

Enclosed switches

Load break switches

20 to 1600 A



COMO enclosure 20 to 125 A
Polycarbonate - IP65



SIRCO enclosure 160 to 630 A
Polyester - IP65



SIRCO M enclosure 32 to 100 A
Stainless steel - IP65



SIRCO M enclosure 20 to 100 A
Painted steel - IP65



SIRCO enclosure 160 to 1600 A
Painted steel - IP65

Functions

Enclosed load break switches ensure the on-load breaking and making of circuits and safely isolate all low-voltage electrical circuits by providing 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

- Reliable lockout for safe maintenance procedures.
- On-load breaking.
- Ergonomic operating handle, available in red/ yellow or black.
- Triple lock in OFF position.

Suitable for all kinds of environments

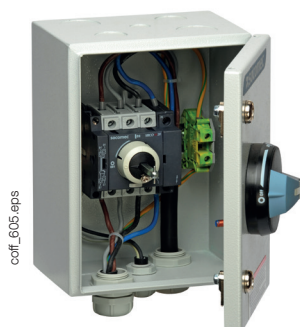
- Insulated enclosure for chemical and food processing applications, indoor or outdoor installation.
- Painted steel enclosure for areas at risk of mechanical impact.
- Stainless enclosure for food processing and pharmaceutical applications.

Easy installation

- Cable access top and/or bottom.
- Cable gland knockouts ($\leq 125A$).
- Removable gland plates at top and bottom for steel enclosures $\geq 160A$.
- Plenty of room for cabling

Extensive range

- Standard range.
- Customised products on request.



The solution for

- > OEM
- > Industries
- > Commercial buildings
- > Electrical distribution



Strong points

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

Conformity to standards

- > IEC 60947-3
- > IEC 60364
- > EN 60947-3
- > EN 61439
- > EN 60204-1



Other products

- > Customised solutions available on request.

Load break switch in insulated enclosure

■ **COMO** in polycarbonate enclosure



General characteristics

- From 20 to 125 A.
- 3, 4, 6 and 8 poles.
- Yellow/red or grey/blue version.
- Triple lock in OFF position.
- Polycarbonate enclosure.
- Screw-on front.
- Ingress Protection rating: IP65.
- Cable gland knock-outs at top, bottom and sides.
- **Accessories**
- Solid neutral pole (max. 1).
- NO+NC or 2 NO auxiliary contact module for pre-break and signalling of positions 0 and I.
- EMC kit for cable shielding continuity

References

Rating (A)	No. of poles	With blue handle	With red handle	Neutral pole, solid ⁽¹⁾	Auxiliary contacts ⁽¹⁾	EMC kit	Enclosure		
							Size	H x W x D (mm)	Cable entry top and bottom (mm)
20	3 P	2115 3301	2115 3401	-	-	-	CPC 0	92 x 64 x 83	2 x Ø 25
	4 P	2115 4301	2115 4401						
25	3 P	2115 3302	2115 3402	2115 5005	1 AC NO/NC 2113 4001 1 AC 2 NO 2113 4002	2110 3301	CPC 1	163 x 100 x 115	2 x Ø 25 ⁽²⁾
	4 P	2115 4302	2115 4402						
32	3 P	2115 3303	2115 3403			2110 3302	CPC 2	200 x 146 x 150	2 x Ø 32 / 40 ⁽²⁾
	4 P	2115 4303	2115 4403						
	6 P	2115 6303	2115 6403						
40	3 P	2115 3304	2115 3404	2115 5007		2110 3301	CPC 1	163 x 100 x 115	2 x Ø 25 ⁽²⁾
	4 P	2115 4304	2115 4404						
63	3 P	2115 3306	2115 3406			2110 3302	CPC 2	200 x 146 x 150	2 x Ø 32 / 40 ⁽²⁾
	4 P	2115 4306	2115 4406						
	6 P	2115 6306	2115 6406						
80	3 P	2115 3308	2115 3408	2115 5009	2110 3303	CPC 3	304 x 214 x 182	2 x Ø 50 / 63 ⁽²⁾	
	4 P	2115 4308	2115 4408						
100	3 P	2115 3309	2115 3409	2115 5011		CPC 2	200 x 146 x 150	2 x Ø 32 / 40 ⁽²⁾	
	4 P	2115 4309	2115 4409						
125	3 P	2115 3312	2115 3412			2110 3303	CPC 3	304 x 214 x 182	2 x Ø 50 / 63 ⁽²⁾
	4 P	2115 4312	2115 4412						

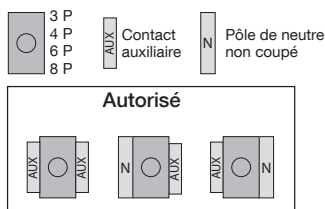
(1) Max. configuration capacity: 1 solid neutral pole + 1 aux contact, or 2 aux contacts.

(2) In addition to top and bottom gland knock-outs, 2 x M20 knock-outs are included on each side of the enclosure for CPC-1 thru CPC-3.

Configurations

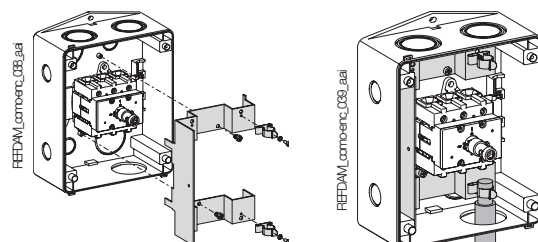
Neutral pole and auxiliary contact

One solid neutral pole and one auxiliary contact, available as accessories, can be fitted to the left and/or right of the COMO switch. Note that only one neutral pole can be installed. For further details, see the diagram below.



EMC kit

For loads sensitive to electromagnetic interference, the continuity of the cable shielding can be ensured by this kit, without the need for EMC cable glands.



Enclosed switches

Load break switches

20 to 1600 A

Load break switch in insulated enclosure

■ **SIRCO** in polyester enclosure



General characteristics

- From 160 to 630 A.
- 3 poles + solid neutral, 4 poles.
- Black handle (red/yellow on request).
- Triple lock in OFF position.
- Polyester enclosure.
- Screw-on front.
- Colour: RAL 7035.
- Ingress Protection rating: IP65.
- Wall-mounted, 4 brackets included.

Accessories

- NO/NC auxiliary contact.
- Terminal screen.

References

Rating (A)	No. of poles	With black handle	Auxiliary contacts	Protective screen	Enclosure	
					Size	H x W x D (mm)
160	3 P + N	3116 5016	1 st AC NO/NC 2699 0031	2698 3012	CP 32	360 x 270 x 171
	4 P	3116 4016		2698 4012	CP 53	540 x 360 x 171
250	3 P + N	3116 5025		2698 3020		
	4 P	3116 4025		2698 4020	CP 75	720 x 540 x 201
400	3 P + N	3116 5040	2 nd auxiliary contact 2 NO / 1 NC 2699 0032	2698 3050		
	4 P	3116 4040		2698 4050		
630	3 P + N	3116 5063		2698 3050		
	4 P	3116 4063		2698 4050		

Load break switch in metallic enclosure

■ **SIRCO M** in painted steel enclosure



General characteristics

- From 20 to 100 A.
- 3 poles + solid neutral.
- Red/yellow or black handle.
- Triple lock in OFF position.
- Painted steel enclosure.
- Screw-on cover.
- Colour: RAL 7035.
- Pre-punched cable gland knockouts at top and bottom.
- Ingress Protection rating: IP65.
- Wall mounting brackets included.

Accessories

- Switched 4th pole (max. 1).
- NO+NC or 2 NC auxiliary contact (max. 2).
- Terminal shroud.

References

Rating (A)	No. of poles	With black handle	With red/ yellow handle	Switched 4 th pole	Auxiliary contacts	Terminal shroud	Enclosure		
							Size	H x W x D (mm)	Cable entry top and bottom (mm)
20	3 P + N	3032 5202	3032 5302	2200 1001	1 AC NO + NC 2299 0001	2294 3005 (3 P) 2294 1005 (1 P)	CT 21	200 x 150 x 120	2 x Ø 25 + 2 x Ø 32 + Ø 16
32	3 P + N	3032 5203	3032 5303	2200 1003		CT 21a			
						CT 21			
						CT 21a			
63	3 P + N	3032 5206	3032 5306	2200 1006	1 AC 2 NO 2299 0011	2294 3009 (3 P) 2294 1009 (1 P)	CT 21	300 x 200 x 120	Ø 32 + 2 x Ø 50 + Ø 16
						CT 21a			
100	3 P + N	3032 5210	3032 5310	2200 1010		2294 3016 (3 P) 2294 1011 (1 P)	CT 32		
						CT 32a			

Load break switch in metallic enclosure (continued)

■ **SIRCO** in painted steel enclosure



General characteristics

- From 160 to 1600 A.
- 3 poles + solid neutral, 4 poles.
- Black handle (red/yellow on request).
- Triple lock in OFF position.
- Painted steel enclosure.
- Hinged door with double bar locking.
- Colour: RAL 7035.
- Cable gland plates: top and bottom.
- Ingress Protection rating: IP65.
- Wall-mounted, 4 brackets included.

Accessories

- NO/NC auxiliary contact.
- Terminal screen.

References

Rating (A)	No. of poles	Handle Black Reference	Auxiliary contacts	Protective screen (top or bottom)	Enclosure		
					Size	H x W x D (mm)	Cable entry top and bottom (mm)
160	3 P + N 4 P	3032 5016 3032 4016	1 st AC NO/NC 2699 0031 2 nd auxiliary contact 2 NO / 1 NC 2699 0032	2698 3012	CT 43	400 x 300 x 210	180 x 100
250	3 P + N 4 P	3032 5025 3032 4025		2698 4012			
				2698 3020	CT 66	600 x 600 x 300	380 x 100
400	3 P + N 4 P	3032 5040 3032 4040		2698 4020			
				2698 3050			
630	3 P + N 4 P	3032 5063 3032 4063		2698 4050			
				2698 4050	CT 86	800 x 600 x 350	560 x 100
800	3 P + N 4 P	3032 5080 3032 4080		2698 3080			
				2698 4080	CT 128	1200 x 800 x 300	660 x 100
1250	3 P + N 4 P	3032 5084 3032 4084		2698 3120			
				2698 4120			
1600	3 P + N 4 P	3032 5088 3032 4088		2698 3120			
				2698 4120			

Enclosed switches

Load break switches

20 to 1600 A

Load break switch in metallic enclosure (continued)

■ **SIRCO M** in stainless steel enclosure



General characteristics

- 32 to 100 A.
- 3 poles + solid neutral.
- Black or red/yellow handle.
- Triple lock in OFF position.
- Brushed 304 stainless steel enclosure (please ask for other options)
- Ingress Protection rating: IP65.
- Pre-punched cable gland knockouts at bottom.
- Hinged door with double bar locking.

Accessories

- Switched 4th pole (max. 1).
- NO+NC or 2 NC auxiliary contact (max. 2).
- Wall brackets.

References

Rating (A)	No. of poles	With black handle	With red/yellow handle	Switched 4 th pole	Auxiliary contacts	Terminal shroud	Set of stainless steel mounting brackets	Enclosure		
								Size	H x W x D (mm)	Cable entry at the bottom (mm)
32	3 P + N	3032 8003	3032 8103	2200 1003	1 AC NO + NC 2299 0001 1 AC 2 NO 2299 0011	2294 3005 (3 P) 2294 1005 (1 P)	3031 0012	Cl 21	200 x 150 x 120	2 x Ø 25 + 2 x Ø 32 + Ø 16
63	3 P + N	3032 8006	3032 8106	2200 1006		2294 3009 (3 P) 2294 1009 (1 P)				
100	3 P + N	3032 8010	3032 8110	2200 1010		2294 3016 (3 P) 2294 1011 (1 P)		Cl 32	300 x 200 x 120	Ø 32 + 2 x Ø 50 + Ø 16

Characteristics

Electrical characteristics according to IEC 60947-3

		COMO							
Thermal current I_{th} (40 °C)		20 A	25 A	32 A	40 A	63 A	80 A	100 A	125 A
Enclosed thermal current I_{th} (35 °C) (A)		20	25	32	40	63	80	100	125
Enclosed thermal current I_{th} (50 °C) (A)		17	22	28	35	54	69	86	108
Rated insulation voltage U_i (V)		690	690	690	690	690	690	690	690
Rated impulse withstand voltage U_{imp} (kV)		4	6	6	6	6	6	6	6
Rated operational currents I_e (A)									
Rated voltage	Utilisation category								
400 VAC	AC-22 A / AC-22 B	20	25	32	40	63	80	100	125
400 VAC	AC-23 A / AC-23 B	15	20	22	40	44	53	70	84
690 VAC	AC-22 A / AC-22 B		12	13	18	22	23.5	34	41
690 VAC	AC-23 A / AC-23 B		9.5	11.5	13	17.5	22	25.5	35
Operational power in AC-23 (kW) without pre-break auxiliary contact									
400 VAC without pre-break AC (kW) ⁽¹⁾		7.5	9.5	11.5	20	22	30	37	45
690 VAC without pre-break AC (kW) ⁽¹⁾			12	13	18	22	25.5	34	41
gG DIN fuse protected short-circuit withstand current ⁽²⁾									
Prospective short-circuit current (kA rms)		1	8	8	8	8	10	20	20
Associated fuse rating (A)		20	25	32	40	63	80	100	125
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)		0.68	0.68	1.28	1.28	2.52	2.52	4	4
Short-circuit operation (switch only)									
Rated short-time withstand current 1s I_{cw} (kA rms)		0.34	0.34	0.64	0.64	1.26	1.26	2	2
Connection									
Minimum Cu cable cross-section		1.5	2.5	2.5	2.5	2.5	2.5	4	4
Maximum copper cable cross-section (mm ²)		4	10	10	10	16	25	35	50

(1) The power value is given for information only; the current values vary from one manufacturer to another. (2) For a rated operational voltage $U_e = 415$ VAC.

		SIRCO M / SIRCO										
Thermal current I_{th} (40 °C)		20 A	32 A	63 A	100 A	160 A	250 A	400 A	630 A	800 A	1250 A	1600 A
Frame size		M1	M1	M2	M3	B3	B4	B5	B5	B6	B7	B7
Enclosed thermal current I_{th} (35 °C) (A)		20	32	63	100	160	250	400	630	770	1000	1450
Enclosed thermal current I_{th} (50 °C) (A)		17	28	54	86	138	216	345	544	665	863	1252
Rated insulation voltage U_i (V)		800	800	800	800	800	800	1000	1000	1000	1000	1000
Rated impulse withstand voltage U_{imp} (kV)		8	8	8	8	8	8	12	12	12	12	12
Rated operational currents I_e (A)												
Rated voltage	Utilisation category											
415 VAC	AC-22 A / AC-22 B	20	32	63	100	160	250	400	630	800	1250	1600
415 VAC	AC-23 A / AC-23 B	20	32	63	100	160	250	400	500	800	1250	1250
500 VAC	AC-22 A / AC-22 B	20	32	63	100							
500 VAC	AC-23 A / AC-23 B	20	25	63	80							
690 VAC	AC-22 A / AC-22 B	20	32	40/63	80/100							
690 VAC	AC-23 A / AC-23 B	20	25	40	63							
Operational power in AC-23 (kW)												
400 VAC without pre-break AC (kW) ⁽¹⁾		9	15	30	45	80	132	220	280	450	710	710
500 VAC without pre-break AC (kW) ⁽¹⁾		9	15	30	45							
690 VAC without pre-break AC (kW) ⁽¹⁾		11	15	30	45							
gG DIN fuse protected short-circuit withstand current ⁽²⁾												
Prospective short-circuit current (kA rms)		50	50	50	25	100	50	100	70	50	100	100
Associated fuse rating (A)		20	32	63	100	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)		2.5	2.5	3	5	15	17	25	25	50	100	100
Short-circuit operation (switch only)												
Rated short-time withstand current 1s I_{cw} (kA rms)		1.26	1.26	1.5	2.75	7	9	13	13	35	50	50
Dynamic withstand current I_{dc} (kA peak) (6)		6	6	9	12	20	30	45	45	55	110	110
Connection												
Minimum Cu cable cross-section		1.5	1.5	2.5	10	50	95	185	2x150	2x185		
Maximum copper cable cross-section (mm ²)		16	16	35	70	95	150	240	2x300	2x300	4x185	6x185

(1) The power value is given for information only; the current values vary from one manufacturer to another. (2) For a rated operational voltage $U_e = 415$ VAC.

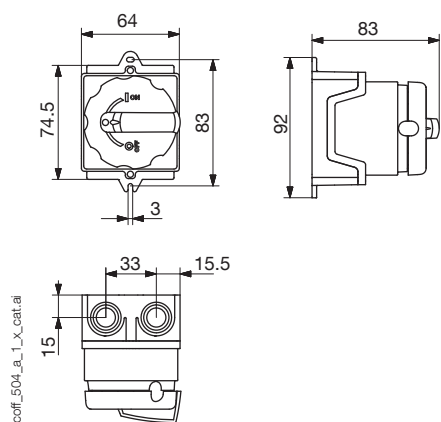
Enclosed switches

Load break switches

20 to 1600 A

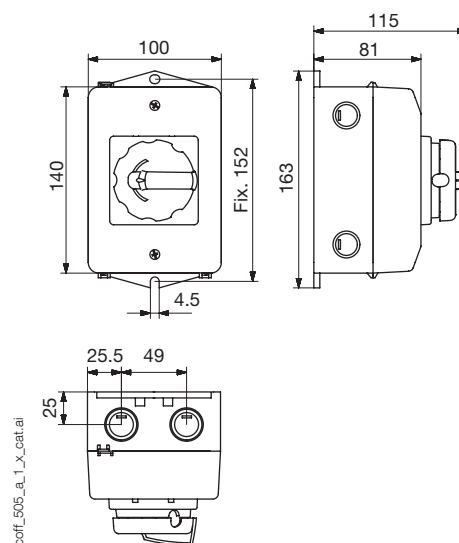
COMO dimensions

Size CPC 0



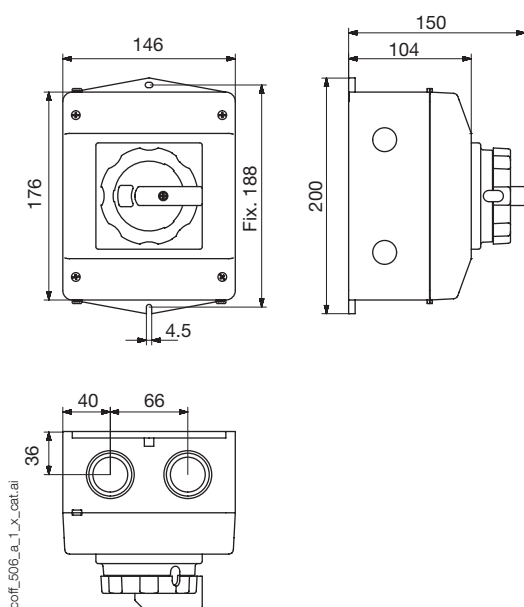
- 2x M25 cable knockouts (top and bottom)

Size CPC 1



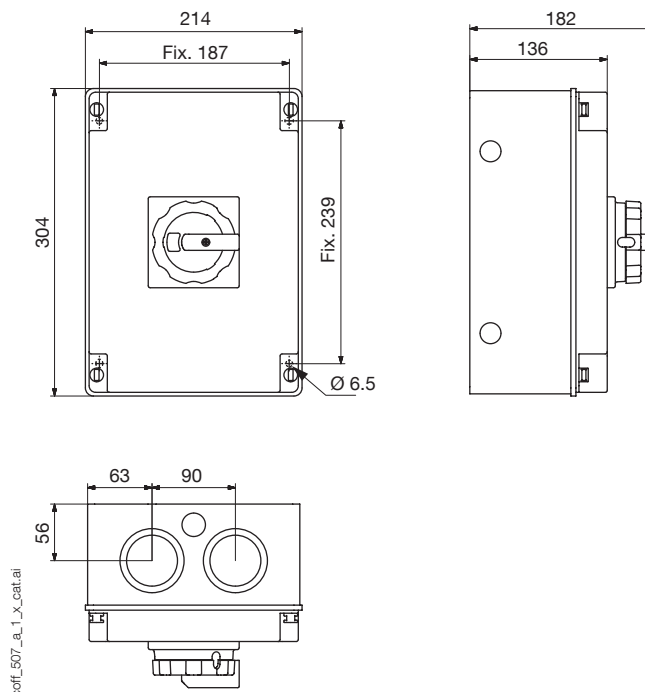
- 2x M20 cable knockouts (on each side)
- 2x M25 cable knockouts (top and bottom)
- 2 pre-drilled holes to expel water

Size CPC 2



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

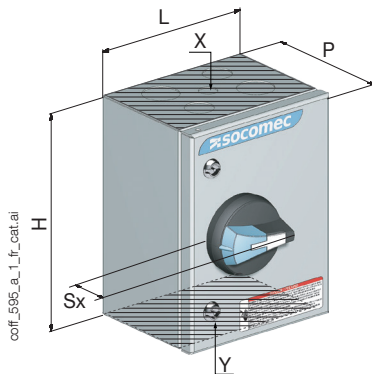
Size CPC 3



- 2x M20 cable knockouts (on each side)
- 2x M50/M63 cable knockouts (top and bottom)
- 2 pre-drilled holes to expel water

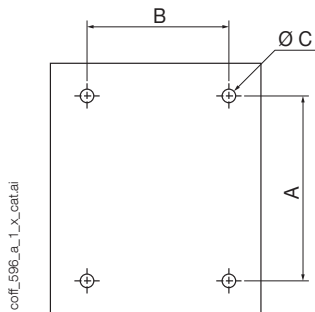
SIRCO M and SIRCO dimensions

Enclosures

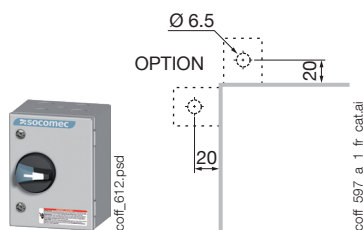


Dimensions	Type	H x W x D (mm)	Sx (mm)	A (mm)	B (mm)	Ø C (mm)	X - Y Cable entry (top and bottom) ⁽¹⁾
CT 21, CI21, CT 21a	1	200 x 150 x 120	36	135	85	6.5	2 x Ø 25 + 2 x Ø 32 + Ø 16
CT 32, CI32, CT 32a		300 x 200 x 120		235	135		1 x Ø 32 + 2 x Ø 50 + Ø 16
CP 32	3	360 x 270 x 171	45	337	247	6.5	-
CP 53		540 x 360 x 171		516	337		
CP 75		720 x 540 x 201		696	516		
CT 43	2	400 x 300 x 210	60	362	262	12.5	180 x 100
CT 66		600 x 600 x 300		562	562		380 x 100
CT 86		800 x 600 x 350		762	562		660 x 100
CT 128		1200 x 800 x 300		1162	762		660 x 100

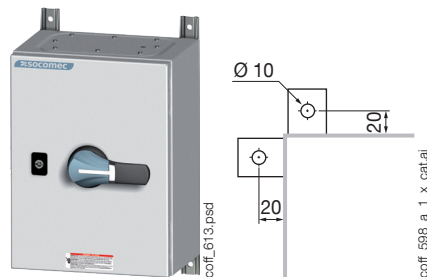
(1) For stainless steel enclosure, cable entry at bottom only.



Type 1



Type 2



Type 3

