

SIRCO M

Manually operated Transfer Switching Equipment

from 25 to 125 A



The solution for

- > Healthcare buildings
- > Manufacturing industry



Strong points

- > Secured breaking
- > Modular device
- Improved on-load switching

Conformity to standards

> IEC 60947-3



Function

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SIRCO M are manually operated 3 or 4 pole modular transfer switches with positive break indication. They provide on-load transfer between two sources for any low voltage power circuit, as well as safety isolation. Other applications include source inversion (e.g. to change the direction of a motor) or grounding/earthing.

Advantages

Secured breaking

SIRCO M transfer switches include contact point technology and double break per pole as standard, enabling safe, optimal operation of LV electrical circuits.

Modular device

Thanks to their modular format, SIRCO M transfer switches can be fixed to a DIN rail, a backplate or a modular panel.

Improved on-load switching

The SIRCO M switch comprises two mechanically interlocked load break switches which are tested in accordance to standard IEC 60947-3. Its AC23 characteristics enable it to perform on-load changeover switching.

What you need to know

- There are two types of operating handles available for the SIRCO M transfer switches:
 - direct front handle
 - external front handle
- The SIRCO M changeover switch is available in 3 and 4 pole, from 25 to 125 A, with pre-break or signalisation auxiliary contacts (accessories).





			SIK	
Manually	operated	Transfer	Switching	Equipment
			£	0E to 10E A

References																					
Rating (A) / Frame size	No. of poles	Switch body	Direct handle	External handle with 1 position padlocking	External handle with 3 position padlocking	Shaft extension for external front handle	Auxiliary contact	Terminal shrouds	Bridging kit												
05.4/44	3 P	2230 3002				S00, S000 type															
25 A/M1	4 P	2230 4002		S000 type I - 0 - II Black IP65		150 mm 1407 0515		1 P 2294 1005 ⁽²⁾	3 P 2299 3005												
10 1 111	3 P	2230 3004		S00 type I - 0 - II Black IP65 1473 1113(1) S01 type I - 0 - II Black IP65 1473 1113(1) S01 type I - 0 - II Black IP65 1403 2113(1)	S01 type - 0 - Black P65 1403 2813	200 mm 1 407 0520		3 P 2294 3005 ⁽²⁾	4 P 2299 4005												
40 A/M1	4 P	2230 4004	Blue 2239 5012			320 mm 1407 0532 N S01 type 1 c 200 mm															
63 A/M2	3 P	2230 3006	Red 2239 5013				M type 1 contact	1 P 2294 1009 ⁽²⁾													
03 AVIVIZ	4 P	2230 4006					NO + NC 2299 0001		3 P 2299 3009												
80 A/M2	3 P	2230 3008																	020111111	1 contact 2 NC	3 P 2294 3009 ⁽²⁾
OU AVIVIZ	4 P	2230 4008				1404 0532	2299 0011														
100 A/M3	3 P	2230 3010				S00 type		1 P 2294 1011 ⁽²⁾ 3 P 2294 3016 ⁽²⁾													
TOU AVIVIS	4 P	2230 4010	Blue 2239 5022	S00 type I - 0 - II Black IP65 1473 0113		150 mm 1409 0615 200 mm 1409 0620 320 mm															
125 A/M3	3 P	2230 3011	Red 2239 5023																		
125 AVIVIS	4 P	2230 4011				1409 0632															

⁽¹⁾ Defeatable handle.

Accessories

See "SIRCO M switches" page 26.

Characteristics according to IEC 60947-3

Thermal current Ith (40 °C)		25 A	40 A	63 A	80 A	100 A	125 A
Frame size		M1	M1	M2	M2	М3	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 in	11.3	18	28.4	35.5	45	56.3	
Fuse protected short-circuit	withstand (kA rms prospective)						
Prospective short-circuit (kA rms)	(3)	50	50	50	50	50	25
Associated fuse rating (A)(3)		25	40	63	80	100	125
Circuit breaker protected sh	ort-circuit withstand with any circuit l	breaker that en	sures trippir	ng in less tha	n 0.3s ⁽⁴⁾		
Rated short-time withstand curre	nt 0.3s I _{cw} (kA rms)	2.3	2.3	2.74	2.74	5	5
Short-circuit capacity (without	out protection)						
Rated short-time withstand curre	nt 1s. I _{cw} (kA rms)	1.26	1.26	1.5	1.5	2.75	2.75
Rated short-circuit making capac	sity I _{cm} (kA peak)	1.8	1.8	2.1	2.1	3.9	3.9
Connection							
Minimum Cu cable cross-section	(mm²)	1.5	1.5	2.5	2.5	10	10
Maximum Cu cable cross-section (mm²)			16	35	35	70	70
Tightening torque min / max (Nm)			2/2.2	3.5 / 3.85	3.5 / 3.85	4 / 4.4	4 / 4.4
Mechanical characteristics							
Durability (number of operating cycles)			10 000	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) 3} pole: for upstream and downstream protection, order quantity 2 x 3 pole shrouds. For a 4 pole device, order quantity 2 x 3 pole + 2 x 1 pole shrouds.

⁽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.

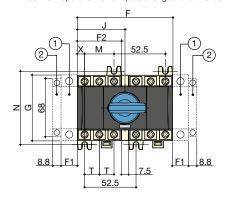
⁽⁴⁾ Value for coordination with any circuit breaker that ensures tripping in less than 0.3s. For coordination with specific circuit-breaker references, higher short-circuit current values are available. Please consult us.

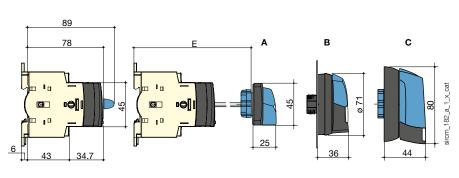
Dimensions

25 to 80 A / M1 to M2

Direct front operation for 3/4 pole changeover switches

External front operation for 3/4 pole changeover switches





- 1. Location for: 1 main pole or 1 auxiliary contact (See accessories page 34).
- 2. Position for 1 auxiliary contact module only.

Note: Maximum of 4 additional blocks (3 pole changeover can be fitted with either one main pole and one A/C block, or two A/C blocks per side; 4 pole changeover can be fitted with only one A/C block per side).

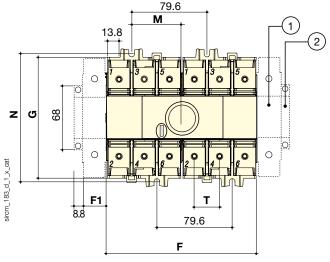
- A. S000 handle
- B. S00 handle
- C. S01 handle

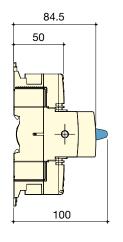
Poting (A) Frame Overall dimensions			Switch body					Switch mounting		Connection		
Rating (A)	size	E min	E max	F	F1	F2	G	J	М	N	T	Х
25 40	M1	105	372	97.5	15	45	68	48.75	30	75	15	7.5
63 80	M2	105	372	105	17.5	52.5	76	52.5	35	85	17.5	8.75

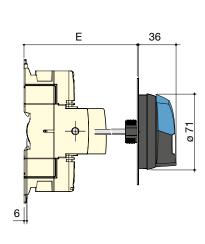
100 to 125 A / M3

Direct front operation for 3/4 pole changeover switches

External front operation for 3/4 pole changeover switches







- 1. Location for: 1 main pole or 1 auxiliary contact (See accessories page 34).
- 2. Position for 1 auxiliary contact module only

Note: Maximum of 4 additional blocks (3 pole changeover can be fitted with either one main pole and one A/C block, or two A/C blocks per side; 4 pole changeover can be fitted with only one A/C block per side).

Dating (A)	Poting (A) Frame Overall dimensions		Switch body			Switch n	Connection		
Rating (A) size	size	E min	E max	F	F1	G	М	N	Т
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 drii	lling
S000 type Transfer switches I-0-II and I - I+II - II	0 or I+II	With 4 fixing screws Ø 27	With fixing nut

Handle type	Front operation Direction of operation	Door drilling
S01 type Transfer switches I-0-II and I - I+II - II	0 or I+II	IP65 with 4 fixing screws
978 187 198 198 198 198 198 198 198 198 198 198	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	<u>4 Ø 7</u> Ø 37

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	0 or I+II	IP55 with 2 fixing clips Ø 37 B 28 2 Ø 7	IP65 with 4 fixing screws Ø 37	With fixing nut

