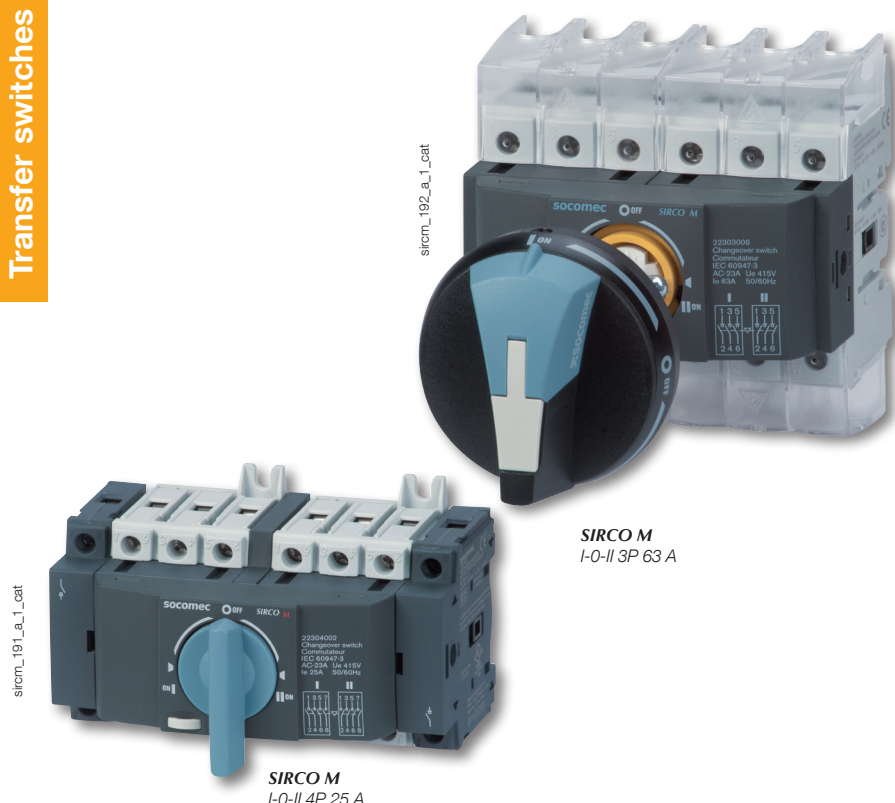


SIRCO M

Manually operated Transfer Switching Equipment

25 to 125 A



The solution for

- > Healthcare buildings
- > Manufacturing



Strong points

- > Secure breaking
- > Modular product
- > On-load switching

Conformity to standards

- > IEC 60947-3



Function

SIRCO M transfer switches are modular, 3 or 4 pole, manually operated transfer switches with positive break indication.

They make and break under load conditions and provide safety isolation for any low voltage circuits. They are also suitable for other applications such as source inversion (e.g. to change the direction of a motor) or grounding.

Advantages

Secure breaking

SIRCO M feature contact point technology and double breaking per phase, which allows for optimal and safe operation of LV electrical circuits.

Modular product

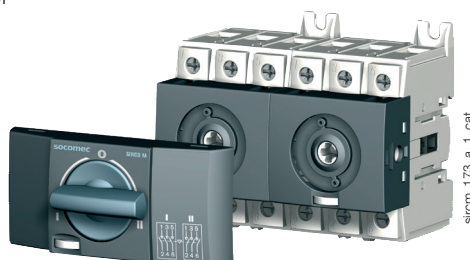
Due to its modular format, SIRCO M can be mounted on a DIN rail, back-plate or modular panel.

On-load switching

The SIRCO M transfer switch is made up of two mechanically interlocked switches and tested according to criteria specified in IEC 60947-3. Thanks to its AC-23 characteristic, it can switch under load.

What you need to know

- The SIRCO M changeover has 2 methods of operation:
 - direct front operation
 - external front operation
- The SIRCO M changeover is available in **3 or 4 poles** from **25 to 125 A**. It can be combined with type M pre-break and signalling auxiliary contacts.



References

Rating (A) / Frame size	No. of poles	Switch body	Direct handle	External handle with 1-pos. padlocking	External handle with 3-pos. padlocking	Shaft for external front operation handle	Auxiliary contact	Terminal shroud	Bridging kit					
25 A/M1	3 P	2230 3002	Blue 2239 5012 Red 2239 5013	S000 type I - O - II Black IP65 1463 5113 ⁽¹⁾		S000 / S00 type 150 mm 1407 0515 200 mm 1407 0520 320 mm 1407 0532	Type M 1 contact NO + NC 2299 0001 1 contact 2 NC 2299 0011	1 P 2294 1005 ⁽²⁾ 3 P 2294 3005 ⁽²⁾	3 P 2299 3005 4 P 2299 4005					
	4 P	2230 4002												
40 A/M1	3 P	2230 3004												
	4 P	2230 4004												
63 A/M2	3 P	2230 3006		S01 type I - O - II Black IP65 1473 1113 ⁽¹⁾	S01 type I - O - II Black IP65 1403 2813	S01 type 200 mm 1404 0520 320 mm 1404 0532		1 P 2294 1009 ⁽²⁾ 3 P 2294 3009 ⁽²⁾	3 P 2299 3009 4 P 2299 4009					
	4 P	2230 4006												
80 A/M2	3 P	2230 3008								S01 type I - O - II Black IP65 1403 2113 ⁽¹⁾				
	4 P	2230 4008												
100 A/M3	3 P	2230 3010	Blue 2239 5022 Red 2239 5023	S00 type I - O - II Black IP65 1473 0113		S00 type 150 mm 1409 0615 200 mm 1409 0620 320 mm 1409 0632	1 P 2294 1011 ⁽²⁾ 3 P 2294 3016 ⁽²⁾							
	4 P	2230 4010												
125 A/M3	3 P	2230 3011												
	4 P	2230 4011												

(1) Defeatable handle. (2) 3 poles: for top and bottom protection, order 2x 3 P terminal shrouds. For a 4-pole device: order 2 x 3 P terminal shrouds + 2 x 1 P terminal shrouds.

Accessories

See "SIRCO M load break switches".

Characteristics according to IEC 60947-3

Thermal current I_{th} (40 °C)	25 A	40 A	63 A	80 A	100 A	125 A
Frame size	M1	M1	M2	M2	M3	M3
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	25/25	40/40	63/63	80/80	100/100	125/125
415 VAC	AC-21 A / AC-21 B	25/25	40/40	63/63	80/80	100/100	125/125
415 VAC	AC-22 A / AC-22 B	25/25	40/40	63/63	80/80	100/100	125/125
415 VAC	AC-23 A / AC-23 B	25/25	40/40	63/63	80/80	100/100	125/125

Operational power in AC-23 (kW)

At 400 VAC without pre-break aux. contact in AC-23 (kW) ⁽²⁾	11.3	18	28.4	35.5	45	56.3
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Rated conditional short-circuit current with gG DIN fuse

Prospective short-circuit current (kA rms.) ⁽³⁾	50	50	50	50	50	25
Associated fuse rating (A) ⁽³⁾	25	40	63	80	100	125

Rated conditional short-circuit current with any brand of circuit breaker that ensures tripping in less than 0.3s ⁽⁴⁾

Rated short-term withstand current 0.3s I_{sc} (kA rms)	2.3	2.3	2.74	2.74	5	5
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Short-circuit operation (switch only)

Rated short-time withstand current I_{sc} 1s (kA rms)	1.26	1.26	1.5	1.5	2.75	2.75
Rated short-circuit breaking capacity I_{cm} (peak kA)	1.8	1.8	2.1	2.1	3.9	3.9

Connection

Min. connection cross-section (mm ²)	1.5	1.5	2.5	2.5	10	10
Maximum Cu cable cross-section (mm ²)	16	16	35	35	70	70
Min./max. tightening torque (Nm)	2 / 2.2	2 / 2.2	3.5 / 3.85	3.5 / 3.85	4 / 4.4	4 / 4.4

Mechanical characteristics

Durability (number of operating cycles)	10000	10000	10000	10000	10000	8000
Weight of a 3-pole device (kg)	0.41	0.41	0.58	0.58	1.1	1.1
Weight of a 4-pole device (kg)	0.51	0.51	0.75	0.75	1.46	1.46

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

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

(3) For a rated operational voltage U_e = 400 VAC.

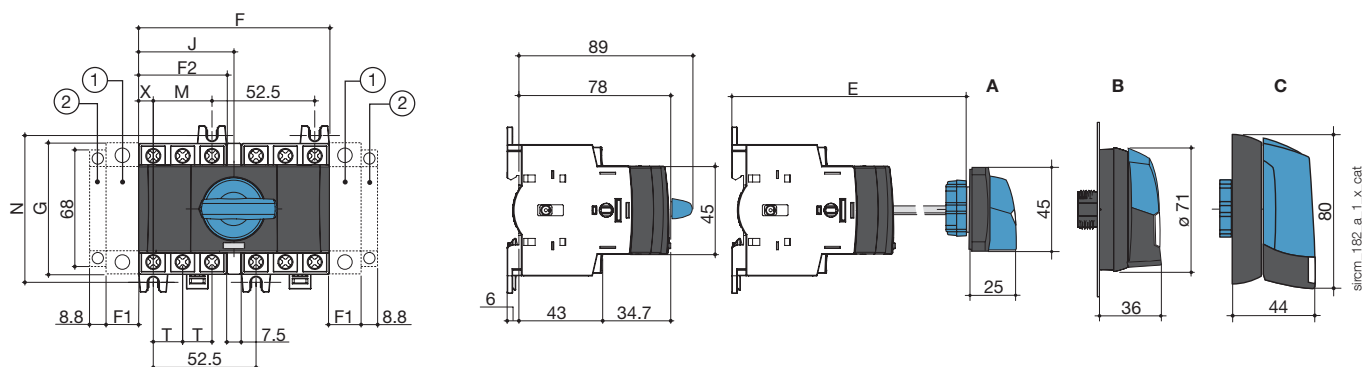
(4) Value for coordination with any circuit breaker that ensures tripping in less than 0.3s. For coordination with specific circuit-breaker parts, higher short-circuit current values are available. Please contact us.

Dimensions

25 to 80 A / M1 to M2

Direct front operation for 3/4 pole transfer switch

External front operation for 3/4 pole transfer switch



1. Location for: 1 main pole or 1 auxiliary contact (see Accessories pages).

2. Location for 1 auxiliary contact only.

Note: the maximum number of additional modules is 4.

A. S000 handle.

B. S00 handle.

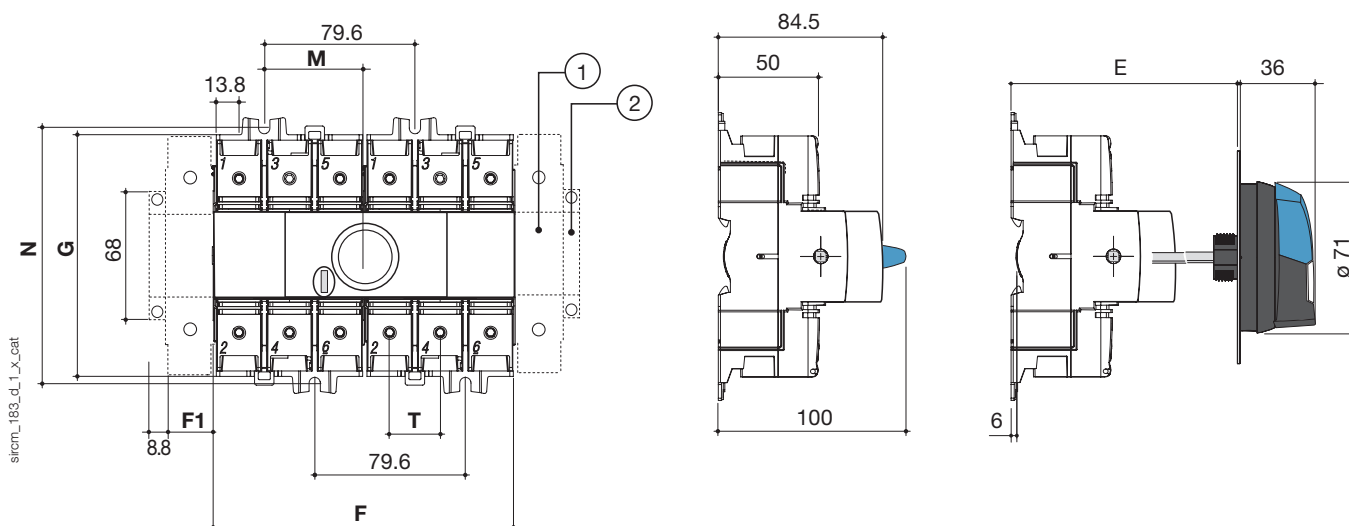
C. S01 handle.

Rating (A)	Frame size	Overall dimensions		Case					Mounting accessory		Connection	
		E min	E max	F	F1	F2	G	J	M	N	T	X
25 ... 40	M1	105	372	97.5	15	45	68	48.75	30	75	15	7.5
63 ... 80	M2	105	372	105	17.5	52.5	76	52.5	35	85	17.5	8.75

100 to 125 A / M3

Direct front operation for 3/4 pole transfer switch

External front operation for 3/4 pole transfer switch



1. Location for: 1 main pole or 1 auxiliary contact (see Accessories pages).

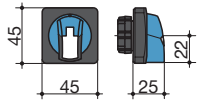
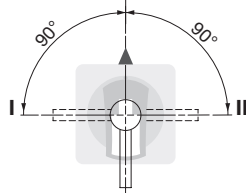
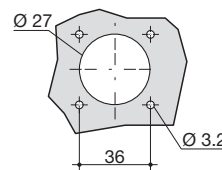
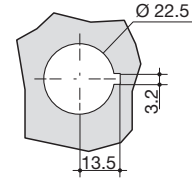
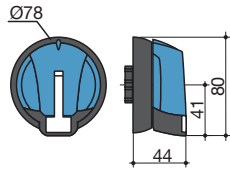
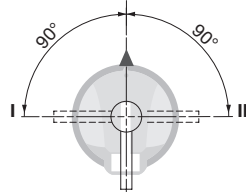
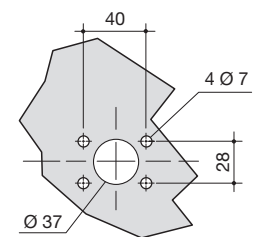
2. Location for 1 auxiliary contact only.

Note: the maximum number of additional modules is 4.

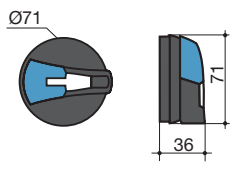
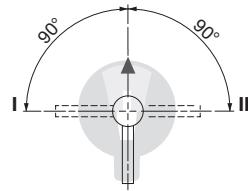
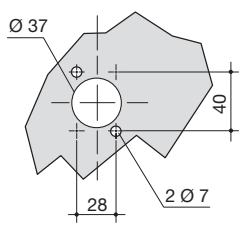
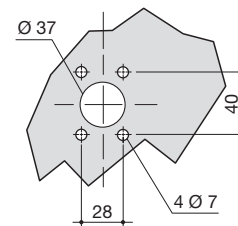
Rating (A)	Frame size	Overall dimensions		Case			Mounting accessory		Connection
		E min	E max	F	F1	G	M	N	T
100 ... 125	M3	105	372	159	26	124.5	52.8	131.5	26

Dimensions for external handles

25 to 80 A / M1 to M2

Handle type	Front operation Direction of operation	Door drilling
S000 type Transfer switches I-0-II and I - I+II - II 		With 4 fixing screws  With fixing nut 
S01 type Transfer switches I-0-II and I - I+II - II 		IP65 with 4 fixing screws 

25 to 125 A / M1 to M3

Handle type	Front operation Direction of operation	Door drilling
S00 type Transfer switches I-0-II and I - I+II - II 		IP55 with 2 fixing clips  IP65 with 4 fixing screws  With fixing nut 