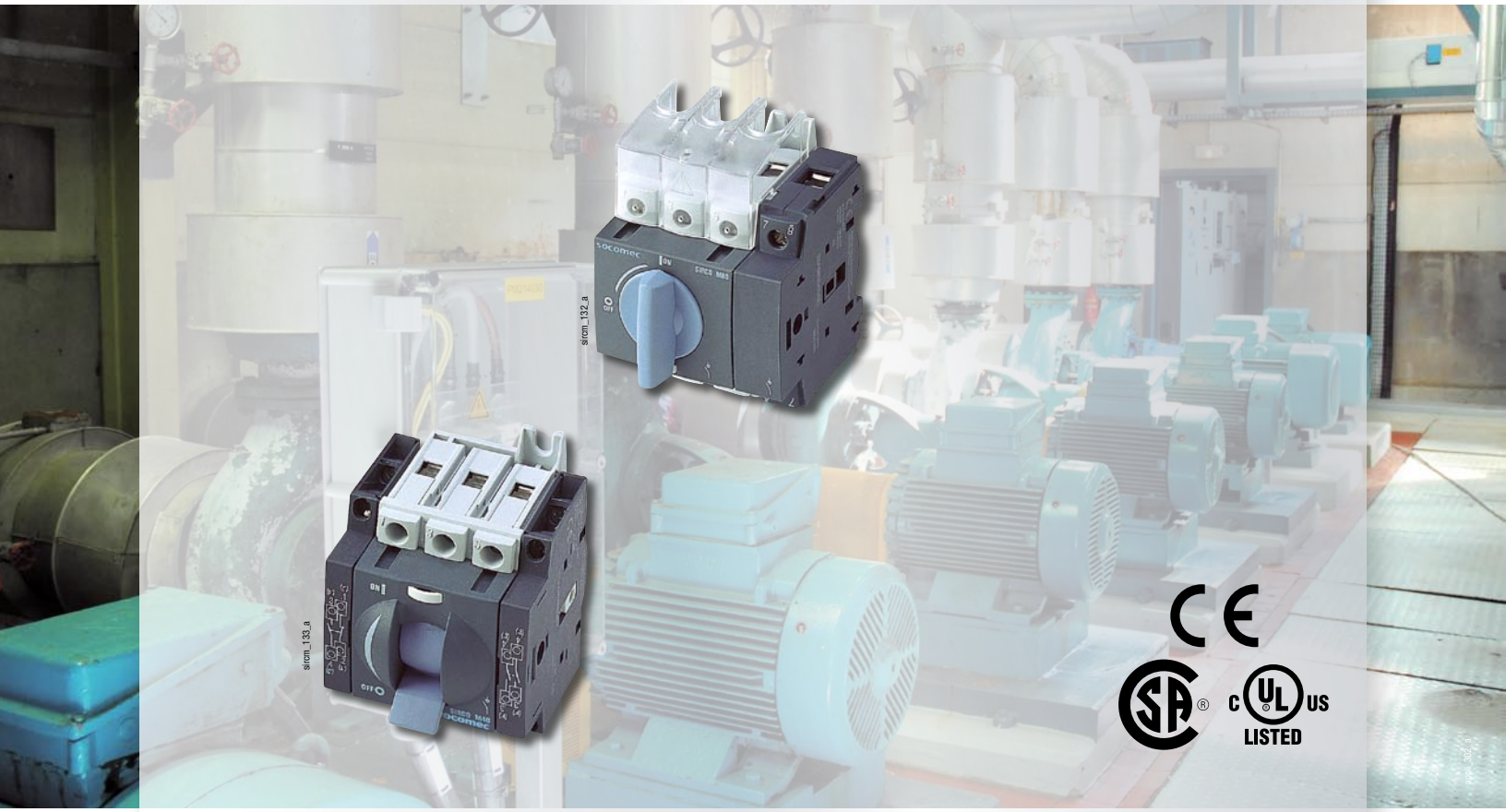


16 to 80 A

➲ Function

SIRCO M load break disconnect switches allow safe control and safe disconnect of any motor applications or to isolate circuit within the panel.
These switches are extremely compact and offer a wide variety of mounting options like 4th pole, auxiliary contacts, door mounting or 6/8 pole kit.

➲ General characteristics

- Touch safe.
- DIN rail or base mount standard.
- Direct or external handle.
- Toggle operation available.

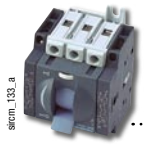
➲ Specific characteristics

- Suitable as motor disconnect.
- Contact point technology.
- Door mounting option.

➲ Conformity to standards

- UL508, Guide NLRV, file E173959
- CSA C22.2#14, Class 3211-05, file 702154
- IEC 60947-3

➲ References





UL508 front and side operated

Rating (A)	No. of poles	Toggle switch (direct handle included)	Rotary switch	Direct handle	Door interlocked external front and right side handle	Shaft extensions for external front and side handle	Switched fourth pole module	Auxiliary contacts	Terminal shrouds	Door mounting kit
16 A	3 P	2205 **3000**	2200 **3000**	Blue 2299 **5012**	S00 type I - 0 Black 3R, 12[1] 1473 **1111** Red/Yellow 3R, 12[1] 1474 **1111** Black 4, 4X[1] 147D **1111** Red/Yellow 4, 4X[1] 147E **1111** S0 type I - 0 Black 1, 3R, 12[1] 1483 **1111** Red/Yellow 1, 3R, 12[1] 1484 **1111** Black 4, 4X[1] 148D **1111** Red/Yellow 4, 4X[1] 148E **1111**	S00 and S0 type 150 mm 5.9 in 1407 **0515** 200 mm 7.9 in 1407 **0520** 320 mm 12.6 in 1407 **0532**[2]	1 P 2200 **1000**	M type 1 AC NO + NC 2299 **0001** 1 AC 2 NC 2299 **0011**	1 P 2294 **1005**[3] 3 P 2294 **3005**[3]	2299 **3409**
20 A	3 P	2205 **3001**	2200 **3001**	Blue 2299 **5012**			1 P 2200 **1001**			
25 A	3 P	2205 **3002**	2200 **3002**				1 P 2200 **1002**			
32 A	3 P	2205 **3003**	2200 **3003**				1 P 2200 **1003**			
40 A	3 P	2205 **3004**	2200 **3004**				1 P 2200 **1004**			
63 A	3 P	2205 **3006**	2200 **3006**				1 P 2200 **1006**		1 P 2294 **1009**[3] 3 P 2294 **3009**[3]	
80 A	3 P	2205 **3008**	2200 **3008**				1P 2200 **1008**			

(1) Nema type.
(2) Please order the shaft guide: 1419 0000 with the shaft.
(4) Top and bottom.

UL508 non-metallic polycarbonate 4, 4X enclosed SIRCO M



➲ Function

Enclosed **SIRCO M** switches allow safe control and safe disconnect of any motor applications.

➲ General characteristics

- Grey enclosure with red handle.
- Equipped with a 3 pole SIRCO M.
- 1 removable earth terminal.
- Possibility of adding 1 power pole and 1 auxiliary contact.
- Nema type 1, 3R, 12, 4, 4X.

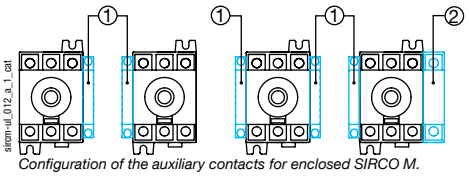
➲ Conformity to standards

- UL508, Guide NLRV, file E173959
- CSA C22.2#14, Class 3211-05, file 702154
- IEC 60947-3

Rating (A)	No. of poles	Enclosed switches	Enclosure size	Switched fourth pole module	Unswitched neutral pole	Unswitched protective earth module	Auxiliary contacts	Terminal shrouds
32 A	3 P	2214 **3503**	Size 1	1 P 2200 **1003**	1 P 2200 **5005**	1 P 2200 **9005**	M type 1 AC NO + NC 2299 **0001**	1 P 2294 **1005**(1) 3 P 2294 **3005**(1)
	3 P	2224 **3503**	Size 2					
63 A	3 P	2224 **3506**	Size 2	1 P 2200 **1006**	1 P 2200 **5009**	1 P 2200 **9009**	1 AC 2 NC 2299 **0011**	1 P 2294 **1009**(1) 3 P 2294 **3009**(1)

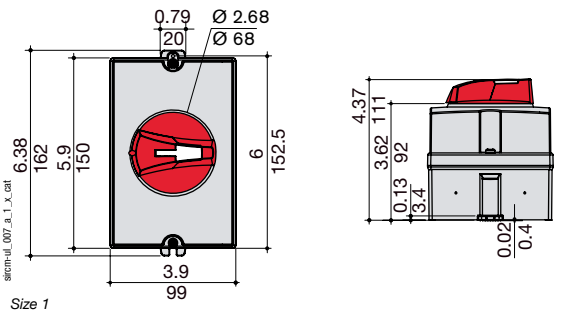
(1) Top and bottom.

➲ Configuration

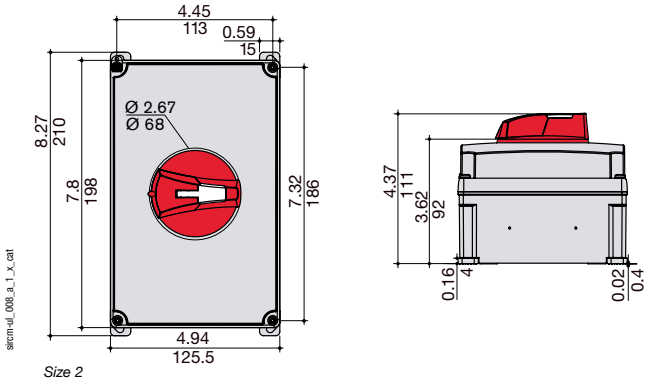


Configuration of the auxiliary contacts for enclosed SIRCO M.
1. M type auxiliary contacts.
2. Additional pole

➲ Dimensions (in / mm)



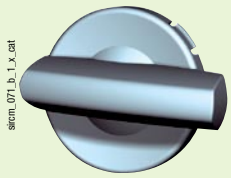
Size 1



Size 2

➲ Accessories

Direct handle


sircm_071_b_1_x_cat

Rating (A)	Handle colour	Handle	Reference
16 … 80	Blue	M00 type	2299 **5012**

Door interlocked external handle


sircm_043_a_1_x_cat

S00 handle

Use

The handle locking function prevents the user from opening the door of the enclosure when the switch is in the "ON" position.
Opening the door when the switch is in the "ON" position is possible by defeating the locking function with the use of a tool (authorized persons only).
the locking function is restored when the door is closed back.
The handle is padlockable with 3 padlocks.


sircm_044_a_1_x_cat

S0 handle

Front and right side operation I - 0

Rating (A)	Handle colour	Handle	Nema type	Reference
16 … 80	Black	S00 type	3R, 12	1473 **1111**
16 … 80	Red/Yellow	S00 type	3R, 12	1474 **1111**
16 … 80	Black	S00 type	4, 4X	147D **1111**
16 … 80	Red/Yellow	S00 type	4, 4X	147E **1111**
16 … 80	Black	S0 type	1, 3R, 12	1483 **1111**
16 … 80	Red/Yellow	S0 type	1, 3R, 12	1484 **1111**
16 … 80	Black	S0 type	4, 4X	148D **1111**
16 … 80	Red/Yellow	S0 type	4, 4X	148E **1111**

Front operation for changeover switches I - 0 - II

Rating (A)	Handle colour	Handle	Nema type	Reference
16 … 80	Black	S00 type	4, 4X	1473 **1113**

Front operation for changeover switches I - I+II - II

Rating (A)	Handle colour	Handle	Nema type	Reference
16 … 80	Black	S00 type	4, 4X	1473 **1114**

Shaft extensions for external handle


sircm_045_a_2_x_cat

Use

Standard lengths:
- 150 mm,
- 200 mm,
- 320 mm.

Other lengths: please consult us.

For 3/4 pole switches, shaft extensions for external front and side handle.
For 6/8 pole switches and SIRCOVER M changeover switches.

For 3/4 pole

Rating (A)	Handle	Length (inches)	Length (mm)	Reference
16 ... 80	S00 type	5.9 in	150 mm	1407 **0515**
16 ... 80	S00 type	7.9 in	200 mm	1407 **0520**
16 ... 80	S00 type	12.6 in	320 mm	1407 **0532**

For 6/8 poles

Rating (A)	Handle	Length (inches)	Length (mm)	Reference
16 ... 80	S00 type	5.9 in	150 mm	1407 **0515**
16 ... 80	S00 type	7.9 in	200 mm	1407 **0520**
16 ... 80	S00 type	12.6 in	320 mm	1407 **0532**

Shaft guide for external operation

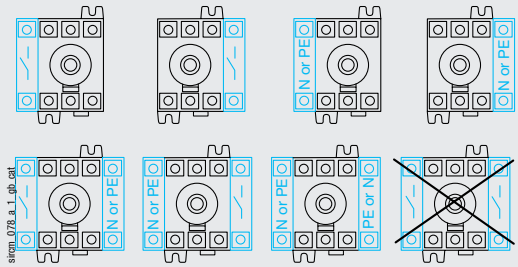


Use
This accessory enables handle to engage extension shaft with a misalignment of up to 15 mm.
Required for a shaft lenght from 320 mm.

Handle type	Reference
S00 and S0	1419 **0000**

Additional pole for SIRCO M





4th pole

Use
Transforms:
- 3 pole SIRCO M load break switches into a 4 pole,
- 6 pole SIRCO M load break switches into a 8 pole,
- 3 pole SIRCOVER M changeover switches into a 4 pole.

Rating (A)	No. of poles	Type	Reference
16	1 P	switched	2200 **1000**
20	1 P	switched	2200 **1001**
25	1 P	switched	2200 **1002**
32	1 P	switched	2200 **1003**
40	1 P	switched	2200 **1004**
63	1 P	switched	2200 **1006**
80	1 P	switched	2200 **1008**

Neutral pole

Use
Transforms the 3-pole switch into a 3-pole + solid neutral.

Rating (A)	No. of poles	Type	Reference
16 … 40	1 P	unswitched	2200 **5005**
63 … 80	1 P	unswitched	2200 **5009**

Protective earth module

Use
Adds 1 protective earth module pole to the switch-disconnector.

Rating (A)	No. of poles	Type	Reference
16 … 40	1 P	unswitched	2200 **9005**
63 … 80	1 P	unswitched	2200 **9009**

Terminal shrouds

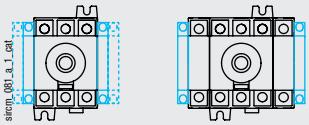


Use
Top and bottom additional protection against direct contact with the terminals or connection parts.
1 or 3 pole are available.
Perforation on each terminal cover enables remote thermographic inspection without dismantling.

Rating (A)	No. of poles	Position	Reference
16 … 40	1 P	top and bottom	2294 **1005**
16 … 40	3 P	top and bottom	2294 **3005**
63 … 80	1 P	top and bottom	2294 **1009**
63 … 80	3 P	top and bottom	2294 **3009**

M type auxiliary contacts





Auxiliary contacts configurations for SIRCO M

Use
Pre-break and signalisation of positions 0 and I by NO+NC or 2 NO auxiliary contacts.
They can be mounted on the left or on the right side of the device.
Max 4 auxiliary contacts (2 modules).

Characteristics
A300.

Rating (A)	Nb de CA	AC type	Reference
16 … 80	1 AC	NO + NC	2299 **0001**
16 … 80	1 AC	2 NC	2299 **0011**

Conversion kit



Conversion kit for 6 or 8 pole load break switches



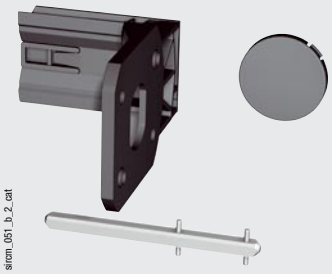
Conversion kit for 3 and 4-pole changeover switches (I - 0 - II) or (I - I+II - II)



Use
This accessory enables the assembly of 2 switches in order to achieve:
- 6 or 8 pole switches
- 3 or 4 pole open or close transition changeover switches.

Rating (A)	Type	Reference
16 … 80	Load break switches 6/8 P	2269 **6009**
16 … 80	Changeover switch 3/4 pole (I - 0 - II)	2209 **6009**
16 … 80	Changeover switch 3/4 pole (I - I+II - II)	2299 **6009**

Door mounting kit



Use
This kit enables a direct mounting of the switch on the door panel, on the right or left side of the panel. The external handle is quick and easy to install due to an internal locking nut mounted on the inside of the enclosure.

Rating (A)	No. of poles	Reference
16 … 80	3/4 P	2299 **3409**

➲ SIRCO M - Characteristics according to UL508/CSA22.2#14 suitable as motor disconnect

16 to 80 A

General use rating	16	20	25	32	40	63	80
Short circuit rating at 600 VAC (kA)	65	65	65	65	10/65	50/65	50/65
Type of fuse	J	J	J	J	J	J	J
Max fuse rating (A)	30	30	30	30	60/30	100/60	100/60
Max. motor hp / FLA 3 ph motor max.							
208 VAC	3 / 10.6	5 / 16.7	7.5 / 24.2	7.5 / 24.2	7.5 / 24.2	15 / 46.2	15 / 46.2
220-240 VAC	5 / 15.2	5 / 15.2	7.5 / 22	7.5 / 22	7,5 / 22	20 / 54	20 / 54
440-480 VAC	10 / 14	10 / 14	15 / 21	20 / 27	20 / 27	40 / 52	40 / 52
600 VAC	10 / 11	15 / 17	20 / 22	25 / 27	25 / 27	40 / 41	40 / 41
Connection terminals							
Solid - 1 wire	#14 - #10	#14 - #10	#14 - #10	#14 - #10	#14 - #10	#14 - #10	#14 - #10
Solid - 2 wires	2x #12	2x #12	2x #12	2x #12	2x #12	2x #12	2x #12
Stranded - 1 wire	#14 - #4	#14 - #4	#14 - #4	#14 - #4	#14 - #4	#14 - #1	#14 - #1
Stranded - 2 wires	2x (#14 - #12)	2x (#14 - #12)	2x (#14 - #12)	2x (#14 - #12)	2x (#14 - #12)	2x (#10 - #6)	2x (#10 - #6)
Auxiliary contacts							
Electrical characteristics	A300	A300	A300	A300	A300	A300	A300
Mechanical characteristics							
Endurance (number of operating cycles)	7/0.8	7/0.8	7/0.8	7/0.8	7/0.8	8.9/1	8.9/1
Operating torque (lbs.in/Nm)	0.16	0.8	0.8	0.8	0.8	1	1

➲ Characteristics according to IEC 60947-3

16 to 80 A

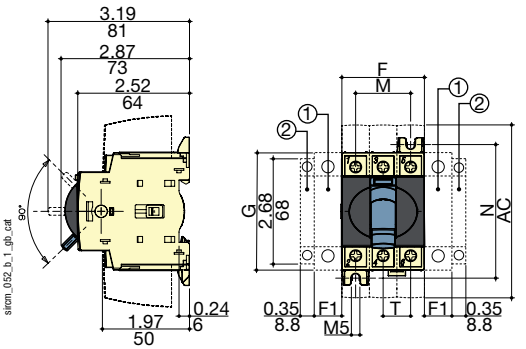
General use rating		**16**	**20**	**25**	**32**	**40**	**63**	**80**
Thermal current I_{th} (40°C)		16	20	25	32	40	63	80
Rated insulation voltage U_i (V)		800	800	800	800	800	800	800
Rated impulse withstand voltage U_{imp} (kV)		8	8	8	8	8	8	8
Rated operational currents I_e (A)								
Rated voltage	Load duty category	A/B[1]	A/B[1]	A/B[1]	A/B[1]	A/B[1]	A/B[1]	A/B[1]
415 VAC	AC-23 A / AC-23 B	16/16	20/20	25/25	32/32	40/40	63/63	80/80
500 VAC	AC-22 A / AC-22 B	16/16	20/20	25/25	32/32	40/40	63/63	80/80
500 VAC	AC-23 A / AC-23 B	16/16	20/20	25/25	25/25	25/25	63/63	63/63
690 VAC	AC-21 A / AC-21 B	16/16	20/20	25/25	32/32	40/40	63/63	80/80
690 VAC	AC-22 A / AC-22 B	16/16	20/20	25/25	32/32	32/40	40/63	63/80
690 VAC	AC-23 A / AC-23 B	16/16	20/20	25/25	25/25	25/25	40/40	40/40
Operational power in AC-23 (kW)								
At 400 VAC without prebreaking AC in AC-23 (kW)[1][2]		7.5	9	11	15	18.5	30	37
At 500 VAC without prebreaking AC in AC-23 (kW)[1][2]		7.5	9	11	15	15	30	37
At 690 VAC without prebreaking AC in AC-23 (kW)[1][2]		7.5	11	15	18.5	18.5	30	37
Fuse protected short-circuit withstand (kA rms prospective)								
Prospective short-circuit current (kA rms)[3]		50	50	50	50	50	50	50
Associated fuse rating (A)[3]		16	20	25	32	40	63	80
Overload capacity (U_e 415 VAC)								
Rated short-time withstand current 0.3 s. I_{cw} (kA rms)[3]		2.5	2.5	2.5	2.5	2.5	3	3
Rated short-circuit making capacity Icm (kA peak)[3]		6	6	6	6	6	9	9
Connection								
Minimum Cu cable cross section (mm²)		1.5	1.5	1.5	1.5	1.5	2.5	2.5
Maximum Cu cable section (mm²)		16	16	16	16	16	35	35
Tightening torque min / max (Nm)		2 / 2.2	2 / 2.2	2 / 2.2	2 / 2.2	2 / 2.2	3.5 / 3.85	3.5 / 3.85

(1) A/B: 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 operating voltage U_e = 400 VAC.

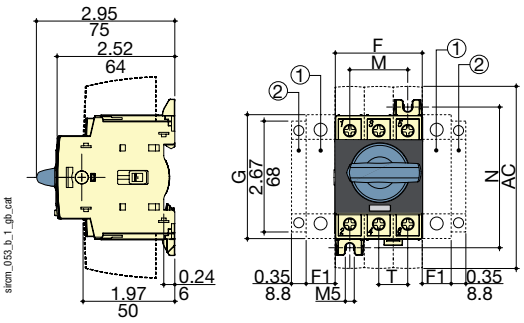
➲ Dimensions (in / mm)

SIRCO M 16 to 80 A

Toggle operation

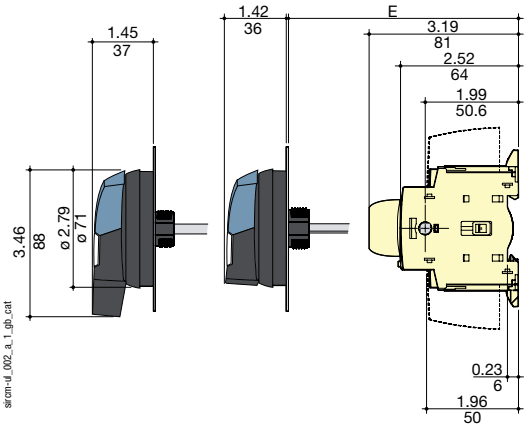


Direct operation with handle

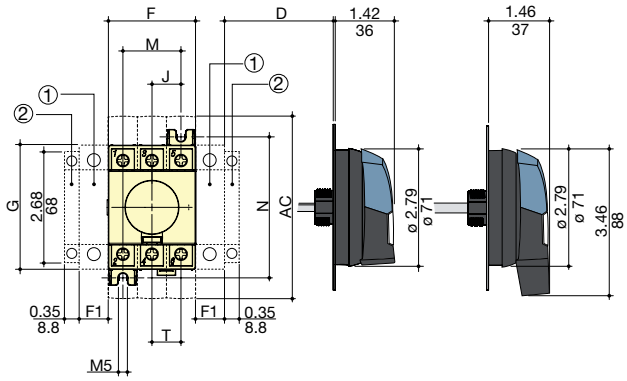


1. Position for 1 switched fourth pole module (1 per device max.) **or** *1 unswitched neutral pole* **or** *1 protective earth module* **or** *1 auxiliary contact.*
2. Position for 1 auxiliary contact only.
Note: Maximum of 4 additional blocks.

External front operation



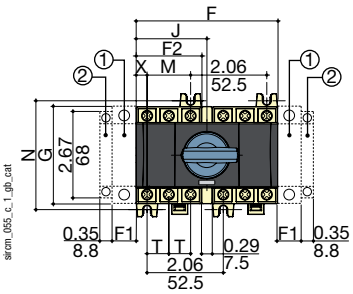
External side operation



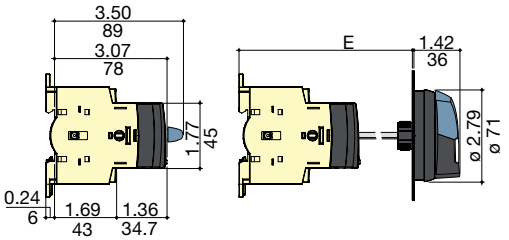
1. Position for 1 switched fourth pole module (1 per device max.) **or** *1 unswitched neutral pole* **or** *1 protective earth module* **or** *1 auxiliary contact.*
2. Position for 1 auxiliary contact only.
Note: Maximum of 4 additional blocks.

Rating (A)	Units	Overall dimensions D min	D max	E min	E max	Terminal shrouds AC	Switch body F	F1	G	J	Switch mounting M	N	Connection T
16 to 40	in	1.18	9.25	3.94	14.64	110	4.33	0.59	2.67	0.59	1.18	2.95	0.59
	mm	30	235	100	372	110	45	15	68	15	30	75	15
63 to 80	in	1.18	9.25	3.93	14.64	4.33	2.06	0.69	2.99	0.69	1.38	3.35	0.69
	mm	30	235	100	372	110	52.5	17.5	76	17.5	35	85	17.5

Direct front operation for 6/8-pole load break switches or 3/4-pole changeover switches



External front operation for 6/8-pole load break switches or 3/4-pole changeover switches



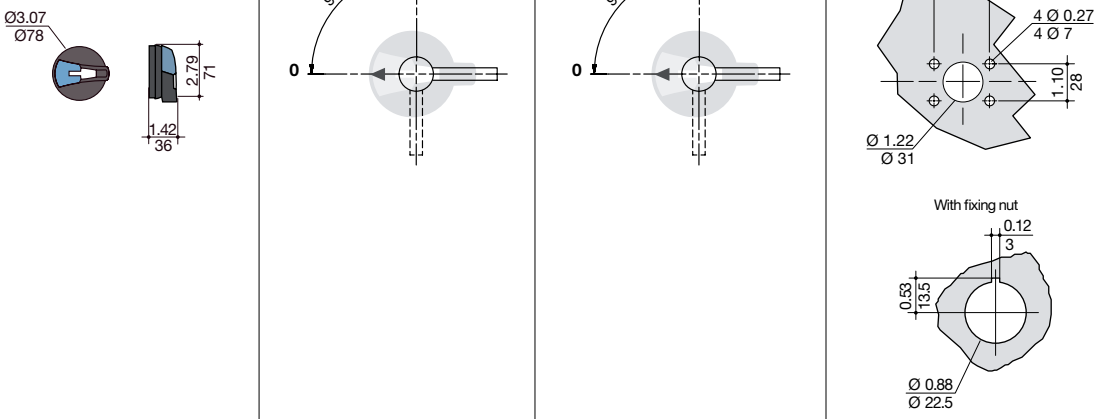
1. Position for 1 switched fourth pole module (1 per device max.) **or** *1 unswitched neutral pole* **or** *1 protective earth module* **or** *1 auxiliary contact.*
2. Position for 1 auxiliary contact only.
Note: Maximum of 4 additional blocks.

Rating (A)	Units	Overall dimensions E min	E max	Switch body F	F1	F2	G	J	Switch mounting M	N	Connection T	X
16 to 40	in	4.13	14.64	3.83	0.59	1.77	2.67	1.92	1.18	2.95	0.59	0.29
	mm	105	372	97.5	15	45	68	48.75	30	75	15	7.5
63 to 80	in	4.13	14.65	4.13	0.69	2.06	2.99	2.06	1.38	3.35	0.69	0.34
	mm	105	372	105	17.5	52.5	76	52.5	35	85	17.5	8.75

➲ Dimensions for external handles (in / mm)

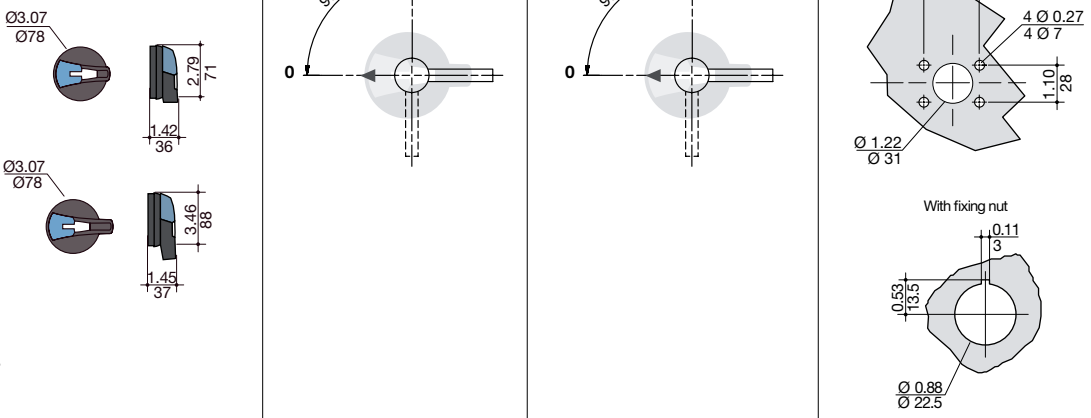
SIRCO M 16 to 80 A

Handle type	Front operation Direction of operation	Side operation Direction of operation	Door drilling template
S00 type			With 4 fixing screws With fixing nut



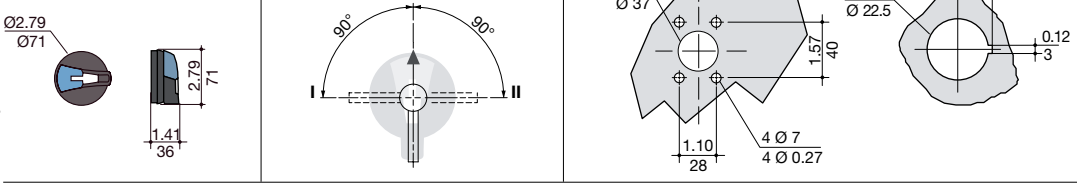
sircm-ul_004_b_1_gb_cat

Handle type	Front operation Direction of operation	Side operation Direction of operation	Door drilling template
S00 / S0 type			With 4 fixing screws With fixing nut



sircm-ul_005_b_1_gb_cat

Handle type	Front operation Direction of operation	Door drilling template
Typ S00 Changeover switches I 0 II and I - I+II - II		With 4 fixing screws With fixing nut



sircm_013_a_1_gb_cat