

Load-break switches and switch-fuses, safety isolating switches, fuses and fusegear, changeover and transfer switches

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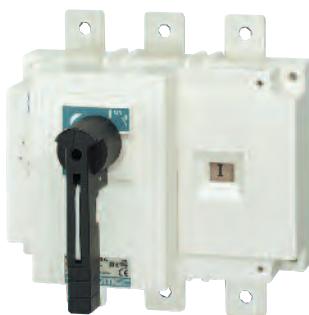
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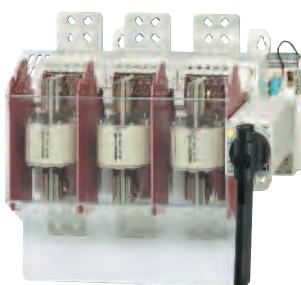
Load-break solutions

- For all breaking functions in commercial, industrial or low voltage networks
- Standard, visual, remote trip and enclosed options
- Full coverage from 20 A to 4000 A



Changeover solutions

- Full range of changeover, bypass or transfer options
- Standard, visual or motorised options
- Full coverage from 63 A to 3200 A



Load-break, changeover and switch-fuses

Introduction

Disconnecting, breaking, controlling, switching and protecting. The principal design of Socomec's "switching" products is to provide all these functions in a reliable and complete product range.

Socomec products can be integrated into any new or existing installation. They assist with safety for both your personnel and equipment.

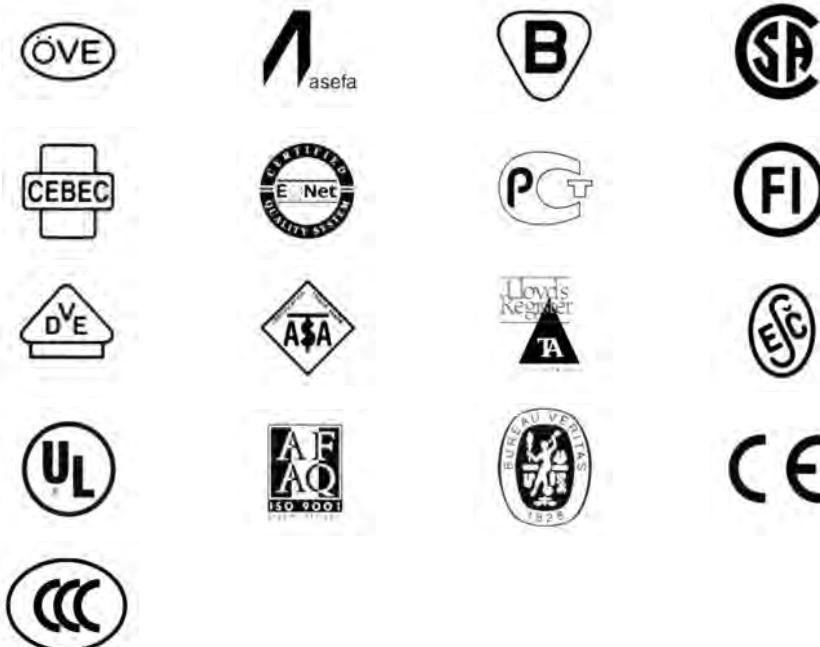
Socomec provide the widest and most complete range on the market today. Socomec are able to provide an extensive range of accessories and replacement parts. Numerous customised possibilities also contribute to the range which allows Socomec to cater for the most complicated switching demands.

To help guarantee the safety of those working on the electrical equipment, Socomec provide fully visible breaking contacts. These contacts provide visually safe solutions.

The Socomec range of changeover switches provide totally safe single operation products. Motorised, bypass and transfer versions allow flexibility and confidence in design.

Complete overcurrent protection and circuit breaking capabilities are easily obtained with Socomec's range of switch fuses. Overcurrent isolation or remote shunt tripping functions provide complete, proven protection for subcircuits.

Approvals



Switch-fuse solutions

- Isolation and overcurrent protection in any industrial or low voltage network
- Standard, plug-in and remote trip options
- BS 88 or DIN compatible
- Full coverage from 20 A to 1250 A

Socomec device types

Switch type	Devices			Breaking indication		Changeover switches	Switch fuse	Tripping devices	Motorised devices
	Socomec reference	NHP reference	Current ratings	Handle and shaft indication	Visible contacts				
Visible Load break	CMP	-	2500 – 5000	✓	✓	-	-	optional	optional
Remote Visible Load-break Switch Fuse	SIDERMAT	-	630 – 1800	✓	✓	-	-	✓	-
Visible Changeover	SIDER Changeover	VCO	125 – 1600	✓	✓	✓	-	-	-
Visible Changeover	SIRCO VM	VLB	32 – 250	✓	✓	✓	-	-	-
Standard Changeover	SIRCO M	SCO	16 – 80	✓	-	✓	-	-	-
Visible Load-break	SIRCO MV	VLB	100 – 160	✓	✓	-	-	-	-
Standard Load-break	SIRCO M	SLB	16 – 125	✓	-	-	-	-	-
Remote Load-break	IDE	RLB	32 – 160	✓	-	-	-	✓	-
Visible Load-break	SIRCO VM	VLB	32 – 200	✓	✓	-	-	-	-
Standard Load-break	SIRCO	SLB	125 – 4000	✓	-	-	-	-	optional
Visible Load-break	SIDER	VLB	630 – 1600	✓	✓	-	-	-	optional
Visible Load-break	SIDER ND	VLB	125 – 500	✓	✓	-	-	-	-
Visible Load-break	SIDER	VCO	200 – 1600	✓	✓	-	-	-	-
Remote Load-break	SIDERMAT	RLB	250 – 1800	✓	✓	-	-	✓	-
Standard Change Over	SIRCOVER	SCO	125 – 3150	✓	-	✓	-	-	-
Bypass Change Over	SIRCOVER	BCO	125 – 1600	✓	-	✓	-	-	-
Automatic Transfer Switches	Motorised SIRCOVER	ATyS	63 – 3150	✓	-	✓	-	-	✓
Standard Switch Fuse	FUSERBLOC	SSF	20 – 1250	✓	-	-	✓	-	-
Visible Switch Fuse	FUSERBLOC V	-	250 – 1250	✓	¹⁾	-	✓	-	-
Remote Switch Fuse	FUSOMAT	RSF	250 – 1800	✓	¹⁾	-	✓	✓	-
Enclosed Load-break	-	ELB	20 – 1600	✓	-	-	-	-	-
Enclosed Stainless Steel	-	ESS	50 – 630	✓	✓	-	-	-	-
Visible Load-break – side operated	-	32BR	50 – 1250	✓	✓	-	-	-	-
DIN Fuse Bases	Fuse bases	DFN	160 – 630	-	-	-	-	-	-

Notes: ¹⁾ Visible contacts not available for 1250 A rating only.

Switching definitions

AS/NZS 60947-3 and IEC 60947-3 manufacturing standards

Definitions

Switch (AS/NZS 60947-3 & 2.1)



"A mechanical connection device capable of:

- making, carrying and breaking currents under normal circuit conditions ¹⁾, possibly including specified operating overload conditions.
- carrying currents in abnormal circuit conditions - such as short-circuit conditions - for a specified duration" (a switch may be able to make short-circuit currents, but it cannot break them).

Disconnector (AS/NZS 60947-3 & 2.2)



"A mechanical switching device which, when open, complies with the requirements specified for the isolating function. This device can carry currents in normal circuit conditions as well as currents in abnormal conditions for a specified duration."

Disconnector: (working definition) device without on-load making and breaking capacity.

Switch-disconnector (AS/NZS 60947-3 & 2.3)



Switch, which in its breaking position meets the specific insulation conditions for a switch-disconnector. ³⁾

Fuse switch-disconnector (AS/NZS 60947-3 & 2.9)



Switch-disconnector in which one or more poles include an in-series fuse in a combined device.

DEVICE \ ACTION	Making	Withstanding	Breaking
Making			
Withstanding			
Breaking			

Normal current

Overload current

Short-circuit current

Notes: ¹⁾ Normal conditions generally correspond to the use of a piece of equipment at an ambient temperature of 40 °C for a period of 8 hours.

²⁾ Not imposed by standard.

³⁾ By the fuse.

Functions

Separation of contacts

As stipulated by the mechanical switching device standard AS/NZS 60947-3, or IEC 364-5-537, all disconnection devices must ensure adequate contact separation of contacts.

Testing contact separation capacity as per standard AS/NZS 60947-3 is carried out in three tests:

- the dielectric test will define sparkover resistance (U_{imp} : impulse withstand voltage) dependant on the distance of the air gap between contacts. (Generally $U_{imp} = 8$ kV for $U_e = 400/690$ V),
- the measurement of leakage current (I_p) will define insulation resistance in the open position partly depending on the creepage distances. At 110 % of U_e , $I_p < 0.5$ mA (new device) and $I_p < 6$ mA (device at end of life span),
- checking the strength of the actuator and the position indication device is aimed at validating the 'mechanical' reliability of position indications. The device is locked in the 'T' position, and a force three times the standard operating force is applied to the operating mechanism.

During the course of this test, locking the device on the '0' position must not be possible, nor should the device remain in the '0' position after the test. This test is not necessary when contact opening is shown by other means than an operating mechanism, such as a mechanical indicator, or direct visibility of contacts, etc.

This third test meets the definition of 'fully visible' breaking to provide the isolation function in low-voltage B systems (500 V < $U \leq 1000$ V AC and 750 V < $U \leq 1500$ V DC).

The latter characteristic is required by NF C 15-100 except for SELV or PELV ($U \leq 50$ V AC or 120 V DC).

On-load and overload breaking

This is ensured by devices defined for making and breaking in normal load and overload conditions. Type tests characterise devices able to make and break specific loads. These can have high overload currents under a low $\cos \varphi$ (a starting motor or a locked rotor).

The type of load or load duty defines the device's load duty category.

Breaking action in the event of a short-circuit

A switch is not intended to cut off a short-circuit current. However its dynamic withstand must be such that it withstands the fault until it is eliminated by the corresponding protective device.

On fused switches, the short-circuit is cut off by the fuses with the considerable advantage of limiting high fault currents.

Switching definitions

AS/NZS 60947-3 and IEC 60947-3 manufacturing standards (continued)

Characteristics

Application condition and utilisation category, according to standard IEC 60947 -3

Table A

UTILISATION CATEGORY		USE	APPLICATION
AC	DC		
AC 20	DC 20	Off-load making and breaking	Disconnectors ¹⁾
AC 21	DC 21	Resistive loads including moderate overloads.	Switches at installation head or for resistive circuits (heating, lighting, except discharge lamps, etc.).
AC 22	DC 22	Inductive and resistive mixed loads including moderate overloads.	Switches in secondary circuits or reactive circuits (capacitor banks, discharge lamps, shunt motors, etc.).
AC 23	DC 23	Loads made of motors or other highly inductive loads.	Switches feeding one or several motors or inductive circuits (electric carriers, brake magnet, series motor, etc.).

Breaking and making capacities

Unlike circuit breakers, where these criteria indicate tripping or short-circuit making characteristics and perhaps requiring device replacement, switch making and breaking capacities correspond to utilisation category maximum performance values.

In such extreme uses, the switch must still maintain its characteristics, in particular its resistance to leakage current and temperature rise.

Table B

	MAKING		BREAKING		N° OF OPERATING CYCLES
	I/I _e	cos φ	I/I _e	cos φ	
AC 21	1.5	0.95	1.5	0.95	5
AC 22	3	0.65	3	0.65	5
AC 23 I _e ≤ 100 A	10	0.45	8	0.45	5
I _e > 100 A	10	0.35	8	0.35	3
	L/R (ms)		L/R (ms)		
DC 21	1.5	1	1.5	1	5
DC 22	4	2.5	4	2.5	5
DC 23	4	15	4	15	5

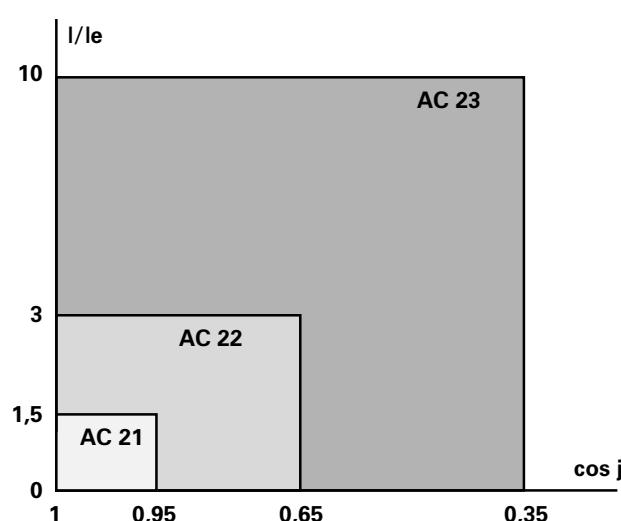


Fig. 1: making and breaking capacities

Note: ¹⁾ Today these devices are replaced by load-break switches for obvious safety of use reasons.

Electrical and mechanical endurance

This standard establishes the minimum number of electrical (at full load) and mechanical (off-load) operating cycles that must be performed by devices. These characteristics also specify the device's theoretical lifespan during which it must maintain its characteristics, particularly resistance to leakage current and temperature rise.

This performance is linked to the device's use and rating. According to anticipated use, two additional application categories are offered:

- category A: frequent operations (in close proximity to the load)
- category B: infrequent operations (at installation head or wiring system).

Table C

I _e (A)	≤ 100	≤ 315	≤ 630	≤ 2500	> 2500
N° CYCLES/HOUR	120	120	60	20	10
N° OF OPERATIONS IN CAT. A					
without current	8500	7000	4000	2500	1500
with current	1500	1000	1000	500	500
Total	10000	8000	5000	3000	2000
N° OF OPERATIONS IN CAT. B					
without current	1700	1400	800	500	300
with current	300	200	200	100	100
Total	2000	1600	1000	600	400

Operational Current I_e

Operational current is determined by endurance tests (both mechanical and electrical), and by making and breaking capacity tests.

Short circuit characteristics

- short-time withstand current (I_{CW}): Admissible RMS current lasting for 1 second.
- short circuit making capacity (I_{CM}): peak current value which the device can withstand due to short circuit closure.
- conditional short circuit current: the RMS current the switch can withstand when associated with a protection device limiting both the current and short circuit duration.
- dynamic withstand: peak current the device can support in a closed position.

The characteristic established by this standard is the short-time withstand current (I_{CW}) from which minimal dynamic withstand is deduced. This essential withstand value corresponds to what the switch can stand without welding.

SLB

Standard load-break switches 16 to 4000 A



SIRCO M 16 to 125 A



The SIRCO M range of load-break switches offer compact IP 20 finger safe solutions for switching up to and including 125 A. They are ideal for the arduous switching of motors.

Standard mounting is by DIN rail or base mount with screws.

The SIRCO M comes complete with direct mount handle or a panel mount, handle complete with shaft. Fourth pole and auxiliary switching can also be achieved with easy clip-on modules - refer accessories.

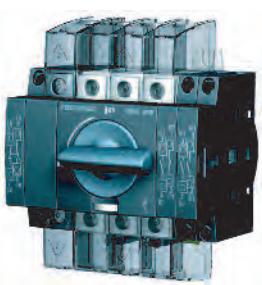
Front or side operated

SICRO M
SLB323PD

Basic switch body	AC 21 400 V (A)	AC 23 400 V (A)	AC 23 400 V (kW)	Cat. No. ¹⁾	Direct handle Price \$	General purpose external handle Price \$
16 A	2200 3000	16	16	5.5	SLBM163P_	64.00 117.00
20 A	2200 3001	20	20	9	SLBM203P_	69.00 127.00
25 A	2200 3002	25	25	11	SLBM253P_	74.00 138.00
32 A	2200 3003	32	32	15	SLBM323P_	85.00 148.00
40 A	2200 3004	40	40	18.5	SLBM403P_	96.00 154.00
63 A	2200 3006	63	63	30	SLBM633P_	117.00 180.00
80 A	2200 3008	80	80	40	SLBM803P_	127.00 191.00
100 A	2200 3010	100	100	40	SLBM1003P_	225.00 295.00
125 A	2200 3011	125	125	63	SLBM1253P_	255.00 330.00

Accessories for SIRCO M switches

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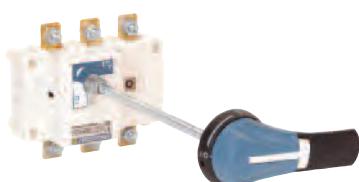
SICRO M
Fitted with optional:

- 4th pole
- 3- Aux contacts
- Terminal covers

Notes: ¹⁾ Sirco M SLBM switches can be supplied with direct mount or extension shaft handles. To obtain a direct mount handle, insert a "D" to replace the "_" above, or leave blank to obtain a round IP65 general purpose - extended handle. To obtain a switch that includes a heavy duty S1, IP65 extended handle, insert "S" above. (Extra cost)

Sirco M DC to
800 V now
available

Price Schedule 'B2'



SLB 2003P
With panel mount handle

SLB Standard load-break switches

SIRCO 125 to 4000 A

The SIRCO range of load-break switches offer compact solutions for switching from 125 A to 4000 A⁴⁾. Base mounting is standard. The SIRCO range are a proven, reliable design that are well suited to harsh Australian conditions.

Front operated - supplied with direct or ext. handle

	AC 21 400 V (A)	AC 23 400 V (A)	AC 23 400 V (kW)	No. of poles	Cat. No. ¹⁾ ²⁾	Direct or External handle Price \$
125 A	125	125	63	3	SLB1253P_	415.00
				4	SLB1254P_	560.00
160 A	160	160	80	3	SLB1603P_	550.00
				4	SLB1604P_	670.00
200 A	200	200	100	3	SLB2003P_	590.00
				4	SLB2004P_	780.00
250 A	250	250	132	3	SLB2503P_	650.00
				4	SLB2504P_	840.00
315 A	315	315	160	3	SLB3153P_	810.00
				4	SLB3154P_	1070.00
400 A	400	400	220	3	SLB4003P_	960.00
				4	SLB4004P_	1260.00
500 A	500	500	280	3	SLB5003P_	1290.00
				4	SLB5004P_	1590.00
630 A	630	500	280	3	SLB6303P_	1470.00
				4	SLB6304P_	1910.00
800 A	800	800	450	3	SLB8003P_	2060.00
				4	SLB8004P_	2690.00
1000 A	1000	1000	560	3	SLB10003P_	2960.00
				4	SLB10004P_	3980.00
1250 A	1250	1250	710	3	SLB12503P_	3980.00
				4	i SLB12504P_	5160.00
1600 A	1600	1250	710	3	SLB16003P_	4700.00
				4	SLB16004P_	6100.00
1800 A	1800	1250	710	3	SLB18003P_	5600.00
				4	i SLB18004P_	7040.00
2000 A	2000	1600	710	3	SLB20003P_	6570.00
				4	i SLB20004P_	8440.00
2500 A	2500	1600	710	3	SLB25003P_	7780.00
				4	i SLB25004P_	9850.00
3200 A	3200	1600	710	3	SLB32003P_	9470.00
				4	i SLB32004P_	12200.00
4000 A	3200	1250	710	3	SLB40003P_	21900.00
				4	i SLB40004P_	28140.00



SLB 32003PD
With direct mount handle

Accessories for SIRCO M switches

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Notes: ¹⁾ Insert D for direct mount handle or leave blank for panel mount pistol handle complete with 320 mm shaft.

²⁾ 6 and 8 pole switches available on indent. Refer to NHP.

³⁾ Supplied with 2 N/O and 2 N/C auxiliaries as standard.

⁴⁾ Refer NHP for 5000 A and 6300 A load break switches.

Available on indent only

Price Schedule 'B2'

SLB Standard load-break switches

Accessories



Direct handle
2799 7012



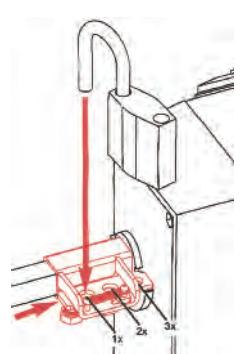
SIRCO M
Round handle
1473 1111



S2 External handle



10 mm Shaft



SLBDL01 Shaft lock

Direct mount handles ('OFF' padlockable, 'ON' locking field convertible)

To suit	Colour	Cat. No.	Price \$
SLBM 16...80	Blue	2299 5012	10.00
SLBM 100...125	Blue	2299 5032	13.00
SLB 125...160	Black	2699 5042	117.00
SLB 200...630	Black	2699 5052	148.00
SLB 800...3200	Black	2799 7012	225.00
SLB 4000	Black	2799 7062	590.00

External mount handles ('OFF' padlockable, 'ON' locking field convertible)

To suit	Type	Colour	IP rating	Cat. No.	Price \$
SLBM 16...80	Round - S00	Blue	65	1473 1111 ¹⁾	41.00
		Red/Yellow	65	1474 1111	41.00
I-O-II	Pistol - S1	Blue	65	1413 2111	85.00
		Blue	65	1473 1113	42.00
I-I+II-II	Round	Blue	65	1473 1114	42.00
		Blue	65	1483 1111	64.00
SLBM 100...125	Pistol - S0	Blue	65	1484 1111	64.00
		Red/Yellow	65	1423 2111	127.00
SLB 125...630	Pistol - S2	Blue	65	1424 2111	170.00
		Red/Yellow	65	1433 3111	225.00
SLB 800...1000	Pistol - S3 (option)	Blue	65	1434 3111	245.00
		Red/Yellow	65	1443 3111	245.00
SLB 800...1800	T-type - S4 (standard)	Black	65	1444 3111	245.00
		Red	65	1444 3111	245.00
SLB 2000...3200	T-type	Black	65	SLBPH09	255.00
		Red	65	SLBPH10	255.00
SLB M 16...125		Shaft misalignment guide		1419 0000	3.50
SLB 125...1800	S1...S4	Shaft misalignment guide		1429 0000	28.00

External mount IP65 stainless steel handle ('OFF' padlockable)

To suit	Description	Cat. No.	Price \$
SLB 125 - 1800 A	Stainless steel handle kit ²⁾	SLBPHMK	700.00

Shafts and shaft lock for external handles

To suit	Shaft length (mm)	Selector type	Pistol or T type	Cat. No.	Price \$
SLBM 16...125	320	Round	-	1407 0532	28.00
5 mm ² shaft	320	-	Pistol S1	1404 0532	53.00
SLB 125...630	320	-	Pistol S2	1400 1032	53.00
10 mm ² shaft	500	-	Pistol S2	1400 1050	85.00
SLB 800...1800	320	-	Type S3 or S4 (T)	1401 1532	106.00
12 mm ² shaft	540	-	Type S3 or S4 (T)	1401 1540	170.00
SLB 2000...4000	200	-	T type	2799 3015	85.00
15 mm ² shaft	320	-	T type	2799 3018	96.00
	450	-	T type	2799 3019 ⁱ⁾	97.00
SLB125...3200		Shaft Lock Device		SLBDL01	191.00

Notes: ¹⁾ Suitable for front or right side operation. For left side operation, use handle type 147A5111.

²⁾ Includes handle shaft, shaft adaptor and position label.

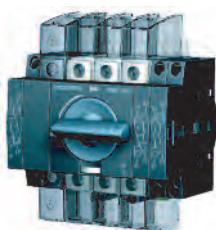
Large ON/OFF escutcheon mountable available. 390.00201

ⁱ⁾ Available on indent only

Price Schedule 'B2'

SLB Standard load-break switches

Accessories



Fourth pole module (Simultaneous switching)

To suit	AC 21 400 V (A)	AC 23 400 V (A)	AC 23 400 V (kW)	Cat. No.	Price \$
SLBM 16...40	16	16	5.5	2200 1000	19.00
	20	20	9	i 2200 1001	21.00
	25	25	11	2200 1002	24.00
	32	32	15	i 2200 1003	28.00
	40	40	18.5	2200 1004	30.00
SLBM 63...125	63	63	30	i 2200 1006	35.00
	80	80	40	2200 1008	39.00
	100	100	40	2200 1010	53.00
	125	125	63	2200 1011	64.00



SLBM AUX
Contacts
2299 0001



Door mounting kit



SLB AUX
Contacts
2699 0031

Auxiliary contacts (Early make / late break)

To suit	Type	Current (A)	Contacts	Cat. No.	Price \$
SLBM 16...125	N/O + N/C	10	N/O + N/C	2299 0001	27.00
	1 changeover faston type	16	1st C/O 2nd C/O	2699 0031 2699 0032	85.00 85.00
SLB 125...3200	1 changeover screw type	16	1st C/O 2nd C/O	2699 0241 2699 0242	127.00 127.00
	N/O + N/C	16	1st N/O + N/C	2699 0141	138.00
SLB 125...3200	N/O + N/C	16	2nd N/O + N/C	2699 0142	138.00
SLB 4000 ¹⁾	2 changeover	16	2 C/O	STANDARD	-

Door mounting kit

To suit		Cat. No.	Price \$
SLBM 16...80	For direct door mounting of an SLBM	2299 3309	15.00

SLBM Changeover switch front coupling

To suit		Cat. No.	Price \$
SLBM 16...80	Makes two load break into changeover (I-O-II)	2209 6009	106.00
SLBM 16...80	Makes two load break into changeover (I-I+I-II)	2299 6009	117.00

6 and 8 Pole switch kits

To suit		Cat. No.	Price \$
SLBM 16...80	Makes two 3P / 4P into 6P / 8P	2269 6009	64.00
SLB 125...160	Makes two 3P / 4P into 6P / 8P	2699 9170	720.00
SLB 200...250	Makes two 3P / 4P into 6P / 8P	2699 9230	1000.00
SLB 315...630	Makes two 3P / 4P into 6P / 8P	2699 9290	1430.00

6 Pole load break switches (a complete 6 pole switch contained within one switch body)

Handles and shafts are not supplied as standard with 6 pole switches. Refer handles and shaft types below.
Other accessories are the same as SCO changeover switches for the same ampere rating.

Rating (A)	Poles	Extension handle and shaft type to suit	Cat. No. ¹⁾	Price \$ ¹⁾
125	6	1423 2111 and 1400 1032	2601 6013	770.00
250	6	1433 3111 and 1401 1532	i 2601 6025	1060.00
400	6	1433 3111 and 1401 1532	i 2601 6040	1770.00
630	6	1433 3111 and 1401 1532	i 2601 6063	2490.00
1000	6	1433 3111 and 1401 1532	i 2601 6100	5740.00
1250	6	1433 3111 and 1401 1532	i 2601 6120	6240.00
1600	6	1433 3111 and 1401 1532	i 2601 6160	8590.00

Notes: ¹⁾ Switch body only

Available on indent only.

Price Schedule 'B2'

SLB Standard load-break switches Accessories



IP 20 Terminal shrouds



Screen



Phase Barriers

Terminal shrouds and screens²⁾

To suit	IP rating	Mounting position	No. of poles	Cat. No.	Price \$
SLBM 16...40	20	top & bottom	3 / Set of 2	2294 3005	24.00
SLBM 63...80	20	top & bottom	3 / Set of 2	2294 3009	35.00
SLBM 100...125	20	top & bottom	3 / Set of 2	2294 3016	39.00
SLBM 16...40	20	top & bottom	1 / Set of 2	2294 1005	10.00
SLBM 63...80	20	top & bottom	1 / Set of 2	2294 1009	14.00
SLBM 100...125	20	top & bottom	1 / Set of 2	2294 1011	14.00
SLB 125...160	20	top or bottom	3 ⁴⁾	2694 3014	85.00
	20	top or bottom	4 ⁴⁾	2694 4014	106.00
SLB 200...250	20	top or bottom	3 ⁴⁾	2694 3021	138.00
	20	top or bottom	4 ⁴⁾	i 2694 4021	148.00
SLB 315...630	20	top or bottom	3 ⁴⁾	2694 3051	191.00
	screen	top or bottom	4 ⁴⁾	i 2694 4051	200.00
SLB 800...1000	'C'screen	top or bottom	3	i 2698 3080	117.00
			4	2698 4080	138.00
SLB 1250...1800	screen	top or bottom	3	SLB 1000 COV	80.00
			4	2698 3120	191.00
SLB 2000-3200	screen	top or bottom	3	i 2698 4120	200.00
			4	i 2698 3200	370.00
SLB 4000 ³⁾		top & bottom	-	i 2698 4200	390.00
				- ³⁾	-

Phase barriers

To suit	Mounting position	No. of poles	Cat. No.	Price \$
SLB 125...160	Top or bottom	3	2998 0033	38.00
	Top or bottom	4	2998 0034	48.00
SLB 200...250	Top or bottom	3	2998 0023	43.00
	Top or bottom	4	2998 0024	59.00
SLB 315...630	Top or bottom	3	2998 0013	53.00
	Top or bottom	4	2998 0014	64.00
SLB 800...1800	Top & bottom	3	- ³⁾	-
	Top & bottom	4	- ³⁾	-
SLB 2000...3200	Top & bottom	3	- ³⁾	-
	Top & bottom	4	- ³⁾	-

Interlocking device - suits NHP ProSafe or Fortress key interlocks⁵⁾



To suit	Cat. No.	Price \$
SLB 125...1800	Shaft cam set for Fortress	1499 7702
SLB 2000...4000	Shaft cam set for Fortress	SLBLK4
NHP (ProSafe)	Shot bolt	TKNHP_ ¹⁾
NHP (ProSafe)	Key	TKNHPKEY_ ¹⁾

Notes: ¹⁾ Insert key code A,B,C.

²⁾ Screw fixing required for 690 V AC applications.

³⁾ Included as standard with switch.

⁴⁾ These terminal shrouds consist of clip-together 1 pole covers. Therefore they can be converted into 3 or 4 pole types.

⁵⁾ Install data.

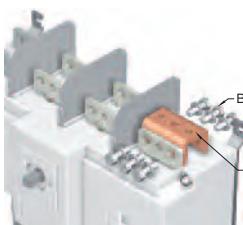
Refer application data in this section.

Available on indent only.

Price Schedule 'B2'

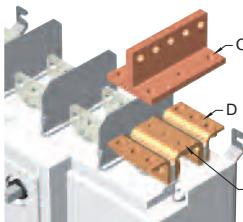
Copper bar connection kits

Optional connection kits for differing connection options


Use

To allow connection between the two power terminals from a same pole for 2000 to 3200 A ratings (Fig. 1 and Fig 2).

Fig. 1



For 3200 A switches, the connection pieces (part A) are supplied with the switch. M12 Bolt sets must be ordered separately.

Dimensions

See page 10 - 17 for connection kit assembly

Fig. 2

Top or bottom flat connection Fig. 1

Rating (A)	Part	Qty to order per pole ¹⁾	Cat No.	Price \$
2000...2500	Connection piece - part A	1	2619 1200	390.00
2000...2500	M12 Bolt set - part B	1	2699 1200	64.00
3200	Connection piece - part A	-	STANDARD	-
3200	M12 Bolt set - part B	1	2699 1200	64.00

Top or bottom flat connection Fig. 2

Rating (A)	Part	Qty to order per pole ¹⁾	Cat No.	Price \$
2000...2500	Connection piece - part A	1	2619 1200	390.00
2000...2500	T piece - part C	1	2629 1200 ²⁾	1030.00
2000...2500	Right angle - part D	2	2639 1200 ²⁾	710.00
3200	Connection piece - part A	-	STANDARD	-
3200	T piece - part C	1	2629 1200 ²⁾	1030.00
3200	Right angle - part D	2	2639 1200 ²⁾	710.00

Technical data and ratings chart - SIRCO M SLB 16 to 160 A

Ratings to AS/NZS 60947-3 and IEC 60947-3

Thermal current I_{th} (40 °C)		16 A	20 A	25 A	32 A	40 A	63 A	80 A	100 A	125 A
Rated AC insulation voltage	V	800	800	800	800	800	800	800	800	800
Rated impulse withstand voltage	kV	8	8	8	8	8	8	8	8	8
Thermal current (60°)		12.8	16	20	25.6	32	50.4	64	80	100
Rated operational current (50/60 Hz)	400 V	A	16	20	25	32	40	63	80	100
AC 21A	500 V	A	16	20	25	32	40	63	80	100
	690 V	A	16	20	25	32	40	63	80	100
AC 22A	400 V	A	16	20	25	32	40	63	80	100
	500 V	A	16	20	25	32	40	63	80	100
	690 V	A	16	20	25	32	40	63	80	100
AC 23A	400 V	A	16	20	25	32	40	63	80	100
	500 V	A	16	20	25	25	25	63	63	80
	690 V	A	16	20	25	25	25	40	40	63
24 - 48 V DC	DC-21 A		16	20	25	32	40	63	80	100
	DC-22 A		16	20	25	25	32	63	80	100
	DC-23 A		10	16	16	16	16	32	63	63
110 V DC	DC-21 A		16	20	25	25	32	32	40	40
	DC-22 A		8	10	10	10	10	25	32	32
	DC-23 A		3	5	5	5	5	16	16	20
Overload capacity										
Short time withstand current I_{cw} (RMS 0.3s) 400 V	kA	2.5	2.5	2.5	2.5	2.5	3	3	5	5
Rated peak withstand current (kA peak)	kA	6	6	6	6	6	9	9	12	12
Fuse protected short circuit withstand (kA RMS prospective)	400 V AC	kA	50	50	50	50	50	50	50	50
	Fuse	A	40	40	40	40	40	80	80	100
Mechanical endurance		Ops	100000	100000	100000	100000	100000	100000	100000	100000
Weight (3 pole)		Kg	0.16	0.16	0.16	0.16	0.16	0.26	0.26	0.7
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	-
Connection cable size		mm ²	1.5/16	1.5/16	1.5/16	1.5/16	1.5/16	2.5/35	2.5/35	10/70

Notes: 240/415 V ratings suitable for use on 230/400 V in accordance with AS 60038 : 2000.

¹⁾ Example for 3-pole device equipped top only; order 3 times the quantities.

²⁾ Bolt set is provided with the accessories.

Price Schedule 'B2'

Technical data and ratings chart

SIRCO SLB 125 to 630 A

Refer NHP for
1000 V AC
types to 400 A

Ratings to AS/NZS 60947-3 and IEC 60947-3

Thermal current I_{th} (40 °C)		125 A	160 A	200 A	250 A	315 A	400 A	500 A	630 A
Rated insulation voltage and rated operation voltage AC 20/DC 20	V	800	800	800	800	1000	1000	1000	1000
Rated impulse withstand voltage	kV	8	8	8	8	12	12	12	12
Thermal current (60°)		100	128	160	200	252	320	400	504
Rated operational current									
AC 21 A	400 V	A	125	160	200	250	315	400	500
	500 V	A	125	160	200	250	315	400	500
	690 V ¹⁾	A	125	160	160	200	315	400	500
AC 22 A	400 V	A	125	160	200	250	315	400	500
	500 V	A	125	125	200	250	315	400	500
	690 V ¹⁾	A	125	125	125	125	250	250	315
AC 23 A	400 V	A	125	160	200	250	315	400	500
	500 V	A	100	100	160	200	315	315	315
	690 V ¹⁾	A	63	63	80	100	160	160	160
Rated operational current									
DC 21 A	220 V	A	125	160	160	250	315	400	400
	500 V	A	125 ²⁾	125 ²⁾	160 ²⁾	200 ²⁾	315 ²⁾	400 ²⁾	500 ²⁾
DC 22 A	220 V	A	125	160	160	250	315	400	400
	500 V	A	125 ³⁾	125 ³⁾	160 ³⁾	200 ³⁾	315 ³⁾	315 ³⁾	500 ³⁾
DC 23 A	220 V	A	125	125	160	200	315	400	500
	500 V	A	125 ³⁾	125 ³⁾	160 ³⁾	200 ³⁾	315 ³⁾	400 ³⁾	500 ³⁾
Operational power									
AC 23 A	400 V	kW	63	80	100	132	160	220	280
	500 V	kW	63	63	110	140	220	220	220
	690 V	kW	55	55	75	90	150	150	150
Overload capacity	RMS 0.3s	kA	15	15	17	17	25	25	25
Short time withstand current I_{cw} RMS 1s	kA	7	7	9	9	13	13	13	13
400 V									
Rated peak withstand current (kA peak) 400 V	kA	20	20	30	30	45	45	45	46
Breaking capacity AC 23 A	400 V	A	1000	1280	1600	2000	2520	3200	4000
Making capacity AC 23 A	400 V	A	1250	1600	2000	2500	3150	4000	5000
Fuse protected short circuit withstand (kA RMS prospective).	400 V AC	kA	100	100	80	50	100	100	70
	Fuse	A	125	160	200	250	315	400	500
Rated capacitor power		kVar	55	75	90	115	145	185	230
Power dissipation watts/pole			1.8	3	4	5.8	7.6	10.8	16
Mechanical endurance		Ops	10000	10000	10000	10000	5000	5000	5000
Weight (3 pole)		Kg	1	1.1	1.7	1.7	4	4	4.1
Min. tightening torque		Nm	6.5	6.5	10	10	14.5	14.5	14.5
Connection cable size (min./max.)		mm ²	35/50	50/95	70/95	95/150	150/240	185/240	2 (150/300)

Notes: ¹⁾ 690 V with terminal shrouds or phase barriers.

²⁾ 2 poles in series for + and 1 pole for -.

³⁾ 2 poles in series for each polarity.

Technical data and ratings chart

SIRCO SLB 800 to 4000 A

Refer NHP for
1000 V AC
types to 400 A

Ratings to AS/NZS 60947-3 and IEC 60947-3

Thermal current I_{th} (40 °C)		800 A	1000 A	1250 A	1600 A	1800 A	2000 A	2500 A	3200 A	4000 A
Rated insulation voltage and rated operation voltage AC 20/DC 20	V	1000	1000	1000	1000	1000	1000	1000	1000	1000
Rated impulse withstand voltage	kV	12	12	12	12	12	12	12	12	12
Thermal current (60°)		640	800	1000	1280	1440	1600	2000	2526	3200
Rated operational current										
(50/60 Hz)	400 V A	800	1000	1250	1600	1800	2000	2500	3200	3200
AC 21 A	500 V A	800	800	1250	1600	1600	2000	2500	3200	3200
	690 V ¹⁾ A	800	800	1000	1000	1000	2000	2000	2000	2000
AC 22 A	400 V A	800	1000	1250	1600	1800	2000	2000	2500	2500
	500 V A	800	800	1000	1250	1250	1600	1600	2000	2000
	690 V ¹⁾ A	800	800	1000	1000	1000	1000	1000	1000	1000
AC 23 A	400 V A	800	1000	1250	1250	1250	1600	1600	1600	1250
	500 V A	630	630	1000	1000	1000	1000	1000	1000	1000
	690 V ¹⁾ A	200	200	500	500	500	800	800	800	800
Rated operational current										
DC 21 A	220 V A	800	1000	1250	1250	1250	2000	2000	2000	2000
	500 V A	800 ³⁾	1000 ³⁾	1250 ³⁾	1250 ³⁾	1250 ³⁾	1250	1250	1250	1250
DC 22 A	220 V A	800	1000	1250	1250	1250	1250	1250	1250	1250
	500 V A	800 ³⁾	1000 ³⁾	1250 ³⁾						
DC 23 A	220 V A	800	1000	1250	1250	1250	1250	1250	1250	1250
	500 V A	800 ³⁾	1000 ³⁾	1250 ³⁾	1250 ³⁾	1250 ³⁾	1000 ³⁾	1000 ³⁾	1000 ³⁾	1000 ³⁾
Operational power										
AC 23 A	400 V kW	450	560	710	710	710	710	710	710	710
	500 V kW	450	450	710	710	710	710	710	710	710
	690 V kW	185	185	475	475	475	750	750	750	750
Overload capacity	RMS 0.3s kA	50	65	100	100	100	100	100	110	110
Short time withstand current I_{cw} RMS 1s 400 V	kA	26	35	50	50	50	50	50	55	70
Rated peak withstand current (kA peak) 400 V	kA	55	105	105	110	110	110	110	120	150
Breaking capacity AC 23 A	400 V A	6400	8000	8000	8000	8000	10000	10000	10000	10000
Making capacity AC 23 A	400 V	8000	10000	10000	10000	10000	12500	12500	12500	12500
Fuse protected short circuit withstand (kA RMS prospective).	400 V AC kA	50	100	100	100	100	100	100	—	—
	Fuse A	800	1000	1250	2x800	2x800	2x1000	2x1250	—	—
Rated capacitor power	kVAr	365	460	575	—	—	—	—	—	—
Power dissipation watts/pole		39.2	45	85	122	153	178	255	444	916
Mechanical endurance	Ops	3000	3000	4000	4000	4000	3000	3000	3000	2500
Weight (3 pole)	Kg	9.2	9.5	12	12	12	22	22	22	90
Min. tightening torque	Nm	37	37	40	40	40	40	40	40	40
Connection cable size (min./max.)	mm ²	2 (185/300)	2 240/4 185	4 185 max	6 185 max	6 185 max	—	—	—	—

Notes: Refer to previous page

Application data load-break / MCCB Socomec load-break switch and TemBreak MCCB co-ordination chart

TemBreak 2 MCCB

Socomec load-break switch

	MCCB Cat. No.	(kA)						
SLBM 63	E125NJ	6.5	S125NJ	6.5	S125GJ	6.5	H125NJ	7.5
SLB 125	E125NJ	22	S125NJ	22	S125GJ	22	H125NJ	30
	-	-	S160NJ	15	S160GJ	15	H160NJ	27
	E250NJ	15	S250NJ	15	S250GJ	15	H250NJ	26
SLB 200	E125NJ	25	S125NJ	36	S125GJ	65	H125NJ	80
	-	-	S160NJ	30	S160GJ	30	H160NJ	80
	E250NJ	25	S250NJ	30	S250GJ	30	H250NJ	80
SLB 250	E250NJ	25	S250NJ	30	S250GJ	30	H250NJ	50
	E400NJ	25	S400NJ	25	S400GJ	25	H400NJ	35
SLB 315	E250NJ	25	S250NJ	36	S250GJ	65	H250NJ	100
	E400NJ	25	S400NJ	50	S400GJ	65	H400NJ	100
SLB 400	E400NJ	25	S400NJ	50	S400GJ	65	H400NJ	100

TemBreak MCCB

Socomec load-break switch

	Cat. No.	(kA)	Cat. No.	(kA)	Cat. No.	(kA)
SLB 630	E630NE	35	S630CE	35	TL630NE	24
SLB 800	XS800NJ	40	XH800PJ	40	TL800NE	28
SLB 1000	XS1250SE	45	XS1600SE	45	TL1250NE	45
SLB 1250	XS1250SE	65	XS1600SE	75	TL1250NE	70
SLB 1600	XS1600SE	75	XS2000NE	60	-	-
SLB 2000	XS2000NE	60	XS2500NE	60	-	-
SLB 2500	XS2500NE	60	-	-	-	-

Notes: Figures based on / valid for – 400/415 V AC.

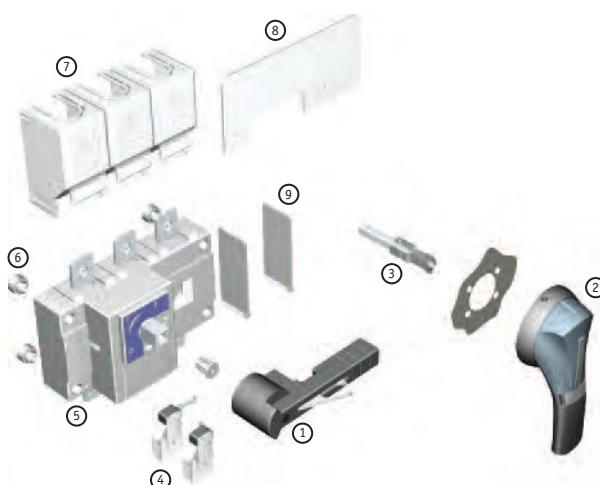
All Socomec load-break switches can be used in higher prospective fault current level applications, due to the upstream Terasaki TemBreak MCCB reducing the peak let-through current.

Example: SLB 250 can be used in a 30 kA application if there is an upstream S250NJ MCCB.

For other combinations please refer to NHP.

Electronic MCCBs can be used to replace thermal magnetic types.

SLB Accessory fitting



- ① Direct front handle
- ② Door interlock external handle
- ③ Shaft extension
- ④ IP2 Auxiliary contacts
- ⑤ Switch body only
- ⑥ Spacers
- ⑦ Terminal shrouds
- ⑧ Shrouded distribution block
- ⑨ Inter phase barrier

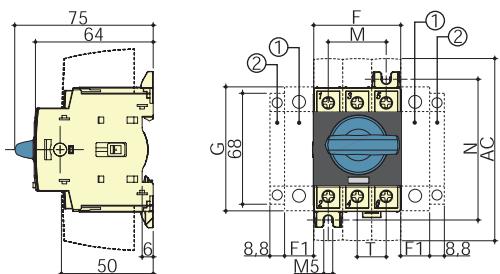
Overview (for further details, please see the installation instructions supplied with each device)

Technical data and dimensions (mm)

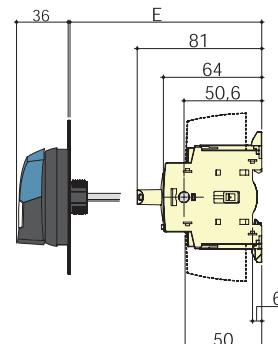
SIRCO M SLB 16 to 125 A

SIRCO M 16 to 80 A

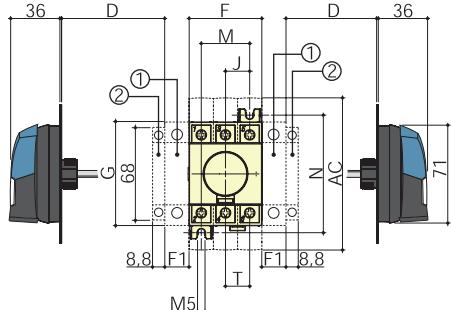
Direct operation with handle



External front operation



External side operation



Rating (A)	Overall dimensions				Terminal shrouds		Switch body		Switch mounting		Connection terminals	
	D min.	D max.	E min.	E max.	AC	F	F1	G	J	M	N	T
16...40	30	235	100	372	110	45	15	68	15	30	75	15
63...80	30	235	100	372	110	52.5	17.5	76	17.5	35	85	17.5

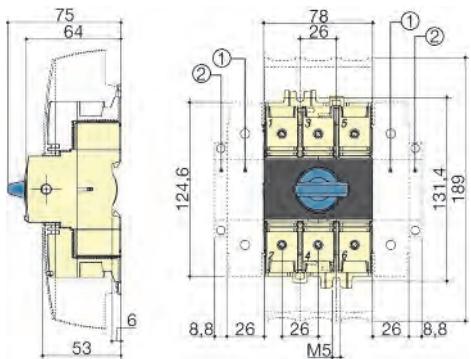
(1) 1 switched fourth pole module (1 per device max.) or 1 unswitched neutral pole or 1 protective earth module or 1 auxiliary contact.

(2) 1 auxiliary contact only.

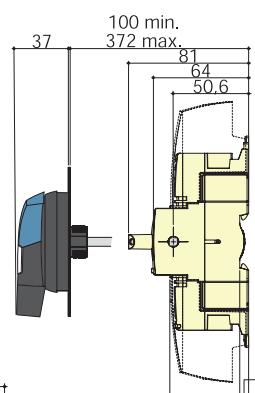
Note: Max. 4 additional blocks

SIRCO M 100 A to 125 A

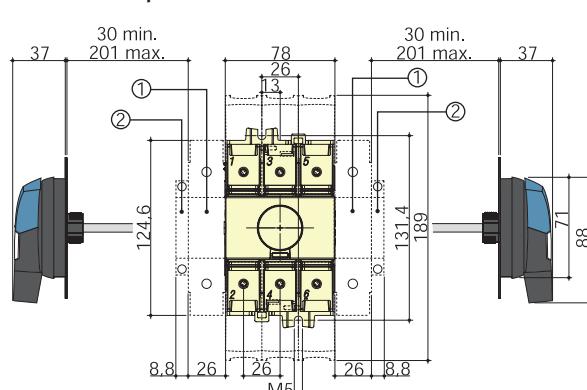
Direct operation with handle



External front operation



External side operation

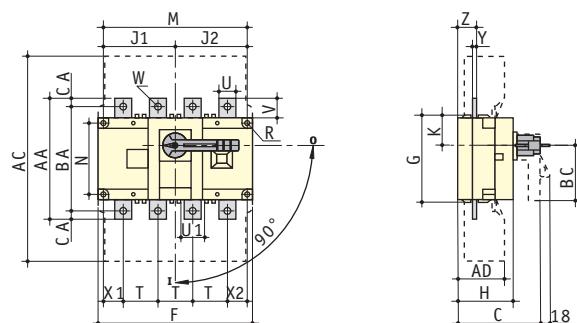


Technical data and dimensions (mm)

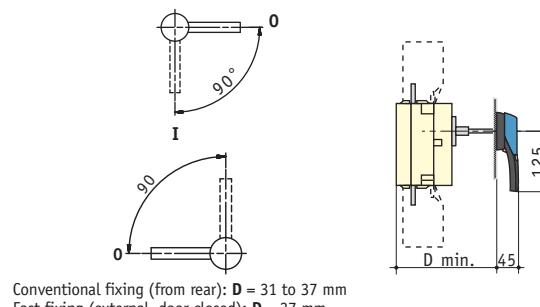
SIRCO SLB 125 to 1800 A

SIRCO SLB 125 to 630 A

Direct front operation



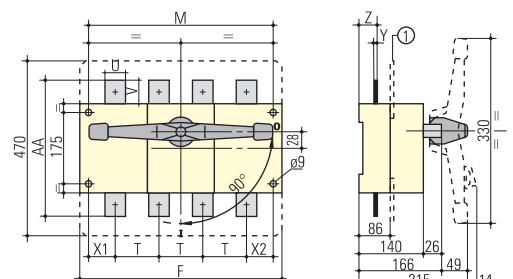
External front operation



Rating A	Overall dimensions			Terminal shrouds		Switch body				Switch mounting			Connection terminals																	
	C	D min.	AC	AD	F 3p	F 4p	G	H	J1 3p	J1 4p	J2	K	BC	M 3p	M 4p	N	R	T	U	U1	V	W	X1 3p	X1 4p	X2	Y	Z	AA	BA	CA
125	115	125	235	50	140	170	93	65	45	75	75	31.5	80	120	150	65	5.5	36	20	20.5	25	9	28	22	20	3.5	20.5	135	115	10
160	115	125	235	50	140	170	93	65	45	75	75	31.5	80	120	150	65	5.5	36	20	20.5	25	9	28	22	20	3.5	20.5	135	115	10
200	125	135	280	60	180	230	108	75	55	105	105	34	115	160	210	80	5.5	50	25	25.5	30	11	33	33	27	3.5	22.5	160	130	15
250	125	135	280	60	180	230	108	75	55	105	105	34	115	160	210	80	5.5	50	25	25.5	30	11	33	33	27	3.5	22.5	160	130	15
315	160	165	401	89	230	290	170	110	75	135	135	55	115	210	270	140	7	65	32	45.5	37.5	11	42.5	37.5	37.5	5	36	235	205	15
400	160	165	401	89	230	290	170	110	75	135	135	55	115	210	270	140	7	65	32	45.5	37.5	11	42.5	37.5	37.5	5	36	235	205	15
500	160	165	401	89	230	290	170	110	75	135	135	55	115	210	270	140	7	65	32	45.5	37.5	13	42.5	37.5	37.5	5	36	235	205	15
630	160	165	400	89	230	290	170	110	75	135	135	55	115	210	270	140	7	65	45	45.5	50	13	42.5	37.5	37.5	5	36	260	220	20

SIRCO SLB 800 to 1800 A

Direct front operation

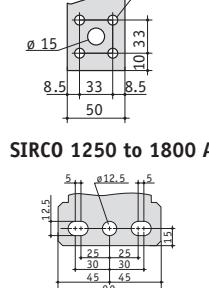


1 Terminal screens

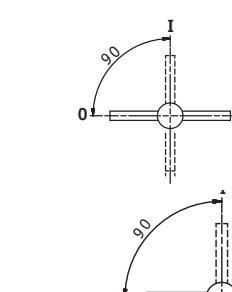
Terminal bolts not supplied with switch

Connection terminal

SIRCO 800 to 1000 A



External front operation



- A. Handle single arm S3 type.
- B. Handle double arm S4 type.

Rating (A)	Switch body		Switch mounting		T	U	V	Connection terminals					
	F 3p	F 4p	M 3p	M 4p				Y	X1	X2	Z	AA	
800	280	360	255	335	80	50	60.5	7	47.5	47.5	46.5	321	
1000	280	360	255	335	80	50	60.5	7	47.5	47.5	46.5	321	
1250	372	492	347	467	120	90	44	8	53.5	53.5	47.5	288	
1600	372	492	347	467	120	90	44	8	53.5	53.5	47.5	288	
1800	372	492	347	467	120	90	44	8	53.5	53.5	47.5	288	

Shaft table (Standard shaft supplied with switch and handle)

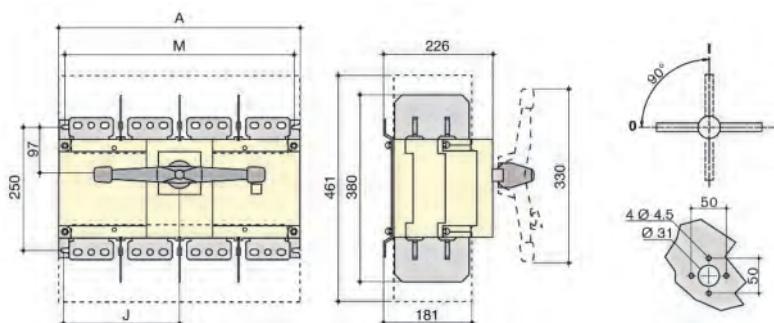
To suit	Minimum distance back-plate to door	Maximum distance back-plate to door	Shaft No.	Shaft length
SLB 125...160	125 mm	370 mm	14001032	320 mm
SLB 200...250	135 mm	385 mm	14001032	320 mm
SLB 315...630	165 mm	415 mm	14001032	320 mm
SLB 800...1800	221 mm	463 mm	14011532	320 mm

Technical data and dimensions (mm)

SIRCO SLB 2000 to 3200 A

SIRCO SLB 2000 to 3200 A

Direct front operation



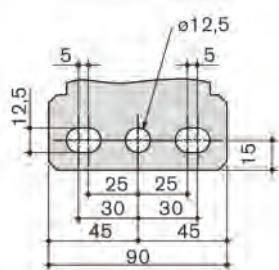
Rating (A)	Overall dimensions		Switch body		Switch mounting	
	A 3p	A 4p	J 3p	J 4p	M 3p	M 4p
2000 to 3200	372	492	173.5	233.5	347	467

Shaft table (Standard shaft supplied with switch and handle)

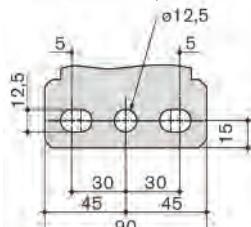
To suit	Minimum distance back-plate to door	Maximum distance back-plate to door	Shaft No.	Shaft length
SLB 2000...3200	415 mm	690 mm	27993018	320 mm

Connection terminals

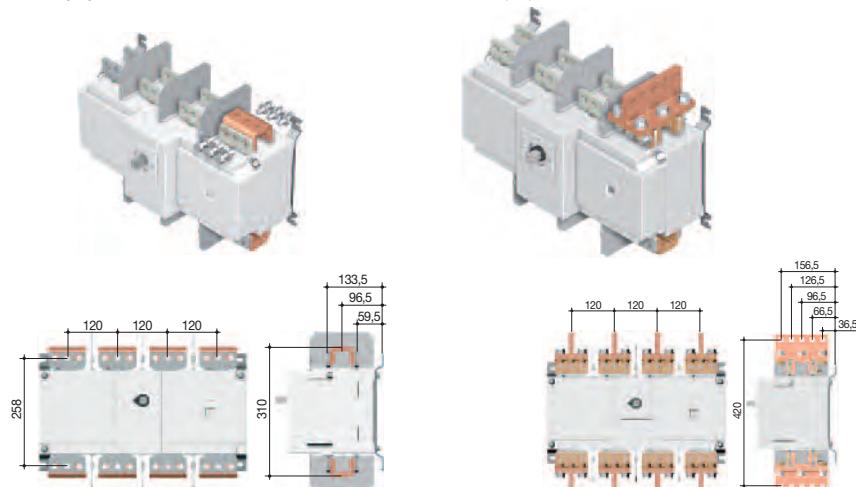
- SIRCO 2000 to 2500 A



- SIRCO 3200 A ¹⁾



Copper bar connection kits ^{2)³⁾}



Notes: Terminal bolts not supplied with Sirco 2000 - 3200 A switches

¹⁾ 3200 A switches are supplied with connection links as standard, as shown in figure 1. The links have threaded holes with 30 mm centres, 30 mm + 30 mm apart. Therefore, although the tags of 3200 A switches are exactly the same as 2000 - 2500 A types, the holes in the supplied link will require 30 mm + 30 mm hole spacing in any attached busbars.

²⁾ In order to prevent possible damage to the switch, NHP recommends that busbar supports be used to prevent heavy conductors from placing excessive weight or pivot forces on the switch connection tags.

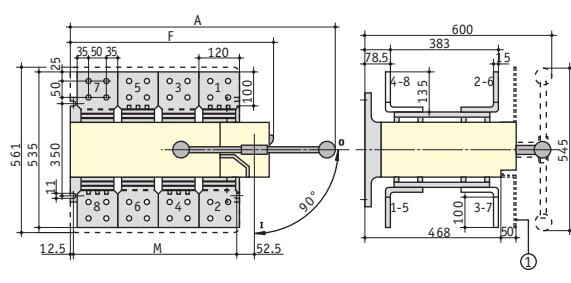
³⁾ Terminal bolts not supplied with 2000 - 3200 A switches.

Technical data and dimensions (mm)

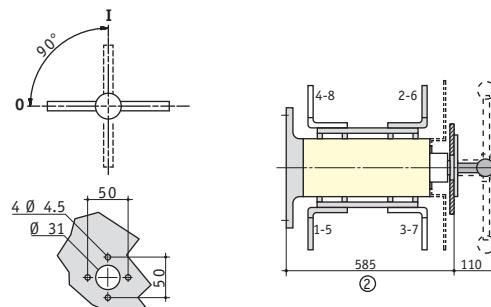
SIRCO SLB 4000 A

SIRCO SLB 4000 A

Direct front operation



External front operation



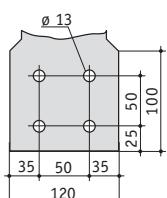
① Terminal screens.

② Min. length with coupling part for shaft extension (shaft 40 mm): 635 mm.

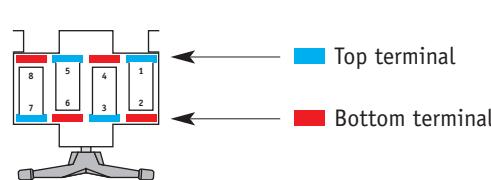
Rating (A)	Overall dimensions		Switch body		Switch mounting	
	A 3p	A 4p	F 3p	F 4p	M 3p	M 4p
4000	684	804	470	590	347	467

Connection terminals

• SIRCO 4000 A



• SIRCO 4000 A



External Handles with metal padlock levers – IP 65

Standard Load Break (SLB) and Standard Switch Fuses (SSF)

Handle Size	SLB Switch rating (A)	SSF switch rating (A)	Handle colour	Cat. No.	Price \$
S1	16 - 160	20 - 63	Black Blue	141D2911	101.00
			Yellow Red	141E2911	101.00
S2	125 - 630	100 - 400	Black Blue	142D2911	143.00
			Yellow Red	142E2911	143.00
S3	250 - 1600	630 - 800	Black Blue	143D3911	250.00
			Yellow Red	143E3911	250.00
S4	800 - 1800	1250	Black Blue	144D3911	270.00
			Yellow Red	144E3911	270.00

Standard Changeover Switches (SCO)

Handle Size	SLB Switch rating (A)	Handle colour	Cat. No.	Price \$
S1	100 - 160	Black Blue	FES1N654XDXC	191.00
S2	125 - 630	Black Blue	FES2N654XDXC	230.00
S3	250 - 1600	Black Blue	FES3N654XDXC	390.00
S4	800 - 1800	Black Blue	FES4N654XDXC	480.00

Price Schedule 'B2'

S-TYPE HANDLE

Suitable for all Socomec switches



Safety

- Door interlocking is standard in the ON position
- Door interlock can be bypassed using Door Defeat function
- Padlocking in the OFF position is standard with up to three padlocks
- Red/ Yellow handle option to highlight emergency breaking and disconnecting
- Door is interlocked when handle is padlocked and cannot be bypassed

Robust

- Suitable for the most arduous applications and harsh environments
- All key functional parts are metallic to assure maximum reliability
- Metal to metal contact between shaft and handle
- UV and chemical agent resistive material to allow use in many environments
- Suits trapped-key interlocking systems

Ease of installation

- Quick and easy to install
- Small panel area 70 mm diameter requirement
- All sizes require only a 31-38 mm hole
- Standard handle can be used for front or side operation
- Four handle sizes to cover Socomec switch range

Ergonomic

- Modern ergonomic stylish design
- Allows safe and efficient operation
- Can be customised (Optional colours)

Options

- Heavy duty metal lock lever (above)
- ON locking field conversion option

VLB

**Visible contact
load-break
switches 32 to 1600 A**



**NEW
VLBM type**



VLB 32...40

SIRCO VM and MV 32 to 200 A

The SIRCO VM and Sider ranges of visible contact load-break switches feature fully visible breaking in a compact and efficient design. The range extends from a compact 32 A version to a very capable 1600 A model. Side operated versions and an extensive range of accessories are available, providing the complete visual switching solution. The best visible contact range on the market.

Front operated surface mount

(Supplied with external handle and 320 mm shaft 63 Amp and above)

32 A

Size	AC 21 400 V (A)	AC 23 400 V (A)	AC 23 400 V (kW)	No. of poles	Cat. No. ¹⁾	Price \$
VMO	32	32	15	3 Direct handle	VLB 32 3P	320.00
40 A	40	40	18.5	3 Direct handle	VLB 40 3P	350.00

63 A

VM1	63	63	30	3	VLB 63 3P	380.00
				4	VLB 63 4P	435.00

80 A

VM1	80	63	30	3	VLB 80 3P	405.00
				4	VLB 80 4P	465.00

100 A

VM1	100	100	45	3	VLB 100 3P	420.00
				4	VLB 100 4P	480.00

125 A

SIRCO MV	125	125	55	3	VLB 125 3P	510.00
				4	VLB 125 4P	580.00

160 A

VM2	160	160	75	3 ¹⁾	VLB 160 3P	600.00
				4	VLB 160 4P	690.00

200 A

VM2	200	200	100	3 ¹⁾	VLB 200 3P	750.00
				4	VLB 200 4P	870.00

Accessories for SIRCO VM and MV switches

Description	Page
Accessories	10 - 22 to 10 - 23
Technical data	10 - 24 to 10 - 25
Dimensions	10 - 26 to 10 - 28



VLB 200

Notes: ¹⁾ VM2, 6 and 8 pole switches available on indent only. Refer NHP.
i Available on indent only.

Price Schedule 'B2'

VLB Visible contact load-break switches

SIDER ND 250 to 500 A

SIDER 630 to 1600 A



VLB 250...500

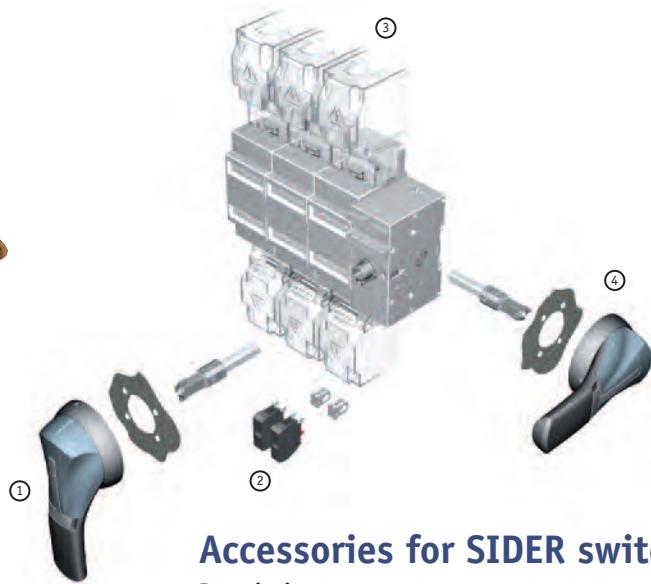
Front operated surface mount
(Supplied with external handle and 320 mm shaft)

	AC 21 400 V (A)	AC 23 400 V (A)	AC 23 400 V (kW)	No. of poles	Cat. No. ¹⁾	Price \$
250 A	250	250	140	3 ¹⁾	VLB 250 3P	1140.00
				4	i VLB 250 4P	1230.00
315 A	315	315	160	3 ¹⁾	VLB 315 3P	1200.00
				4	i VLB 315 4P	1350.00
400 A	400	400	220	3 ¹⁾	VLB 400 3P	1360.00
				4	i VLB 400 4P	1510.00
500 A	500	500	295	3 ¹⁾	VLB 500 3P	1740.00
				4	i VLB 500 4P	2450.00
630 A	630	630	355	3	VLB 630 3P	2700.00
				4	i VLB 630 4P	3740.00
800 A	800	630	355	3	VLB 800 3P	3740.00
				4	i VLB 800 4P	4760.00
1250 A	1250	1000	560	3	VLB 1250 3P	6050.00
				4	i VLB 1250 4P	7600.00
1600 A	1600	1000	560	3	VLB 1600 3P	7080.00
				4	i VLB 1600 4P	8770.00

VLB 250...500 Accessory fitting



VLB 630...1600



- ① Door interlocked external front handle
 - ② 2 x 2 configurable U type ACs for pre-break and signalling or TEST
 - ③ Terminal shrouds
 - ④ Extended RHS handle.
- Overview (for further details, please see the installation instructions supplied with each device)

Accessories for SIDER switches

Description	Page
Accessories	10 - 22 to 10 - 23
Technical data	10 - 24 to 10 - 25
Dimensions	10 - 26 to 10 - 28

Notes: ¹⁾ Sider ND6 and 8 pole switches available on indent only. Refer NHP.
i Available on indent only.

Price Schedule 'B2'

VLB Visible contact load-break switches Accessories



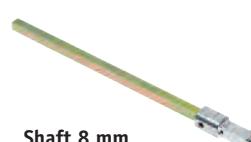
Direct handle



External handle (S2)



Shaft 5 mm



Shaft 8 mm



Shaft 12 mm

Direct mount handles ('OFF' padlockable, 'ON' locking field convertible)

To suit	Type	Colour	Cat. No.	Price \$
VLB 32...40	Direct	Black	2599 4012	16.00
VLB 63...80	Direct	Black	2599 5012	85.00
VLBM 100...160	Direct	Black	2299 5022	96.00
VLB 200	Direct	Black	2599 5022	96.00
VLB 630...1600	Direct	Black	2799 7012	225.00

External mount handles ('OFF' padlockable, 'ON' locking field convertible)

To suit	Type	Colour	IP rating	Cat. No.	Price \$
VLB 63...80 + 200	Pistol - S1	Black	65	1413 2111	85.00
		Red/Yellow	65	1414 2111	96.00
VLB 250...500	Pistol - S2	Black	65	1423 2111	127.00
		Red/Yellow	65	1424 2111	170.00
VLB 630...1600	T-Handle - S4	Black	65	1443 3111	245.00
		Red/Yellow	65	1444 3111	245.00

External side mount handles for SIRCO MV - 100 to 160 Amp

To suit	Description	Cat. No.	Price \$
VLBM 100...160	Right side hadle S1	14172111	180.00
	Left side handle S1	141 A 2111	180.00

Shaft extensions

To suit	Shaft length	Blackplate to door (max.)	Blackplate to door (min.)	Cat. No.	Price \$
VLB 63...80 + 200 8 mm ² shaft	320 mm	380 mm	96 mm	1402 0832	53.00
VLBM 100...160 6mm ² shaft	320mm	357mm	110mm	1401 0632	90.00
VLB 250...500 10 mm ² shaft	320 mm	350 mm	95 mm	1400 1032	53.00
VLB 630...1600 12 mm ² shaft	320 mm	675 mm	295 mm	1401 1532	106.00
	400 mm	755 mm	295 mm	1401 1540	170.00

Notes:  Available on indent only.

Price Schedule 'B2'

VLB Visible contact load-break switches

Accessories

Auxiliary contacts (early break - late make)



Auxiliary contact
3999 0702



Auxiliary contact
2599 0001



Auxiliary contact
3999 0041



Shroud
3998 3025



Phase barriers
2998 0003



Price Schedule 'B2'

To suit	Type	Current (A)	Contacts	Cat. No.	Price \$
VLB 32...40	Front	5	1 N/O ²⁾	3999 0701	48.00
	Front	5	1 N/C ²⁾	3999 0702	48.00
	Side	5	2 C/O ¹⁾	3999 0002	170.00
VLB 63...80 + 200	Internal	16	1 C/O ²⁾	2599 0001	117.00
	Internal	5	1 N/O ²⁾	3999 0701	48.00
VLBM 100...160	Internal	5	1 N/C ²⁾	3999 0702	48.00
	Side	10	N/O + N/C ^{1) 6)}	2299 0001	27.00
	Front	5	1 N/O ¹⁾	3999 0701	48.00
	Front	5	1 N/C ¹⁾	i 3999 0702	48.00
VLB 250...500	Left side 1st	20	1 N/O + 1 N/C ³⁾	i 3999 0041	180.00
	Left side 2nd	20	1 N/O + 1 N/C ³⁾	3999 0042	210.00
	Left side 3rd	20	1 N/O + 1 N/C ³⁾	i 3999 0043	320.00
	Left side 4th	20	1 N/O + 1 N/C ³⁾	i 3999 0044	520.00
VLB 630...1600	Left side 1st	16	1 C/O	2799 0001	117.00
	Left side 2nd	16	1 C/O	2799 0002	117.00
	Left side 1st	16	1 N/O + 1 N/C	2799 0005	148.00

Terminal shrouds and screens

To suit	IP rating	Mounting position	No. of poles	Cat. No.	Price \$
VLBM 100...160	20	Top and bottom ⁵⁾	3	2294 3016	39.00
	20		4	2294 4016	106.00
VLB 160...200	20	Top and bottom ⁵⁾	3/4	2594 4020	96.00
	20	Top and bottom ⁵⁾	3	i 3998 3025	138.00
VLB 250...500	20	Top and bottom ⁵⁾	4	3998 4025	143.00
	Screen	Top and bottom ⁵⁾	3	i 2998 3080	138.00
VLB 630...800	Screen	Top and bottom ⁵⁾	4	2998 4080	143.00
	Screen	Top and bottom ⁵⁾	3	i 2998 3120	143.00
	Screen	Top and bottom ⁵⁾	4	2988 4120	191.00

* VLB 32...80 supplied with IP20 terminals as standard

* Quantity of 2 covers required required to shroud top and bottom terminals.

Phase barriers

To suit	No. of poles	Cat. No.	Price \$
VLB 630...1600	3 ⁵⁾	2998 0003	78.00
	4 ⁵⁾	2998 0004	96.00

Interlocking device - suits NHP ProSafe or Fortress key interlocks

To suit	Cat. No.	Price \$
VLB 63...1600	S type handles	1499 7702
NHP (ProSafe)	Shot bolt	TKNHP_ ⁴⁾
NHP (ProSafe)	Key	TKNHPKEY_ ⁴⁾

Notes: ¹⁾ Max. 4 auxiliary contacts.

²⁾ Max. 2 auxiliary contacts.

³⁾ Auxiliary is configurable to 2 N/O or 2 N/C.

⁴⁾ Insert key code A,B,C.

⁵⁾ 2 set required 1 for line and 1 for load.

⁶⁾ Not pre break type.

ⁱ Available on indent only.

Technical data and ratings chart

SIRCO VM VLB 32 to 200 A

Ratings to AS/NZS 60947-3 and IEC 60947-3

	VM0	VM1		SIRCO MV				VM2	
		32 A	40 A	63 A	80 A	100 A	125 A	160 A	200 A
Rated insulation voltage and rated operation voltage AC 20/DC 20	V	800	800	800	800	800	800	800	800
Rated impulse withstand voltage	kV	8	8	8	8	8	8	8	8
Rated operational current									
AC 21A	400 V A	32	40	63	80	100	125	160	200
	500 V A	32	40	63	80	100	125	160	200
	690 V ¹⁾ A	32	40	63	80	100	125	125	200
AC 22A	400 V A	32	40	63	80	100	125	160	200
	500 V A	32	40	63	80	100	100	125	200
	690 V ¹⁾ A	32	40	40	40	100	80	100	160
AC 23A	400 V A	32	40	63	63	100	125	160	200
	500 V A	32	40	50	50	80	80	100	200
	690 V ¹⁾ A	32	40	25	25	63	80	80	63
Rated operational current/poles in series									
DC 21A	220 V A	32	32	63 ²⁾	80 ²⁾	100 ²⁾	125 ²⁾	160 ²⁾	200 ²⁾
	440 V A	—	—	40 ²⁾	40 ²⁾	40 ²⁾	40 ²⁾	160 ²⁾	160 ²⁾
DC 22A	220 V A	—	—	63 ²⁾	80 ²⁾	100 ²⁾	125 ²⁾	160 ²⁾	200 ²⁾
	440 V A	—	—	32 ²⁾	32 ²⁾	32 ²⁾	32 ²⁾	100 ²⁾	100 ²⁾
DC 23A	220 V A	—	—	63 ²⁾	63 ²⁾	63 ²⁾	63 ²⁾	160 ²⁾	160 ²⁾
	440 V A	—	—	32 ²⁾	32 ²⁾	32 ²⁾	32 ²⁾	63 ²⁾	63 ²⁾
Operational power									
AC 23A	400 V kW	15	18.5	30	30	45	55	75	100
	500 V kW	18.5	25	33	33	45	55	75	140
	690 V kW	25	33	22	22	45	55	75	55
Overload capacity	RMS 0.3s kA	2.6	2.6	4.5	4.5	7	7	7	8
Short time withstand current	RMS 1s kA	1.3	1.3	2.5	2.5	2.5	2.5	4	4
Icw 400 V									
Breaking capacity	400 V A	256	320	504	504	504	1000	1280	1600
AC 23A									
Fuse protected short circuit withstand AC	400 V kA	100	25	100	100	100	65	50	50
(kA RMS prospective)	Fuse A	32	40	63	80	100	125	160	160
Rated capacitor power @ 400 VAC	kVAr	15	18	28	37	45	55	75	90
Mechanical endurance	Ops	20000	20000	20000	20000	50000	50000	50000	10000
Weight (3 pole)	Kg	0.5	0.5	0.7	0.7	0.7	0.7	0.7	1.2
Min. tightening torque	Nm	2	2	6	6	4	4	4	9
Connection cable size (min./max.)	mm ²	2.5/16	2.5/16	4/50	4/50	10/70	10/70	10/70	10/95

Notes: ¹⁾ 690 V with terminal shrouds or phase barriers.

²⁾ 4 pole device with 2 poles in series by polarity.

240/415 V ratings suitable for use on 230/400 V in accordance with AS 60038 : 2000.

Technical data and ratings chart

SIDER VLB 250 to 1600 A

Ratings to AS/NZS 60947-3 and IEC 60947-3

		250 A	315 A	400 A	500 A	630 A	800 A	1250 A	1600 A
Rated insulation voltage and rated operation voltage AC 20/DC 20	V	800	800	800	800	1000	1000	1000	1000
Rated impulse withstand voltage	kV	8	8	8	8	12	12	12	12
Rated operational current									
AC 21A	400 V A	250	315	400	500	630	800	1250	1600
	500 V A	250	250	315	315	630	800	1250	1600
	690 V ¹⁾ A	250	315	400	500	630	800	1250	1600
AC 22A	400 V A	250	315	400	500	630	800	1000	1250
	500 V A	250	250	315	315	630	800	1000	1000
	690 V ¹⁾ A	250	315	400	500	315	315	400	400
AC 23A	400 V A	250	315	400	500	630	630	1000	1000
	500 V A	250	250	315	315	500	500	800	800
	690 V ¹⁾ A	250	250	315	315	100	125	200	200
Rated operational current/poles in series									
DC 21A	220 V A	250	250	–	–	630	800	1000	1250
	440 V A	250 ²⁾)	250 ²⁾)	–	–	500	630	–	1000
DC 22A	220 V A	250	250	–	–	630	800	800	800
	440 V A	250 ²⁾)	250 ²⁾)	–	–	630 ²⁾)	800 ²⁾)	800 ²⁾)	800 ²⁾)
DC 23A	220 V A	200	200	–	–	630	800	800	800
	440 V A	200 ²⁾)	200 ²⁾)	–	–	630 ²⁾)	800 ²⁾)	800 ²⁾)	800 ²⁾)
Operational power									
AC 23A	400 V kW	140	160	220	295	355	355	560	560
	500 V kW	160	160	220	220	355	355	560	560
	690 V kW	220	220	295	295	90	110	185	185
Overload capacity	RMS 0.3s kA	17	17	17	17	50	50	100	100
Short time withstand current	RMS 1s kA	9	9	9	9	26	26	50	50
Icw 400 V									
Rated peak withstand current (kA peak)		32.5	32.5	40	40	55	55	100	110
Fuse protected short circuit withstand AC (kA RMS prospective)	400 V kA	100	60	50	30	100	70	100	120
	Fuse A	250	315	400	500	630	800	1250	2x800
Rated capacitor power	kVAr	115	145	185	230	290	365	575	–
Mechanical endurance	Ops	10000	10000	10000	10000	5000	4000	4000	3000
Weight (3 pole)	Kg	3.2	3.2	4.0	4.0	10.5	10.5	11.5	16.5
Min. tightening torque	Nm	12	12	15	15	45	45	45	60
Connection cable size (min./max.)	mm ²	240	240	2x150	2x150	2x300	2x300	4x185	6x240

Notes: ¹⁾ 690 V with terminal shrouds or phase barriers.
²⁾ 4 pole device with 2 poles in series by polarity.

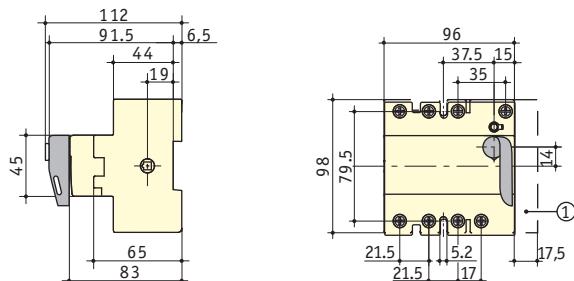
240/415 V ratings suitable for use on 230/400 V in accordance with AS 60038 : 2000.

Technical data and dimensions (mm)

SIRCO VM VLB 32 to 200 A

SIRCO VM VLB 32 to 40 A

Direct front operation

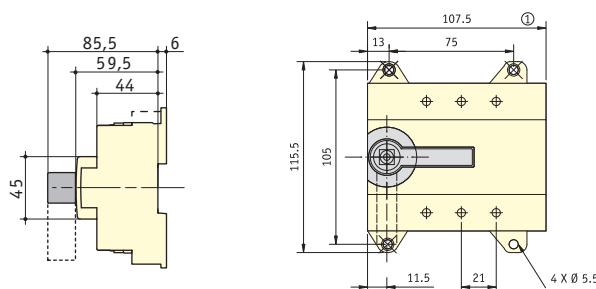


(1) Auxiliary contact

SIRCO VM VLB 63 to 80 A

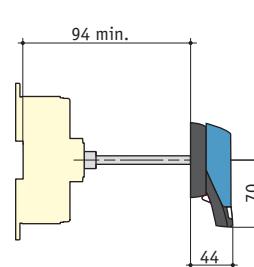
Direct front operation

External front operation



(1) 6 modules wide

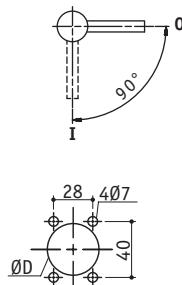
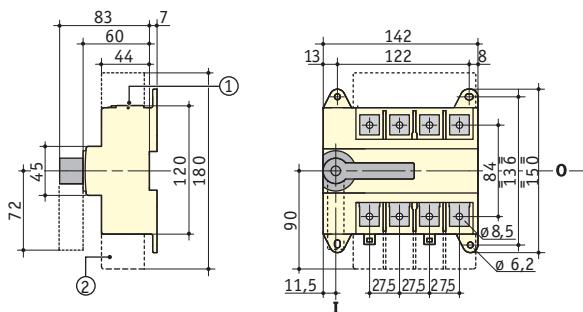
Conventional fixing (from rear): $D = 31$ to 37 mm
Fast fixing (external, door closed): $D = 37$ mm



SIRCO VM VLB 200 A

Direct front operation

External front operation



Conventional fixing (from rear): $D = 31$ to 37 mm
Fast fixing (external, door closed): $D = 37$ mm

(1) Additional cage terminals with terminal shrouds top or bottom (accessories)

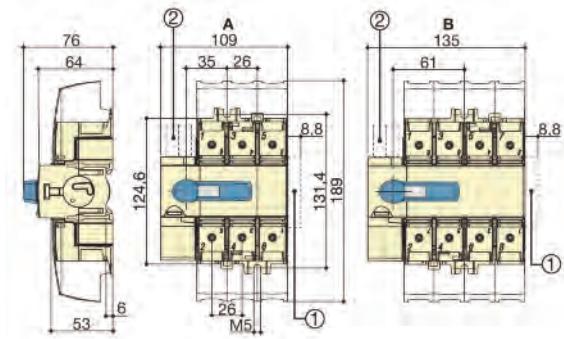
(2) Additional terminal shrouds (accessories)

Technical data and dimensions (mm)

SIRCO MV 100 to 160 A

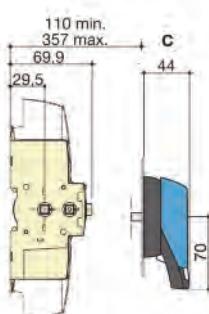
SIRCO MV 100 to 160 A

Direct front operation

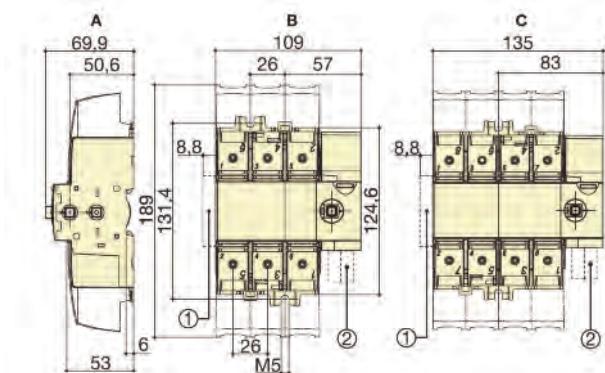


A. 3 pole
B. 4 pole
c. S1 handle

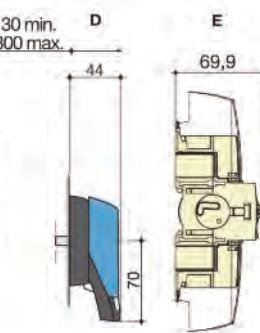
External front operation



1. Max. 4 "M" type auxillary contacts side
2. Max. 2 "U" type auxillary contacts internal



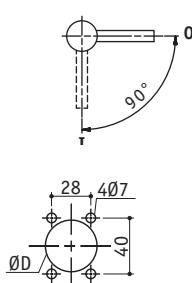
A. Side right operation
B. 3 pole
C. 4 pole
D. S1 handle
E. Side left operation



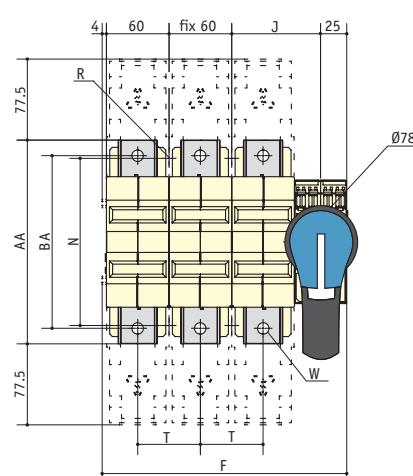
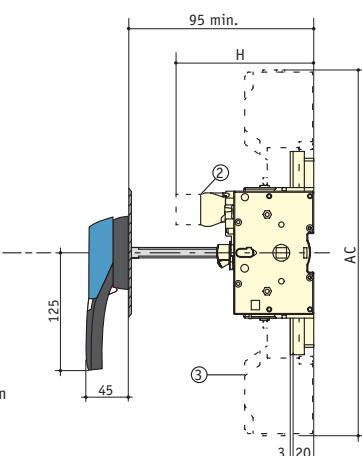
1. Max. 4 "M" type auxillary contacts side
2. Max. 2 "U" type auxillary contacts internal

SIDER VLB 250 to 500 A

External front operation



Conventional fixing (from rear): D = 31 to 37 mm
Fast fixing (external, door closed): D = 37 mm



① Door drilling for front operation

② 1 or 2 pre-break and signalling ACs

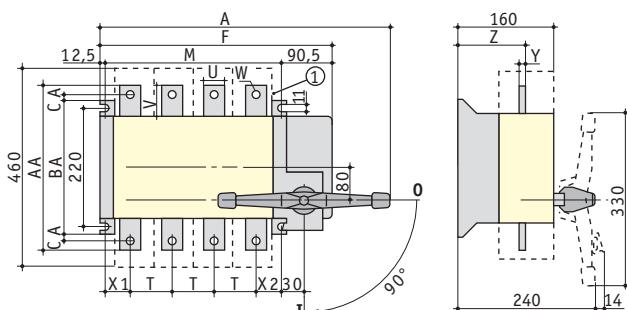
Rating (A)	Terminal shrouds AC	F 3p.	Switch body F 4p.	H	J	Switch mounting N	R	T	Connection terminals W	AA	BA
250	350	234	294	132	85	162	6	60	10	195	165
315	350	234	294	132	85	162	6	60	10	195	165
400	360	252	318	132	91	172	6	66	10	214	175
500	360	252	318	132	91	172	6	66	10	214	175

Technical data and dimensions (mm)

SIDER VLB 630 to 1600 A

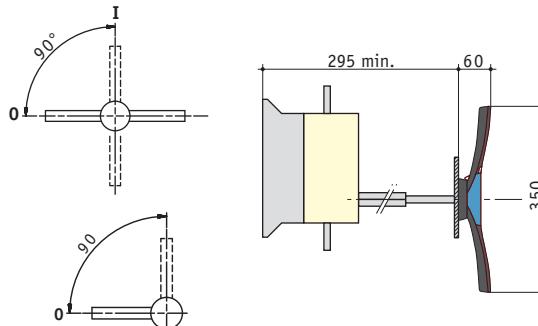
SIDER VLB 630 to 1600 A

Direct front operation



① Terminal screen.

External front operation

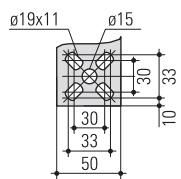


Conventional fixing (from rear): D = 31 to 37 mm
Fast fixing (external, door closed): D = 37 mm

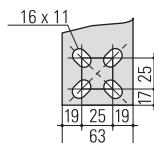
Rating (A)	Overall dimensions		Switch body		Switch mounting			Connection terminals									
	A 3p	A 4p	F 3p	F 4p	M 3p	M 4p	T	U	V	W	X1	X2	Y	Z	AA	BA	CA
630	463	543	358	438	255	335	80	40	50	13	42.5	52.5	6	106	300	260	20
800	463	543	358	438	255	335	80	50	60	-	47.5	47.5	6	106	320	-	-
1250	555	675	450	560	347	457	120	63	65	-	46.5	60.5	7	107	330	-	-
1600	555	675	450	560	347	457	120	80	80	-	46.5	60.5	15	111	360	-	-

Terminal hole patterns

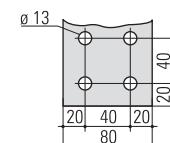
SIDER 800 A



SIDER 1250 A

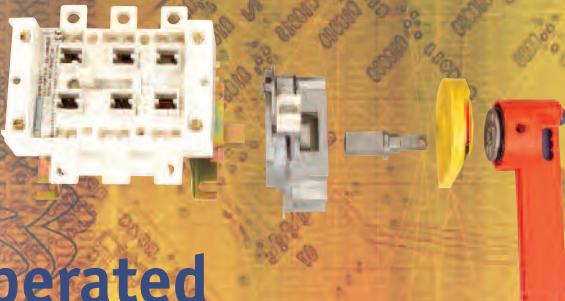


SIDER 1600 A



32BR

**Visible contact
load-break switches
50 to 1250 A - side operated**



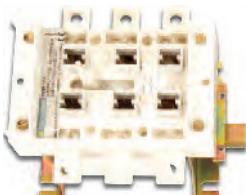
SIDER 32BR visible contact load-break switches ¹⁾

(supplied with red external side mount handle and shaft)



RCD handle

	AC 21 400 V (A)	AC 23 400 V (A)	AC 23 400 V (kW)	No. of poles	Cat. No.	Price \$
50 A	50	50	25	3	32BR3005	455.00
80 A	80	63	30	3	32BR3008	650.00
125 A	125	125	63	3	32BR3012	960.00
200 A	200	200	100	3	32BR3020	1170.00
400 A	400	400	220	3	32BR3040	1410.00
630 A	630	630	355	3	<input type="checkbox"/> 32BR3063	2580.00
800 A	800	630	355	3	<input type="checkbox"/> 32BR3080	3740.00
1250 A	1250	1000	560	3	<input type="checkbox"/> 32BR3000	6520.00



Side operated switch



Optional
Aluminium handle

SIDER 32BR visible contact load-break switches ¹⁾

(supplied with red external side mount handle, door interlock and shaft)

	AC 21 400 V (A)	AC 23 400 V (A)	AC 23 400 V (kW)	No. of poles	Cat. No.	Price \$	With aluminium handle Cat. No.	Price \$
50 A	50	50	25	3	32BR3205	1540.00	<input type="checkbox"/> 32BR3105	1670.00
80 A	80	63	30	3	32BR3208	1930.00	<input type="checkbox"/> 32BR3108	2060.00
125 A	125	125	63	3	32BR3212	2320.00	<input type="checkbox"/> 32BR3112	2450.00
200 A	200	200	100	3	32BR3220	2580.00	<input type="checkbox"/> 32BR3120	2700.00
400 A	400	400	220	3	32BR3240	2970.00	<input type="checkbox"/> 32BR3140	3100.00
630 A	630	630	355	3	32BR3263	3870.00	<input type="checkbox"/> 32BR3163	3990.00
800 A	800	630	355	3	32BR3280	5150.00	<input type="checkbox"/> 32BR3180	5280.00
1250 A	1250	1000	560	3	32BR3200	7080.00	<input type="checkbox"/> 32BR3100	7850.00

Accessories for 32BR (SIDER) switches

Description	Page
Accessories	10 - 30
Technical data	10 - 31
Dimensions	10 - 32 to 10 - 33

Note: ¹⁾ 'OFF' padlockable as standard.

Available on indent only.

Price Schedule 'B2'

SIDER 32BR Visible contact load-break switches Accessories

Terminal shroud and screens

To suit	Description	Mounting	No. of poles	Cat. No.	Price \$
80 A	Shroud	Top or Bottom	3	2994 4008	43.00
125 A	Shroud	Top	3	2994 3013	85.00
		Bottom	3	2994 8013	85.00
200 A	Shroud	Top	3	2994 3020	85.00
		Bottom	3	2994 8020	85.00
400 A	Shroud	Top	3	2994 3050	117.00
		Bottom	3	2994 8050	117.00
630...800 A	Screen	Top or Bottom	3	2998 3080	138.00
1250 A	Screen	Top or Bottom	3	2998 3120	143.00

Note: One terminal shroud/screen required per side.

Phase barriers

To suit	Mounting	Cat. No.	Price \$
630...1250 A	Top or Bottom	2998 0003	78.00

Auxiliary contacts

Switches WITHOUT door interlock (32BR0000 to 32BR3005)

To suit	Current (A)	Contacts	No. of poles	Cat. No.	Price \$
32BR0	50...80	2 C/O	3	2999 0012	85.00
32BR0	125...1250	1 C/O 1 st contact	3	2799 0011	85.00
		1 C/O 2 nd contact	3	2799 0012	85.00

Switches WITH door interlock (32BR32__ to 32BR31__)

To suit	Current (A)	Contacts	No. of poles	Cat. No.	Price \$
32BR2	50...1250	2 C/O	3	2999 0012	85.00
32BR1	50...1250	2 C/O	3	2999 0012	85.00

Extension shaft

To suit	Shaft length	Cat. No.	Price \$
125...1250 A	200 mm	2799 3022	64.00

Handles

To suit	Description	Cat. No.	Price \$
32B31	Aluminium handle	3211 0500	405.00
32BR	On-off label	390.00201	64.00



2999 0012



Aluminium handle

Price Schedule 'B2'

Technical data and ratings chart

SIDER 32BR 50 to 1250 A

Ratings to AS/NZS 60947-3 and IEC 60947-3

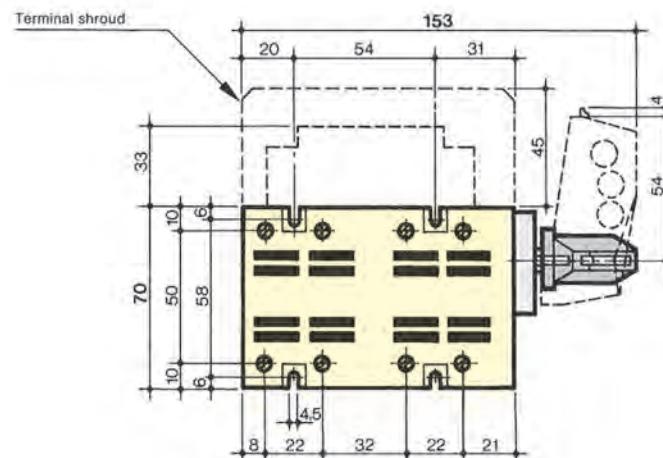
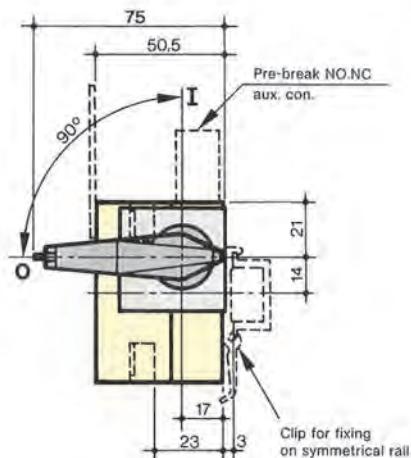
		50 A	80 A	125 A	200 A	400 A	630 A	800 A	1250 A
Rated insulation voltage and rated operation voltage AC 20/DC 20	V	690	690	750	750	1000	1000	1000	1000
Rated impulse withstand voltage	kV	6	6	8	8	12	12	12	12
Rated operational current									
AC 21	400 V A	50	80	125	200	400	630	800	1250
	500 V A	50	80	100	160	400	630	800	1250
	690 V ²⁾ A	40	63	100	160	400	630	800	1000
AC 22	400 V A	50	63	125	200	400	630	800	1250
	500 V A	32	50	63	125	315	630	800	1000
	690 V ²⁾ A	25	40	63	100	200	315	315	400
AC 23	400 V A	50	63	125	200	400	630	630	1000
	500 V A	20	20	63	80	200	500	500	800
	690 V ²⁾ A	-	-	-	-	80	100	125	200
Rated operational current/poles in series									
DC 21A	260 V DC A	50 ¹⁾	80 ¹⁾	125	200	400	630	800	1000
	400 V DC A	32 ¹⁾	40 ¹⁾	100 ¹⁾	160 ¹⁾	315	500	630	630
	500 V DC A	32 ¹⁾	40 ¹⁾	100 ¹⁾	160 ¹⁾	315	500	630	630
DC 22A	260 V DC A	50 ¹⁾	63 ¹⁾	100 ¹⁾	160	400	630	800	800
	400 V DC A	25 ¹⁾	32 ¹⁾	100 ¹⁾	160 ¹⁾	400 ¹⁾	630 ¹⁾	800 ¹⁾	800 ¹⁾
	500 V DC A	-	-	100 ¹⁾	160 ¹⁾	400 ¹⁾	630 ¹⁾	800 ¹⁾	800 ¹⁾
DC 23A	260 V DC A	50 ¹⁾	63 ¹⁾	100 ¹⁾	160 ¹⁾	400 ¹⁾	630	800	800
	400 V DC A	-	-	-	-	400 ¹⁾	630 ¹⁾	800 ¹⁾	800 ¹⁾
	500 V DC A	-	-	-	-	400 ¹⁾	630 ¹⁾	800 ¹⁾	800 ¹⁾
Operational power									
AC 23A	400 V kW	25	30	63	100	220	355	355	560
	500 V kW	11	11	40	55	140	355	355	560
	690 V ²⁾ kW	-	-	-	-	75	90	110	185
Overload capacity									
Short time withstand current 1s (kA RMS)	kA	2.5	2.5	7	9	13	26	26	50
Fuse protected short circuit withstand (kA RMS prospective)	kA	100	100	100	100	100	100	70	100
Fuse rating	A	50	80	125	200	400	630	800	1250
Rated capacitor power	kVar	20	35	55	75	15	2x125	2x150	4x125
Mechanical endurance	Ops	10000	10000	10000	10000	5000	5000	4000	4000
Weight (3 pole)	Kg	0.5	0.5	1.5	2.5	4	8	8.5	11
Min. tightening torque	Nm	2	2	10	13	21	45	45	45
Connection cable size	mm ²	16	35	50	95	240	2x300	2x300	4x185

Notes: ¹⁾ 2 poles in series by polarity.

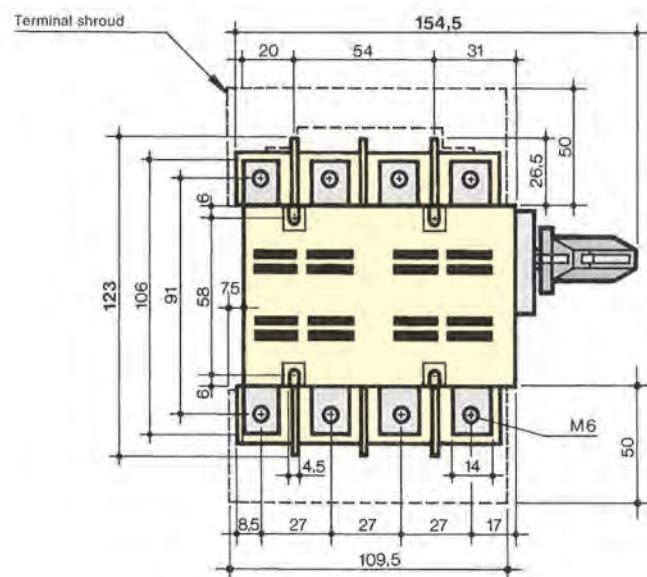
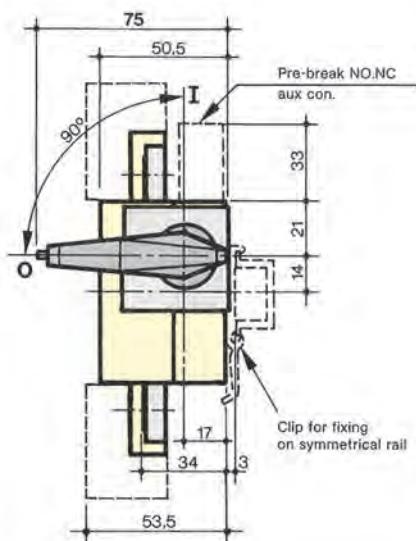
²⁾ With terminal shrouds or phase barriers.

Technical data and dimensions (mm) SIDER 32BR 50 to 80, A 3/4 pole types ¹⁾

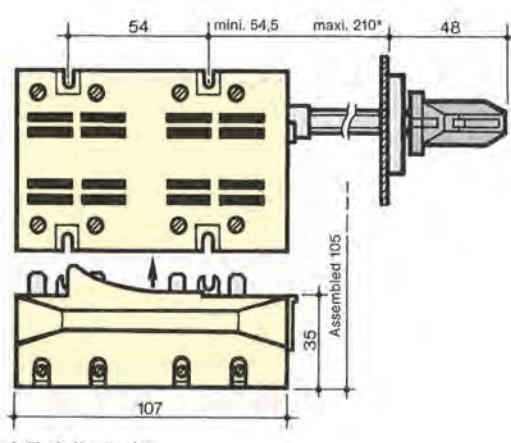
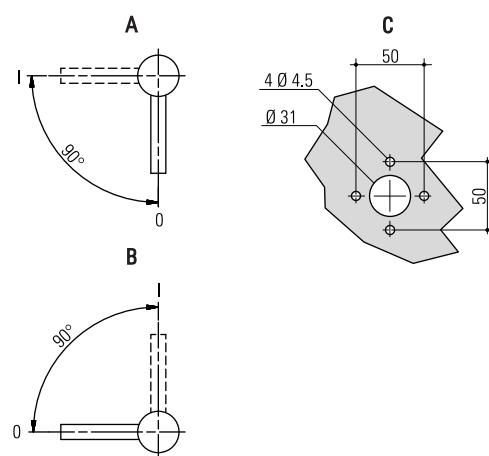
SIDER 32BR 50 A



SIDER 32BR 80 A



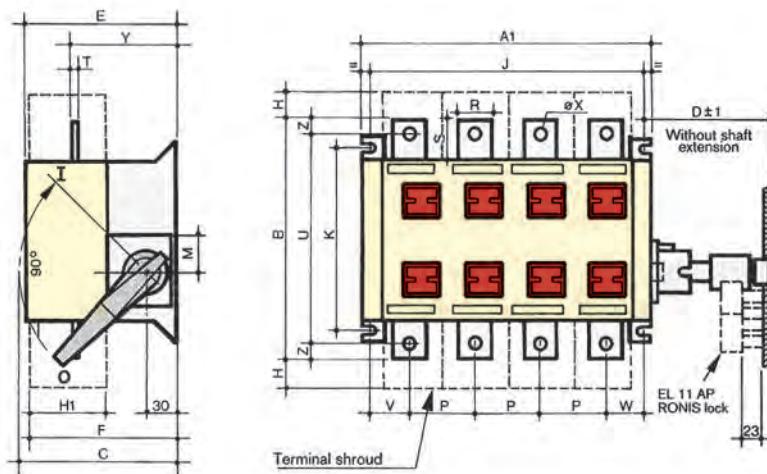
External handle



Notes: ¹⁾ 3 pole types use a 4 pole moulding with 3 poles fitted.

Technical data and dimensions (mm)

SIDER 32BR 125 to 1250 A

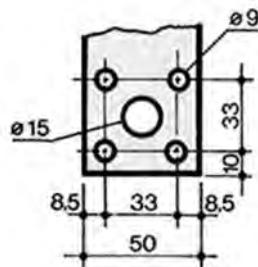


Dimensions in mm

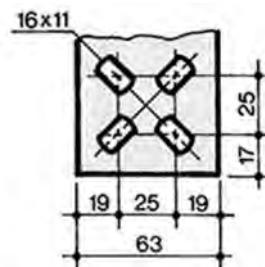
Rating	Overall dimensions									Switch mounting				Connection terminals									
	A ₁	A ₂	B	C	D	E	F	H	H ₁	J	K	L	M	P	R	S	T	U	V	W	øX	Y	Z
3 x 125 A	140	20	135	150	75	112	109	47.5	40	120	95	7	15	36	20	25	3.5	115	28	20	9	80	10
4 x 125 A	170	20	135	150	75	112	109	47.5	40	150	95	7	15	36	20	25	3.5	115	22	20	9	80	10
3 x 200 A	180	20	150	150	75	118	121	65	50	160	110	7	20	50	25	25	2.5	130	33	27	9	85	10
4 x 200 A	230	20	150	150	75	118	121	65	50	210	110	7	20	50	25	25	2.5	130	33	27	9	85	10
3 x 400 A	230	20	235	150	75	150	154	82.5	75	210	180	9	30	65	32	37.5	5	205	42.5	37.5	11	105	15
4 x 400 A	290	20	235	150	75	150	154	82.5	75	270	180	9	30	65	32	37.5	5	205	37.5	37.5	11	105	15
3 x 500 A	230	20	245	150	75	150	154	77.5	75	210	180	9	30	65	32	42.5	5	215	42.5	37.5	11	105	15
4 x 500 A	290	20	245	150	75	150	154	77.5	75	270	180	9	30	65	32	42.5	5	215	37.5	37.5	11	105	15
3 x 630 A	280	14	300	240	72	201		80		255	220	11	28	80	40	50	6	260	42.5	52.5	13	147	20
4 x 630 A	360	14	300	240	72	201		80		335	220	11	28	80	40	50	6	260	42.5	52.5	13	147	20
3 x 800 A	280	14	320	240	72	201		70		255	220	11	28	80	50	60	6		47.5	47.5		147	
4 x 800 A	360	14	320	240	72	201		70		335	220	11	28	80	50	60	6		47.5	47.5		147	
3 x 1250 A	372	14	330	240	72	201		65		347	220	11	28	120	63	65	7		46.5	60.5		148	
4 x 1250 A	492	14	330	240	72	201		65		467	220	11	28	120	63	65	7		46.5	60.5		148	

Connection terminals

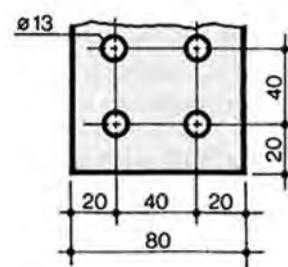
800 A



1250 A



1600 A



RLB

Remote load-break switches 40 to 1800 A



**With
shunt
trip**



RLB 40...160

40 A

63 A

125 A

160 A

The IDE and SIDERMAT range of remote trip load-break switches are fully functional, remote breaking isolators with a range extending from 40 A through to 1800 A. To assist in protecting personnel against insulation faults via the advantage of its special remote trip function, the RLB range can also offer protection against overloads when combined with suitable current transformers and thermal relays.

IDE 40 to 160 A Front operated surface mount shunt trip type (direct handle only)

Coil voltage	AC 21 400 V (A)	AC 23 400 V (A)	AC 23 400 V (kW)	No. of poles	Cat. No.	Price \$
240	40	40	22	3	RLB 40 23P	700.00
				4	i RLB 40 24P	840.00
415	40	40	22	3	i RLB 40 43P	700.00
				4	i RLB 40 44P	840.00
240	63	63	30	3	RLB 63 23P	960.00
				4	i RLB 63 24P	1090.00
415	63	63	30	3	i RLB 63 43P	960.00
				4	i RLB 63 44P	1090.00
240	125	125	63	3	RLB 125 23P	1540.00
				4	i RLB 125 24P	1800.00
415	125	125	63	3	i RLB 125 43P	1540.00
				4	i RLB 125 44P	1800.00
240	160	160	80	3	RLB 160 23P	1930.00
				4	i RLB 160 24P	2320.00
415	160	160	80	3	i RLB 160 43P	1930.00
				4	i RLB 160 44P	2320.00

Accessories for IDE switches

Description	Page
Accessories	10 - 36
Technical data	10 - 37 to 10 - 38
Dimensions	10 - 39 to 10 - 40

Notes: Undervoltage release (240 or 415 V) available on request.
i Available on indent only.

Price Schedule 'B2'

RLB Remote trip load-break switches

SIDERMAT 250 to 1800 A

Visible Contacts



RLB 250...800

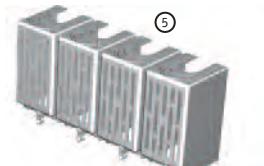
**Front operated surface mount 240 V AC Shunt trip type
(supplied with external handle and 320 mm shaft)**

	AC 21 400 V (A)	AC 23 400 V (A)	AC 23 400 V (kW)	No. of poles	Cat. No.	Price \$
250 A	250	250	132	3	i RLB 250 3P	2580.00
				4	i RLB 250 4P	2850.00
400 A	400	400	220	3	i RLB 400 3P	3100.00
				4	i RLB 400 4P	3770.00
630 A	630	630	355	3	i RLB 630 3P	4380.00
				4	i RLB 630 4P	5340.00
800 A	800	630	355	3	i RLB 800 3P	5020.00
				4	i RLB 800 4P	6120.00
1250 A	1250	1250	710	3	i RLB 1250 3P	6320.00
				4	i RLB 1250 4P	7710.00
1600 A	1600	1600	900	3	i RLB 1600 3P	7280.00
				4	i RLB 1600 4P	8880.00
1800 A	1800	1600	900	3	i RLB 1800 3P	8370.00
				4	i RLB 1800 4P	10180.00

RLB Accessory fitting

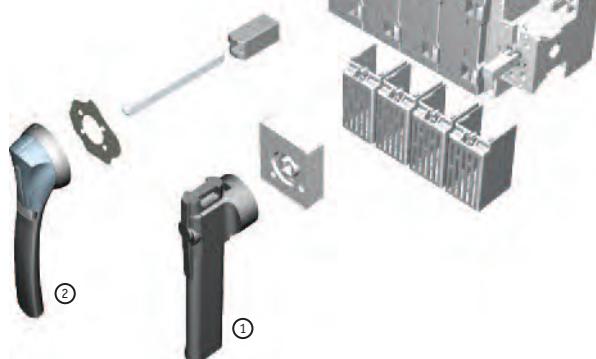


RLB 1250...1800



- ① Direct front handle
- ② External front handle
- ③ N/O / N/C position AC.
- ④ N/O / N/C AC wired to ready mounted transmission coil (standard)
- ⑤ Terminal shrouds

Overview (for further details, please see the installation instructions supplied with each device)



Accessories for SIDERMAT switches

Description	Page
Accessories	10 - 36
Technical data	10 - 37 to 10 - 38
Dimensions	10 - 39 to 10 - 40

Notes: Switches supplied with 240 V shunt trip coil as standard.
Other voltages refer NHP.

Under voltage release (240 to 415 V) available on request.

Available on indent only.

Price Schedule 'B2'

RLB Remote trip load-break switches Accessories



Auxiliary

Auxiliary contacts

To suit	Type	Current (A)	Contacts	Cat. No.	Price \$
RLB 40...63		12	1 N/O + 1 N/C	1299 0011	96.00
RLB 125... 160		5	1 N/O + 1 N/C	1299 0021	117.00
	1 st switch	16	1 C/O	3999 0051	96.00
RLB 250...1800	2 nd switch	16	1 C/O	3999 0052	117.00
	Coil tripping	16	1 C/O	3999 0031	117.00



Shrouds

Terminal shrouds and phase barriers

To suit	Type	Mounting position	No. of poles	Cat. No.	Price \$
RLB 40...63	Screen	Top & bottom	3	1299 8007	96.00
RLB 125...160	Screen	Top & bottom	3	1299 8013	138.00
RLB 250...630	Shroud	Top or bottom	3	3998 3040	170.00
			4	3998 4040	210.00
RLB 800	Shroud	Top or bottom	3	3998 3063	255.00
			4	3998 4063	265.00
RLB 1250...1800	Screen	Top or bottom	3	2998 3120	143.00
			4	2998 4120	191.00
RLB 1250...1600	Phase Barriers	Top or bottom	3	2998 0003	78.00
			4	2998 0004	96.00
RLB 1800	Phase Barriers	Top & bottom	3	¹⁾	-
			4	¹⁾	-

Shaft spares

To suit	250...1800	Shaft length	Cat. No.	Price \$
RLB 250...1800	✓	200 mm	1401 1520	85.00
	✓	320 mm	1401 1532	106.00



Direct mount handle

Direct mount handles ³⁾ ('OFF' padlockable 'ON' locking field convertible)

To suit	Colour	Cat. No.	Price \$
RLB 40...63	Black	1299 5022	127.00
	Red/Yellow	1299 5023	127.00
RLB 125... 160	Black	1299 5032	127.00
	Red/Yellow	1299 5033	127.00
RLB 250...1800	Black	3999 6203	550.00

External mount handles ³⁾ ('OFF' padlockable 'ON' locking field convertible)

To suit	IP rating	Colour	Type	Cat. No.	Price \$
RLB 40...63 ²⁾	65	Black	Pistol	1299 6032	245.00
125...160 ²⁾	65	Black	Pistol	1299 6042	245.00
RLB 250...1800	55	Black	Pistol - S3	1431 3511	255.00
	55	Red/Yellow	Pistol - S3	1432 3511	295.00

Notes: ¹⁾ Standard with switch.

²⁾ Comes complete with 200 mm shaft.

³⁾ Refer NHP for stainless steel handles.

Available on indent only.

Price Schedule 'B2'

Technical data and ratings chart

IDE RLB 40 to 160 A Remote trip load-break switches

Ratings to AS/NZS 60947-3 and IEC 60947-3

		40 A	63 A	125 A	160 A
Rated insulation voltage and rated operation voltage AC 20/DC 20	V	690	690	690	690
Rated impulse withstand voltage	kV	8	8	8	8
Rated operational current					
AC 21A	400 V A	40	63	125	160
	500 V A	40	63	125	160
	690 V ¹⁾ A	40	63	125	160
AC 22A	400 V A	-	-	-	-
	500 V A	-	-	-	-
	690 V ¹⁾ A	-	-	-	-
AC 23A	400 V A	40	63	125	160
	500 V A	-	-	-	-
	690 V ¹⁾ A	-	-	-	-
Rated operational current					
DC 21A	400 V A	-	-	-	-
	500 V A	-	-	-	-
DC 22A	400 V A	-	-	-	-
	500 V A	-	-	-	-
DC 23A	400 V A	-	-	-	-
	500 V A	-	-	-	-
Operational power					-
AC 23A	400 V kW	22	30	63	80
	500 V kW	-	-	-	-
	690 V kW	-	-	-	-
Overload capacity					
Short time withstand current	kA	1.5	1.5	2.5	2.5
Icw (RMS 1s) 400 V					
Breaking capacity	400 V A	160	200	256	320
AC 23A					
Fuse protected short circuit withstand AC	400 V kA	-	-	-	-
(kA RMS prospective)	Fuse A	-	-	-	-
Rated capacitor power	kVar	-	-	-	-
Mechanical endurance	Ops	60000	60000	30000	30000
Weight (3 pole)	Kg	0.6	0.6	0.7	0.7
Min. tightening torque	Nm	-	-	-	-
Connection cable size	mm ²	2.5/10	2.5/10	6/70	6/70

Notes: ¹⁾ Required shrouds or phase barriers.

Contact NHP if additional data required.

240/415 V ratings suitable for use on 230/400 V in accordance with AS 60038 : 2000.

Technical data and ratings chart

SIDERMAT RLB 250 to 1800 A

Remote trip load-break switches

Ratings to AS/NZS 60947-3 and IEC 60947-3

		250 A	400 A	630 A	800 A	1250 A	1600 A	1800 A
Rated insulation voltage and rated operation voltage AC 20/DC 20	V	1000	1000	1000	1000	1000	1000	1000
Rated impulse withstand voltage	kV	8	12	12	12	12	12	12
Rated operational current								
AC 21A	400 V A	250	400	630	800	1250	1600	1600
	500 V A	250	400	630	800	1250	1600	1600
	690 V A	250	400	630	800	1250	1600	1600
AC 22A	400 V A	250	400	630	800	1250	1600	1800
	500 V A	250	400	630	800	1250	1600	1800
	690 V A	200	315	500	630	1000	1250	1250
AC 23A	400 V A	250	400	630	630	1250	1600	1600
	500 V A	250	400	630	630	1250	1600	1600
	690 V A	200	315	400	500	800	1000	1000
Rated operational current								
DC 21A	400 V A	250	400	630	800	1250	1600	1800
	500 V A	-	-	630	800	1250	1600	1600
DC 22A	400 V A	250	400 ¹⁾	630 ¹⁾	800 ¹⁾	1250 ¹⁾	1600 ¹⁾	1600 ¹⁾
	500 V A	250	400 ¹⁾	630 ¹⁾	800 ¹⁾	1250 ¹⁾	1600 ¹⁾	1600 ¹⁾
DC 23A	400 V A	200	315 ¹⁾	500 ¹⁾	630 ¹⁾	1250 ¹⁾	1250 ¹⁾	1250 ¹⁾
	500 V A	200	315 ¹⁾	500 ¹⁾	630 ¹⁾	1250 ¹⁾	1250 ¹⁾	1250 ¹⁾
Operational power								
AC 23A	400 V kW	132	220	255	255	710	900	900
	500 V kW	185	295	400	475	750	900	900
	690 V kW	185	295	400	475	750	900	900
Overload capacity	RMS 0.3s kA	17	25	50	65	65	80	80
Short time withstand current	RMS 1s kA	9	14	25	36	36	45	45
Icw 400 V								
Breaking capacity	400 V A	2000	3200	5040	5040	10000	12800	12800
AC 23A								
Fuse protected short circuit withstand AC	400 V kA	100	100	100	100	100	120	120
(kA RMS prospective)	Fuse A	250	400	630	800	1250	2x800	2x900
Rated capacitor power	kVar	115	185	290	365	575	-	-
Mechanical endurance	Ops	8000	8000	5000	5000	5000	3000	3000
Weight (3 pole)	Kg	6.5	7	8	11	14	19	21
Min. tightening torque	Nm	20	40	40	-	20	40	40
Connection cable size (min./max.)	mm ²	95/240	185/240	(2x150)(2x300)	(2x185)(2x300)	(4x185)	(6x240)	-

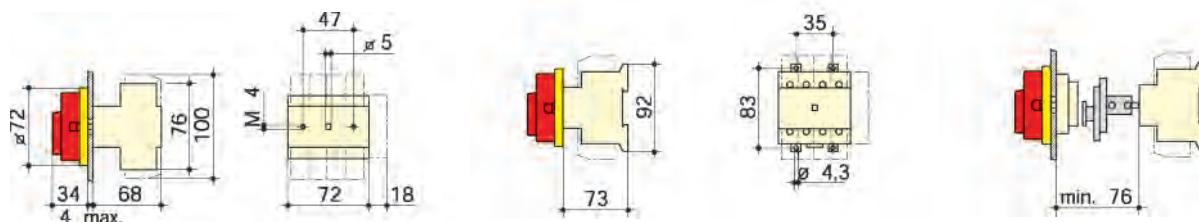
Note: ¹⁾ 4 pole device with 2 poles in series for each polarity.
240/415 V ratings suitable for use on 230/400 V in accordance with AS 60038 : 2000.

Technical data and dimensions

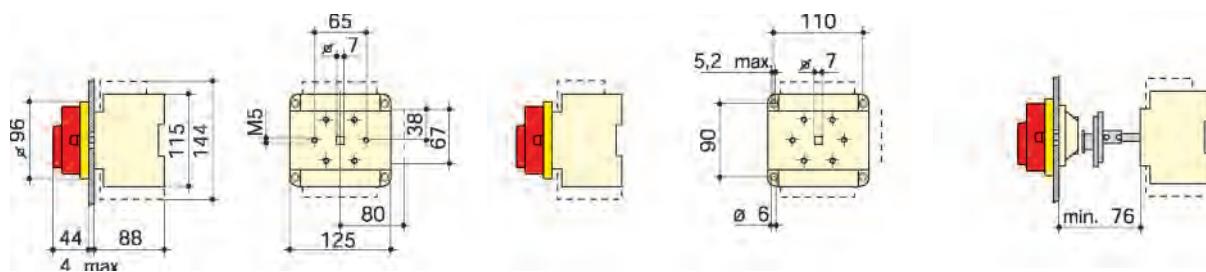
IDE RLB 40 to 160 A Remote trip load-break switches

Dimensions (mm)

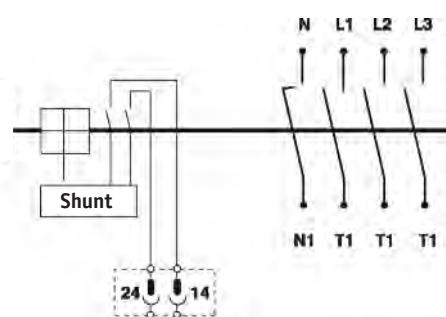
IDE 40 to 63 A



IDE 125 to 160 A



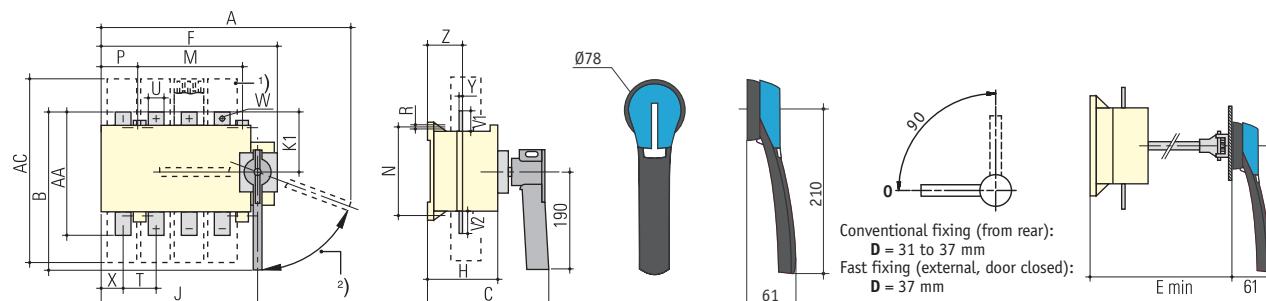
Typical wiring diagram



Technical data and dimensions (mm)

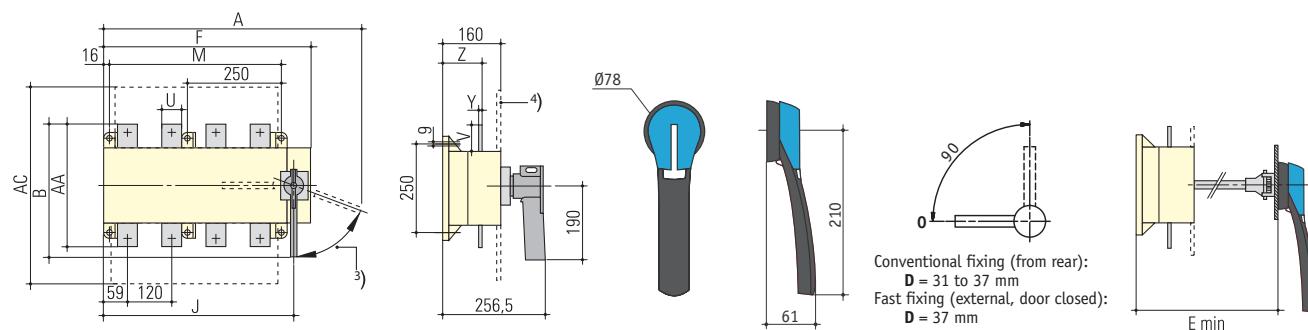
SIDERMAT 250 to 1800 A Remote trip Load-break switches

SIDERMAT 250 to 800 A



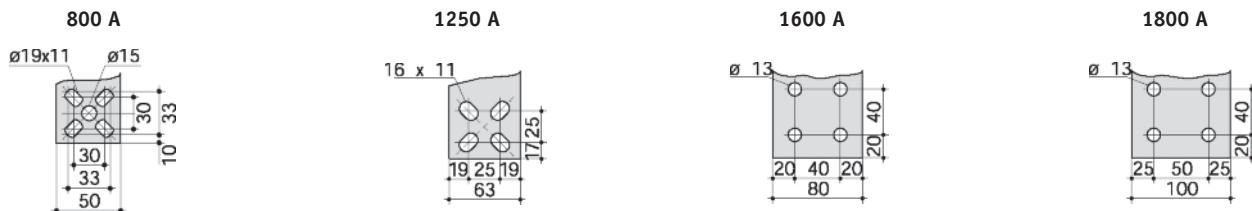
Rating (A)	Overall dimensions				Terminal				Switch body				Switch mounting														
	A 3p	A 4p	B	C	E	AC	F 3p	F 4p	H	J 3p	J 4p	K1	M	N	P 3p	P 4p	R	T	U	V1	V2	W	X 3p	X 4p	Y	Z	AA
250	435	495	309	248	275	388	285	345	148	253	313	115	210	180	10	70	7	65	32	35	43	11	31	46	3	67	238
400	435	495	309	248	275	388	285	345	148	253	313	115	210	180	10	70	7	65	32	35	43	13	31	46	5	69	238
630	435	495	318.5	248	275	388	285	345	148	253	313	129	210	180	10	70	7	65	45	49	49	13	31	46	8	72	257
800	491	570	350	262	296	470	346	426	178	308	388	160	250	250	20	100	9	80	50	60	60	15	36	65	7	72	320

SIDERMAT 1250 to 1800 A



Rating (A)	Overall dimensions				Terminal				Switch body				Switch mounting				Connection terminals			
	A 3p	A 4p	B	E	AC	F 3p	F 4p	J 3p	J 4p	M 3p	M 4p	U	V	Y	Z	AA				
1250	582	702	355	291	480	437	557	400	520	345	465	63	65	3	67	330				
1600	582	702	370	291	479	437	557	400	520	345	465	80	80	15	110	360				
1800	582	702	370	291	479	437	557	400	520	345	465	100	80	15	110	360				

SIDERMAT Connection terminals



Note:

- ¹⁾ Terminal shrouds
- ²⁾ Reset 70°
- ³⁾ Reset 70°
- ⁴⁾ Lug protection screen

ELB

**Enclosed load-break
switches 20 to 800 A
Insulated or steel enclosed types**



SIRCO M Insulated enclosed 20 to 100 A

The IP 65 range of enclosed polycarbonate switches from Socomec, come fitted standard with the SIRCO M switch. They are also provided with a neutral and earth terminal for easy connection. Due to its spacious design, the SIRCO M enclosed switch allows for the fitting of two additional modules, one on each side, increasing the functionality of the switch. With standard knockouts in all enclosures between 20 and 63 A as well as the prominent red handle and yellow cover, the SIRCO M enclosed range offers a solution for any enclosed load-break requirements.

AC23 rated up to 80 Amp as standard

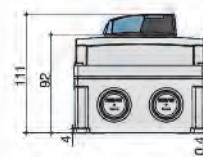
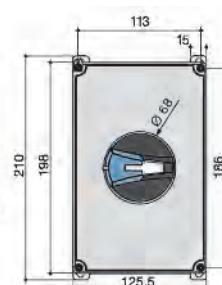
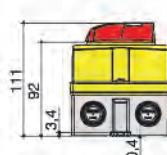
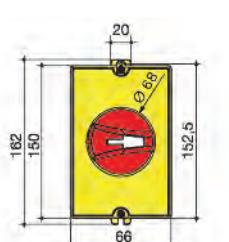
ELB-P Insulated enclosed type load-break switch



Switch body	AC 22 400 V (A)	AC 23 400 V (A)	AC 23 400 V (kW)	Plastic enclosed load-break switch Cat. No.	Price \$
2200 3000	16	16	7.5	ELBPM163P	133.00
2200 3001	20	20	9	ELBPM203P	138.00
2200 3002	25	25	11	ELBPM253P	159.00
2200 3003	32	32	15	ELBPM323P	191.00
2000 3004	40	40	18.5	ELBPM403P	210.00
2000 3006	63	63	30	ELBPM633P	255.00
2000 3008	80	80	37	ELBPM803P	370.00
Refer NHP	100	80	37	ELBPM1003P	455.00

Dimensions (mm)

SIRCO M 16 TO 40 A



SIRCO M 63 TO 100 A

Price Schedule 'B2'

ELB-S Enclosed load-break switches IP 65 Steel enclosed 20 to 800 A

- Superior switching capabilities
- Most types ex-stock for immediate delivery
- Custom built switches available at short lead time
- All enclosures IP 65 rated
- Rating from 20 A to 800 A
- Customised lock fitted, other locking option available
- Door hinged left or right
- Earth terminals - standard
- Terminal covers - standard
- Handle orientation adjustable

Housing material: Steel plate 1.2/1.5 mm

Housing colour: Grey RAL 7035

Degree of protection: IP 65



ELB-S Steel enclosed type load-break switch

Switch (A)	Enclosure type	Enclosure dimensions (mm) Height Width Depth			Cat. No.	Price \$
SLB 20 3P					ELB-S 20 3P	690.00
SLB 32 3P					ELB-S 32 3P	720.00
SLB 40 3P	MAS0202015 R5	200	200	155	ELB-S 40 3P	730.00
SLB 63 3P					ELB-S 63 3P	750.00
SLB 80 3P					ELB-S 80 3P	850.00
SLB 100 3P					ELB-S 100 3P	860.00
SLB 125 3P	MAS0352515 R5	350	250	155	ELB-S 125 3P	870.00
SLB 160 3P					ELB-S 160 3P	1140.00
SLB 200 3P	MAS0403021 R5	400	300	210	ELB-S 200 3P	1350.00
SLB 250 3P					ELB-S 250 3P	1460.00
SLB 315 3P	MAS0503021 R5	500	400	210	ELB-S 315 3P	1600.00
SLB 400 3P					ELB-S 400 3P	1860.00
SLB 500 3P	MAS0604021 R5	600	400	210	ELB-S 500 3P	2180.00
SLB 630 3P					ELB-S 630 3P	2520.00
SLB 800 3P	MAS0705026 R5	700	500	260	A ELB-S 800 3P	3740.00

Notes: Handle orientation - Handles are positioned for 9 O'clock OFF and 12 O'clock ON as standard.
For optional 12 O'clock OFF, and 3 O'clock ON, an additional set of mounting holes are supplied in the door.
Custom size enclosures available, refer NHP. For switch accessories refer SLB accessories.
Refer NHP for enclosed changeover switches and switch-fuses.

[A] This product is manufactured to order.

Price Schedule 'B2'

ESS Enclosed 32 BR

Visible contact load-break switches

IP 65 Stainless steel 50 A to 800 A (side operated)

- Visible contact indication
- ON/OFF indication on window
- Safety door interlocking mechanism prevents switch operation when door is open
- Stainless steel enclosure
- IP 65 rated
- Ratings from 50 A to 800 A
- Door hinged left
- Red S type handle
- Optional aluminium handle available



Enclosed 32 BR visible contact load-break switches

Switch ¹⁾	Amps (A)	Type	Enclosure Dimensions (mm)	3 Pole Price \$	4 Pole Price \$
			Height Width Depth	Cat. No. ¹⁾	
32 BR _205	50	D403020	400 300 200	ESSS50_P	3100.00 [A] 3500.00
32 BR _208	80	D403020	400 300 200	ESSS80_P	[A] 3220.00 [A] 3650.00
		D604020	600 400 200	ESSL80_P	[A] 3480.00 [A] 3920.00
32 BR _212	125	D404020	400 400 200	ESSS125_P	3870.00 [A] 4370.00
		D604020	600 400 200	ESSL125_P	3990.00 [A] 4500.00
32 BR _220	200	D404020	400 400 200	ESSS200_P	3870.00 [A] 4180.00
		D604020	600 400 200	ESSL200_P	4110.00 [A] 4380.00
32 BR _240	400	D806030	800 600 300	ESSS400_P	[A] 5800.00 [A] 6550.00
32 BR _263	630	D806030	800 600 300	ESSS630_P	[A] 6990.00 [A] 7740.00
32 BR _280	800	D806030	800 600 300	ESSS800_P	[A] 8370.00 [A] 9450.00



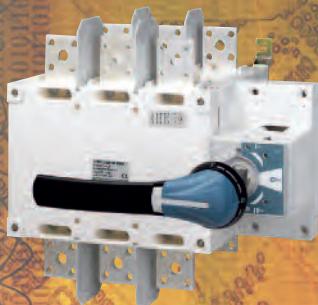
Handle showing metal lock lever

Ideal for mining and industrial applications

Notes: For stainless steel handle or aluminium handle refer NHP.
 Custom size enclosures available, refer NHP. For switch accessories refer 32BR accessories.
 Non door interlocked models available.
¹⁾ Insert 3 for 3 pole or 4 for 4 pole.
 [A] This product is manufactured to order.

SCO

Standard changeover switches 20 to 3200 A



SIRCO M 20 to 80 A

The SCOM range of SIRCO M products consists of manual operated multi-polar switches. These devices are available in 2 ranges, standard (I, 0, II) and make before break (I, I&II, II).

Both designs feature 3 stable contact positions and are available with panel mount handle with 320 mm shaft or direct mount handle.

DIN rail or surface mount (direct operation)

	Switch body	AC 21	AC 23	No. of poles	Cat. No. ¹⁾	Standard ³⁾ I,0,II	Make before break ⁴⁾ I,I&II,II
		AC 21	AC 23			Standard ³⁾ I,0,II	Make before break ⁴⁾ I,I&II,II
20 A	2200 3001	20	9	3	SCOM203PD_	225.00	230.00
				4	SCOM204PD_	265.00	270.00
40 A	2200 3004	40	18.5	3	SCOM403PD_	275.00	285.00
				4	SCOM404PD_	340.00	345.00
63 A	2200 3006	63	30	3	SCOM633PD_	320.00	330.00
				4	SCOM634PD_	390.00	405.00
80 A	2200 3008	80	40	3	SCOM803PD_	340.00	350.00
				4	SCOM804PD_	415.00	425.00

DIN rail or surface mount

(external panel mount handle with 320 mm shaft) ²⁾

	Switch body	AC 21	AC 23	No. of poles	Cat. No. ¹⁾	Standard ³⁾ I,0,II	Make before break ⁴⁾ I,I&II,II
		AC 21	AC 23			Standard ³⁾ I,0,II	Make before break ⁴⁾ I,I&II,II
20 A	2200 3001	20	9	3	SCOM203P_	285.00	295.00
				4	SCOM204P_	330.00	340.00
40 A	2200 3004	40	18.5	3	SCOM403P_	340.00	350.00
				4	SCOM404P_	405.00	415.00
63 A	2200 3006	63	30	3	SCOM633P_	390.00	405.00
				4	SCOM634P_	465.00	475.00
80 A	2200 3008	80	40	3	SCOM803P_	415.00	425.00
				4	SCOM804P_	490.00	500.00

Accessories

Description	Page
Accessories	10 - 46 to 10 - 48
Technical data	10 - 49 to 10 - 50
Dimensions	10 - 51 to 10 - 52

Notes: ¹⁾ _ Insert MB for make before break (I, I&II, II) switch. Leave blank for standard changeover switch.

²⁾ For a larger S1 handle option, use 1413 2111 and handle 1404 0532 shaft.

³⁾ I-O-II changeover mechanism type 2209 6009.

⁴⁾ I-I & II-II changeover mechanism type 2299 6009.

Price Schedule 'B2'



SCO 125 4P

SCO Standard changeover switches

SIRCOVER 125 to 3200 A

Standard type (I, 0, II)

Make before break (MB) type (I, I&II, II)

The SCO range of Sircover products consists of manually operated multi-polar switches. These IP 30 devices are available in 2 ranges, standard (I, 0, II) and make before break (I, I&II, II), both feature 3 stable contact positions.



SCO 200 4P

Front operated base mount (I, 0, II)

(supplied with external handle and 320 mm shaft)

	AC 21 400 V (A)	AC 23 400 V (A)	AC 23 400 V (kW)	No. of poles	Standard I,O,II Cat. No. ¹⁾	Price \$	Make before break I,I&II,II Price \$
125 A	125	125	63	3	SCO 125 3P_	1290.00	1540.00
				4	SCO 125 4P_	1410.00	1670.00
160 A	160	160	80	3	SCO 160 3P_	1410.00	1670.00
				4	SCO 160 4P_	1740.00	2000.00
200 A	200	160	80	3	SCO 200 3P_	1480.00	1800.00
				4	SCO 200 4P_	1800.00	2130.00
250 A	250	250	132	3	SCO 250 3P_	1540.00	1870.00
				4	SCO 250 4P_	1870.00	2180.00
400 A	400	250	132	3	SCO 400 3P_	2180.00	2580.00
				4	SCO 400 4P_	2450.00	2760.00
500 A	500	500	280	3	SCO 500 3P_	2700.00	3350.00
				4	SCO 500 4P_	3020.00	3610.00
630 A	630	500	280	3	SCO 630 3P_	3540.00	3930.00
				4	SCO 630 4P_	3670.00	4090.00
800 A	800	800	450	3	SCO 800 3P_	4250.00	5020.00
				4	SCO 800 4P_	4630.00	5340.00
1250 A	1250	1000	560	3	SCO 1250 3P_	9020.00	11080.00
				4	SCO 1250 4P_	12370.00	14820.00
1600 A	1600	1000	560	3	SCO 1600 3P_	10300.00	12700.00
				4	SCO 1600 4P_	16750.00	19410.00
2000 A	2000	1250	710	3	SCO 2000 3P	19330.00	-
				4	SCO 2000 4P	23450.00	-
2500 A	2500	1250	710	3	SCO 2500 3P	24360.00	-
				4	SCO 2500 4P	26930.00	-
3200 A	3200	1250	710	3	SCO 3200 3P	28600.00	-
				4	SCO 3200 4P	33620.00	-

Accessories for SIRCOVER switches

Description	Page
Accessories	10 - 46 to 10 - 48
Technical data	10 - 49 to 10 - 50
Dimensions	10 - 51 to 10 - 52

Notes: ¹⁾_ Insert MB for make before break I, I&II, II switch. Leave blank for standard changeover switch.
 Available on indent only.

Price Schedule 'B2'

SCO Standard changeover switches

Accessories

Direct mount handles ('OFF' padlockable, 'ON' locking field convertible)



Direct handle

To suit	Colour	Handle type	Cat. No.	Price \$
SCOM 20...80	Black	Pistol	2299 5012	10.00
SCO 125...630	Black	Pistol	4199 5012	117.00
SCO 800...1600	Black	Pistol	2799 7052	210.00
SCO 2000...3200	Black	T-handle	2799 7012	225.00



External handle (S2)

External mount handles ²⁾ ('OFF' padlockable, 'ON' locking field convertible)

To suit	Colour	Padlock position	IP rating	Standard handle Cat. No.	Make before break handle Cat. No.	Price \$
SCOM 20...80	Black	Off	65	1473 1113	1473 1114	42.00
SCO 125...630	Black	Off	65	1423 2113	1423 2114	200.00
SCO 800...1600	Black	Off	65	1433 3113	1433 3114	380.00
SCO 2000...3200	Black		65	2799 7146	-	1200.00

Shaft extensions



Shaft

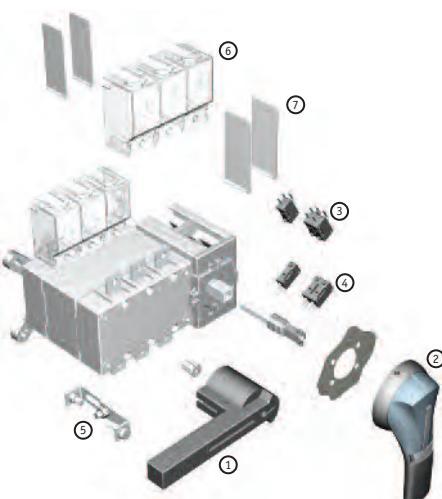
To suit	Shaft length (mm)	Back plate to door (max.)	Back plate to door (min.)	Cat. No.	Price \$
SCOM 20...80	320 (5 mm)	372	105	1407 0532	28.00
SCO 125...400	320 (10 mm)	430	210	1400 1032	53.00
SCO 500...630	320 (10 mm)	510	280	1400 1032	53.00
SCO 800...1600	320 (12 mm)	697	425	1401 1532	106.00
SCO 2000...3200	320 (15 mm)	923	653	2799 3018	96.00

Bridging bars



Bridging bars

To suit ¹⁾	No. of Poles	Cat. No.	Price \$
SCO 125...200 Amp	1	4109 0019	85.00
SCO 250 Amp	1	4109 0025	106.00
SCO 400 Amp	1	4109 0039	127.00
SCO 500 Amp	1	4109 0050	138.00
SCO 630 Amp	1	4109 0063	159.00
SCO 800 Amp	1	4109 0080	255.00
SCO 1250 Amp	1	4109 0120	370.00
SCO 1600 Amp	1	i 4109 0160	455.00



SCO 125 to 1600 A

- ① Direct front handle
- ② Door interlocked external front handle
- ③ ④ Auxiliary contacts
- ⑤ Bridging bar
- ⑥ Terminal shrouds
- ⑦ Inter phase barrier

Overview (for further details, please see the installation instructions supplied with each device)

Notes: ¹⁾ Three 1 pole bars required on 3 pole SCO switches.
²⁾ Refer NHP for stainless steel handles.
i Available on indent only.

Price Schedule 'B2'

SCO Standard changeover switches

Accessories

Auxiliary contacts



Auxiliary contact

To suit	Current (A)	Contacts	Cat. No.	Price \$
SCOM 20...80	10	1 N/O + 1 N/C	2299 0001	27.00
SCO 125...1600	16	1 C/O (can fit max. of 2)	4109 0021	117.00
SCO 2000...3200	16	1 st 1 C/O	4409 0021	117.00
		2 nd 1 C/O	4409 0022	117.00



Cover



Screen



Phase Barriers



Terminal shrouds and screens

To suit	IP rating	Mounting position	Terminal side	No. of poles	Cat. No.	Price \$
SCOM 20...40	20	Top and bottom		1 (set of 2)	2294 1005	10.00
				3 (set of 2)	2294 3005	24.00
SCOM 63...80	20	Top and bottom		1 (set of 2)	2294 1009	14.00
				3 (set of 2)	2294 3009	35.00
SCO 125...200	20	Top or bottom	Front or Rear	3	2694 3014 ²⁾	85.00
				4	2694 4014 ²⁾	106.00
SCO 250...400	20	Top or bottom	Front or Rear	3	2694 3021 ²⁾	138.00
				4	2694 4021 ²⁾	148.00
SCO 500...630	20	Top or bottom	Front or Rear	3	2694 3051 ²⁾	191.00
				4	2694 4051 ²⁾	200.00
SCO 800...1250	Screen	Top or bottom	Front or Rear	3	1509 3080 ³⁾	425.00
				4	[i] 1509 4080 ³⁾	455.00
SCO 1600	Screen	Top or bottom	Front	3	[i] 1509 3160 ³⁾	640.00
				4	[i] 1509 4160 ³⁾	670.00
SCO 2000...3200 ¹⁾	Screen	Top or bottom	Front	3	- ¹⁾	-
				4	- ¹⁾	-

Phase barriers

To suit	Mounting position	No. of poles	Cat. No.	Price \$
SCO 125...200	Top or bottom	3	2998 0033	38.00
		4	2998 0034	48.00
SCO 250...400	Top or bottom	3	2998 0023	43.00
		4	2998 0024	59.00
SCO 500...630	Top or bottom	3	2998 0013	53.00
		4	2998 0014	64.00

SCO 800...320 Barriers supplied as standard

Interlocking device – suits NHP or Fortress key interlocks

To suit	Cat. No.	Price \$
SCO 125...1800	1499 7702	225.00
SCO 2000...3200	SLBLK4	320.00
NHP	TKNHP_ ⁴⁾	515.00
NHP	TKNHPKEY_ ⁴⁾	133.00

Notes:¹⁾ Included as standard on switch.²⁾ Two terminal shrouds required per side, in order to cover both rows of terminals on each side of the changeover switch.³⁾ One screen required per switch.⁴⁾ Insert key code A,B,C.

[i] Available on indent only.

Price Schedule 'B2'

Copper bar connection & bridging kits 2000 - 3200 A

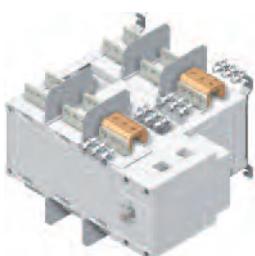


Fig. 1

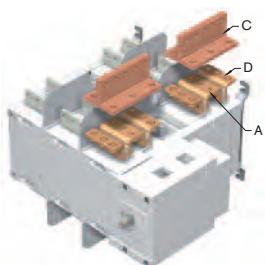


Fig. 2

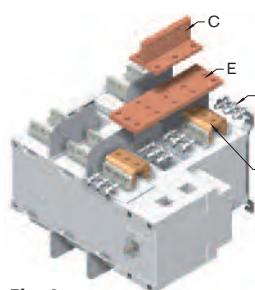


Fig. 3

Top or bottom flat connection Fig. 1

Rating (A)	Part	Qty to order per pole *)	Cat No.	Price \$
2000...2500	Connection piece - part A	2	2619 1200	390.00
2000...2500	Bolt set - part B	2	2699 1200	64.00
3200	Connection piece - part A	-	STANDARD	-
3200	Bolt set - part B	2	2699 1200	64.00

Top or bottom edgewise connection Fig. 2

Rating (A)	Part	Qty to order per pole *)	Cat No.	Price \$
2000...2500	Connection piece - part A	2	2619 1200	390.00
2000...2500	T piece - part C	2	2629 1200 *)	1030.00
2000...2500	Right angle - part D	2	2639 1200 *)	710.00
3200	Connection piece - part A	-	STANDARD	-
3200	T piece - part C	2	2629 1200 *)	1030.00
3200	Right angle - part D	2	2639 1200 *)	710.00

Top or bottom bridging connection Fig. 3

Rating (A)	Part	Qty to order per pole *)	Cat No.	Price \$
2000...2500	Connection piece - part A	2	2619 1200	390.00
2000...2500	Bolt set - part B	2	2699 1200	64.00
2000...2500	Bar - part E	1	4109 0250 *)	680.00
2000...2500	T piece - part C	1	2629 1200 *)	1030.00
3200	Connection piece - part A	-	STANDARD	-
3200	Bolt set - part B	2	2699 1200	64.00
3200	Bar - part E	1	4109 0320 *)	760.00
3200	T piece - part C	1	2629 1200 *)	1030.00

Use

To allow:
 - connection between the two power terminals from a same pole for 2000 to 3200 A ratings
 (fig. 1 and fig 2.)
 - Top or bottom bridging connection (fig. 3)

For 3200 A rating, the connection piece (Part A) are delivered bridged from factory. M12 Bolt sets must be ordered separately.

Dimensions

Refer below for terminal dimension info. Additional information page 10 - 52.

Terminal dimensions (mm) ¹⁾²⁾³⁾

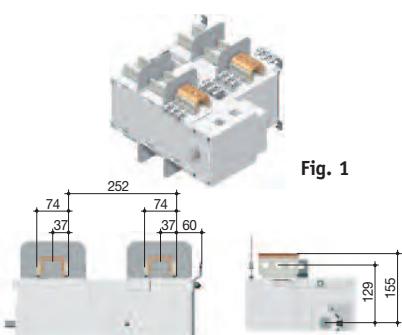


Fig. 1

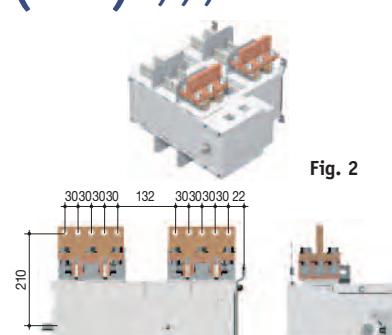


Fig. 2

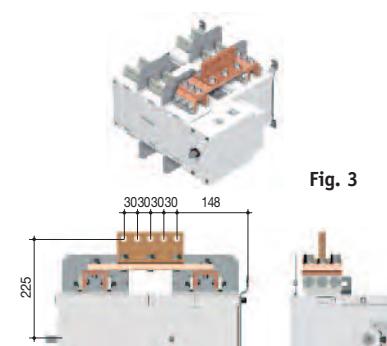


Fig. 3

- Notes:**
- ¹⁾ 3200 A switches are supplied with connection links as standard, as shown in figure 1. The links have threaded holes with 30 mm centres. 30 mm + 30 mm apart. Therefore, although the tags of 3200 A switches are exactly the same as 2000 - 2500 A types, the holes in the supplied link will require 30 mm + 30 mm hole spacing in any attached busbars.
 - ²⁾ In order to prevent possible damage to the switch, NHP recommends that busbar supports be used to prevent heavy conductors from placing excessive weight or pivot forces on the switch connection tags.
 - ³⁾ Terminal bolts not supplied with 2000 - 3200 A switches.
 - ⁴⁾ Example for 3-pole device equipped top only: order 3 times the quantities.
 - ⁵⁾ Bolt set is provided with the accessories.

Price Schedule 'B2'

Technical data and ratings chart

SIRCOVER SCO 125 to 630 A

SIRCO M 20 A - 80 A
changeover switch ratings
Refer page 10 - 11

Ratings to AS/NZS 60947-3 and IEC 60947-3

		125 A	160 A	200 A	250 A	400 A	500 A	630 A
Rated insulation voltage and rated operation voltage AC 20/DC 20	V	800	800	800	800	1000	1000	1000
Rated impulse withstand voltage	kV	8	8	8	8	12	12	12
Rated operational current								
AC 21 A	400 V A	125	160	200	250	400	500	630
	690 V ¹⁾ A	125	160	160	200	200	400	500
AC 22 A	400 V A	125	160	200	250	400	500	630
	690 V ¹⁾ A	125	125	125	125	125	250	315
AC 23 A	400 V A	125	160	160	250	250	500	500
	690 V ¹⁾ A	63	63	63	100	100	160	160
Rated operational current								
DC 21 A	220 V A	125	160	160	250	250	500	630
	440 V A	125 ²⁾)	125 ²⁾)	125 ²⁾)	200 ²⁾)	200 ²⁾)	400 ²⁾)	500 ²⁾)
DC 22 A	220 V A	125	160	160	250	250	400	500
	440 V A	125 ²⁾)	125 ²⁾)	125 ²⁾)	200 ²⁾)	200 ²⁾)	315 ²⁾)	500 ²⁾)
DC 23 A	220 V A	125	125	125	200	200	400	500
	440 V A	125 ³⁾)	125 ³⁾)	125 ³⁾)	200 ³⁾)	200 ³⁾)	400 ³⁾)	500 ³⁾)
Operational power								
AC 23 A	400 V kW	63	80	80	132	132	280	280
	500 V kW	63	63	63	160	160	220	220
	690 V kW	55	55	55	90	90	150	150
Overload capacity	RMS 0.3s kA	15	15	15	17	17	25	25
Short time withstand current	RMS 1s kA	7	7	7	9	9	13	13
Icw 400 V								
Rated peak withstand current (kA peak)	400 V kA	20	20	20	30	30	45	45
Fuse protected short circuit withstand AC (kA RMS prospective)	400 V kA	100	100	50	50	18	100	70
	Fuse A	125	160	200	250	400	500	630
Rated capacitor power	kVAr	55	75	90	115	185	230	290
Mechanical endurance	Ops	10000	10000	10000	10000	10000	5000	5000
Weight (3 pole)	Kg	3.3	3.3	3.3	47	49	8.0	12
Min. tightening torque	Nm	9	9	9	20	20	20	20
Connection cable size (min./max.)	mm ²	35/50	50/95	50/95	95/150	185/240	240/240	2x150/2x300

Notes: ¹⁾ 690 V with terminal or phase barriers.

²⁾ 3 pole device, 2 poles in series for + and 1 pole for -.

³⁾ 4 pole device with 2 poles in series by polarity.

240/415 V ratings suitable for use on 230/400 V in accordance with AS 60038 : 2000.

Technical data and ratings chart

SIRCOVER SCO 800 to 3200 A

Ratings to AS/NZS 60947-3 and IEC 60947-3

		800 A	1250 A	1600 A	2000 A	2500 A	3200 A
Rated insulation voltage and rated operation voltage AC 20/DC 20	V	1000	1000	1000	1000	1000	1000
Rated impulse withstand voltage	kV	12	12	12	12	12	12
Rated operational current							
AC 21A	400 V A	800	1250	1600	2000	2500	3200
	500 V A	800	-	1600	2000	2000	2000
	690 V ¹⁾ A	800	800	1000	2000	2000	2000
AC 22A	400 V A	800	1250	1600	2000	2000	2500
	500 V A	800	1250	1250	2000	2000	2000
	690 V ¹⁾ A	800	1000	1000	1000	1000	1000
AC 23A	400 V A	800	1250	1250	1600	1600	1600
	500 V A	800	1000	1000	1000	1000	1000
	690 V ¹⁾ A	200	200	500	800	800	800
Rated operational current/poles in series							
DC 21A	220 V A	800	1250	1250	2000	2000	2000
	440 V A	800 ²⁾	1250 ²⁾	1250 ²⁾	1250	1250	1250
DC 22A	220 V A	800	1250	1250	1250	1250	1250
	440 V A	800 ²⁾	1250 ²⁾				
DC 23A	220 V A	800	1250	1250	1250 ²⁾	1250 ²⁾	1250 ²⁾
	440 V A	800 ²⁾	1250 ²⁾	1250 ²⁾	1000 ²⁾	1000 ²⁾	1000 ²⁾
Operational power							
AC 23A	400 V kW	450	560	710	710	710	710
	500 V kW	560	710	710	710	710	710
	690 V ¹⁾ kW	220	475	475	750	750	750
Overload capacity	RMS 0.3s kA	50	65	100	100	100	110
Short time withstand current Icw 400 V	RMS 1s kA	26	26	50	50	50	50
Rated peak withstand current (kA peak)	400 V kA	55	80	110	110	110	120
Fuse protected short circuit withstand AC (kA RMS prospective)	400 V kA	50	100	100	100	100	-
	Fuse A	800	1250	2x800	2x1000	2x1250	-
Rated capacitor power	kVar	365	575	-	-	-	-
Mechanical endurance	Ops	4000	4000	4000	3000	3000	3000
Weight (3 pole)	Kg	21	22.5	34	50	50	50
Min. tightening torque	Nm	-	20	40	40	40	40
Connection cable size (min./max.)	mm ²	2 (185/300)	2 240/4 185	4 185 max.	6 240 max.	-	-

Notes: ¹⁾ 690 V with terminal or phase barriers.

²⁾ 4 pole device with 2 poles in series by polarity.

240/415 V ratings suitable for use on 230/400 V in accordance with AS 60038 : 2000.

Technical data and dimensions (mm)

SIRCOVER SCO 20 to 1600 A

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

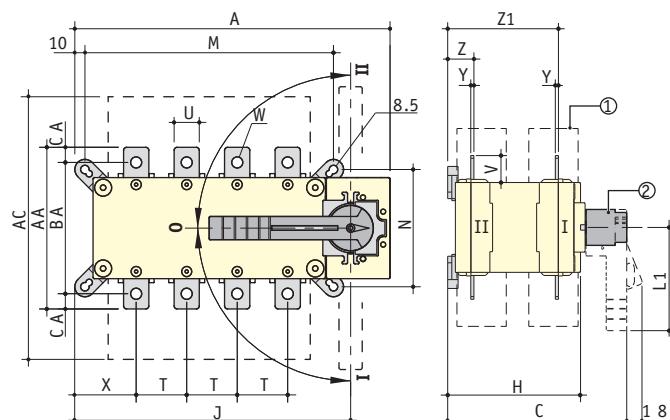


Rating (A)	Overall dimensions			Switch body			Mounting			Connection terminals	
	E min.	E max.	F	F1	G	J	M	N	M	N	
16...40	105	372	97.5	45	68	48.75	30	75	15	7.5	
63...80	105	372	105	52.5	76	52.5	35	85	17.5	8.75	

Notes: Showing 1 switches fourth pole module - 1 pole per switch is the maximum. 1 auxiliary contact can also be mounted onto a 4th pole, though two other auxiliaries can be mounted on the other side of the switch in addition.
Showing 1 auxiliary contact. A maximum of 2 auxiliaries can be on each side of a switch, making up a total of 4 auxiliaries.

SIRCOVER 125 to 1600 A

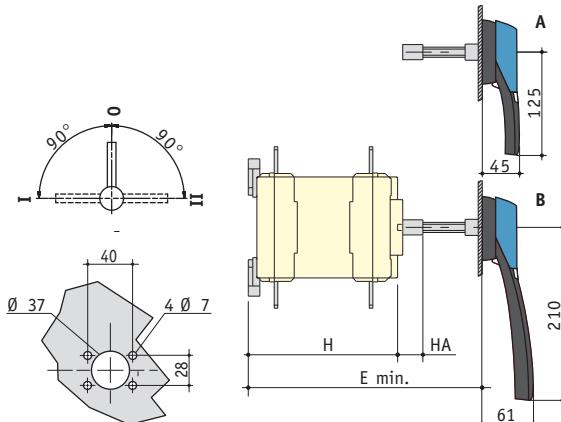
Direct front operation



A. External operation handle S2 type: 125 to 630 A

B. External operation handle S3 type: 800 to 1600 A

External front operation



① Terminal shrouds

② Direct operation handle:

- 125 to 630 A: L1 = 140 mm.

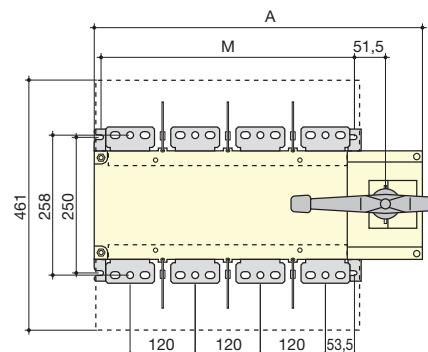
- 800 to 1600 A: L1 = 210 mm.

Rating (A)	Overall dimensions (mm)				Terminal shrouds		Switch body			Switch mounting			Connection terminals								
	A 3p	A 4p	C	E min.	AC	H	HA	J 3p	J 4p	M 3p	M 4p	N	X 3p	X 4p	Y	Z	Z1	AA	BA	CA	
125	221	251	218	210	235	148	25	182	212	156	186	101	36	20	25	8.5	56	50	3.5	28	124
160	221	251	218	210	235	148	25	182	212	156	186	101	36	20	25	8.5	56	50	3.5	28	124
200	221	251	218	210	235	148	25	182	212	156	186	101	36	20	25	8.5	56	50	3.5	28	124
250	262	312	218	210	280	148	25	223	273	196	246	116	50	25	30	11	61	61	3.5	30	124
400	262	312	218	210	280	148	25	223	273	196	246	116	50	35	35	11	61	61	3.5	30	124
500	319	379	295	280	400	225	25	272	332	246	306	176	65	32	37	13	70.5	65.5	5	43	180
630	319	379	295	280	400	225	25	272	332	246	306	176	65	45	50	13	70.5	65.5	5	43	180
800	386	466	375	425	459	298	29	306.5	386.5	336	336	250	80	50	60.5	15	48	48	7	66.5	253.5
1250	386	466	375	425	459	298	29	306.5	386.5	336	336	250	80	60	65	16x11	48	48	7	66.5	255.5
1600	478	598	375	425	461	298	29	388.5	518.5	347	467	250	120	90	43.5	12.5x5	54	54	8	66.5	255.5
																					288
																					15

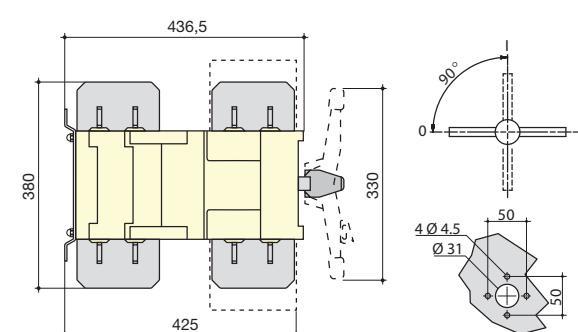
Technical data and dimensions (mm) SIRCOVER SCO 2000 to 3200 A

SIRCOVER 2000 to 3200 A

Direct front operation

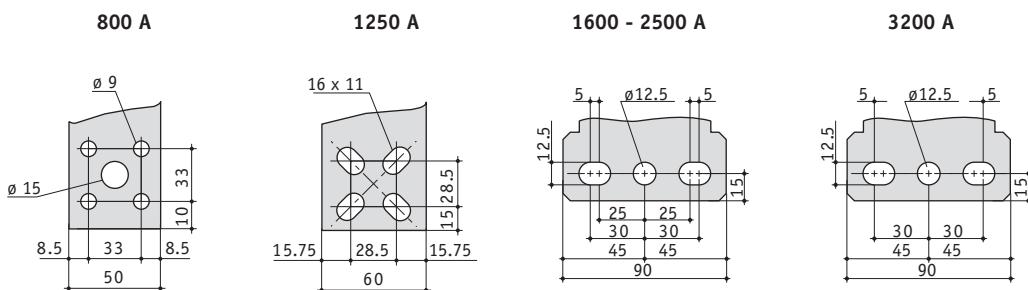


External front operation



Rating (A)	Overall dimensions		Switch mounting	
	A 3p.	A 4p.	M 3p.	M 4p.
2000...3200	478	598	347	467

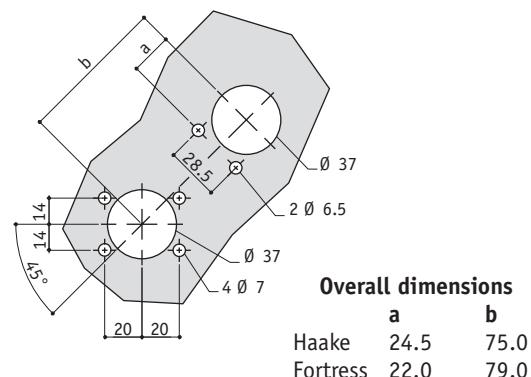
SIRCOVER Changeover and bypass switch connection terminals



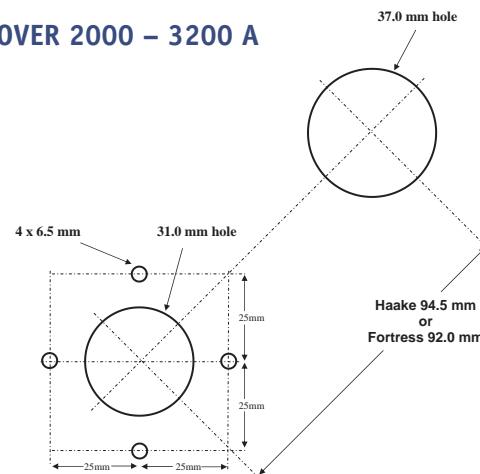
Note: Refer page 10 - 48 for additional 2000 - 3200 A terminal info.

Door drilling with Fortress K Lock

SIRCOVER 125 – 1800 A



SIRCOVER 2000 – 3200 A



VCO

Visible contact changeover switches 63 to 1600 A



SIRCO VM1 63 to 125 A SIDER 200 to 1600 A



63-125 A

VCO visible contact changeover switches offer fully visible breaking in a compact and effective design. The VCO range features positive circuit indication, 2 stable contact positions and double-break contacts for better electrical characteristics. The range extends from a compact 63 A version to a very capable 1600 A model. In combination with an extensive range of accessories, the VCO range is the complete visible contact changeover solution. The switches are padlockable in all positions.

Front operated base mount (Supplied with direct mount handle)

	AC 21 400 V (A)	AC 23 400 V (A)	AC 23 400 V (kW)	No. of poles	Cat. No.	Price \$
63 A	63	63	30	3	VCO 63 3 P	590.00
				4	VCO 63 4 P	660.00
80 A	80	63	30	3	VCO 80 3 P	750.00
				4	VCO 80 4 P	800.00
100 A	100	63	30	3	VCO 100 3 P	850.00
				4	VCO 100 4 P	930.00
125 A	125	63	30	3	VCO 125 3 P	900.00
				4	VCO 125 4 P	990.00
200 A	200	200	100	3	i VCO 200 3 P	2730.00
				4	i VCO 200 4 P	3360.00
400 A	400	400	220	3	i VCO 400 3 P	4250.00
				4	i VCO 400 4 P	4580.00
630 A	630	630	355	3	i VCO 630 3 P	8380.00
				4	i VCO 630 4 P	8990.00
800 A	800	630	355	3	i VCO 800 3 P	8690.00
				4	i VCO 800 4 P	9150.00
1250 A	1250	1000	560	3	i VCO 1250 3 P	15470.00
				4	i VCO 1250 4 P	19720.00
1600 A	1600	1000	560	3	i VCO 1600 3 P	19720.00
				4	i VCO 1600 4 P	21260.00

Accessories for VCO switches

Description

Page

Accessories	10 - 54
Technical data	10 - 55 to 10 - 56
Dimensions	10 - 57



200-1600 A

Note:  Available on indent only.

Price Schedule 'B2'

VCO Visible contact changeover switches Accessories

Auxiliary contacts (early break)



Auxiliary contact

To suit	Contacts	Cat. No.	Price \$
VCO 63...125	1 C/O	4439 0001	106.00
VCO 200	1st contact 1 C/O	i 4409 0001	85.00
VCO 400	1st contact 1 C/O	i 4409 0003	85.00
VCO 630...1600	1st contact 1 C/O	i 4409 0004	85.00
VCO 200...1600	2nd contact 1 C/O	i 4409 0002	85.00



Direct handle

Direct mount handles ('OFF' padlockable, I & II padlocking via knockouts)

To suit	Colour	Cat. No.	Price \$
VCO 63...125	Black	4439 5012	85.00
VCO 200...400	Black	2699 5052	148.00
VCO 630...1600	Black	2799 7052	210.00

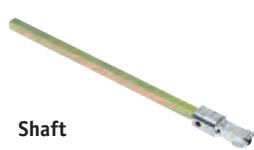
External mount handles



External handle (S1)

To suit	Type	Colour	IP rating	No. of padlock positions	Cat. No.	Price \$
VCO 63...125	Pistol - S1	Black	IP 65	1 (in off)	1413 2113	200.00
		Black	IP 65	3	1413 2813	200.00
VCO 200...1600	Pistol - S3	Black	IP 65	1 (in off)	1433 3113	380.00

Shaft extensions



Shaft

To suit	Shaft length	Cat. No.	Price \$
VCO 63...125	320 mm (8 mm)	1402 0832	53.00
VCO 200...1600	320 mm (15 mm)	1401 1532	106.00

Bridging bars (one piece per switch)



Bridging bars

To suit	No. of poles	Cat. No.	Price \$
VCO 63...125	3	4499 3006	255.00
	4	i 4499 4006	320.00

Terminal shrouds and screens ¹⁾



Shrouds

To suit	IP Rating	Mounting position	No. of poles	Cat. No.	Price \$
VCO 200	20	Top or	3	i 4428 3020	74.00
		Bottom	4	i 4428 4020	85.00
VCO 400	20	Top or	3	i 4428 3050	85.00
		Bottom	4	i 4428 4050	91.50
VCO 630...800	Screen	Top or	3	i 2998 3080	138.00
		Bottom	4	i 2998 4080	143.00
VCO 1250...1600	Screen	Top or	3	i 2998 3120	143.00
		Bottom	4	i 2998 4120	191.00

Notes: ¹⁾ One terminal shroud or screen required per side.

Available on indent only.

Price Schedule 'B2'

Technical data and ratings chart

SIRCO VM1 VCO 63 to 125 A

Ratings to AS/NZS 60947-3 and IEC 60947-3

			63 A	80 A	100 A	125 A
Rated insulation voltage and rated operation voltage AC 20/DC 20	V		800	800	800	800
Rated impulse withstand voltage	kV		8	8	8	8
Rated operational current						
AC 21A	400 V	A	63	80	100	125
	500 V	A	63	80	80	80
	690 V ¹⁾	A	63	80	80	80
AC 22A	400 V	A	63	80	100	125
	500 V	A	40	40	40	40
	690 V ¹⁾	A	40	40	40	40
AC 23A	400 V	A	63	63	63	63
	500 V	A	25	25	25	25
	690 V ¹⁾	A	25	25	25	25
Rated operational current / poles in series						
DC 21A	220 V	A	63	80	100	125
	440 V	A	-	-	-	1
DC 22A	220 V	A	63	80	100	100
	440 V	A	-	-	-	-
DC 23A	220 V	A	63	63	63	63
	440 V	A	-	-	-	-
Operational power						
AC 23A	400 V	kW	30	30	30	30
	500 V	kW	-	-	-	-
	690 V	kW	22	22	22	22
Overload capacity	RMS 0.3s	kA	4.5	4.5	4.5	4.5
Short time withstand current	RMS 1s	kA	2.5	2.5	2.5	2.5
Icw 400 V						
Rated peak withstand current (kA peak)	400 V	kA	12	12	12	12
Fuse protected short circuit withstand AC	400 V	kA	100	100	100	50
(kA RMS prospective)	Fuse	A	63	80	100	125
Rated capacitor power		kVAr	28	37	45	55
Mechanical endurance		Ops	10000	10000	10000	10000
Weight (3 pole)		Kg	1.2	1.2	1.4	1.4
Min. tightening torque		Nm	6	6	6	6
Connection cable size (min./max.)		mm ²	4/50	4/50	4/50	4/50

Note: ¹⁾ 690 V with terminal shrouds or phase barriers.

240/415 V ratings suitable for use on 230/400 V in accordance with AS 60038 : 2000.



- ① Direct front handle
- ② Door interlocked external front handle
- ③ ④ Pre-break and signalling N/O / N/C auxillary contact blocks
- ⑤ Bridging bars
- ⑥ Back plate mounting or DIN rail mounting

Overview (for further details, please see the installation instructions supplied with each device)

Technical data and ratings chart SIDER VCO 200 to 1600 A

Ratings to AS/NZS 60947-3 and IEC 60947-3

		200 A	400 A	630 A	800 A	1250 A	1600 A
Rated insulation voltage and rated operation voltage AC 20/DC 20	V	750	1000	1000	1000	1000	1000
Rated impulse withstand voltage	kV	8	12	12	12	12	12
Rated operational current							
AC 21A	400 V A	200	400	630	800	1250	1600
	500 V A	160	400	630	800	1000	1250
	690 V A	160	400	630	800	1000	1250
AC 22A	400 V A	200	400	630	800	1250	1250
	500 V A	100	400	315	315	400	400
	690 V A	100	400	315	315	400	400
AC 23A	400 V A	200	400	630	630	1000	1000
	500 V A	-	80	100	125	200	200
	690 V A	-	80	100	125	200	200
Rated operational current/poles in series							
DC 21A	220 V A	200	400	630	800	1000	1250
	440 V A	160/2	315	500	630	-	1000
DC 22A	220 V A	160	400	630	800	800	800
	440 V A	160/2	400/2	630/2	800/2	800/2	800/2
DC 23A	220 V A	160/2	400/2	630	800	1250	1600
	440 V A	-	400/2	630/2	800/2	800/2	800/2
Operational power							
AC 23A	400 V kW	100	220	355	355	560	560
	500 V kW	-	-	-	-	-	-
	690 V kW	-	75	90	110	185	185
Overload capacity	RMS 0.3s kA	17	17	50	50	100	100
Short time withstand current	RMS 1s kA	9	9	26	26	50	50
Icw 400 V							
Fuse protected short circuit withstand AC	400 V kA	100	100	100	70	100	120
(kA RMS prospective)	Fuse A	200	400	630	800	1250	2x800
Rated capacitor power	kVAr	90	185	290	365	575	-
Mechanical endurance	Ops	10000	5000	5000	4000	4000	3000
Weight (3 pole)	Kg	4	9	17.5	17	23.5	35
Min. tightening torque	Nm	9	20	40	-	20	40
Connection cable size	mm ²	95	240	2x300	2x300	4x185	6x240

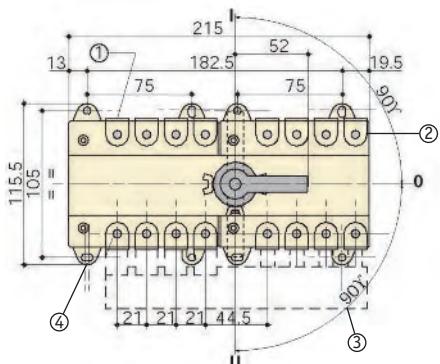
Note: 240/415 V ratings suitable for use on 230/400 V in accordance with AS 60038 : 2000.

Technical data and dimensions (mm)

SIDER/SIRCO VCO 63 to 1600 A

SIRCO VM1 63 to 125 A

Direct front operation

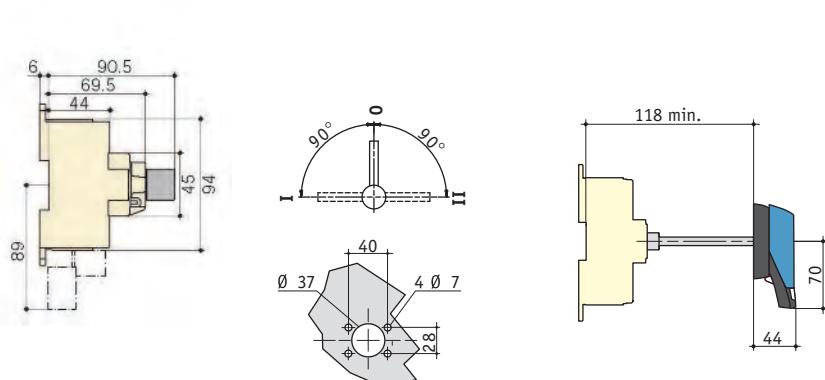


① Max. connection:

- Rigid: 50 mm²
- Flexible: 35 mm²

② Pozidrive no.1 slot 4.5 mm

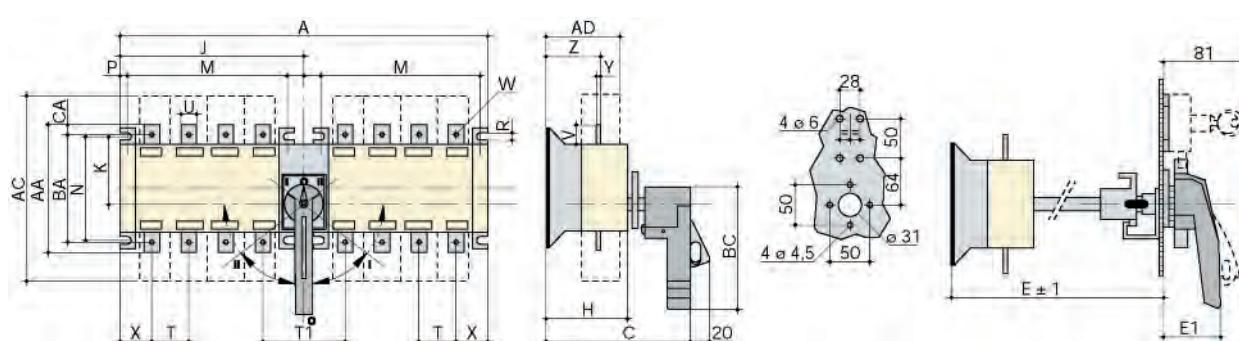
External front operation



③ Bridging bars

④ Mounting by 4 or 8 screws ø 7 mm

SIRCO VCO 200 to 1600 A



Rating (A)	Overall dimensions				Terminal shrouds		Switch body			Mounting				Connections															
	A 3p	A 4p	C	E	E1	AC	AD	H	J 3p	J 4p	K	BC	M 3p	M 4p	N	P	R	T	T1 3p	T1 4p	U	V	W	X	Y	Z	AA	BA	CA
200	395	495	153	173	60	280	121	92	197.5	247.5	72	115	160	210	110	10	7	50	121	121	25	25	9	37	2.5	59	150	130	10
400	530	650	187	207	60	400	152	126	265	325	120	115	210	270	180	10	9	65	175	165	32	37.5	11	47.5	5	82	235	205	15
630	638	798	240	240	81	460	-	160	319	399	110	210	255	335	220	12.5	11	80	188	188	40	50	13	65	6	106	300	260	20
800	638	798	240	240	81	460	-	160	319	399	110	210	255	335	220	12.5	11	80	198	198	50	60	-	60	6	106	320	-	-
1250	822	1062	240	240	81	460	-	160	411	531	110	210	347	467	220	12.5	11	120	196	196	63	65	-	73	7	107	330	-	-
1600	822	1062	240	240	81	460	-	160	411	531	110	210	347	467	220	12.5	11	120	196	196	80	80	-	73	15	111	360	-	-

LOAD BREAK AND AUTOMATIC TRANSFER SWITCHES

NHP

Dedicated to industrial applications, providing simple solutions for emergency or local switching and machine control.



SIRCO M

20-160 A Loadbreak Switch

SIRCO M is a load break switch that combines attractive style and optimised features due to its innovative design. The mechanism enables the operation of the device in every orientation without derating.

- 16 - 125 A
- Front on side operation
- Direct operation handle
- External operation handle
- Din profile
- Padlockable as standard

ATYS

63-160 A Automatic Transfer Switch

Changeover - Two mechanically interlocked power switches

Operation - A configurable automatic control associated with an emergency manual operation

Monitoring and control - A built-in configuration and control interface, simple or advanced

Installation - A modular product adapted to any type of DIN enclosure integration

socomec
Innovative Power Solutions

BCO

UPS Bypass switches 125 to 1600 A



SIRCOVER BYPASS 125 to 1600 A

Socomec's BCO bypass changeover switches deliver an easy and effective UPS bypass solution. The switches feature 3 stable circuit positions for onload switching and full safety isolation on low voltage circuits during maintenance applications.

Front operated base mount (supplied with external handle and 320 mm shaft)

	AC 21 400 V (A)	AC 23 400 V (A)	AC 23 400 V (kW)	No. of poles	Make before break (I,I&II,II) Cat. No.	Price \$
125 A	125	125	63	3	BCO 125 3P MB	2060.00
				4	BCO 125 4P MB	2260.00
160 A	160	160	80	3	BCO 160 3P MB	2520.00
				4	i BCO 160 4P MB	2760.00
200 A	200	160	80	3	BCO 200 3P MB	3220.00
				4	BCO 200 4P MB	3410.00
250 A	250	250	132	3	BCO 250 3P MB	3710.00
				4	i BCO 250 4P MB	3950.00
400 A	400	250	132	3	BCO 400 3P MB	4920.00
				4	i BCO 400 4P MB	5580.00
500 A	500	500	280	3	i BCO 500 3P MB	6830.00
				4	i BCO 500 4P MB	7210.00
630 A	630	500	280	3	i BCO 630 3P MB	8170.00
				4	i BCO 630 4P MB	8640.00
800 A	800	800	450	3	i BCO 800 3P MB	12830.00
				4	i BCO 800 4P MB	13830.00
1250 A	1250	1250	710	3	i BCO 1250 3P MB	25640.00
				4	i BCO 1250 4P MB	27560.00
1600 A	1600	1250	710	3	i BCO 1600 3P MB	28600.00
				4	i BCO 1600 4P MB	32090.00



Accessories for SIRCOVER BYPASS switches

Description	Page
Accessories	10 - 60 to 10 - 61
Technical data	10 - 62 to 10 - 63
Dimensions	10 - 64

Notes:  Available on indent only.

Price Schedule 'B2'

BCO Standard bypass switches Accessories

Direct mount handles



Direct handle

To suit	Colour	Handle type	Cat. No.	Price \$
BCO 125...200	Black	Single	4199 5012	117.00
BCO 250...630	Black	Single	2799 7052	210.00
BCO 800...1600	Black	Double	2799 7012	225.00

External mount handles



External handle (S2)

To suit	Colour	IP rating	Type	Cat. No.	Price \$
BCO 125...200 MB	Black	65	Pistol-S2	1423 2114	200.00
BCO 250...630 MB	Black	65	Pistol-S3	1433 3114	380.00
BCO 800...1600 MB	Black	65	T Handle	1443 3114	435.00

Shaft extensions



Shaft

To suit	Shaft length (mm)	Cat. No.	Price \$
BCO 125...200	320 (10 mm)	1400 1032	53.00
BCO 250...630	320 (12 mm)	1401 1532	106.00
BCO 800...1600	320 (15 mm)	2799 3018	96.00

Bridging bars (one per pole)



Bridging bars

To suit	No. of Poles	Cat. No.	Price \$
BCO 125...200 Amp	1	4109 0019	85.00
BCO 250 Amp	1	4109 0025	106.00
BCO 400 Amp	1	4109 0039	127.00
BCO 630 Amp	1	4109 0063	159.00
BCO 800...1000 Amp	1	4109 0080	255.00
BCO 1250 Amp	1	4109 0120	370.00
BCO 1600 Amp	1	4109 0160	455.00

Accessory fitting
diagram page 10 - 46

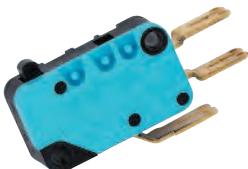
Notes: Six 1 pole bars required on 3 pole BCO
 Available on indent only.

Price Schedule 'B2'

BCO Standard bypass switches

Accessories

Auxiliary contacts



Auxiliary contact

To suit	Current (A)	Contacts	Cat. No.	Price \$
BCO 125...1600	16	1 st /2 nd C/O	4109 0021	117.00



Shrouds

Terminal shrouds and screens

To suit	IP rating	Mounting position	No. of poles	Cat. No.	Price \$
BCO 125...200	20	Top or bottom	3	2694 3014	85.00
			4	2694 4014	106.00
BCO 250...400	20	Top or bottom	3	2694 3021	138.00
			4	2694 4021	148.00
BCO 500...630	20	Top or bottom	3	2694 3051	191.00
			4	2694 4051	200.00
BCO 800...1250	screen only	Top or bottom	3	i 15093080	425.00
			4	i 15094080	455.00
BCO 1600	screen only	Top or bottom	3	i 15093160	640.00
			4	15094160	670.00

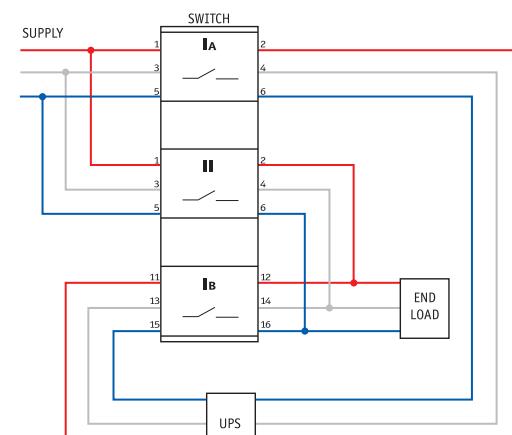
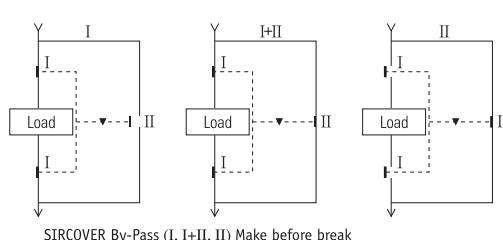
3 terminal covers required per side

Phase barriers



To suit	Mounting position	No. of poles	Cat. No.	Price \$
BCO 125...200	Top or bottom	3	2998 0033	38.00
		4	2998 0034	48.00
BCO 250...400	Top or bottom	3	2998 0023	43.00
		4	2998 0024	59.00
BCO 500...630	Top or bottom	3	2998 0013	53.00
		4	2998 0014	64.00

Typical application



Notes: Available on indent only.

Price Schedule 'B2'

Technical data and ratings chart

SIRCOVER BYPASS BCO 125 to 1600 A

Ratings to AS/NZS 60947-3 and IEC 60947-3

		125 A	160 A	200 A	250 A	400 A
Rated insulation voltage and rated operation voltage AC 20/DC 20	V	800	800	800	800	800
Rated impulse withstand voltage	kV	8	8	8	8	8
Rated operational current						
AC 21A	400 V A	125	160	200	250	400
	690 V ¹⁾ A	125	160	160	200	200
AC 22A	400 V A	125	160	200	250	400
	690 V ¹⁾ A	125	125	125	125	125
AC 23A	400 V A	125	160	160	250	250
	690 V ¹⁾ A	63	63	63	100	100
Rated operational current / poles in series						
DC 21A	220 V A	125	160	160	250	250
	440 V A	125 ²⁾)	125 ²⁾)	125 ²⁾)	200 ²⁾)	200 ²⁾)
DC 22A	220 V A	125	160	160	250	250
	440 V A	125 ²⁾)	125 ²⁾)	125 ²⁾)	200 ²⁾)	200 ²⁾)
DC 23A	220 V A	125	125	125	200	200
	440 V A	125 ³⁾)	125 ³⁾)	125 ³⁾)	200 ³⁾)	200 ³⁾)
Operational power						
AC 23A	400 V kW	63	80	80	132	132
	500 V kW	-	-	-	-	-
	690 V kW	55	55	55	90	90
Overload capacity	RMS 0.3s kA	15	15	15	17	17
Short time withstand current	RMS 1s kA	7	7	7	9	9
Icw 400 V						
Rated peak withstand current	400 V kA (kA peak)	20	20	20	30	30
Fuse protected short circuit withstand AC	400 V kA	100	100	50	50	18
(kA RMS prospective)	Fuse A	125	160	200	250	400
Rated capacitor power	kVAr	55	55	90	115	185
Mechanical endurance	Ops	10000	10000	10000	10000	10000
Weight (3 pole)	Kg	5.5	5.6	5.6	7.1	7.4
Min. tightening torque	Nm	9	9	9	20	20
Connection cable size (min./max.)	mm ²	35/50	50/95	50/95	95/150	185/240

Notes: ¹⁾ 690 V with terminal shrouds or phase barriers.

²⁾ 3 pole device, 2 poles in series for + and -.

³⁾ 4 pole device with 2 poles in series by polarity.

240/415 V ratings suitable for use on 230/400 V in accordance with AS 60038 : 2000.

Cont'd next page

Technical data and ratings chart

SIRCOVER BYPASS BCO 125 to 1600 A (cont'd)

Ratings to AS/NZS 60947-3 and IEC 60947-3

		500 A	630 A	800 A	1250 A	1600 A
Rated insulation voltage and rated operation voltage AC 20/DC 20	V	1000	1000	1000	1000	1000
Rated impulse withstand voltage	kV	12	12	12	12	12
Rated operational current						
AC 21A	400 V A	500	630	800	1250	1600
	690 V ¹⁾ A	400	500	800	800	1000
AC 22A	400 V A	500	630	800	1250	1600
	690 V ¹⁾ A	250	315	800	1000	1000
AC 23A	400 V A	500	500	800	1250	1250
	690 V ¹⁾ A	160	160	200	200	500
Rated operational current / poles in series						
DC 21A	220 V A	500	630	800	1250	1250
	440 V A	400 ²⁾	500 ²⁾	800 ²⁾	1250 ²⁾	1250 ²⁾
DC 22A	220 V A	400	500	800	1250	1250
	440 V A	315 ²⁾	500 ²⁾	800 ²⁾	1250 ²⁾	1250 ²⁾
DC 23A	220 V A	400	500	800	1250	1250
	440 V A	400 ³⁾	500 ³⁾	800 ²⁾	1250 ²⁾	1000 ²⁾
Operational power						
AC 23A	400 V kW	280	280	450	560	710
	500 V kW	-	-	560	710	710
	690 V kW	150	150	220	475	475
Overload capacity	RMS 0.3s kA	25	25	50	65	100
Short time withstand current	RMS 1s kA	13	13	26	26	50
Icw 400 V						
Rated peak withstand current	400 V kA (kA peak)	45	45	55	80	110
Fuse protected short circuit withstand AC	400 V kA (kA RMS prospective)	100	70	50	100	10
	Fuse A	500	630	800	1250	2x800
Rated capacitor power	kVAr	230	290	-	-	-
Mechanical endurance	Ops	5000	5000	3000	3000	3000
Weight (3 pole)	Kg	20	25	47	47	50
Min. tightening torque	Nm	20	20	-	20	40
Connection cable size (min./max.)	mm ²	240	(2x150)/(2x300)	(2x185)/(2x300)	4x185	6x240

Notes: ¹⁾ 690 V with terminal shrouds or phase barriers.

²⁾ 3 pole device, 2 poles in series for + and -.

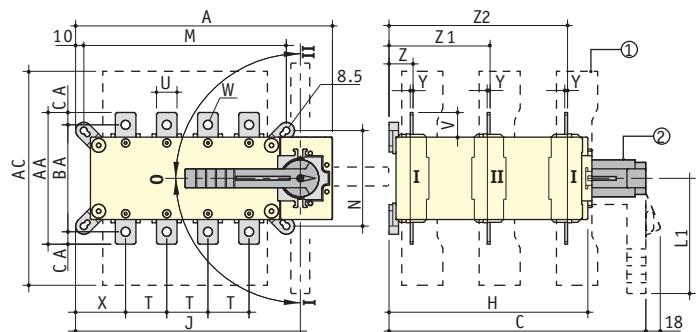
³⁾ 4 pole device with 2 poles in series by polarity.

240/415 V ratings suitable for use on 230/400 V in accordance with AS 60038 : 2000.

Technical data and dimensions (mm) SIRCOVER BYPASS BCO 125 to 1600 A

SIRCOVER bypass 125 to 1600 A

Direct front operation

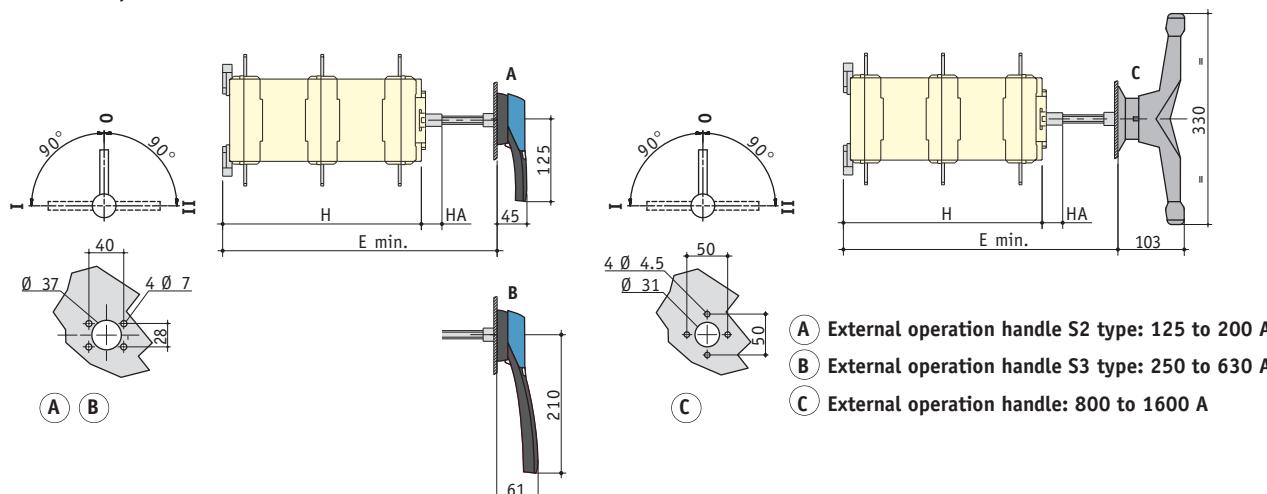


① Terminal shrouds

② Direct operation handle:

- 125 to 200 A: L1 = 140 mm
- 250 to 630 A: L1 - 210 mm
- 800 to 1600 A: L1 = ø 330 mm

External front operation



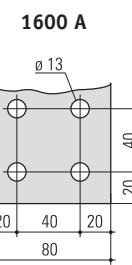
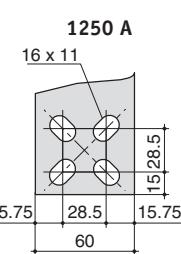
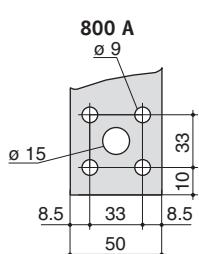
A External operation handle S2 type: 125 to 200 A

B External operation handle S3 type: 250 to 630 A

C External operation handle: 800 to 1600 A

Rating (A)	Overall dimensions (mm)				Terminal shrouds			Switch body		Switch mounting		Connection terminals													
	A 3P	A 4P	C	E min.	AC	H	HA	J 3P	J 4P	M 3P	M 4P	N	T	U	V	W	X 3P	X 4P	Y	Z	Z1	Z2	AA	BA	CA
125	221	251	313	320	235	243	25	182	212	156	186	101	36	20	25	8.5	56	50	3.5	28	124	219	135	115	10
160	221	251	313	320	235	243	25	182	212	156	186	101	36	20	25	8.5	56	50	3.5	28	124	219	135	115	10
200	221	251	313	320	235	243	25	182	212	156	186	101	36	20	25	8.5	56	50	3.5	28	124	219	135	115	10
250	262	312	313	298	280	243	25	223	273	196	246	116	50	25	30	11	61	61	3.5	30	124	219	160	130	10
400	262	312	313	298	280	243	25	223	273	196	246	116	50	35	35	11	61	61	3.5	30	124	219	170	140	15
500	319	379	432	417	401	362	25	272	332	246	306	176	65	32	37	13	70.5	65.5	5	43	180	317	235	205	15
630	319	379	432	417	400	362	25	272	332	246	306	176	65	45	50	13	70.5	65.5	5	43	180	317	260	220	20
800	386	466	560	550	459	479	29	306.5	386.5	255	335	250	80	50	60.5	15	48	48	7	66.5	253.5	439.5	321	-	26.5
1250	386	466	560	550	459	479	29	306.5	386.5	255	335	250	80	60	65	16x11	48	48	7	66.5	253.5	439.5	320	-	29.25
1600	478	598	560	550	461	479	29	388.5	518.5	347	467	250	120	90	43.5	12.5x5	54	54	8	66.5	253.5	439.5	288	-	15

SIRCOVER Connection terminals



AUTOMATIC TRANSFER SWITCHES

NHP

POWER DISTRIBUTION



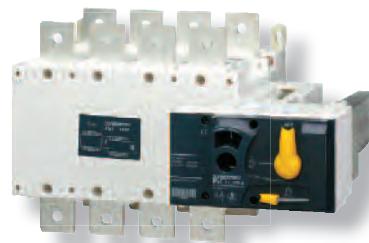
PD-SOCOMECA-TYS

ATyS M

New 1 and 3 phase models



ATyS 3s



ATyS 6e



- 40 to 3200 A
- AS/NZ 60947.6.1, IEC 60947.6.1
- Motorised changeover switches
- Automatic transfer switches complete with logic
- Six models to choose from
- Full range of accessories
- Separate logic available
- New compact ATyS M 40-160 A, 1 and 3 phase models

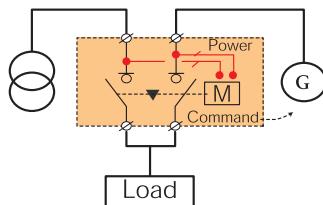
socomec
Innovative Power Solutions

ATS Automatic transfer switches

ATyS 63 to 3200 A Selection Guide

Refer Part C
for additional
technical
information

Applications



Example: between a transformer and a gенсет



ATyS M 6e



ATyS M 3s



ATyS 3s



ATyS 6e



ATyS 6m

	ATyS M 3s	ATyS M 6s	ATyS M 6e	ATyS 3s	ATyS 6e	ATyS 6m
Normal / backup transfer with an external automatic control	•				•	
Normal / backup transfer with an internal automatic control (ATS)		•	•		•	•

Characteristics

Auxiliary Power Supply

Version 1 AC power supply				•		
Version 2 AC power supplies	•	•	•		•	•
Version 1 DC power supply				•	•	•

Operation

By free auxiliary contacts for the I, 0, II positions	•	•	•	•	•	•
Automatic		•	•		•	•
Key-type /AUT selector switch				•	•	•
Padlock in 0 position	•	•	•	•	•	•

Monitoring

Main network: 3 V, loss of one phase, phase sequence		•	•	•	•	•
Main network: frequency			•		•	•
Emergency network: frequency			•		•	•
Emergency network: 3 V, loss of one phase, phase sequence			•			•

Configuration

Choice of logic: contactor or impulse	•		•	•	•	•
Upper and lower thresholds, associated hysteresis		•	•		•	•
Operating time delays		•	•		•	•
Network priority		•	•		•	•

Front Display

Status of supplies, positions, commands, faults, padlocking		•	•		•	•
Voltage monitored, parameters			•		•	•
Frequencies monitored, parameters			•		•	•
3I, In, P, Q, S, PF, monitored			•			•

Inputs/Outputs

Position I and II auxiliary contacts (optional)	•	○	•	•	•	•
Position 0 auxiliary contacts (optional)		○	•		•	•
Padlock and /AUT information auxiliary contacts	•		•		•	•
2 slots for optional modules (COM RS 485, Inputs / Outputs)					•	•
Generator start-up command		•	•		•	•
Fault relay output contact		•	•		•	•
Remote control interface (optional)			○		○	○

Notes: • denotes features included in unit

○ denotes that this feature is optional and must be ordered separately.

ATS Automatic transfer switches

ATyS M 3s Transfer switch



The ATyS M 3s is made up of 2 power switches that are mechanically and electrically interlocked to ensure safe operation. The 3s is driven by a volt free contact allowing switching operation between I, 0, II from external control logic. The 3s features solenoid operation to ensure fast switching operations. ATyS M 3s Transfer switches require external control for switching and or circuit sensing.

Ordering details

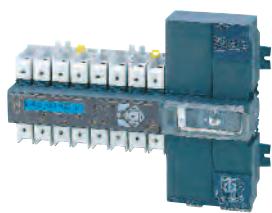
40 A
63 A
100 A
160 A

AC 21 400 V (A)	AC 23 400 V (A)	No. of poles	1 Phase Cat. No.	Price \$	No. of poles	3 Phase Cat. No.	Price \$
40	40	2	<input type="button" value="i"/> 1323 2004	1280.00			
63	80	2	<input type="button" value="i"/> 1323 2006	1590.00	4	1323 4006	2500.00
100	100	2	<input type="button" value="i"/> 1323 2010	1840.00	4	1323 4010	3390.00
160	125	2	<input type="button" value="i"/> 1323 2016	2330.00	4	1323 4016	4270.00

Note: ATyS M are on automatic transfer switch and require upstream protection.

New single
phase type

ATyS M 6s and ATyS M 6e Transfer switches



The ATyS M 6s and ATyS M 6e transfer switches both have fully integrated control and automatic changeover functions. Featuring solenoid operation to ensure fast switching operation, the transfer switches are also mechanically and electrically interlocked to ensure safe operation.

The main differences between the two models are:

- The ATyS M 6s model features dials for setting circuit sensing parameters
- The ATyS M 6e model contains an LCD display method of circuit status indication and setting adjustments. It can display frequency, voltage, amperes, phase loss, phase sequence, PF, and is also available with communications (1384 xxxx type). A remote operations panel is available for the ATyS M 6e. Refer to page 10 - 72

New single
phase type

Ordering details

40 A
63 A
100 A
160 A

AC 31 B 400 V (A)	No. of poles	1 Phase Cat. No.	Price \$	No. of poles	Type	3 Phase Cat. No.	Price \$
40	2	<input type="button" value="i"/> 1353 2004	2100.00	4	6s	-	-
		-			6e	-	-
63	2	<input type="button" value="i"/> 1353 2006	2570.00	4	6s	1354 4006	3230.00
		-			6e	<input type="button" value="i"/> 1364 4006	5150.00
100	2	<input type="button" value="i"/> 1353 2010	2820.00	4	6s	1354 4010	4110.00
		-			6e	<input type="button" value="i"/> 1364 4010	6030.00
160	2	<input type="button" value="i"/> 1353 2016	3310.00	4	6s	1354 4016	5000.00
		-			6e	<input type="button" value="i"/> 1364 4016	6910.00

Wiring diagrams
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10

Accessories for ATyS M switches

Description

Accessories
Technical data
Dimensions

Page

10 - 70 to 10 - 72
10 - 73
10 - 78

Note: ATyS M automatic transfer switches require upstream overload and short circuit protection.
ATyS M 6E with RS 4585 communication available indent. (1384....)
Refer NHP for pricing

Available on indent only.

Price Schedule 'B2'

ATS Automatic transfer switches

ATyS 3s Transfer switches (external sensing circuit required)



ATyS 3s

Ordering details

	AC 21 400 V (A)	AC 23 400 V (A)	No. of poles	Cat. No.	Price \$
125 A	125	125	3	1523 3012	4490.00
			4	1523 4012	4790.00
160 A	160	160	3	1523 3016	5430.00
			4	1523 4016	5770.00
250 A	250	250	3	1523 3025	6400.00
			4	1523 4025	7050.00
400 A	400	250	3	1523 3040	8490.00
			4	1523 4040	9130.00
630 A	630	500	3	1523 3063	9300.00
			4	1523 4063	9930.00
800 A	800	800	3	1523 3080	12180.00
			4	i 1523 4080	12830.00
1000 A	1000	1000	3	i 1523 3100	14740.00
			4	i 1523 4100	18160.00
1250 A	1250	1250	3	i 1523 3120	19560.00
			4	i 1523 4120	20830.00
1600 A	1600	1250	3	i 1523 3160	23210.00
			4	i 1523 4160	27560.00
1800 A	1800	1250	3	i 1523 3180	27080.00
			4	i 1523 4180	29200.00

Wiring diagrams
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Accessories for ATyS switches

Description	Page
Accessories	10 - 70 to 10 - 72
Technical data	10 - 73 to 10 - 77
Dimensions	10 - 78 to 10 - 80

Notes: i Available on indent only.

ATyS 3s transfer switches require upstream overload and short circuit protection.

Manual changeover handles supplied standard.

Requires logic control from external source such as the ATyS C30 control reply to operate automatically.

Price Schedule 'B2'

ATS Automatic transfer switches

ATyS 6e, 6m Automatic transfer switches



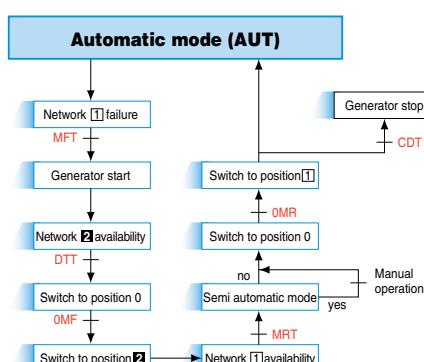
ATyS 6E

The ATyS 6e, 6m integrates logic control into the transfer of supplies with the added feature of monitoring capabilities. Voltage sensing as well as current and frequency are standard on both models. The 6m also offers real power, reactive power, apparent power and power factor monitoring. The 6e and 6m come complete with one set of auxiliary changeover contacts and are padlockable in the 0 (off) position. The motor operation has the ability to be controlled by a double supply.

Ordering details

	AC 31 B 415 V (A)	No. of poles	ATyS 6e	ATyS 6m		
			Cat. No.	Price \$	Cat. No.	Price \$
125 A	125	3	1563 3012	6550.00	i 1573 3012	8340.00
		4	1563 4012	6680.00	i 1573 4012	8470.00
160 A	160	3	1563 3016	7500.00	i 1573 3016	9300.00
		4	1563 4016	7720.00	i 1573 4016	9500.00
250 A	250	3	1563 3025	8530.00	i 1573 3025	10250.00
		4	1563 4025	8810.00	i 1573 4025	10520.00
400 A	400	3	1563 3040	10720.00	i 1573 3040	12420.00
		4	1563 4040	11060.00	i 1573 4040	12770.00
630 A	630	3	1563 3063	14340.00	i 1573 3063	16120.00
		4	1563 4063	14880.00	i 1573 4063	16660.00
800 A	800	3	1563 3080	18440.00	i 1573 3080	20210.00
		4	1563 4080	19120.00	i 1573 4080	20900.00
1000 A	1000	3	i 1563 3100	18850.00	i 1573 3100	20620.00
		4	1563 4100	19810.00	i 1573 4100	21610.00
1250 A	1250	3	i 1563 3120	21300.00	i 1573 3120	22980.00
		4	1563 4120	22390.00	i 1573 4120	24180.00
1600 A	1600	3	i 1563 3160	26220.00	i 1573 3160	28010.00
		4	1563 4160	29640.00	i 1573 4160	31190.00
2000 A	2000	3	i 1563 3200	32070.00	i 1573 3200	34240.00
		4	i 1563 4200	35830.00	i 1573 4200	38270.00
2500 A	2500	3	i 1563 3250	34820.00	i 1573 3250	36940.00
		4	i 1563 4250	38850.00	i 1573 4250	41230.00
3200 A	3200	3	i 1563 3320	40120.00	i 1573 3320	42290.00
		4	i 1563 4320	44790.00	i 1573 4320	47220.00

Wiring diagrams
page 10 - 77



Accessories for ATyS switches

Description	Page
Accessories	10 - 70 to 10 - 72
Technical data	10 - 73 to 10 - 77
Dimensions	10 - 78 to 10 - 80

Notes: i Available on indent only.

For make before break refer NHP.

Upstream overload and short circuit protection required

Manual changeover handles supplied standard.

Price Schedule 'B2'

ATS Automatic transfer switches

Accessories



External transfer switch controller (for ATyS M 3s & ATyS 3s)

Description	Cat. No.	Price \$
ATyS C30 Mains/Mains or Mains/Gen Logic Relay	1599 3030	2400.00
ATyS C40 Dual Genset Logic Relay	1599 3040	2400.00



Voltage sensing kit

Voltage sensing kit (to suit 6e and 6m) ¹⁾³⁾

To suit	No. of poles	Cat. No.	Price \$
ATS 6 125...160	3	1559 3012	425.00
	4	1559 4012	455.00
ATS 6 250	3	1559 3025	510.00
	4	1559 4025	530.00
ATS 6 400	3	1559 3040	540.00
	4	1559 4040	590.00
ATS 6 630	3	1559 3063	610.00
	4	1559 4063	660.00
ATS 6 800...1000	3	1559 3080	770.00
	4	i 1559 4080	830.00
ATS 6 1250	3	i 1559 3120	780.00
	4	i 1559 4120	840.00
ATS 6 1600	3	i 1559 3160	800.00
	4	i 1559 4160	850.00



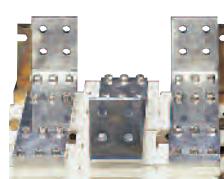
ATyS M Bridging Bars



Bridging bars

Bridging bars (allows for common loadside connections)

To suit	No. of poles ²⁾	Cat. No.	Price \$
ATyS M 40...125 Amp	2	i 1309 2006	170.00
ATyS M 160 Amp	2	i 1309 2016	240.00
ATyS M 63...125 Amp	4	1309 4006	200.00
ATyS M 160 Amp	4	1309 4016	285.00
ATyS 125...160 Amp	1	4109 0019	85.00
ATyS 250 Amp	1	4109 0025	106.00
ATyS 400 Amp	1	4109 0039	127.00
ATyS 630 Amp	1	i 4109 0063	159.00
ATyS 800...1000 Amp	1	i 4109 0080	255.00
ATyS 1250 Amp	1	4109 0120	370.00
ATyS 1600 Amp	1	i 4109 0160	455.00



Bridging bars

Notes: ¹⁾ Not required for ATyS M.

²⁾ Three 1 pole bars used on 3 pole ATyS, or 4 used for a 4 pole ATyS.

³⁾ Voltage sensing and power supply kit provides convenient voltage sensing and power supply connections, between the main power terminals and transfer switch controller relay module.

Available on indent only.

Price Schedule 'B2'

ATS Automatic transfer switches

Accessories

Auxiliary contacts



ATyS M Aux

To suit	Type	Cat. No.	Price \$
63...160 ATyS M	1 changeover contact in each position ³⁾	1309 0001	159.00
125...1600 ATyS 3s	1 changeover contact ¹⁾	4109 0021	117.00
125...630 ATyS 6E, 6m	2nd changeover contact ²⁾	1599 0502	210.00
800...1600 ATyS 6E, 6m		1599 0532	210.00

Note: 6E and 6M auxiliaries are factory fitted.



ATyS Aux

Terminal shrouds



ATyS M Shroud

To suit	Mounting position	Terminal side	No. of poles	Cat. No.	Price \$
ATyS M 63...160	Top or bottom	N/A	4	2294 4016 ¹⁾	106.00
ATyS 125...160	Top or bottom	Front or rear	3	2694 3014	85.00
			4	2694 4014	106.00
ATyS 250...400	Top or bottom	Front or rear	3	2694 3021	138.00
			4	2694 4021	148.00
ATyS 630	Top or bottom	Front or rear	3	2694 3051	191.00
			4	2694 4051	200.00

Notes: Two terminal shrouds required per side for ATyS.
Cannot fit to bottom terminals if bridging bars used.



ATyS Shroud

Terminal screens



Screen

To suit	Mounting position	Terminal side	No. of poles	Cat. No.	Price \$
ATyS 125...160	Top and bottom	Front	3	1509 3012	180.00
			4	1509 4012	200.00
ATyS 250...400	Top and bottom	Front	3	1509 3025	191.00
			4	1509 4025	210.00
ATyS 630	Top and bottom	Front	3	1509 3063	370.00
			4	1509 4063	405.00
ATyS 800...1250	Top and bottom	Front	3	1509 3080	425.00
			4	i 1509 4080	455.00
ATyS 1600	Top and bottom	Front	3	i 1509 3160	640.00
			4	i 1509 4160	670.00

Notes: One screen required per switch.

¹⁾ 2 sets required for line and load side, due to multiple rows of terminals

²⁾ ATyS 6e and 6m types include 1 C/O auxiliary as standard. To add an additional 1 C/O auxiliary contact, refer to NHP for NHP factory fitting.

³⁾ ATyS M and ATyS 3s will accept up to 2 user fit auxiliaries.

Available on indent only.

Price Schedule 'B2'



Remote Interface
ATyS D10



Remote Interface
ATyS D20

ATS Automatic transfer switches

Accessories

Remote displays (to suit 6e and 6m)

Description	Cat. No.	Price \$
ATyS D10 Remote status display	1599 2010	670.00
ATyS D20 Remote backlit display with control features	1599 2020	1090.00
RJ45 Cable 3 metre cable to connect D10, D20	1599 2009	40.00



Optional plug-in module

Plug-in optional modules (to suit 6e and 6m)

Description	Cat. No.	Price \$
COM RS 485 Control and state feedback of the switch via a 2 or 3 wire link with JBus/Modules	1599 2000	700.00
Module I/O Priority network selection remote manual retransfer option source 1, 2 available output option load shedding option	1599 2001	590.00



DPS

Double power supply

Description	Cat. No.	Price \$
DPS Allows 2 power supplies to be connected to ATyS 3s	1599 4001	590.00



Voltage tap

General accessories



Spacer



Optional padlocking facility

Description	Cat. No.	Price \$
Voltagetap Provides 2 terminals for voltage sensing power supply ATyS M	1399 4006	74.00
Fixing spacers Raise device terminal by 10 mm on ATyS 125-630 (Qty 2)	1509 0001	320.00
Control transformer Reduces 415 to 240 V for ATyS 3 and 6	125-630 1599 4063	1390.00
	800-1250 1599 4120	1600.00
	1600 A 1599 4160	1730.00
Door surround Suits ATyS 3s	125-630 i 1529 0012	170.00
	800-1600 i 1529 0080	200.00
Suits ATyS 6e, 6m	125-630 1539 0012	210.00
	800-1600 i 1539 0080	245.00
Sealable cover suits ATyS M 6S 2 Pole	i 1359 2000	145.00
Sealable cover suits ATyS M 6S 4 Pole	1359 0000	154.00
ATyS Manual operating handles	125-630 1599 6001	170.00
	800-1600 1599 6011	320.00

Notes: Available on indent only.

Price Schedule 'B2'

Technical data and ratings chart

ATyS M (mini) 63-160

ATyS M 3s
 ATyS M 6s
 ATyS M 6e

Ratings to AS/NZS 60947_3 and AS/NZS 60947-6

		63 A	80 A	100 A	125 A	160 A
Rated insulation voltage and rated operation voltage AC 20/DC 20	V	800	800	800	800	800
Rated impulse withstand voltage	kV	6	6	6	6	6
According to AS/NZS 60947-3						
Rated operational current						
AC 21A	400 V A	63	80	100	125	160
	690 V ¹⁾ A	63	80	100	125	160
AC 22A	400 V A	63	80	100	125	160
	690 V ¹⁾ A	63	80	80	100	100
AC 23A	400 V A	63	80	100	125	125
According to AS/NZS 60947-3	690 V ¹⁾ A	63	63	80	80	80
Rated operational current						
AC 31B	415 V A	63	80	100	125	160
AC 32B	415 V A	63	80	100	125	160
AC 33B	415 V A	63	80	80	80	80
Switching time						
	1-11 or 11-1 (MS)	180	180	180	180	180
	1-0 or 11-0 (MS)	50	50	50	50	50
Duration of blackout (MS)		90	90	90	90	90
Overload capacity						
Short time withstand current at 400 V	RMS 0.3 sec kA	7	7	7	7	7
	RMS 1 sec kA	4	4	4	4	4
Short circuit making capacity (kA peak)	400 V kA	17	17	17	17	17
Fuse protected short circuit withstand AC (kA RMS prospective)	400 V kA	50	50	50	50	50
	Fuse A	63	80	100	125	160
Control supply during transfer inrush/normal (VA)		30/6	30/6	30/6	30/6	30/6
Mechanical endurance	Ops	10000	10000	10000	10000	10000
Weight (3 pole)	Kg	3.5	3.5	3.5	3.5	3.5
Min. tightening torque	Nm	-	-	-	-	-
Connection cable size (min./max.)	mm ²	6/70	6/70	6/70	6/70	6/70

Notes: ¹⁾ 690 V with terminal shrouds or phase barries

240/415 V ratings suitable for use on 230/400 V in accordance with AS 60038 : 2000.

Technical data and ratings chart

ATyS 125 A to 1000 A

ATyS 3s
ATyS 6e
ATyS 6m

ATyS - Characteristics (according to IEC 60947, AS/NZS 60947)

Thermal current I_{th} (40 °C)	125 A	160 A	250 A	400 A	630 A	800 A	1000 A
Rated insulation voltage U_i (V)	800	800	800	800	1000	1000	1000
Rated impulse withstand voltage U_{imp} (kV)	8	8	8	8	12	12	12

Rated operational currents I_e (A) According to IEC 60947-3, AS/NZS 60947-3

Rated voltage	Load duty category	A/B ¹⁾						
415 V AC	AC-21 A/AC-21 B	125/125	160/160	250/250	400/400	630/630	800/800	1000/1000
	AC-22 A/AC-22 B	125/125	160/160	250/250	400/400	630/630	800/800	1000/1000
	AC-23 A/AC-23 B	125/125	160/160	250/250	250/250	500/500	800/800	1000/1000
690 V AC ²⁾	AC-20 A/AC-20 B	125/125	160/160	250/250	400/400	630/630	800/800	1000/1000
	AC-21 A/AC-21 B	125/125	160/160	200/250	200/250	500/500	800/800	800/800
	AC-22 A/AC-22 B	125/125	125/125	125/160	125/160	315/315	800/800	800/800
220 V DC	AC-23 A/AC-23 B	63/80	63/80	100/125	100/125	160/200	200/250	200/250
	DC-20 A/DC-20 B	125/125	160/160	250/250	400/400	630/630	800/800	1000/1000
	DC-21 A/DC-21 B	125/125	160/160	250/250	250/250	630/630	800/800	1000/1000
440 V DC	DC-22 A/DC-22 B	125/125	160/160	250/250	250/250	500/500	800/800	1000/1000
	DC-23 A/DC-23 B	125/125	125/125	200/200	200/200	500/500	800/800	1000/1000
	DC-20 A/DC-20 B	125/125	160/160	250/250	400/400	630/630	800/800	1000/1000
440 V DC	DC-21 A/DC-21 B	125 ³⁾ /125 ³⁾	125 ³⁾ /125 ³⁾	200 ³⁾ /200 ³⁾	200 ³⁾ /200 ³⁾	500 ³⁾ /500 ³⁾	800 ⁴⁾ /800 ⁴⁾	1000 ⁴⁾ /1000 ⁴⁾
	DC-22 A/DC-22 B	125 ³⁾ /125 ³⁾	125 ³⁾ /125 ³⁾	200 ³⁾ /200 ³⁾	200 ³⁾ /200 ³⁾	500 ³⁾ /500 ³⁾	800 ⁴⁾ /800 ⁴⁾	1000 ⁴⁾ /1000 ⁴⁾
	DC-23 A/DC-23 B	125 ³⁾ /125 ⁴⁾	125 ⁴⁾ /125 ⁴⁾	200 ⁴⁾ /200 ⁴⁾	200 ⁴⁾ /200 ⁴⁾	500 ³⁾ /500 ³⁾	800 ⁴⁾ /800 ⁴⁾	1000 ⁴⁾ /1000 ⁴⁾

According to IEC 60947-6-1, AS/NZS 60947-6-1

415 V AC	AC-31 B	125	160	250	400	630	800	1000
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Overload capacity

Rated short-time withstand current 1 s I_{CW} (kA rms)	7	7	9	9	13	26	35
Rated peak withstand current (kA peak) ⁵⁾	20	20	30	30	45	55	80
Prospective short-circuit current (kA rms) ⁵⁾	100	100	50	18	70	50	100
Associated fuse rated (A) ⁵⁾	125	160	250	400	630	800	1000

Connection

Minimum Cu cable section (mm ²)	35	50	95	185	2 x 150	2 x 185	2 x 240
Minimum Cu busbar section (mm ²)	-	-	-	-	2 x 30 x 5	2 x 40 x 5	2 x 50 x 5
Maximum Cu cable section (mm ²)	50	95	150	240	2 x 300	2 x 300	4 x 185
Maximum Cu busbar width (mm ²)	25	25	32	32	50	63	63
Tightening torque min./max. (Nm)	9/13	9/13	20/26	20/26	20/26	-	-

Switching time

I - II or II - I (s) ⁶⁾	0.75	0.75	1.3	1.3	1.3	2.6	2.6
I - 0 or II - 0 (s) ⁶⁾	0.45	0.45	0.85	0.85	0.85	1.6	1.6
Duration of 'electrical blackout' I - II (s)	0.3	0.3	0.6	0.6	0.6	1.5	1.5

Power-supply tolerance

Supply 230 V AC min./max. (V AC)	176/288	176/288	176/288	176/288	176/288	176/288	176/288
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Control-supply power demand

Supply 230 V AC inrush/nominal (VA)	420/80	420/80	420/100	420/100	420/110	450/120	450/120
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Mechanical characteristics

Endurance (number of operating cycles)	10 000	10 000	8 000	8 000	5 000	4 000	4 000
Weight of 3 P switch (ATyS 3) (kg)	3.2	3.3	3.7	4.7	5.2	19.6	23.1
Weight of 4 P switch (ATyS 3) (kg)	3.3	3.4	3.8	5.2	5.7	23.1	24.6
Weight of 3 P switch (ATyS 6) (kg)	4	4.1	4.5	5.5	6	20.4	23.9
Weight of 4 P switch (ATyS 6) (kg)	4.1	4.2	4.6	6	6.5	23.9	25.4

Notes: For pages 10 - 74 and 10 - 75.

²⁾ With terminal shrouds or phase barrier.

³⁾ A/P: Category with index A = frequent operation/Category with index B = infrequent operation.

⁴⁾ 3-pole device with 2 pole in series for the + and 1 pole for the -

⁵⁾ 4-pole device with 2 pole in series by polarity.

Technical data and ratings chart

ATyS 1250 A to 3200 A

ATyS - Characteristics (according to IEC 60947, AS/NZS 60947)

ATyS 3s
ATyS 6e
ATyS 6m

Thermal current I_{th} (40 °C)	1250 A	1600 A	1800 A	2000 A	2500 A	3200 A
Rated insulation voltage U_i (V)	1000	1000	1000	1000	1000	1000
Rated impulse withstand voltage U_{imp} (kV)	12	12	12	12	12	12
Rated operational currents I_e k(A) (According to IEC 60947-3, AS/NZS 60947-3)						
Rated voltage	Load duty category	A/B ¹⁾	A/B ¹⁾	A/B ¹⁾	A/B ¹⁾	A/B ¹⁾
415 V AC	AC-21 A/AC-21 B	1250/1250	1600/1600	1800/1800	-/2000	-/2500
	AC-22 A/AC-22 B	1250/1250	1600/1600	1800/1800	-/2000	-/2500
	AC-23 A/AC-23 B	1250/1250	1250/1250	1250/1250	-/1600	-/1600
690 V AC ²⁾	AC-20 A/AC-20 B	1250/1250	1600/1600	1800/1800	-/-	-/-
	AC-21 A/AC-21 B	800/800	1000/1000	1000/1000	-/-	-/-
	AC-22 A/AC-22 B	800/800	1000/1000	1000/1000	-/-	-/-
	AC-23 A/AC-23 B	200/250	500/500	500/500	-/-	-/-
220 V DC ²⁾	DC-20 A/DC-20 B	1250/1250	1600/1600	1800/1800	-/-	-/-
	DC-21 A/DC-21 B	1250/1250	1250/1250	1250/1250	-/-	-/-
	DC-22 A/DC-22 B	1250/1250	1250/1250	1250/1250	-/-	-/-
	DC-23 A/DC-23 B	1250/1250	1250/1250	1250/1250	-/-	-/-
440 V DC	DC-20 A/DC-20 B	1250/1250	1600/1600	1800/1800	-/-	-/-
	DC-21 A/DC-21 B	1250 ⁴⁾ /1250 ⁴⁾	1250 ⁴⁾ /1250 ⁴⁾	1250 ⁴⁾ /1250 ⁴⁾	-/-	-/-
	DC-22 A/DC-22 B	1250 ⁴⁾ /1250 ⁴⁾	1250 ⁴⁾ /1250 ⁴⁾	1250 ⁴⁾ /1250 ⁴⁾	-/-	-/-
	DC-23 A/DC-23 B	1250 ⁴⁾ /1250 ⁴⁾	1250 ⁴⁾ /1250 ⁴⁾	1250 ⁴⁾ /1250 ⁴⁾	-/-	-/-
According to IEC 60947-6-1, AS/NZS 60947-6-1						
415 V AD	AC-31 B	1250	1600	1800	2000	2500
Overload capacity						
Rated short-time withstand current 1 s I_{cw} (kA rms)	35	50	50	55	55	55
Rated peak withstand current (kA peak) ⁵⁾	80	110	110	120	120	120
Prospective short-circuit current (kA rms) ⁵⁾	100	100	100	-	-	-
Associated fuse rated (A) ⁵⁾	1250	1600	1800	-	-	-
Connection						
Minimum Cu busbar section (mm ²)	2 x 60 x 5	2 x 80 x 5	3 x 100 x 5	⁸⁾	⁸⁾	⁸⁾
Maximum Cu cable section (mm ²)	4 x 185	6 x 185	6 x 185	-	-	-
Maximum Cu busbar section (mm ²)	63	100	100	⁸⁾	⁸⁾	⁸⁾
Tightening torque min./max. (Nm)	20/26	40/45	40/45	40/45	40/45	40/45
Switching time						
I - II or II - I (s) ⁶⁾	2.6	2.6	2.6	2	2	2
I - 0 or II - 0 (s) ⁶⁾	1.6	1.6	1.6	1	1	1
Duration of 'electrical blackout' I - II (s)	1.5	1.6	1.6	1	1	1
Power-supply tolerance						
Supply 230 V AC min./max. (V AC)	176/288	176/288	176/288	176/288	176/288	176/288
Control-supply power demand						
Supply 230 V AC inrush/nominal (VA)	450/120	450/120	450/120	550/390	550/390	550/390
Mechanical characteristics						
Endurance (number of operating cycles)	4 000	3 000	3 000	3 000	3 000	3 000
Weight of 3 P switch (ATyS 3) (kg)	24.6	36.1	36.1	47 ⁷⁾	51 ⁷⁾	59 ⁷⁾
Weight of 4 P switch (ATyS 3) (kg)	29.6	42.1	42.1	57 ⁷⁾	61 ⁷⁾	69 ⁷⁾
Weight of 3 P switch (ATyS 6) (kg)	25.4	36.9	-	47 ⁷⁾	57 ⁷⁾	59 ⁷⁾
Weight of 4 P switch (ATyS 6) (kg)	30.4	42.9	-	57 ⁷⁾	61 ⁷⁾	69 ⁷⁾

Notes: For pages 10 - 74 and 10 - 75.

⁵⁾ For a rated operating voltage $U_e = 400$ V AC.

⁶⁾ Between the order given and the arrival in position (under the normal conditions).

⁷⁾ Weight for ATyS 3e, 6e and 6m.

⁸⁾ Refer busbar connection options page 10 - 48.

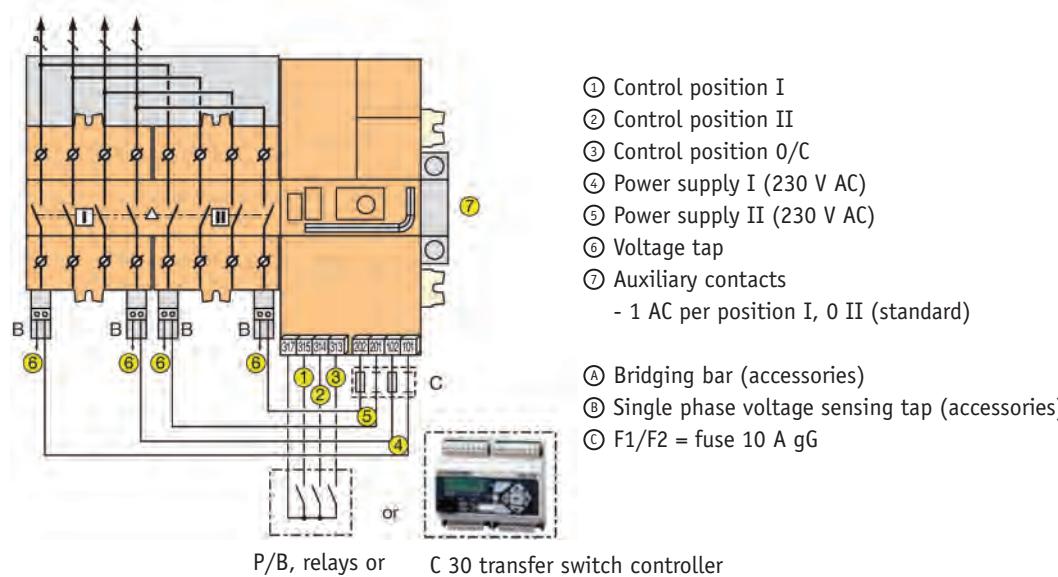
Technical data

ATyS M 63 to 160 A

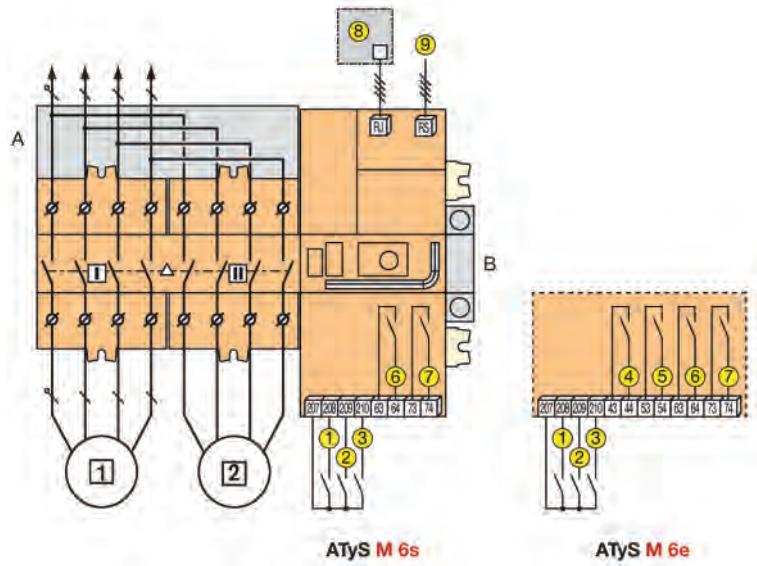
ATyS M 3s
ATyS M 6s
ATyS M 6e

Simplified wiring diagrams

ATyS M 3s



ATyS M 6s and 6e



ATyS M 6s

- ① ② ③ Manual retransfer/priority change ¹⁾
- ④ Test on load ¹⁾
- ⑤ automatic mode inhibition ¹⁾
- ⑥ Fault relay and front cover open
- ⑦ Genset start/stop relay

ATyS M 6e

- ① ② ③ Programmable input
- ④ 'non automatic' mode output
- ⑤ ⑥ Programmable output
- ⑦ Genset start/stop relay
- ⑧ RJ 45 ATyS D10/D20 remote interface connection
- ⑨ RS485

- Ⓐ Priority source
- Ⓑ Backup source

① Priority source

② Backup source

Note: ¹⁾ 1+2+3: control 0 position.

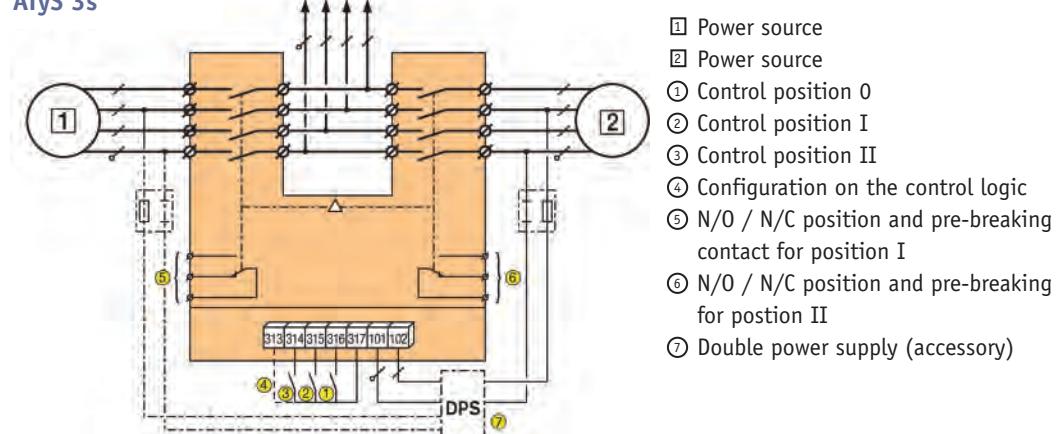
Technical data

ATyS M 125 to 3200 A

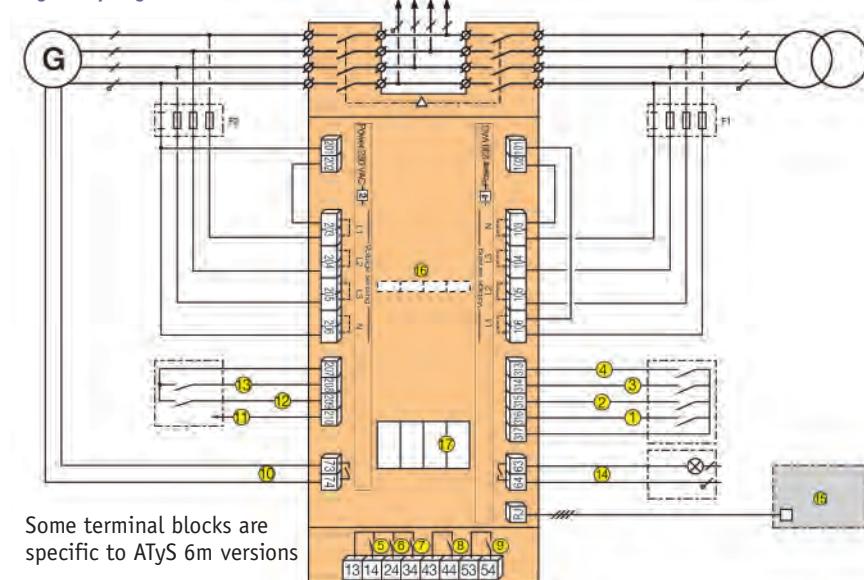
ATyS 3s
ATyS 6e
ATyS 6m

Simplified wiring diagrams

ATyS 3s



ATyS 6e/ATyS 6m



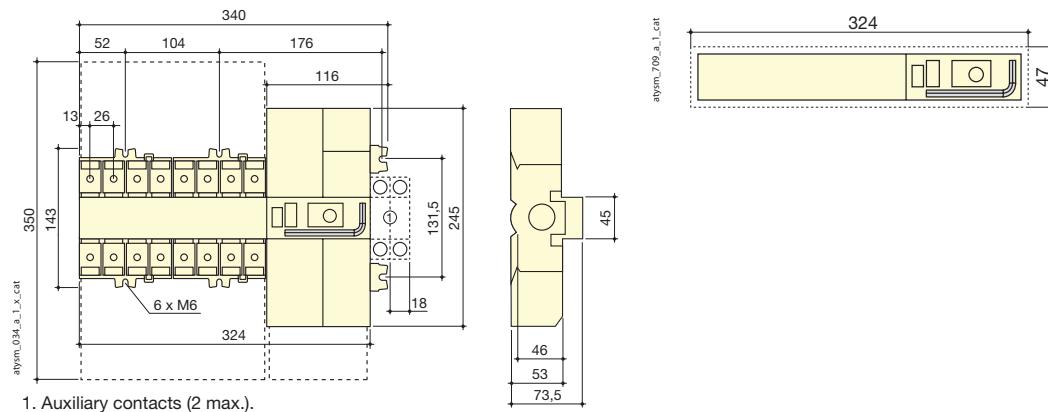
- | | |
|---|--|
| ① Control position 0 | ⑩ Genset start and stop command |
| ② Control position I | ⑪ Auxiliary power supply
(for optional modules control) |
| ③ Control position II | ⑫ Remote 'test on-load' input |
| ④ Remote command | ⑬ DTT inhibit input. Transfer initiated as soon as the input is closed when DTT = max. value |
| ⑤ Auxiliary contact, closed when the switch is in position I | ⑭ Fault output |
| ⑥ Auxiliary contact, closed when the switch is in position II | ⑮ Remote control interface |
| ⑦ Auxiliary contact, closed when the switch is in position 0 | ⑯ Current transformers (ATyS 6m only) |
| ⑧ Auxiliary contact, closed when the switch is in 'AUT' mode | ⑰ Slots for optional modules |
| ⑨ Auxiliary contact, closed when the switch is padlocked | |

ATS Automatic transfer switches

Dimensions(mm) and wiring

According to IEC 60947-6-1

ATyS M 3 and 6



ATyS Accessory fitting

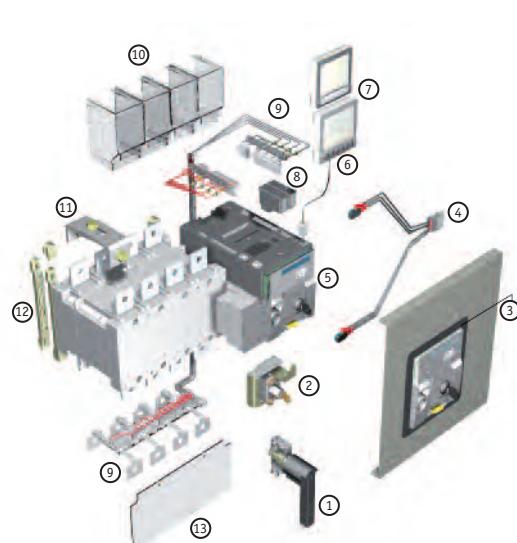
ATyS M from 63 to 160 A



- ① ATyS D10 or D20 remote interfaces (ATyS M 6e only)
- ② 1 or 2 auxiliary contacts
- ③ Terminal shrouds
- ④ Voltage sensing and power supply tap
- ⑤ Bridging bars

Overview (for further details, please see the installation instructions supplied with each device).

ATyS from 125 to 3200 A



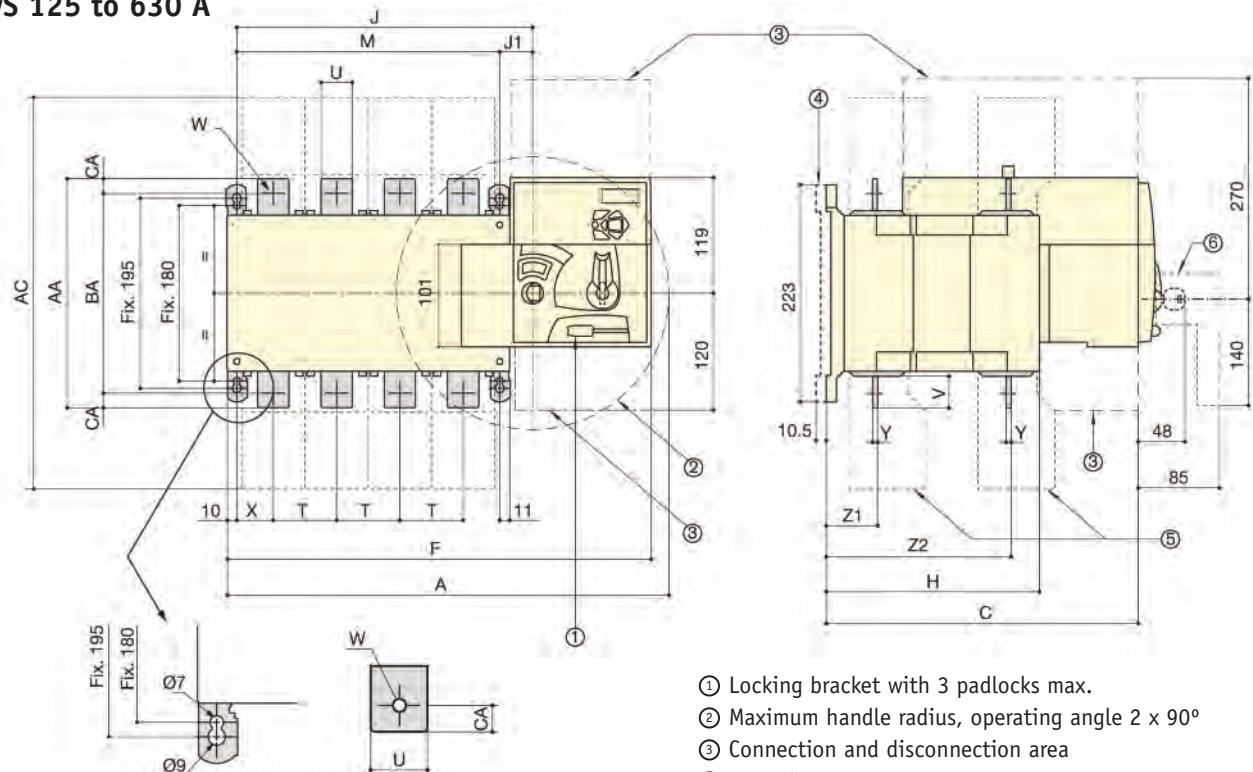
- ① Backup handle and support (included with device)
- ② Handle key interlocking accessories
- ③ Door protective surround
- ④ Additional auxiliary contacts
- ⑤ Standard device
- ⑥ Connecting cable for ATyS D10 or D20 remote interface (ATyS 6)
- ⑦ ATyS D10 or D20 interfaces (ATyS 6)
- ⑧ Plug-in optional modules (not for ATyS 3s)
- ⑨ Voltage sensing and power supply kit (ATyS 6)
- ⑩ Terminal shrouds
- ⑪ Bridging bars
- ⑫ Mounting spacers
- ⑬ Terminal screens

ATS Automatic transfer switches

Dimensions (mm)

According to IEC 60947-6-1
ATyS 3 and 6, 125 to 630 A

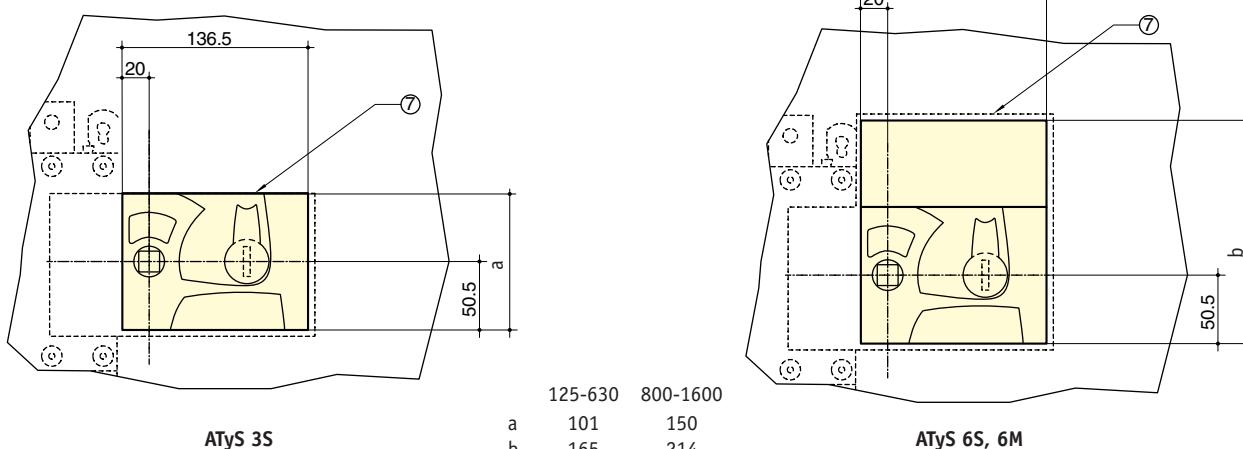
ATyS 125 to 630 A



- ① Locking bracket with 3 padlocks max.
- ② Maximum handle radius, operating angle 2 x 90°
- ③ Connection and disconnection area
- ④ Mounting spacers
- ⑤ Terminal shrouds
- ⑥ Handle

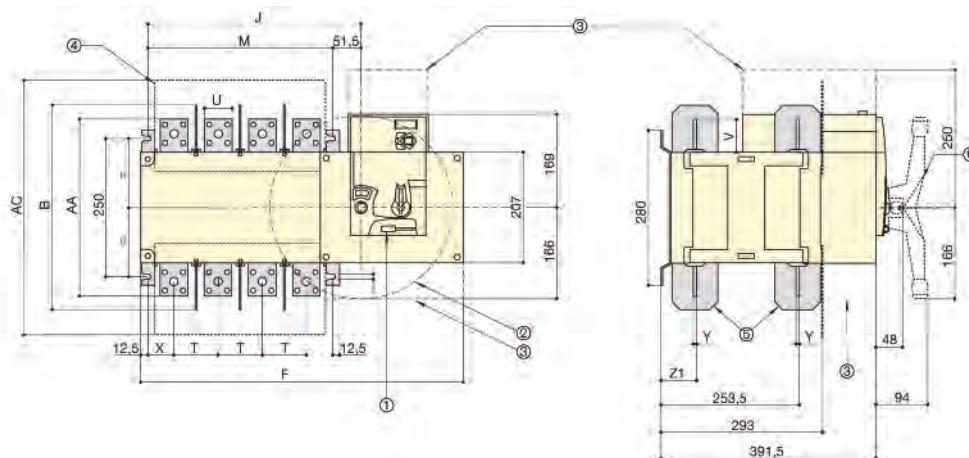
Rating (A)	Overall dimensions (mm)			Terminal shrouds		Switch body				Switch mounting		Connection terminals												
	A 3p.	A 4p.	C	AC	F 3p.	F 4p.	H 3p.	J 4p.	J1	M 3p.	M 4p.	T	U	V	W	X 3p.	X 4p.	Y	Z1	Z2	AA	BA	CA	
125	304	340	244	235	286.5	322.5	151	154	184	34	120	150	36	20	25	9	28	22	3.5	38	134	135	115	10
160	304	340	244	235	286.5	322.5	151	154	184	34	120	150	36	20	25	9	28	22	3.5	38	134	135	115	10
250	345	395	244.5	280	328	378	153	195	245	35	160	210	50	25	30	11	39	33	3.5	39.5	134.5	160	130	15
400	345	395	244.5	280	328	378	153	195	245	35	160	210	50	35	35	11	39	33	3.5	39.5	134.5	170	140	15
630	394	459	320.5	400	377	437	221	244	304	34	210	270	65	45	50	13	42.5	37.5	5	53	190	260	220	20

Module dimensions (mm) ATyS 3s, 6s and 6m



ATS Automatic transfer switches Dimensions (mm) According to IEC 60947-6-1 ATyS 3 and 6, 800 to 1600 A

ATyS 800 to 1600 A



- ① Locking bracket with 3 padlocks max.
- ② Maximum handle radius,
operating angle $2 \times 90^\circ$
- ③ Connection and disconnection area
- ④ Terminal screens
- ⑤ Phase barrier shield
- ⑥ Handle

Rating (A)	Overall dimensions (mm)	Terminal shrouds AC	F 3p.	Switch body F 4p.			Switch mounting M 3p.	Switch mounting M 4p.	Connection terminals						
					J 3p.	J 4p.			T	U	V	X	Y	Z1	AA
800	370	461	504	584	306.5	386.5	255	335	80	50	60.5	60	7	66.5	321
1000	370	461	504	584	306.5	386.5	255	335	80	50	60.5	60	7	66.5	321
1250	370	461	504	584	306.5	386.5	255	335	80	60	65	60	7	66.5	330
1600	380	481	596	716	398.5	518.5	347	467	120	90	44	66	8	67.5	288
1800	380	481	596	716	398.5	518.5	347	467	120	90	44	66	8	67.5	288

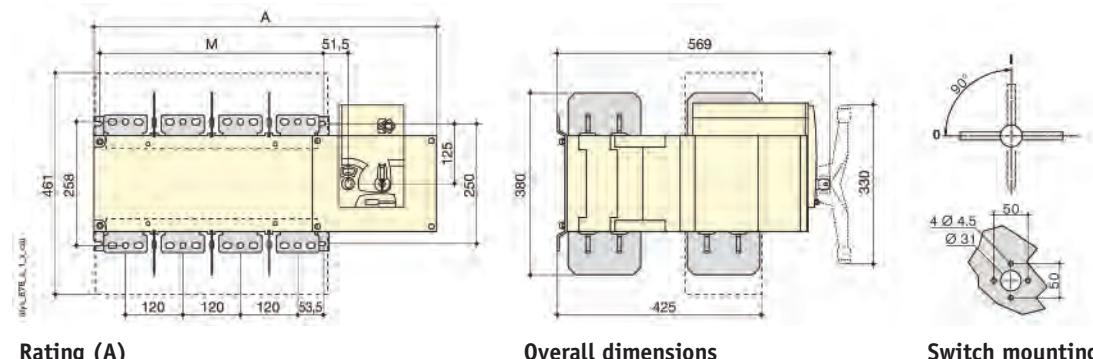
A = 596 (3P)

716 (4P)

M = 347 (3P)

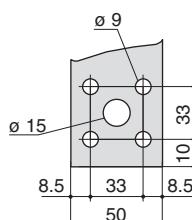
467 (4P)

ATyS 2000 to 3200 A

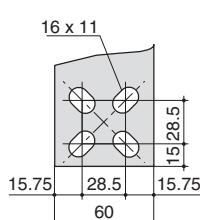


ATyS Connection terminals

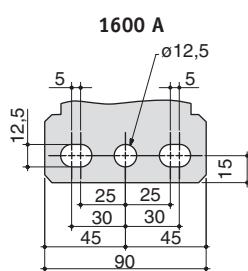
800...1000 A



1250 A



1600 A

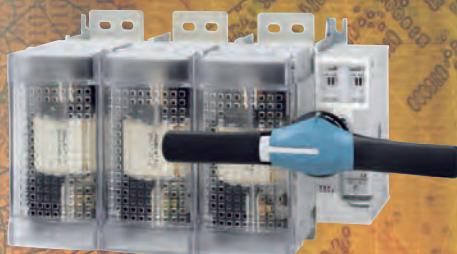


For more detail on
2000 - 3200 A
connection tags,
refer page 10 - 48.

SSF

Standard switch-fuses

20 to 1250 A



FUSERBLOC BS88 20 to 1250 A



SSF Standard switch-fuses boast IP 30 protection on all fuse terminals in a compact yet effective design. These switch-fuses feature a test position and double-break contacts per phase, allowing the safe isolation of AC and DC circuits as well as the added short circuit protection offered by HRC fuses.

Front operated base mount (supplied with external handle and 320 mm shaft)

	Fuse size	AC 21 415 V (A)	AC 23 415 V (A)	AC 23 415 V (kW)	No. of poles	Cat. No.	Price \$
20 A	A1	20	20	9	3	SSF BS20C 3P	320.00
					3+N ¹⁾	SSF BS20C 4P	390.00
32 A Compact	A1	32	32	15	3	SSF BS32C 3P	340.00
					3+N ¹⁾	SSF BS32C 3PN	415.00
32 A	A1	32	32	15	3	SSF BS32 3P	415.00
					4	SSF BS32 4P	510.00
63 A	A2 – A3	63	63	30	3	SSF BS63 3P	500.00
					4	SSF BS63 4P	640.00
100 A	A4	100	100	51	3	SSF BS100 3P	670.00
					4	SSF BS100 4P	870.00
160 A	B1 – B2	160	160	80	3	SSF BS160 3P	870.00
					4	SSF BS160 4P	1120.00
200 A	B1 – B2	200	200	100	3	SSF BS200 3P	1140.00
					4	SSF BS200 4P	1520.00
250 A	B1 – B2 – B3	250	250	132	3	SSF BS250 3P	1470.00
					4	SSF BS250 4P	1800.00
315 A	B1 – B2 – B3	315	315	160	3	SSF BS315 3P	1580.00
					4	SSF BS315 4P	2070.00
400 A	B1 – B2 – B3 – B4	400	400	220	3	SSF BS400 3P	1840.00
					4	SSF BS400 4P	2340.00
630 A	C1 – C2	630	630	355	3	SSF BS630 3P	3020.00
					4	SSF BS630 4P	3890.00
800 A	C1 – C2 – C3	800	800	450	3	SSF BS800 3P	3660.00
					4	SSF BS800 4P	4620.00
1250 A	D1	1250	1000	560	3	SSF BS1250 3P	5600.00
					4	SSF BS1250 4P	7840.00

Notes: ¹⁾ Switched neutral
 Available on indent only.

SSF Standard switch-fuses

FUSERBLOC DIN 63 to 1250 A¹⁾



SSF DN63

Front operated base mount
(Supplied with external handle and 320 mm shaft)

	AC 21 415 V	AC 23 415 V	AC 23 415 V (kW)	No. of poles	Cat. No.	Price \$
Fuse size	(A)	(A)				
63 A	00C	63	63	3	SSF DN63 3P	500.00
				4	i SSF DN63 4P	640.00
125 A	00	125	125	3	SSF DN125 3P	760.00
				4	i SSF DN125 4P	950.00
160 A	00	160	160	3	SSF DN160 3P	870.00
				4	i SSF DN160 4P	1120.00
250 A	1	250	250	3	SSF DN250 3P	1470.00
				4	i SSF DN250 4P	1800.00
400 A	2	400	400	3	SSF DN400 3P	1840.00
				4	i SSF DN400 4P	2340.00
630 A	3	630	630	3	SSF DN630 3P	3020.00
				4	i SSF DN630 4P	3890.00
800 A	3	800	800	3	SSF DN800 3P	3660.00
				4	i SSF DN800 4P	4620.00
1250 A	4	1250	1000	3	i SSF DN1250 3P	8960.00
				4	i SSF DN1250 4P	11210.00



SSF DN630

Accessories for FUSERBLOC DIN switches

Description	Page
Accessories	10 - 83 to 10 - 84
Technical data	10 - 85 to 10 - 86
Dimensions	10 - 87 to 10 - 90

Shaft table (Standard shaft supplied with switch and handle)

To suit	Shaft	Minimum distance back-plate to door	Maximum distance back-plate to door
BS88 & DIN			
20...32C	1401 0532	102 mm	365 mm
32	1400 1032	100 mm	350 mm
63...100	1400 1032	125 mm	350 mm
125...200	1400 1032	135 mm	350 mm
250...400	1400 1032	160 mm	350 mm
630...800	1400 1232	270 mm	424 mm
1250	1400 1232	304 mm	424 mm

Note: ¹⁾ Refer NHP for blown fuse indication. This requires DIN fuses with a striker, and a special auxiliary contact block for the fuse switch.

 Available on indent only.

Price Schedule 'B2'

SSF Standard switch-fuses

Accessories



Direct handle



External handle (S2)



Side mount (S1)



Shaft extension



Auxiliary contact

Direct mount handle (switch fuse bodies can be padlocked off ⁴⁾)

To suit	Type	Colour	Cat. No.	Price \$
20 - 32A	Pistol - front type	Black	3629 4012	64.00
63-400 ¹⁾	Pistol - front type	Black	2699 5052	148.00
	Shaft		1400 1032	53.00
	Adapter 10 mm to 15 mm		SLBADAP2	53.00

External mount handles ('OFF' padlockable, 'ON' locking field convertible)

To suit	Type	Colour	IP rating	Cat. No.	Price \$
SSF BS/DN 20C...63	Pistol - S1	Black	65	1413 2111	85.00
		Red	65	1414 2111	96.00
	Test	Black	65	1413 2115	147.00
SSF BS/DN 100...400	Pistol - S2	Black	65	1423 2111	127.00
		Red	65	1424 2111	170.00
	Test	Black	65	1423 2115	180.00
SSF BS/DN 630...800	Pistol - S3	Black	65	1433 3111	225.00
		Red	65	1434 3111	245.00
SSF BS/DN 1250	T-handle - S4	Black	65	1443 3111	245.00

Side external mount handles ('OFF' padlockable, 'ON' locking field convertible)

To suit	Type	Colour	IP rating	Cat. No.	Price \$
SSF BS/DN 20...63	Pistol - S1	Black	65	1417 2111	180.00
		Red	65	1418 2111	200.00
SSF BS/DN 100...400	Pistol - S2	Black	65	1427 2111	180.00
		Red	65	1428 2111	200.00
SSF BS/DN 630...1250	Pistol - S3	Black	65	1437 3111	225.00
		Red	65	1438 3111	245.00

Shaft extensions

To suit	Shaft length	Size	Cat. No.	Price \$
SSF BS/DN 20...32	320 mm	5 mm	1401 0532	32.00
	320 mm	10 mm	1400 1032	53.00
SSF BS/DN 63...400	500 mm	10 mm	1400 1050	85.00
	320 mm	12 mm	1400 1232	96.00
SSF BS/DN 630...800	500 mm	12 mm	1400 1250	148.00
	320 mm	12 mm	1400 1232	96.00
SSF BS/DN 1250	500 mm	12 mm	1400 1250	148.00

Auxiliary contacts (clip-on)

To suit	Type	Current (A)		Contacts	Cat. No.	Price \$
		N/O	N/C			
SSF BS/DIN 20...1250	Aux. cont holder	10		N/O	3999 0701	48.00
				N/C	3999 0702	48.00
SSF BS/DIN 32-400	Side mount aux. 1st				3999 0600 ²⁾	117.00
SSF BS/DIN 32-400	Side mount aux. 2nd	1 N/O + 1 N/C ³⁾			3999 0041	180.00
SSF BS/DIN 32-400	Side mount aux. 2nd	1 N/O + 1 N/C ³⁾			3999 0042	210.00

Note: ¹⁾ Shaft and adapter required

²⁾ Allows 2 extra aux. contacts to be fitted (3999 0701, 3999 0702).

³⁾ Auxiliary has screw terminals and mounts on left side of switch.

⁴⁾ The padlocking lever installed in direct mount handles will not work on switch - fuses.

However, the switch fuse body will accept 1 or more padlocks as standard, which prevents handle rotation.

Price Schedule 'B2'

SSF Standard switch-fuses

Accessories

Terminal shrouds



Shrouds

To suit	No. of poles	Mounting position	IP rating	Cat. No.	Price \$
SSF BS/DN 20...63	3/4	Top or Bottom	20	STANDARD ¹⁾	-
SSF BS/DN 100...160	3	Top or Bottom	20	3998 3016	117.00
	4			 3998 4016	117.00
SSF BS/DN 200...400	3	Top or Bottom	20	3998 3025	138.00
	4			 3998 4025	143.00
SSF BS/DN 630...800	3	Top or Bottom	20	3898 3080	148.00
	4			 3898 4080	159.00
SSF BS/DN 1250	3	Top or Bottom	20	3898 3120	240.00
	4			3898 4120	275.00

Quality of 2 covers required to shroud top and bottom terminals

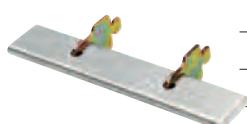
Solid neutral module



Solid neutral module

To suit	I _{max} (A)	Centre (mm)	Cat. No.	Price \$
SSF 32	32	27	3629 9227	180.00
SSF 63	63	32	3629 9232	200.00
SSF 100...125	125	36	3629 9236	210.00
SSF 160	160	50	3629 9250	225.00
SSF 200...250	250	60	3629 9260	415.00
SSF 315...400	400	66	3629 9266	475.00
SSF 630...800	800	94	3629 9294	1470.00
SSF 1250	1250	120	3629 9212	1446.00

Solid links



Solid link

To suit	Fuse size	I _{max} (A)	Cat. No.	Price \$
SSF BS 32	A1	32	3629 9003	21.00
SSF BS 63	A2 - A3	63	3629 9006	24.00
SSF BS 100	A4	160	3629 9010	39.00
SSF BS 160	A1 - B2	160	3629 9010	39.00
SSF BS 200	B1 - B2	200	3629 9016	59.00
SSF BS 250	B1 - B2 - B3	315	3629 9025	85.00
SSF BS 315	B1 - B2 - B3	315	3629 9025	85.00
SSF BS 400	B1 - B2 - B3 - B4	400	3629 9040	100.00
SSF BS 630...800	C1 - C3	800	3629 9063	140.00
SSF BS 1250	D1	1250	3629 9120	144.00
SSF DN 63	00	160	6420 0000	22.00
SSF DN 125...160	0	160	6421 0000	22.00
SSF DN 250	1	250	6421 0001	74.00
SSF DN 400	2	400	6421 0002	106.00
SSF DN 630...800	3	630	6421 0003	138.00
SSF DN 1250	4	1250	6441 0005	144.00

Notes: ¹⁾ 20 - 63 A switch fuses have integral IP 20 terminals as standard, and therefore no external cover is required.

 Available on indent only.

Price Schedule 'B2'

Technical data and ratings chart

FUSERBLOC SSF 20 to 1250 A

Ratings to AS/NZS 60947-3 and IEC 60947-3

		20 A	32C A	32 A	63 A	100 A	125 A	160 A (BS)	160 A DIN
Rated insulation voltage	V	800	800	750	750	750	750	750	750
Rated impulse withstand voltage	kV	8	8	8	8	8	8	8	8
Rated operational current									
AC 21A	400 V A	20	32	32	63	100	125	160	160
	690 V A	20	32	32	63	100 ¹⁾	125 ¹⁾	160 ¹⁾	160 ¹⁾
AC 22A	400 V A	20	32	32	63	100	125	160	160
	690 V A	20	32	32	63	100 ¹⁾	125 ¹⁾	160 ¹⁾	160 ¹⁾
AC 23A	400 V A	20	32	32	63	100	125	160	160
	690 V A	20	32	32	63	100 ¹⁾	100 ¹⁾	125 ¹⁾	125 ¹⁾
Rated operational current/poles in series									
DC 21A	220 V A	–	–	32	63	100	125	160	160
	440 V A	–	–	32 ²⁾	63 ²⁾	100 ²⁾	125 ²⁾	160 ²⁾	160 ²⁾
DC 22A	220 V A	–	–	32	63	100	125	160	160
	440 V A	–	–	32 ²⁾	63 ²⁾	100 ²⁾	125 ²⁾	160 ²⁾	160 ²⁾
DC 23A	220 V A	–	–	32	40	100	100	125	125
	440 V A	–	–	32 ²⁾	40 ²⁾	100 ²⁾	100 ²⁾	160 ²⁾	125 ²⁾
Operational power									
At 400 V without pre-break AC	kW	9	15	15	30	51	63	80	80
At 690 V without pre-break AC	kW	15	25	25	55	90	90	110	110
Short-circuit capacity									
Switch fuse cut-off current	400 V kA	5.5	5.5	9	10.6	20	20	20	22.7
(kA peak)									
Fuse protected short circuit withstand AC BS88/DIN (kA RMS prospective)	400 V kA	80	80	80	80	80	–	50	80
	Fuse A	20	32	32	63	100	–	160	160
Fuse types, IEC 269-2	DIN 43620	–	–	–	00C	–	00	–	0
	BS 88	A1	A1	A1	A2-A3	A4	–	B1-B2	–
Rated capacitor power	kVAr	8	15	15	28	45	55	75	75
Mechanical endurance	Ops	20000	20000	10000	10000	10000	10000	10000	10000
Weight (3 pole)	Kg	0.5	0.5	1.0	1.3	1.8	1.9	2.5	2.5
Connection cable size (min./max.)	mm ²	2.5/16	2.5/16	6/25	10/25	25/95	35/95	50/95	50/95

Notes:

- ¹⁾ With terminal shrouds/screen.
- ²⁾ 4 pole device with 2 poles in series by polarity.

240/415 V ratings suitable for use on 230/400 V in accordance with AS 60038 : 2000.

Technical data and ratings chart FUSERBLOC SSF 20 to 1250 A (cont'd)

Ratings to AS/NZS 60947-3 and IEC 60947-3

		200 A	250 A	315 A	400 A	630 A	800 A	1250 A
Rated insulation voltage	V	750	750	800	800	1000	1000	1000
Rated impulse withstand voltage	kV	8	8	8	8	12	12	12
Rated operational current								
AC 21A	400 V A	200	250	315	400	630	800	1250
	690 V A	200 ¹⁾	250 ¹⁾	315 ¹⁾	315	500	800	800
AC 22A	400 V A	200	250	315	400	630	800	1250
	690 V A	200 ¹⁾	250 ¹⁾	315 ¹⁾	315	500	800	800
AC 23A	400 V A	200	250	315	400	630	800	1000
	690 V A	200 ¹⁾	250 ¹⁾	250 ¹⁾	250	315	630	630
Rated operational current/poles in series								
DC 21A	220 V A	200	250	250	315	315	800	1250
	440 V A	250 ²⁾	250 ²⁾	250 ²⁾	315	315	800 ²⁾	1000 ²⁾
DC 22A	220 V A	200	250	250	315	315	800	1250
	440 V A	250 ²⁾	250 ²⁾	250 ²⁾	315	315	800 ²⁾	1000 ²⁾
DC 23A	220 V A	200	200	200	200	400	800	1250
	440 V A	200 ²⁾	200 ²⁾	200 ²⁾	250	315	800 ²⁾	1000 ²⁾
Operational power								
At 400 V without pre-break AC	kW	100	132	160	220	355	450	560
At 690 V without pre-break AC	kW	150	220	222	220	295	400	400
Short-circuit capacity								
Switch fuse cut-off current	400 V kA	32.5	32.5	40	40	70	80	90
(kA peak)								
Fuse protected short circuit	400 V kA	80	80	80	80	80	80	-
withstand AC BS88/DIN								
(kA RMS prospective)	Fuse A	200	250	315	400	630	800	-
Fuse types, IEC 269-2	DIN 43620	-	1	-	2	3	3	4
	BS 88	B1-B2	B1-B2-B3	B1-B2-B3	B1-B2-B3-B4	C1-C2	C1-C2-C4	D1
Rated capacitor power	kVar	90	115	145	185	290	365	460
Mechanical endurance	Ops	10000	10000	10000	10000	8000	8000	5000
Weight (3 pole)	Kg	3.8	3.8	4.8	4.8	18.7	19.8	250
Connection cable size (min./max)	mm ²	95/240	95/240	185/240	185/240	2 x 150/2 x 300	2 x 185/2 x 300	4 x 185

Notes:

¹⁾ With terminal shrouds/screen.

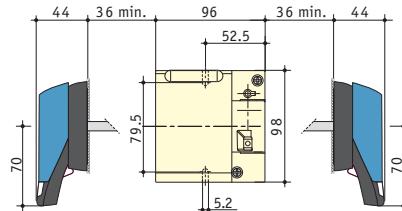
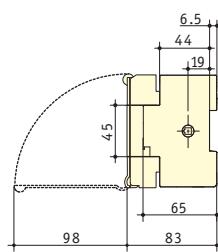
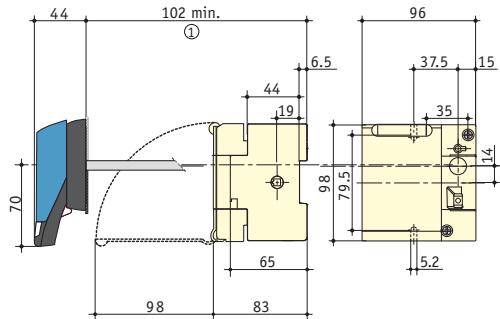
²⁾ 4 pole device with 2 poles in series by polarity.

240/415 V ratings suitable for use on 230/400 V in accordance with AS 60038 : 2000.

Technical data and dimensions (mm)

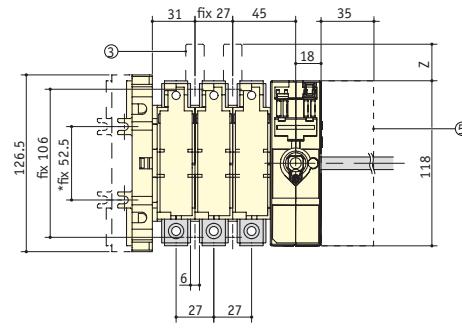
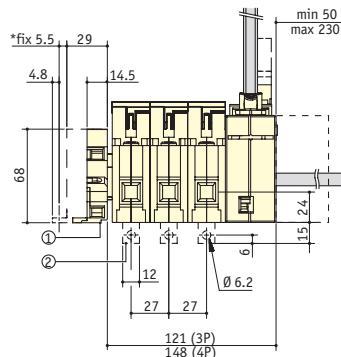
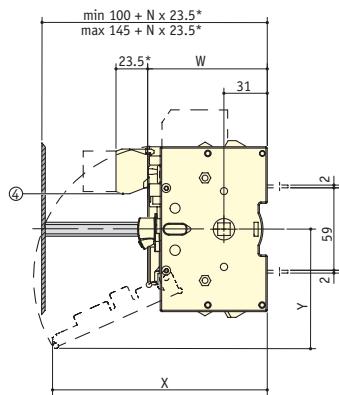
FUSERBLOC SSF BS 20 A Compact to DIN 63 A

FUSERBLOC SSF BS 20 and 32 A Compact



① With 1 U type AC: 130 mm
With 1 U type AC: 130 mm

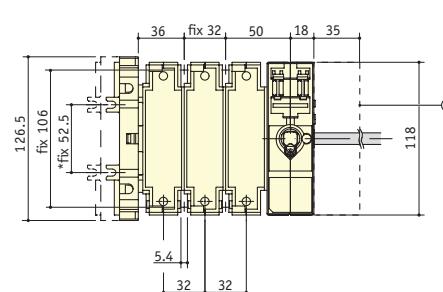
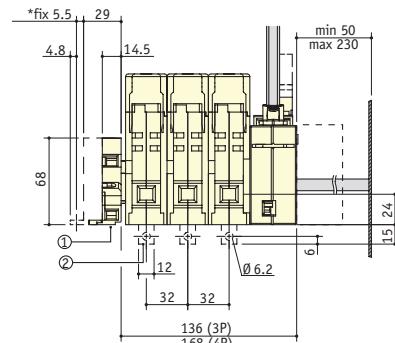
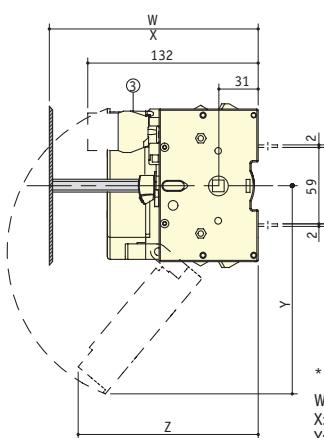
FUSERBLOC SSF BS 32 A



* to use if pre-break auxiliary contact number > 4
W: 84.5 +N x 23.5 for BS; 87 for DIN
X: 153 only for DIN
Y: 85 only for DIN
Z: 26 only for DIN

- ① S type auxiliary contact N/O + N/C to use if block number > 4.
- ② Rear connection (option).
- ③ 1 or 2 pre-break auxiliary contact (fuse blown indication).
- ④ 1 to 4 pre-break auxiliary contact for signalling.
- ⑤ Additional contact holder for U type AC.

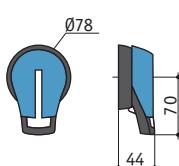
FUSERBLOC SSF BS 63 A and DIN 63 A



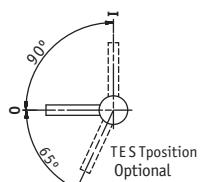
* to use if pre-break auxiliary contact number > 4
W: 124 +N x 23.5 for BS; 139 for DIN
X: 145 +N x 23.5 for BS; 145 for DIN
Y: 159 only for DIN
Z: 145 only for DIN

- ① S type auxiliary contact N/O + N/C to use if block number > 4.
- ② Rear connection (option).
- ③ 1 to 4 pre-break auxiliary contact for signalling.
- ④ Additional contact holder for U type AC.

Door drilling

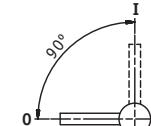
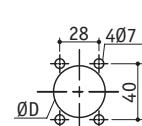


S1 handle



S type handle - front operation

Conventional fixing (from rear): $D = 31$ to 37 mm
Fast fixing (external, door closed): $D = 37$ mm

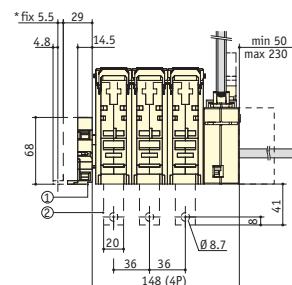
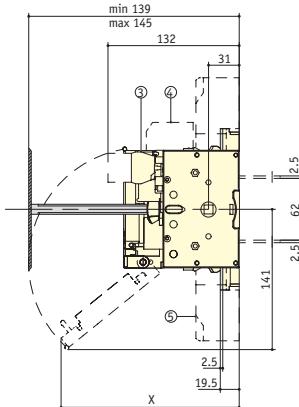


S type handle - side operation

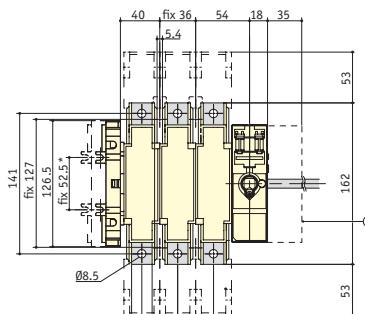
Conventional fixing (from rear): $D = 31$ to 37 mm
Fast fixing (external, door closed): $D = 37$ mm

Technical data and dimensions (mm) FUSERBLOC SSF BS 100 A to DIN 250 A

FUSERBLOC SSF BS 100 A and DIN 125 A

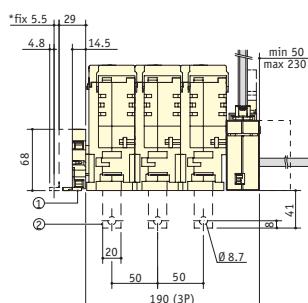
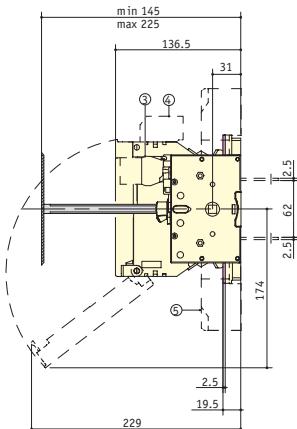


* to use if pre-break auxiliary contact number > 4
 X: 179 for BS 100 A (size 4) and DIN 100 - 125 A (size 22 x 58)
 189 for DIN 125 - 160 A (size 00).

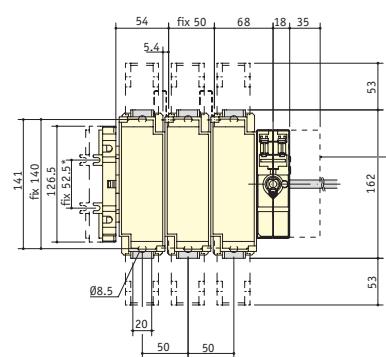


- ① S type auxiliary contact N/O + N/C to use if block number > 4.
- ② Rear connection (option).
- ③ 1 to 4 pre-break auxiliary contact for signalling.
- ④ 1 or 2 pre-break auxiliary contact (fuse blown indication).
- ⑤ Terminal shrouds.
- ⑥ Additional contact holder for U type AC.

FUSERBLOC BS 160 A and DIN 160 A

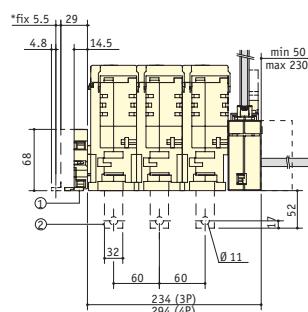
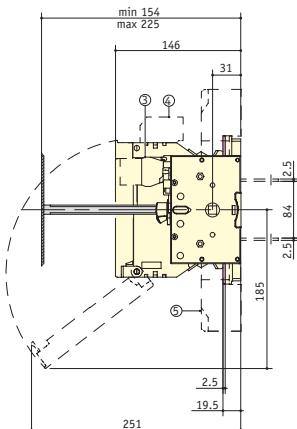


* to use if pre-break auxiliary contact number > 4
 ① S type auxiliary contact N/O + N/C to use if block number > 4.
 ② Rear connection (option).

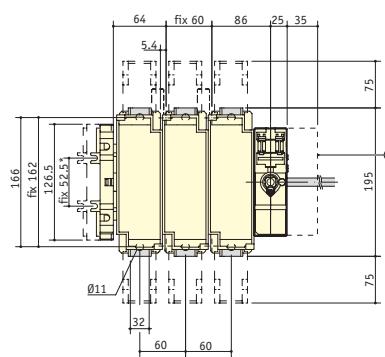


- ③ 1 to 4 pre-break auxiliary contact for signalling.
- ④ Terminal shrouds.
- ⑤ Additional contact holder for U type AC.

FUSERBLOC BS 200 – 250 A and DIN 250 A

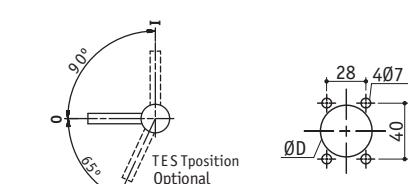
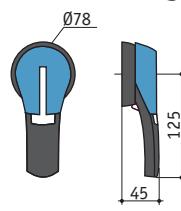


* to use if pre-break auxiliary contact number > 4
 ① S type auxiliary contact N/O + N/C to use if block number > 4.
 ② Rear connection (option).
 ③ 1 to 8 pre-break auxiliary contact for signalling.

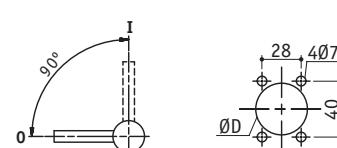


- ④ 1 or 2 pre-break auxiliary contact (fuse blown indication).
- ⑤ Terminal shrouds.
- ⑥ Additional contact holder for U type AC.

Door drilling



S type handle - front operation
 Conventional fixing (from rear): $D = 31$ to 37 mm
 Fast fixing (external, door closed): $D = 37$ mm

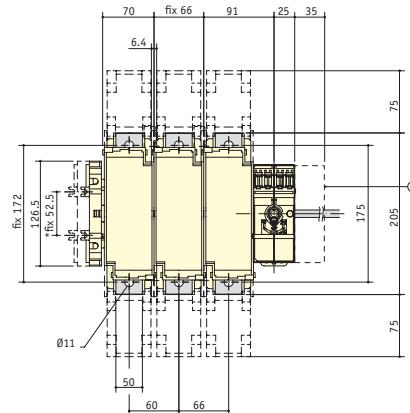
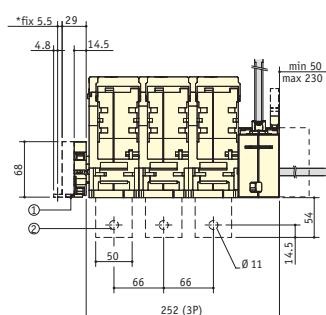
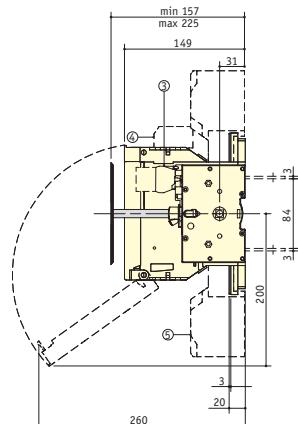


S type handle - side operation
 Conventional fixing (from rear): $D = 31$ to 37 mm
 Fast fixing (external, door closed): $D = 37$ mm

Technical data and dimensions (mm)

FUSERBLOC SSF BS 315 A to DIN 800 A

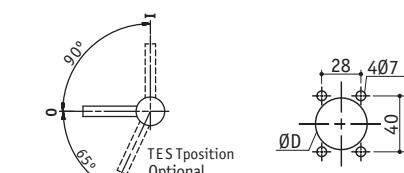
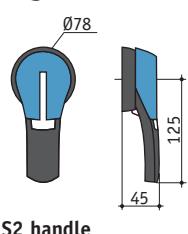
FUSERBLOC SSF BS 315 - 400 A and DIN 400 A



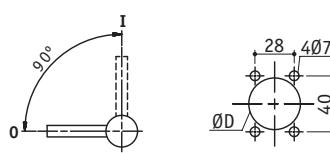
- * to use if pre-break auxiliary contact number > 4
- ① S type auxiliary contact N/O + N/C to use if block number > 4.
- ② Rear connection (option).
- ③ 1 to 8 pre-break auxiliary contact for signalling.

- ④ 1 or 2 pre-break auxiliary contact (fuse blown indication).
- ⑤ Terminal shrouds.
- ⑥ Additional contact holder for U type AC.

Door drilling

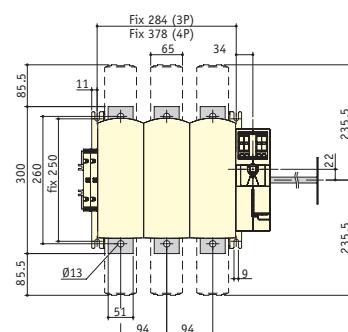
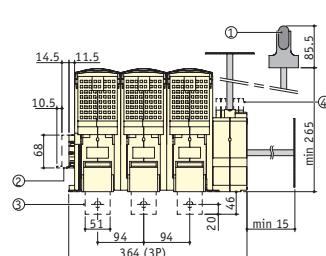
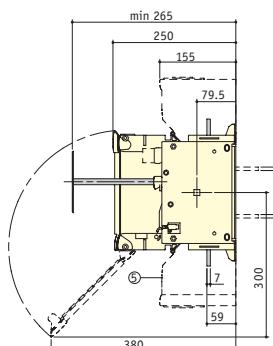


S type handle - front operation
Conventional fixing (from rear): $D = 31$ to 37 mm
Fast fixing (external, door closed): $D = 37$ mm



S type handle - side operation
Conventional fixing (from rear): $D = 31$ to 37 mm
Fast fixing (external, door closed): $D = 37$ mm

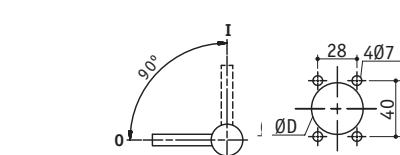
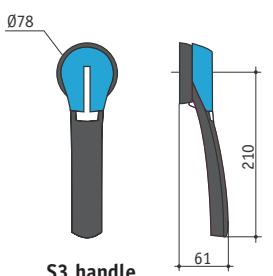
FUSERBLOC SSF BS 630 - 800 A and DIN 630 - 800 A



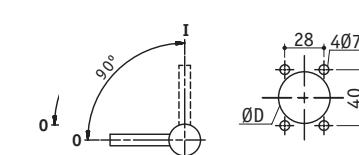
- ① Direct operation.
- ① S type auxiliary contact N/O + N/C.
- ② Rear connection (option).

- ④ 1 to 8 pre-break auxiliary contact for signalling.
- ⑤ Terminal shrouds.

Door drilling



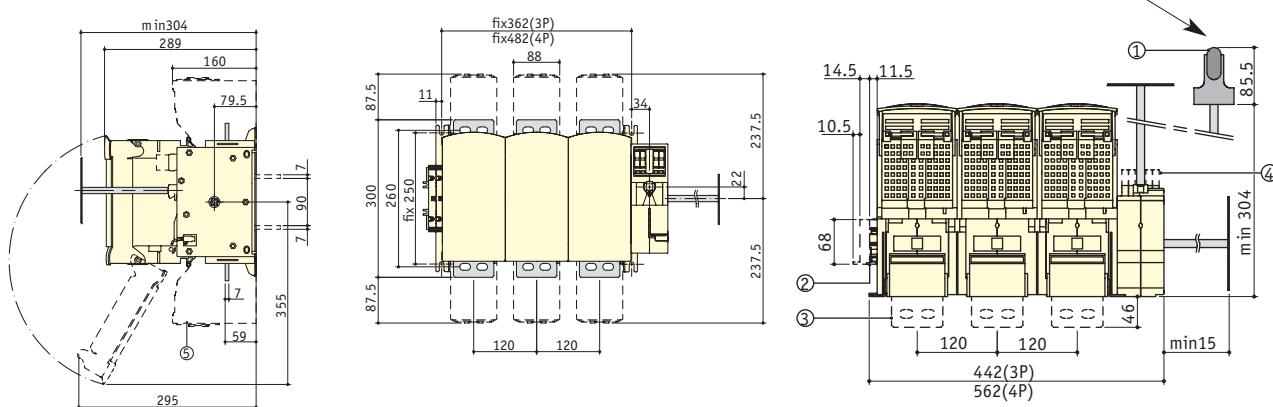
Front operation
Conventional fixing (from rear): $D = 31$ to 37 mm
Fast fixing (external, door closed): $D = 37$ mm



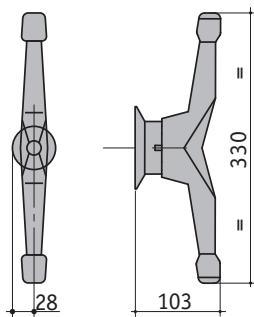
Side operation
Conventional fixing (from rear): $D = 31$ to 37 mm
Fast fixing (external, door closed): $D = 37$ mm

Technical data and dimensions (mm) FUSERBLOC SSF BS 1250 A and DIN 1250 A

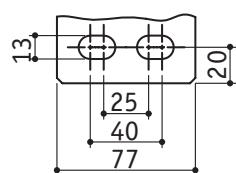
FUSERBLOC BS 1250 A and DIN 1250 A



Direct operation



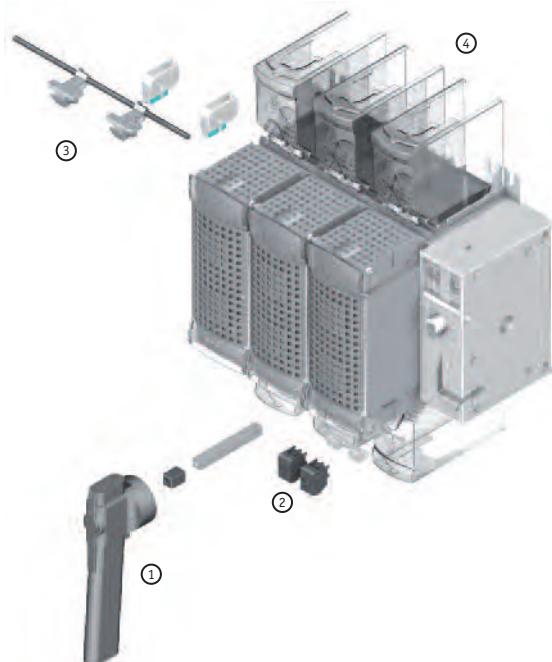
Connection terminals



1250 A types require
S4 "T" handles.

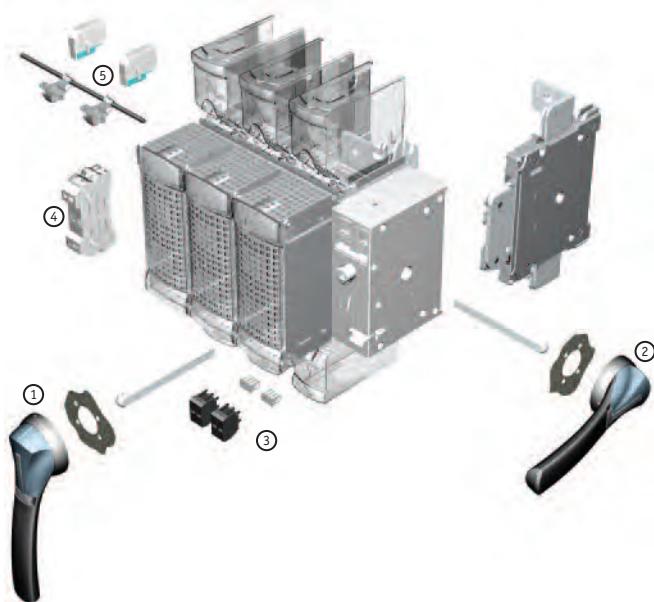
- ① Direct operation
- ② S type auxiliary contact N/O + N/C
- ③ Rear connection (option)
- ④ 1 to 8 pre-break auxiliary contact for signalling
- ⑤ Terminal shrouds

SSF 630 to 1250 A - Direct operation



- ① Direct front handle
- ② 2 x 4 configurable U type ACs for pre-break and signalling
- ③ Fuse blown indication device
- ④ Terminal shrouds

SSF 630 to 1250 A



- ① Door interlocked external front handle (S3 to 800 A / S4-T handle to 1250 A)
- ② Door interlocked external right side handle
- ③ 4 x 2 configurable U type ACs, for pre-break and signalling
- ④ S, ST type block
- ⑤ Fuse blown indication device
- ⑥ Terminal shrouds

RSF

Remote switch-fuses 250 to 1250 A



**WITH
SHUNT
TRIP**

Fusomat 250 to 1250 A

Socomec's RSF remote switch-fuses incorporate full short circuit protection offered by HRC fuses, as well as full breaking indication and remote disconnection by tripping coil. The range covers any amperage up to and including 1250 A and combined with suitable current transformers and thermal relays.

Front operated surface mount (Supplied with external handle and 320 mm shaft)

	AC 22 400 V (A)	AC 23 400 V (kW)	Fuse type	Fuse size	No. of poles	Cat. No.	Price \$
250 A	250	132	BS 88	B1-B2-B3	3	RSF BS250 3P	2260.00
					4	RSF BS250 4P	2830.00
			DIN	1	3	RSF DN250 3P	2260.00
					4	RSF DN250 4P	2830.00
400 A	400	220	BS 88	B1-B2-B3-B4	3	RSF BS400 3P	3790.00
					4	RSF BS400 4P	4760.00
			DIN	2	3	RSF DN400 3P	3790.00
					4	RSF DN400 4P	4630.00
630 A	630	355	BS 88	C1-C2	3	RSF BS630 3P	5280.00
					4	RSF BS630 4P	7210.00
			DIN	3	3	RSF DN630 3P	5280.00
					4	RSF DN630 4P	7210.00
800 A	800	450	BS 88	C1-C2-C3	3	RSF BS800 3P	6830.00
					4	RSF BS800 4P	8640.00
			DIN	4	3	RSF DN800 3P	6830.00
					4	RSF DN800 4P	8640.00
1250 A	1250	560	BS 88	D1	3	RSF BS1250 3P	8960.00
					4	RSF BS1250 4P	11210.00
			DIN	4	3	RSF DN1250 3P	8960.00
					4	RSF DN1250 4P	11210.00

Accessories for FUSOMAT switches

Description	Page
Accessories	10 - 92
Technical data	10 - 93
Dimensions	10 - 94

Notes:  Available on indent only.

STD trip coil voltage 230 V AC. For 110 V AC insert 110 at end of part no. e.g. **RSFBS2503P110**

* Shunt trip coils are short time rated - 5 second maximum

Price Schedule 'B2'

RSF remote trip switch-fuses Accessories



External handle
(S3 type used)

Panel mount handles ('OFF' padlockable, 'ON' locking field convertible)

To suit	Colour	Cat. No.	Price \$
RSF BS/DN 250...1250	Black	1431 3511	255.00

Shaft extensions

To suit	Shaft length (mm)	Cat. No.	Price \$
RSF BS/DN 250...1250	320 (12 mm)	1401 1532	106.00

Auxiliary contacts

To suit	Contact type	Contact position	Cat. No.	Price \$
RSF 250...1250	1 C/O	1st	3999 0051	96.00
	1 C/O	2nd	3999 0052	117.00
	1 C/O	Coil tripping	3999 0031	117.00

Terminal shrouds/screens

To suit	Mounting position	Switch type	No. of poles	Cat. No.	Price \$
RSF 250...400	Top or bottom	BS/DIN	3	3998 3040	170.00
		BS/DIN	4	3998 4040	210.00
RSF 630	Top or bottom	DIN	3	3998 3063	255.00
		DIN	4	3998 4063	265.00
RSF 630...800	Top or bottom	BS 88	3	3998 3063	255.00
		BS 88	4	3998 4063	265.00
RSF 800...1250	Top	BS/DIN	3	3998 3120	POA
		BS/DIN	4	3998 4120	POA

Replacement AC tripping coils

To suit	Coil voltage	Cat. No.	Price \$
RSF BS/DN 250...1250	110 V AC	3990 1110	540.00
	230 V AC	3990 1220	540.00



Shroud



Trip coil

- ① Direct front handle (S3)
- ② Door interlocked external front handle
- ③ N/O / N/C position auxiliary contacts
- ④ N/O / N/C auxiliary contacts linked to factory-mounted shunt trip coil
- ⑤ Terminal shrouds
- ⑥ Fuse blown indication device

Overview (for further details, please see the installation instructions supplied with each device)

Note: Other voltages available on request.
 Available on indent only.

Price Schedule 'B2'

Technical data and ratings chart

FUSOMAT RSF Remote Trip 250 to 1250 A

Ratings to AS/NZS 60947-3 and IEC 60947-3

		250 A	400 A	630 A	800 A	1250 A
Rated insulation voltage	V	1000	1000	1000	1000	1000
Rated impulse withstand voltage	kV	12	12	12	12	12
Rated operational current						
AC 21A	400 V A	250	400	630	800	1250
	690 V ¹⁾ A	200	315	500	800	800
AC 22A	400 V A	250	400	630	800	1250
	690 V ¹⁾ A	200	315	500	800	800
AC 23A	400 V A	250	400	630	800	1000
	690 V ¹⁾ A	200	250	315	630	630
Rated operational current/poles in series						
DC 21A	220 V A	200	315	400	800	800
	440 V A	200	315	400	800 ³⁾	800 ³⁾
DC 22A	220 V A	200	315	315	800	800
	440 V A	200	315 ²⁾	315	800 ³⁾	800 ³⁾
DC 23A	220 V A	200	200	400	800	800
	440 V A	200	200 ²⁾	400 ²⁾	800 ³⁾	800 ³⁾
Operational power						
At 400 V without pre-break AC	kW	132	220	355	450	560
At 690 V without pre-break AC	kW	185	220	295	400	600
Short-circuit capacity						
Switch fuse cut-off current	400 V kA	5.5	9	10.6	20	20
(kA peak)		—	—	—	—	—
Fuse protected short circuit	400 V kA	80/100	80/100	80/100	80/100	80/100
withstand AC BS88/DIN						
(kA RMS prospective)	Fuse A	250	400	630	800	1250
Fuse types, IEC 60269-2	DIN	1	2	3	4	4
	BS 88	B1-B2-B3	B1-B2-B3-B4	C1-C2	C1-C2-C3	D1
Rated capacitor power	kVAr	115	185	290	365	575
Mechanical endurance	Ops	8000	8000	5000	5000	5000
Weight (3 pole)	Kg	7	8	16	28	28
Connection cable size (min./max.)	mm ²	95/240	185/240	2x150/2x300	4x185	4x185

Notes: ¹⁾ 690 V with terminal shrouds on phase barriers.

²⁾ Poles cannot be side by side.

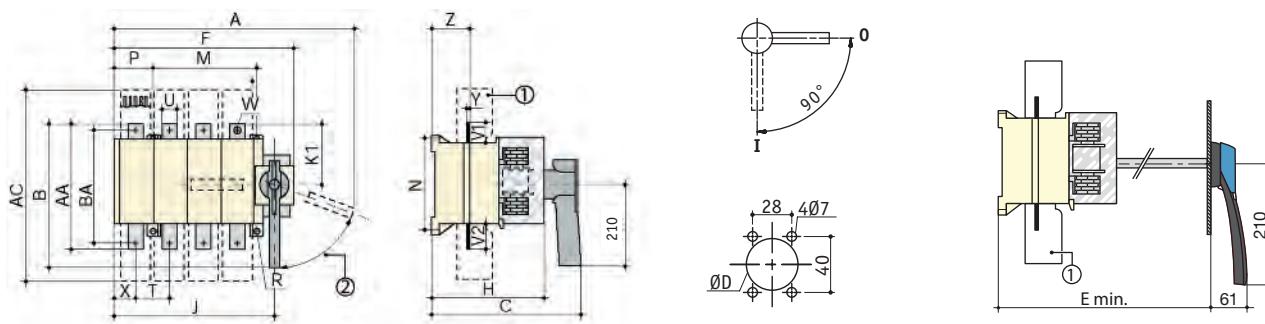
³⁾ 4 pole device with 2 poles in series by polarity.

240/415 V ratings suitable for use on 230/400 V in accordance with AS 60038 : 2000.

Technical data and dimensions (mm) FUSOMAT RSF BS 88 Remote Trip 250 to 1250 A

FUSOMAT BS 250 to 800 A FUSOMAT DIN 250 to 630 A

External front operation



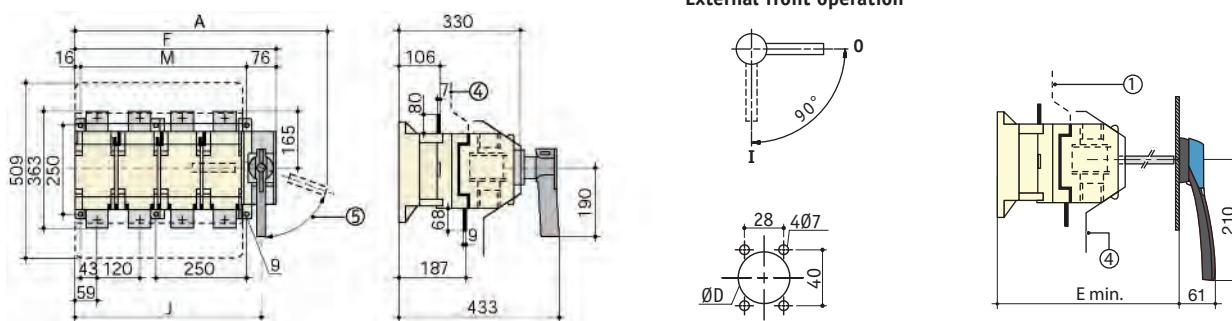
① Terminal shrouds

② Reset 70°

Rating	Overall dimensions (mm)					Terminal shrouds			Switch body			Switch mounting					Connections/terminals											
	(A)	A 3p.	A 4p.	B	C	E	AC	F 3p.	F 4p.	H	J 3p.	J 4p.	K1	M	N	P 3p.	P 4p.	R	T	U	V1	V2	W	X 3p.	X 4p.	Y	Z	AA
250	435	495	305	307	297...343	380	285	345	221	253	313	115	210	180	10	70	7	65	32	35	43	11	31	46	3	67	238	208
400	435	495	305	307	293...343	380	285	345	221	253	313	115	210	180	10	70	7	65	32	35	43	13	31	46	5	69	238	208
630	490.5	570.5	350	348	341...440	470	345.5	425.5	268	308	388	150	250	250	20	100	9	80	50	50	50	13	36	65	7	72	300	260
800	490.5	570.5	350	348	341...440	470	345.5	425.5	268	308	388	150	250	250	20	100	9	80	50	50	50	13	36	65	7	72	300	-

FUSOMAT BS 1250 FUSOMAT DIN 800 to 1250 A

External front operation



① Top terminal screens

② Reset 70°

④ Front shield

Rating (A)	Overall dimensions (mm)			Switch body			Switch Mounting		
	A 3p.	A 4p.	E	F 3p.	F 4p.	J 3p.	J 4p.	M 3p.	M 4p.
800	582	702	416...481	437	557	399.5	519.5	345	465
1250	582	702	416...481	437	557	399.5	519.5	345	465

PSF

Plug in
switch-fuses
250 to 400 A



FUSERBLOC 32 to 400 A

PSF Standard switch-fuses boast IP 30 protection on all fuse terminals in a compact yet effective design. These switch-fuses feature a test position and double-break contacts per phase, allowing the safe isolation of AC and DC circuits as well as the added short circuit protection offered by HRC fuses.



BS88 Plug in switch-fuse

32 A
63 A
125 A
160 A
160 A
250 A
400 A

Fuse size	AC 21 415 V (A)	AC 23 415 V (A)	AC 23 415 V (kW)	No. of poles	Cat. No.	Price \$
A1	32	32	15	3	PSFBS323P	730.00
A2-A3	63	63	30	3	PSFBS633P	850.00
A4	125	125	63	3	PSFBS1253P	1000.00
A4	160	160	80	3	PSFBS1603P	1110.00
A4	160	160	80	3	PSFBS1603PR	1390.00
B1-B2-B3	250	250	132	3	PSFBS2503PR	2330.00
B1-B2-B3-B4	400	400	220	3	PSFBS4003PR	2920.00

3PR type = Right side load



DIN plug in switch-fuse

32 A
63 A
125 A
160 A
160 A
250 A
400 A

Fuse size	AC 21 415 V (A)	AC 23 415 V (A)	AC 23 415 V (kW)	No. of poles	Cat. No.	Price \$
00	32	32	15	3	PSFDN323P	730.00
00	63	63	30	3	PSFDN633P	850.00
00	125	125	63	3	PSFDN1253P	1000.00
00	160	160	80	3	PSFDN1603P	1110.00
00	160	160	80	3	PSFDN1603PR	1390.00
1	250	250	132	3	PSFDN2503PR	2330.00
2	400	400	220	3	PSFDN4003PR	2920.00

3PR type = Right side load

Accessories for FUSERBLOC switches

Description	Page
Accessories	10 - 96
Technical data	10 - 97
Dimensions	10 - 98

Notes: Available on indent only.

Price Schedule 'B2'

PSF Plug in switch fuses Accessories



External handle (S2)

External mount handles ('OFF' padlockable, 'ON' locking field convertible)

To suit	Type	Colour	IP rating	Cat. No.	Price \$
32...63	Pistol - S1	Black	65	1413 2111	85.00
		Red	65	1414 2111	96.00
125...400	Pistol - S2	Black	65	1423 2111	127.00
		Red	65	1424 2111	170.00
630...800	Pistol - S3	Black	65	1433 3111	225.00
		Red	65	1434 3111	245.00



Shaft extension

Shaft extensions

To suit	Shaft length	Size	Cat. No.	Price \$
32...63	320 mm	5 mm	1401 0532	32.00
125...400	320 mm	10 mm	1400 1032	53.00
	500 mm	10 mm	1400 1050	85.00
630...800	320 mm	12 mm	1400 1232	96.00
	500 mm	12 mm	1400 1250	148.00



Auxiliary contact

Auxiliary contacts

To suit	Type	Current (A)	Contacts	Cat. No.	Price \$
32...800		10	N/O	3999 0701	48.00
			N/C	3999 0702	48.00
	Side mount aux 1st		1 N/O + 1 N/C ¹⁾	3999 0041	180.00
	Side mount aux 2nd		1 N/O + 1 N/C ¹⁾	3999 0042	210.00



Shrouds

Terminal shrouds

To suit	No. of poles	Mounting position	IP rating	Cat. No.	Price \$
32...63	3	Bottom	20	STANDARD	-
125...160	3	Bottom	20	3998 3016	117.00
200...400	3	Bottom	20	3998 3025	138.00

For solid neutral and solid links refer to page 10 - 84.

Note: ¹⁾ Auxiliary has screw terminals and mounts on left side of switch.

Technical data and ratings chart

FUSERBLOC PSF 32 to 400 A

Ratings to AS/NZS 60947-3 and IEC 60947-3

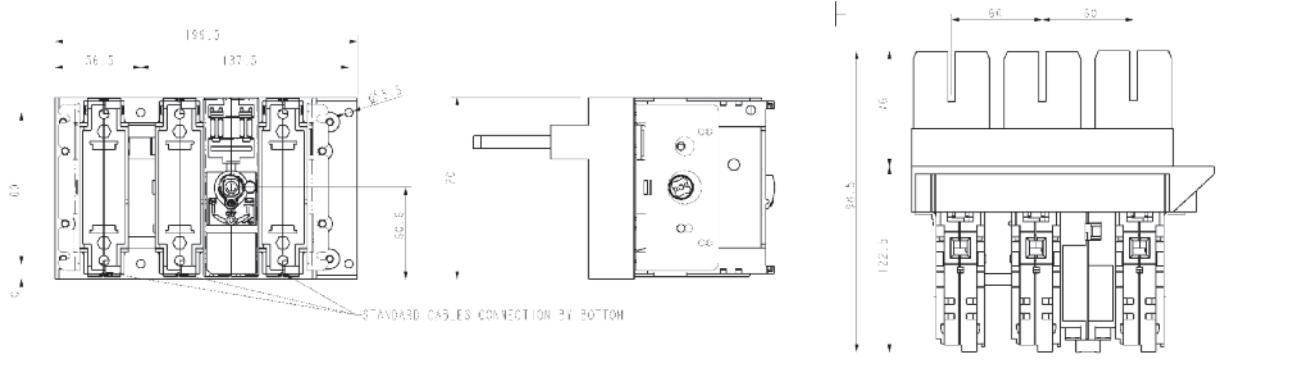
		32 A	63 A	125 A	160 A	250 A	400 A
Rated insulation voltage	V	750	750	750	750	750	800
Rated impulse withstand voltage	kV	8	8	8	8	8	8
Rated operational current							
AC 21A	400 V A	32	63	125	160	250	400
	690 V A	32	63	125 ¹⁾	160 ¹⁾	250 ¹⁾	315
AC 22A	400 V A	32	63	125	160	250	400
	690 V A	32	63	125 ¹⁾	160 ¹⁾	250 ¹⁾	315
AC 23A	400 V A	32	63	125	160	250	400
	690 V A	32	63	125 ¹⁾	125 ¹⁾	250 ¹⁾	250
Rated operational current/poles in series							
DC 21A	220 V A	32	63	125	160	250	315
	440 V A	32 ²⁾	63 ²⁾	125 ²⁾	160 ²⁾	250 ²⁾	315
DC 22A	220 V A	32	63	125	160	250	315
	440 V A	32 ²⁾	63 ²⁾	125 ²⁾	160 ²⁾	250 ²⁾	315 ²⁾
DC 23A	220 V A	32	40	125	125	200	200
	440 V A	32 ²⁾	40 ²⁾	125 ²⁾	125 ²⁾	200 ²⁾	250 ²⁾
Operational power							
At 400 V without pre-break AC	kW	15	30	63	80	132	220
At 690 V without pre-break AC	kW	25	55	90	110	220	220
Short-circuit capacity							
Switch fuse cut-off current (kA peak)	400 V kA	10.6	10.6	20	20	32.5	40
Fuse protected short circuit withstand AC BS88/DIN (kA RMS prospective)	400 V kA	80	80	50	50	80	80
	690 V kA						
	Fuse A	32	63	125	160	250	400
Fuse types, IEC 269-2	DIN 43620	00C	00C	00	00	1	2
	BS 88	A2-A3	A2-A3	B1-B2	B1-B2	B1-B2-B3	B1-B2-B3-B4
Rated capacitor power	kVAr	15	28	55	75	115	185
Mechanical endurance	Ops	10000	10000	10000	10000	10000	10000
Weight (3 pole)	Kg	1.3	1.3	2.5	2.5	3.8	4.8
Connection cable size (min./max.)	mm ²	10/25	10/25	50/95	50/95	95/240	185/240

Notes: ¹⁾ With terminal shrouds/screen.
²⁾ 4 pole device with 2 poles in series by polarity.

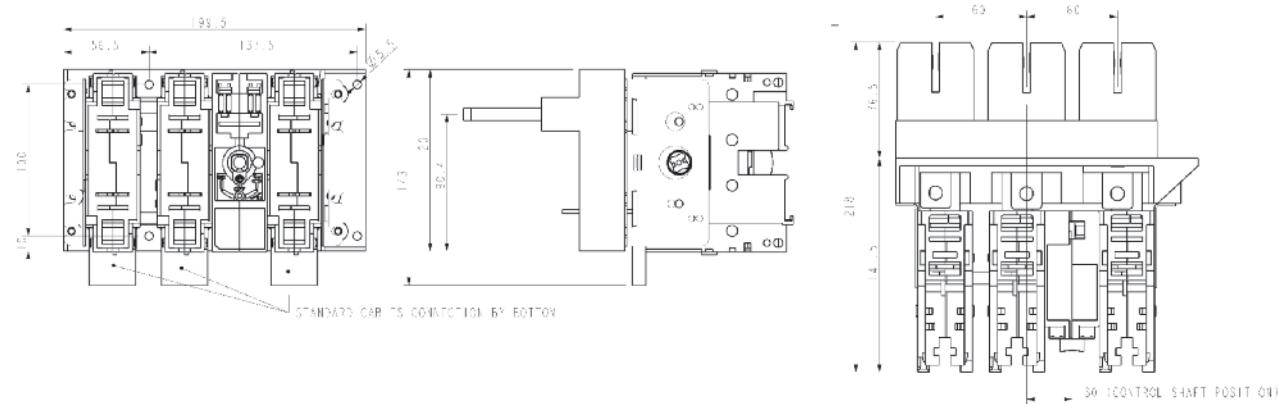
240/415 V ratings suitable for use on 230/400 V in accordance with AS 60038 : 2000.

Technical data and dimensions (mm)

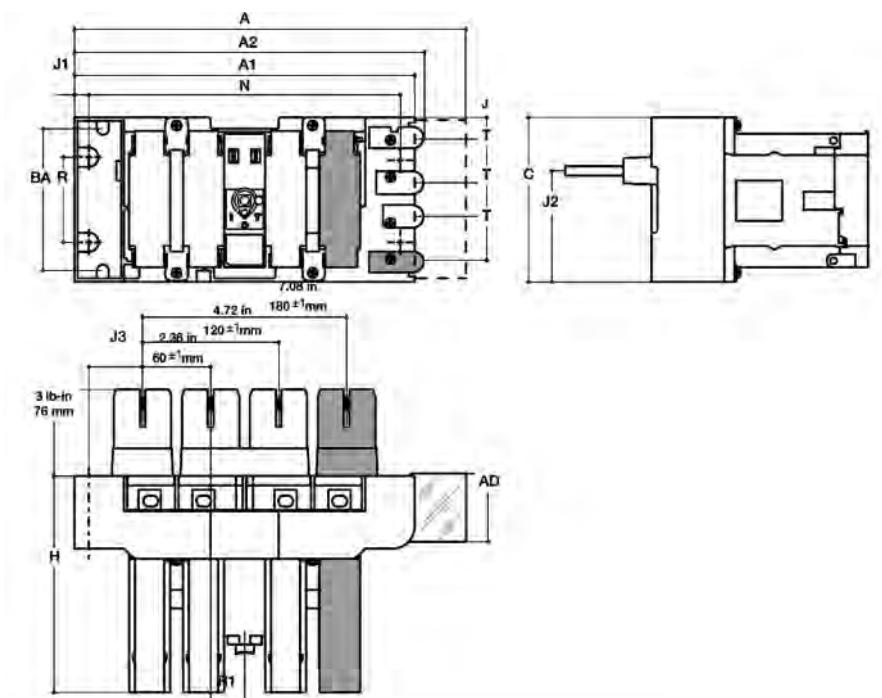
FUSERBLOC PSF 32 to 63 A



FUSERBLOC PSF 125 to 160 A



FUSERBLOC PSF 250 to 400 A (3 and 4 pole) ¹⁾



Note: ¹⁾ 3 pole types use the same moulding as 4 pole types.

CAL	A	A1	A2	C	AD	H	J	J1	J2	J3	N	R	R1	T	BA	L1	L2	U	U1	U2	S	S1	S2	L
250 A	in 17.32	15.74	/	7.67	4.37	9.25	0.94	0.45	5.82	3.34	13.78	3.93	1.18	2.32	5.90	9.29	1.02	13.78	2.24	0.45	5.90	3.93	0.98	L = X - 6.06
	mm 440	400	/	195	111	235	24	11.5	148	85 ± 1	350	100	30	59	150	236	26	350	57	11.5	150	100	25	L = X - 154
400 A	in 17.32	15.74	/	7.67	4.37	9.37	0.94	0.45	5.82	3.34	13.78	3.93	1.18	2.32	5.90	9.29	1.02	13.78	2.24	0.45	5.90	3.93	0.98	L = X - 6.06
	mm 440	400	/	195	111	238	24	11.5	148	85 ± 1	350	100	30	59	150	236	26	350	57	11.5	150	100	25	L = X - 154

Application data

Correction factor

Certain operation conditions necessitate modification of thermal current using a correction factor.

Kt correction due to ambient air temperature.

Ambient air temperature surrounding the device.

- Simplified method.

$$I_{\text{thu}} \leq I_{\text{th}} \times K_t$$

Table A: correction factors according to ambient air temperature (t_a)

Kt: correction factor	
0.9	$40^{\circ}\text{C} < t_a \leq 50^{\circ}\text{C}$
0.8	$50^{\circ}\text{C} < t_a \leq 60^{\circ}\text{C}$
0.7	$60^{\circ}\text{C} < t_a \leq 70^{\circ}\text{C}$

- A more accurate calculation can be made for each application: please refer NHP.

Other de-rating due to temperature

- Switch fuses fitted with high speed fuses.
- In certain cases, de-rating is necessary for 24-hour full-load operation. Please refer NHP.

Kf correction due to frequency

$$I_{\text{thu}} \leq I_{\text{th}} \times K_f$$

Table B: correction factors according to frequency (f)

Kf: correction factor	
0.9	$100 \text{ Hz} < f \leq 1000 \text{ Hz}$
0.8	$1000 \text{ Hz} < f \leq 2000 \text{ Hz}$
0.7	$2000 \text{ Hz} < f \leq 6000 \text{ Hz}$
0.6	$6000 \text{ Hz} < f \leq 10000 \text{ Hz}$

Ka correction factor due to altitude

- No de-rating of I_{th} .
- U_e and I_e de-rating in both AC and DC currents.

Table C: correction factors according to altitude (A)

	$2000 \text{ m} < A \leq 3000 \text{ m}$	$3000 \text{ m} < A \leq 4000 \text{ m}$
U_e	0.95	0.80
I_e	0.85	0.85

Switch mounting and orientation

$$I_{\text{thu}} \leq I_{\text{th}} \times K_p$$

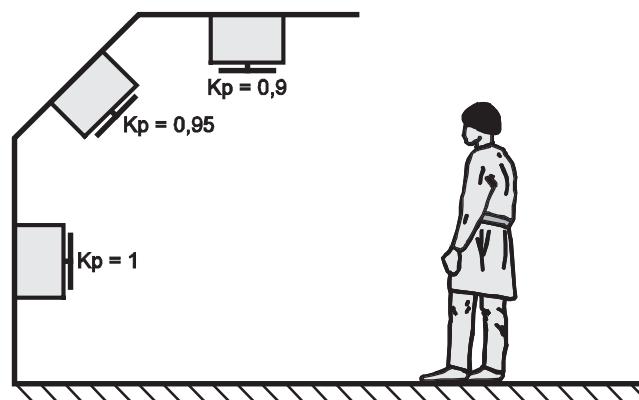


Fig. 2: position de-rating

Table D

Rotation of each device layout is limited either to clockwise or anti-clockwise in order to ensure that switching characteristics remain independent from the speed of operation.

		90° anti-clockwise	180° clockwise	90° clockwise
SIRCO M		YES	YES	YES
SIRCO VM	VMO, VM2	32...40; 125...160	YES	YES
	VM1	63...125	YES	NO
SIRCO	3/4 pole	40...3200 A	NO	YES
	4000 A	YES	YES	NO
	6/8 pole	125...630 A	YES	NO
		800...3200 A	NO	YES
SIDERMAT	Shunt trip coil	250...1800 A	YES	NO
	Undervoltage trip coil	250...1800 A	NO	YES
SIRCO VM1 changeover switches	I-O-II/I-I+II-II		YES	NO
SIRCOVER	I-O-II	CD 125...CD 630 A	NO	YES
		CD 800...3200 A	YES	NO
	I-I+II-II	CD 125...3200 A	NO	YES
	6/8 pole	CD 125...CD 630 A	NO	YES
SIRCOVER By-Pass	I-O-II	CD 125...CD 630 A	NO	YES
		CD 800...3200 A	YES	NO
	I-I+II-II	CD 125...CD 630 A	NO	YES
		CD 800...3200 A	NO	YES
ATyS	I-O-II/I-I+II-II	CD 25...630 A	NO	YES
FUSERBLOC Compact design		CD 25...1250 A	YES	YES
FUSOMAT	Shunt trip coil	250...1250 A	YES	NO
	Undervoltage trip coil	250...1250 A	NO	YES

Power dissipation in W/pole for each piece of equipment

Ratings (A)	32	40	50	63	80	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	1800	2000	2500	3200	4000
SIRCO	-	0.6	-	2	2.6	3	1.8	3	4	5.8	7.6	10.8	16	30.9	39.2	45	85	122	153	178	255	444	916
SIRCO VM	0.9	1.3	-	1.2	2.1	3.1	5.7	3.3	5.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SIDER	-	-	1	-	2.9	-	1.5	-	3.4	-	-	12.9	17	20.7	32	-	42.5	102	-	-	-	-	-
SIDERMAT ¹⁾	-	-	-	-	-	-	-	-	-	8.2	-	15.6	-	45	66.4	-	80	113	-	-	-	-	-
FUSERBLOC	4.7 (CD)	-	7.3	9	-	14.5	20	23	25.4	41	-	60	-	100	143.4	-	215	-	-	-	-	-	-
FUSOMAT	-	-	-	-	-	-	-	-	-	30.3	-	50	-	83.5	-	-	222	-	-	-	-	-	-

Note: ¹⁾ Value's represent switch fuses with fuse cartridges fitted.

TEMCURVE 6 - CIRCUIT BREAKER AND FUSE SELECTIVITY APPLICATION SOFTWARE

The latest version of TemCurve 6 includes advanced new features making it a versatile application tool for use with Terasaki MCBs, MCCBs, ACBs, NHP fuses as well as generic IEC protection relay curves.



TemCurve 6 includes:

- Circuit line-diagrams
- Cable fault calculations
- TemCurve file sharing
- Distribution schematic
- Supply fault calculations
- Supply voltage options
- Catalogue data prints
- Time current curves
- Device photos
- User defined curves
- Motor start applications
- Internet update capability
- Energy let through curves
- Supply device type options
- Exports to AutoCad
- Circuit breaker setting detail
- Calculator

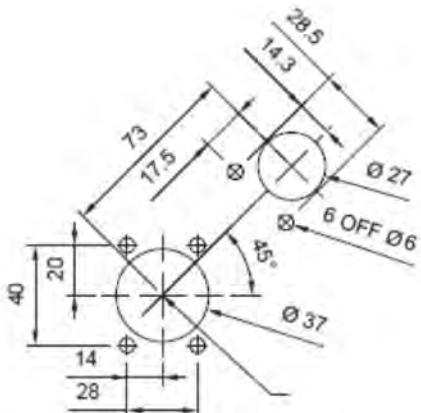
Application data Socomec S type handle

Interlock assembly instructions - TKNHP

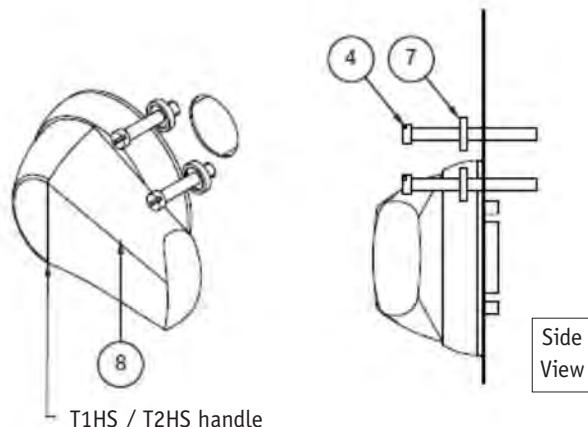
For use with T1HS / T1HS extension handles and Terasaki Moulded Case Circuit Breakers

Assembly & installation

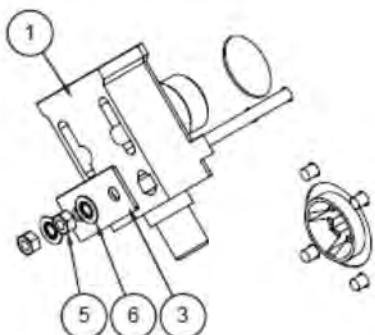
- Cut out front of door panel and mount handle as per handle instructions.



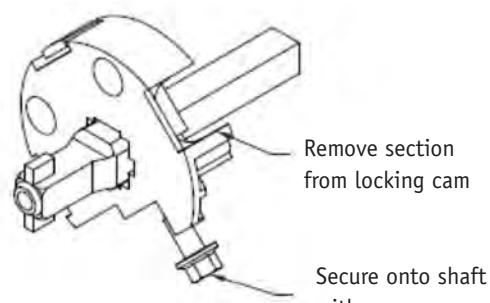
- Place 2 off M5 x 50 mm screws (4) through cap rings (7) and Ø 6 mm holes in door panel.



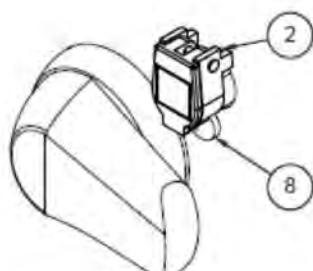
- On rear of door panel, position bolt interlock (1) over screw threads and fasten with nuts (5) and washers (6).



- Remove section of locking cam at 45° to shaft as shown. Install cam on switch shaft as per instructions.



- Place black cap (8) over screw head on front of door panel. Fit weatherproof dust cap (2) over bolt interlock and secure on underside with grub screw.



TKNHP Part List ¹⁾

Item No.	Part No.	Qty.	Description
1	440TMSBLE10XX	1	Bolt interlock - Allen Bradley
2	440T-ASFC10XX	1	Weatherproof dust cap
3	TKNHPFPLATE	1	Bolt interlock fixing plate
4	M5X50CH	2	Screw: cheese HD ZP - M5 x 50
5	M5NUT	2	Nut: standard ZP - M5
6	M5THWSR	2	Washer: internal teeth ZP - M5
7	006 1051 000 01	2	Cap ring 5 mm - natural
8	006 1052 599 01	2	Cap 5 mm - black

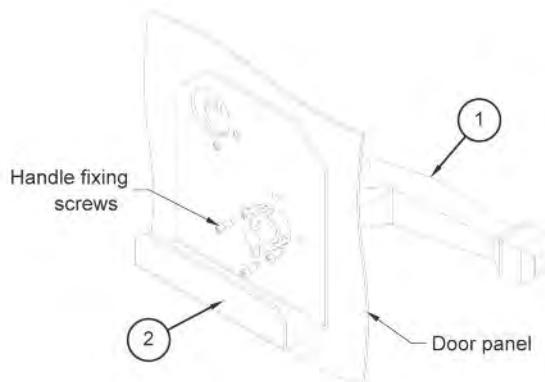
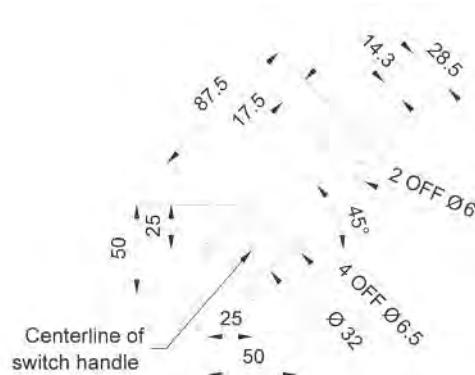
Note: ¹⁾ 14997702 Cam interlock kit and TKNHP to be ordered separately.

Application data Socomec 2000 - 4000 A handle Interlock assembly instructions - TKNHP

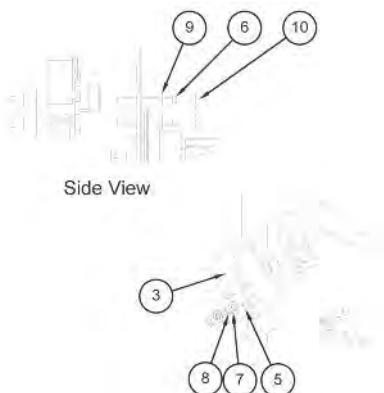
For use with T1HS / T1HS extension handles and Terasaki Moulded Case Circuit Breakers

Assembly & installation

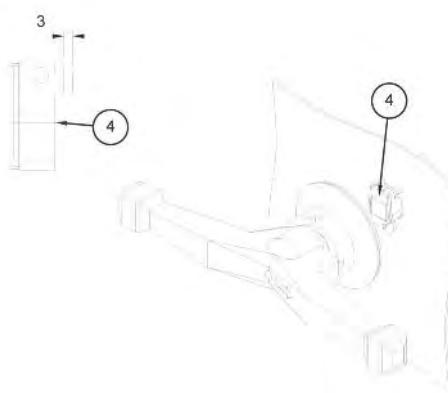
- Cut-out front of door panel.
- Locate handle (1) with gasket on front of door. Align cam interlock bracket (2) on rear of door panel and fasten with 4 off screws supplied with handle..



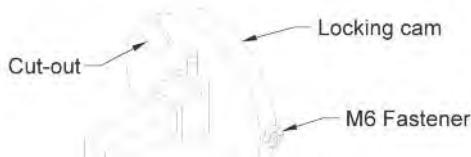
- Place bolt interlock (3) on cam interlock bracket and fasten with M5x50 screws (6), cap ring (9)fixing plate (5), nuts (8) and washers (7). Fit black screw cap (10) on cap ring



- Remove 3mm from weatherproof dust cap (4) feet to allow correct fitting. Place dust cap over bolt interlock and secure on underside with grub screw.



- Place locking cam over switch handle shaft, ensuring cut-out is aligned with bolt interlock. Secure with M6 fastener. Install handle shaft as per handle instructions.



TKNHP Part List ¹⁾

Item No.	Part No.	Qty.	Description
1	SLBPH09	1	SLB2000-3200 T-Type Handle - Socomec
2	SLBLK4	1	Cam Interlock Kit
3	440TMSBLE10XX	1	Bolt Interlock - Allen Bradley
4	440T-ASFC10X	1	Weatherproof Dust Cap
5	TKNHPPLATE	1	Bolt interlock Fixing Plate
6	M5X50CH	2	Screw : Cheese - M5 x 50
7	M5THWSR	2	Washer : Internal Teeth - M5
8	M5NUT	2	Nut : Standard - M5
9	006 1051 000 01	2	Cap Ring 5mm Natural - Skiffy
10	006 1052 599 01	2	Cap 5mm Black - Skiffy

Note: ¹⁾ SLBLK4 Cam interlock kit and TKNHP key to be ordered separately.

DFB

DIN fuse
bases
160 to 630 A



Single pole base (open)



Rating	DIN fuse size	Mounting	Cat. No.	Price \$
160 A	00	Backplate	6500 1010	48.00
		DIN rail	6500 1110	48.00
250 A	1	Backplate	6501 1011	85.00
		DIN rail	6501 1111	85.00
400 A	2	Backplate	6501 1012	138.00
		DIN rail	6501 1112	138.00
630 A	3	Backplate	6501 1013	235.00
		DIN rail	6501 1113	235.00

Three single pole bases (open)



Rating	DIN fuse size	Mounting	Cat. No.	Price \$
160 A	00	Backplate	6500 1030	127.00
		DIN rail	6500 1130	127.00
250 A	1	Backplate	6501 1031	255.00
		DIN rail	6501 1131	255.00
400 A	2	Backplate	6501 1032	380.00
		DIN rail	6501 1132	380.00
630 A	3	Backplate	6501 1033	540.00
		DIN rail	6501 1133	540.00

Ordering

3 Pole bases consist of 3 single pole types clipped together using 'connecting blocks'
- refer page 10 - 104

Therefore, single pole DFB's can be used to create 1, 2, 3 or 4 pole configurations. IP 20 kits can be ordered on the following page. IP 20 lists are also broken into the component parts also listed on the following page.

Price Schedule 'B2'

DFB DIN Fuse bases

Accessories

IP 20 kit - includes the component parts shown below

IP20 kits include fuse cover, shrouds, shields and connecting blocks

To suit	No. of poles	Cat. No.	Price \$
DFB 00	1	6510 1010	35.00
	3	6510 1030	53.00
DFB 1	1	6511 1011	53.00
	3	6511 1031	85.00
DFB 2	1	6511 1012	53.00
	3	6511 1032	117.00
DFB 3	1	6511 1013	74.00
	3	6511 1033	148.00

Component parts for IP 20 kits

Connecting block (1 piece)



To suit	Cat. No.	Price \$
DFB 00	6500 0033	5.50
DFB 1	6500 0031	6.50
DFB 2	6500 0031	6.50
DFB 3	6500 0032	8.50

Note: 2 required to connect 3 fuse bases

Phase separation shield (1 piece)



To suit	Cat. No.	Price \$
DFB 00	6500 0001	8.50
DFB 1	6500 0003	11.00
DFB 2	6500 0003	11.00
DFB 3	6500 0004	16.00

Note: 4 required for 3 fuse bases

Terminal shroud (1 piece)



To suit	Cat. No.	Price \$
DFB 00	6500 0010	11.00
DFB 1	6500 0012	12.00
DFB 2	6500 0013	14.00
DFB 3	6500 0014	14.00

Note: Two required per pole

Fuse cover (1 piece)



To suit	Cat. No.	Price \$
DFB 00	6500 0020	8.50
DFB 1	6500 0022	11.00
DFB 2	6500 0022	11.00
DFB 3	6500 0023	12.00

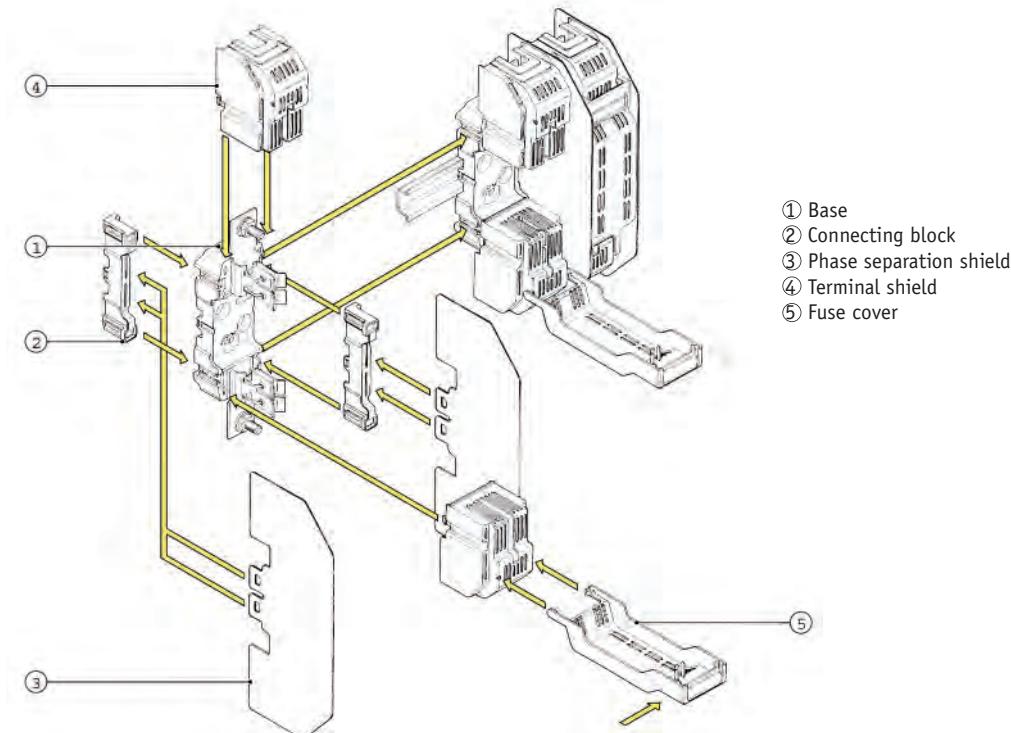
Note: One required per pole

Price Schedule 'B2'

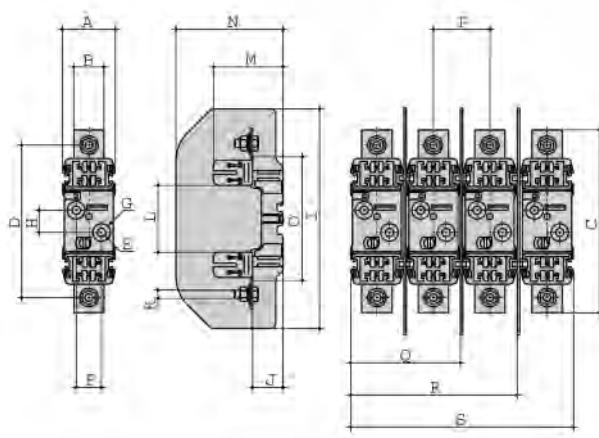
DFB DIN Fuse bases

Dimensions (mm)

IP 20 kit assembly



Dimensions (mm)



Rating (A)	Fuse size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
160	00	37	20	120.5	100	15	0	7.5	25	146	23	M8	56.5	58	84.5	86	38.5	75.5	114	152.5
250	1	60	28	200	175	10.5	30	20.5	25	250	35	M10	80	77.5	123	148	66	121.5	192	244.5
400	2	60	32	225	200	10.5	30	20.5	25	250	35	M12	80	88	123	148	66	121.5	192	244.5
630	3	60	38	240	210	10.5	30	20.5	25	270	35	M12	80	97	143	148	82	121.5	224	244.5

GET ISOLATED WITH NHP

NHP offers a comprehensive range of easy to install, easy to select KATKO ISO switches.

CONTROL, SWITCHING & HAE



ET-KATKO-SWITCH

KATKO ISO switches are ideal for any electrical isolation requirement such as repair, maintenance, installation and inspection. The KATKO ISO switch range includes:

- IP 66 rating on most models
- Comprehensive range (25-200 A)
- Suitable for multiple padlocks
- Stainless steel (316) range
- AC23 rating 415 / 690 V
- Polycarbonate range
- Tested according to AS / NZS 3947.3 (IEC 60947-3)
- Cast aluminium range
- Easy snap on auxiliary switches
- Motor M rated



Fuse disconnectors, fuses and fusegear, isolating and L7 load-break switches

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Wöhner QUADRON® VolBreaker

LTS DIN fuse switch disconnectors

For fuses IEC 60269-2-1 (I)/DIN VDE 0636-201 sizes 000-00-1-2-3-4A

Panel and busbar mounting

3 pole switching

DIN VDE 0660 part 107/EN 60947-3/IEC 60947-3

Shock protection with integrated positive action closure and arc chambers

Fuses with mechanical retention in disconnector lid

Test openings in disconnector lid self-closing

Recommended mounting position: handle at top



QUADRON® VolBreaker

Panel-mounting Quadron VolBreaker LTS DIN fuse switch

disconnectors in sizes 000 to 3 for panel mounting are available for currents up to 630 A. Sizes 00 to 3 are available in models with electronic fuse monitoring. A variety of connection options are available for connecting copper and aluminium conductors. Panel mount types have IP 20 shrouded terminals as standard.



QUADRON® VolBreaker

LTS DIN busbar mounting fuse switch disconnectors in sizes 000 to 3 can be arranged for top and bottom connection. Externally spring-loaded contact blades ensure easy and secure connection to the busbar system.

LTS – DIN fuse disconnectors

Switch options

Base mount



33200

Rated operational current (A)	Link size (DIN)	HRC Fuse	No. of poles	Termination type top/bottom	Connection (mm²)	Dimensions (mm) H W D	Cat. No.	Price \$
125	000	3	Box Terminal	50	143	89	75	33217 138.00
160	00	3	Bolt - M8	70	176	106	83	33200 148.00
250	1	3	Bolt - M10	120	243	184	112	33201 550.00
400	2	3	Bolt - M10	240	288	210	120	33202 720.00
630	3	3	Bolt - M12	240	300	256	143	33203 860.00
1600	4 A	3	Bolt - 2 x M12	2 x 500	352	378	233	i 33204 5020.00

Busbar mount - 60 mm



33198

Rated operational current (A)	Link size (DIN)	HRC Fuse	No. of poles	Termination type Incoming	Termination type Outgoing	Connection (mm²)	Dimensions (mm) H W D	Cat. No.	Price \$
125	000	3	Busbar ¹⁾	Box Terminal	50	200	89	90	33216 200.00
160	00	3	Busbar ¹⁾	Box terminal	70	200	106	97	33198 225.00
250	1	3	Busbar ¹⁾ ²⁾	Bolt - M10	120	243	184	129	33601 770.00
400	2	3	Busbar ¹⁾ ²⁾	Bolt - M10	240	288	210	145	i 33602 870.00
630	3	3	Busbar ¹⁾	Bolt - M12	240	300	256	160	i 33603 1290.00

Note: To suit 60 mm busbar system, other sizes on request.

Electric fuse monitoring type



33329

Rated operational current (A)	Link size (DIN)	HRC Fuse	No. of poles	Termination type Incoming	Termination type Outgoing	Connection (mm²)	Dimensions (mm) H W D	Cat. No.	Price \$
160	00	3	Busbar	Bolt - M8	70	200	106	137	i 33206 560.00
160	00	3	Bolt - M8	Bolt - M8	70	200	106	122	i 33329 1200.00
250	1	3	Bolt - M10	Bolt - M10	120	243	184	152	i 33330 1670.00
400	2	3	Bolt - M10	Bolt - M10	240	288	210	169	i 33331 1970.00
630	3	3	Bolt - M12	Bolt - M12	240	300	256	183	i 33332 2260.00

Cylindrical fuse disconnectors



Rating	Poles	Fuse size	Width	Connection terminal	Rating	Cat. No.	Price \$
32 A	1	10 x 38	18 mm	25 mm²	690 V AC/440 V DC	31110	22.00
32 A	3	10 x 38	54 mm	25 mm²	690 V AC/440 V DC	31113	64.00
50 A	1	14 x 51	27 mm	35 mm²	690 V AC/440 V DC	31115	64.00
50 A	3	14 x 51	81 mm	35 mm²	690 V AC/440 V DC	i 31118	191.00
125 A	1	22 x 58	36 mm	50 mm²	690 V AC/440 V DC	i 31120	90.00
125 A	3	22 x 58	108 mm	50 mm²	690 V AC/440 V DC	i 31123	270.00
32 A	1	10 x 38	18 mm	25 mm²	1000 V DC	31971	30.00

Notes: Fuse links page 10 - 114.

¹⁾ Can be mounted directly on busbars 12, 15, 20, 25, 30 x 5, 10 mm, double-T and triple-T sections.

²⁾ Requires a 33148 adaptor to fit onto 5 mm busbar.

i Available on indent only.

Price Schedule 'B2'

LTS – DIN fuse disconnectors

Accessories

Shrouds for cable lugs



33223

To suit size	Description	No. of poles	Termination type	Cat. No.	Price \$
00	can be clipped on top and bottom	3	Busbar mount	79811	59.00
1	can be clipped on top and bottom	3	Base mount	33142	64.00
2	can be clipped on top and bottom	3	Base mount	33143	85.00
3	can be clipped on top and bottom	3	Base mount	33144	96.00

Note: One required per side

Auxiliary contacts (Pilot switch) – for monitoring disconnector lid position



33156

To suit size	Description	Cat. No.	Price \$
000, 00, 1, 2 & 3	1 changeover switch 250 V AC/5 A; 30 V DC/4 A	33156	40.00

Termination options – for termination of cables to top and bottom of switch.



33224

To suit switch/size	Description	Cat. No.	Price \$
00	Wedge clamp single, for Cu and Al conductor	33224	19.00
00	Tunnel terminal for busbar connection	01182	27.00
1	Wedge clamp single, for Cu and Al conductor	33166	33.00
1	Wedge clamp double, for Cu conductor	33145	106.00
2	Wedge clamp, single for Cu and Al conductor	33167	48.00
2	Wedge clamp double for Cu conductor	33146	106.00
3	Wedge clamp, single for Cu and Al conductor	33168	54.00
3	Wedge clamp, double for Cu conductor	33147	117.00



33146

Notes: Three required per side
Refer to page 10 - 112 for DIN fuse link selection.

Price Schedule 'B2'

LTS – DIN fuse switch disconnectors

Technical information

NH fuse switch disconnector for fuse IEC 60269-2-1 (I)/DIN VDE 0636-201 Sizes 000-00

Description	Size	000	00
Type of current		AC (50-60 Hz) DC	AC (50-60 Hz) DC
Rated operating voltage (Ue) ⁴⁾		690 V AC 400 V DC	690 V AC 400 V DC
Rated insulation voltage (Ui) ⁴⁾		800 V	800 V
Rated surge withstand capacity (Uimp) ⁴⁾		6 kV	6 kV
Rated operating current (ie) ¹⁾		125 A	160 A
Utilisation categories ⁴⁾		AC 23B (400 V) AC 22B (500 V) AC 21B (690 V) DC 22B 440 V 63 A DC 22B 220 V 100A DC 21B 440 V 80 A DC 21B 220 V 125 A	AC 23B (400 V) AC 23B 500 V 125 A AC 22B (690 V) AC 21B (690 V) DC 22B 440 V 125 A DC 22B 220 V 160 A DC 21B 440 V 160 A
Conditional rated short-circuit current ²⁾		50 kA	50 kA
For DIN VDE 0636-201 NH fuses of all operating classes with power dissipation per phase		9 W	12 W

NH fuse switch disconnector for fuse IEC 60269-2-1 (I)/DIN VDE 0636-201 Sizes 1-2-3

Description	Size	1	2	3
Type of current		AC (50-60 Hz) DC	AC (50-60 Hz) DC	AC (50-60 Hz) DC
Rated operating voltage (Ue) ⁴⁾		690 V AC 440 V DC	690 V AC 440 V DC	690 V AC 440 V DC
Rated insulation voltage (Ui) ⁴⁾		800 V	800 V	800 V
Rated surge withstand capacity (Uimp) ⁴⁾		6 kV	6 kV	6 kV
Rated operating current (ie) ³⁾		250 A	400 A	630 A
Utilisation categories ⁴⁾		AC 23B (400 V) AC 22B (690 V) AC 21B (690 V) DC 22B (440 V) DC 21B (440 V)	AC 23B (400 V) AC 22B (690 V) AC 21B (690 V) DC 22B 440 V DC 21B 440 V	AC 23B (400 V) AC 22B (690 V) AC 21 B (690 V) DC 22B 440 V DC 21B 440 V
Conditional rated short-circuit current ²⁾		50 kA	50 kA	50 kA
For DIN VDE 0636-201 NH fuses of all operating classes with power dissipation per phase		23 W	34 W	48 W

- Notes:**
- ¹⁾ During continuous operation, the rated load factor specified according to VDE 0660 part 500/EN 60 439-1, table 1, must be observed for AC 23B. The distance to earthed parts must be at least 140/150 mm at the top and 45/50 mm at the side for size 000/00.
 - ²⁾ Type tested with fuses of all utilisation classes gL/gG.
 - ³⁾ During continuous operation, the rated load factor specified according to VDE 0660 part 500/EN 60 439-1, table 1, must be observed for AC 23B. The distance to earthed parts must be at least 250/290/300 mm at the top and 95/105/130 mm at the side for size 1/2/3.
 - ⁴⁾ Electromechanical fuse monitoring 24-690 V AC, 24-250 V DC (mains connections), electronic fuse monitoring AC 400-690 V (mains connection), Uimp 4 kV level of soiling 2.
DC specifications: 2 current paths (L1, L3) in series.

NH / DIN fuse links

500 V AC

- Ratings from 6 – 800 A
- Size 00 – 3
- Complies with DIN 43620/1 IEC 269-2-1
- Pop-up blown fuse indicator
- Rated breaking capacity 120 kA RMS
- gG general purpose fuse links
- 500 V AC rated (refer following pages for 690 V)

Ordering details

	Length (mm)	Diameter (mm)	Current rating (A)	HRC fuse link size	Cat. No.	Price \$
N00_	78.5	20.5	6	00C ¹⁾	N00 6	29.00
	78.5	20.5	10	00C ¹⁾	N00 10	29.00
	78.5	20.5	16	00C ¹⁾	N00 16	29.00
	78.5	20.5	20	00C ¹⁾	N00 20	29.00
	78.5	20.5	25	00C ¹⁾	N00 25	29.00
	78.5	20.5	32	00C ¹⁾	N00 32	29.00
	78.5	20.5	35	00C ¹⁾	N00 35	29.00
	78.5	20.5	40	00C ¹⁾	N00 40	29.00
	78.5	20.5	50	00C ¹⁾	N00 50	29.00
	78.5	20.5	63	00C ¹⁾	N00 63	29.00
	78.5	20.5	80	00C ¹⁾	N00 80	29.00
	78.5	20.5	100	00C ¹⁾	N00 100	29.00
	78.5	20.5	125	000 ¹⁾	N000 125	38.00
	78.5	28	125	00	N00 125	38.00
	78.5	28	160	00	N00 160	38.00
N1_	133	44	25	1	N1 25	43.00
	133	44	35	1	N1 35	43.00
	133	44	50	1	N1 50	43.00
	133	44	63	1	N1 63	43.00
	133	44	80	1	N1 80	43.00
	133	44	100	1	N1 100	43.00
	133	44	125	1	N1 125	43.00
	133	44	160	1	N1 160	43.00
	133	44	200	1	N1 200	43.00
	133	44	224	1	N1 224	43.00
	133	44	250	1	N1 250	43.00
N2_	148	53	80	2	N2 80	64.00
	148	53	100	2	N2 100	64.00
	148	53	125	2	N2 125	64.00
	148	53	160	2	N2 160	64.00
	148	53	200	2	N2 200	64.00
	148	53	224	2	N2 224	64.00
	148	53	250	2	N2 250	64.00
	148	53	315	2	N2 315	64.00
	148	53	355	2	N2 355	64.00
	148	53	400	2	N2 400	64.00
N3_	150	70	400	3	N3 400	106.00
	150	70	500	3	N3 500	106.00
	150	70	630	3	N3 630	106.00
	150	70	800	3	N3 800	210.00



DIN F / DIN FMB
Extraction handle and
bracket

Note: ¹⁾ Compact size 00C is very similar to 000 size fuses. While the overall length of 00, 000 & 00C fuses are the same, the fuse bodies can be different lengths.

Price Schedule 'B2'

BS compact fuse holders

Clip-in Fast reliable fitting and removal of fuse links - DIN rail mountable ¹⁾



		20 A	32 A	63 A
Front wired (Black)	Cat. No.	NV20FW	NV32FW	NV63FW
	Price \$	21.00	22.00	53.00
Back wired (Black)	Cat. No.	-	NV32BBW	NV63BBW
	Price \$		22.00	53.00
Fuse link to suit	NNS_	*	*	
	NES_			*
BS 88 Ref		F1	F1	F2
Dimensions (mm)	Height	75	75	89
	Width	25	25	32
	Depth	58	58	67
Suggested max. cable size mm ²		10	10	25

Note: Back wired type (BBW) is screw fixed.

BS compact fuse links

To suit NV fuseholders listed above

Clip-in offset tags

- Complies with BS 88
- Reduced dimensions
- Low watts loss
- gG general purpose fuse links

Rating (A)	BS 88 ref.	Overall length (mm)	Overall Dia. (mm)	Cat. No. ¹⁾	Price \$
2	F1	60	14	NNS 2	8.50
4				NNS 4	8.50
6				NNS 6	8.50
10				NNS 10	8.50
16				NNS 16	8.50
20				NNS 20	13.00
25				NNS 25	13.00
32				NNS 32	13.00
20M25				NNS 20M25	13.00
20M32				NNS 20M32	13.00
20	F2	68	17	NES 20	22.00
25				NES 25	22.00
32				NES 32	22.00
40				NES 40	29.00
50				NES 50	29.00
63				NES 63	29.00



NES 20

Note: ¹⁾ 'M' in catalogue number denotes motor starting type.

Price Schedule 'B2'

Cylindrical fuse links - gG type

Refer catalogue NF

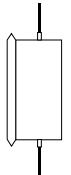


31110
Cylindrical
fuse disconnecter
(refer page 10 - 109)

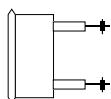
To suit	415 V rating	Size	Cat. No.	Price \$
32 A	2 A	10 x 38	31182	4.50
32 A	4 A	10 x 38	31183	4.50
32 A	6 A	10 x 38	31184	4.50
32 A	10 A	10 x 38	31185	4.50
32 A	16 A	10 x 38	31186	4.50
32 A	20 A	10 x 38	31187	4.50
32 A	32 A	10 x 38	31189	4.50
50 A	20 A	14 x 51	31192	10.00
50 A	32 A	14 x 51	31194	10.00
50 A	40 A	14 x 51	31195	10.00
50 A	50 A	14 x 51	31196	10.00



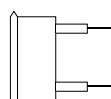
31182



FW –
Front wired



SSW –
Stud / Stud



BBW –
Back / Back

BS compact fuse holder

Bolt-in



Amperes		20 A	32 A	63 A	100 A	200 A	315 A
Front wired (Black)	Cat. No.	N20FW	NC32FW	NC63FW ²⁾	NC100FW	NC200FW	NC315FW
	Price \$	41.00	43.00	64.00	106.00	285.00	455.00
Front wired (White)	Cat. No.	-	NC32FWW	NC63FWW ²⁾	-	-	-
	Price \$	-	64.00	85.00	-	-	-
Stud / Stud (Black)	Cat. No.	-	-	-	-	NC200SSW	NC315SSW
	Price \$					i 435.00	i 610.00
Back wired (Black)	Cat. No.	-	-	-	NC100BBW	-	-
	Price \$				106.00		
Fuse link to suit	NNIT_	*	*				
	NTIA_			*	*	*	¹⁾
	NTIS_				*	*	¹⁾
	NOS_				*	*	¹⁾
	NTCP_ or NTFP_						*
	NTBC_ or NTC_						*
	NTF_						*
BS 88 Ref		A1	A1	A2, A3	A2, A3	A2 ¹⁾ -A4	B1-B3
Dimensions	Height	87	87	109	118	154	193
	Width	27	27	31	35	54	70
	Depth	50	50	62	72	108	149
Suggested max. cable size mm ²		10	10	25	50	95	150

Notes: 1) Fuses can be fitted using adapter 100 MELK, see page 10 - 118.

¹⁾ Fuses can be fitted using adapter 100 MFLK, see page 10 - 118.
²⁾ M type (motor rated) NTTS fuses not suitable for NC63 . Use NC100 holder.

Available on indent only.

Price Schedule 'B2'

Refer catalogue NF

BS compact fuse links

Bolted pattern offset tags



NNIT 16



NTIA 16



NOS 100M125



NTFP125

Rating (A)	BS 88 ref.	Fixing centres (mm)	Cat. No. ¹⁾	Price \$
2	A1	44.5	NNIT 2	11.00
4			NNIT 4	11.00
6			NNIT 6	11.00
10			NNIT 10	11.00
16			NNIT 16	11.00
20			NNIT 20	13.00
25			NNIT 25	13.00
32			NNIT 32	13.00
20M25			NNIT 20M25	13.00
20M32			NNIT 20M32	13.00
32M40			NNIT 32M40	38.00
32M50			NNIT 32M50	38.00
32M63			NNIT 32M63	38.00
2	A2	73	NTIA 2	16.00
4			NTIA 4	16.00
6			NTIA 6	16.00
10			NTIA 10	16.00
16			NTIA 16	19.00
20			NTIA 20	19.00
25			NTIA 25	19.00
32			NTIA 32	19.00
32M40			NTIA 32M40	22.00
32M50			NTIA 32M50	22.00
32M63			NTIA 32M63	22.00
35	A3	73	NTIS 35	31.00
40			NTIS 40	31.00
50			NTIS 50	31.00
63			NTIS 63	31.00
63M80			NTIS 63M80	39.00
63M100			NTIS 63M100	39.00
80	HYBRID A3	73	NOS 80	53.00
100			NOS 100	74.00
100M125			NOS 100M125	74.00
100M160			NOS 100M160	148.00
80			NTCP 80	59.00
100	A4	94	NTCP 100	59.00
100M125			NTCP 100M125	74.00
100M160			NTCP 100M160	74.00
125			NTFP 125	96.00
160			NTFP 160	106.00
200	HYBRID A4	94	NTFP 200	106.00
200M250			NTFP 200M250	127.00

Note: ¹⁾ 'M' in catalogue number denotes motor starting type.

Price Schedule 'B2'

BS compact fuse links

Refer catalogue NF

Bolted pattern centre tags (cont.)



NTB 16



NTBC 20



NTF 200

Rating (A)	BS 88 Ref.	Fixing centres (mm)	Cat. No. ¹⁾	Price \$
2	-	97	NTB 2	29.00
4			NTB 4	29.00
6			NTB 6	29.00
10			NTB 10	29.00
16			NTB 16	29.00
20			NTB 20	29.00
25			NTB 25	29.00
32			NTB 32	29.00
40			NTB 40	29.00
50			NTB 50	29.00
63			NTB 63	29.00
63M100			NTB 63M100	38.00
2	B1	111	NTBC 2	29.00
4			NTBC 4	29.00
6			NTBC 6	29.00
10			NTBC 10	29.00
16			NTBC 16	29.00
20			NTBC 20	29.00
25			NTBC 25	29.00
32			NTBC 32	29.00
40			NTBC 40	29.00
50			NTBC 50	29.00
63			NTBC 63	29.00
63M80			NTBC 63M80	38.00
63M100			NTBC 63M100	38.00
80			NTC 80	59.00
100	B2	111	NTC 100	59.00
100M125			NTC 100M125	64.00
100M160			NTC 100M160	64.00
125			NTF 125	96.00
160			NTF 160	106.00
200			NTF 200	117.00
200M250			NTF 200M250	117.00
200M315			NTF 200M315	127.00
250			NTKF 250	170.00
315	B3	111	NTKF 315	180.00
315M400			NTKF 315M400	200.00
250			NTKM 250	170.00
315			NTKM 315	180.00
355	B4	133	NTMF 355	225.00
400			NTMF 400	255.00

 Note: ¹⁾ 'M' in catalogue number denotes motor starting type.

Price Schedule 'B2'

BS compact fuse links



NTM 400



NTLT 710



NTXU 1250



20211 0816

Bolted pattern centre tags (cont.)

Rating (A)	BS 88 Ref.	Fixing centres (mm)	Cat. No. ¹⁾	Price \$
355	C1	133/184	NTM 355	225.00
400			NTM 400	255.00
450			NTTM 450	320.00
500	C2	133/184	NTTM 500	390.00
560			NTTM 560	435.00
630			NTTM 630	455.00
450			NTT 450	340.00
500		165/229	NTT 500	340.00
560			NTT 560	360.00
630			NTT 630	395.00
710	C3	133/184	NTLM 710	550.00
800			NTLM 800	700.00
710		165/229	NTLT 710	550.00
800			NTLT 800	700.00
1000	D1	149	NTXU 1000	2240.00
1250			NTXU 1250	2240.00

NH / DIN fuse links 690 V AC

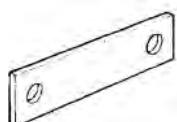
- Ratings from 16 A - 250 A
- Sizes 00,1
- Complies with DIN 43620 / 1 IEC 269 - 2 - 1
- Rated breaking capacity 120 kA RMS
- gG general use

Length (mm)	Width (mm)	Current rating (A)	HRC fuse link size	Cat. No.	Price \$
78	46	63	00	20209 1363	38.00
		80	00	20209 1380	38.00
		100	00	20209 13100	38.00
		125	00	20209 13125	38.00
135	51.5	16	1	20211 1316	65.00
		20	1	20211 1320	65.00
		25	1	20211 1325	65.00
		35	1	20211 1335	65.00
		40	1	20211 1340	65.00
		50	1	20211 1350	65.00
		63	1	20211 1363	65.00
		80	1	20211 1380	65.00
		100	1	20211 13100	65.00
		125	1	20211 13125	65.00
		160	1	20211 13160	65.00
		200	1	20211 13200	65.00
		250	1	20211 13250	65.00

Note: ¹⁾ 'M' in catalogue number denotes motor starting type.

Price Schedule 'B2'

BS and DIN fuse accessories



100MFNL

BS solid links

Type	To suit fuse holder	Cat. No.	Price \$
Bolt-in	N20_	20MFNL	11.00
	NC32_	32MFNL	17.00
	NC63_	36299006	24.00
	NC100_	100MFNL	40.00
	NC200_	200MFNL	126.00
Clip-in	NC315_		



32CLK

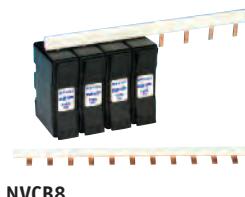
Type	To suit fuse holder	Cat. No.	Price \$
Clip-in	NV32_	32CLK	14.00



100MFLK

Fuse link adaptor

Adapts fuse size BS 88	To suit fuse holder	Cat. No.	Price \$
A2, A3	NC200	100MFLK	26.00



NVCB8

8 way comb busbar

	Cat. No. ¹⁾	Price \$
8 way comb busbar	NVCB8	34.00



DIN solid link

DIN fuse accessories

DIN solid links

Length (mm)	Current rating (A)	HRC fuse link size	Cat. No.	Price \$
78.5	160	00	64200000	22.00
133	250	1	64210001	74.00
148	400	2	64210002	106.00
150	800	3	64210003	138.00

- For use with DIN fuse holders and switch fuses



DIN F / DIN FMB
Extractor handle and bracket

Accessories

Description	Cat. No.	Price \$
DIN fuse extractor handle	DIN F	96.00
DIN fuse extractor handle mounting bracket	DIN FMB	24.00

Note: ¹⁾ Suits NV20FW/NV32FW fuses.

Price Schedule 'B2'

BS and DIN fuse link selection chart

BS Fuses

Quick - Link
fuse reference
guide

Switch-fuses								Fuse type Cat. No. Prefix
800	630	400	315	250	200	160	125	
								NNS_
								NNIT_
						✓	✓	NTIA_
						✓	✓	NTIS_
						✓	✓	NOS_
						✓		NTCP_
								NTFP_
								NTSLOO_
		✓	✓	✓	✓			NTBC_
		✓	✓	✓	✓			NTC_
		✓	✓	✓	✓			NTF_
		✓	✓	✓				NTKF_
								NTSL3_
			✓					NTMF_
✓	✓							NTM_
✓	✓							NTTM_
✓								NTLM_

NHP HRC fuse holders									Fuse type Cat. No. Prefix
NC (Bolt-in)						NV (Clip-in)			
315	200	100	63	32	20	63	32	20	
							✓	✓	NNS_
						✓			NES_
				✓	✓				NNIT_
✓ ¹⁾	✓	✓	✓						NTIA_
✓ ¹⁾	✓	✓	✓ ²⁾						NTIS_
✓ ¹⁾	✓								NOS_
✓									NTCP_
✓									NTFP_
✓									NTBC_
✓									NTC_
✓									NTF_
✓									NTKF_

DIN Fuses

Switch-fuses						Fuse type Cat. No. Prefix
800	630	400	250	160	125	
				✓	✓	N00_
			✓			N1_
		✓				N2_
✓	✓					N3_

Legend: ✓ Fuse links fit direct.

✓¹⁾ Fuses require 100MFLK adaptor, see page 10 - 118.

✓²⁾ 'M' type (motor rated) NTIS not suitable for NC63_. Use NC100 fuse holder.

Price Schedule 'B2'

10

BS compact fuse links

Bolted pattern - Centre tag

Motor rated fuse links

BS 88 aligns with international fuse specification IEC 60269 and Australian standards AS 2005, and AS 60209. Special motor rated fuse links are listed and are available in various barrel sizes, in each case fitted with special fuse elements. Their selection frequently permits the use of lower rated switch and/or fusegear than would be the case if using Class gG fuse links. This range of fuse-links has been ASTA certified for a breaking capacity of 80 kA at 415 V AC.

NHP Compact industrial bolted pattern fuse links conform with BS 88: Part 2: 1998 and have been ASTA certified for a breaking capacity of 80 kA at 415 V AC or 550 V AC and have utilisation categories gG.

NHP Compact fuse-links are suitable for back-up protection in motor circuits, having excellent time delay characteristics with low fusing factor and high rupturing capacity.

Fuses for use in motor circuits should be selected in accordance with the requirements for the protection of motor control gear as specified by the control gear manufacturer.

As a guide, the following table shows the minimum fuse sizes that may be associated with motors based on the assumption that the starting conditions for typical 3 phase 4 pole 415 V motors are; 8 x FLC for 6 secs [DOL] and 4 x FLC for 12 secs [Star-delta].

Fuse link selection for motor circuit protection

Motor rating (kW)	(hp)	Approx. FLC (A)	DOL starting fuse link (A)	Motor rated fuse-link (A)	Start assisted standard fuse link (A)
0.19	0.25	0.7	4		2
0.37	0.5	1.3	6		4
0.55	0.75	1.6	6		4
0.75	1.0	1.8	10		4
1.1	1.5	2.6	10		6
1.5	2.0	3.4	10		10
2.2	3.0	5.0	16		10
3.0	4.0	6.5	16		10
4.0	5.5	8.0	20	20M25	16
5.5	7.5	11.0	25	20M32	16
7.5	10	15	40	32M40	25
11.0	15	22	50	32M50	32
15.0	20	28	63	32M63	40
18.5	25	36	80	63M80	50
22	30	39	80	63M80	63
30	40	52	100	63M100	63
37	50	69	160	100M160	80
45	60	79	160	100M160	100
55	75	96	200	100M200	160
75	100	125	200	200M250	160
90	125	156	250	200M250	160
110	150	189	315		200
132	175	224	355		250
150	200	255	355		250
160	220	275	400		315
185	250	318	450		315
200	270	339	500		355
220	300	374	560		400
257	350	450	630		450
295	400	500	710		500
315	430	535	710		560
355	483	580	800		630
400	545	646	800		710
450	612	725	1000		800

Fuse equivalent chart

This chart is designed to help choose the correct fuse to fit a particular switch-fuse (or vice versa) and to help choose the correct replacement fuse. Some data is from other manufacturers publications and as such cannot be guaranteed by NHP. Beware that some motor start fuses are in a larger body size than a normal fuse. It is wise to consult the fuse manufacturer's data to determine their particular fuse sizes (i.e. A2-C3).

Fuse manufacturers' part numbers – AS/NZS/British standard

BS Ref.	Amps	NHP COMPACT FUSES	EATON	(NHP) Lawson	(IPD) GEC	Bussmann	(Schneider) PDL	(NHP) SIBA
F1	2...32	NNS	NS	NS	NS	NSD	N20C	-
F2	20...63	NES	MES	MES	ES	ESD	N63E	-
A1	2...32	NNIT	NIT	NIT	NIT	NITD	N20B	-
A2	2...32	NTIA	TIA	TIA	TIA	AAO	N32B	-
A3	35...63	NTIS	TIS	TIS	TIS	BAO	N63B	-
Hybrid (A3)	80...100	NOS	-	-	OS	OSD	NOSD	-
A4	80...100	NTCP	TCP	TCP	TCP	CEO	N100B	-
Hybrid (A4)	125...200	NTFP ¹⁾	TFP	TFP	TFP	DEO	N200B	-
-	2...32/40...63	NTB	TB	TB	TB	AC/BC	N_TB	-
B1	2...32/40...63	NTBC	TBC	TBC	TBC	AD/BD	N63B_	-
B1	80...100	NTC	TC	TC	TC	CD	N100B_C	-
B2	125...200	NTF	TF	TF	TF	DD	N200B_C	-
B3	250...315	NTKF	TKF	TKF	TKF	ED	N315B_C	-
-	250...315	NTKM	TKM	TKM	TKM	EFS	N315B_C	-
B4	355...400	NTMF	TMF	TMF	TMF	ED	N400B_C	-
Hybrid (B4)	450...630	NTSL3	-	-	-	-	-	-
C1	355...400	NTM	TM	TM	TM	EF	N404B_C	-
C2	450...630	NTTM	TTM	TTM	TTM	FF	N504B_C	-
-	450...630	NTT	TT	TT	TT	FG	N630B_C	-
C3	710...800	NTLM	TLM	TLM	TLM	GF	N804B_C	-
-	710...800	NTLT	TLT	TLT	TLT	GG	B804B_C	-
D1	1000...1250	NTXU	TXU	TXU	TXU	GH	N_U44	-
DIN pattern (NH)								
00	6...160	N00	NH00	-	NHG-00	NH00G	-	NH 00
1	25...250	N1	NH01	-	NHG-1	NH1G	-	NH 00
2	80...400	N2	NH02	-	NHG-2	NH2G	-	NH 02
3	315...800	N3	NH03	-	NHG-3	NH3G	-	NH 03
Fuse holders								
Clip-in	20A	NV20FW	V20FF	-	SC20H	-	FC20FW	-
	32A	NV32FW	V32FF	-	SC32H	32NNSF	NC32FW	-
Front wired	20A	N20FW	20MFB	-	RSM20H	-	FB20FW	-
	32A	NC32FW	2008 46	-	RSM32H	-	FB32FW	-
	63A	NC63FW	LCF 63 FC FC	-	RSM63H	-	FB63FW	-
	100A	NC100FW	100MFB	-	RSM100H	-	FB100FW	-
	200A	NC200FW	200MFB	-	RSM200H	-	FB200FW	-
Stud/	20A	N20SFW	20MFD	-	RSM20PH	-	FB20SF	-
front wired	32A	NC32SFW	LCF 32 FC BC	-	RSM32PH	-	FB32SF	-
	63A	NC63SFW	LCF 63 FC BC	-	RSM63PH	-	FB63SF	-
	100A	NC100SFW	100MFD	-	RSM100PH	-	FB100SF	-
	200A	NC200SFW	200MFD	-	RSM200PH	-	FB200SF	-

Note: ¹⁾ This hybrid type fuse is actually an A4 size fuse, but as it is over 100 amps it cannot be called an A4 fuse to AS 2005.

ISO switch

Safety isolating switches

Polycarbonate enclosed rotary switches

- Large 3 way padlockable red/yellow or grey/black handles
- High IP 66 rating
- Easy to install and operate
- Comprehensive range, 25 to 200 A models
- High breaking capacity with 12.5 mm contact air gap
- Easy snap-on fitting of auxiliary switches
- Larger enclosure, increased wiring space
- Fitted with safety interlocks
- Single pole version available



ISO 125 PG



ISO 325 PY



ISO 480 PY

1 Pole ISO Switch (available only with grey/black handle) IP 66

AC 23 rating 240 V	Power rating 240 V	AC 21 rating 240 V	Locked rotor M rating	Terminal capacity mm ²	Enclosure type	Cat. No.	Price \$
16 A	4 kW	25 A	128 A	16 Cu	U2	ISO 125PG	60.50
25 A	5.5 kW	40 A	200 A	16 Cu	U2	ISO 140PG	71.50

3 Pole ISO Switch IP 66

AC 23 rating 415 / 690 V	Power rating 415 / 690 V	AC 21 rating up to 690 V	Locked rotor M rating	Terminal capacity mm ²	Enclosure type	Cat. No. ¹⁾ ²⁾	Price \$
16 / 16 A	7.5 / 11 kW	25 A	128 A	16 Cu	U2	ISO 325P_	99.00
25 / 25 A	11 / 22 kW	40 A	200 A	16 Cu	U2	ISO 340P_	146.00
25 / 25 A	11 / 22 kW	40 A	200 A	16 Cu	U3	ISO 340P_LE	186.00
32 / 32 A	15 / 32 kW	63 A	256 A	16 Cu	U2	ISO 363P_	164.00
32 / 32 A	15 / 32 kW	63 A	256 A	16 Cu	U3	ISO 363P_LE	210.00
40 / 40 A	22 / 37 kW	80 A	320 A	35 Cu	U3	ISO 380P_	205.00
63 / 40 A	30 / 37 kW	100 A	504 A	35 Cu	U3	ISO 3100P_	300.00
80 / 80 A	45 / 55 kW	160 A	640 A	70 Cu	U4	ISO 3160P_	730.00
80 / 80 A	45 / 55 kW	160 A	640 A	70 Cu	MF01 ³⁾	ISO 3160P_LE	750.00
135 / 125 A	75 / 90 kW	200 A	1080 A	70 Cu	MF01 ³⁾	ISO 3200P_	840.00
200 / - A	132 kW / -	250 A	-	-	MF01 ³⁾	<input checked="" type="checkbox"/> ISO 3250P_	900.00

4 Pole ISO Switch IP 66

AC 23 rating 415 / 690 V	Power rating 415 / 690 V	AC 21 rating up to 690 V	Locked rotor M rating	Terminal capacity mm ²	Enclosure type	Cat. No. ¹⁾ ²⁾	Price \$
16 / 16 A	7.5 / 11 kW	25 A	128 A	16 Cu	U2	ISO 425P_	152.00
25 / 25 A	11 / 22 kW	40 A	200 A	16 Cu	U2	ISO 440P_	193.00
25 / 25 A	11 / 22 kW	40 A	200 A	16 Cu	U3	ISO 440P_LE	210.00
32 / 32 A	15 / 32 kW	63 A	256 A	16 Cu	U2	ISO 463P_	200.00
32 / 32 A	15 / 32 kW	63 A	256 A	16 Cu	U3	ISO 463P_LE	235.00
40 / 40 A	22 / 37 kW	80 A	320 A	35 Cu	U3	ISO 480P_	250.00
63 / 40 A	30 / 37 kW	100 A	504 A	35 Cu	U3	ISO 4100P_	325.00
80 / 80 A	45 / 55 kW	160 A	640 A	70 Cu	U4	<input checked="" type="checkbox"/> ISO 4160P_	760.00
135 / 125 A	75 / 90 kW	200 A	1080 A	70 Cu	MF01 ³⁾	<input checked="" type="checkbox"/> ISO 4200P_	850.00
200 / - A	132 kW / -	250 A	-	-	MF01 ³⁾	<input checked="" type="checkbox"/> ISO 4250P_	960.00

Notes: ¹⁾ Y for yellow/red or G for black/grey handles

²⁾ LE for large enclosure type

³⁾ MF01 for enclosure IP 65

Available on indent only.

Price Schedule 'B2'

ISO Switch

Safety isolating switches

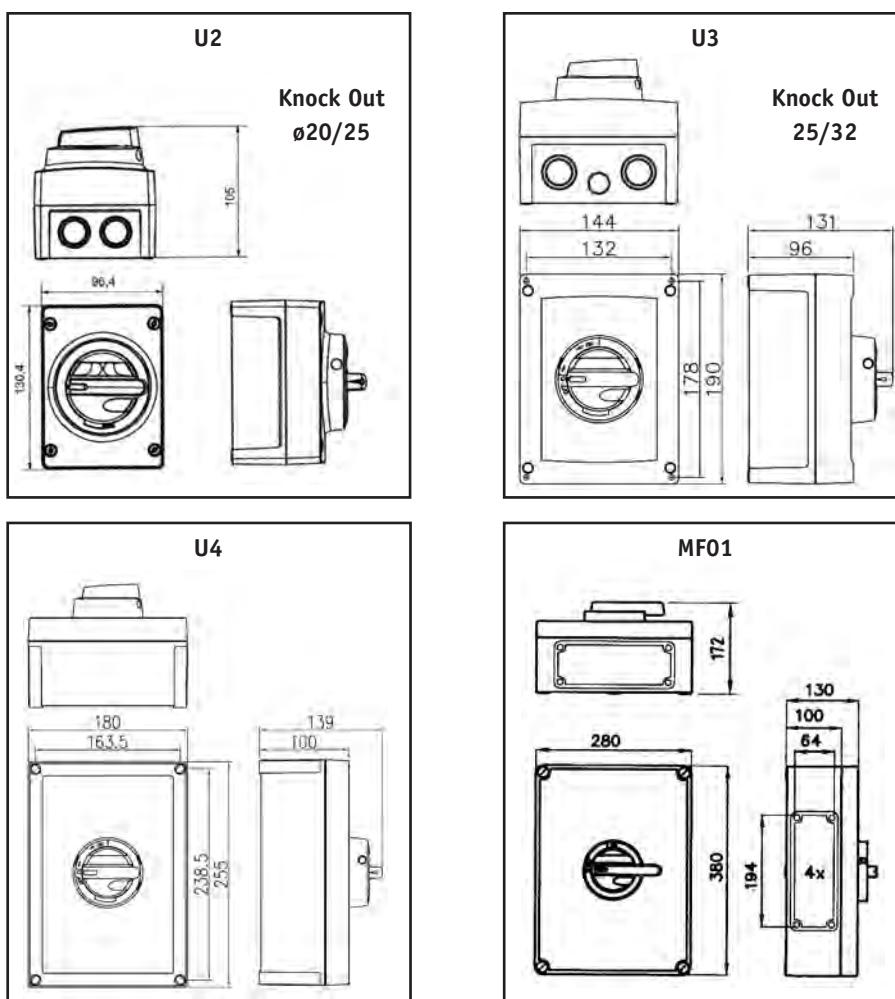
6 Pole ISO Switch IP 66



ISO 6160 PG

AC 23 rating 415 / 690 V	Power rating 415 / 690 V	AC 21 rating up to 690 V	Locked rotor M rating	Terminal capacity mm ²	Enclosure type	Cat. No. ¹⁾	Price \$
16 / 16 A	7.5 / 11 kW	25 A	128 A	16 Cu	U3	ISO 625P_	300.00
25 / 25 A	11 / 22 kW	40 A	200 A	16 Cu	U3	ISO 640P_	325.00
32 / 32 A	15 / 32 kW	63 A	256 A	16 Cu	U3	ISO 663P_	375.00
40 / 40 A	22 / 37 kW	80 A	320 A	35 Cu	U3	ISO 680P_	415.00
63 / 40 A	30 / 37 kW	100 A	504 A	35 Cu	U3	ISO 6100P_	440.00
80 / 80 A	45 / 55 kW	160 A	640 A	70 Cu	MF01 ²⁾	ISO 6160P_	950.00
135 / 125 A	75 / 90 kW	200 A	1080 A	70 Cu	MF01 ²⁾	ISO 6200P_	1060.00

Polycarbonate enclosure dimensions (mm)



Cable gland selection guide

ISO Switch

knockout hole size	Moulded cable glands and lock nuts	Conduit conversion adaptors	Thorsmans self-sealing cable glands	Metric size
Ø 20.5 mm	PS 11 / PS 11 B	PG 16 - 20 mm plastic	TET 7 - 10 / C	M 20
Ø 25.5 mm	PS 16 / PS 16 B	PG 21 - 20 mm plastic	TET 10 - 14 / C	M 25
Ø 32.5 mm	PS 21 / PS 21 B	-	TET 14 - 20 / C	M 32

Note:

¹⁾ Y for yellow/red or G for black/grey handles²⁾ MF01 for enclosure IP 66

Price Schedule 'B2'

ISO Switch

Safety isolating switches

Aluminium enclosed ISO Switch safety isolating switches

- Large 3 way padlockable red/yellow or grey/black handles
- High IP 66 rating
- Easy to install and operate
- Comprehensive range, 25 to 200 A models
- High breaking capacity with 12.5 mm contact air gap
- Easy snap-on fitting of auxiliary switches

3 Pole ISO Switch IP 66



ISO 363 MY

AC 23 rating 415 / 690 V	Power rating 415 / 690 V	AC 21 rating rotor up to 690 V	Locked M rating	Terminal capacity mm ²	Enclosure type	Cat. No. ¹⁾	Price \$
16 / 16 A	7.5 / 11 kW	25 A	128 A	16 Cu	A2	ISO 325M_	194.00
25 / 25 A	11 / 22 kW	40 A	200 A	16 Cu	A2	ISO 340M_	220.00
25 / 25 A	11 / 22 kW	40 A	200 A	16 Cu	A3	ISO 340M LE ²⁾	435.00
32 / 32 A	15 / 32 kW	63 A	256 A	16 Cu	A2	ISO 363M_	280.00
32 / 32 A	15 / 32 kW	63 A	256 A	16 Cu	A3	ISO 363M LE ²⁾	455.00
40 / 40 A	22 / 37 kW	80 A	320 A	35 Cu	A3	ISO 380M_	530.00
63 / 40 A	30 / 37 kW	100 A	504 A	35 Cu	A3	ISO 3100M_	690.00
80 / 80 A	45 / 55 kW	160 A	640 A	70 Cu	A3	ISO 3160M_	790.00
135 / 125 A	75 / 90 kW	200 A	1080 A	70 Cu	A3	ISO 3200M_	910.00

4 Pole ISO Switch IP 66

AC 23 rating 415 / 690 V	Power rating 415 / 690 V	AC 21 rating rotor up to 690 V	Locked M rating	Terminal capacity mm ²	Enclosure type	Cat. No. ¹⁾	Price \$
16 / 16 A	7.5 / 11 kW	25 A	128 A	16 Cu	A2	ISO 425M_	245.00
25 / 25 A	11 / 22 kW	40 A	200 A	16 Cu	A2	ISO 440M_	285.00
25 / 25 A	11 / 22 kW	40 A	200 A	16 Cu	A3	ISO 440M LE ²⁾	455.00
32 / 32 A	15 / 32 kW	63 A	256 A	16 Cu	A2	ISO 463M_	415.00
32 / 32 A	15 / 32 kW	63 A	256 A	16 Cu	A3	ISO 463M LE ²⁾	480.00
40 / 40 A	22 / 37 kW	80 A	320 A	35 Cu	A3	ISO 480M_	750.00
63 / 40 A	30 / 37 kW	100 A	504 A	35 Cu	A3	ISO 4100M_	820.00
80 / 80 A	45 / 55 kW	160 A	640 A	70 Cu	A3	i ISO 4160M_	870.00
135 / 125 A	75 / 90 kW	200 A	1080 A	70 Cu	A3	i ISO 4200M_	990.00

6 Pole ISO Switch IP 66



ISO 625 MG

AC 23 rating 415 / 690 V	Power rating 415 / 690 V	AC 21 rating rotor up to 690 V	Locked M rating	Terminal capacity mm ²	Enclosure type	Cat. No. ¹⁾	Price \$
16 / 16 A	7.5 / 11 kW	25 A	128 A	16 Cu	A3	ISO 625M_	560.00
25 / 25 A	11 / 22 kW	40 A	200 A	16 Cu	A3	ISO 640M_	610.00
32 / 32 A	15 / 32 kW	63 A	256 A	16 Cu	A3	ISO 663M_	760.00
40 / 40 A	22 / 37 kW	80 A	320 A	35 Cu	A3	ISO 680M_	800.00
63 / 40 A	30 / 37 kW	100 A	504 A	35 Cu	A3	ISO 6100M_	840.00
80 / 80 A	45 / 55 kW	160 A	640 A	70 Cu	ALF42	i ISO 6160M_	1700.00
135 / 125 A	75 / 90 kW	200 A	1080 A	70 Cu	ALF42	i ISO 6200M_	1800.00

Notes: ¹⁾ Y for yellow/red or G for black/grey handles

²⁾ LE for large enclosure type

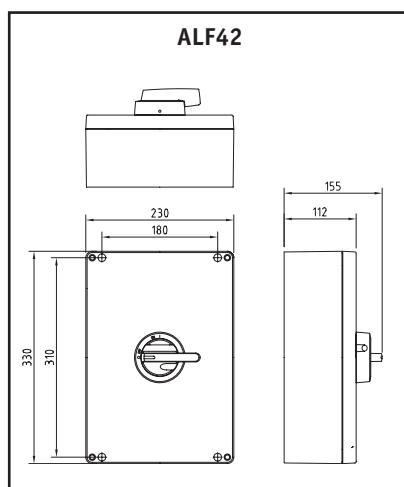
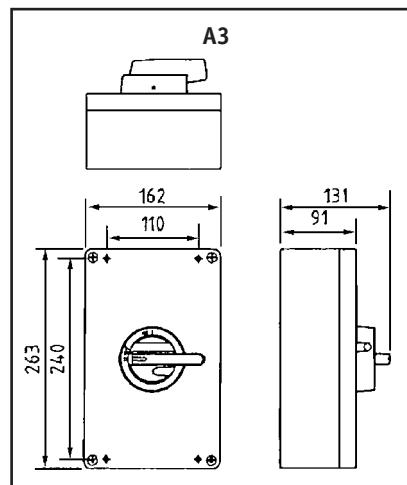
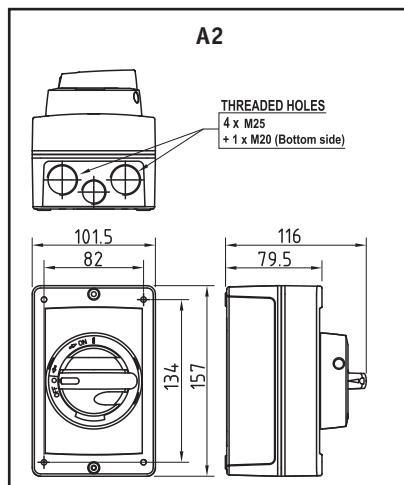
Available on indent only.

Price Schedule 'B2'

ISO Switch

Safety isolating switches

Aluminium enclosure dimensions (mm)



ISO Switch

Safety isolating switches

Stainless steel enclosed ISO Switch

- Large 3 way padlockable red/yellow handles
- High IP 66 rating
- Easy to install and operate
- 316 Stainless steel
- Comprehensive range, 25 to 200 A models
- High corrosion resistance
- Easy snap-on fitting of auxiliary switches



ISO 325 SSY

3 Pole ISO Switch IP 66

AC 23 rating 415 / 690 V	Power rating 415 / 690 V	AC 21 rating rotor up to 690 V	Locked M rating	Terminal capacity mm ²	Enclosure type	Cat. No.	Price \$
16 / 16 A	7.5 / 11 kW	25 A	128 A	16 Cu	H23	ISO 325SSY	620.00
25 / 25 A	11 / 22 kW	40 A	200 A	16 Cu	H23	ISO 340SSY	650.00
32 / 32 A	15 / 32 kW	63 A	256 A	16 Cu	H23	ISO 363SSY	670.00
40 / 40 A	22 / 37 kW	80 A	320 A	35 Cu	H32	ISO 380SSY	750.00
63 / 40 A	30 / 37 kW	100 A	504 A	35 Cu	H32	ISO 3100SSY	770.00
80 / 80 A	45 / 55 kW	160 A	640 A	70 Cu	H02	ISO 3160SSY	1140.00
135 / 125 A	75 / 90 kW	200 A	1080 A	70 Cu	H02	ISO 3200SSY	1290.00

4 Pole ISO Switch IP 66

AC 23 rating 415 / 690 V	Power rating 415 / 690 V	AC 21 rating rotor up to 690 V	Locked M rating	Terminal capacity mm ²	Enclosure type	Cat. No.	Price \$
16 / 16 A	7.5 / 11 kW	25 A	128 A	16 Cu	H23	ISO 425SSY	620.00
25 / 25 A	11 / 22 kW	40 A	200 A	16 Cu	H23	ISO 440SSY	690.00
32 / 32 A	15 / 32 kW	63 A	256 A	16 Cu	H23	ISO 463SSY	710.00
40 / 40 A	22 / 37 kW	80 A	320 A	35 Cu	H32	ISO 480SSY	780.00
63 / 40 A	30 / 37 kW	100 A	504 A	35 Cu	H32	ISO 4100SSY	910.00
80 / 80 A	45 / 55 kW	160 A	640 A	70 Cu	H02	ISO 4160SSY	1480.00
135 / 125 A	75 / 90 kW	200 A	1080 A	70 Cu	H02	ISO 4200SSY	1590.00

6 Pole ISO Switch IP 66

AC 23 rating 415 / 690 V	Power rating 415 / 690 V	AC 21 rating rotor up to 690 V	Locked M rating	Terminal capacity mm ²	Enclosure type	Cat. No.	Price \$
16 / 16 A	7.5 / 11 kW	25 A	128 A	16 Cu	H23	ISO 625SSY	860.00
25 / 25 A	11 / 22 kW	40 A	200 A	16 Cu	H23	ISO 640SSY	910.00
32 / 32 A	15 / 32 kW	63 A	256 A	16 Cu	H23	ISO 663SSY	950.00
40 / 40 A	22 / 37 kW	80 A	320 A	35 Cu	H32	ISO 680SSY	1020.00
63 / 40 A	30 / 37 kW	100 A	504 A	35 Cu	H32	ISO 6100SSY	1030.00
80 / 80 A	45 / 55 kW	160 A	640 A	70 Cu	H02	ISO 6160SSY	1750.00
135 / 125 A	75 / 90 kW	200 A	1080 A	70 Cu	H02	ISO 6200SSY	1860.00



ISO 3160 SSY

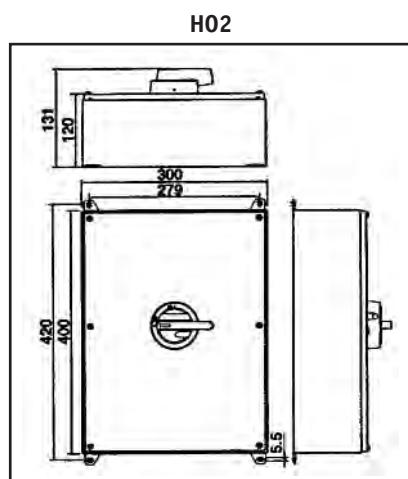
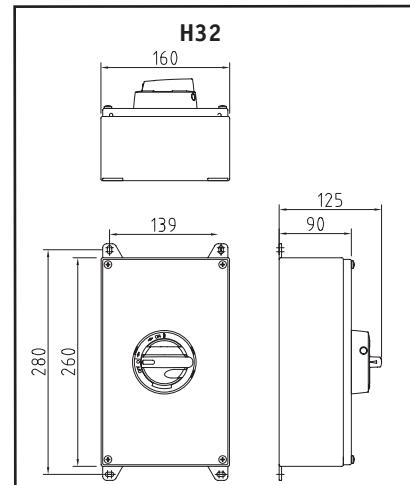
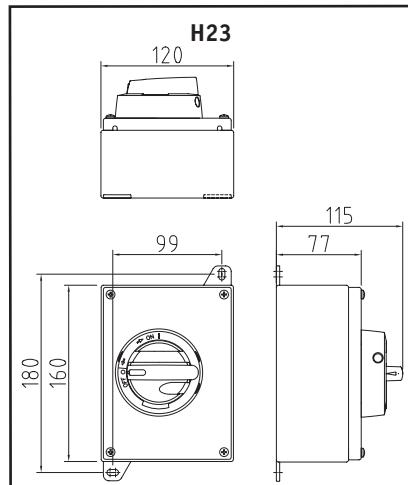
Notes: Available on indent only.

Price Schedule 'B2'

ISO Switch

Safety isolating switches

Stainless steel enclosure dimensions (mm)



ISO Switch

800 V Switch for DC applications



- 800 V DC capacity
- Compact size saves space
- DIN rail or base mounted as standard
- 20 - 32 A
- Contacts with 350 µm silver alloy ensure a long life expectancy and safe operation in harsh weather conditions
- Handle LK10 and shaft L=180 mm included, suitable for 250 mm deep panel boards

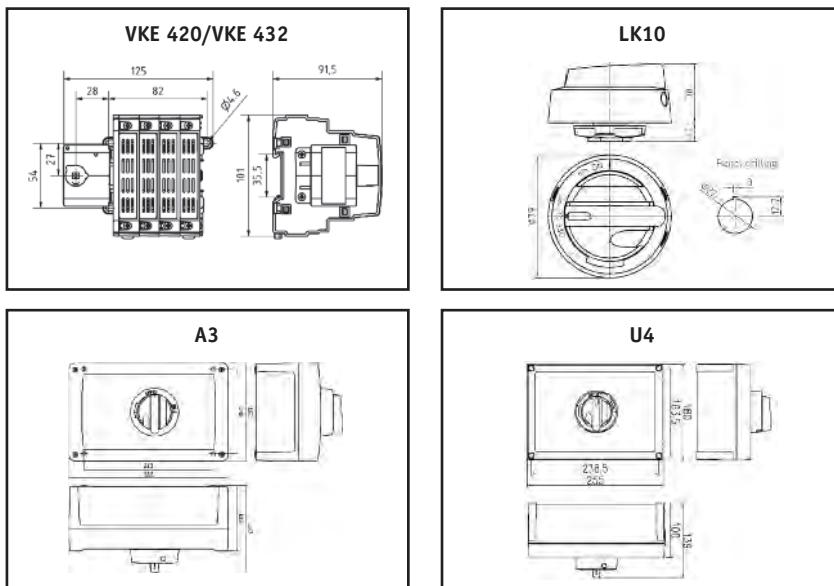
- Door interlocked in both "ON" and "padlocked OFF" position
- Available in aluminium enclosure A3 (ISO 232 PVPG) and in polycarbonate enclosure U4 (ISO 232 PVMG)
- IP 66
- Wide operating temperature range
- Resistant against many chemicals
- UV resistant

Technical data

DC 21 Ratings 800 V	DC 22 Ratings 800 V	Terminal size cu (mm ²)	Enclosure type	Cat. No.	Price \$
20 A	20 A	2.5 - 35	Plastic U4	ISO220PVPG	580.00
20 A	20 A	2.5 - 35	Aluminium A3	ISO220PVMG	650.00
32 A	32 A	2.5 - 35	Plastic U4	ISO232PVPG	610.00
32 A	32 A	2.5 - 35	Aluminium A3	ISO232PVMG	680.00

Rated fused short circuit current	VKE 420	VKE 432	ISO 220 PVMG	ISO 232 PVMG	ISO 220 PVPG	ISO 232 PVPG
R.M.S. value I _k (kA)	50	50	50	50	50	50
Max. terminal torque, (Nm)	2.2	2.2	2.2	2.2	2.2	2.2
Weight (kg)	0.55	0.68	2.4	2.5	1.1	1.2

Dimensions



ISO Switch

Changeover and reversing switches



ISO 325 U VV

- 3 Way padlockable grey/ black handles
- 3 Poles changeover and reversing switches
- High IP 66 rating
- Rated AC - 23 A / 415 V

3 pole changeover switches IP 66

Rated current 415 V AC 21	Power rating	AC 23 rating	Enclosure type	Cat. No.	Price \$
25 A	11 kW	25 A	U2	ISO 325 U VV	179.00
40 A	18.5 kW	40 A	U2	ISO 340 U VV	196.00

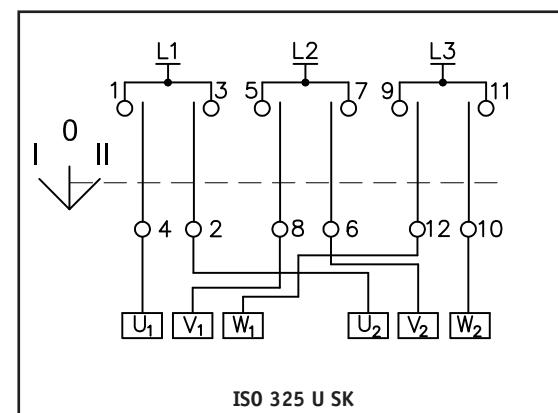
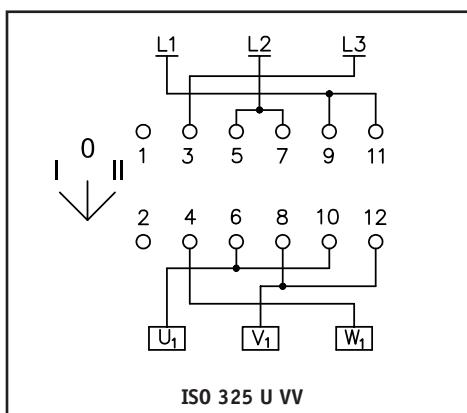


ISO 325 U SK

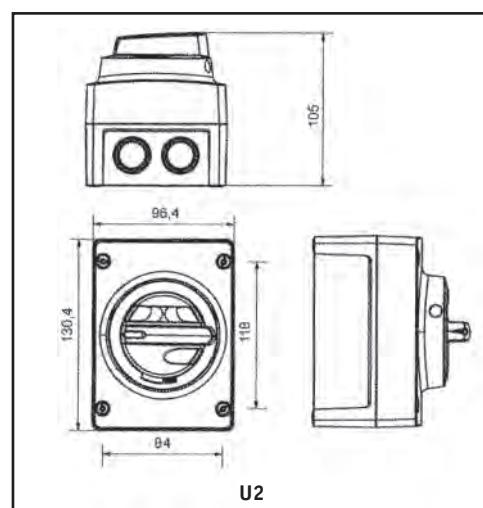
3 pole reversing switches IP 66

Rated current 415 V AC 21	Power rating	AC 23 rating	Enclosure type	Cat. No.	Price \$
25 A	11 kW	25 A	U2	ISO 325 U SK	179.00
40 A	18.5 kW	40 A	U2	ISO 340 U SK	189.00

Connection diagrams



Enclosure dimensions (mm)



Price Schedule 'B2'

ISO Switch

Safety isolating switches

Toggle ISO Switch



ISO 340 T

- Compact and easy to fit into panelboards and loadcentres
- DIN rail mounting with front plate IP terminal
- Padlockable toggle switches
- Highly visible yellow/red operating handles

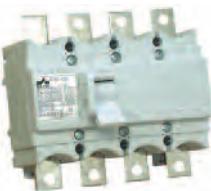
- Large terminal capacity
- Robust construction and reliable switching performance
- Terminal covers and phase separators supplied with EVA ISO

3 Pole toggle switch



EVA 3250

AC 23 rating 415 / 690 V	Power rating 415 / 690 V	AC 21 rating up to 690 V	Locked rotor M rating	Terminal capacity mm ²	Cat. No.	Price \$
16 / 16 A	7.5 / 11 kW	25 A	128 A	16 Cu	ISO 325T	80.00
25 / 25 A	11 / 22 kW	40 A	200 A	16 Cu	ISO 340T	84.00
32 / 32 A	15 / 32 kW	63 A	256 A	16 Cu	ISO 363T	88.00
40 / 40 A	22 / 37 kW	80 A	320 A	35 Cu	ISO 380T	107.00
63 / 40 A	30 / 37 kW	100 A	504 A	35 Cu	ISO 3100T	122.00
80 / 80 A	45 / 55 kW	160 A	640 A	70 Cu	ISO 3160T	240.00
135 / 125 A	75 / 90 kW	200 A	1080 A	70 Cu	ISO 3200T	290.00
250 / - A	132 / - kW	250 A ¹⁾	2000 A	120 Cu	EVA 3250	485.00



EVA 4250

4 Pole toggle switch

AC 23 rating 415 / 690 V	Power rating 415 / 690 V	AC 21 rating up to 690 V	Locked rotor M rating	Terminal capacity mm ²	Cat. No.	Price \$
250 A	132 kW	250 A ¹⁾	2000 A	120 Cu	EVA 4250	590.00

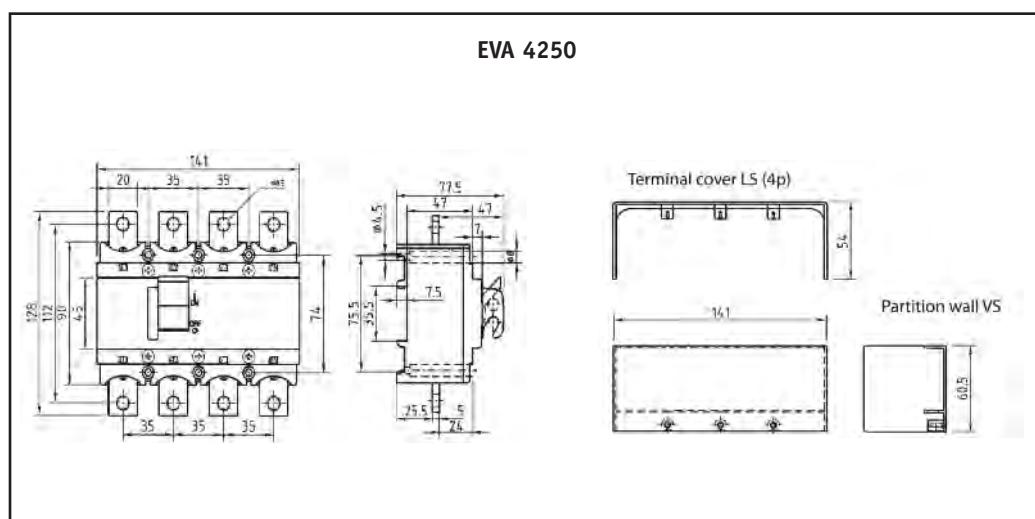
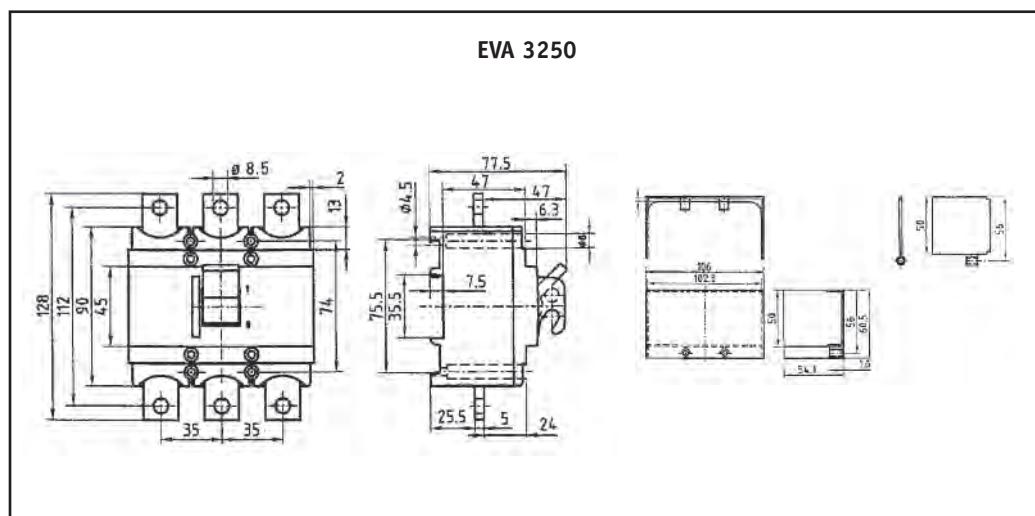
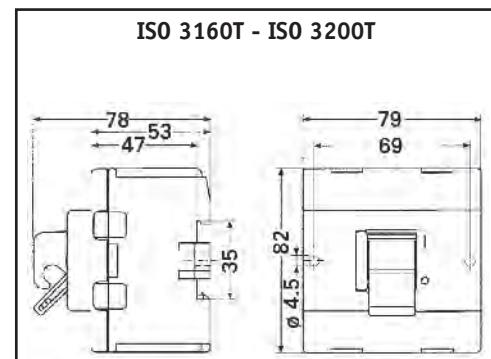
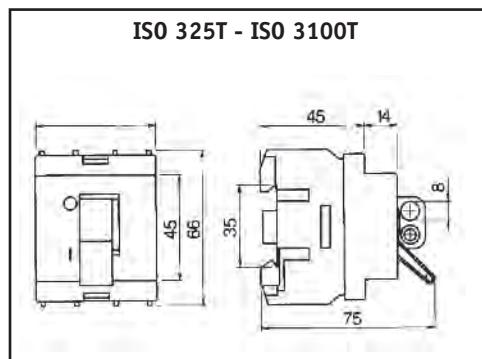
Notes: ¹⁾ 415 V AC only.

Price Schedule 'B2'

ISO Switch

Safety isolating switches

Toggle ISO Switch dimensions (mm)



ISO Switch

Safety isolating switches

Direct handle rotary ISO Switch

- Compact and easy to fit into panelboards and loadcentres
- DIN rail mounting with front plate IP terminal
- Padlockable rotary operated switches
- Highly visible yellow/red operating handles
- Large terminal capacity
- Robust construction and reliable switching performance



ISO 425 R

3 Pole rotary switch

AC 23 rating 415 / 690 V	Power rating 415 / 690 V	AC 21 rating up to 690 V	Locked rotor M rating	Terminal capacity mm ²	Cat. No.	Price \$
16 / 16 A	7.5 / 11 kW	25 A	128 A	16 Cu	ISO 325R	90.00
25 / 25 A	11 / 22 kW	40 A	200 A	16 Cu	ISO 340R	98.00
32 / 32 A	15 / 32 kW	63 A	256 A	16 Cu	ISO 363R	109.00
40 / 40 A	22 / 37 kW	80 A	320 A	35 Cu	ISO 380R	135.00
63 / 40 A	30 / 37 kW	100 A	504 A	35 Cu	ISO 3100R	145.00

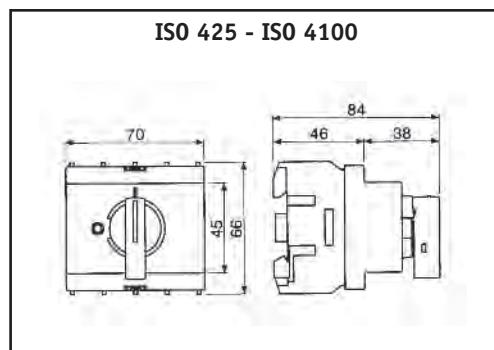
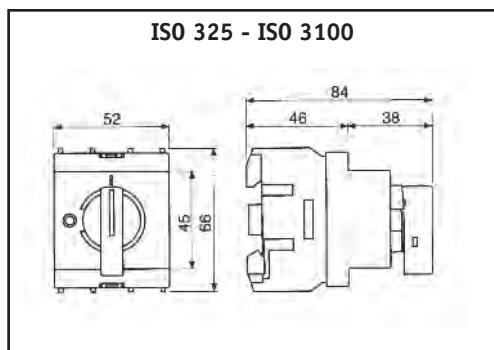


ISO DHY 3P/4P

4 Pole ISO Switch

AC 23 rating 415 / 690 V	Power rating 415 / 690 V	AC 21 rating up to 690 V	Locked rotor M rating	Terminal capacity mm ²	Cat. No.	Price \$
16 / 16 A	7.5 / 11 kW	25 A	128 A	16 Cu	ISO 425R	121.00
25 / 25 A	11 / 22 kW	40 A	200 A	16 Cu	ISO 440R	118.00
32 / 32 A	15 / 32 kW	63 A	256 A	16 Cu	ISO 463R	133.00
40 / 40 A	22 / 37 kW	80 A	320 A	35 Cu	ISO 480R	155.00
63 / 40 A	30 / 37 kW	100 A	504 A	35 Cu	ISO 4100R	175.00

Rotary ISO Switch with direct handle dimensions (mm)



Accessories and spares

		Cat. No.
Spare handle	Grey / Black 3 pole	i ISO DHG 3P 27.60
	Yellow / Red 3 pole	i ISO DHY 3P 27.40
	Grey / Black 4 pole	i ISO DHG 4P 41.00
	Yellow / Red 4 pole	i ISO DHY 4P 37.00

Notes: Available on indent only.

Price Schedule 'B2'

ISO Switch

Safety isolating switches

ISO Switch rotary contact block

- Compact design and easy to fit
- DIN rail mounting switch
- Operational snap on auxiliary switches
- Large terminal capacity
- Robust construction and reliable switching performance



ISO 325 - ISO 3100



ISO 3160 - ISO 3200

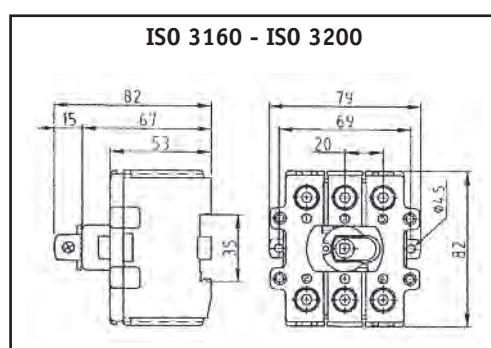
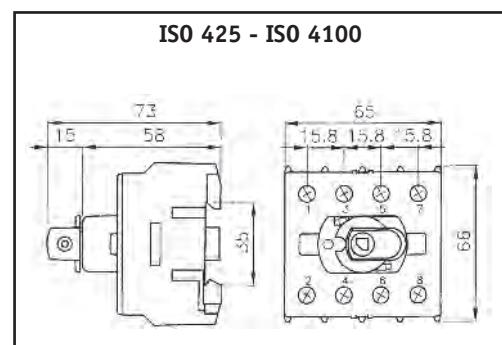
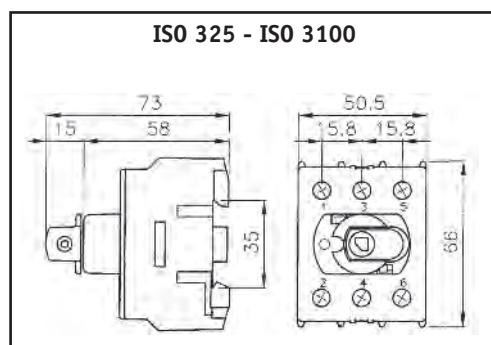
3 Pole rotary contact block

AC 23 rating 415 / 690 V	Power rating 415 / 690 V	AC 21 rating up to 690 V	Locked rotor M rating	Terminal capacity mm ²	Cat. No.	Price \$
16 / 16 A	7.5 / 11 kW	25 A	128 A	16 Cu	ISO 325	68.50
25 / 25 A	11 / 22 kW	40 A	200 A	16 Cu	ISO 340	75.50
32 / 32 A	15 / 32 kW	63 A	256 A	16 Cu	ISO 363	104.00
40 / 40 A	22 / 37 kW	80 A	320 A	35 Cu	ISO 380	124.00
63 / 40 A	30 / 37 kW	100 A	504 A	35 Cu	ISO 3100	142.00
80 / 80 A	45 / 55 kW	160 A	640 A	70 Cu	ISO 3160	250.00
135 / 125 A	75 / 90 kW	200 A	1080 A	70 Cu	ISO 3200	345.00

4 Pole rotary contact block

AC 23 rating 415 / 690 V	Power rating 415 / 690 V	AC 21 rating up to 690 V	Locked rotor M rating	Terminal capacity mm ²	Cat. No.	Price \$
16 / 16 A	7.5 / 11 kW	25 A	128 A	16 Cu	ISO 425	89.00
25 / 25 A	11 / 22 kW	40 A	200 A	16 Cu	ISO 440	105.00
32 / 32 A	15 / 32 kW	63 A	256 A	16 Cu	ISO 463	113.00
40 / 40 A	22 / 37 kW	80 A	320 A	35 Cu	ISO 480	140.00
63 / 40 A	30 / 37 kW	100 A	504 A	35 Cu	ISO 4100	159.00
80 / 80 A	45 / 55 kW	160 A	640 A	70 Cu	i ISO 4160	870.00
135 / 125 A	75 / 90 kW	200 A	1080 A	70 Cu	i ISO 4200	990.00

ISO Switch rotary contact block dimensions (mm)



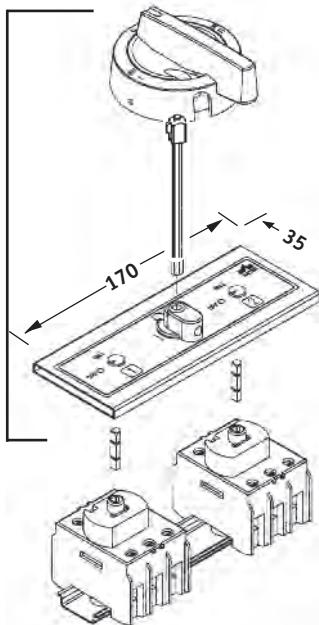
Notes: Available on indent only.

Price Schedule 'B2'

ISO Switch

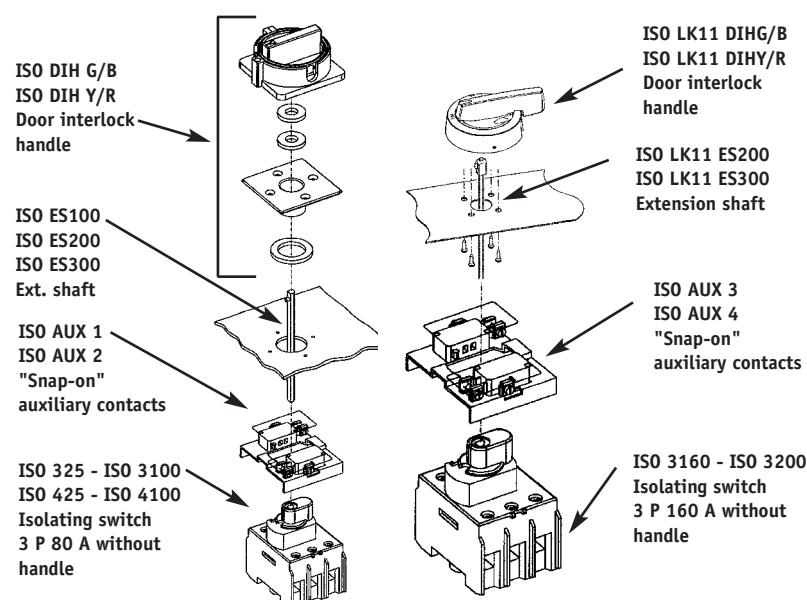
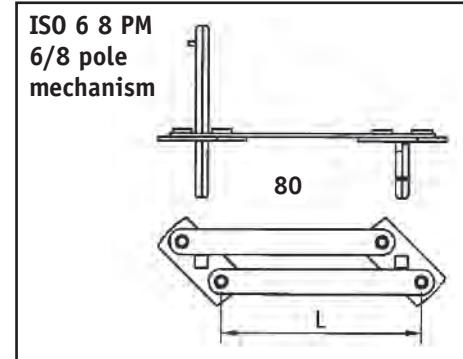
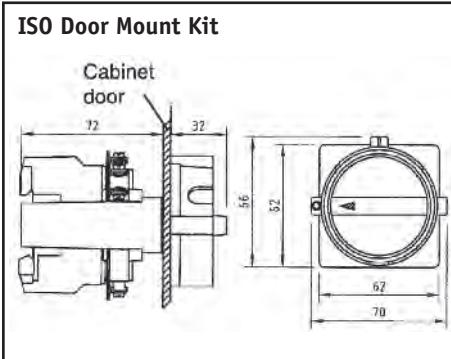
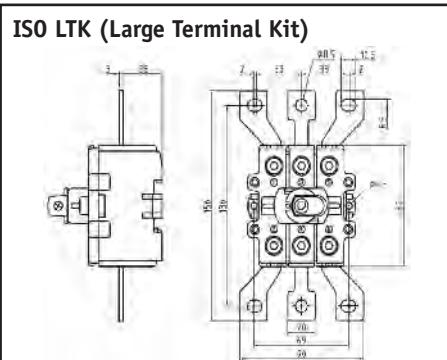
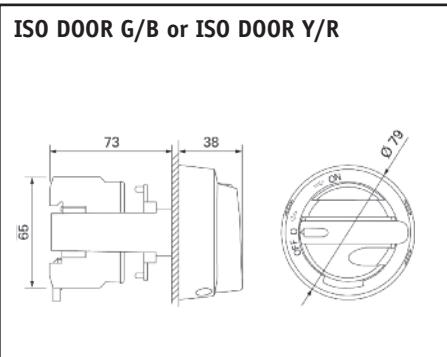
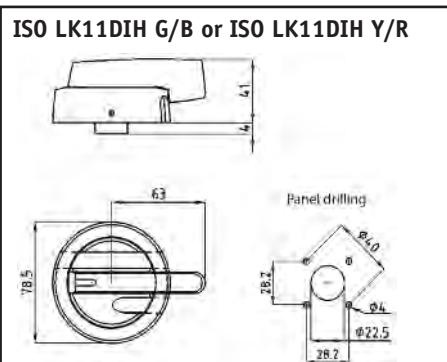
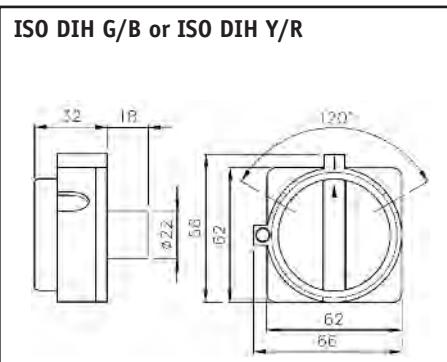
Accessories and spares

Accessories and spares dimensions (mm)



ISO COM

Changeover kit includes the handle and the necessary shafts, switches not included.



ISO Switch

Accessories and spares



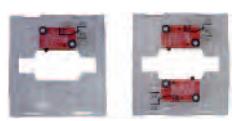
Extension shaft to suit	25 -100 A Switch Cat. No.	Price \$	160 - 200 A Switch Cat. No.	Price \$
100 mm	ISO ES 100	15.80	-	-
200 mm	ISO ES 200	17.80	ISO LK 11ES 200	17.80
300 mm	ISO ES 300	19.60	ISO LK 11ES 300	19.60

To suit 25 - 100 A switch



	Cat. No.
Auxiliary switch (Late make - early break type)	1 (C/O) ISO AUX 1 66.50
	2 (C/O) ISO AUX 2 87.00

To suit 160 - 200 A switch



	Cat. No.
Auxiliary switch (Late make - early break type)	1 (C/O) ISO AUX 3 67.00
	2 (C/O) ISO AUX 4 87.00

To suit 25 - 100 A switch



	Cat. No.
Door interlock handle (GREY/BLACK)	ISO DIH G/B 42.00
	ISO DIH Y/R 42.00

To suit 160 - 200 A switch



	Cat. No.
Door interlock handle (GREY/BLACK)	ISO LK11 DIHG/B 42.00
	ISO LK11 DIHY/R 42.00

To suit 160 - 200 A switch (3 pole switch)



	Cat. No.
Large terminal kit (3 pole) (switches not included)	ISO LTK 80.50

To suit 25 - 100 A (3 pole switch)



	Cat. No.
Door mount kit 3 pole only (GREY/BLACK)	ISO DOOR G/B 51.50
	ISO DOOR Y/R 51.50



Changeover mechanism

	Cat. No.
To suit 25 - 200 A (switches not included)	ISO COM 375.00

Price Schedule 'B2'

ISO Switch

Technical data - ratings chart

NHP ISO Switch Isolating / Load-break switches

Rated thermal current I _{the} (A)			25 A	40 A	63 A	80 A	100 A	160 A	200 A	250 A (EVA 3250)	
Rated insulation voltage U_i (V)			690 V	690 V	690 V	690 V	690 V	690 V	690 V	690 V	
Rated operational current I _e (A) AC ratings	AC 21	400/415 V	25 A	40 A	63 A	80 A	100 A	160 A	200 A	-	
		500 V	25 A	40 A	63 A	80 A	100 A	160 A	200 A	-	
		690 V	25 A	40 A	63 A	80 A	100 A	160 A	200 A	-	
	AC 22	400/415 V	16 A	25 A	40 A	63 A	80 A	125 A	160 A	250 A	
		500 V	16 A	25 A	40 A	63 A	80 A	125 A	160 A	-	
		690 V	16 A	25 A	40 A	63 A	80 A	125 A	160 A	-	
	AC 23	400/415 V	16 A	25 A	32 A	40 A	63 A	80 A	135 A	250 A	
		500 V	16 A	25 A	32 A	40 A	40 A	80 A	125 A ¹⁾	-	
		690 V	16 A	25 A	32 A	40 A	40 A	80 A	125 A ¹⁾	-	
Rated operational power (kW) AC ratings	AC 23	230 V	4 kW	5.5 kW	7.5 kW	11 kW	15 kW	30 kW	37 kW	-	
		400/415 V	7.5 kW	11 kW	15 kW	22 kW	30 kW	45 kW	75 kW	132 kW	
		500 V	7.5 kW	15 kW	22 kW	30 kW	30 kW	55 kW	75 kW	-	
		690 V	11 kW	22 kW	30 kW	37 kW	37 kW	55 kW	90 kW	-	
Rated fused short circuit current											
Back-up fuse			(A)	63 A	63 A	63 A	80 A	80 A	160 A	160 A	
RMS value			I _k (kA)	50 kA	50 kA						
Peak value			I (kA)	7.2 kA	7.2 kA	7.2 kA	8.7 kA	8.7 kA	15 kA	15 kA	
Rated short circuit making capacity			I _{cm} (kA)	5.4 kA	6.6 kA	7.2 kA	8.3 kA	8.7 kA	13.7 kA	5.1 kA	
Rated short time withstand current (1s)			I _{cw} (kA)	1.7 kA	1.7 kA	1.7 kA	2.3 kA	2.3 kA	3.5 kA	3.5 kA	
Rated breaking capacity I _{cn} (A) AC ratings	AC 23	400/415 V	128 A	200 A	256 A	320 A	504 A	640 A	1080 A	2000 A	
		500 V	128 A	200 A	256 A	320 A	320 A	640 A	1000 A	2000 A	
		690 V	128 A	200 A	256 A	320 A	320 A	640 A	1000 A	2000 A	
For DC applications poles MUST be connected in series	DC 21	48 V	16 A/3 P	25 A/3 P	40 A/3 P	63 A/3 P	80 A/3 P	125 A/3 P	160 A/3 P	250/3 P	
		110 V	16 A/3 P	25 A/3 P	40 A/3 P	63 A/3 P	80 A/3 P	125 A/3 P	160 A/3 P	250/3 P	
		220 V	16 A/3 P	25 A/3 P	40 A/3 P	63 A/3 P	80 A/3 P	125 A/3 P	160 A/3 P	250/3 P	
		440 V	16 A/4 P	25 A/4 P	40 A/4 P	63 A/4 P	80 A/4 P	125 A/4 P	160 A/4 P	250/3 P	
	DC 22	48 V	16 A/3 P	25 A/3 P	40 A/3 P	63 A/3 P	80 A/3 P	125 A/3 P	160 A/3 P	250/3 P	
		110 V	16 A/3 P	25 A/3 P	40 A/3 P	63 A/3 P	80 A/3 P	125 A/3 P	160 A/3 P	250/3 P	
		220 V	16 A/3 P	25 A/3 P	40 A/3 P	63 A/3 P	80 A/3 P	125 A/3 P	160 A/3 P	250/3 P	
		440 V	16 A/4 P	10 A/4 P	16 A/4 P	25 A/4 P	32 A/4 P	50 A/4 P	63 A/4 P	125/3 P	
	DC 23	48 V	16 A/3 P	25 A/3 P	40 A/3 P	63 A/3 P	80 A/3 P	125 A/3 P	160 A/3 P	250/3 P	
		110 V	16 A/3 P	25 A/3 P	40 A/3 P	63 A/3 P	80 A/3 P	125 A/3 P	160 A/3 P	250/3 P	
		220 V	10 A/3 P	16 A/3 P	20 A/3 P	32 A/3 P	40 A/3 P	100 A/4 P	125 A/3 P	160/3 P	
Rated breaking capacity I _{cn} (Amps/poles in series) DC ratings	DC 23	48 V	64 A/3 P	100 A/3 P	160 A/3 P	253 A/3 P	320 A/3 P	500 A/3 P	640 A/3 P	1000/3 P	
		110 V	64 A/3 P	100 A/3 P	160 A/3 P	253 A/3 P	320 A/3 P	500 A/3 P	640 A/3 P	1000/3 P	
		220 V	40 A/3 P	64 A/3 P	80 A/3 P	128 A/3 P	160 A/3 P	400 A/3 P	500 A/3 P	640/3 P	
Electrical life (number of operations)			3000	3000	3000	3000	3000	2000	2000	2000	
Mechanical life (number of operations)			50000	50000	50000	50000	50000	16000	16000	16000	
Terminal capacity			Cu (mm ²)	1.5 - 16	1.5 - 16	1.5 - 16	2.5 - 35	2.5 - 35	6 - 70	M8 X 25 ²⁾	
Maximum terminal torque			(Nm)	1.8	1.8	1.8	2.5	2.5	4.5	30 - 44	

Notes: ¹⁾ = AC 23B values/AC 23A = 105 A.

²⁾ = Bolt size.

³⁾ = 415 V only

Sprecher + Schuh L 7 Load-break switches, 3 & 4 pole Isolator, changeover, panel/base mount & enclosed type

Sprecher + Schuh L7 load-break switches - 16 to 315 amp	Page
L7 load-break switches introduction and catalogue number structure	10 - 138 to 10 - 139
3 pole switches 16 A to 315 A, 7.5 kW to 110 kW	10 - 140
3 pole changeover switches 16 A to 100 A	10 - 141
4 pole switches 125 A to 315 A, 45 kW to 110 kW	10 - 141
Accessory for assembly of six pole switches 16 A to 100 A	10 - 141
Handles, control knobs and accessories	10 - 142
Clip-on accessories – 4th poles, auxiliary contacts, terminal covers	10 - 143 to 10 - 144
LY 7 enclosed load-break switches	10 - 145
Mounting and dimensions	10 - 146 to 10 - 153



L 7 load-break switches

Introduction

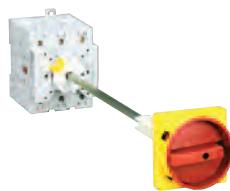


L 7 load-break switch



Clip-on accessories

(16...100A)



Metal or modular plastic extension shafts

Features

- Rated currents up to 315 A
- Touch-proof switch body (IP 20)
- Water spray and dustproof mechanisms (IP 66)
- Easily accessible terminals
- Clearly marked terminals
- Wide range of accessories
- High AC 23 A ratings
- High breaking capacity
- Electronic compatibility of auxiliary contacts
- High short circuit withstand capacity (reduced risk of welding)
- High overvoltage withstand

Selection of handles and control knobs

The same control knobs can be used with both base mounted and panel mounted switches. Two types of padlockable handles are available for one or three padlocks. Economical shaft extension kits are available including thermoplastic (modular) or a metallic "telescopic" type. The latter has the advantage of being suitable for deep switchboard construction and incorporates a padlock facility on the switch body itself as well as a door interlock mechanism and padlock on the operating handle.

Front panel mounting and base mounting switches

Type LA 7 is the base mounted switch which can also be snapped onto standard DIN rail.

Type LE 7 is the panel or front mounted switch. Both types utilise the same control knobs.

Enclosed load-break switches

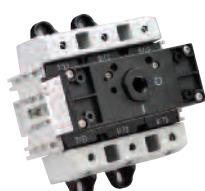
The LY 7 enclosed load-break switches are the perfect solution for local isolation of motors as well as other plant and equipment. They are available in 3 pole and 6 pole, the latter being suited to downstream isolation of 6 lead motors (star-delta starting). They cover motor sizes up to 45 kW. (Refer page 10 - 143).

High current load-break switches 125...315 A

These additions to the range extend the AC 23 kW rating of L 7 load-break switches to 110 kW. Available in base or panel mounting, the high current switches are also complemented by a versatile range of accessories.



LY 7 enclosed isolator



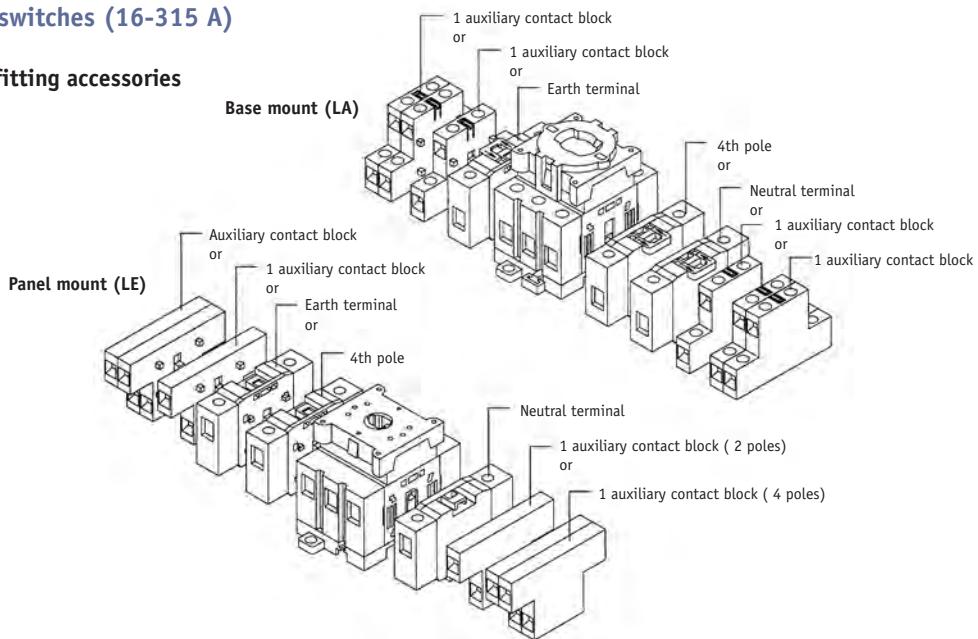
LA 7 load-break switch

L 7 load-break switches

Introduction

L 7 load-break switches (16-315 A)

Possibilities for fitting accessories



L 7 Catalogue Number construction

Mounting type

LA 7	=	Base mount
LB 7	=	Base mount
LE 7	=	Panel mount
LF 7	=	Panel mount
LY 7	=	Enclosed

Current rating - AC 21

16	=	16 amp
25	=	25 amp
32	=	32 amp
40	=	40 amp
63	=	63 amp
80	=	80 amp
100	=	100 amp
125	=	125 amp
160	=	160 amp
250	=	250 amp
315	=	315 amp

Switch function

1753	=	3 pole
1754	=	4 pole
1756	=	6 pole
3753	=	3 pole C/O

Handle type

G	=	Disk type standard
N	=	Disk type yellow/red
E	=	Knob type standard
L	=	Knob type yellow/red
A	=	Knob type ¹⁾
P	=	DIN 45 knob

Escutcheon size (mm) ²⁾

4	=	48 x 48 (54 x 54)
6	=	64 x 64 (67 x 67)
8	=	88 x 88 (90 x 90)
13	=	130 x 130 (135 x 135)

Escutcheon marking

175	=	0 - 1
175I	=	Off - On
375	=	1 - 0 - 2 ³⁾
SPE	=	Special engraving

Notes: Order clip-on accessories separately.

¹⁾ Non padlockable - others are padlockable refer page 10 - 142 for further details.

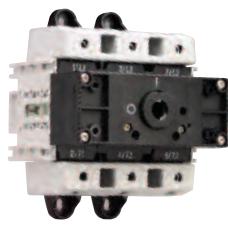
²⁾ Figures in () are for G and N type handles.

³⁾ For changeover switches.

Wide range
of handles
available



LA 7, 3 pole base mounted



LA 7-160-1753



LE 7, 3 pole panel mounted



LE 7-125-1753



LA 7-25-1753-R

10

L 7 load-break switches

16 to 315 amp - 7.5 to 110 kW panel and base mounted

3 pole switches base mounting ¹⁾

AC 23 M ³⁾ rating (A) kW	AC 23 @ 400/415 V Amps	Open Ith Amps	Encl. Ith Amps	AC 21, AC 22 Amps	Rated fused short circuit current kA	Fuse (A)	Cat. No. ²⁾	Price \$	On Off O
120	7.5	25	20	16	15	20	LA 7-16-1753	72.00	
256	11	40	32	25	15	35	LA 7-25-1753	113.00	
256	15	50	40	32	15	35	LA 7-32-1753	127.00	
504	22	63	50	40	20	50	LA 7-40-1753	143.00	
504	30	75	63	63	15	63	LA 7-63-1753	179.00	
800	37	100	80	80	30	80	LA 7-80-1753	230.00	
800	45	120	100	100	25	100	LA 7-100-1753	285.00	
750	45	125	125	125	30	125	LA 7-125-1753 ⁴⁾	490.00	
850	55	160	160	160	30	160	LA 7-160-1753 ⁴⁾	610.00	
1380	90	250	250	250	30	250	LA 7-250-1753 ⁴⁾	860.00	
1650	110	315	315	315	30	315	LA 7-315-1753 ⁴⁾	1030.00	

3 pole switches panel mounting ¹⁾

AC 23 M ³⁾ rating (A) kW	AC 23 @ 400/415 V Amps	Open Ith Amps	Encl. Ith Amps	AC 21, AC 22 Amps	Rated fused short circuit current kA	Fuse (A)	Cat. No. ²⁾	Price \$
120	7.5	25	20	16	15	20	LE 7-16-1753	71.00
172	11	40	32	25	15	35	LE 7-25-1753	86.00
232	15	50	40	32	15	35	LE 7-32-1753	110.00
280	18.5	63	50	40	20	50	LE 7-40-1753	126.00
336	22	75	63	63	15	63	LE 7-63-1753	156.00
544	37	100	80	80	30	80	LE 7-80-1753	205.00
680	45	120	100	100	25	100	LE 7-100-1753	265.00
750	45	125	125	125	30	125	LE 7-125-1753 ⁴⁾	520.00
850	55	160	160	160	30	160	LE 7-160-1753 ⁴⁾	650.00
1380	90	250	250	250	30	250	LE 7-250-1753 ⁴⁾	870.00
1650	110	315	315	315	30	315	LE 7-315-1753 ⁴⁾	1050.00

3 pole complete switches for DIN cut-out

AC 23 @ 400/415 V kW	Open Ith Amps	Encl. Ith Amps	AC 21, AC 22 Amps	Rated fused short circuit current kA	Fuse (A)	Cat. No.	Price \$
7.5	40	32	25	15	35	LA 7-25-1753-Q	123.00
11	50	40	32	15	35	LA 7-32-1753-Q	135.00
Emergency OFF (red handle)							
7.5	40	32	25	15	35	LA 7-25-1753-R	127.00
11	50	40	32	15	35	LA 7-32-1753-R	147.00

Notes: ¹⁾ Supplied without handles and interlock. Handles page 10 - 142.

²⁾ LA and LE = Box terminals, LB and LF = Bolt terminals in 125 to 315 A range.

³⁾ Rated breaking capacity.

⁴⁾ Supplied with 195 mm shaft and coupling.

Available on indent only.

Price Schedules

Up to 100 A - Schedule 'A2'

Above 100 A - Schedule 'A3'

L 7 load-break switches

16 to 315 amp - 7.5 to 110 kW panel and base mounted



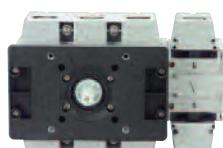
LA 7-32-3753 3 pole
changeover switch

AC 23 @ 400/415 V kW	Open I _{th} Amps	Encl. I _{th} Amps	AC 21, AC 22 Amps	Rated fused short circuit current kA		Cat. No.	Price \$	Switch angle 375 °
				Fuse (A)	I			II
7.5	25	20	16	15	20	LA 7-16-3753 ³⁾	191.00	
11	40	32	25	15	35	LA 7-25-3753	210.00	
15	50	40	32	15	35	LA 7-32-3753	245.00	
22	63	50	40	20	50	LA 7-40-3753	295.00	
30	75	63	63	15	63	LA 7-63-3753	345.00	
37	100	80	80	30	80	LA 7-80-3753	460.00	
45	120	100	100	25	100	LA 7-100-3753	570.00	



LA 7-160-1754

AC 23 @ 400/415 V kW	Open I _{th} Amps	Encl. I _{th} Amps	AC 21, AC 22 Amps	Rated fused short circuit current kA		Cat. No.	Price \$	Switch angle 375 °
				Fuse (A)	I			II
45	125	125	125	30	125	LA 7-125-1754 ⁴⁾	660.00	
55	160	160	160	30	160	LA 7-160-1754 ⁴⁾	820.00	
90	250	250	250	30	250	LA 7-250-1754 ⁴⁾	1120.00	
110	315	315	315	30	315	LA 7-315-1754 ⁴⁾	1270.00	



LE 7-250-1754

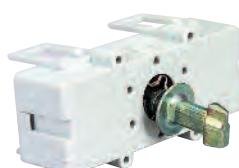
AC 23 @ 400/415 V kW	Open I _{th} Amps	Encl. I _{th} Amps	AC 21, AC 22 Amps	Rated fused short circuit current kA		Cat. No.	Price \$	Switch angle 375 °
				Fuse (A)	I			II
45	125	125	125	30	125	LE 7-125-1754 ⁴⁾	690.00	
55	160	160	160	30	160	LE 7-160-1754 ⁴⁾	1010.00	
90	250	250	250	30	250	LE 7-250-1754 ⁴⁾	1130.00	
110	315	315	315	30	315	LE 7-315-1754 ⁴⁾	1460.00	

6 pole switch 16 amps ¹⁾

7.5	25	20	16	15	20	LA 7-16-1756	187.00
7.5	25	20	16	15	20	LE 7-16-1756	155.00

Accessory for assembly of six pole switches 16 to 100 amps – base and panel mounting

Mechanical connection for joining two, three pole switches together (6 pole operation)	For 16 Amp switch	L 7G-3821	42.50
	For 25/32 Amp switch	L 7G-3660	32.00
	For 40/63 Amp switch	L 7G-3661	34.00
	For 80/100 Amp switch	L 7G-3662	39.00



L 7G-3660

Price Schedules

Up to 100 A - Schedule 'A2'

Above 100 A - Schedule 'A3'

Notes: ¹⁾ Supplied without handles and interlock. Handles page 10 - 142.

²⁾ LA and LE = Box terminals, LB and LF = Bolt terminals in 125 to 315 A range.

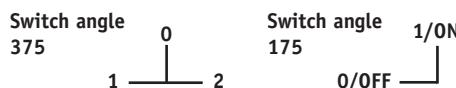
³⁾ Also available in panel mount (LE 7).

⁴⁾ Supplied with 195 mm shaft and coupling.

Available on indent only.

L 7 load-break switches

Handles and control knobs



Handles - IP 66 complete with escutcheon. ¹⁾ For base or panel mounted switches

Type A handle

Black front frame, silver grey legend plate, black knob



LFS 2-A-4-175

Size (mm)	Description	Legend	Cat. No.	Price \$ ¹⁾
48 x 48	for 16 to 63 A switches	0-1	LFS 2-A-4-175	15.80
48 x 48	for 16 to 63 A switches	OFF-ON	LFS 2-A-4-175I ³⁾	15.80
48 x 48	for 16 to 63 A switches	OFF-ON	LFC 2-A-4-175I ²⁾ ³⁾	24.40
48 x 48	for 16 to 63 A switches	1-0-2	LFS 2-A-4-375 ³⁾	15.80
64 x 64	for 16 to 100 A switches	0-1	LFS 2-A-6-175	26.40
64 x 64	for 16 to 100 A switches	OFF-ON	LFS 2-A-6-175I ³⁾	26.40
64 x 64	for 16 to 100 A switches	1-0-2	LFS 2-A-6-375 ³⁾	26.40
88 x 88	for 40 to 100 A switches	OFF-ON	LFS 2-A-8-175I ³⁾	46.50
88 x 88	for 125 to 315 A switches	0-1	LFS 7-A-8-175	54.00
130 x 130	for 125 to 315 A switches	ON/1-OFF/0	LFS 7-A-13-175	65.50



LFS 2-E-4-175

Type E handle

Padlockable handle (1 padlock), black frame, silver escutcheon, black knob

48 x 48	for 16 to 63 A switches	0-1	LFS 2-E-4-175	28.60
48 x 48	for 16 to 63 A switches	OFF-ON	LFC 2-E-4-175I ²⁾ ³⁾	28.60
48 x 48	for 16 to 63 A switches	1-0-2	LFS 2-E-4-375102	28.60
64 x 64	for 25 to 100 A switches	0-1	LFS 2-E-6-175	32.00
64 x 64	for 25 to 100 A switches	1-0-2	LFS 2-E-6-375	32.00



LFC-2-G-6-175

Type G handle

Padlockable disk handle, grey frame, black knob (up to 3 padlocks)

54 x 54	for 16 A switches	0-1, OFF-ON	LFS 7-G-4-175	30.50
64 x 64	for 25 to 100 A switches	ON/1 - OFF/0	LFS 2-G-6-175	44.50
67 x 67	for 25 to 100 A switches	OFF/0 - ON/1	LFC 2-G-6-175 ²⁾	44.50
90 x 90	for 40 to 100 A switches	0-1	LFS 2-G-8-175	59.50
90 x 90	for 125 to 315 A switches	0-1, OFF-ON	LFS 7-G-8-175	64.50
135 x 135	for 125 to 315 A switches	0-1, OFF-ON	LFS 7-G-13-175	87.00



LFS 2-I-8-175I

Type I handle

Black frame, yellow legend plate, red knob

88 x 88	for 40 to 100 A switches	OFF-ON	LFS 2-I-8-175I	47.50
88 x 88	for 125 to 315 A switches	0-1	LFS 7-I-8-175	55.00
130 x 130	for 125 to 315 A switches	0-1	LFS 7-I-13-175	87.00



LFS 2-L-4-175

Type L handle

Padlockable handle (1 padlock), yellow escutcheon, red knob

48 x 48	for 16 to 63 A switches	0-1	LFS 2-L-4-175	34.00
64 x 64	for 25 to 100 A switches	0-1	LFS 2-L-6-175	39.00



LFS 2-N-6-175

Type N handle

Padlockable disk handle yellow escutcheon, red knob (up to 3 padlocks)

54 x 54	for 16 A switches	OFF/0 - ON/1	LFS 7-N-4-175	28.60
67 x 67	for 25 to 100 A switches	OFF/0 - ON/1	LFC 2-N-6-175 ²⁾	44.50
67 x 67	for 25 to 100 A switches	OFF/0 - ON/1	LFS 2-N-6-175	42.50
90 x 90	for 40 to 100 A switches	OFF/0 - ON/1	LFS 2-N-8-175	59.50
90 x 90	for 125 to 315 A switches	0-1	LFS 7-N-8-175	65.50
135 x 135	for 125 to 315 A switches	0-1	LFS 7-N-13-175	87.00

Price Schedules

Up to 100 A - Schedule 'A2'

Above 100 A - Schedule 'A3'

Notes: ¹⁾ Add price of handle / accessories to switch prices.

²⁾ Central nut mounting.

³⁾ Supplied as a kit of two parts.

L 7 load-break switches

Clip-on accessories

Handles, shafts, 4th poles, auxiliary contacts

Accessories for panel + base mounted switches (LE/LA)



LA 2-G-3393



L 7-G-3707

Description	Cat. No.	Price \$
Shaft extension including coupling for LA switch - 2 pieces, yellow padlockable 16 ... 100 A	L = 24 mm LA 2-G-2853 ³⁾	11.60
Metal shaft extension including coupling (with padlock facility on switch body) 16 ... 100 A	L = 235 mm LA 2-G-3393 ²⁾ L = 350 mm LA 2-G-3394 ²⁾ L = 400 mm L 7-AB40 ²⁾	47.50 62.50 65.50
Only suited to LFS handle (125....315 A) (shaft only)	44 mm LA 2-G-3380 ³⁾	4.20
Standard shaft (supplied with LA 7)	52 mm LA 2-G-3194 ³⁾	6.40
Alternative shafts for LA 7	57 mm LA 2-G-3195 ³⁾	6.40
Metal shaft (for 25 to 100 Amp)	44 mm L 7-G-3687 ³⁾	14.80
	52 mm L 7-G-3707 ³⁾	15.80

Clip-on 4th pole ¹⁾

For base mounted switches - (LA) (Early make late break) ¹⁾



LA 7-25-NP

For LA 7-16 switches	LA 7-16 NP	34.00
For LA 7-25 switches	LA 7-25-NP	35.00
For LA 7-32 switches	LA 7-32-NP	36.00
For LA 7-40 switches	LA 7-40-NP	43.50
For LA 7-63 switches	LA 7-63-NP	53.00
For LA 7-80 switches	LA 7-80-NP	60.00
For LA 7-100 switches	LA 7-100-NP	76.00

For panel mounted switches - (LE) (Early make late break) ¹⁾



LE 7-40-NP

For LE 7-16 switches	LE 7-16-NP	32.00
For LE 7-25 switches	LE 7-25-NP	34.00
For LE 7-32 switches	LE 7-32-NP	38.00
For LE 7-40 switches	LE 7-40-NP	43.50
For LE 7-63 switches	LE 7-63-NP	52.00
For LE 7-80 switches	LE 7-80-NP	59.50
For LE 7-100 switches	LE 7-100-NP	75.00



LA 7-P-11



LE 7-P-11

Clip-on auxiliary contact blocks

For base mounting switches

For LA 7-16 switches	1 N/O	early break	LA 7-16-P-D10	71.00
For LA 7-16/100 switches	1 N/O	1 N/C	LA 7-P-11	55.00
For LA 7-16/100 switches	2 N/O	2 N/C	LA 7-P-22	101.00
For LA 7-16/100 switches	1 N/O	1 N/C make before break	LA 7-P-L11	55.00
For LA 7-25/100 switches	1 N/O	early break	LA 7-P-D10	57.00
For L 7-125/160 switches	2 N/O	1 N/C	L 7-AB-P21-160	185.00
For L 7-250/315 switches	2 N/O	1 N/C	L 7-AB-P21-315	196.00

For panel mounting switches

For LE 7-16 switches	1 N/O	early break	LE 7-16-P-D10	74.00
For LE 7-16/100 switches	1 N/O	1 N/C	LE 7-P-11	54.00
For LE 7-16/100 switches	2 N/O	2 N/C	LE 7-P-22	109.00
For LE 7-16/100 switches	1 N/O	1 N/C make before break	LE 7-P-L11	55.00
For LE 7-16/100 switches	1 N/O	early break	LE 7-P-D10	57.00
For L 7-125/160 switches	2 N/O	1 N/C	L 7-EF-P21-160	184.00
For L 7-250/315 switches	2 N/O	1 N/C	L 7-EF-P21-315	196.00

Notes: ¹⁾ 4th pole makes before main contacts fully rated.

²⁾ Requires LA 2-G-3399 insert for use with changeover switches. Refer page 10 - 144.

³⁾ For further details refer to page 1 - 152.

Price Schedule 'A2'

L 7 load-break switches

Clip-on accessories

Earth and neutral terminals for panel + base mounted switches (LE/LA)



Clip-on terminal

PE
PE

Clip-on earthing terminals – (LA / LE) ¹⁾ ²⁾

Description	Base mount Cat. No.	Panel mount Cat. No.	Price \$
For LA/LE 7-16 switches	LA 7-16-PE	LE 7-16-PE	26.40
For LA/LE 7-25/32 switches	LA 7-32-PE	LE 7-32-PE	29.60
For LA/LE 7-40/63 switches	LA 7-63-PE	LE 7-63-PE	30.50
For LA/LE 7-80/100 switches	LA 7-100-PE	LE 7-100-PE	37.00
For LA/LE 7-125...160 switches (box terminals)	L 7-AE160-PE	-	113.00



Clip-on terminal

N
N

Clip-on neutral terminals - (LA / LE) ¹⁾ ²⁾

For LA/LE 7-16 switches	LA 7-16-TN	LE 7-16-TN	26.40
For LA/LE 7-25/32 switches	LA 7-32-TN	LE 7-32-TN	29.60
For LA/LE 7-40/63 switches	LA 7-63-TN	LE 7-63-TN	30.50
For LA/LE 7-80/100 switches	LA 7-100-TN	LE 7-100-TN	37.00
For LA/LE 7-125...160 switches (box terminal)	L 7-AE160-TN	-	113.00



L 7-25-C4

Terminal covers - (LA / LE) ⁴⁾

	3 pole Cat. No.	4 pole Cat. No.	Price \$
LA/LE 7-16	L 7-16-C3	10.20	-
LA/LE 7-25/32	L 7-25-C3	8.40	L 7-25-C4
LA/LE 7-40/63	L 7-40-C3	10.60	L 7-40-C4
LA/LE 7-80/100	L 7-80-C3	13.80	-



LA 2-G-3399

Terminal covers 1 pole ¹⁾

Suit switch	Cat. No.	Price \$
Box terminals	LA 7/LE 7 125/160 A	L 7-AE125-C1
	LA 7/LE 7 250/315 A	L 7-AE250-C1
Bolt terminals	LF 7/LB 7 125/160 A	L 7-BF125-C1
	LF 7/LB 7 250/315 A	L 7-BF250-C1

Accessories for base mounted switches ³⁾

White insert is used when a 3 pole changeover switch needs to be base mounted using metal shaft extension with door coupling.	Cat. No.	Price \$
	LA2-G-3399	5.30



Notes: ¹⁾ Terminals only - not switched.

²⁾ 125-315 Amp earth and neutral terminals either base or panel mounted.

³⁾ To be used with metal shaft extension LA 2-G-3393 or -3394. Refer page 10 - 143.

⁴⁾ 2 off required if coveringline and load sides.

Price Schedules

Up to 100 A - Schedule 'A2'

Above 100 A - Schedule 'A3'

L 7 load-break switches

LY 7 enclosed type and name plate accessory

Features

- Standard IP 66 protection
- Cover interlock in 'on' position
- Facility for 4 padlocks
- Earth terminal included
- Ample wiring room
- Positive switching action gives reliable position indication
- Cover is 'keyed' ensuring correct positioning
- IP 20 terminals (touch safe)
- Red and yellow safety handle
- Ideal for local isolation for 3 phase motors



LY 7 -25-1753

Enclosed load-break switches 3 pole

Red and yellow handle

AC 23 kW ¹⁾	AC 3 kW ²⁾	Ithe (A)	Fuse rating kA	Fuse (A)	Dimensions (mm) H	W	D	Cat. No.	Price \$
7.5	5.5	20	15	20	120	70	70	LY 7-16M-1753/N-4 ⁵⁾	132.00
11	7.5	32	15	35	150	95	86	LY 7-25-1753/N-6 ⁵⁾	164.00
15	11	40	15	35	150	95	86	LY 7-32-1753/N-6 ⁵⁾	175.00
22	15	50	20	50	180	125	105	A LY 7-40-1753-/N-6	230.00
30	18.5	63	15	63	180	125	105	A LY 7-63-1753/N-6	270.00
37	30	80	30	80	230	175	120	A LY 7-80-1753/N-6	450.00
45	37	100	25	100	230	175	120	A LY 7-100-1753/N-6	530.00

Enclosed load-break switches 6 pole ³⁾

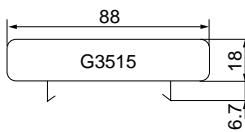
Red and yellow handle

AC 23 kW ¹⁾	AC 3 kW ²⁾	Ithe (A)	Fuse rating kA	Fuse (A)	Dimensions (mm) H	W	D	A Cat. No.	Price \$
11	7.5	32	15	35	180	125	105	LY 7-25-1756/N-6	310.00
15	11	40	15	35	180	125	105	LY 7-32-1756/N-6	330.00
22	15	50	20	50	230	175	120	LY 7-40-1756/N-6	530.00
30	18.5	63	15	63	230	175	120	LY 7-63-1756/N-6	580.00

Accessories



L 2-G3667



Additional name plate
Dimensions (mm)

Additional name plates for handles ⁴⁾

For handle sizes 48 x 48 mm, 64 x 64 mm and 67 x 67 mm	Cat. No.	Price \$
Blank	L 2-G3667	7.90
For handle sizes 88 x 88 mm, 90 x 90 mm, 130 x 130 mm and 135 x 135 mm		
Blank	L 2-G3515	11.60
Main Switch	L 2-G3515A	15.80
Emergency Stop	L 2-G3515H	15.80

Notes: ¹⁾ Max. rating at 400/415 volts.

²⁾ Maximum fuse size may limit motor kW. For DOL starters AC 3 ratings are recommended.

³⁾ For star-delta starters - kW and Amp ratings may be increased by a factor of 1.7 (6 wire isolation). Take care with upstream fuses.

⁴⁾ Clip-on to escutcheon.

⁵⁾ Not suitable for direct sunlight use.

[A] These items are manufactured to order. Please enquire regarding availability.

Price Schedules

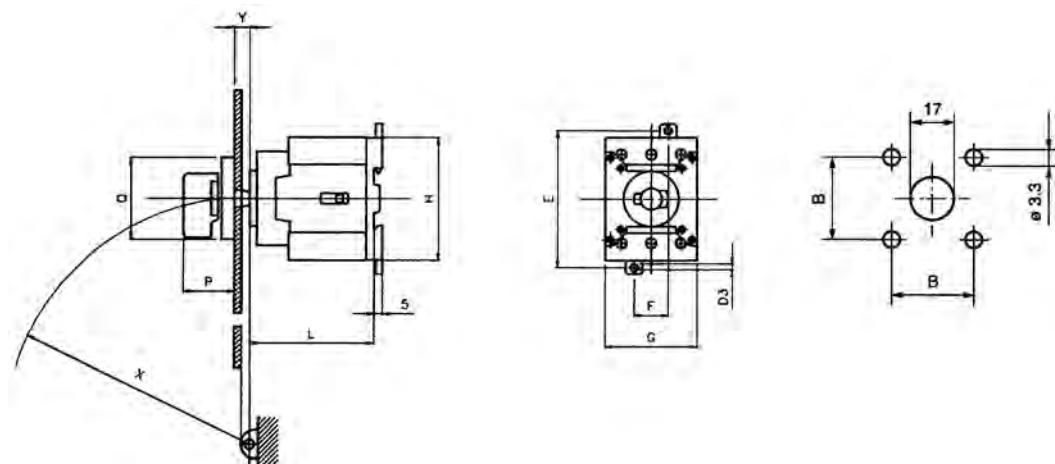
Up to 100 A - Schedule 'A2'

Above 100 A - Schedule 'A3'

L 7 load-break switches

Mounting and dimensions (mm)

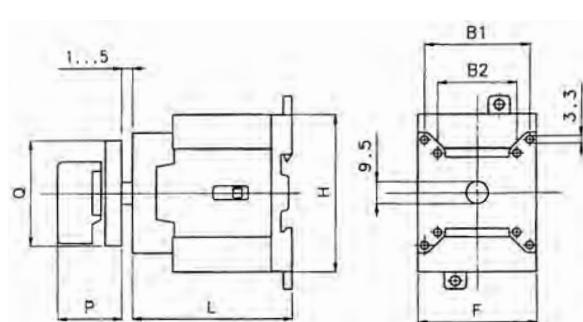
LA 7 - base mounted switches - 3 pole (16 ... 100 A)



Type	D3	E	F	G	H	L
LA 7-16	4.5	70	11	36	63	55
LA 7-25/32	4.5	70	15	45	64	59
LA 7-40/63	4.5	80	20	54	72	73
LA 7-80/100	5.6	95	25	72	90	89

Type	Y min.	X ≥	Y max.	L ≥
LA 7-25/32	5	142	9.5	90
LA 7-40/63	2.5	150	9.5	90
LA 7-80/100	2.5	150	9.5	90

LE 7 - panel mounted switches - 3 pole (16 ... 100 A)

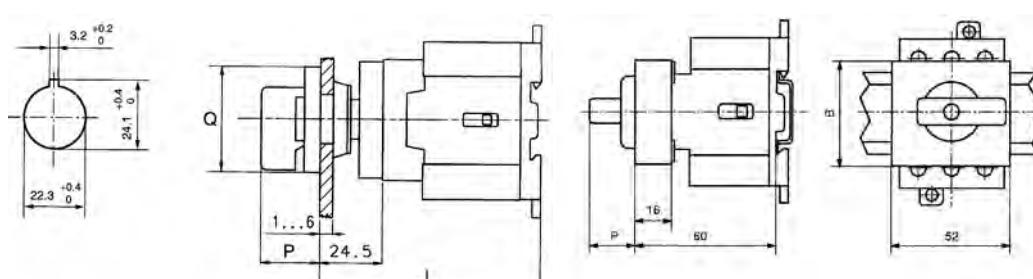


Type	B1	B2	F	H	L
LE 7-16	-	-	36	63	51
LE 7-25/32	-	36	45	64	60
LE 7-40/63	48	36	54	72	74
LE 7-80/100	48	36	72	90	90

Control handles

Cat. No.	Q	P	B
LFS 2-A-4	48 x 48	28	36
LFS 2-E-4	48 x 48	28	48
LFS 2-A-6	64 x 64	28	48
LFS 2-E-6	64 x 64	28	48
LFS 7-N-4-175	54 X 54	28	28
LFS 2-N-6	67 x 67	34	48
LFS 2-G-6	67 x 67	34	48
LFS 7-G-4-175	54 X 54	28	28

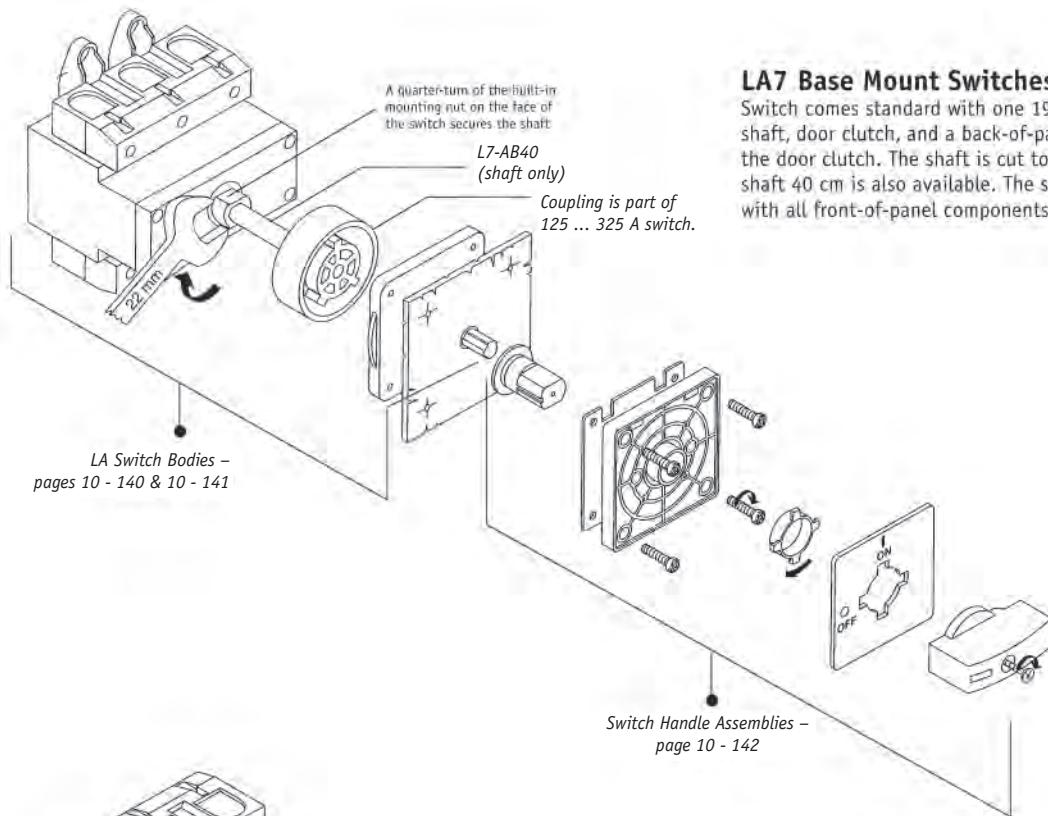
Central hole fixing Ø 22 mm (excluding L7-80/100)



L 7 load-break switches

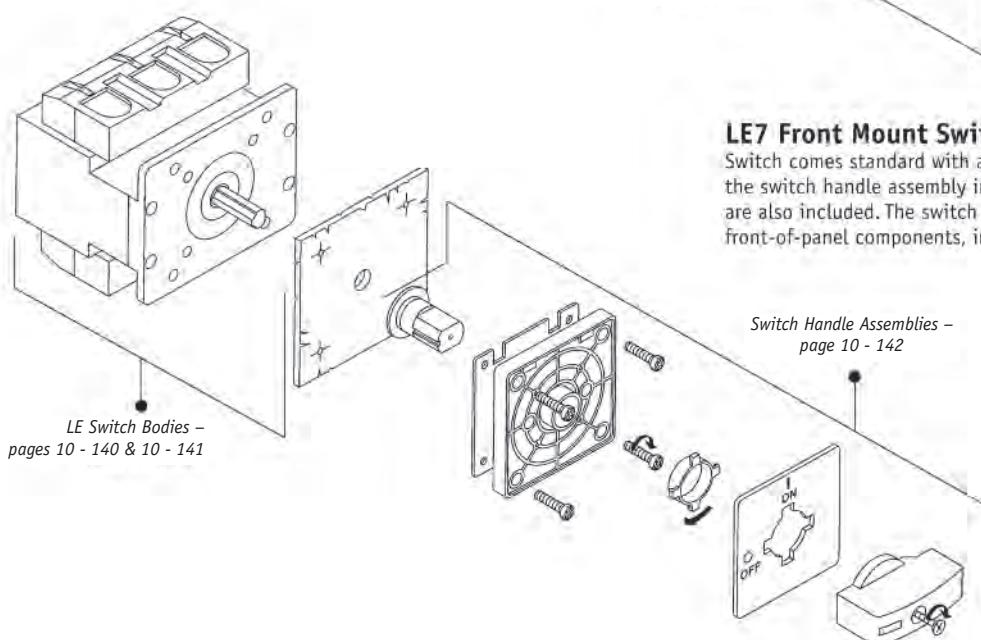
Motor disconnect switch exploded views

LA 7 - base mounted switches and LE 7 - front mounted switches



LA7 Base Mount Switches

Switch comes standard with one 195 mm aluminum shaft, door clutch, and a back-of-panel interlock for mating with the door clutch. The shaft is cut to length in the field. A longer shaft 40 cm is also available. The switch handle assembly comes with all front-of-panel components, including mounting screws.



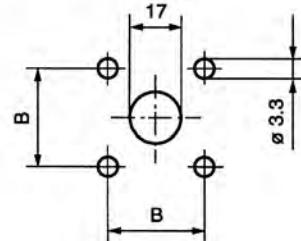
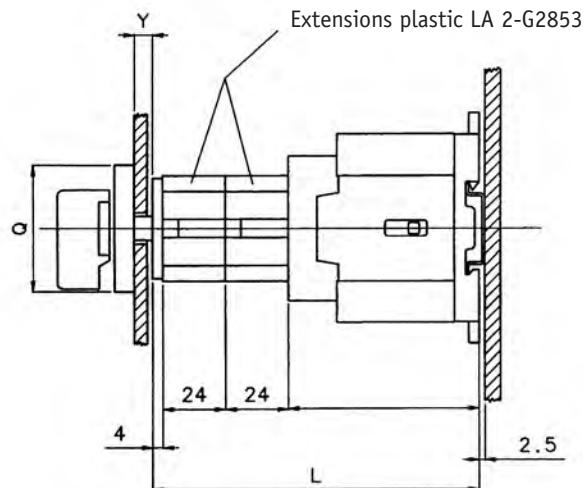
LE7 Front Mount Switches

Switch comes standard with an integral shaft which mates with the switch handle assembly in the field. Panel mounting screws are also included. The switch handle assembly comes with all front-of-panel components, including mounting screws.

L 7 load-break switches

Mounting and dimensions (mm)

LA 7 - 3 pole with plastic shaft extension LA 2-G-2853 (16 .. 100 A)

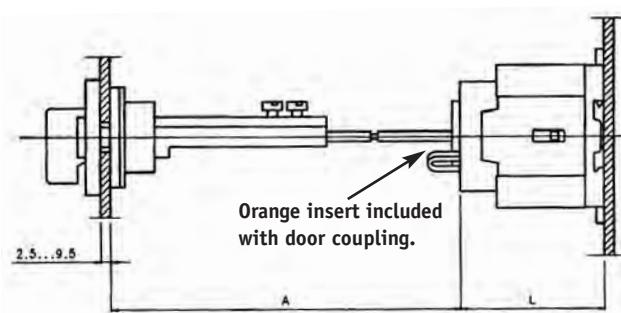


No. of extensions	LA 7-25/32	LA 7-40/63	LA 7-80/100
L with 1 extension	88	102	118
L with 2 extensions	112	126	142
L with 3 extensions	136	150	166
L with 4 extensions	160	174	190
L with 5 extensions	184	198	214
L with 6 extensions	208	222	238

Plastic shaft	Type	Y
44 mm	LA 2-G2830	2.5...9.5
52 mm	LA 2-G3194	9...18
57 mm	LA 2-G3195	14...23

Type	B	Q
LFS 2-A-4	36	48 x 48
LFS 2-A-6	48	64 x 64
LFS 2-N-6	48	67 x 67
LFS 2-G-6	48	67 x 67

LA 7 with metal handle extension shaft

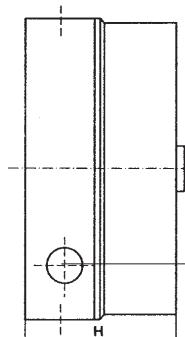
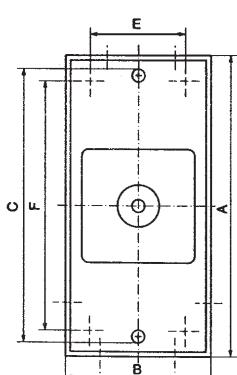


Metal shaft	Type	A
52 mm	LA 2-G3393	110...235
57 mm	LA 2-G3394	230...350

Type	L ¹⁾
LA 7-25/32	60
LA 7-40/63	74
LA 7-80/100	90

¹⁾ DIN 46 277 (35 mm)
+ 2.5 mm

LY 7 - enclosed load-break switches



Cat. No.	A	B	C	E	F	H
LY 7-25/32	3 pole	150	95	140	60	115
	6 pole	180	125	172	-	105
LY 7-40/63	3 pole	180	125	172	-	105
	6 pole	230	175	-	155	195
LY 7-80/100	3 pole	230	175	-	155	195
	6 pole	230	175	-	155	120

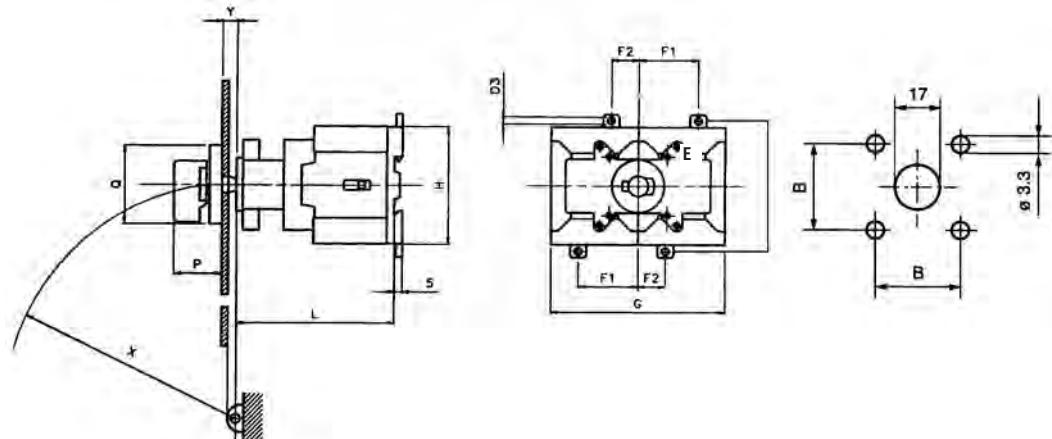
Knockout

- L7 G3664 - 37.5 mm
- L7 G3576 - 20 mm
- L7 G3666 - 47.5 mm

L 7 load-break switches

Mounting and dimensions (mm)

LA 7 - 6 pole and changeover switches

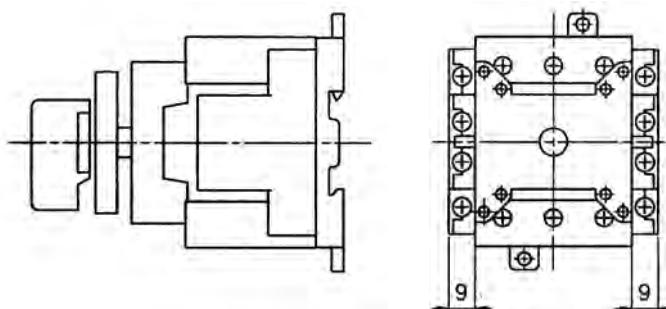


Type	D3	E	F1	F2	G	H	L
LA 7-25/32	4.5	70	30	15	90	64	84
LA 7-40/63	4.5	80	37	17	108	72	98
LA 7-80/100	5.6	95	48.5	23.5	144	90	114

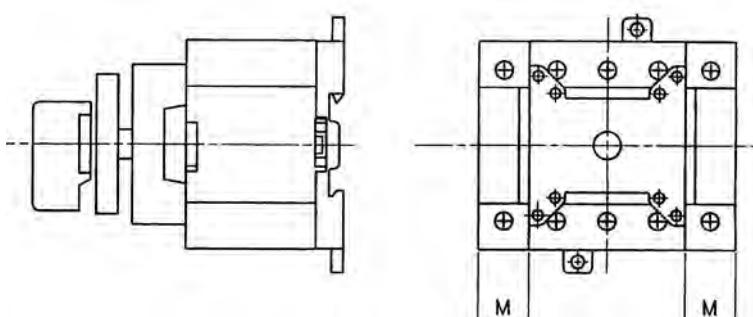
Type	P	B	Q
LFS 2-A-4	28	36	48 x 48
LFS 2-A-6	28	48	64 x 64
LFS 2-N-6	34	48	67 x 67
LFS 2-G-6	34	48	67 x 67

Type	Y min.	X ≥	Y max.	X ≥
LA 7-25/32	5	142	9.5	90
LA 7-40/63	2.5	150	9.5	90
LA 7-80/100	2.5	150	9.5	90

L 7 auxiliary switch



4th poles and terminals E and N



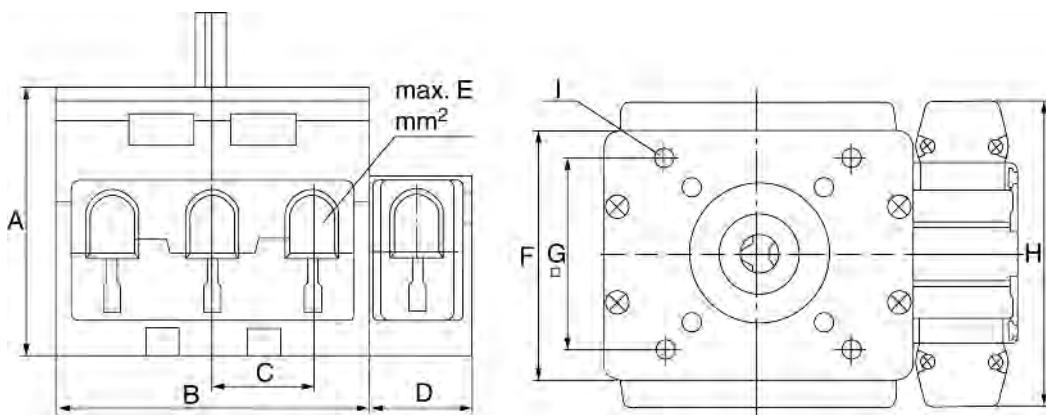
Type	M
L 7-16	12.5
L 7-20/32	14
L 7-40/63	17.5
L 7-80/100	22

10

L 7 load-break switches

Mounting and dimensions (mm)

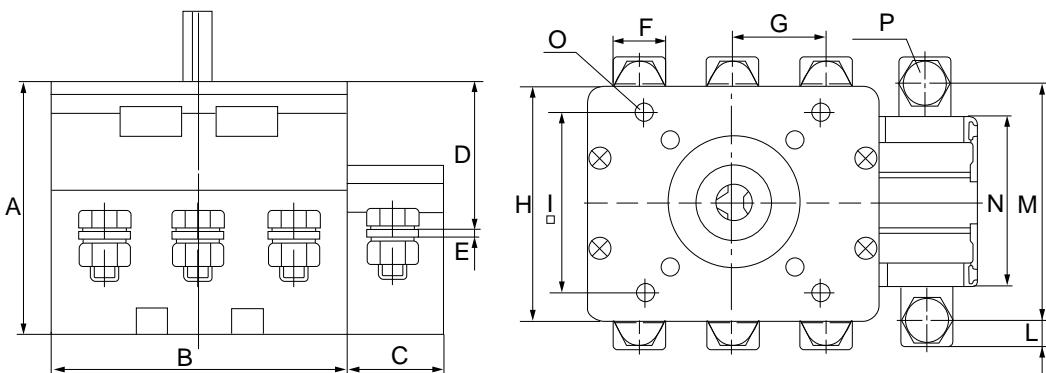
3-4 pole box terminals



Switch body L 7-E¹⁾

Size (Amps)	A	B	C	D	E	F	G	H	I
125	91	112	36	38	95	88	68	108	M5
160	91	112	36	38	95	88	68	108	M5
250	103	145	44	52.5	185	88	68	120	M5
315	103	145	44	52.5	185	88	68	120	M5

Front installation bolt terminals 3-4 pole



Switch body L 7-F¹⁾

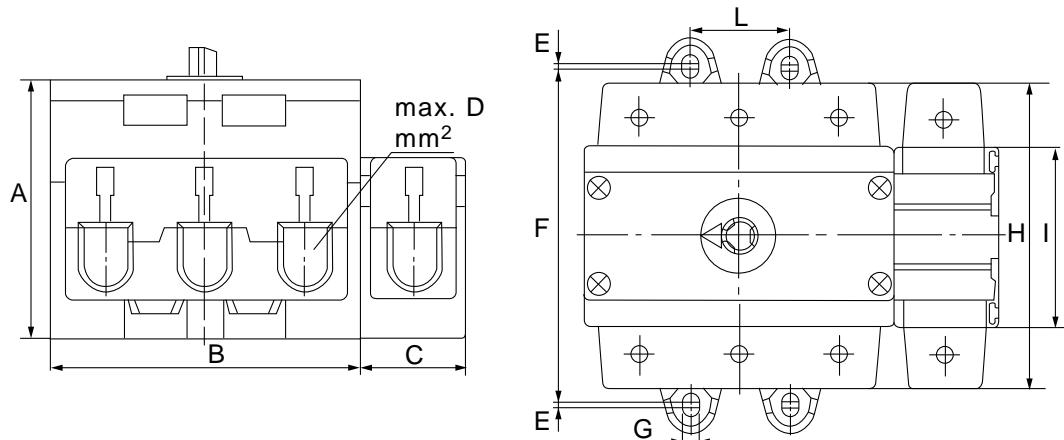
Size (Amps)	A	B	C	D	E	F	G	H	I	L	M	N	O	P
125	91	112	38	65.5	3	20	36	88	68	10	90	64	M5	M10
160	91	112	38	65.5	3	20	36	88	68	10	90	64	M5	M10
250	103	145	52.5	60.4	4	26	44	88	68	13	100	70	M5	M12
315	103	145	52.5	60.4	4	26	52	88	68	13	100 to 106	70	M5	M12

Notes: ¹⁾ Switch supplied with 195 mm aluminium shaft and coupling.

L 7 load-break switches

Mounting and dimensions (mm)

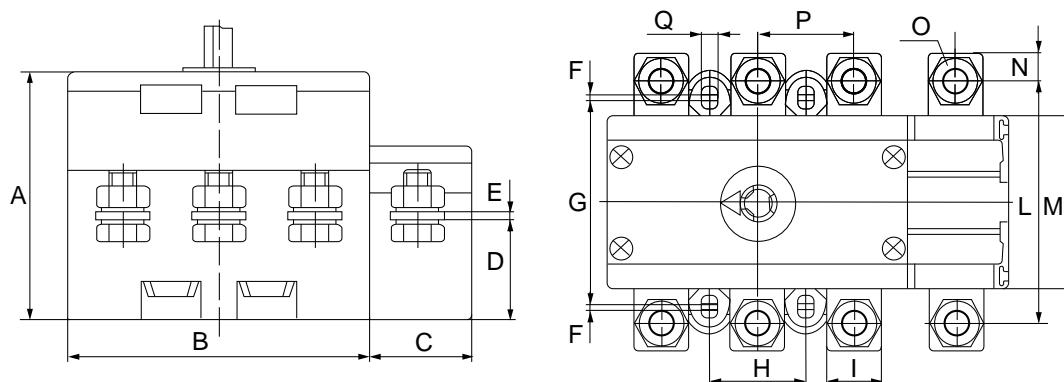
Base mounting box terminals 3-4 pole



Switch body L 7-A

Size (Amps)	A	B	C	D	E	F	G	H	I	L
125	91	112	38	95	2	118	6.4	108	64	36
160	91	112	38	95	2	118	6.4	108	64	36
250	98	145	52.5	185	2	140	6.4	126	70	44
315	98	145	52.5	185	2	140	6.4	126	70	44

Base mounting bolt terminals 3-4 pole



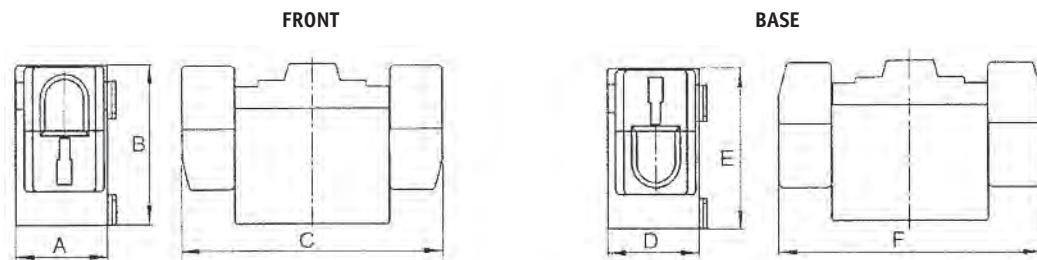
Switch body L 7-B

Size (Amps)	A	B	C	D	E	F	G	H	I	L	M	N	O	P	Q
125	91	112	38	36.5	3	2	76	36	20	90	64	10	M10	36	6.4
160	91	112	38	36.5	3	2	76	36	20	90	64	10	M10	36	6.4
250	103	145	52.5	38.6	4	2	80	44	26	100	70	13	M12	44	6.4
315	103	145	52.5	38.6	4	2	80	44	26	100 to 106	70	13	M12	52	6.4

L 7 load-break switches

Mounting and dimensions (mm)

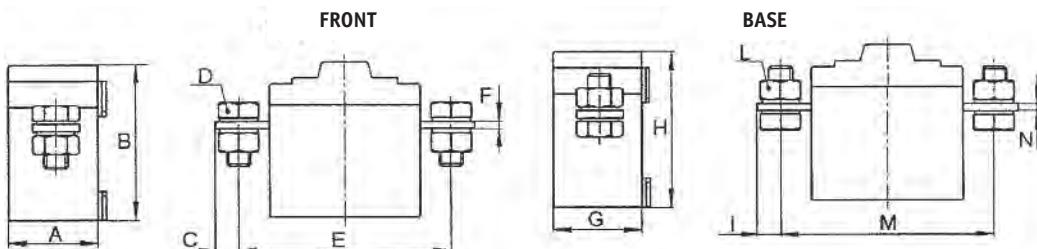
BOX earth and neutral terminal



Switch body L 7-F

Size (Amps)	A	B	C	D	E	F
125	37.8	64	108	37.8	64	108
160	37.8	64	108	37.8	64	108
250	52.3	71.1	126	52.3	80.6	126
315	53.2	71.1	126	52.3	80.6	126

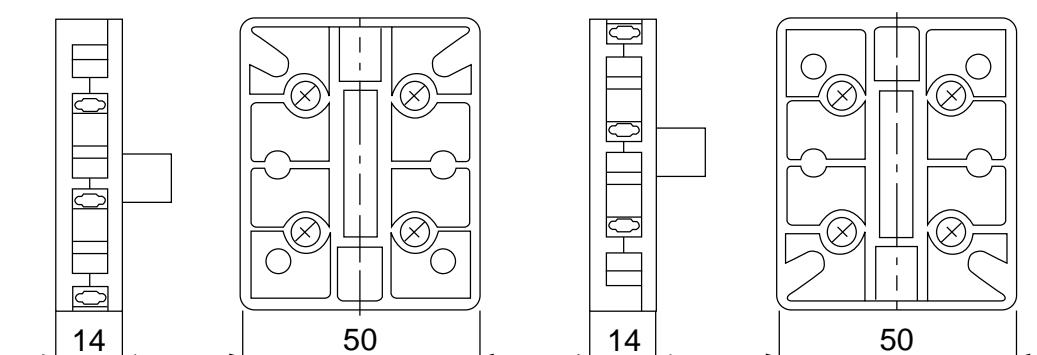
BOLT earth and neutral terminal



Switch body L 7-F

Size (Amps)	A	B	C	D	E	F	G	H	I	L	M	N
125	37.8	64	10	M10	90	3	37.8	64	10	M10	90	3
160	37.8	64	10	M10	90	3	37.8	64	10	M10	90	3
250	52.3	68	13	M12	100	4	52.3	68	13	M12	100	4
315	52.3	68	13	M12	100 to 106	4	52.3	68	13	M12	100 to 106	4

Auxiliary contacts



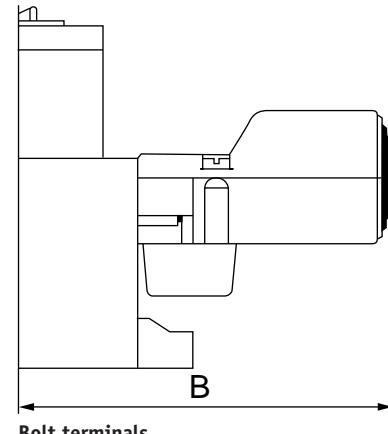
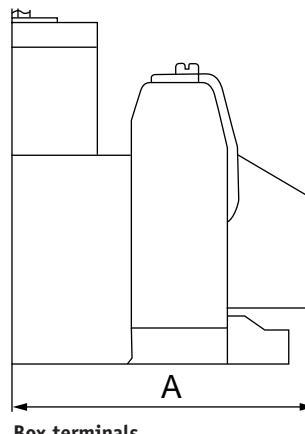
L 7 load-break switches

Mounting and dimensions (mm)

Terminal cover

Switch body L 7-F

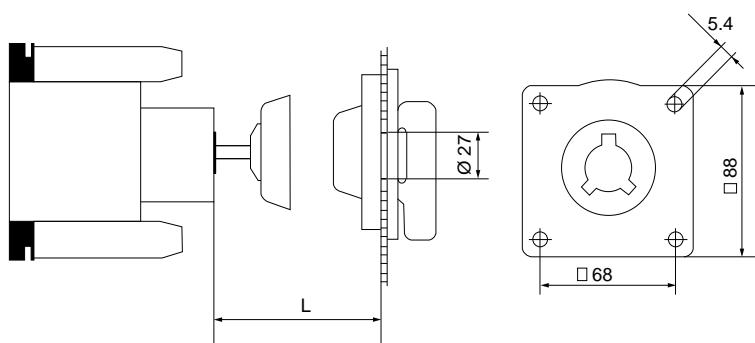
Size (Amps)	A	B
125	76.2	95
160	76.2	95
250	88	109.5
315	88	



Door clutches

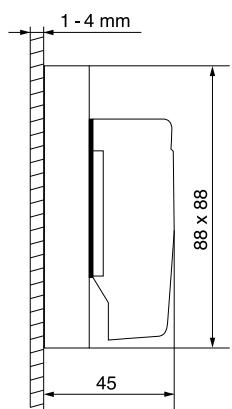
L for standard shaft

93-199

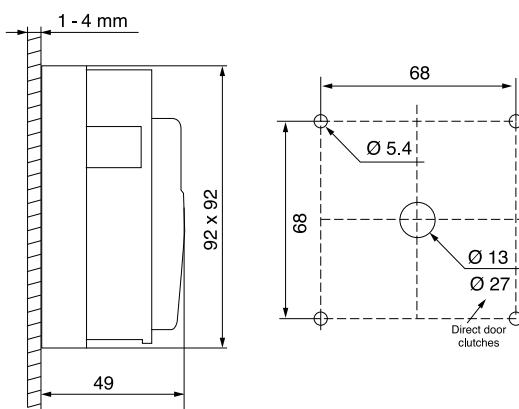


Actuator type

A8 - I8

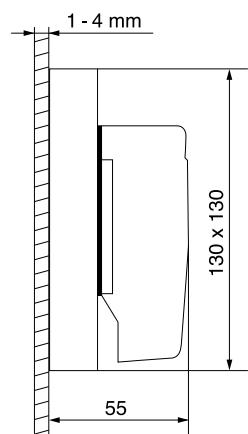


G8 N8

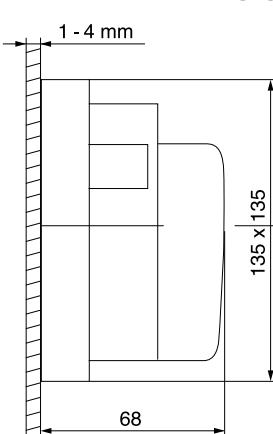


Actuator type

A13 - I13



G13 - N13





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