



SIRCO M UL508

Load break switches standards UL and CSA
16 to 80 A

Load break
switches

new



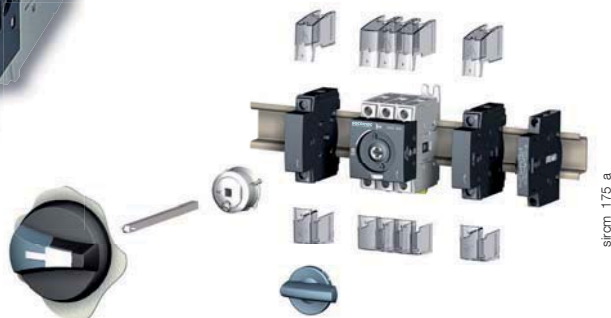
Rotary switch
SIRCO M 3 x 80 A



Toggle switch
SIRCO M 3 x 80 A + 2 auxiliary contacts



Rotary switch
SIRCO M 3 x 80 A



The solution for

- > Industrial control systems



Strong points

- > Total integration.
- > Wide range of accessories.
- > Upgradeability.
- > Compliance to major certifications and approvals.
- > Specific characteristics.

Conformity to standards⁽¹⁾

- > IEC 60947-3
- > UL 508 listed, Guide NLRV, File E173959
- > CSA C22.2§14, class 3211-05, File 112964



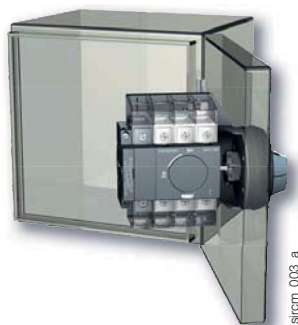
⁽¹⁾ Product reference on request.

Function

SIRCO M UL/CSA non fusable disconnect switches are compact modifiable and modular switches. They make and break under load conditions and provide safety isolation for any low voltage circuit, particularly for machine and control circuits.

General characteristics

- Positive break indication.
- Direct or external operation.
- Compact footprint.
- DIN-rail or base mount.
- Wide range of accessories.
- Up to 8 pole or 4 pole MTS.



UL508 non-metallic polycarbonate 4.4x enclosed SIRCO M

- > Enclosed SIRCO M switches allow safe control and disconnection of any motor application.



UL508 manual motor controller "Suitable as motor disconnect"

References

Rating (A)	No. of poles	Toggle switch (direct handle included)	Rotary switch	Direct handle	External front and right side handles ⁽⁴⁾	Shaft for external handles	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	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	2299 3409
20 A	3 P	2205 3001	2200 3001		Red/Yellow 3R, 12 ⁽¹⁾ 1474 1111		1 P 2200 1001			
25 A	3 P	2205 3002	2200 3002		Black 4, 4X ⁽¹⁾ 1470 1111		1 P 2200 1002			
32 A	3 P	2205 3003	2200 3003		Red/Yellow 4, 4X ⁽¹⁾ 147E 1111		1 P 2200 1003			
40 A	3 P	2205 3004	2200 3004		S0 type I - 0 Black 1, 3R, 12 ⁽¹⁾ 1483 1111		1 P 2200 1004			
63 A	3 P	2205 3006	2200 3006		Red/Yellow 1, 3R, 12 ⁽¹⁾ 1484 1111		1 P 2200 1006			
80 A	3 P	2205 3008	2200 3008		Black 4, 4X ⁽¹⁾ 148D 1111		1P 2200 1008			
					Red/Yellow 4, 4X ⁽¹⁾ 148E 1111					

(1) Nema type.

(2) Please order the shaft guide: 1419 0000 with the shaft.

(3) Top and bottom.

(4) There is no door interlocking when the switch is fitted on the side of the enclosure.

SIRCO M UL508

Load break switches standards UL and CSA

16 to 80 A

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

References



Function

Enclosed **SIRCO M** switches allow safe control and disconnection of any motor application.

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⁽¹⁾

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



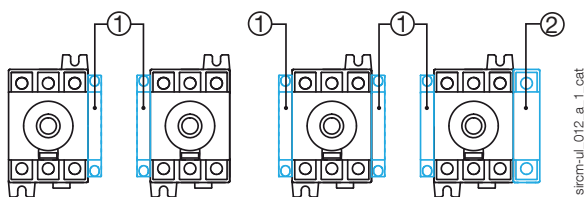
(1) Product reference on request.

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⁾	1 P 2200 9005⁽¹⁾	M type 1 AC NO + NC 2299 0001	1 P 2294 1005⁽²⁾
	3 P	2224 3503	Size 2					3 P 2294 3005⁽²⁾
63 A	3 P	2224 3506	Size 2	1 P 2200 1006⁽¹⁾	1 P 2200 5009⁽¹⁾	1 P 2200 9009⁽¹⁾	1 AC 2 NC 2299 0011	1 P 2294 1009⁽²⁾ 3 P 2294 3009⁽²⁾

(1) Not UL.

(2) Top and bottom.

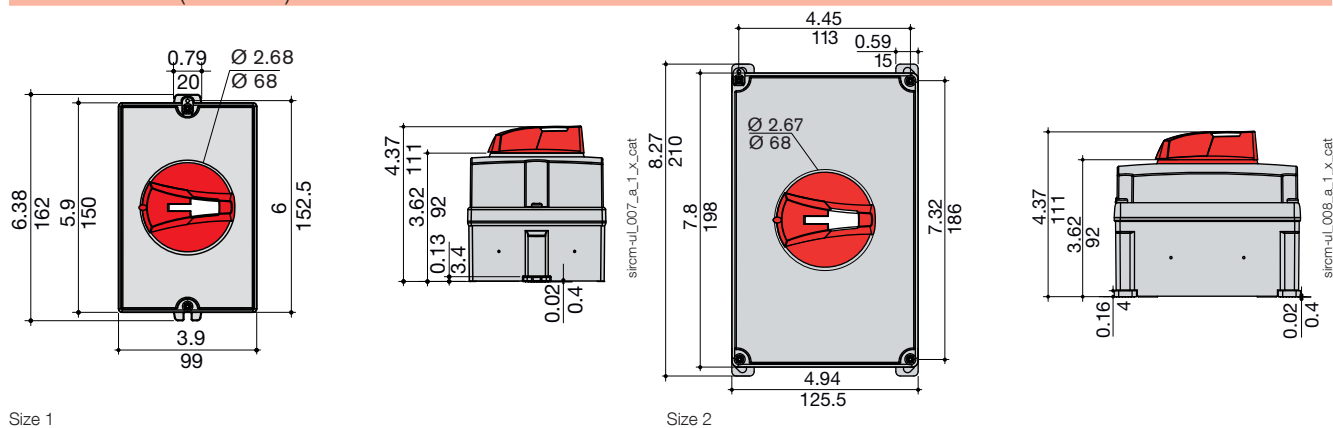
Configuration



Configuration of the auxiliary contacts for enclosed SIRCO M.

1. M type auxiliary contacts.
2. Additional pole.

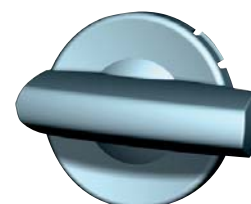
Dimensions (in / mm)



Accessories

Direct operation handle

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



M00 handle

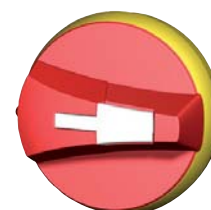
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External operation handle

Use

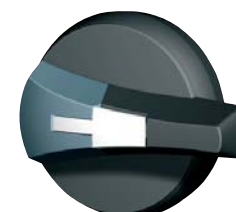
The handle locking function prevents the user from opening the door of the enclosure when the switch is in the "ON" position (only if the handle is fitted on the door).

Opening the door when the switch is in the "ON" position is possible by defeating the interlocking function with the use of a tool (authorised persons only). The interlocking function is restored when the door is closed. The handle is padlockable with 3 padlocks.



S00 handle

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S0 handle

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Front and right side handles 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 handle for changeover switches I - 0 - II

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

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

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

Shafts for external handle

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.



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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 4/8 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

SIRCO M UL508

Load break switches standards UL and CSA

16 to 80 A

Accessories (continued)

Shaft guide for external handle

Use

This accessory enables handle to engage extension shaft with a misalignment of up to 15 mm.

Required for a shaft length from 320 mm.

Handle type	Reference
S00 and S0	1419 0000



access_260_a_2_cat

Additional pole for SIRCO M

4th 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 ⁽¹⁾
80	1 P	switched	2200 1008 ⁽¹⁾

(1) Not UL.

Use

Transforms:

- 3 pole SIRCO M load break switches into a 4 pole,
- 3 pole SIRCOVER M changeover switches into a 4 pole.



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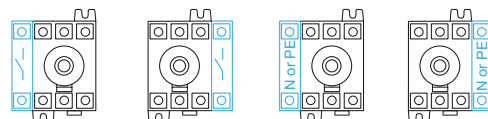
Solid neutral pole

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

(1) Not UL.

Use

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



sircm_078_a_1_glb_cat

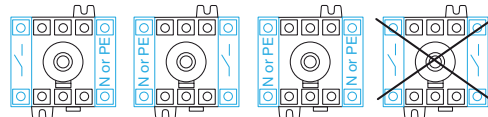
Earth module

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

(1) Not UL.

Use

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



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



sircm_049_a_1_cat

M type Auxiliary Contacts

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 per product (2 modules).

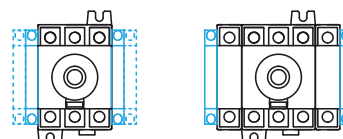
Characteristics

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



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sircm_081_a_1_x_cat

Auxiliary contacts configurations for SIRCO M

Conversion kit

Use

These accessories enable 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



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sircm_097_b_2_x_cat

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)



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Door mounting kit

Use

This kit enables direct mounting of the switch on the panel door or 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



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SIRCO M UL508

Load break switches standards UL and CSA

16 to 80 A

Characteristics

Characteristics according to UL508/CSA22.2#14 suitable as motor disconnect

SIRCO M UL508 - 16 to 80 A							
General use rating	16 A	20 A	25 A	32 A	40 A	63 A	80 A
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)	100 000	100 000	100 000	100 000	100 000	100 000	100 000
Operating torque (lbs.in/Nm)	7/0.8	7/0.8	7/0.8	7/0.8	7/0.8	8.9/1	8.9/1

Characteristics according to IEC 60947-3

		SIRCO M UL508 - 16 to 80 A						
General use rating		16 A	20 A	25 A	32 A	40 A	63 A	80 A
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	Utilisation	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 I_{cm} (kA peak) ⁽³⁾		6	6	6	6	6	9	9
Connection								
Minimum Cu cable cross section (mm ²)		1.5	1.5	1.5	1.5	1.5	2.5	2.5
Maximum Cu cable section (mm ²)		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.

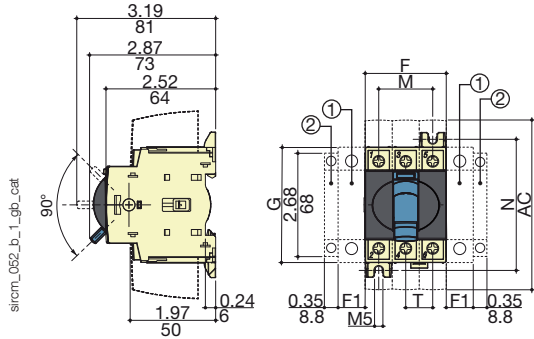
SIRCO M UL508

Load break switches standards UL and CSA
16 to 80 A

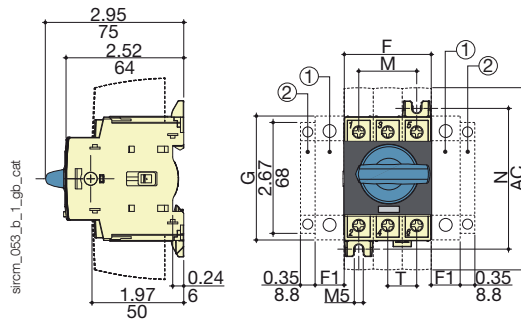
Dimensions (in / mm)

16 to 80 A

Toggle operation



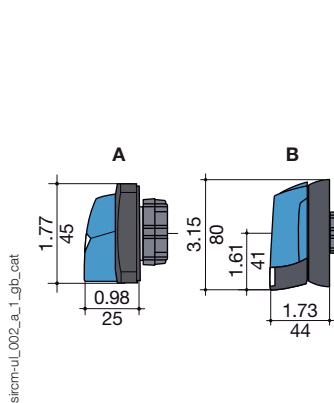
Direct operation with handle



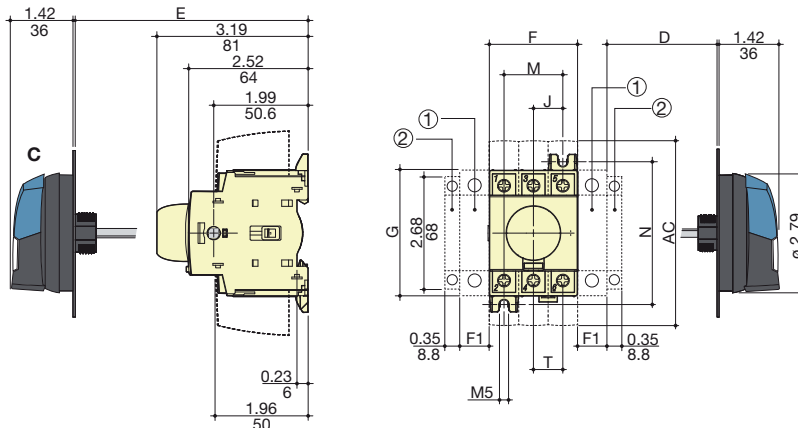
1. Position for 1 switched fourth pole module (1 per device max.) or 1 unswitched neutral pole or 1 protective earth module or 1 auxiliary contact.
2. Position for 1 auxiliary contact only.

Note: Maximum of 4 additional blocks.

External front handle



External side handle

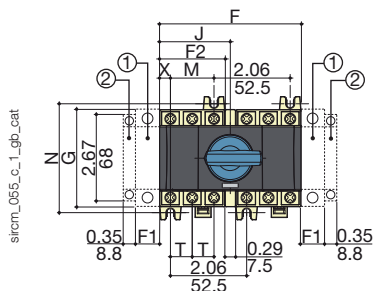


1. Position for 1 switched fourth pole module (1 per device max.) or 1 unswitched neutral pole or 1 earth module or 1 auxiliary contact.
2. Position for 1 auxiliary contact only.

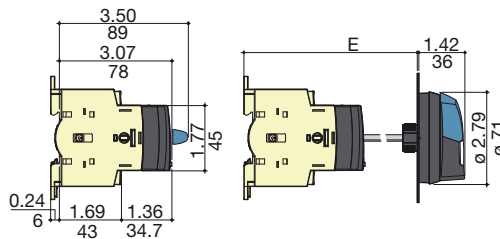
Note: Maximum of 4 additional blocks.

Rating (A)	Units	Overall dimensions				Terminal shrouds		Switch body				Switch mounting		Connection
		D min	D max	E min	E max	AC	F	F1	G	J	M	N	T	
16 to 40	in	1.18	9.25	3.94	14.64	4.33	1.77	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 handle for 6/8-pole load break switches or 3/4-pole changeover switches



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

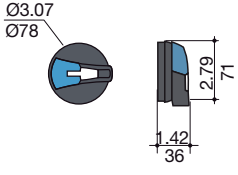
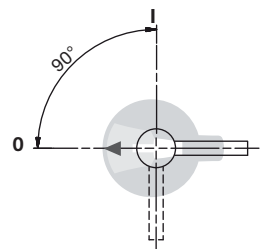
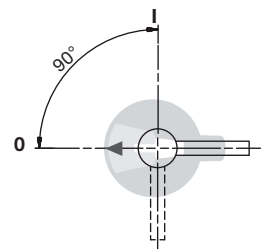
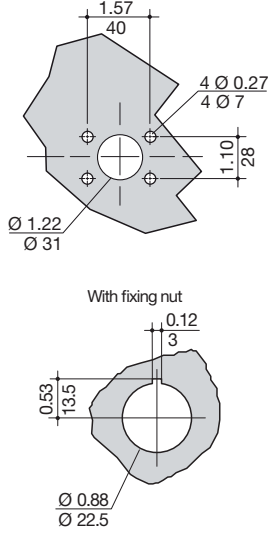
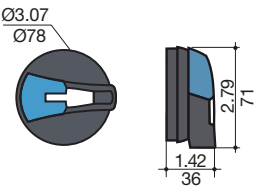
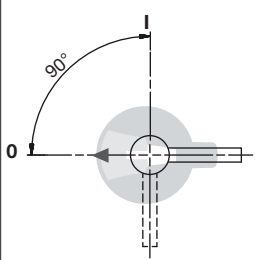
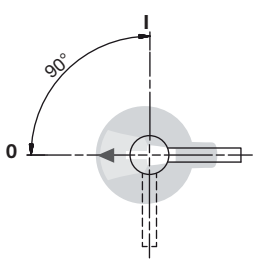
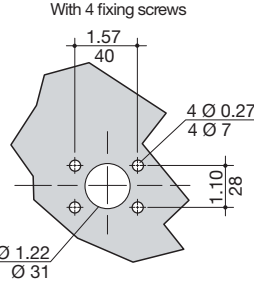
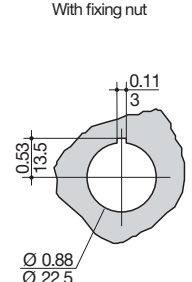
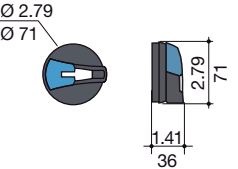
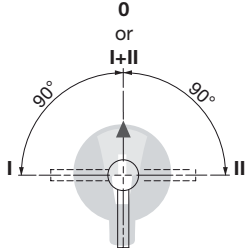
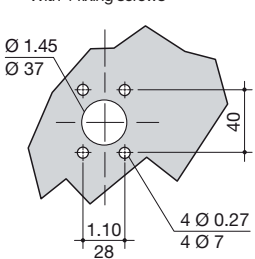
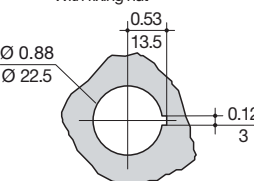


1. Position for 1 switched fourth pole module (1 per device max.) or 1 unswitched neutral pole or 1 earth module or 1 auxiliary contact.
2. Position for 1 auxiliary contact only.

Note: Maximum of 4 additional blocks.

Rating (A)	Units	Overall dimensions		Switch body					Switch mounting		Connection	
		E min	E max	F	F1	F2	G	J	M	N	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	1.38	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

External handles dimensions (in / mm)

16 to 80 A				
Handle type		Front operation Direction of operation	Side operation Direction of operation	Door drilling
S00 type Load break switches 				IP65 with 4 fixing screws 
S00 type 				With 4 fixing screws  With fixing nut 
Typ S00 Changeover switches 				With 4 fixing screws  With fixing nut 

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