20/26	20/26		
<b>Mechanical characteristics</b>											
Durability (number of operating cycles)	25000	25000	25000	10000	10000	10000	8000	8000	5000		
Weight of a 3 pole device with no accessories (kg)				2.9	2.9	2.9	3.8	3.9	3.9		
Weight of a 4 pole device with no accessories (kg)				4.1	4.1	4.1	4.6	4.6	4.6		

(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 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.

## Characteristics according to IEC 60947-3 and IEC 60947-6-1

### 500 to 3200 A

Thermal current I <sup>th</sup> at 40°C	500 A	630 A	CD 800 A	800 A	1000 A	1250 A	1600 A	2000 A	2500 A	3200 A
Frame size	B5	B5	B5	B6	B6	B6	B7	B8	B8	B8
Rated insulation voltage U <sub>i</sub> (V)	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Rated impulse withstand voltage U <sub>imp</sub> (kV)	12	12	12	12	12	12	12	12	12	12

### Rated operational currents I<sub>e</sub> (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>	A/B <sup>(1)</sup>	A/B <sup>(1)</sup>
415 VAC	AC-31 B	500	630	800/800	800	1000	1250	1600	2000	2500	3200
415 VAC	AC-32 B	500	500	500	800	1000	1250	1250	2000	2000	2000
415 VAC	AC-33 B	400	400	400	800	1000	1000	1000	1250	1250	1250

### Rated operational currents I<sub>e</sub> (A) according to IEC 60947-3

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>	A/B <sup>(1)</sup>	A/B <sup>(1)</sup>
415 VAC	AC-21 A / AC-21 B	500/500	630/630	800/800	800/800	1000/1000	1250/1250	1600/1600	-/2000	-/2500	-/3200
415 VAC	AC-22 A / AC-22 B	500/500	630/630	630/630	800/800	1000/1000	1250/1250	1600/1600	-/2000	-/2500	-/3200
415 VAC	AC-23 A / AC-23 B	500/500	500/630	500/630	800/800	1000/1000	1250/1250	1250/1250	-/1600	-/1600	-/1600
500 VAC	AC-21 A / AC-21 B	500/500	630/630	630/630	800/800	1000/1000	1250/1250	1600/1600	-/2000	-/2000	-/2000
500 VAC	AC-22 A / AC-22 B	500/500	500/500	500/500	630/630	800/800	1000/1000	1600/1600			
500 VAC	AC-23 A / AC-23 B	400/400	400/400	400/400	630/630	630/630	800/800	1000/1000			
690 VAC <sup>(3)</sup>	AC-21 A / AC-21 B	500/500	500/500	500/500	800/800	1000/1000	1250/1250	1600/1600	-/2000	-/2000	-/2000
690 VAC <sup>(3)</sup>	AC-22 A / AC-22 B	400/400	400/400	400/400	630/630	800/800	1000/1000	1000/1000			
690 VAC <sup>(3)</sup>	AC-23 A / AC-23 B	400/400	400/400	400/400	630/630	630/630	800/800	800/800			
220 VDC	DC-21 A / DC-21 B	500/500	630/630	630/630	800/800	1000/1000	1250/1250	1250/1250			
220 VDC	DC-22 A / DC-22 B	500/500	630/630	630/630	800/800	1000/1000	1250/1250	1250/1250			
220 VDC	DC-23 A / DC-23 B	500/500	630/630	630/630	800/800	1000/1000	1250/1250	1250/1250			
440 VDC <sup>(2)</sup>	DC-21 A / DC-21 B	500/500	630/630	630/630	800/800	1000/1000	1250/1250	1250/1250			
440 VDC <sup>(2)</sup>	DC-22 A / DC-22 B	500/500	630/630	630/630	800/800	1000/1000	1250/1250	1250/1250			
440 VDC <sup>(2)</sup>	DC-23 A / DC-23 B	500/500	630/630	630/630	800/800	1000/1000	1250/1250	1250/1250			

### Operation power in AC-23 (kW)<sup>(4)</sup>

At 415 VAC without AC pre-break	235/235	235/280	235/280	375/375	450/450	560/560	560/560	-/710	-/710	-/710
At 690 VAC without AC pre-break	310/310	310/310	310/310	475/475	475/475	620/620	620/620			

### Reactive power (kvar)<sup>(4)</sup>

At 415 VAC (kvar)	250/250	250/300	250/300	400/400	500/500	650/650	650/650	-/850	-/850	-/850
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### 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	50	50	50	100	100			
Prospective short-circuit current with gG DIN fuses at 690 VAC (kA rms)	50	50	50	50	50	50				
Associated fuse rating (A)	500	630	630	800	1000	1250	2x800			

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

Rated short-time withstand current 0.3s I <sub>sc</sub> at 415 VAC (kA rms)	17 <sup>(5)</sup>	17 <sup>(5)</sup>	17 <sup>(5)</sup>	64	64	64	78	78	78	78
Rated short-time withstand current 1s I <sub>sc</sub> at 415 VAC (kA rms)	11 <sup>(5)</sup>	10 <sup>(5)</sup>	10 <sup>(5)</sup>	35	35	35	50	50	50	50
Rated peak withstand current at 415 VAC (kA peak)	45	45	45	55	55	80	110	120	120	120

### Short-circuit withstand without protection as per IEC 60947-6-1

Rated short-time withstand current 60 ms I <sub>sc</sub> at 415 VAC (kA rms)	10	12.6	12.6	20	20	25	32	50	50	50
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### Connection

Minimum Cu cable cross-section (mm <sup>2</sup> )	2x95	2x120	2x120	2x185						
Recommended Cu busbar cross-section (mm <sup>2</sup> )	2x32x5	2x40x5	2x40x5	2x50x5	2x63x5	2x60x7	2x100x5	3x100x5	2x100x10	3x100x10
Recommended Al busbar cross-section (mm <sup>2</sup> )	50x12	2x50x10	2x50x10	2x50x10	2x60x10	2x75x10	2x100x10	3x80x10	3x100x10	4x100x10
Maximum Cu cable cross-section (mm <sup>2</sup> )	2x185	2x300	2x300	2x300	4x185	4x185	6x185			
Maximum busbar width (mm)	50	50	50	63	63	63	100	100	100	100
Maximum busbar width with spreaders (mm)	50	60	60							
Tightening torque min/max (Nm)	20/26	20/26	20/26	20/26	20/26	20/26	20/26	40/45	40/45	40/45

### Mechanical characteristics

Durability (number of operating cycles)	5000	5000	5000	4000	4000	4000	3000	3000	3000	3000
Weight of a 3 pole device with no accessories (kg)	8.6	9.1	9.1	20.5	21	21.6	25.7	42	42	52.3
Weight of a 4 pole device with no accessories (kg)	10.4	11.1	11.1	24.8	25.6	25.6	32	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.



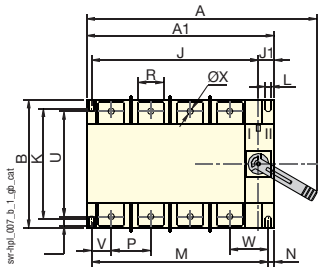
# SIRCOVER

Manually operated transfer switching equipment  
from 63 to 3200 A

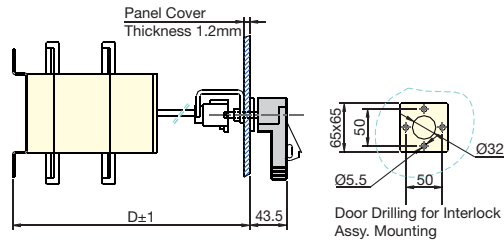
## Dimensions

### 63 to 125 A / B2

#### Direct front operation



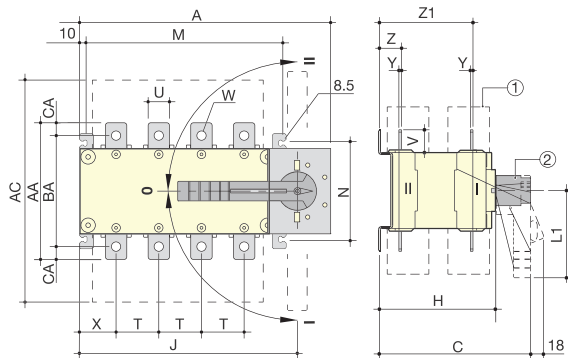
#### External front operation



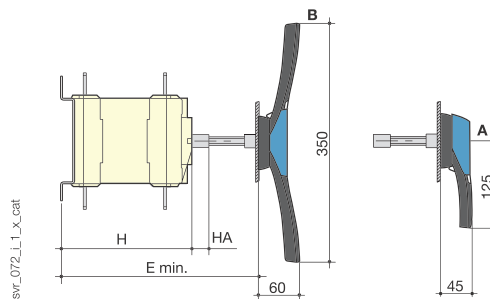
Rating (A)/ Frame size	Dimensions										Fixing of Sw.					Connection terminal							Sw. Wt. Open Ex. (kg)	
	A	A1	B	C	D	E	G	J	J1	K	L	M	N	P	R	S	T	U	V	W	ØX	Y		Y1
4 x 63 ... 125 / B2	181	141.5	111	168.5	192	127	62	116	18	95	6.5	125	6.25	27	14	16	2.6	91	11	35	6.5	45	101	2

### 125 to 1600 A / B3 to B5

#### Direct front operation



#### External front operation



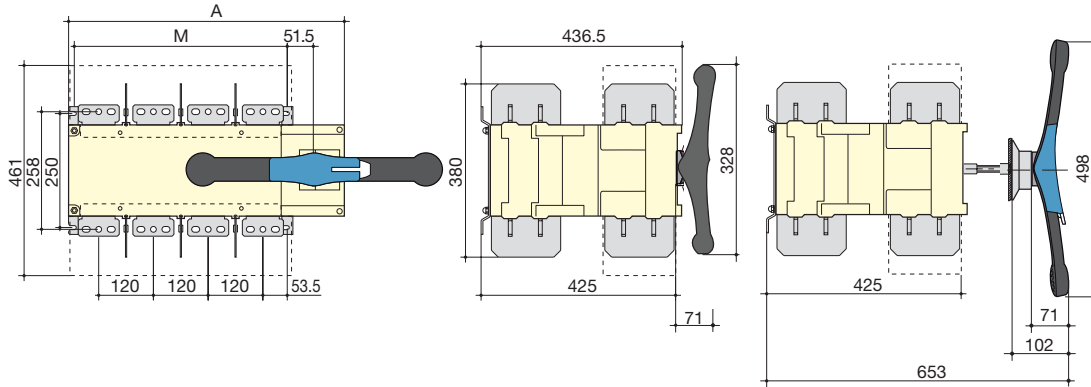
A. S2 type handle for external operation: 125 to CD 800 A  
B. S4 type handle for external operation: 800 to 1600 A

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				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	CA
125 / B3	225	255	237	208 ... 436	235	170	20.8	186	216	156	186	101	36	20	25	8.5	60	55	3.5	45.5	141	135	115	10	
160 / B3	225	255	237	208 ... 436	235	170	20.8	186	216	156	186	101	36	20	25	8.5	60	55	3.5	45.5	141	135	115	10	
200 / B3	225	255	237	208 ... 436	235	170	20.8	186	216	156	186	101	36	20	25	8.5	60	55	3.5	45.5	141	135	115	10	
250 / B4	266	316	237	208 ... 436	280	170	20.8	227	277	196	246	116	50	25	30	11	65	65	3.5	47	141	160	131	15	
315 / B4	266	316	237	208 ... 436	280	170	20.8	227	277	196	246	116	50	35	35	11	65	65	3.5	47	141	170	140	15	
400 / B4	266	316	237	208 ... 436	280	170	20.8	227	277	196	246	116	50	35	35	11	65	65	3.5	47	141	170	140	15	
500 / B5	323	383	313	285 ... 513	401	247.5	20.8	276	336	246	306	176	65	32	37.5	14	75	70	4.8	61	198	235	205	15	
630 ... CD800/B5	323	383	313	285 ... 513	400	247.5	20.8	276	336	246	306	176	65	45	50	13	75	70	4.8	61	198	260	220	20	
800 / B6	386	466	375	425 ... 577	459	303	24	306.5	399	255	336	250	80	50	60.5	15	48	48	7	67.5	253.5	321		26.5	
1000 / B6	386	466	375	425 ... 577	459	303	24	306.5	399	255	336	250	80	50	60.5	15	48	48	7	67.5	253.5	321		26.5	
1250 / B6	386	466	375	425 ... 577	459	303	24	306.5	399	255	336	250	80	60	65	16x11	48	48	7	67.5	255.5	330		29.5	
1600/B7	478	598	375	425 ... 577	461	303	24	388.5	531	347	467	250	120	90	43.5	12.5x5	54	54	8	67.5	255.5	288		15	

## 2000 to 3200 A / B8

### Direct front operation



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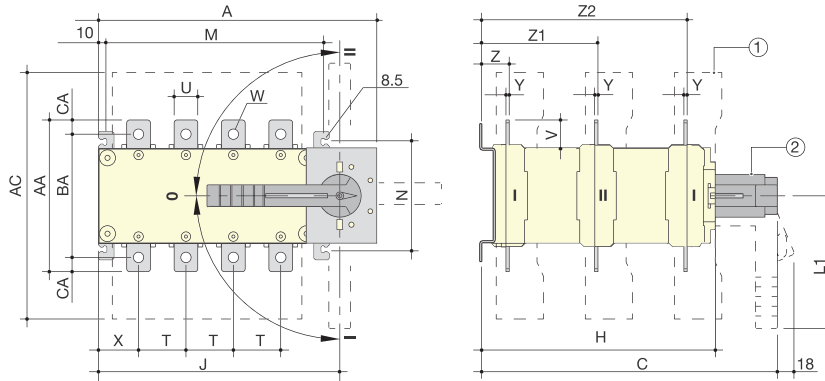
Rating (A) / Frame size	Overall dimensions		Switch mounting	
	A 3p.	A 4p.	M 3p.	M 4p.
2000 ... 3200 / B8	478	598	347	467

# SIRCOVER

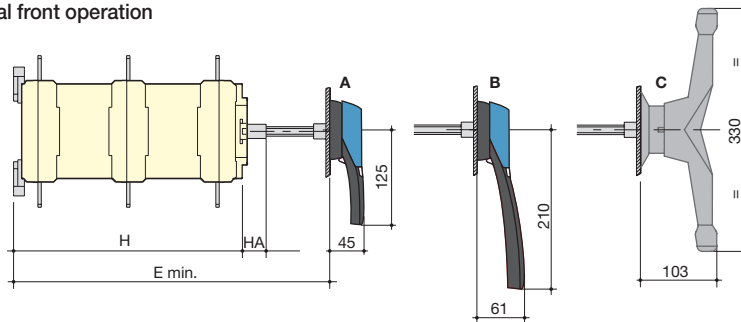
Manually operated transfer switching equipment  
from 63 to 3200 A

## SIRCOVER Bypass 125 to 1600 A / B3 to B7

### Direct front operation



### External front operation



- 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.

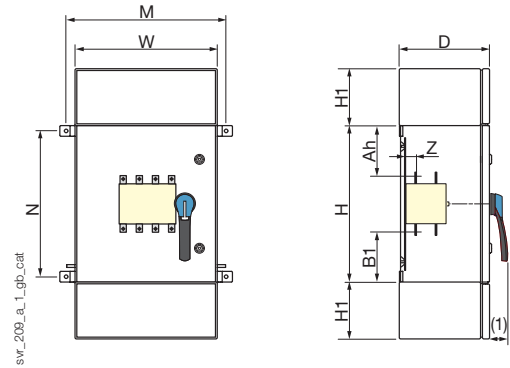
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Rating (A) / Frame size	Overall dimensions			Terminal shrouds	Switch body			Switch mounting		Connection											
	A 4+8p.	C	E min.	AC	H	HA	J 4+8p.	M 4+8p.	N	T	U	V	W	X 4+8p.	Y	Z	Z1	Z2	AA	BA	CA
125 / B3	251	313	320	235	264	25	216	186	101	36	20	25	8.5	54.5	3.5	28	124	219	135	115	10
160 / B3	251	313	320	235	264	25	216	186	101	36	20	25	8.5	54.5	3.5	28	124	219	135	115	10
200 / B3	251	313	320	235	264	25	216	186	101	36	20	25	8.5	54.5	3.5	28	124	219	135	115	10
250 / B4	316	313	298	280	264	25	277	246	116	50	25	30	11	65	3.5	30	124	219	160	130	10
400 / B4	316	313	298	280	264	25	277	246	116	50	35	35	11	65	3.5	30	124	219	170	140	15
500 / B5	383	432	417	401	380	20	336	306	176	65	32	37	13	70	5	43	180	317	235	205	15
630 / B5	383	432	417	400	380	20	336	306	176	65	45	50	13	70	5	43	180	317	260	220	20
800 / B6	466	560	550	459	479	29	386.5	335	250	80	50	60.5	15	48	7	66.5	253.5	439.5	321		26.5
1250 / B6	466	560	550	459	479	29	386.5	335	250	80	60	65	16x11	48	7	66.5	253.5	439.5	320		29.25
1600/B7	598	560	550	461	479	29	518.5	467	250	120	90	43.5	12.5x5	54	8	66.5	253.5	439.5	288		15

## Enclosed Sircover Dimensions

Rating (A) / Enclosure size	H x W x D (mm)	M (mm)	N (mm)	Z (mm)	Ah (mm)	B1 (mm)	H1 (mm)
63 / Size 1	250 x 300 x 205	350	210	44.5	87.75	87.75	100
125 ... 200 / Size 2	350 x 350 x 250	400	310	45.4	115	115	150
250 ... 315 / Size 3	450 x 400 x 250	450	410	46.8	160	160	150
400 / Size 4	600 x 400 x 300	450	560	46.8	230	230	150
500 ... 630 / Size 5	600 x 500 x 330	550	560	61	190	190	200
800 ... 1000 / Size 6	700 x 700 x 500	750	660	136.5	215	215	250
1250 ... 1600 / Size 7	800 x 750 x 500	800	760	162	265	265	300
2000 ... 3200 / Size 8	1000 x 830 x 600	880	960	-	370	370	300

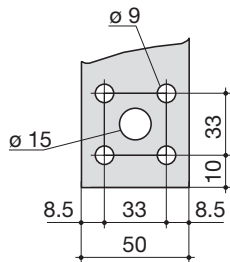
Drawings as shown include the optional top and bottom extension boxes (WxH1).



(1) 125 ... 630 A: 58 mm  
800 ... 1 600 A: 74 mm.

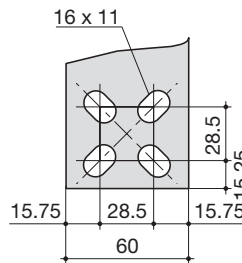
## Connection terminals

800 to 1000 A / B6



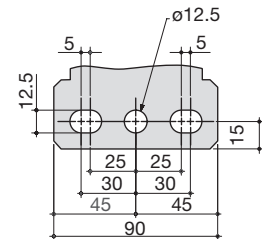
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1250 A / B6



svr\_078\_b\_1\_x\_cat

1600 to 3200 A / B7 to B8



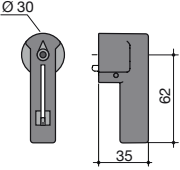
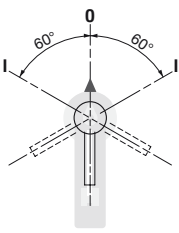
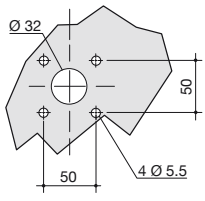
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# SIRCOVER

Manually operated transfer switching equipment  
from 63 to 3200 A

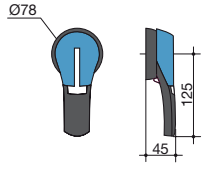
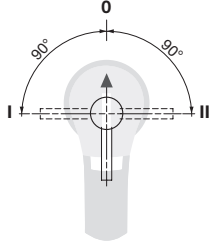
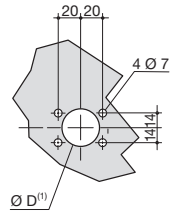
## Dimensions for external handles

### 63 to 125 A / B2

Handle type	Front operation Direction of operation	Door drilling
<b>SH0 type</b> 		

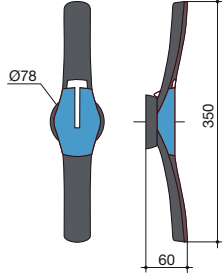
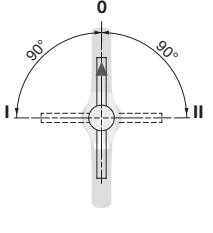
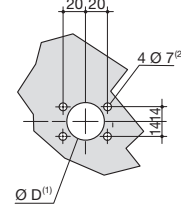
poign\_030\_a\_1\_gb\_cat

### 125 to 630 A / B3 to B5

Handle type	Front operation Direction of operation	Door drilling
<b>S2 type</b> 		

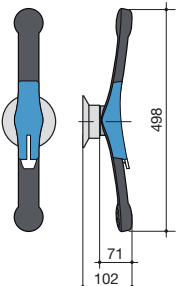
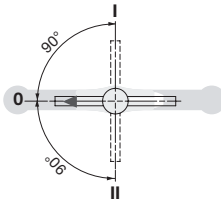
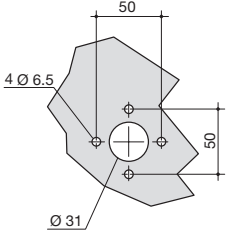
poign\_030\_a\_1\_gb\_cat

### 800 to 1600 A / B6 to B7

Handle type	Front operation Direction of operation	Door drilling
<b>S4 type</b> 		

poign\_031\_a\_1\_gb\_cat

### 2000 to 3200 A / B8

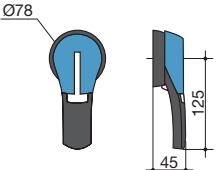
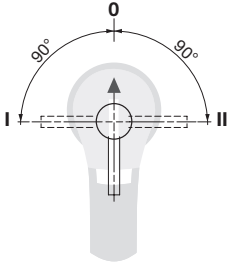
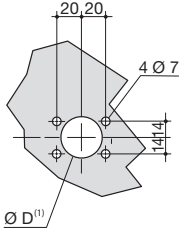
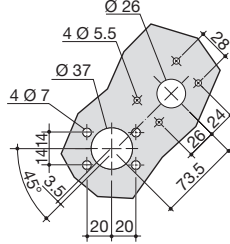
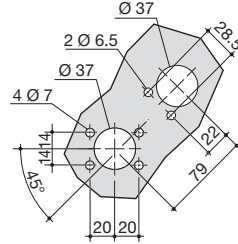
Handle type	Front operation Direction of operation	Door drilling
<b>S5 type with V Escutcheon</b> 		

poign\_023\_a\_1\_gb\_cat

(1) Ø 31 to Ø 37: rear screw mounting, Ø 37: front clip mounting.

(2) Ø 6 to Ø 7: clip mounting.

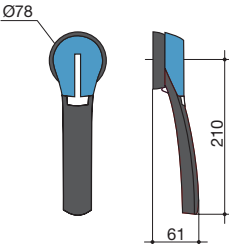
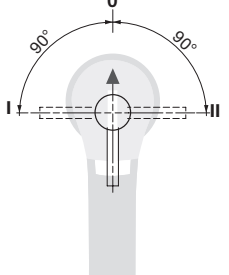
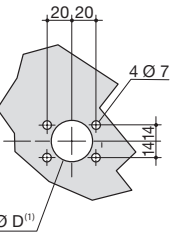
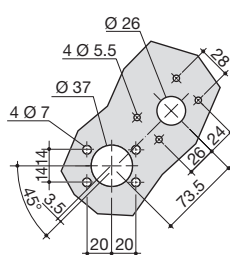
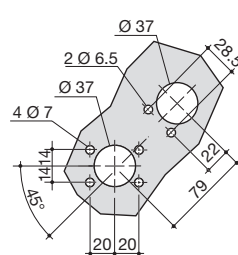
## SIRCOVER Bypass 125 to 200 A / B3

Handle type	Front operation Direction of operation	Door drilling		
<b>S2 type</b>  			<b>With lock RONIS EL11AP</b> 	<b>With lock CASTELL K</b> 

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

polgn\_032\_a\_1\_gp\_cat

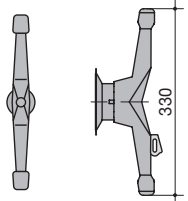
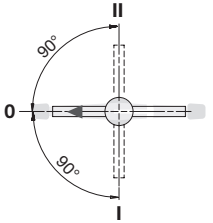
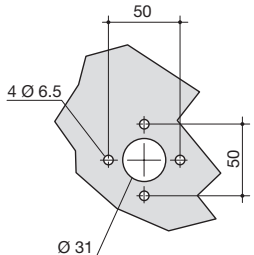
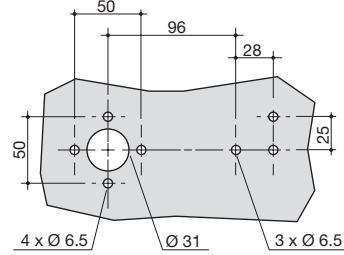
## SIRCOVER Bypass 250 to 630 A / B4 to B5

Handle type	Front operation Direction of operation	Door drilling		
<b>S3 type</b>  			<b>With lock RONIS EL11AP</b> 	<b>With lock CASTELL K</b> 

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

polgn\_033\_a\_1\_gp\_cat

## SIRCOVER Bypass 800 to 1600 A / B6 to B7

Handle type	Front operation Direction of operation	Door drilling	
<b>C type</b>  			<b>With lock CASTELL K</b> 

polgn\_022\_a\_1\_gp\_cat