

SIDER

Load break switches for power distribution
from 125 to 3150 A with visible breaking



***SIDER ND** 4 x 500 A*
External right side operation



***SIDER** 3 x 1250 A*
external front operation



***SIDER** 2500 A*
direct front operation handle

Function

SIDER units are manually operated 3 or 4-pole load break switches.

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

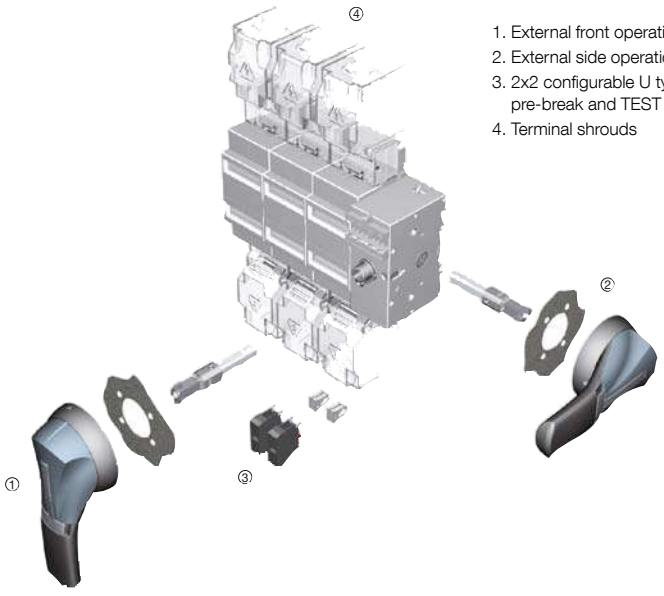
Advantages

Safety thanks to visible breaking

Visible breaking and positive break indication ensure safe switching. The user can assess the condition of the device either during a preventive check or before an operation. SIDER load break switches are most suitable for use in safety enclosures in explosive atmospheres (zones 21 and 22). The addition of a mechanical flag indicator, directly connected to the device's breaking system, provides reliable position information on the front of the enclosure.

Functional diagram

For further details see the installation instructions supplied with the product.



1. External front operation
2. External side operation
3. 2x2 configurable U type auxiliary contacts for pre-break and TEST signalling
4. Terminal shrouds

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The solution for

- Main switchboard
- Distribution panels
- Safety enclosures for emergency load break
- Normal atmosphere
- Explosive atmosphere



Strong points

- Safety thanks to visible breaking
- Modularity

Conformity to standards

- IEC 60947-3
- EN 60947-3
- VDE 0660-107 (1992)
- NBN EN 60947-3
- BS EN 60947-3

Approvals and certifications

- GOST (Russie)

socomec Innovative Power Solutions

References

Front operation

Rating (A)	No. of poles	Switch body Direct operation	Switch body External operation	Direct handle	External handle	Shaft for external handle	Auxiliary contact
ND 125 A	3 P	2915 **3012**	2921 **3012**	Black 3629 **7901**(1)	S2 type Black IP55 1421 **2111**(1) Black IP65 1423 **2111** Red IP65 1424 **2111**	200 mm 1400 **1020** 320 mm 1400 **1032**(1) 500 mm 1400 **1050**	1st contact NO/NC 3999 **0021**(2)(3) 2 contacts NO/NC 3999 **0022**(2)(3) 1 contact NC 3999 **0701**(4)(5) 1 contact NO 3999 **0702**(4)(5)
	4 P	2915 **4012**	2921 **4012**				
ND 200 A	3 P	2915 **3021**	2921 **3020**				
	4 P	2915 **4021**	2921 **4020**				
ND 250 A	3 P	2915 **3025**	2921 **3025**				
	4 P	2915 **4025**	2921 **4025**				
ND 315 A	3 P	2915 **3031**	2921 **3031**				
	4 P	2915 **4031**	2921 **4031**				
ND 400 A	3 P	2915 **3041**	2921 **3041**				
	4 P	2915 **4041**	2921 **4041**				
ND 500 A	3 P	2915 **3051**	2921 **3051**				
	4 P	2915 **4051**	2921 **4051**				
630 A	3 P	2900 **3063**	2900 **3063**	Black 2799 **7012**(1) Red 2799 **7013**	Type S4 Black IP65 1443 **3111**(1) Red / Yellow IP65 1444 **3111**	200 mm 1401 **1520** 320 mm 1401 **1532**(1) 400 mm 1401 **1540**	1st NO / NC contact 2799 **0001** 2nd NO / NC contact 2799 **0002**
	4 P	2900 **4063**	2900 **4063**				
800 A	3 P	2900 **3080**	2900 **3080**				
	4 P	2900 **4080**	2900 **4080**				
1250 A	3 P	2900 **3120**	2900 **3120**				
	4 P	2900 **4120**	2900 **4120**				
1600 A	3 P	2900 **3160**	2900 **3160**				
	4 P	2900 **4160**	2900 **4160**				
1800 A	3 P	2901 **3180**(6)		Black 2799 **7012**	Type S4 Black IP65 1443 **3111** Red/Yellow 1444 **3111**	200 mm 1401 **1520** 320 mm 1401 **1532** 400 mm 1401 **1540**	
2000 A	3 P	2901 **3200**(6)					
2500 A	3 P	2901 **3250**(6)					
3150 A	3 P	2901 **3310**(6)					

(1) Standard.
(2) Auxiliary signal contact - Type S.
(3) For direct operation.
(4) For external operation.
(5) Auxiliary signal contact - Type U.
(6) Switch body front operation

References

Side operation

Rating (A)	No. of poles	Switch body Direct operation	Switch body External right side operation	Direct handle	External handle	Shaft for external handle	Auxiliary contact
ND 125 A	3 P	2915 **3012**	2921 **3012**	Black 3629 **7901**(1)	S2 type Black IP55 1425 **2111**(1) Black IP65 1427 **2111** Red / Yellow IP65 1428 **2111**	200 mm 1400 **1020**(1)	1st contact NO/NC 3999 **0021**(2)(3) 2 contacts NO/NC 3999 **0022**(2)(3) 1 contact NC 3999 **0701**(4)(6) 1 contact NO 3999 **0702**(4)(6)
	4 P	2915 **4012**	2921 **4012**				
ND 200 A	3 P	2915 **3021**	2921 **3020**				
	4 P	2915 **4021**	2921 **4020**				
ND 250 A	3 P	2915 **3025**	2921 **3025**				
	4 P	2915 **4025**	2921 **4025**				
ND 315 A	3 P	2915 **3031**	2921 **3031**				
	4 P	2915 **4031**	2921 **4031**				
ND 400 A	3 P	2915 **3041**	2921 **3041**				
	4 P	2915 **4041**	2921 **4041**				
ND 500 A	3 P	2915 **3051**	2921 **3051**				
	4 P	2915 **4051**	2921 **4051**				
630 A	3 P	2905 **3063**	2905 **3063**	Black 2799 **7052**(1) Conversion kit 2799 **7070**(5) Red 2799 **7053** Conversion kit 2799 **7070**(5)	S3 type Black IP65 1437 **3111**(1) Red / Yellow IP65 1438 **3111**	200 mm 1404 **1520**(1)	1st contact NO/NC 2799 **0011** 2nd contact NO/NC 2799 **0012**
	4 P	2905 **4063**	2905 **4063**				
800 A	3 P	2905 **3080**	2905 **3080**				
	4 P	2905 **4080**	2905 **4080**				
1250 A	3 P	2905 **3120**	2905 **3120**				
	4 P	2905 **4120**	2905 **4120**				
1600 A	3 P	2905 **3160**	2905 **3160**				
	4 P	2905 **4160**	2905 **4160**				

(1) Standard.
(2) Auxiliary signal contact - Type S.
(3) For direct operation.
(4) For external operation.
(5) Conversion kit necessary for any direct operation.
(6) Auxiliary signal contact - Type U.

Accessories

Direct operation handle

For front operation Rating (A)	Handle colour	Reference
ND 125 … ND 500	Black	3629 **7901**
630 ... 3150	Black	2799 **7012**(1)
630 ... 3150	Red	2799 **7013**

(1) Standard.

For side operation Rating (A)	Handle colour	Reference
ND 125 … ND 500	Black	3629 **7901**
630 ... 1600	Black	2799 **7052**
630 ... 1600	Red	2799 **7053**

Direct side operation escutcheon Rating (A)	External IP	Reference
630 ... 1600	IP54	2799 **7070**(1)

(1) To be ordered together with a direct side operation handle.


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External operation handle

For front operation Rating (A)	Handle colour	Handle type	External IP(1)	Reference
ND 125 … ND 500	Black	S2	IP55	1421 **2111**(2)
ND 125 ND 500	Black	S2	IP65	1423 **2111**
ND 125 … ND 500	Red	S2	IP65	1424 **2111**
630 ... 3150	Black	S4	IP65	1443 **3111**(2)
630 ... 3150	Red	S4	IP65	1444 **3111**

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

For right side operation Rating (A)	Handle colour	Handle type	External IP(1)	Reference
ND 125 … ND 500	Black	S2	IP55	1425 **2111**
ND 125 … ND 500	Red	S2	IP65	1428 **2111**
630 ... 1600	Black	S3	IP65	1437 **3111**
630 ... 1600	Red	S3	IP65	1438 **3111**

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


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S2 type handle


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S3 type handle


acces_152_a_1_cat

S4 type handle

Shaft guide for external operation

Use

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.

Required for a shaft length over 320 mm.

Description	Reference
Shaft guide	1429 **0000**


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Accessories (continued)

Type S handle adapter

Use

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

Dimensions

Adds 12 mm to the handle depth.



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

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

Alternative S type handle cover colour

Use

For single lever handle S1, S2, S3 types and double lever handle S4 type.

Other colours available - please contact us.



Handle colour	To be ordered in multiples of	Handle type	Reference
Light grey	50	S1, S2	1401 **0001**
Dark grey	50	S1, S2	1401 **0011**
Light grey	50	S4	1401 **0031**
Dark grey	50	S4	1401 **0041**

Shaft for external operation

Use

Standard lengths:
- 80 mm,
- 200 mm,
- 320 mm,
- 400 mm,
- 500 mm.

Other lengths available - please contact us.

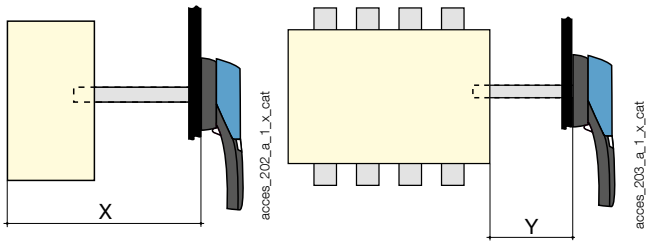


For front operation

Rating (A)	Dimension X (mm)	Shaft length (mm)	Type	Reference
ND 125 ... ND 500	95 ... 230	200 mm	10 x 10	1400 **1020**
ND 125 ... ND 500	95 ... 350	320 mm	10 x 10	1400 **1032**
ND 125 ... ND 500	95 ... 530	500 mm	10 x 10	1400 **1050**
630 ... 3150	295 ... 555	200 mm	15 x 12	1401 **1520**
630 ... 3150	295 ... 675	320 mm	15 x 12	1401 **1532**
630 ... 3150	295 ... 755	400 mm	15 x 12	1401 **1540**

For side operation

Rating (A)	Dimension Y (mm)	Shaft length (mm)	Type	Reference
ND 125 ... ND 500	20 ... 110	80 mm	10 x 10	included
ND 125 ... ND 500	20 ... 230	200 mm	10 x 10	1400 **1020**
630 ... 1600	98 ... 258	200 mm	15 x 12	1404 **1520**



Auxiliary contacts for pre-break and signalling - Front operation

Use
Pre-break and signalling of positions 0 and I:
- 1 to 2 NO/NC auxiliary contacts,
- 1 to 4 NO or NC auxiliary contacts,
- 1 to 4 NO+NC auxiliary contacts.

Connection to the control circuit
6.35 mm fast-on terminal.

Characteristics
NO/NC A/C: IP2X.

Electrical characteristics
30 000 operations.


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NO/NC contact		
Rating (A)	**Position AC**	**Reference**
ND 125 … ND 500	1st	3999 **0021**(1)
ND 125 … ND 500	2nd	3999 **0022**(1)
630 … 1600	1st	2799 **0001**
630 … 1600	2nd	2799 **0002**

(1) For direct operation.

NC contact		
Rating (A)	**Position AC**	**Reference**
ND 125 … ND 500	1 to 4	3999 **0701**(1)

(1) For external operation.

NO contact		
Rating (A)	**Position AC**	**Reference**
ND 125 … ND 500	1 to 4	3999 **0702**(1)

(1) For external operation.

NO + NC contact		
Rating (A)	**Position AC**	**Reference**
630 … 1600	1	2799 **0005**

Low level NO/NC auxiliary contacts		
Rating (A)	**Position AC**	**Reference**
630 … 1600	1	2699 **0101**

Characteristics

Rating (A)	Contact type	Current nominal (A)	Operating current I_e (A) 250 VAC AC-13	400 VAC AC-13	24 VDC DC-13	48 VDC DC-13
ND 125 … ND 500	changeover NO/NC	16		3	12	2
ND 125 … ND 500	NC	10	6	4	5	3
ND 125 … ND 500	NO	10	6	4	5	3
630 … 1600	changeover NO/NC	16	12	8	14	6
630 … 1600	NO + NC	15	10	6	15	12

Auxiliary contacts for pre-break and signalling - Right side operation

Use
Pre-break and signalling of positions 0 and I:
- 1 to 2 NO/NC auxiliary contacts,
- 1 to 4 NO or NC auxiliary contacts.

Connection to the control circuit
By 6.35 mm fast-on terminal.

Characteristics
NO/NC A/C: IP2X.

Electrical characteristics
30 000 operations.


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acces_056_a_1_cat

NO/NC contact		
Rating (A)	**Position AC**	**Reference**
ND 125 … ND 500	1st	3999 **0021**
ND 125 … ND 500	2	3999 **0022**
630 … 1600	1st	2799 **0011**
630 … 1600	2nd	2799 **0012**

NC contact		
Rating (A)	**Position AC**	**Reference**
ND 125 … ND 500	1 to 4	3999 **0701**

NO contact		
Rating (A)	**Position AC**	**Reference**
ND 125 … ND 500	1 to 4	3999 **0702**

Low level NO/NC auxiliary contacts		
Rating (A)	**Position AC**	**Reference**
630 … 1600	1	2799 **0111**

Characteristics

Rating (A)	Contact type	Current nominal (A)	Operating current I_e (A) 250 VAC AC-13	400 VAC AC-13	24 VDC DC-13	48 VDC DC-13
ND 125 … ND 500	changeover NO/NC	16		3	12	2
ND 125 … ND 500	NC	10	6	4	5	3
ND 125 … ND 500	NO	10	6	4	5	3
630 … 1600	changeover NO/NC	16	12	8	14	6

Accessories (continued)

S type auxiliary contacts for signalisation - Front and right side operation

Use
Signalling of positions 0 and I,
1 to 4 NO+NC auxiliary contacts.

Connection to the control circuit
By terminals with a max. cross-section of 10 mm².

Electrical principle
The NO+NC S-type auxiliary contacts can be configured as 2 NO or 2 NC.

Electrical characteristics
30 000 operations.



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NO+NC contact		
Rating (A)	**Position AC**	**Reference**
ND 125 … ND 500	1	3999 **0041**
ND 125 … ND 500	2	3999 **0042**
ND 125 … ND 500	3	3999 **0043**
ND 125 … ND 500	4	3999 **0044**

Characteristics

Rating (A)	Contact type	Current nominal (A)	Operating current I_e (A) 250 VAC AC-13	Operating current I_e (A) 400 VAC AC-13
ND 125 … ND 500	NO + NC	20	10	8

Terminal shrouds

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

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

Advantage



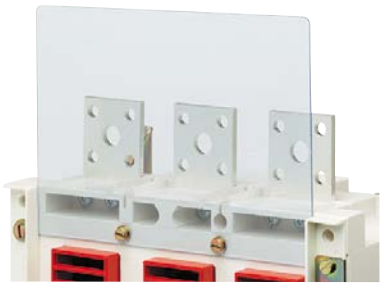
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Rating (A)	No. of poles	Position	Reference
ND 125 … ND 200	3 P	top or bottom	3998 **3016**(1)
ND 125 … ND 200	4 P	top or bottom	3998 **4016**(2)
ND 250 … ND 500	3 P	top or bottom	3998 **3025**(1)
ND 250 … ND 500	4 P	top or bottom	3998 **4025**(2)

(1) Reference composed of 3 pieces.
(2) Reference composed of 4 pieces.

Terminal screens

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



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Rating (A)	No. of poles	Position	Reference
630 … 800	3 P	top or bottom	2998 **3080**
630 …800	4 P	top or bottom	2998 **4080**
1250 ... 3150	3 P	top or bottom	2998 **3120**
1250 ... 1600	4 P	top or bottom	2998 **4120**

Inter-phase barrier

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



acces_036_a_1_cat

Rating (A)	No. of poles	Reference
630 ... 3150	3 P	2998 **0003**
630 ... 1600	4 P	2998 **0004**

Handle key interlocking accessories

Use

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

- using RONIS EL11AP lock in direct right-side operation (Fig. 1),
- using RONIS EL11AP lock in direct front operation (Fig. 2),
- using RONIS EL11AP or CASTELL type K-type lock in external front operation (Fig. 3),
- using RONIS EL11AP lock in external right-side operation,
- using CASTELL FS-type in external front operation (Fig. 4).

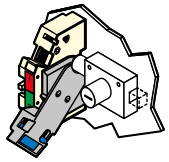


Fig. 1

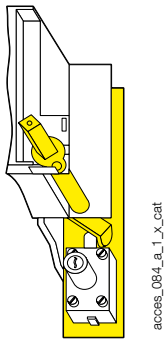


Fig.2

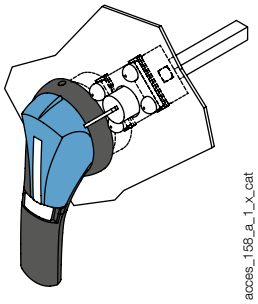


Fig. 3

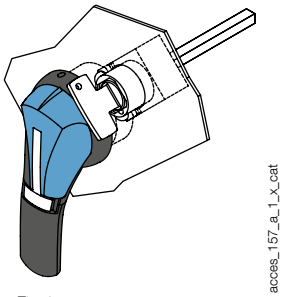


Fig.4

Locking using RONIS EL11AP lock (not supplied)

Rating (A)	Operation	Figure	Reference
ND 125 ... ND 500	front direct	1	3629 **7913**(1)
630 ... 1600	front direct	2	2799 **7007**(2)
ND 125 ... 1600	external front	3	1499 **7701**
ND 125 ... ND 500	direct side operation	1	3629 **7913**(1)
ND 125 ... 1600	external right side	3	1499 **7701**

(1) Handle included.
(2) Factory mounting only.

Locking using type K CASTELL lock (not supplied)

Rating (A)	Operation	Figure	Reference
ND 125 ... ND 500	external front	3	1499 **7702**

Locking using type FS CASTELL lock (not supplied)

Rating (A)	Operation	Figure	Reference
ND 125 ND 500	external front	4	1499 **7703**

Other specific accessories

- Mechanical coupling device for combining switches with "n" poles of the same or different ratings.
- Mechanical interlocking device.
- Mechanical plates and escutcheon for standard systems.

Characteristics according to IEC 60947-3

SIDER ND 125 to 500 A

Thermal current I_{th} at 40°C		**ND 125 A**	**ND 200 A**	**ND 250 A**	**ND 315 A**	**ND 400 A**	**ND 500 A**
Rated insulation voltage U_i (V)		800	800	800	800	800	800
Rated impulse withstand voltage U_{imp} (kV)		8	8	8	8	8	8
Rated operational currents I_e (A)							
Rated voltage	**Utilisation category**	**A/B(1)**	**A/B(1)**	**A/B(1)**	**A/B(1)**	**A/B(1)**	**A/B(1)**
415 VAC	AC-20 A / AC-20 B	125/125	200/200	250/250	315/315	400/400	500/500
415 VAC	AC-21 A / AC-21 B	125/125	200/200	250/250	315/315	400/400	500/500
415 VAC	AC-22 A / AC-22 B	125/125	200/200	250/250	315/315	400/400	500/500
415 VAC	AC-23 A / AC-23 B	125/125	200/200	250/250	315/315	400/400	500/500
500 VAC	AC-20 A / AC-20 B	125/125	200/200	250/250	315/315	400/400	500/500
500 VAC	AC-21 A / AC-21 B	125/125	160/160	250/250	250/250	400/400	500/500
500 VAC	AC-22 A / AC-22 B	125/125	160/160	250/250	250/250	400/400	500/500
500 VAC	AC-23 A / AC-23 B	125/125	160/160	250/250	250/250	315/315	315/315
690 VAC(2)	AC-20 A / AC-20 B	125/125	200/200	250/250	315/315	400/400	500/500
690 VAC(2)	AC-21 A / AC-21 B	125/125	160/160	250/250	315/315	400/400	500/500
690 VAC(2)	AC-22 A / AC-22 B	125/125	160/160	250/250	315/315	400/400	500/500
690 VAC(2)	AC-23 A / AC-23 B	125/125	160/160	250/250	250/250	315/315	315/315
220 VDC	DC-20 A / DC-20 B	125/125	200/200	250/250	315/315	400/400	500/500
220 VDC	DC-21 A / DC-21 B	125/125	160/160	250/250	250/250	315/315(3)	315/315(3)
220 VDC	DC-22 A / DC-22 B	125/125	160/160	250/250	250/250	315/315(3)	315/315(3)
220 VDC	DC-23 A / DC-23 B	125/125	125/125	200/200	200/200	200/315(3)	200/315(3)
440 VDC	DC-20 A / DC-20 B	125/125	200/200	250/250	315/315	400/400	500/500
440 VDC	DC-21 A / DC-21 B	125/125(4)	160/160(4)	250/250(4)	250/250(4)	315/315(4)	315/315(4)
440 VDC	DC-22 A / DC-22 B	125/125(4)	160/160(4)	250/250(4)	250/250(4)	315/315(4)	315/315(4)
440 VDC	DC-23 A / DC-23 B	125/125(4)	125/125(4)	200/200(4)	200/200(4)	200/315(4)	200/315(4)
500 VDC	DC-20 A / DC-20 B	125/125	200/200	250/250	315/315	400/400	500/500
500 VDC	DC-21 A / DC-21 B	125/125(4)	160/160(4)	250/250(4)	250/250(4)	315/315(4)	315/315(4)
500 VDC	DC-22 A / DC-22 B	125/125(4)	160/160(4)	250/250(4)	250/250(4)	315/315(4)	315/315(4)
500 VDC	DC-23 A / DC-23 B	125/125(4)	125/125(4)	200/200(4)	200/200(4)	200/315(4)	200/315(4)
Operational power in AC-23 A (kW) (1)(5)							
At 400 VAC without pre-break in AC-23 (kW)(1)		63/63	110/110	140/140	160/160	220/220	295/295
At 500 VAC without pre-break in AC-23 (kW)(1)		85/85	110/110	160/160	160/160	220/220	220/220
At 690 VAC without pre-break in AC-23 (kW)(1)		110/110	150/150	220/220	220/220	295/295	295/295
Reactive power (kvar)							
At 400 VAC (kvar)		55	90	115	145	185	230
Fuse protected short-circuit withstand (kA rms prospective)(6)							
Prospective short-circuit current (kA rms)		100	60	100	60	50	30
Associated fuse rating (A)		125	200	150	315	400	500
Circuit breaker protected short-circuit withstand with any circuit breaker that ensures tripping in less than 0.3s							
Prospective short-circuit 0.3s (kA rms)		15	15	17	17	17	17
Short-circuit capacity (without protection)							
Rated short-time withstand current 1s. I_{CW} (kA rms)		7	7	9	9	9	9
Rated peak withstand current (kA peak)(6)		20	20	32.5	32.5	40	40
Connection							
Minimum Cu cable cross-section (mm^2)							
Minimum Cu busbar cross-section (mm^2)							
Maximum Cu cable cross-section (mm^2)		120	120	240	240	2 x 150	2 x 150
Maximum Cu busbar width (mm)		20	20	32	32	45	45
Tightening torque min (Nm)		9	9	20	20	20	20
Mechanical characteristics							
Durability (number of operating cycles)(6)		10 000	10 000	10 000	10 000	10 000	10 000
Operating effort (Nm)		10	10	12	12	15	15
Weight of a 3 pole device (kg)		1.8	1.8	3.2	3.2	4.8	4.8
Weight of a 4 pole device (kg)		2.3	2.3	4.5	4.5	6.1	6.1

(1) Category with index A = frequent operation - Category with index B = infrequent operation.
(2) With terminal shrouds or phase barrier.
(3) 3-pole device with 2 poles in series for the "+" and 1 pole for the "-".
(4) 4-pole device with 2 poles in series per polarity.
(5) The power value is given for information only, the current values vary from one manufacturer to another.
(6) For a rated operational voltage Ue = 415 VAC.

Characteristics according to IEC 60947-3

SIDER 630 to 3150 A

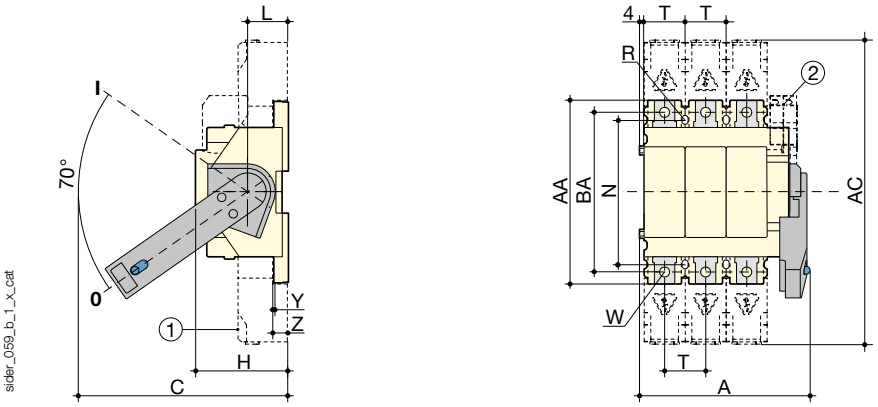
Thermal current I_{th} at 40°C		**630 A**	**800 A**	**1250 A**	**1600 A**	**1800 A**	**2000 A**	**2500 A**	**3150 A**
Rated insulation voltage U_i (V)		1000	1000	1000	1000	1000	1000	1000	1000
Rated impulse withstand voltage U_{imp} (kV)		12	12	12	12	12	12	12	12
Rated operational currents I_e (A)									
Rated voltage	**Utilisation category**	**A/B(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-20 A / AC-20 B	630 / 630	800 / 800	1250 / 1250	1600 / 1600	1800 / 1800	2000/2000	2500/2500	3150/3150
415 VAC	AC-21 A / AC-21 B	630 / 630	800 / 800	1250 / 1250	1600 / 1600	1800 / 1800	2000/2000	2500/2500	3150/3150
415 VAC	AC-22 A / AC-22 B	630 / 630	800 / 800	1250 / 1250	1250 / 1250	-	-	-	-
415 VAC	AC-23 A / AC-23 B	630 / 630	630 / 800	1000 / 1000	1000 / 1000	-	-	-	-
500 VAC	AC-20 A / AC-20 B	630 / 630	800 / 800	1250 / 1250	1600 / 1600	1800 / 1800	2000/2000	2500/2500	3150/3150
500 VAC	AC-21 A / AC-21 B	630 / 630	800 / 800	1250 / 1250	1600 / 1600	-	-	-	-
500 VAC	AC-22 A / AC-22 B	630 / 630	800 / 800	1000 / 1000	1000 / 1000	-	-	-	-
500 VAC	AC-23 A / AC-23 B	500 / 500	500 / 500	800 / 800	800 / 800	-	-	-	-
690 VAC(2)	AC-20 A / AC-20 B	630 / 630	800 / 800	1250 / 1250	1600 / 1600	1800 / 1800	2000/2000	2500/2500	3150/3150
690 VAC(2)	AC-21 A / AC-21 B	630 / 630	800 / 800	1000 / 1000	1250 / 1250	-	-	-	-
690 VAC(2)	AC-22 A / AC-22 B	315 / 315	315 / 315	400 / 400	400 / 400	-	-	-	-
690 VAC(2)	AC-23 A / AC-23 B	100 / 100	125 / 125	200 / 200	200 / 200	-	-	-	-
220 VDC	DC-20 A / DC-20 B	630 / 630	800 / 800	1250 / 1250	1600 / 1600	-	-	-	-
220 VDC	DC-21 A / DC-21 B	630 / 630	800 / 800	1000 / 1000	1250 / 1250	-	-	-	-
220 VDC	DC-22 A / DC-22 B	630 / 630	800 / 800	800 / 800	800 / 800	-	-	-	-
220 VDC	DC-23 A / DC-23 B	630 / 630	800 / 800	800 / 800	800 / 800	-	-	-	-
440 VDC	DC-20 A / DC-20 B	630 / 630	800 / 800	1250 / 1250	1600 / 1600	-	-	-	-
440 VDC	DC-21 A / DC-21 B	500 / 500	630 / 630	800 / 800	1000 / 1000	-	-	-	-
440 VDC	DC-22 A / DC-22 B	630 / 630(4)	800 / 800(4)	800 / 800(4)	800 / 800(4)	-	-	-	-
440 VDC	DC-23 A / DC-23 B	630 / 630(4)	800 / 800(4)	800 / 800(4)	800 / 800(4)	-	-	-	-
500 VDC	DC-20 A / DC-20 B	630 / 630	800 / 800	1250 / 1250	1600 / 1600	-	-	-	-
500 VDC	DC-21 A / DC-21 B	500 / 500	630 / 630	800 / 800(4)	1000 / 1000	-	-	-	-
500 VDC	DC-22 A / DC-22 B	630 / 630(4)	800 / 800(4)	800 / 800(4)	800 / 800(4)	-	-	-	-
500 VDC	DC-23 A / DC-23 B	630 / 630(4)	800 / 800(4)	800 / 800(4)	800 / 800(4)	-	-	-	-
Operational power in AC-23 (kW)(1)(5)									
At 400 VAC without pre-break auxiliary contact in AC-23 (kW)(1)		355 / 355	355 / 355	560 / 560	560 / 560	-	-	-	-
At 500 VAC without pre-break in AC-23 (kW)(1)		355 / 355	355 / 355	560 / 560	560 / 560	-	-	-	-
At 690 VAC without pre-break in AC-23 (kW)(1)		90 / 90	110 / 110	185 / 185	185 / 185	-	-	-	-
Reactive power (kvar)									
At 400 VAC (kvar)		290	365	575	-	-	-	-	-
Current rated as conditional short-circuit with fuse gG DIN									
Prospective short-circuit current (kA rms.)(5)		100	70	100	120	-	-	-	-
Associated fuse rating (A) (5)		630	800	1250	2 x 800	-	-	-	-
Circuit breaker protected short-circuit withstand with any circuit breaker that ensures tripping in less than 0.3s									
Rated short-time withstand current 0.3s. I_{cw} (kA rms)		50	50	100	100	-	-	-	-
Short-circuit operation (switch only)									
Rated short-time withstand current I_{cw} 1s (kA rms)		26	26	50	50	50	50	50	50
Rated peak withstand current in I_{cc} (kA peak)(6)		55	55	100	110	80	80	80	80
Connection									
Minimum Cu cable cross-section (mm^2)		2 x 150	2 x 185			-	-	-	-
Minimum Cu cable cross-section (mm^2)		2 x 30 x 5	2 x 40 x 5	2 x 60 x 5	2 x 80 x 5	2 x 80 x 5	2 x 80 x 10	4 x 100 x 5	-
Minimum Cu cable cross-section (mm^2)		2 x 300	2 x 300	4 x 185	6 x 240	6 x 240	3 x 100 x 5	2 x 100 x 10	3 x 100 x 10
Maximum Cu busbar width (mm)		63	63	100	100	100	100	100	100
Tightening torque min/max (Nm)		20	20	20	40	40	-	-	-
Mechanical characteristics									
Durability (number of operating cycles)(7)		5000	4000	4000	3000	3000	-	-	-
Operating effort (Nm)		45	45	45	65	65	-	-	-
Weight of a 3-pole device (kg)		8	8.5	11	16.5	16.5	-	-	-
Weight of a 4-pole device (kg)		9.5	10	14	20.5	20.5	-	-	-

(1) Category with index A = frequent operation - Category with index B = infrequent operation.
(2) With terminal shrouds or phase barrier.
(3) 3-pole device with 2 poles in series for the '+' and 1 pole for the '-'.
(4) 4-pole device with 2 poles in series per polarity
(5) The power value is given for information only - the current values vary from one manufacturer to another
(6) For a rated operational voltage U_e = 415 VAC
(7) For higher endurances, please contact us.

Dimensions - Front operation

SIDER ND 125 to 500 A

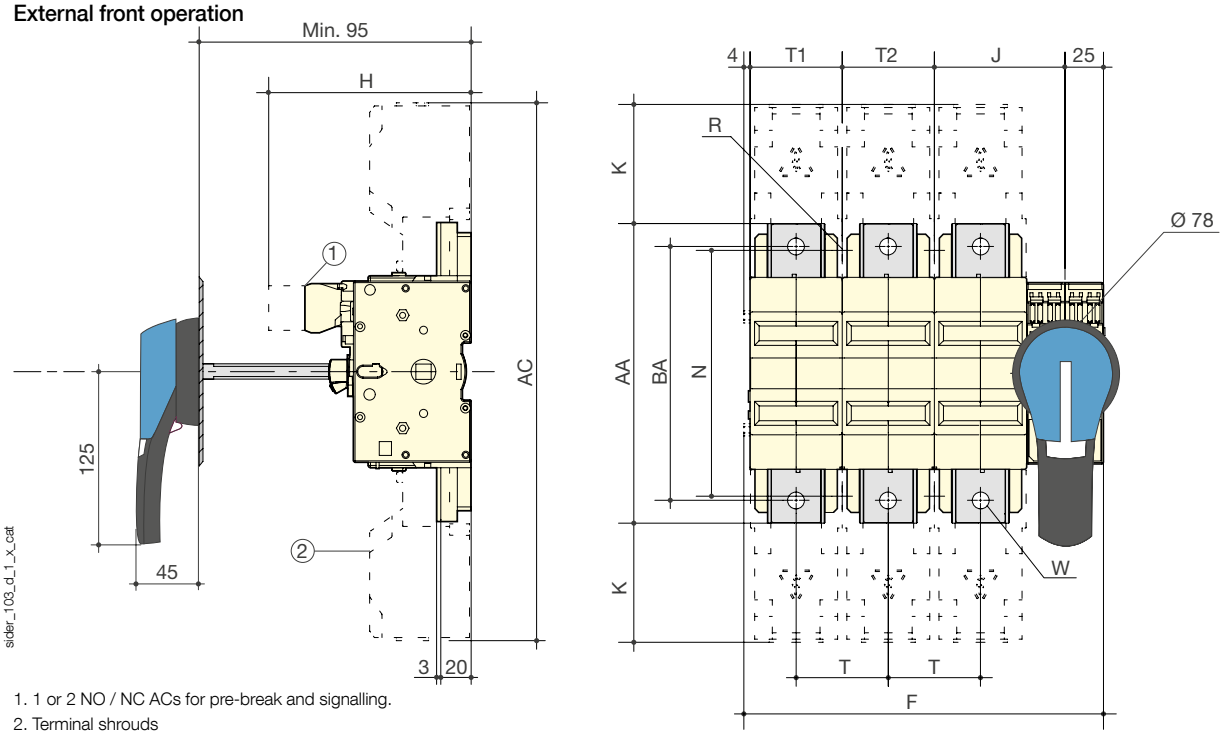
Direct front operation



1. Terminal shrouds
2. 1 or 2 NO / NC ACs for pre-break and signalling.

Rating (A)	Overall dimensions			Terminal shrouds	Switch body		Switch mounting		Connection					
	A 3p.	A 4p.	C	AC	H	L	N	R	T	W	Y	Z	AA	BA
ND 125	160	196	178	268	82	36	130	5	36	8	3	20	162	141
ND 200	160	196	178	268	82	36	130	5	36	8	3	20	162	141
ND 250	232	322	173	350	77	31	162	6	60	10	3	20	195	165
ND 315	232	322	173	350	77	31	162	6	60	10	3	20	195	165
ND 400	280	346	173	360	77	31	172	6	66	10	3	20	214	175
ND 500	280	346	173	360	77	31	172	6	66	10	3	20	214	175

External front operation

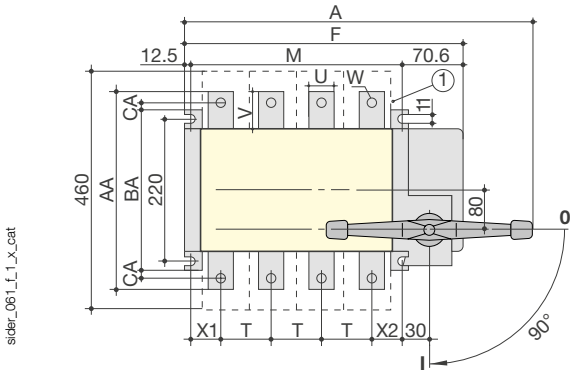


1. 1 or 2 NO / NC ACs for pre-break and signalling.
2. Terminal shrouds

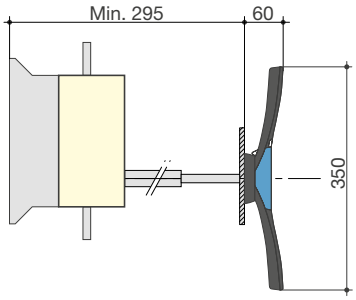
Rating (A)	Terminal shrouds	Switch body					Switch mounting		Connection					
	AC	F 3p.	F 4p.	H	J	K	N	R	T	W	AA	BA	T1	T2
ND 125	268	148	184	137	54	53	130	5	36	8	162	141	36	36
ND 200	268	148	184	137	54	53	130	5	36	8	162	141	36	36
ND 250	350	234	294	132	85	77.5	162	6	60	10	195	165	60	60
ND 315	350	234	294	132	85	77.5	162	6	60	10	195	165	60	60
ND 400	360	252	318	132	91	73	172	6	66	10	214	175	66	66
ND 500	360	252	318	132	91	73	172	6	66	10	214	175	66	66

SIDER 630 to 1800 A

Direct front operation



External front operation

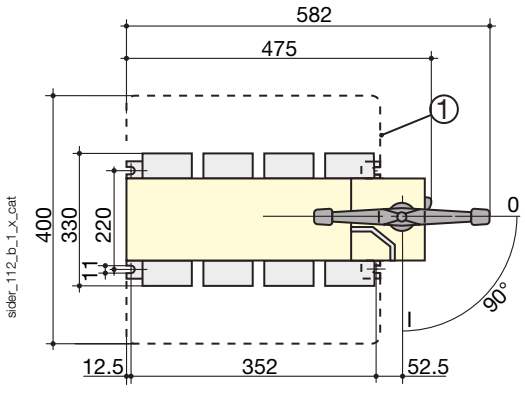


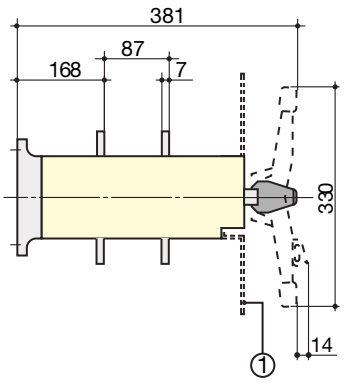
1. Terminal screens

Rating (A)	Overall dimensions		Switch body		Switch mounting		Connection										
	A 3p.	A 4p.	F 3p.	F 4p.	M 3p.	M 4p.	T	U	V	W	X1	X2	Y	Z	AA	BA	AC
630	463	543	358	438	255	335	80	40	50	13	42.5	52.5	6	106	300	260	20
800	463	543	358	438	255	335	80	50	60	9	47.5	47.5	6	106	320		
1250	555	675	430	550	347	467	120	63	65	16 x 11	46.5	60.5	7	107	330		
1600	555	675	430	550	347	467	120	80	80	13	46.5	60.5	15	111	360		
1800	479		417		345		120	100	80		46.5	60.5	15	112	360	250	

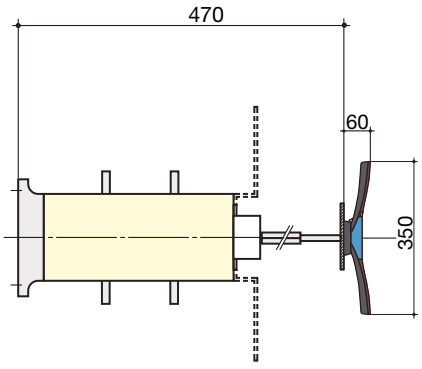
SIDER 2000 to 2500 A

Direct front operation





External front operation

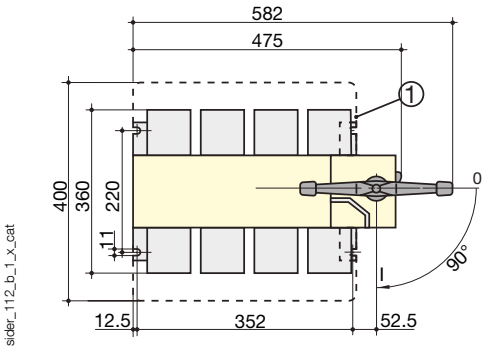


1. Terminal screens.

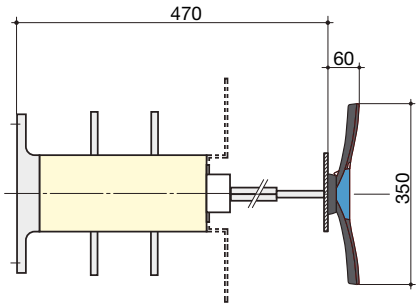
Dimensions - Front operation (continued)

SIDER 3150 A

Direct front operation



External front operation

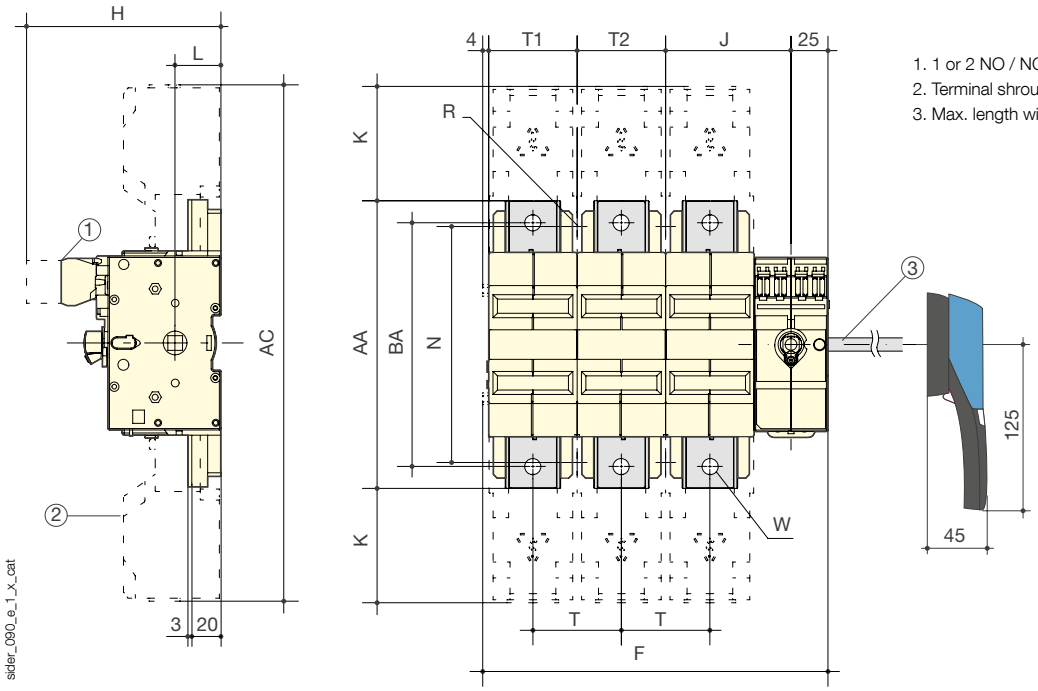


1. Terminal screens.

Dimensions - Side operation

SIDER ND 125 to 500 A

External side operation



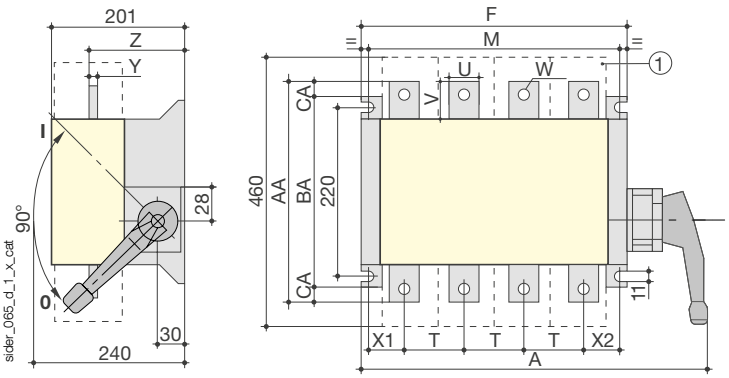
1. 1 or 2 NO / NC ACs for pre-break and signalling.
2. Terminal shrouds
3. Max. length with shaft extension: 230 mm

	Terminal shrouds	Overall dimensions		Switch body				Switch mounting		Connection					
Rating (A)	AC	F 3p.	F 4p.	H	J	K	L	N	R	T	W	AA	BA	T1	T2
ND 125	268	148	184	137	54	53	36	130	5	36	8	162	141	36	36
ND 200	268	148	184	137	54	53	36	130	5	36	8	162	141	36	36
ND 250	350	234	294	132	85	77.5	31	162	6	60	10	195	165	60	60
ND 315	350	234	294	132	85	77.5	31	162	6	60	10	195	165	60	60
ND 400	360	252	318	132	91	73	31	172	6	66	10	214	175	66	66
ND 500	360	252	318	132	91	73	31	172	6	66	10	214	175	66	66

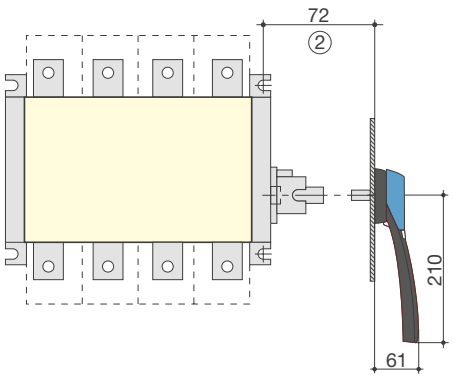
Dimensions - Side operation (continued)

SIDER 630 to 1600 A

Direct side operation



External side operation

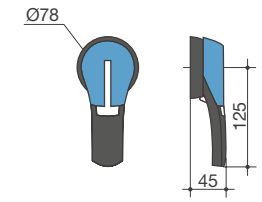
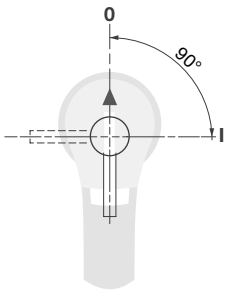
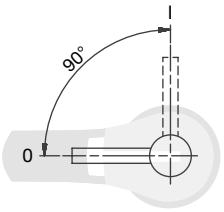
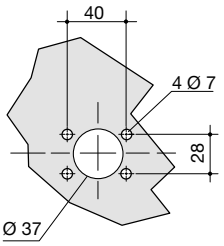
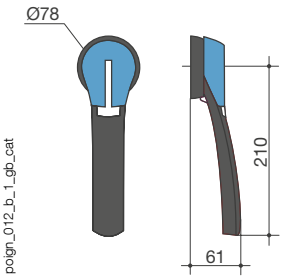


1. Terminal screen
2. Min. length with shaft extension: 111 mm

	Overall dimensions		Switch body		Switch mounting		Connection										
Rating (A)	**A 3p.**	**A 4p.**	**F 3p.**	**F 4p.**	**M 3p.**	**M 4p.**	**T**	**U**	**V**	**W**	**X1**	**X2**	**Y**	**Z**	**AA**	**BA**	**AC**
630	395	475	280	360	255	335	80	40	50	13	42.5	52.5	6	147	300	260	20
800	395	475	280	360	255	335	80	50	60	15	47.5	47.5	6	147	320		
1250	480	600	372	492	347	467	120	63	65	16 x 11	46.5	60.5	7	148	330		
1600	480	600	372	492	347	467	120	80	80	13	46.5	60.5	15	152	360		

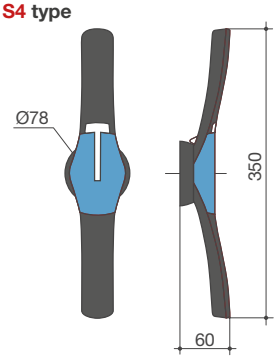
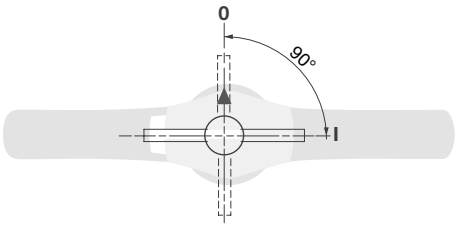
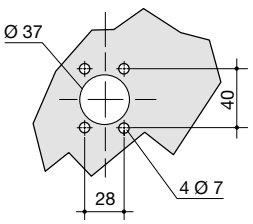
Dimensions for external handles

SIDER ND 125 to 500 A

Handle type	Front operation Direction of operation	Side operation Direction of operation	Door drilling
S2 type 		**Right** side operation 	
S3 type 			

poign_012_b_1_gb_cat

SIDER 630 to 1800 A

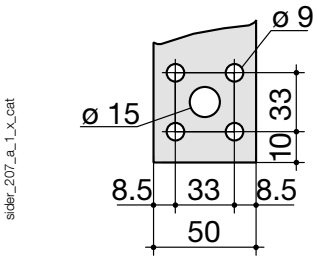
Handle type	Front operation Direction of operation	Door drilling
S4 type 		

poign_014_a_1_gb_cat

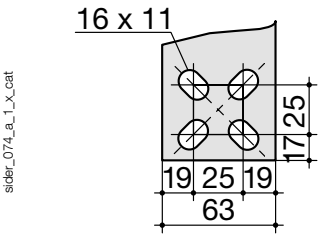
socomec
Innovative Power Solutions

Connection terminal

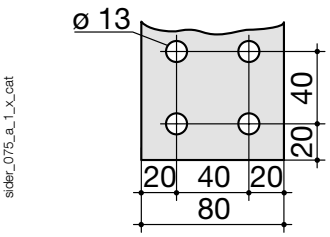
800 A



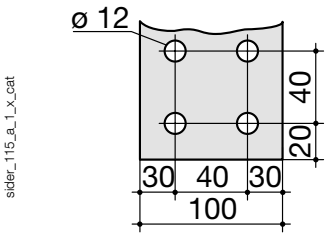
1250 A



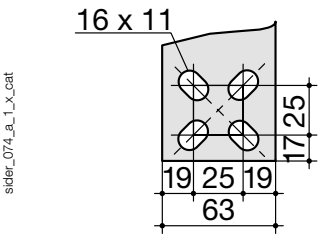
1600 A



1800 A



2000 to 2500 A



3150 A

