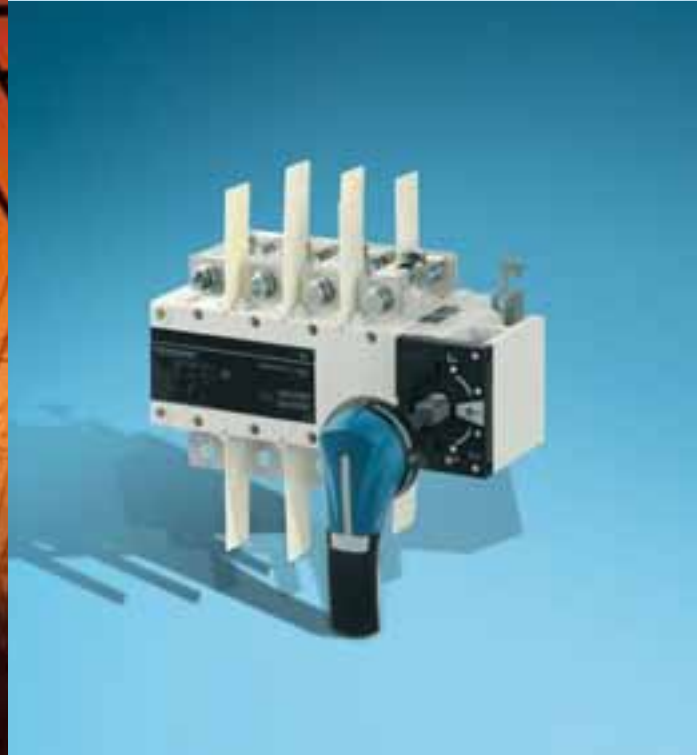
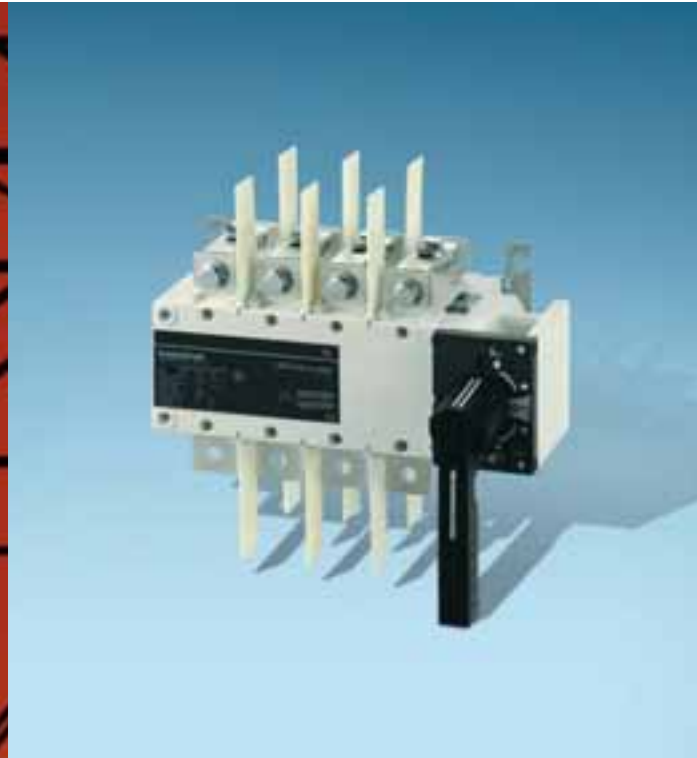


# SIRCOVER

Manual transfer switching equipment  
for source changeover applications

from 63 to 3200A

2017



your energy  
our expertise

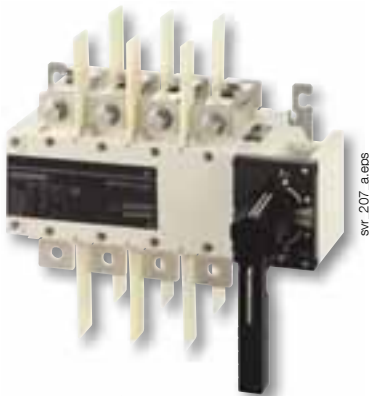




# SIRCOVER

Manually operated transfer switching equipment  
from 63 to 3200 A

Transfer switches



SIRCOVER  
4 P 400 A



SIRCOVER  
4 P 400 A

## 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



## Function

SIRCOVER products are manually operated transfer switches with positive break indication. There are 3 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.

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 SIRCOVER 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

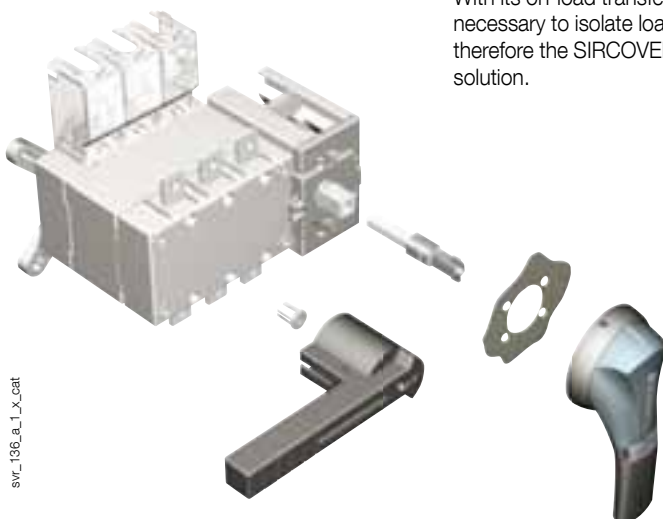
For ratings of 2000 to 3200 A, we offer copper bar connection pieces. This gives you the option of different connection methods - flat, edgewise with top or bottom bridging.

### Stable positions

SIRCOVER 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 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.



svr\_136\_a\_1\_x\_cat

## 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.

# SIRCOVER

Manually operated transfer switching equipment  
from 63 to 3200 A

## References - Spares and accessories

### SIRCOVER I-0-II

Rating (A) / Frame size	No. of poles	Switch body	Direct handle	External handle	Shaft for external handle	Bridging bars	Auxiliary contacts	Spreaders	Interphase barriers set							
63 A / B2	4 P	41AC 4006A														
100 A / B2	4 P	41AC 4010A	4299 0002A	4259 0002A	-	4109 4006A	1 <sup>st</sup> /2 <sup>nd</sup> NO/NC contact 4209 1030A <sup>(2)</sup>	-	-							
CD 125 A / B2	4 P	41AC 4011A														
125 A / B3	3 P	41AC 3013A	B3 type 4199 5012A	S2 type Black IP55 1421 2113A	200 mm 1400 1020A	3 P 4109 3019A 4 P 4109 4019A	1 <sup>st</sup> /2 <sup>nd</sup> NO/NC contact 4109 0021A <sup>(2)</sup>	3 P 4106 3016A 4 P 4106 4016A	3 P 2998 5036A 4 P 2998 5038A							
	4 P	41AC 4013A														
160 A / B3	3 P	41AC 3016A														
	4 P	41AC 4016A														
200 A / B3	3 P	41AC 3020A														
	4 P	41AC 4020A														
250 A / B4	3 P	41AC 3025A														
	4 P	41AC 4025A														
315A / B4	3 P	41AC 3031A														
	4 P	41AC 4031A														
400 A / B4	3 P	41AC 3040A														
	4 P	41AC 4040A														
500 A / B5	3 P	41AC 3050A														
	4 P	41AC 4050A														
630 A / B5	3 P	41AC 3063A														
	4 P	41AC 4063A														
CD 800 A / B5	3 P	41AC 3079A														
	4 P	41AC 4079A														
800 A / B6	3 P	41AC 3080A	C1 type 2799 7052A	S4 type Black IP65 1443 3113A	200 mm 14011 520A 320 mm 1401 1532A	3 P 4109 3080A 4 P 4109 4080A	1 <sup>st</sup> /2 <sup>nd</sup> NO/NC contact 4109 0021A <sup>(2)</sup>	3 P 4106 3050A 4 P 4106 4050A	3 P 2998 5016A 4 P 2998 5018A							
	4 P	41AC 4080A														
1000 A / B6	3 P	41AC 3100A														
	4 P	41AC 4100A														
1250 A / B6	3 P	41AC 3120A														
	4 P	41AC 4120A														
1600 A / B7	3 P	41AC 3160A														
	4 P	41AC 4160A														
2000 A / B8	3 P	41AC 3200A								C2 type 2799 7012A	S5 type Black IP65 1453 8113A	200 mm 2799 3015A	(1)	1 <sup>st</sup> and 2 <sup>nd</sup> NO/NC contact included	3 P 4106 3120A 4 P 4106 4120A	included with the switch
	4 P	41AC 4200A														
2500 A / B8	3 P	41AC 3250A														
	4 P	41AC 4250A														
3200 A / B8	3 P	41AC 3320A														
	4 P	41AC 4320A														

(1) Refer to "Copper bar connection pieces"

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

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

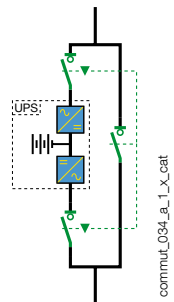
### SIRCOVER I-I+II-II

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: with these manual changeover switches you can isolate then switch a backup power supply, such as a UPS, using 3 interlocking load break switches assembled into one very compact device. There are two bypass models, one with open transition switching and the other with contact overlapping.



commut\_034\_a\_1\_X\_cat

## Accessories

### Direct operation handle

SIRCOVER I-0-II				
Rating (A)	Frame size	Handle colour	Handle type	Reference
63 ... CD 125	B2	Black	SH0	4299 <b>0002A</b>
125 ... CD 800	B3 ... B5	Black	B3	4199 <b>5012A</b>
800 ... 1600	B6 ... B7	Black	C1	2799 <b>7052A</b>
2000 ... 3200	B8	Black	C2	2799 <b>7012A<sup>(1)</sup></b>

(1) Double lever handle.



### External operation handle

#### Use

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

SIRCOVER I-0-II				
Rating (A)	Frame size	External IP <sup>(1)</sup>	Handle type	Reference
63 ... CD 125	B2	IP42	SH0	4259 <b>0002A</b>
125 ... CD 800	B3 ... B5	IP55	S2	1421 <b>2113A</b>
800 ... 1600	B6 ... B7	IP65	S4	1443 <b>3113A<sup>(2)</sup></b>
2000 ... 3200	B8	IP65	S5	1453 <b>8113A<sup>(2)</sup></b>

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

(2) Double lever handle.



### Shaft for external operation

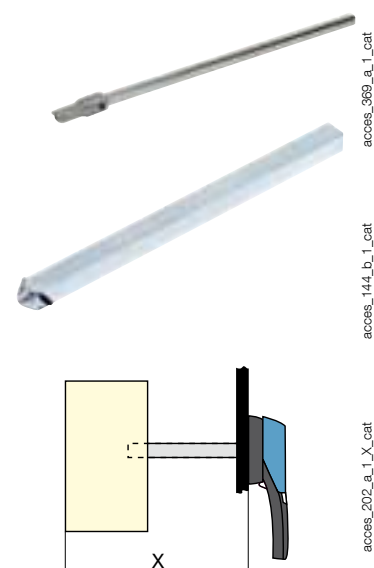
#### Use

Standard lengths:

- 200 mm,
- 320 mm.

Other lengths available: consult us.

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



# SIRCOVER

Manually operated transfer switching equipment  
from 63 to 3200 A

## Accessories (continued)

### Bridging bars

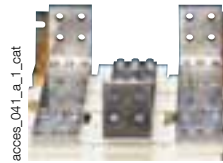
#### Use

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).

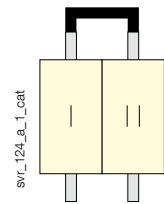
SIRCOVER I-0-II				
Rating (A)	Frame size	No. of poles	Cross section (mm)	Reference
63 ... CD 125	B2	4 P	12.7 x 2.6	4109 4006A
125 ... 200	B3	3 P	20 x 2.5	4109 3019A
125 ... 200	B3	4 P	20 x 2.5	4109 4019A
250	B4	3 P	25 x 2.5	4109 3025A
250	B4	4 P	25 x 2.5	4109 4025A
315 ... 400	B4	3 P	32 x 5	4109 3039A
315 ... 400	B4	4 P	32 x 5	4109 4039A
500	B5	3 P	32 x 5	4109 3050A
500	B5	4 P	32 x 5	4109 4050A
630 ... CD 800	B5	3 P	50 x 5	4109 3063A
630 ... CD 800	B5	4 P	50 x 5	4109 4063A
800 ... 1000	B6	3 P	50 x 6	4109 3080A
800 ... 1000	B6	4 P	50 x 6	4109 4080A
1250	B6	3 P	60 x 8	4109 3120A
1250	B6	4 P	60 x 8	4109 4120A
1600	B7	3 P	90 x 10	4109 3160A
1600	B7	4 P	90 x 10	4109 4160A



svr\_205\_a.eps



access\_041\_a\_1\_cat



svr\_124\_a\_1\_cat

### 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.



svr\_088\_a\_1\_cat



access\_065\_a\_1\_cat

#### Characteristics

Rating (A)	Frame size	Nominal current (A)	Operating current I <sub>e</sub> (A)				Electrical endurance
			250 VAC AC-13	400 VAC AC-13	24 VDC DC-13	48 VDC DC-13	
63 ... CD 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 ... CD 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

### 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.

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 <sup>(2)</sup>	included	included	included
Bolt kit 35 mm - part B	2699 1201	1 <sup>(1)</sup>		2 <sup>(2)</sup>	1 <sup>(1)</sup>		2 <sup>(2)</sup>
Bolt kit 45 mm - part B	2699 1200	1 <sup>(1)</sup>			1 <sup>(1)</sup>		
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.

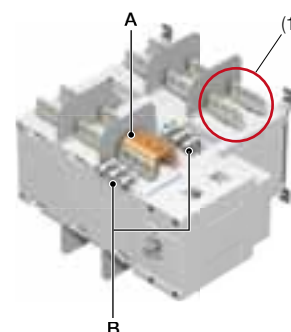
(2) For bridging connections, quantity 2 pieces are required for creating the link between the two power terminals of the same pole for switch bodies I and II.

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:

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

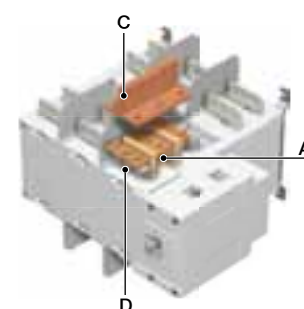
Fig. 1



access\_457\_a\_1\_x\_cat

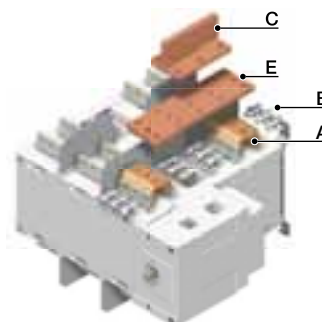
(1) Single pole connection: 1 pole (top or bottom) comprises two power terminals which are to be linked with the copper connection kit.

Fig. 2



access\_457\_a\_1\_x\_cat

Fig. 3



access\_230\_c\_1\_x\_cat

# SIRCOVER

Manually operated transfer switching equipment  
from 63 to 3200 A

## 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 ... CD 125	B2	4 P	top / bottom / front (I) / rear (II)	2998 <b>4008A</b> <sup>(1)(2)</sup>
125 ... 200	B3	3 P	top / bottom / front (I) / rear (II)	2694 <b>3014A</b> <sup>(1)(2)</sup>
125 ... 200	B3	4 P	top / bottom / front (I) / rear (II)	2694 <b>4014A</b> <sup>(1)(2)</sup>
250 ... 400	B4	3 P	top / bottom / front (I) / rear (II)	2694 <b>3021A</b> <sup>(1)(2)</sup>
250 ... 400	B4	4 P	top / bottom / front (I) / rear (II)	2694 <b>4021A</b> <sup>(1)(2)</sup>
500 ... CD 800	B5	3 P	top / bottom / front (I) / rear (II)	2694 <b>3051A</b> <sup>(1)(2)</sup>
500 ... CD 800	B5	4 P	top / bottom / front (I) / rear (II)	2694 <b>4051A</b> <sup>(1)(2)</sup>



access\_472\_a.eps

(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 <b>3012A</b>	
	4 P			1509 <b>4012A</b>	
	3 P		Wide	1509 <b>3013A</b>	
	4 P			1509 <b>4013A</b>	
250 ... 400 / B4	3 P		Standard	1509 <b>3025A</b>	
	4 P			1509 <b>4025A</b>	
	3 P		Wide	1509 <b>3026A</b>	
	4 P			1509 <b>4026A</b>	
500 ... CD 800 / B5	3 P		Standard	1509 <b>3063A</b>	
	4 P			1509 <b>4063A</b>	
	3 P			Wide	1509 <b>3064A</b>
	4 P				1509 <b>4064A</b>
800 ... 1250 / B6	3 P	Standard	1509 <b>3080A</b>		
	4 P		1509 <b>4080A</b>		
	3 P	Wide	1509 <b>3081A</b>		
	4 P		1509 <b>4081A</b>		
1600 / B7	3 P	Standard	1509 <b>3160A</b>		
4 P	1509 <b>4160A</b>				
2000 ... 3200 / B8	3 P	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.



svr\_206\_a.eps

### Interphase barrier set

Rating (A)	Frame size	No. of poles	No. of pieces	Reference
125 ... 200	B3	3 P	8	2998 <b>5036A</b>
125 ... 200	B3	4 P	12	2998 <b>5038A</b>
250 ... 400	B4	3 P	8	2998 <b>5026A</b>
250 ... 400	B4	4 P	12	2998 <b>5028A</b>
500 ... 630	B5	3 P	8	2998 <b>5016A</b>
500 ... 630	B5	4 P	12	2998 <b>5018A</b>

#### Use

Safe isolation between the terminals. Essential for use with aluminium cables, at 690 VAC or in a polluted or dusty atmosphere.



svr\_207\_a.eps

### Spreaders

Rating (A) / Frame size	No. of poles	Reference
125 ... 200 / B3	3 P	4106 <b>3016A</b>
	4 P	4106 <b>4016A</b>
250 / B4	3 P	4106 <b>3025A</b>
	4 P	4106 <b>4025A</b>
315 ... 400 / B4	3 P	4106 <b>3040A</b>
	4 P	4106 <b>4040A</b>
500 / B5	3 P	4106 <b>3050A</b>
	4 P	4106 <b>4050A</b>
630 ... CD 800 / B5	3 P	4106 <b>3063A</b>
	4 P	4106 <b>4063A</b>
800 ... 1250 / B6	3 P	4106 <b>3120A</b>
	4 P	4106 <b>4120A</b>

#### Use

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



access\_474\_a.eps



## 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>		
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	100/100	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	58/58	75/75	100/100	100/100	145/145	190/190		
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	60/60	75/75	100/100	125/125	150/150	200/200		
<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>sc</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>sc</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>sc</sub> at 415 VAC (kA rms)	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	32	32	50		
Maximum busbar width with spreaders (mm)				25	25	25	25	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 "+" 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

## 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>
415 VAC	AC-31 B	500	630	800	800	1000	1250	1600	2000	2500
415 VAC	AC-32 B	500	500	500	800	1000	1250	1250	2000	2000
415 VAC	AC-33 B	400	400	400	800	1000	1000	1000	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>
415 VAC	AC-21 A / AC-21 B	500/500	630/630	630/800	800/800	1000/1000	1250/1250	1600/1600	-/2000	-/2500
415 VAC	AC-22 A / AC-22 B	500/500	630/630	630/630	800/800	1000/1000	1250/1250	1600/1600	-/2000	-/2500
415 VAC	AC-23 A / AC-23 B	500/500	500/630	500/630	800/800	1000/1000	1250/1250	1250/1250	-/1600	-/1600
500 VAC	AC-21 A / AC-21 B	500/500	630/630	630/800	800/800	1000/1000	1250/1250	1600/1600	-/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	800/800	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
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	800/800	800/800	1000/1000	1250/1250	1250/1250		
220 VDC	DC-22 A / DC-22 B	500/500	630/630	800/800	800/800	1000/1000	1250/1250	1250/1250		
220 VDC	DC-23 A / DC-23 B	500/500	630/630	800/800	800/800	1000/1000	1250/1250	1250/1250		
440 VDC <sup>(2)</sup>	DC-21 A / DC-21 B	500/500	630/630	800/800	800/800	1000/1000	1250/1250	1250/1250		
440 VDC <sup>(2)</sup>	DC-22 A / DC-22 B	500/500	630/630	800/800	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
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
Fused 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>cw</sub> at 415 VAC (kA rms)		17 <sup>(5)</sup>	17 <sup>(5)</sup>	17 <sup>(5)</sup>	64	64	64	78	78	78
Rated short-time withstand current 1s I <sub>cw</sub> at 415 VAC (kA rms)		11 <sup>(5)</sup>	10 <sup>(5)</sup>	10 <sup>(5)</sup>	35	35	35	50	50	50
Rated peak withstand current at 415 VAC (kA peak)		45	45	45	55	55	80	110	120	120
Short-circuit withstand without protection as per IEC 60947-6-1										
Rated short-time withstand current 60 ms I <sub>cw</sub> at 415 VAC (kA rms)		10	12.6	12.6	20	20	25	32	50	50
Connection										
Minimum Cu cable cross-section (mm <sup>2</sup> )		2x95	2x120	2x185	2x185					
Recommended Al cable cross-section (mm <sup>2</sup> )										
Recommended Cu busbar cross-section (mm <sup>2</sup> )		2x32x5	2x40x5	2x50x5	2x50x5	2x63x5	2x60x7	2x100x5	3x100x5	2x100x10
Recommended Al busbar cross-section (mm <sup>2</sup> )		50x12	2x50x10	2x50x10	2x50x10	2x60x10	2x75x10	2x100x10	3x80x10	3x100x10
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	63	100	100
Maximum busbar width with spreaders (mm)		50	60	50	75	75	75			
Tightening torque min/max (Nm)		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
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
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

(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.

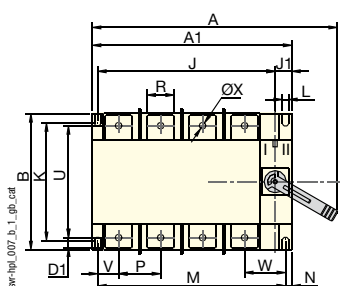
(4) The power value is given for information only, the current values vary from one manufacturer to another.

(5) Values given at 690 VAC.

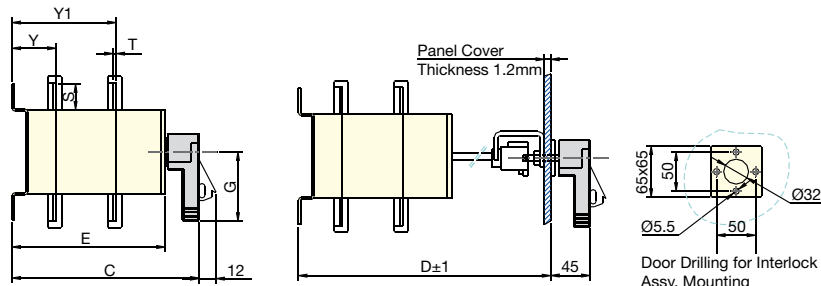
## Dimensions

### 63 to CD 125 A / B2

#### Direct front operation



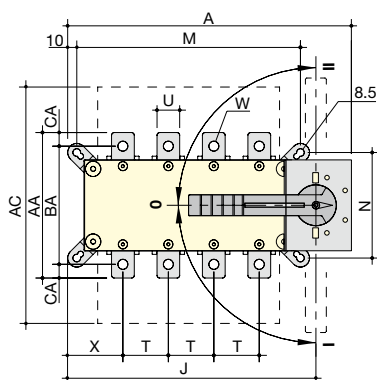
#### External front operation



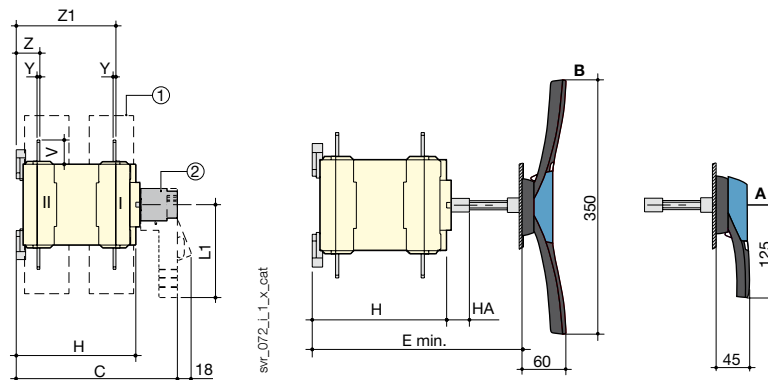
Rating (A)/ Frame size	Dimensions										Fixing of Sw.					Connection terminal							Sw. Wt.		
	A	A1	B	C	D	D1	E	G	J	J1	K	L	M	N	P	R	S	T	U	V	W	ØX	Y	Y1	Open Ex. (kg)
4 x 63 ... CD 125 / B2	181	141.5	111	168.5	192	44	127	62	116	18	95	6.5	127	6.25	27	14	16	2.6	91	11	35	6.5	45	101	2

### 125 to 1600 A / B3 to B7

#### Direct front operation



#### External front operation



A. S2 type handle for external operation: 125 to 630 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 AC	Switch body				Switch mounting				Connection										
	A 3p.	A 4p.	C	E min		H	HA	J 3p.	J 4p.	M 3p.	M 4p.	N	T	U	V	W	X 3p.	X 4p.	Y	Z	Z1	AA	BA	AC
125 / B3	221	255	240	230...458	230	170	25	182	212	156	186	101	36	20	25	8.5	56	50	3.5	45.5	141.4	135	115	10
160 / B3	221	255	240	230...458	230	170	25	182	212	156	186	101	36	20	25	8.5	56	50	3.5	45.5	141.4	135	115	10
200 / B3	221	255	240	230...458	230	170	25	182	212	156	186	101	36	20	25	8.5	56	50	3.5	45.5	141.4	135	115	10
250 / B4	262	316	240	230...458	348	170	25	223	273	196	246	116	50	25	30	11	61	61	3.5	46.8	141	160	130	15
315 / B4	262	316	240	230...458	348	170	25	223	273	196	246	116	50	35	35	11	61	61	3.5	46.8	141	170	140	15
400 / B4	262	316	240	230...458	348	170	25	223	273	196	246	116	50	35	35	11	61	61	3.5	46.8	141	170	140	15
500 / B5	323	383	254	244...472	464	184	25	272	332	246	306	176	65	32	37	13	70.5	65.5	5	61	134	235	205	15
630...CD 800 / B5	323	383	254	244...472	464	184	25	272	332	246	306	176	65	45	50	13	70.5	65.5	5	61	134	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

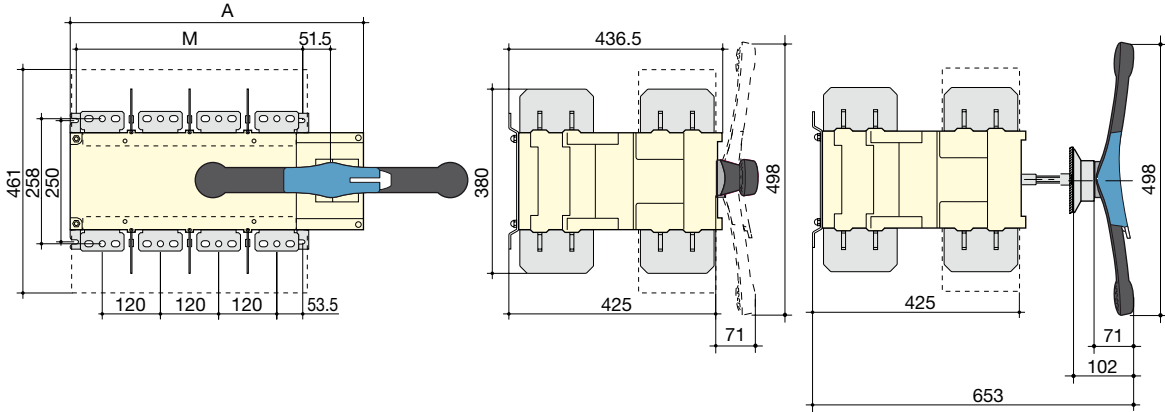
# SIRCOVER

Manually operated transfer switching equipment  
from 63 to 3200 A

## Dimensions (continued)

2000 to 3200 A / B8

Direct front operation



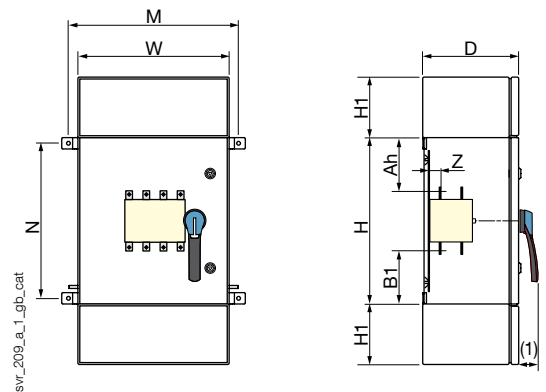
svr\_160\_a\_1\_x\_cat

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

## Enclosed dimensions

Rating (A) / Enclosure size	H x W x D (mm)	M (mm)	N (mm)	Z (mm)	Ah (mm)	B1 (mm)	H1 (mm)
63 ... CD 125 / Size 1	250 x 300 x 200	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 ... CD 800 / 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	750	760	162	265	265	300
2000 ... 3200 / Size 8	1000 x 830 x 600	750	960	-	370	370	300

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



svr\_209\_a\_1\_gb\_cat

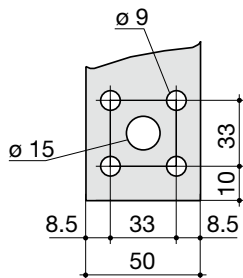
(1) 125 ... 630 A: 58 mm  
800 ... 1 600 A: 74 mm.

## Connection terminals

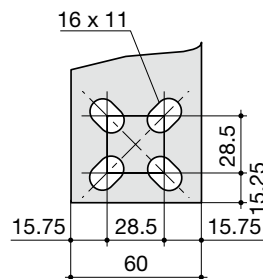
800 to 1000 A / B6

1250 A / B6

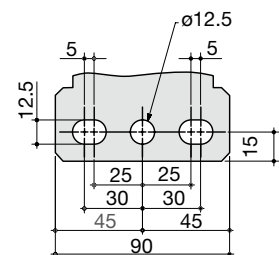
1600 to 3200 A / B7 to B8



svr\_077\_a\_1\_x\_cat



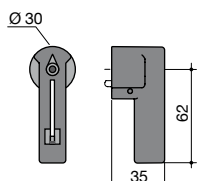
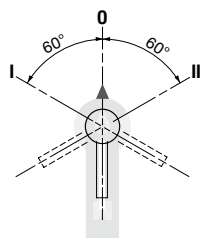
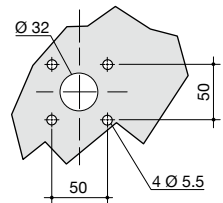
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svr\_088\_a\_1\_x\_cat

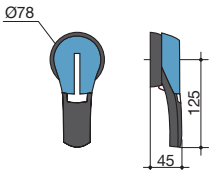
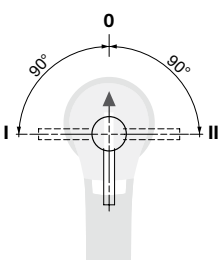
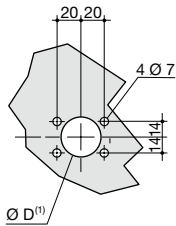
## Dimensions for external handles

### 63 to CD 125 A / B2

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

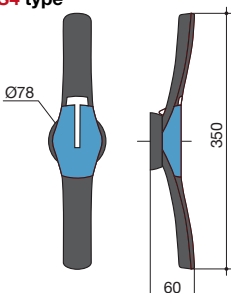
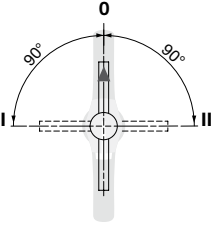
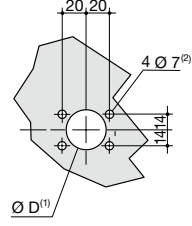
polign\_030\_a\_1\_gb\_cat

### 125 to CD 800 A / B3 to B5

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

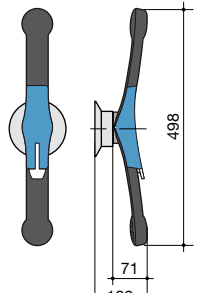
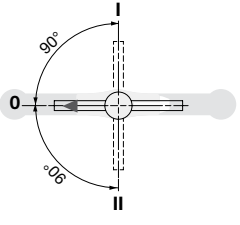
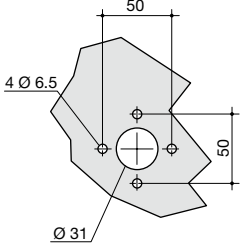
polign\_030\_a\_1\_gb\_cat

### 800 to 1600 A / B6 to B7

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

polign\_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> 		

polign\_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.





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