



# Enclosed switches

## Load break switches

20 to 1600 A

Integrated products & solutions

como-enc\_005\_a\_front\_2\_cat



**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

### The solution for

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



### Strong points

- > Safe operation
- > Suitable for all kinds of environment
- > Easy setup
- > Extensive range

### Compliance with standards

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



### Other products

- > Customised solutions available on request.

## Function

**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

- Secures transfer for mechanical or electrical work.
- On-load breaking.
- Ergonomic control lever, available in red/yellow or black.
- Triple lock in OFF position.

### Suitable for all kinds of environment

- Insulating 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 setup

- Cable access top and/or bottom.
- Pre-drilled cable glands (up to 125 A).
- Removable steel cable glands, top and bottom (> 125 A), aluminium coated (> 630 A).
- Plenty of room for cabling.

### Extensive range

- Standard range
- Customised on request.



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## Load break switch in isolating enclosure

### ■ **COMO** in polycarbonate enclosure



#### General characteristics

- From 20 to 125 A.
- 3, 4, 6, 8 poles.
- Yellow/red or grey/blue lever.
- Triple lock in OFF position.
- Polycarbonate enclosure.
- Screw-on front.
- Colour: RAL 7035.
- Degree of protection: IP65.
- Pre-drilled cable-in holes at top and bottom.

#### Accessories

- Unswitched neutral pole optional extra (max. 1).
- NO+NC or 2 NO auxiliary contact.

## References

Rating (A)	N° of poles	Grey/blue lever Reference	Red/yellow lever Reference	Extra pole <sup>(1)</sup> (connected)	Auxiliary contacts <sup>(1)</sup>	Enclosure		
						Size	H x W x D (mm)	Cable-in 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		CPC 1	163 x 100 x 115	2 x Ø 25
	4 P	2115 4302	2115 4402					
32	3 P	2115 3303	2115 3403	2115 5005		CPC 2	200 x 146 x 150	2 x Ø 32 + 2 x Ø 40
	4 P	2115 4303	2115 4403					
	6 P	2115 6303	2115 6403					
40	3 P	2115 3304	2115 3404	2115 5007	1 AC NO+NC 2113 4001	CPC 1	163 x 100 x 115	2 x Ø 25
	4 P	2115 4304	2115 4404					
63	3 P	2115 3306	2115 3406	2115 5007	1 AC 2 NO 2113 4002	CPC 2	200 x 146 x 150	2 x Ø 32 + 2 x Ø 40
	4 P	2115 4306	2115 4406					
	6 P	2115 6306	2115 6406					
80	3 P	2115 3308	2115 3408	2115 5009		CPC 3	304 x 214 x 182	2 x Ø 50 + 2 x Ø 63
	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 + 2 x Ø 40
	4 P	2115 4309	2115 4409					
125	3 P	2115 3312	2115 3412	2115 5011		CPC 3	304 x 214 x 182	2 x Ø 50 + 2 x Ø 63
	4 P	2115 4312	2115 4412					

(1) Max. setup: 1 extra pole + 1 aux contact, or 2 aux contacts

# Enclosed switches

## Load break switches

20 to 1600 A

### Load break switch in isolating enclosure

#### ■ **SIRCO** in polyester enclosure



#### General characteristics

- From 160 to 630 A.
- 3 poles + unswitched neutral, 4 poles.
- Black lever (yellow/red on request).
- Triple lock in OFF position.
- Polyester enclosure.
- Screw-on front.
- Colour: RAL 7035.
- Degree of protection: IP65.
- Wall-mounted, 4 brackets included.

#### Accessories

- NO/NC auxiliary contact.
- Terminal screen.

### References

Rating (A)	N° of poles	Handle Black Reference	Auxiliary contacts	Protective screen	Enclosure		
					Size	H x W x D (mm)	
160	3 P + N	3116 5016	1 <sup>st</sup> AC NO/NC 2699 0031	2698 3012	CP 32	360 x 270 x 171	
	4 P	3116 4016		2698 4012			
250	3 P + N	3116 5025		2 <sup>nd</sup> AC 2 NO/NC 2699 0032	2698 3020	CP 53	540 x 360 x 171
	4 P	3116 4025			2698 4020		
400	3 P + N	3116 5040	2698 3050		2698 3050	CP 75	720 x 540 x 201
	4 P	3116 4040			2698 4050		
630	3 P + N	3116 5063		2698 3050	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, unswitched 4<sup>th</sup> pole optional extra (max. 1).
- Yellow/red or black lever.
- Triple lock in OFF position.
- Painted steel enclosure.
- Door latch system or screw-on.
- Colour: RAL 7035.

- Pre-drilled cable-in holes at top and bottom.
- Degree of protection: IP65.

#### Accessories

- 4<sup>th</sup> pole switched (max. 1), unswitched (max. 1).
- NO+NC or 2 NO auxiliary contact (max. 2).
- Terminal shroud.
- Wall brackets

### References

Rating (A)	N° of poles	Handle Black Reference	Handle Red/Yellow Reference	Extra pole (unswitched pole)	Auxiliary contacts	Terminal shroud	Bracket kit	Enclosure							
								Size	H x W x D (mm)	Cable-in top and bottom (mm)					
20	3 P + N	3032 5002	3032 5102	2200 1001	1 AC NO + NC 2299 0001	2294 3005 (3 P) 2294 1005 (1 P)	3031 0011	CT 21	200 x 150 x 120	2 x Ø 25 + 2 x Ø 32 + Ø 16					
	3 P + N	3032 5202 <sup>(1)</sup>	3032 5302 <sup>(1)</sup>					CT 21a							
32	3 P + N	3032 5003	3032 5103	2200 1003		1 AC 2 NO 2299 0011		2294 3009 (3 P) 2294 1009 (1 P)			3031 0011	CT 21	300 x 200 x 120	Ø 32 + 2 x Ø 50 + Ø 16	
	3 P + N	3032 5203 <sup>(1)</sup>	3032 5303 <sup>(1)</sup>									CT 21a			
63	3 P + N	3032 5006	3032 5106	2200 1006	2294 3016 (3 P) 2294 1011 (1 P)		3031 0011	3031 0011	CT 21	300 x 200 x 120		Ø 32 + 2 x Ø 50 + Ø 16			
	3 P + N	3032 5206 <sup>(1)</sup>	3032 5306 <sup>(1)</sup>						CT 21a						
100	3 P + N	3032 5010	3032 5110	2200 1010		2294 3016 (3 P) 2294 1011 (1 P)			3031 0011		3031 0011		CT 32	300 x 200 x 120	Ø 32 + 2 x Ø 50 + Ø 16
	3 P + N	3032 5210 <sup>(1)</sup>	3032 5310 <sup>(1)</sup>										CT 32a		

(1) Front panel: screw-on

## Load break switch in metallic enclosure (continued)

### ■ **SIRCO** in painted steel enclosure



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#### General characteristics

- From 160 to 1600 A.
- 3 poles + solid neutral , 4 poles.
- Black lever (yellow/red on request).
- Triple lock in OFF position.
- Painted steel enclosure.
- Door latch system.
- Colour: RAL 7035.
- Cable gland plates: top and bottom.
- Degree of protection: IP65.
- Wall-mounted, 4 brackets included.

#### Accessories

- NO/NC auxiliary contact.
- Terminal screen.

#### References

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

# 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 100A.
- 3 poles + solid neutral, 4<sup>th</sup> switched pole optional extra (max. 1).
- Yellow/red or black lever.
- Triple lock in OFF position.
- Brushed stainless steel enclosure 304 (please ask for other options).
- Degree of protection: IP65.
- Pre-drilled cable-in holes at bottom.
- Door latch system.

#### Accessories

- 4<sup>th</sup> switched pole (max. 1), connected (max. 1).
- NO+NC or 2 NO auxiliary contact (max. 2).
- Wall brackets.

#### References

Rating (A)	N° of poles	Handle Black Reference	Handle Red/Yellow Reference	Extra pole (switched pole)	Auxiliary contacts	Terminal shroud	Set of stainless steel brackets	Enclosure		
								Size	H x W x D (mm)	Cable-in 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 + 2x 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 features according to IEC 60947-3

		COMO CS							
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)									
400 VAC without pre-break AC (kW) <sup>(5)</sup>		7.5	9.5	11.5	20	22	30	37	45
690 VAC without pre-break AC (kW) <sup>(5)</sup>			12	13	18	22	25.5	34	41
gG DIN(6) fuse protected short-circuit withstand									
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									
Current rated as short-time withstand $I_{cw}$ 0.3s (kA rms)		0.68	0.68	1.28	1.28	2.52	2.52	4	4
Short-circuit operation (switch only)									
Current rated as short-time withstand $I_{cw}$ 1s (kA rms)		0.34	0.34	0.64	0.64	1.26	1.26	2	2
Connection									
Minimum Cu cable cross-section (mm <sup>2</sup> )		1.5	2.5	2.5	2.5	2.5	2.5	4	4
Maximum Cu cable cross-section (mm <sup>2</sup> )		4	10	10	10	16	25	35	50

		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) <sup>(5)</sup>		9	15	30	45	80	132	220	280	450	710	710
500 VAC without pre-break AC (kW) <sup>(5)</sup>		9	15	30	45							
690 VAC without pre-break AC (kW) <sup>(5)</sup>		11	15	30	45							
gG DIN(6) fuse protected short-circuit withstand												
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												
Current rated as short-time withstand $I_{cw}$ 0.3s (kA rms)		2.5	2.5	3	5	15	17	25	25	50	100	100
Short-circuit operation (switch only)												
Current rated as short-time withstand $I_{cw}$ 1s (kA rms)		1.26	1.26	1.5	2.75	7	9	13	13	35	50	50
Dynamic withstand current in $I_{cc}$ (kA peak) (6)		6	6	9	12	20	30	45	45	55	110	110
Connection												
Minimum Cu cable cross-section (mm <sup>2</sup> )		1.5	1.5	2.5	10	50	95	185	2x150	2x185		
Maximum Cu cable cross-section (mm <sup>2</sup> )		16	16	35	70	95	150	240	2x300	2x300	4x185	6x185

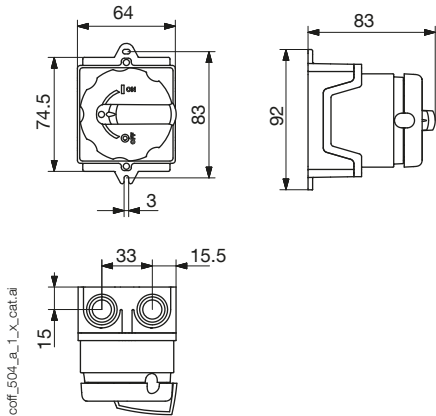
# Enclosed switches

## Load break switches

20 to 1600 A

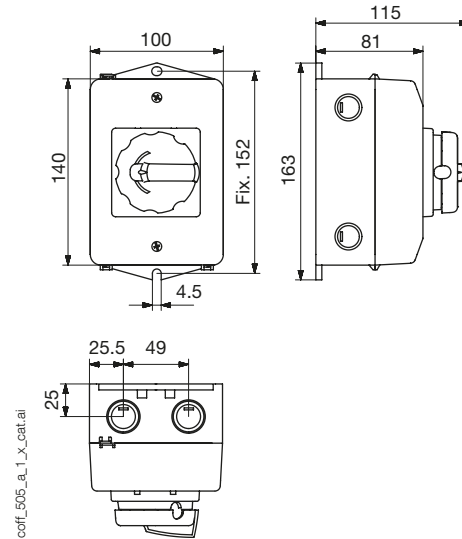
### Dimensions

#### Size CPC 0



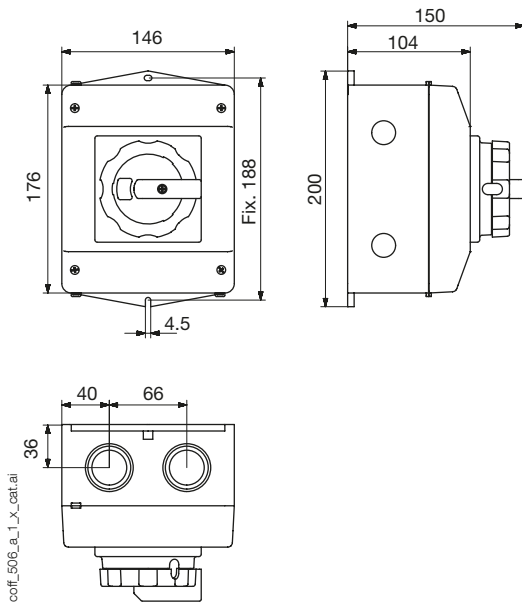
- 4x M25 pre-drilled holes (top and bottom)

#### Size CPC 1



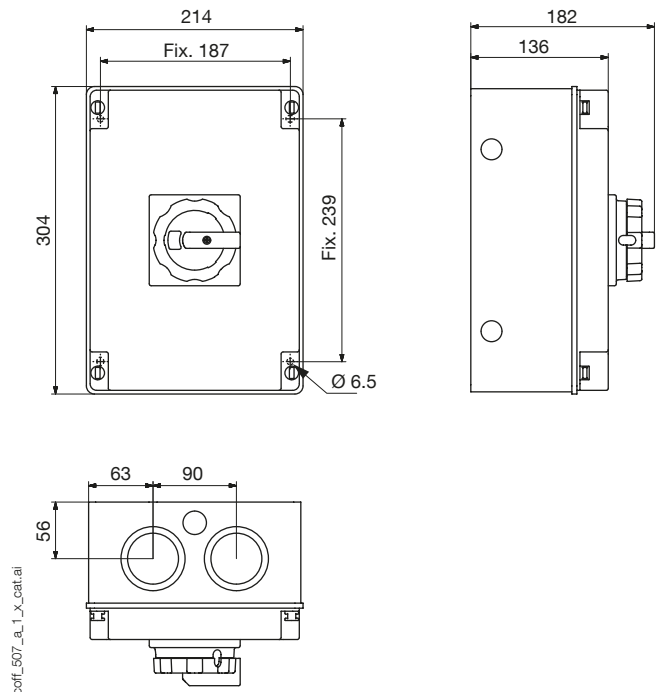
- 4x M20 pre-drilled holes (on the side)
- 4x M25 pre-drilled holes (top and bottom)
- 4 pre-drilled holes to expel water

#### Size CPC 2



- 4x M20 pre-drilled holes (on the side)
- 4 M32/M40 pre-drilled holes (top and bottom)
- 2 pre-drilled holes to expel water

#### Size CPC 3



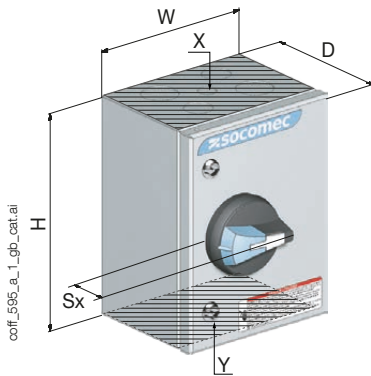
- 4x M20 pre-drilled holes (on the side)
- 4x M50/M63 pre-drilled holes and 2x M20 pre-drilled holes (on the side)
- 2 pre-drilled holes to expel water

# Enclosed switches

Load break switches

20 to 1600 A

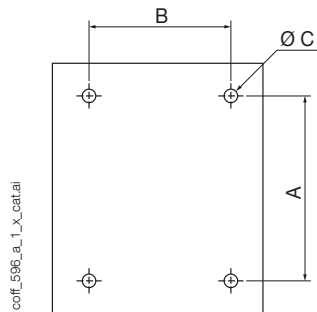
## Enclosures



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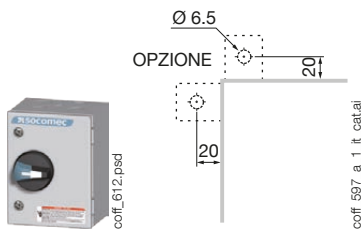
Size	Type	H x W x D (mm)	Sx (mm)	A (mm)	B (mm)	Diameter C (mm)	X - Y Cable-in top and bottom <sup>(1)</sup>
CT 21, CI21, CT 21a	1	200 x 150 x 120	36	135	85	6.5	2 x Ø 25 + 2 x Ø 32 + Ø 16
CT 32, CI32, CT 32a		300 x 200 x 120		235	135		1 x Ø 32 + 2 x Ø 50 + Ø 16
CP 32	3	360 x 270 x 171	45	337	247		-
CP 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	
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		

(1) For stainless steel enclosure, cable-in at bottom only



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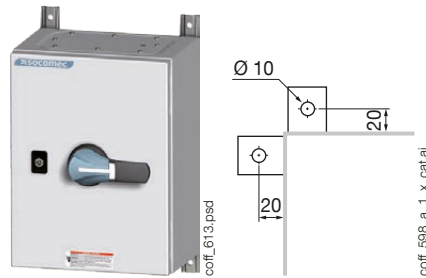
### Type 1



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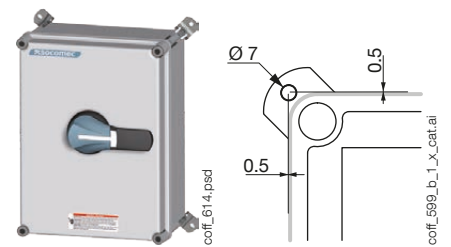
### Type 2



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### Type 3



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