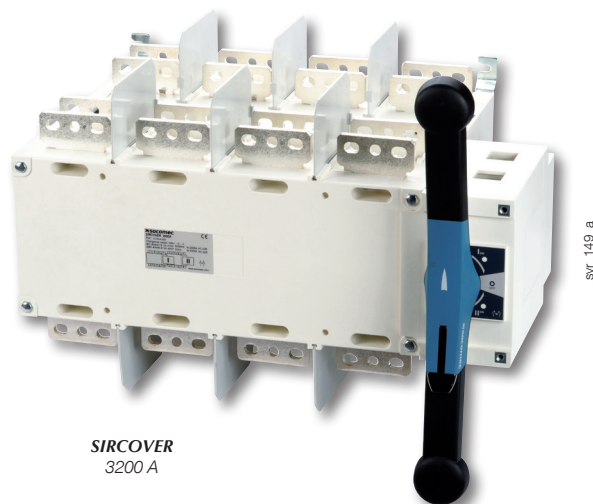


SIRCOVER

Manually operated Transfer Switching Equipment from 125 to 3200 A



Function

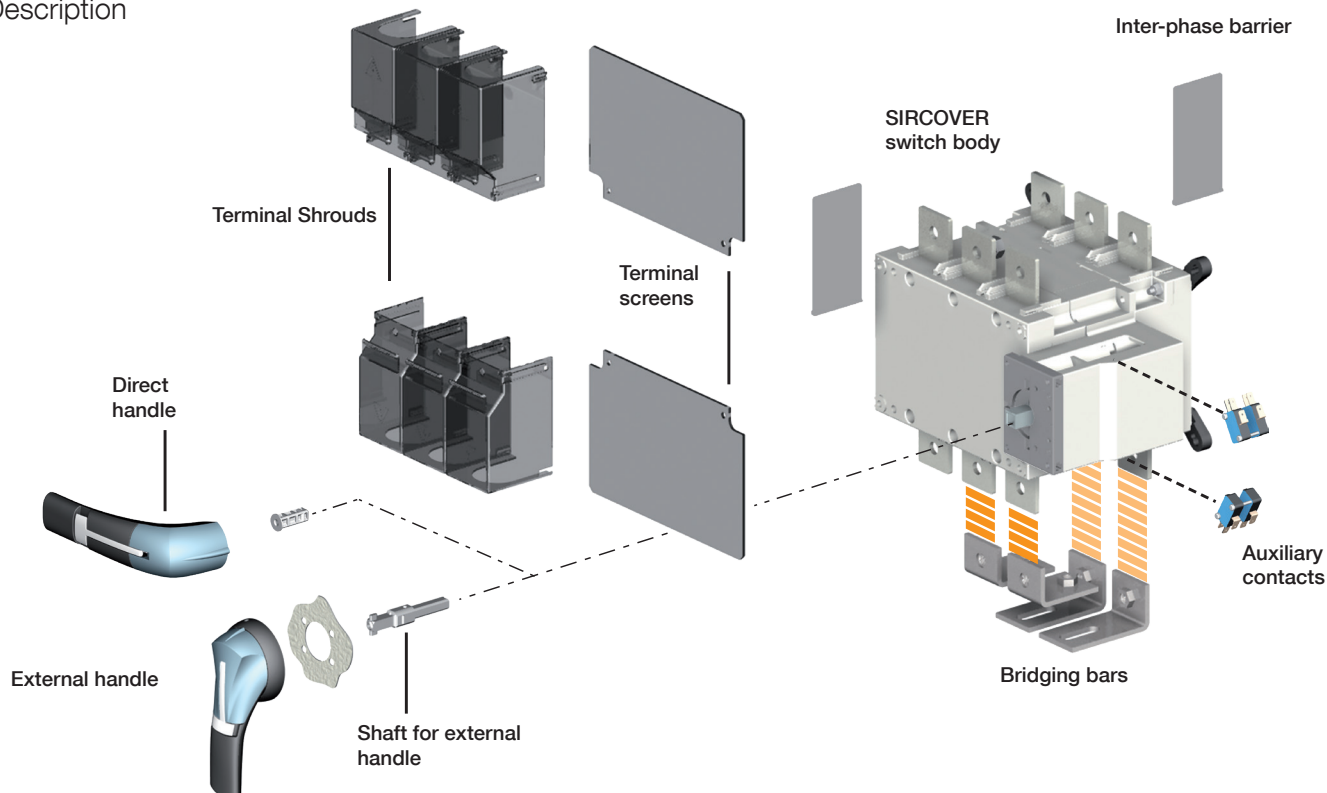
SIRCOVER products are manually operated transfer switches with positive break indication.

There are 2 ranges in the series:

- SIRCOVER AC for open-transition switching (I-O-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.

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.

Description



References

Description	No. of poles	Reference	Typ of operation	Particularity
SIRCOVER AC	3 P	41AC 3***	Front	Open-transition switching (I-O-II)
	4 P	41AC 4***		
SIRCOVER	3 P	4190 3***	Front	Overlapping contact switching (I-I+II-II)
	4 P	4190 4***		

** - corresponds to two characters of a reference, based on the rating of the changeover switch

Accessories required for implementation of the IEC/EN 61439 standard

Terminal shroud

Use

IP2X protection against direct contact with terminals or connecting parts.

Advantages

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

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

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



access_206_a_2_cat

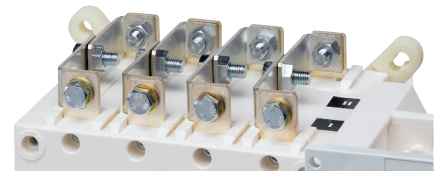
Bridging bars

Use

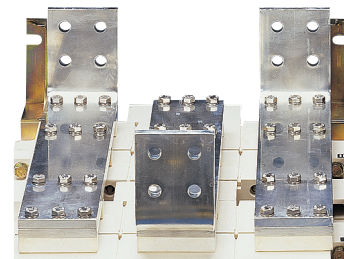
For bridging power terminals on the incoming or outgoing side of the switch.

Rating (A)	Frame size	Section (mm)	Reference ⁽¹⁾
125 ... 200	B3	20 x 2.5	4109 0019
250	B4	25 x 2.5	4109 0025
315 ... 400	B4	32 x 5	4109 0039
500	B5	32 x 5	4109 0050
630	B5	50 x 5	4109 0063
800 ... 1000	B6	50 x 6	4109 0080
1250	B6	60 x 8	4109 0120
1600	B7	90 x 10	4109 0160

(1) 3-pole device, order 3 bridging bars; for 4-pole devices, order 4.



access_205_a_2_cat



access_041_a_1_cat

SIRCOVER AC - Characteristics according to IEC 60947-3 and IEC 60947-6-1

125 to 630 A / B3 to B5

Thermal current I_{th} at 40°C	125 A	160 A	200 A	250 A	315 A	400 A	500 A	630 A
Frame size	B3	B3	B3	B4	B4	B4	B5	B5
Rated insulation voltage U_i (V)	800	800	800	1000	1000	1000	1000	1000
Rated impulse withstand voltage U_{imp} (kV)	8	8	8	12	12	12	12	12

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

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

Rated operational currents I_e (A) according to IEC 60947-3

Rated voltage	Utilisation category	A/B ⁽¹⁾	A/B ⁽¹⁾	A/B ⁽¹⁾	A/B ⁽¹⁾	A/B ⁽¹⁾	A/B ⁽¹⁾	A/B ⁽¹⁾	A/B ⁽¹⁾
415 VAC	AC-21 A / AC-21 B	125/125	160/160	200/200	250/250	315/315	400/400	500/500	630/630
415 VAC	AC-22 A / AC-22 B	125/125	160/160	200/200	250/250	315/315	400/400	500/500	630/630
415 VAC	AC-23 A / AC-23 B	125/125	160/160	200/200	200/200	315/315	400/400	500/500	630/630
500 VAC	AC-21 A / AC-21 B	125/125	160/160	200/200	250/250	315/315	400/400	500/500	630/630
500 VAC	AC-22 A / AC-22 B	125/125	160/160	200/200	200/250	200/315	200/400	500/500	500/500
500 VAC	AC-23 A / AC-23 B	80/80	80/80	80/80	200/200	200/200	200/200	400/400	400/400
690 VAC ⁽²⁾	AC-21 A / AC-21 B	125/125	160/160	200/200	200/200	200/200	200/200	500/500	500/500
690 VAC ⁽²⁾	AC-22 A / AC-22 B	125/125	125/125	125/125	160/160	160/160	160/160	400/400	400/400
690 VAC ⁽²⁾	AC-23 A / AC-23 B	63/80	63/80	63/80	125/125	125/125	125/125	400/400	400/400

Rated conditional short-circuit current with gG DIN fuse, according to IEC 60947-3

Prospective short-circuit current with fuse at 415 VAC (kA rms)	100	100	50	50	50	50	50	50
Prospective short-circuit current with fuse at 690 VAC (kA rms)				50	50	50	50	50
Associated fuse rating (A)	125	160	200	250	315	400	500	630

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

Rated short-term withstand current 0.3 s I_{ow} at 415 VAC (kA rms)	12	12	12	15 ⁽³⁾	15 ⁽³⁾	15 ⁽³⁾	17 ⁽³⁾	17 ⁽³⁾
Rated short-term withstand current 1 s I_{ow} at 415 VAC (kA rms)	7	7	7	8 ⁽³⁾	8 ⁽³⁾	8 ⁽³⁾	11 ⁽³⁾	10 ⁽³⁾
Rated peak withstand current at 415 VAC (kA peak)	20	20	20	30	30	30	45	45

Connection

Minimum Cu cable cross-section as per IEC 60947-1 (mm²)	35	35	50	95	120	185	2 x 95	2 x 120
Recommended Cu busbar cross-section (mm²)							2 x 32 x 5	2 x 40 x 5
Maximum copper cable cross-section (mm²)	50	95	120	150	240	240	2 x 185	2 x 300
Maximum width of copper bars (mm)	25	25	25	32	32	32	50	50
Min./Max. tightening torque (Nm)	9/13	9/13	9/13	20/26	20/26	20/26	20/26	20/26

Mechanical characteristics

Durability (number of operating cycles)	10,000	10,000	10,000	8,000	8,000	8,000	5,000	5,000
Weight of 3 P switch (kg)	2.9	2.9	2.9	3.8	3.9	3.9	8.6	9.1
Weight of 4 P switch (kg)	4.1	4.1	4.1	4.6	4.9	4.9	10.4	11.1

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

(2) Interphase barriers must be installed on the products.

(3) Values given at 690 VAC.

800 to 3200 A / B6 to B8

Thermal current I _{th} at 40°C	800 A	1000 A	1250 A	1600 A	2000 A	2500 A	3200 A	
Frame size	B6	B6	B6	B7	B8	B8	B8	
Rated insulation voltage U _i (V)	1000	1000	1000	1000	1000	1000	1000	
Rated impulse withstand voltage U _{imp} (kV)	12	12	12	12	12	12	12	
Rated operational currents I _e (A) according to IEC 60947-6-1								
Rated voltage	Utilisation category	A/B ⁽¹⁾	A/B ⁽¹⁾	A/B ⁽¹⁾	A/B ⁽¹⁾	A/B ⁽¹⁾	A/B ⁽¹⁾	
415 VAC	AC-31 A / AC-31 B	800	1000	1250	1600	2000	2500	3200
415 VAC	AC-32 A / AC-32 B	800	1000	1250	1600	2000	2000	2000
415 VAC	AC-33 A / AC-33 B	800	800	800	1000	1250	1250	1250
Rated operational currents I _e (A) according to IEC 60947-3								
Rated voltage	Utilisation category	A/B ⁽¹⁾	A/B ⁽¹⁾	A/B ⁽¹⁾	A/B ⁽¹⁾	A/B ⁽¹⁾	A/B ⁽¹⁾	A/B ⁽¹⁾
415 VAC	AC-21 A / AC-21 B	800/800	1000/1000	1250/1250	1600/1600	-/2000	-/2500	-/3200
415 VAC	AC-22 A / AC-22 B	800/800	1000/1000	1250/1250	1600/1600	-/2000	-/2500	-/3200
415 VAC	AC-23 A / AC-23 B	800/800	1000/1000	1250/1250	1250/1250	-/1600	-/1600	-/1600
500 VAC	AC-21 A / AC-21 B	800/800	1000/1000	1250/1250	1600/1600	-/2000	-/2000	-/2000
500 VAC	AC-22 A / AC-22 B	630/630	800/800	1000/1000	1600/1600			
500 VAC	AC-23 A / AC-23 B	400/400	630/630	800/800	1000/1000			
690 VAC ⁽²⁾	AC-21 A / AC-21 B	800/800	1000/1000	1250/1250	1600/1600	-/2000	-/2000	-/2000
690 VAC ⁽²⁾	AC-22 A / AC-22 B	630/630	800/800	1000/1000	1000/1000			
690 VAC ⁽²⁾	AC-23 A / AC-23 B	400/400	630/630	800/800	800/800			
Rated conditional short-circuit current with gG DIN fuse, according to IEC 60947-3								
Prospective short-circuit current with fuse at 415 VAC (kA rms)	50	100	100	100				
Prospective short-circuit current with fuse at 690 VAC (kA rms)	50	50	50					
Associated fuse rating (A)	800	1000	1250	2 x 800				
Short-circuit withstand without protection as per IEC 60947-3								
Rated short-term withstand current 0.3 s I _{ow} at 415 VAC (kA rms)	64	64	64	78	78	78	78	
Rated short-term withstand current 1 s I _{ow} at 415 VAC (kA rms)	35	35	35	50	50	50	50	
Rated withstand current at 415 VAC (kA peak)	55	55	80	110	120	120	120	
Connection								
Minimum Cu cable cross-section as per IEC 60947-1 (mm²)	2 x 185							
Recommended Cu busbar cross-section (mm²)	2 x 50 x 5	2 x 63 x 5	2 x 60 x 5	2 x 100 x 5	3 x 100 x 5	2 x 100 x 10	3 x 100 x 10	
Maximum copper cable cross-section (mm²)	4 x 185	4 x 185	4 x 185	6 x 185				
Maximum width of copper bars (mm)	63	63	63	100	100	100	100	
Min./Max. tightening torque (Nm)	20/26	20/26	20/26	40/45	40/45	40/45	40/45	
Mechanical characteristics								
Durability (number of operating cycles)	4,000	4,000	4,000	3,000	3,000	3,000	3,000	
Weight of a 3-pole device (kg)	20.5	21.0	21.6	25.7	42.0	42.0	52.3	
Weight of a 4-pole device (kg)	24.8	25.6	26.2	32.0	52.9	52.9	66.6	

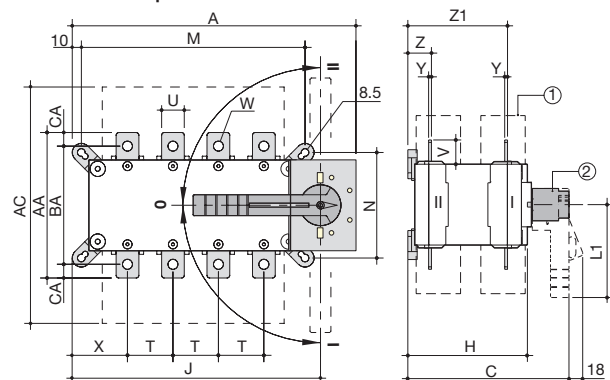
(1) Category with index A = frequent operation -
Category with index B = infrequent operation.

(2) Interphase barriers must be installed on the products.

Dimensions

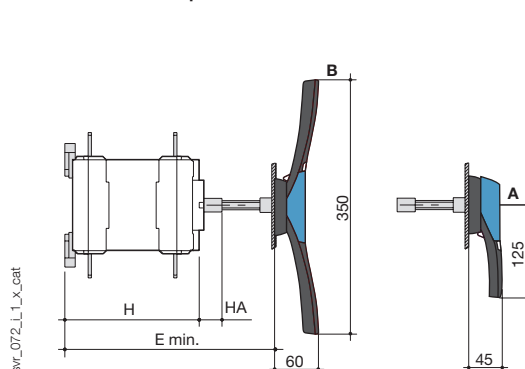
SIRCOVER 125 to 1600 A / B3 to B7

Direct front operation



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

External front operation

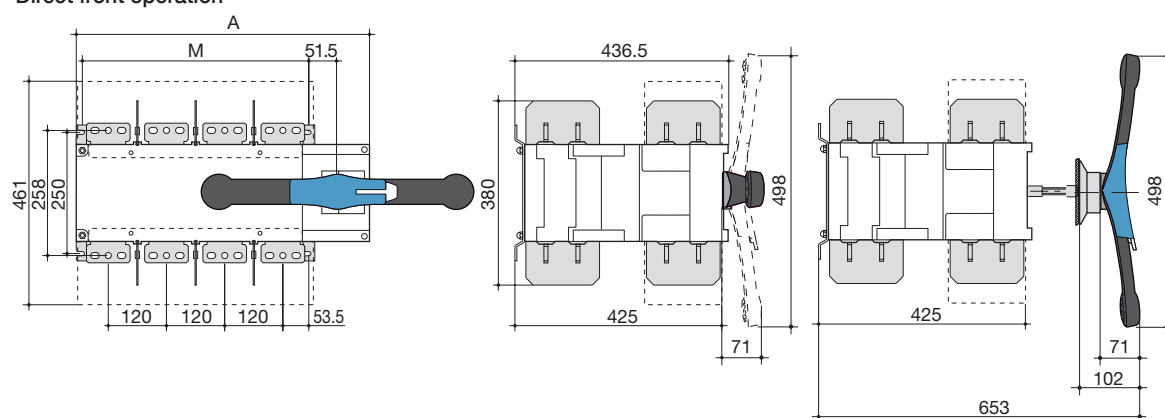


1. Terminal shroud
2. Direct operation handle:
- 125 to 630 A: L1 = 140 mm,
- 800 to 1600 A: L1 = 210 mm.

Rating (A) / Frame size	Perimeter dimensions				Terminal shroud	Case				Mounting accessory			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.	O	Z	Z1	AA	BA	CA	
125 / B3	221	251	218	208 ... 436	235	148	25	182	212	156	186	101	36	20	25	8.5	56	50	3.5	28	124	135	115	10		
160 / B3	221	251	218	208 ... 436	235	148	25	182	212	156	186	101	36	20	25	8.5	56	50	3.5	28	124	135	115	10		
200 / B3	221	251	218	208 ... 436	235	148	25	182	212	156	186	101	36	20	25	8.5	56	50	3.5	28	124	135	115	10		
250 / B4	262	312	218	208 ... 436	280	148	25	223	273	196	246	116	50	25	30	11	61	61	3.5	30	124	160	130	15		
315 / B4	262	312	218	208 ... 436	280	148	25	223	273	196	246	116	50	35	35	11	61	61	3.5	30	124	170	140	15		
400 / B4	262	312	218	208 ... 436	280	148	25	223	273	196	246	116	50	35	35	11	61	61	3.5	30	124	170	140	15		
500 / B5	319	379	295	285 ... 513	401	225	25	272	332	246	306	176	65	32	37	13	70.5	65.5	5	43	180	235	205	15		
630 / B5	319	379	295	285 ... 513	400	225	25	272	332	246	306	176	65	45	50	13	70.5	65.5	5	43	180	260	220	20		
800 / B6	386	466	375	425 ... 577	459	298	29	306.5	386.5	255	336	250	80	50	60.5	15	48	48	7	66.5	253.5	321		26.5		
1000/B6	386	466	375	425 ... 577	459	298	29	306.5	386.5	255	336	250	80	50	60.5	15	48	48	7	66.5	253.5	321		26.5		
1250 / B6	386	466	375	425 ... 577	459	298	29	306.5	386.5	255	336	250	80	60	65	16x11	48	48	7	66.5	255.5	330		29.5		
1600/B7	478	598	375	425 ... 577	461	298	29	388.5	518.5	347	467	250	120	90	43.5	12.5x5	54	54	8	66.5	255.5	288		15		

SIRCOVER 2000 to 3200 A / B8

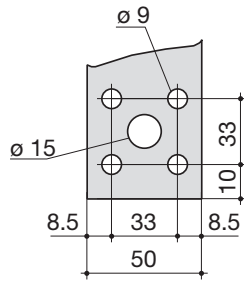
Direct front operation



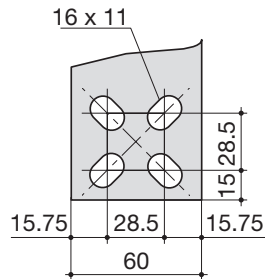
Rating (A) / Frame size	Perimeter dimensions		Mounting accessory	
	A 3p.	A 4p.	M 3p.	M 4p.
2000 ... 3200 / B8	478	598	347	467

Connection terminals

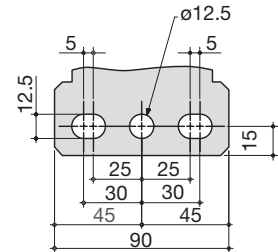
800 to 1000 A / B6



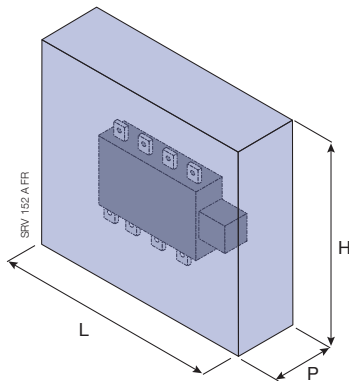
1250 A / B6



1600 to 3200 A / B7 to B8



Product integration data in compliance with IEC / EN 61439-1



The data below apply for:

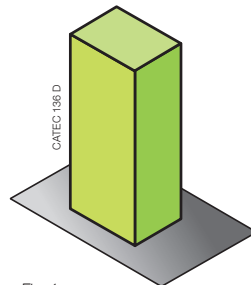


Fig. 1
Box

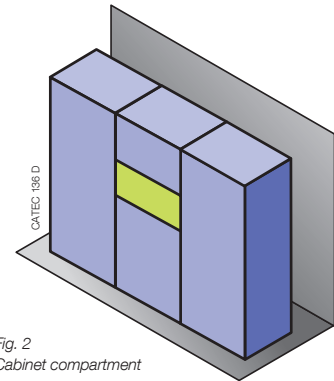


Fig. 2
Cabinet compartment

Rating (A)	H (mm)	W (mm)	D (mm)
125 ... 200	400	500	320
250 ... 400	400	500	320
500 ... 630	600	500	320
800 ... 3 200	800	800	600

Mounting orientation

125 A to 630 A

 vignette sircover.ai	 OK	 Not permitted	 OK
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800 A to 3200 A

 sirco_6_8p.ai	 Not permitted	 OK	 OK
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Rated operational currents I_e (A)

Horizontal mounting

Ambient temperature (°C)	25°C - 35°C		40°C		45°C		50°C	
	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31
Rating (A)								
125	125	113	119	108	113	102	107	97
160	160	145	152	138	145	131	138	125
200	200	181	191	173	182	165	172	156
250	250	227	238	216	227	206	215	195
315	300	272	286	260	273	248	258	234
400	370	336	353	320	336	305	319	290
500	470	427	449	408	427	366	405	368
630	500	454	477	433	455	413	431	391
800	800	727	764	694	728	661	690	627
1000	900	818	860	781	819	744	776	705
1250	950	863	908	825	854	785	820	745
1600	1375	1250	1314	1194	1251	1137	1186	1078
2000	2000	1818	1911	1737	1820	1654	1726	1569
2500	2250	2045	2150	1954	2048	1861	1942	1765
3200	2700	2454	2580	2345	2457	2233	2330	2118

Vertical mounting

Ambient temperature (°C)	25°C - 35°C		40°C		45°C		50°C	
	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31	IP ≤ 31	IP > 31
Rating (A)								
125	125	113	119	108	113	102	107	97
160	150	136	143	130	136	123	129	117
200	180	163	172	156	163	148	155	140
250	250	227	238	216	227	206	215	195
315	290	263	277	251	263	239	250	227
400	330	300	315	286	300	272	284	258
500	450	409	430	390	409	371	388	352
630	500	454	477	433	455	413	431	391
800	750	681	716	650	682	620	647	588
1000	850	772	812	736	773	702	733	666
1250	900	818	880	781	819	744	776	705
1600	1300	1181	1242	1129	1183	1075	1122	1020
2000	2000	1818	1911	1737	1820	1654	1726	1569
2500	2200	2000	2102	1910	2002	1820	1899	1726
3200	2500	2272	2389	2171	2275	2066	2158	1961

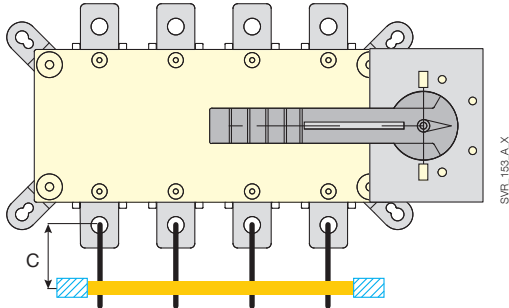
Power dissipation

Rating (A)	125	160	200	250	315	400	500	630
Resistance (mΩ/pole)	0.12	0.13	0.10	0.09	0.08	0.09	0.07	0.08
Dissipated power (W / pole)	1.90	3.20	4.10	5.90	7.80	15.11	17.00	32.40

Rating (A)	800	1000	1250	1600	2000	2500	3200
Resistance (mΩ/pole)	0.07	0.05	0.06	0.05	0.04	0.04	0.03
Dissipated power (W / pole)	41.7	46.9	93.3	122	178	255	330

Connection

Rating (A)	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3200
Recommended Cu cable cross-section (mm ²)	50	70	95	150	185	240	2x150	2x185	2x240	4x150	4x185	4x240	8x150	8x185	8x240
Max. Cu cable cross-section (mm ²)	50	95	120	150	240	240	2x185	2x300	2x300	4x185	6x185	-	-	-	-
Recommended rigid Cu bar (mm ²)	-	-	-	-	-	-	2x32x5	2x40x5	2x50x5	2x63x5	2x60x7	2x100x5	2x100x10	2x100x10	3x100x10
Recommended flexible Cu bar (mm ²)	20x2	20x2	20x2	20x3	32x5	32x6	32x8	10x50x1	10x50x1	63x10x1	100x10x1	-	-	-	-
Flexible Cu bar - max width (mm)	25	25	25	32	32	32	50	50	63	63	63	100	100	100	100



Electromagnetic compatibility and tightening torques

Refer to the product manual.

Clamping

Cables must be clamped and can be done by strand or individually.

C - Maximum distance of conductor from the first cable fastening support	400 mm
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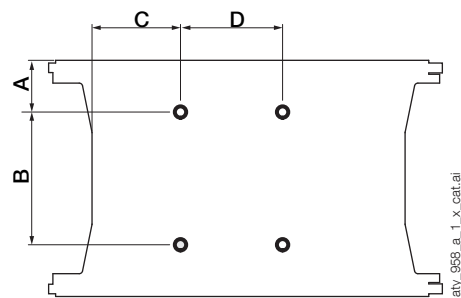
Insulation distances D_i and leak lines L_f

Visual check of compliance with distances as per tables 1 and 2 of the IEC 61439-1 standard

Power circuit	125 ... 200 A	$U_{mp} = 8 \text{ kV}$	$D_i \geq 8 \text{ mm}$	$U_i = 800 \text{ V}$	$L_f \geq 12.5 \text{ mm}$
	250 ... 630 A	$U_{mp} = 12 \text{ kV}$	$D_i \geq 14 \text{ mm}$	$U_i = 1000 \text{ V}$	$L_f \geq 16 \text{ mm}$
	800 ... 3200 A				

Integration data complying with the IEC/EN 61439 standard

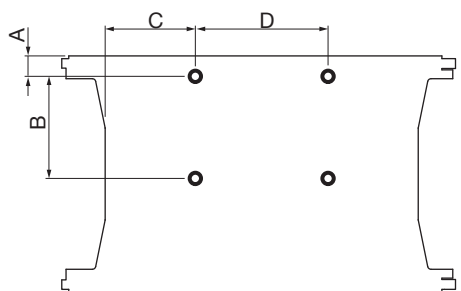
Horizontal mounting



Drilling template for the back plate

Rating (A) / Frame size	No. of poles	A (mm)	B (mm)	C (mm)	D (mm)
125 ... 200 / B3	3 P	76	195	170	120
	4 P	76	195	140	150
250 ... 400 / B4	3 P	76	195	130	160
	4 P	76	195	80	210
500 ... 630 / B5	3 P	76	195	80	210
	4 P	76	195	20	270

Vertical mount



Drilling template for the back plate

Rating (A) / Frame size	No. of poles	A (mm)	B (mm)	C (mm)	D (mm)
125 ... 200 / B3	3 P	30	120	133	195
	4 P	30	150	133	195
250 ... 400 / B4	3 P	70	160	133	195
	4 P	20	210	133	195
500 ... 630 / B5	3 P	80	210	133	195
	4 P	20	270	133	195

SIRCOVER

Manually operated Transfer Switching Equipment

from 125 to 3200 A

Rated conditional short-circuit current with circuit breaker*

ABB		TMAX XT1 (160 A)					TMAX XT2 (160 A)					TMAX XT3 (250 A)		TMAX XT4 (250 A)					
Series	I_{cu} I_n	B	C	N	S	H	N	S	H	L	V	N	S	N	S	H	L	V	X
		18 kA	25 kA	36 kA	50 kA	70 kA	36 kA	50 kA	70 kA	120 kA	150 kA	36 kA	50 kA	36 kA	S	70 kA	120 kA	150 kA	200 kA
SIRCOVER	125 A	T	T	T	40	40	T	45	45	45	45	19	19	22	S	22	22	18	18
	160 A	T	T	T	40	40	T	45	45	45	45	19	19	22	S	22	22	18	18
	200 A	T	T	T	40	40	T	45	45	45	45	19	19	22	S	22	22	18	18
	250 A	T	T	T	T	T	T	T	T	T	T	32	32	T	S	50	50	36	36
	315 A	T	T	T	T	T	T	T	T	T	T	T	T	T	S	T	T	T	105
	400 A	T	T	T	T	T	T	T	T	T	T	T	T	T	S	T	T	T	105
	500 A	T	T	T	T	T	T	T	T	T	T	T	T	T	S	T	T	T	T
	630 A	T	T	T	T	T	T	T	T	T	T	T	T	T	S	T	T	T	T
	800 A	T	T	T	T	T	T	T	T	T	T	T	T	T	S	T	T	T	T
	1000 A	T	T	T	T	T	T	T	T	T	T	T	T	T	S	T	T	T	T
	1250 A	T	T	T	T	T	T	T	T	T	T	T	T	T	S	T	T	T	T
	1600 A	T	T	T	T	T	T	T	T	T	T	T	T	T	S	T	T	T	T
	2000 A	T	T	T	T	T	T	T	T	T	T	T	T	T	S	T	T	T	T
	2500 A	T	T	T	T	T	T	T	T	T	T	T	T	T	S	T	T	T	T
	3200 A	T	T	T	T	T	T	T	T	T	T	T	T	T	S	T	T	T	T

ABB		TMAX XT5						TMAX XT6			TMAX XT7			EMAX E2
Series	I_{cu} I_n	N	S	H	L	V	X	N	S	H	S	H	L	
		36 kA	50 kA	70 kA	120 kA	150 kA	200 kA	36 kA	50 kA	70 kA	50 kA	70 kA	120 kA	130 kA
SIRCOVER	125 A	12	12	12	12	12	12	10	10	10	-	-	-	10
	160 A	12	12	12	12	12	12	10	10	10	-	-	-	10
	200 A	12	12	12	12	12	12	10	10	10	-	-	-	10
	250 A	20	20	20	20	20	20	16	16	16	-	-	-	15
	315 A	T	T	T	80	80	80	24	24	24	-	-	-	21
	400 A	T	T	T	80	80	80	24	24	24	-	-	-	21
	500 A	T	T	T	T	T	T	32	32	32	21	21	21	27
	630 A	T	T	T	T	T	T	T	T	65	34	34	34	42
	800 A	T	T	T	T	T	T	T	50	50	28	28	28	35
	1000 A	T	T	T	T	T	T	T	50	50	28	28	28	35
	1250 A	T	T	T	T	T	T	T	T	T	46	46	46	55
	1600 A	T	T	T	T	T	T	T	T	T	T	T	75	80
	2000 A	T	T	T	T	T	T	T	T	T	T	T	80	85
	2500 A	T	T	T	T	T	T	T	T	T	T	T	80	85
	3200 A	T	T	T	T	T	T	T	T	T	T	T	80	85

HAGER		H3+ P160 TM/Mag				H3+ P160 electro.				H3+ P250TM/Mag				H3+ P250 electro.				H3+ P630				H3+ x630		
Series	I_n I_{cu}	I _n	H	M	E	I _n	H	M	E	I _n	H	M	E	I _n	H	M	E	I _n	H	M	E	I _n	M	E
	25 kA		50 kA	70 kA	25 kA		50 kA	70 kA	25 kA		50 kA	70 kA	25 kA		50 kA	70 kA	25 kA		50 kA	70 kA	50 kA		70 kA	
SIRCOVER	125 A	125 A	T	35	35	160 A	20	20	20	125 A	T	T	T	160 A	17	17	17	250 A	18	18	18	250 A	13	13
	160 A	160 A	T	20	20	160 A	20	20	20	160 A	T	T	T	160 A	17	17	17	250 A	18	18	18	250 A	13	13
	200 A	160 A	T	20	20	160 A	20	20	20	200 A	T	T	T	250 A	16	16	16	250 A	18	18	18	250 A	13	13
	250 A	160 A	T	T	52	160 A	T	42	42	250 A	T	42	42	250 A	T	30	30	250 A	T	28	28	250 A	22	22
	315 A	160 A	T	T	T	160 A	T	T	T	250 A	T	T	T	250 A	T	T	T	400 A	T	T	T	320 A	T	T
	400 A	160 A	T	T	T	160 A	T	T	T	250 A	T	T	T	250 A	T	T	T	400 A	T	T	T	400 A	T	T
	500 A	160 A	T	T	T	160 A	T	T	T	250 A	T	T	T	250 A	T	T	T	630 A	T	T	T	500 A	T	T
	630 A	160 A	T	T	T	160 A	T	T	T	250 A	T	T	T	250 A	T	T	T	630 A	T	T	T	630 A	T	T
	800 A	160 A	T	T	T	160 A	T	T	T	250 A	T	T	T	250 A	T	T	T	630 A	T	T	T	630 A	T	T
	1000 A	160 A	T	T	T	160 A	T	T	T	250 A	T	T	T	250 A	T	T	T	630 A	T	T	T	630 A	T	T
	1250 A	160 A	T	T	T	160 A	T	T	T	250 A	T	T	T	250 A	T	T	T	630 A	T	T	T	630 A	T	T
	1600 A	160 A	T	T	T	160 A	T	T	T	250 A	T	T	T	250 A	T	T	T	630 A	T	T	T	630 A	T	T
	2000 A	160 A	T	T	T	160 A	T	T	T	250 A	T	T	T	250 A	T	T	T	630 A	T	T	T	630 A	T	T
	2500 A	160 A	T	T	T	160 A	T	T	T	250 A	T	T	T	250 A	T	T	T	630 A	T	T	T	630 A	T	T
	3200 A	160 A	T	T	T	160 A	T	T	T	250 A	T	T	T	250 A	T	T	T	630 A	T	T	T	630 A	T	T

* - Subject to accuracy of the reading and data from the short-circuit current limiting curves of the MCCB circuit breaker.

T - Coordination possible up to the max I_{cu} value of the circuit breaker

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Rated conditional short-circuit current with circuit breaker*

LEGRAND		DPX ³ 160												DPX ³ 250								DPX ³ 630MT				
Series	I_n	I_{cu}	16A - 25A - 40A				63A - 80A				100A - 125A - 160A				100A - 160A				200A - 250A				250A to 630A			
			16 kA	25 kA	36 kA	50 kA	16 kA	25 kA	36 kA	50 kA	16 kA	25 kA	36 kA	50 kA	25 kA	36 kA	50 kA	70 kA	25 kA	36 kA	50 kA	70 kA	36 kA	50 kA	70 kA	100 kA
SIRCOVER	125 A	T	T	T	13.5	T	T	16	16	T	19.5	19.5	19.5	T	14.5	14.5	14.5	17.5	17.5	17.5	17.5	21	21	21	21	
	160 A	T	T	T	13.5	T	T	16	16	T	19.5	19.5	19.5	T	14.5	14.5	14.5	17.5	17.5	17.5	17.5	21	21	21	21	
	200 A	T	T	T	13.5	T	T	16	16	T	19.5	19.5	19.5	T	14.5	14.5	14.5	17.5	17.5	17.5	17.5	21	21	21	21	
	250 A	T	T	T	T	T	T	T	T	T	T	23	23	T	T	T	T	T	T	21	21	26	26	26	26	
	315 A	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	34	34	34	
	400 A	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	34	34	34	
	500 A	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	38	38	38	
	630 A	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	
	800 A	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	
	1000 A	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	
	1250 A	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	
	1600 A	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	
	2000 A	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	
	2500 A	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	
	3200 A		T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	

LEGRAND		DPX ³ 630 EL				DPX ³ 1600 MT								DPX ³ 1600 EL												
Series	I_n / I_{cu}	250 A to 630 A				500 A to 800 A				1000 A to 1250 A				500 A to 800 A				1000 A 1250 A				1600 A				
		36 kA	50 kA	70 kA	100 kA	36 kA	50 kA	70 kA	100 kA	36 kA	50 kA	70 kA	100 kA	36 kA	50 kA	70 kA	100 kA	36 kA	50 kA	70 kA	100 kA	36 kA	50 kA	70 kA	100 kA	
SIRCOVER	125 A	21	21	21	21	29	29	29	29	33	33	33	33	28	28	28	28	30	30	30	30	33	33	33	33	33
	160 A	21	21	21	21	29	29	29	29	33	33	33	33	28	28	28	28	30	30	30	30	33	33	33	33	33
	200 A	21	21	21	21	29	29	29	29	33	33	33	33	28	28	28	28	30	30	30	30	33	33	33	33	33
	250 A	26	26	26	26	37	37	37	37	42	42	42	42	36	36	36	36	40	40	40	40	42	42	42	42	42
	315 A	T	34	34	34	47	47	47	47	57	57	57	57	48	48	48	48	55	55	55	55	58	58	58	58	58
	400 A	T	34	34	34	47	47	47	47	57	57	57	57	48	48	48	48	55	55	55	55	58	58	58	58	58
	500 A	T	T	38	38	55	55	55	55	65	65	65	65	55	55	55	55	65	65	65	65	68	68	68	68	68
	630 A	T	T	T	T	T	T	68	68	T	82	82	82	T	T	68	68	T	82	82	82	T	90	90	90	90
	800 A	T	T	T	T	T	63	63	63	76	76	76	76	T	60	60	60	75	75	75	75	82	82	82	82	82
	1000 A	T	T	T	T	T	63	63	63	76	76	76	76	T	60	60	60	75	75	75	75	82	82	82	82	82
	1250 A	T	T	T	T	T	T	T	T	T	T	90	90	T	T	T	T	T	T	90	90	T	T	105	105	105
	1600 A	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	2000 A	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	2500 A	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	3200 A	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T

SCHNEIDER			NSX 160/100								NSX 250								NSX 400								NSX 630								NSX m							
Series	I_n	I_{cu}	B 25 kA	F 35 kA	N 50 kA	H 70 kA	S 100 kA	L 150 kA	R 200 kA	B 25 kA	F 35 kA	N 50 kA	H 70 kA	S 100 kA	L 150 kA	R 200 kA	F 35 kA	N 50 kA	H 70 kA	S 100 kA	L 150 kA	R 200 kA	F 35 kA	N 50 kA	H 70 kA	S 100 kA	L 150 kA	R 200 kA	E 16 kA	B 25 kA	F 35 kA	N 50 kA	H 70 kA									
SIRCOVER	125 A	T	T	45	45	45	45	45	T	T	35	35	35	35	35	35	16	16	16	16	16	16	13	13	13	13	13	13	T	T	T	T	50									
	160 A	T	T	45	45	45	45	45	T	T	35	35	35	35	35	35	16	16	16	16	16	16	13	13	13	13	13	13	T	T	T	T	50									
	200 A	T	T	45	45	45	45	45	T	T	35	35	35	35	35	35	16	16	16	16	16	16	13	13	13	13	13	T	T	T	T	50										
	250 A	T	T	T	T	T	110	110	T	T	T	T	80	80	80	32	32	32	32	32	32	22	22	22	22	22	22	T	T	T	T	T										
	315 A	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	70	70	70	T	T	50	50	50	50	T	T	T	T	T									
	400 A	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	70	70	70	T	T	50	50	50	50	T	T	T	T	T									
	500 A	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	100	100	T	T	T	75	75	75	T	T	T	T	T									
	630 A	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	110	110	T	T	T	80	80	80	T	T	T	T	T									
	800 A	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	180	T	T	T	T	T										
	1000 A	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	180	T	T	T	T	T										
	1250 A	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T									
	1600 A	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T									
	2000 A	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T									
	2500 A	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T									
	3200 A	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T									

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Rated conditional short-circuit current with circuit breaker*

SIEMENS		3VA10 100 A			3VA11 160 A			3VA12 250 A			3VA13 400 A			3VA14 630 A			3VA15 1000 A			3VA20 100 A				3VA21 160 A			
Series	I_n I_{cu}	B	N	S	M	H	S	M	H	S	M	H	C	M	H	C	M	H	C	L	M	H	C	L			
		16 kA	25 kA	36 kA	55 kA	70 kA	36 kA	55 kA	70 kA	36 kA	55 kA	70 kA	110 kA	55 kA	70 kA	110 kA	55 kA	85 kA	110 kA	150 kA	55 kA	85 kA	110 kA	150 kA			
SIRCOVER	125 A	T	T	T	49	49	18	18	18	9.3	9.3	9.3	9.3	7.4	7.4	7.4	43.6	43.6	43.6	43.6	25.9	25.9	25.9	25.9			
	160 A	T	T	T	49	49	18	18	18	9.3	9.3	9.3	9.3	7.4	7.4	7.4	43.6	43.6	43.6	43.6	25.9	25.9	25.9	25.9			
	200 A	T	T	T	49	49	18	18	18	9.3	9.3	9.3	9.3	7.4	7.4	7.4	43.6	43.6	43.6	43.6	25.9	25.9	25.9	25.9			
	250 A	T	T	T	T	T	T	42	42	17.5	17.5	17.5	17.5	10	10	10	T	T	T	117.6	T	68	68	68			
	315 A	T	T	T	T	T	T	T	T	T	40	40	40	16.8	16.8	16.8	T	T	T	T	T	T	T	T			
	400 A	T	T	T	T	T	T	T	T	T	40	40	40	16.8	16.8	16.8	T	T	T	T	T	T	T	T			
	500 A	T	T	T	T	T	T	T	T	T	T	61	61	23.2	23.2	23.2	T	T	T	T	T	T	T	T			
	630 A	T	T	T	T	T	T	T	T	T	T	T	T	51.2	51.2	51.2	T	T	T	T	T	T	T	T			
	800 A	T	T	T	T	T	T	T	T	T	T	T	T	38.4	38.4	38.4	T	T	T	T	T	T	T	T			
	1000 A	T	T	T	T	T	T	T	T	T	T	T	T	38.4	38.4	38.4	T	T	T	T	T	T	T	T			
	1250 A	T	T	T	T	T	T	T	T	T	T	T	T	T	T	83.8	T	T	T	T	T	T	T	T			
	1600 A	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T			
	2000 A	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T			
	2500 A	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T			
	3200 A	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T			

SIEMENS		3VA22 250 A				3VA23 400 A				3VA24 400 A				3VA24 630 A				3VA25 1000 A			3VA26 1250 A			3VA27 1600 A		
Series	I_n I_{cu}	M	H	C	L	M	H	C		M	H	C	L	M	H	C	M	H	C	M	H	C				
		55 kA	85 kA	110 kA	150 kA	55 kA	85 kA	110 kA	150 kA	55 kA	85 kA	110 kA	150 kA	55 kA	85 kA	110 kA	55 kA	85 kA	110 kA	55 kA	85 kA	110 kA				
SIRCOVER	125 A	19.2	19.2	19.2	19.2	10.2	10.2	10.2	10	7	7	7	7	7.4	7.4	7.4	7.4	7.4	7.4	8	8	8				
	160 A	19.2	19.2	19.2	19.2	10.2	10.2	10.2	10	7	7	7	7	7.4	7.4	7.4	7.4	7.4	7.4	8	8	8				
	200 A	19.2	19.2	19.2	19.2	10.2	10.2	10.2	10	7	7	7	7	7.4	7.4	7.4	7.4	7.4	7.4	8	8	8				
	250 A	50.4	50.4	50.4	50.4	25.8	25.8	25.8	26	11	11	11	11	10	10	10	11	11	11	11	11	11				
	315 A	T	T	T	T	T	83.2	83.2	83	33	33	33	33	14.4	14.4	14.4	18.4	18.4	18.4	16	16	16				
	400 A	T	T	T	T	T	83.2	83.2	83	33	33	33	33	14.4	14.4	14.4	18.4	18.4	18.4	16	16	16				
	500 A	T	T	T	T	T	T	T	145	T	56	56	56	17	17	17	23.9	23.9	23.9	19	19	19				
	630 A	T	T	T	T	T	T	T	T	T	T	T	T	43	43	43	45.5	45.5	45.5	30	30	30				
	800 A	T	T	T	T	T	T	T	T	T	T	T	129	29	29	29	36	36	36	25.4	25.4	25.4				
	1000 A	T	T	T	T	T	T	T	T	T	T	T	129	29	29	29	36	36	36	25.4	25.4	25.4				
	1250 A	T	T	T	T	T	T	T	T	T	T	T	T	T	T	87	T	73	73	41	41	41				
	1600 A	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	69	69				
	2000 A	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	81.5	81.5				
	2500 A	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	81.5	81.5				
	3200 A	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	81.5	81.5				

* - Subject to accuracy of the reading and data from the short-circuit current limiting curves of the MCCB circuit breaker.

T - Coordination possible up to the max I_{cu} value of the circuit breaker

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Rated conditional short-circuit current with circuit breaker*

TERASAKI		B160 TM		B250 TM		B250 BE/BEG/SE		B400 BE/BEG/SX/SE		B800 TM			
Series	$I_n \backslash I_{cu}$	P	R	P	R	P	R	P	R	F	N	H	G
		125 kA	200 kA	125 kA	200 kA	125 kA	200 kA	125 kA	200 kA	36 kA	50 kA	70 kA	100 kA
SIRCOVER	125 A	19	19	20	20	20	20	14	14	-	-	-	-
	160 A	19	19	20	20	20	20	14	14	-	-	-	-
	200 A	19	19	20	20	20	20	14	14	-	-	-	-
	250 A	50	50	50	50	50	50	22	22	15	15	15	16
	315 A	T	T	T	T	T	T	50	50	24	24	24	25
	400 A	T	T	T	T	T	T	50	50	24	24	24	25
	500 A	T	T	T	T	T	T	90	90	34	34	34	31
	630 A	T	T	T	T	T	T	T	T	T	T	61	59
	800 A	T	T	T	T	T	T	T	T	T	T	50	46
	1000 A	T	T	T	T	T	T	T	T	T	T	50	46
	1250 A	T	T	T	T	T	T	T	T	T	T	T	90
	1600 A	T	T	T	T	T	T	T	T	T	T	T	T
	2000 A	T	T	T	T	T	T	T	T	T	T	T	T
	2500 A	T	T	T	T	T	T	T	T	T	T	T	T
	3200 A	T	T	T	T	T	T	T	T	T	T	T	T

TERASAKI		B800 BE/BEG/SX/SE					B1000 BE/BEG/SX/SE		B1250 BE/BEG			B1600 BE/BEG		
Series	$I_n \backslash I_{cu}$	N	H	G	P	R	N	H	N	H	HL	N	H	HL
		50 kA	70 kA	100 kA	125 kA	200 kA	50 kA	70 kA	50 kA	70 kA	85 kA	50 kA	70 kA	85 kA
SIRCOVER	125 A	-	-	-	-	-	-	-	-	-	-	-	-	-
	160 A	-	-	-	-	-	-	-	-	-	-	-	-	-
	200 A	-	-	-	-	-	-	-	-	-	-	-	-	-
	250 A	15	15	15	-	-	16	16	-	-	-	-	-	-
	315 A	25	25	25	-	-	26	26	-	-	-	-	-	-
	400 A	25	25	25	-	-	26	26	-	-	-	-	-	-
	500 A	33	33	33	-	-	34	34	25	25	25	22	22	22
	630 A	T	65	60	70	70	T	65	37	37	37	38	38	38
	800 A	T	50	46	55	55	T	50	30	30	30	31	31	31
	1000 A	T	50	46	55	55	T	50	30	30	30	31	31	31
	1250 A	T	T	90	T	120	T	T	T	50	50	T	50	50
	1600 A	T	T	T	T	T	T	T	T	T	80	T	T	80
	2000 A	T	T	T	T	T	T	T	T	T	T	T	T	T
	2500 A	T	T	T	T	T	T	T	T	T	T	T	T	T
	3200 A	T	T	T	T	T	T	T	T	T	T	T	T	T

* - Subject to accuracy of the reading and data from the short-circuit current limiting curves of the MCCB circuit breaker.

T - Coordination possible up to the max I_{cu} value of the circuit breaker

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