

Manual transfer enclosed switches

Enclosed COMO CS, SIRCOVER, SIRCO M

25 to 1600 A



COMO CS *enclosure*
25 to 100 A
Polycarbonate - IP65



SIRCOVER *enclosure*
160 to 630 A
Polyester - IP65



SIRCO M *enclosure*
32 to 100 A
Painted steel - IP65



SIRCOVER *enclosure*
160 to 1600 A
Painted steel - IP65

The solution for

> Securing the electrical supply for moderately sensitive applications



Strong points

> Safe operation
> Suitable for all kinds of environments
> Easy installation
> Extensive range

Compliance with standards

> IEC 60947-6-1
> IEC 60364
> IEC 61439
> EN 60204-1

Function

Enclosed changeover switches ensure the on-load transfer between two sources or loads, as well as providing safety isolation, for all low-voltage electrical circuits. In addition, they provide protection against contact with live parts and environmental elements such as dust, water and other hazards.

They enable the shutdown and isolation of the power supply as close to the equipment as possible.

Advantages

Safe operation
- Local transfer and isolation.
- Ergonomic operating handle..
- Triple locking in the OFF position.

Suitable for all kinds of environments
- Insulated enclosures for chemical environments and outdoor areas.
- Painted steel enclosures for impact protection.
- Stainless steel enclosures for food processing and pharmaceutical applications.

Easy installation
- Room for cabling.
- Cable gland knockouts or removable gland plates.

Extensive range
- A wide range of enclosed manual transfer switches in insulated (25 to 630 A) and steel (32 to 1600 A) enclosures.
- Products suitable for any use.

COMO CS in polycarbonate enclosure



General characteristics

- 25 to 100 A
- 3 poles, 4 poles.
- Red handle.
- Triple lock in OFF position.
- Polyester enclosure.
- Cable gland knockouts (≤ 40 A)
- Screw-on cover.
- Colour: RAL 7035.
- Degree of protection: IP65.
- Wall-mounted.
- Integrated bridging bars.

References

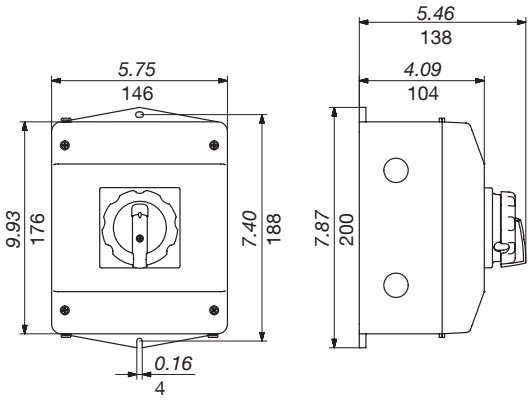
Rating (A)	No. of poles	I-0-II Reference	I-II Reference
25	3 P	4331 **3C02**	4321 **3C02**
25	4 P	4331 **4C02**	4321 **4C02**
40	3 P	4331 **3C04**	4321 **3C04**
40	4 P	4331 **4C04**	4321 **4C04**
63	3 P	4331 **3C06**	4321 **3C06**
63	4 P	4331 **4C06**	4321 **4C06**
100	3 P	4331 **3C10**	4321 **3C10**
100	4 P	4331 **4C10**	4321 **4C10**

Mounting accessory

Name	Reference
Set of 4 stainless steel mounting feet for 63-100 A enclosure	U000 **CB18**

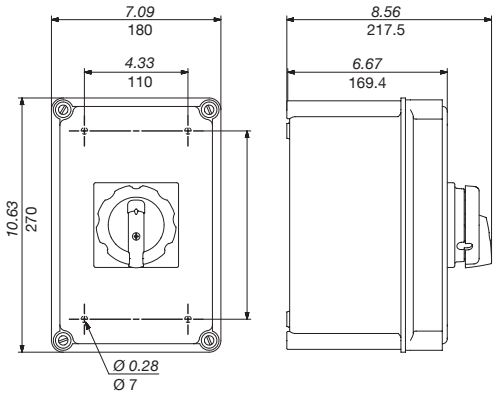
Dimensions

25 to 40 A



- 2x M20 cable knockouts (on each side)
- 2X M32/M40 cable knockouts (top and bottom)
- 2 pre-drilled holes to expel water

63 to 100 A



Rating (A)	No. of poles	H x W x D (mm)	Cable-in (top and bottom)
25 ... 40	3 / 4 P	200 x 146 x 104	2 x (Ø 32 / 40)
63 ... 100	3 / 4 P	270 x 180 x 170	-

COMO CS in polycarbonate enclosure (continued)

Characteristics according to IEC 60947-3

Conventional free air thermal current I_{th} at 40 °C (A)	**25 A**	**40 A**	**63 A**	**100 A**
Conventional free air thermal current I_{th} at 50 °C (A)	25	34	63	100
Conventional free air thermal current I_{th} (60 °C) (A)	19	24	53	90
Rated insulation voltage U_i (V)	690	690	690	690
Rated impulse withstand voltage U_{imp} (kV)	4	6	6	6
Rated operational currents I_e (A)				
Utilisation category at 400 VAC				
AC-21A	25	40	63	100
AC-22A	20.5	40	63	100
AC-23A	15	29	63	63
AC-3	12	22	/	/
Utilisation category at 690 VAC				
AC-21A	25	40	63	100
AC-22A	20.5	40	63	100
AC-23A	8.5	17	63	63
AC-3	7	12.8	/	/
Operational power in AC-23 (kW)(1)				
At 400 VAC without pre-break AC	7.5	15	37	37
At 690 VAC without pre-break AC	4.8	15	/	/
Fuse protected short-circuit withstand with gG DIN fuses				
Prospective short-circuit (kA rms)	7	10	5	5
Associated fuse rating (A)	25	40	63	100
Rated operational voltage (Va.c)	690	690	690	690
Connection				
Minimum CU cable cross-section (mm^2)	0.5	1	1.5	4
Maximum CU cable cross-section (mm^2)	4	10	16	35
Tightening torque min - max (Nm)	0.8-1.2	1.2-1.5	2.5	1.5
Mechanical characteristics				
Durability (number of operating cycles)	100 000	100 000	100 000	100 000
Weight of a 3 pole device (g)	109	184	440	440
Weight of a 4 pole device (g)	130	221	535	535

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

SIRCOVER in polyester enclosure



General characteristics

- From 160 to 630 A.
- 3 poles, 4 poles.
- SIRCOVER with break-before-make operation (I-0-II), other options on request
- Black handle.
- Triple lock in OFF position.
- Polyester enclosure.
- Screw-on front, door interlocked when ON.
- Colour: RAL 7035.
- IP rating: IP55.
- Wall-mounted, 4 brackets included.

Accessories

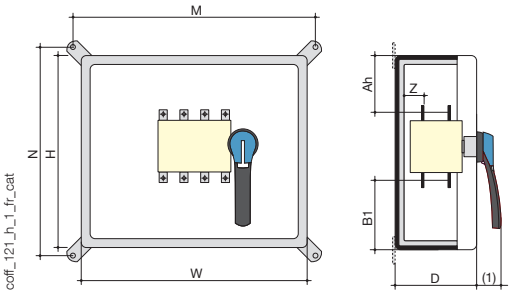
- Bridging bars.
- NO/NC auxiliary contact.
- Terminal screen.

References

Rating (A)	N° of poles	Reference	Bridging bars(1)	Auxiliary contacts	Protective screen
160	3 P	4215 **3016**	4109 **0019**(1)	1 contact NO/NC 4109 **0021**	1509 **3012**
	4 P	4215 **4016**			1509 **4012**
250	3 P	4215 **3025**	4109 **0025**(1)		1509 **3025**
	4 P	4215 **4025**			1509 **4025**
400	3 P	4215 **3039**	4109 **0040**(1)		1509 **3025**
	4 P	4215 **4039**			1509 **4025**
630	3 P	4215 **3063**	4109 **0063**(1)		1509 **3063**
	4 P	4215 **4063**			1509 **4063**

(1) For a 3 pole device order quantity 3 bridging bars, for a 4 pole device order quantity 4.

Dimensions



Rating (A)	N° of poles	H x W x D (mm)	M (mm)	N (mm)	Z (mm)	Ah (mm)	B1 (mm)	Weight (kg)
160	3 P	540 x 270 x 233	272	542	28	210	210	9
	4 P	540 x 360 x 233	362	542	28	210	210	10
250	3 P	540 x 360 x 233	362	542	29	205	205	11
	4 P	540 x 360 x 233	362	542	29	205	205	12
400	3 P	800 x 600 x 300	620	796	29	330	330	30
	4 P	800 x 600 x 300	620	796	29	330	330	31
630	3 P	800 x 600 x 300	620	796	45	297	297	38
	4 P	800 x 600 x 300	620	796	45	297	297	40

Characteristics according to IEC 60947-3, IEC 60947-6-1 and IEC 61439-2

Thermal current I_{th} (40°C)		**160 A**	**250 A**	**400 A**	**630 A**
Enclosed thermal current I_{th} (35°C) (A)		160	250	400	630
Enclosed thermal current I_{th} (50°C) (A)		138	216	345	544
Rated insulation voltage U_i (V)		800	1000	1000	1000
Rated impulse withstand voltage U_{imp} (kV)		8	12	12	12
Rated operational currents Ie (A)					
Rated voltage	**Utilisation category**				
415 VAC	AC-23 A / AC-23 B	160	250	400	500/630
690 VAC	AC-23 A / AC-23 B	63/80	125	125	400
Operational power in AC-23 (kW)					
400 VAC without pre-break AC (kW)		80	132	280	450
690 VAC without pre-break AC (kW)		55/75	90/110	150/185	185/220
Current rated as conditional short-circuit with fuse gG DIN					
Prospective short-circuit current (kA rms)		100	50	50	50
Associated fuse rating (A)		160	250	400	630
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)		12	15	15	17
Short-circuit operation (switch only)					
Rated short-time withstand current I_{cw} 1s (kA rms)		7	8	8	10
Connection					
Minimum Cu cable cross-section (mm^2)		35	95	185	2x120
Maximum Cu cable cross-section (mm^2)		95	150	240	2x300

Manual transfer enclosed switches

Enclosed COMO CS, SIRCOVER, SIRCO M

25 to 1600 A

SIRCO M changeover switch in steel enclosure



General characteristics

- 32 to 100A.
- 3 poles + solid neutral, 4 poles.
- Black handle.
- Triple lock in OFF position.
- Painted steel enclosure.
- Hinged door with double bar locking.
- Fixed via 4 holes at the base of the enclosure.
- Colour: RAL 7035.
- Cable gland knockouts (≤ 63 A) or removable gland plates (100 A) top and bottom.
- Degree of protection: IP65.

Accessories

- Aux contact NO+NC or 2 NO (max. 1 per position).
- Terminal shrouds.
- Bridging bars (≤ 63 A).

References

Rating (A)	No. of poles	I-0-II Reference	Bridging bars	Auxiliary contacts	Terminal shroud and screen
32	3 P + N	4214 **5003**	2299 **3005**	1 contact NO + NC 2299 **0001** 1 contact 2 NO 2299 **0011**	(3 P) 2294 **3005**
	4 P	4214 **4003**	2299 **4005**		(1 P) 2294 **1005**
63	3 P + N	4214 **5006**	2299 **3009**		(3 P) 2294 **3009**
	4 P	4214 **4006**	2299 **4009**		(1 P) 2294 **1009**
100	3 P + N	4214 **5010**			(3 P) 2294 **3016**
	4 P	4214 **4010**			(1 P) 2294 **1011**

Dimensions

Rating (A)	No. of poles	H x W x D (mm)	Cable-in (mm) (top and bottom)
32 … 63	3 P + N 4 P	300 x 250 x 150	2 x 16.5 + 2 x 25.5 + 2 x 32.5
100	3 P + N 4 P	400 x 300 x 210	180 x 100

Characteristics according to IEC 60947-3, IEC 60947-6-1 and IEC 61439-2

Thermal current I_{th} (40°C)		**32 A**	**63 A**	**100 A**
Frame size		**M1**	**M2**	**M3**
Enclosed thermal current I_{th} (35°C) (A)		32	63	100
Enclosed thermal current I_{th} (50°C) (A)		28	54	86
Rated insulation voltage U_i (V)		800	800	800
Rated impulse withstand voltage U_{imp} (kV)		8	8	8
Rated operational currents I_e (A)				
Rated voltage	**Utilisation category**			
415 VAC	AC-23 A / AC-23 B	32	63	100
690 VAC	AC-23 A / AC-23 B	25	40	63
Operational power in AC-23 (kW)				
400 VAC without pre-break AC (kW)		15	30	45
690 VAC without pre-break AC (kW)		15	30	45
Current rated as conditional short-circuit with fuse gG DIN				
Prospective short-circuit current (kA rms)		50	50	25
Associated fuse rating (A)		32	63	100
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)		2.5	3	5
Short-circuit operation (switch only)				
Rated short-time withstand current I_{cw} 1s (kA rms)		1.26	1.5	2.75
Rated peak withstand current (kA peak)		6	9	12
Connection				
Minimum Cu cable cross-section (mm^2)		1.5	2.5	10
Maximum Cu cable cross-section (mm^2)		16	35	70

SIRCOVER in steel enclosure



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General characteristics

- From 160 to 1600 A.
- 3 poles + solid neutral, 4 poles.
- Black handle.
- Triple lock in OFF position.
- Painted steel enclosure.
- Hinged door with double bar locking.
- Colour: RAL 7035.
- Removable gland plates at top and bottom.
- Degree of protection: IP65.
- Wall-mounted, 4 brackets included.

Accessories

- Bridging bars.
- NO/NC auxiliary contact.
- Terminal screen.

References

Rating (A)	No. of poles	I-0-II Reference	Bridging bars[1]	Auxiliary contacts	Protective screen
160	3 P + N	4214 **5016**	4109 **0019**	1 contact NO/NC 4109 **0021**	1509 **3012**
	4 P	4214 **4016**			1509 **4012**
250	3 P + N	4214 **5025**	4109 **0025**		1509 **3025**
	4 P	4214 **4025**			1509 **4025**
400	3 P + N	4214 **5040**	4109 **0039**		1509 **3025**
	4 P	4214 **4040**			1509 **4025**
630	3 P + N	4214 **5063**	4109 **0063**		1509 **3063**
	4 P	4214 **4063**			1509 **4063**
800	3 P + N	4214 **5080**	4109 **0080**		1509 **3080**
	4 P	4214 **4080**			1509 **4080**
1250	3 P + N	4214 **5084**	4109 **0120**		1509 **3080**
	4 P	4214 **4084**			1509 **4080**
1600	3 P + N	4214 **5088**	4109 **0160**		1509 **3160**
	4 P	4214 **4088**			1509 **4160**

(1) For a 3 pole device order quantity 3 bridging bars, for a 4 pole device order quantity 4.

Dimensions

Rating (A)	No. of poles	H x W x D (mm)	Cable-in (mm) (top and bottom)
160 … 250	3 P + N 4 P	600 x 400 x 250	280 x 100
400 … 630	3 P + N 4 P	800 x 600,350	560 x 100
800 … 1600	3 P + N 4 P	1200 x 800,500	660 x 100

Characteristics according to IEC 60947-3, IEC 60947-6-1 and IEC 61439-2

Thermal current I_{th} (40°C)		**160 A**	**250 A**	**400 A**	**630 A**	**800 A**	**1250 A**	**1600 A**
Enclosed thermal current Ith (35°C) (A)		160	250	400	630	770	1000	1450
Enclosed thermal current Ith (50°C) (A)		138	216	345	544	665	863	1252
Rated insulation voltage U_i (V)		800	1000	1000	1000	1000	1000	1000
Rated impulse withstand voltage U_{imp} (kV)		8	12	12	12	12	12	12
Rated operational currents I_e (A)								
Rated voltage	**Utilisation category**							
415 VAC	AC-23 A / AC-23 B	160	250	400	500/630	800	1250	1250
690 VAC	AC-23 A / AC-23 B	63/80	125	125	400	630	800	800
Operational power in AC-23 (kW)								
400 VAC without pre-break AC (kW)		80	132	280	450	710	710	710
500 VAC without pre-break AC (kW)								
690 VAC without pre-break AC (kW)		55/75	90/110	150/185	185/220	185/220	475	750
Current rated as conditional short-circuit with fuse gG DIN								
Prospective short-circuit current (kA rms)		100	50	50	50	50	100	100
Associated fuse rating (A)		160	250	400	630	800	1250	2x800
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)		12	15	15	17	64	64	78
Short-circuit operation (switch only)								
Rated short-time withstand current I_{cw} 1s (kA rms)		7	8	8	10	35	35	50
Connection								
Minimum Cu cable cross-section (mm^2)		35	95	185	2 x 120	2 x 185		
Maximum Cu cable cross-section (mm^2)		95	150	240	2 x 300	2 x 300	4 x 185	6 x 185