

Non-Fused Load Break Switches FSSC, SX, SXDC, SC

UL 98 Non-Fused Load Break Switches

Mersen disconnect switches are extremely durable, manually operated, non-fused disconnect switches. These heavy-duty switches are designed with the most up-to-date disconnect switch technology available. Designed to suit the UL98 or UL489 standard, the switch gives you a product that “makes and breaks” power circuits on load. The switches are tested and approved for use in demanding applications, such as “Service Entrance”. Up to 400A, the switches are available with visible blade contacts. A wide array of handles are available to meet OSHA padlocking requirements, NEMA configurations, defeater options and NFPA 79 requirements.

Features/Benefits

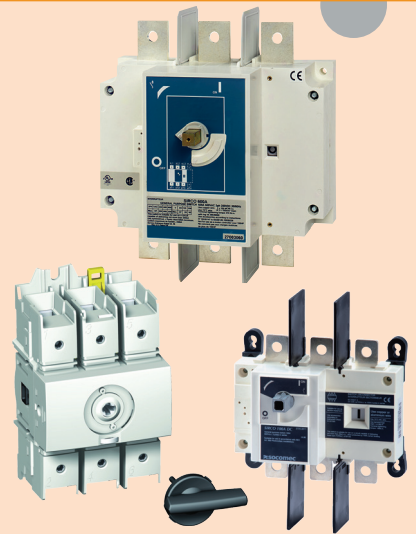
- UL 98 Service entrance rated
- Front or side operated switches
- Padlockable
- Compact
- Robust
- DIN-rail, panel or door mounting
- Lockable, defeatable external handles
- Side-mounted auxiliary contacts and additional poles available
- The SXDC switches are rated 600VDC UL and 1000VDC IEC

Highlights:

- Visible blade contacts up to 400 A
- Line side shrouding supplied with switch
- Defeatable pistol handles automatically re-latch when panel door is closed - no tool necessary to reset latch
- External or direct operation handles
- Flange operation (for use with side operated switches)
- Double-break, silver-plated contacts
- SX series has flexible terminal shields that allow for tighter wire bending

Applications:

- Service entrance or main panel disconnects up to 600VAC, 1200A
- “Make and break” power circuit applications on load
- NFPA 79 solutions
- Photovoltaic



Ratings:

- Volts** : 600VAC / DC
: UL and 1000VDC IEC
- Amps** : 30A, 60A, 100A, 200A,
400A, 600A, 800A,
1000A and 1200A
- SCCR** : Up to 200kA with fuses
Suitable as motor disconnect up
to 200hp

Approvals:

- All switches meet the requirements of UL and CSA
- UL listed guide WHTY, File E191605 for UL 98 (ratings from 30 A to 1200 A)
- CSA 22.2 # 4, class 4652-04, File 703166 (ratings from 30 A to 1200 A)
- IEC 947-3 CE mark (other IEC ratings up to 5,000A available on request, please consult us)



Non-Fused Load Break Switches SX

Front Operated Range 100A to 400A - SX

High HP Rating!

Select a switch



Select a switch

Ampere Rating	Catalog Numbers		
	100	200	400
3-Pole	SX1003	SX2003	SX4003
4-Pole	SX1004	SX2004	SX4004

S type pistol handle for external front and side operation



Select a handle

NEMA Type	IEC	Color	Catalog Numbers		
1, 3R, 12	IP54	Black	HSPBL	HSPBL	HSPBL
1, 3R, 12	IP54	Red / Yellow	HSPRL	HSPRL	HSPRL
1, 3R, 12, 4, 4X	IP65	Black	HSPB4L	HSPB4L	HSPB4L
1, 3R, 12, 4, 4X	IP65	Red / Yellow	HSPR4L	HSPR4L	HSPR4L



Select a shaft

Shaft Length (in/mm)	Catalog Numbers		
7.9 / 200	SS200-10	SS200-10	SS200-10
12.6 / 320	SS320-10	SS320-10	SS320-10
15.7 / 400	SS400-10	SS400-10	SS400-10
19.7 / 500	SS500-10*	SS500-10*	SS500-10*

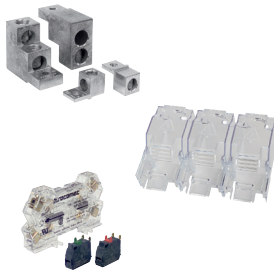
*Not UL

Pistol handle for direct front operation



	Color	Catalog Numbers		
Direct Handle for SX	Black	SXHD	SXHD	SXHD

Options for front & side operation



	Catalog Numbers		
Terminal lugs for 3-pole (set of 6)	TL200X6	TL200X6	TL400X6
Terminal lugs for 4-pole (set of 8)	TL200X8	TL200X8	TL400X8
1 Auxiliary Contact NO+NC	SXAUX	SXAUX	SXAUX
2 Auxiliary Contact NO+NC	SXAUX2	SXAUX2	SXAUX2
Top Terminal Screen 3-pole	SXTS2T3	SXTS2T3	SXTS4T3
Bottom Terminal Screen 3-pole	SXTS2B3	SXTS2B3	SXTS4B3
Top OR Bottom Terminal Screen 4-pole	SXTS2TB4	SXTS2TB4	SXTS4TB4

Please contact factory for visible blades and/or flange operation.

Note: Do not mount in a vertical position with window on top. Any other orientation is okay.

Non-Fused Load Break Switches sx

Technical Characteristics for Front and Side Operation - SX

Catalog Numbers - UL, cUL and CSA

Catalog Numbers	SX1002 / SX1003 / SX1004	SX2002 / SX2003 / SX2004	SX4002 / SX4003 / SX4004
Ampere Rating	100	200	400
Operating voltage	600	600	600
Max Horsepower Rating / Max Motor FLA Current Three-Phase			
208 V	25 / 78.5	50 / 150	100 / 286
240 V	30 / 80	79 / 192	125 / 312
480 V	75 / 96	150 / 180	250 / 302
600 V	100 / 99	200 / 192	350 / 336
DC 125 V	10 / 76 ⁽¹⁾	15 / 55 ⁽¹⁾	20 / 148 ⁽¹⁾
DC 250 V	15 / 55 ⁽²⁾	15 / 55 ⁽²⁾	50 / 173 ⁽²⁾
Short circuit rating with fuses (SCCR) kA	200	200	200
Branch circuit fuse type	J	J	J
Max fuse rating (A)	100	200	400
Dimension 3-Pole (front operated switches)			
H (in)	6.3	6.3	10.2
W (in)	7.1	7.1	9.05
D (in)	3.72	3.72	4.92
Shaft Size Square (front operated switches)			
in	0.4 x 0.4	0.4 x 0.4	0.4 x 0.4
mm	10 x 10	10 x 10	10 x 10
3-pole switch operating torque (front operation) (lb in)	88	88	130
Terminal lugs kit (# lugs per kit)	Optional (6)	Optional (6)	Optional (6)
Wire range AWG (# wire holes per lug)	300 kcmil-#6 (1)	300 kcmil-#6 (1)	250 kcmil-1/0 (2)
Wire tightening torque (lb in)	275 max	275 max	375 max

(1) 2-pole in series. (2) 3-pole in series.

Catalog Numbers - IEC 947-3

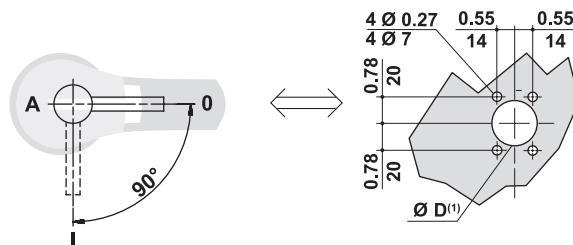
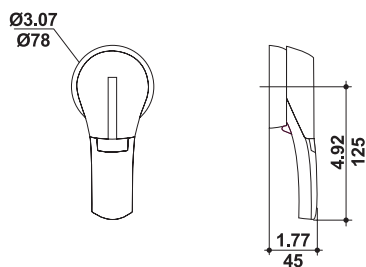
Catalog Numbers		SX1002 / SX1003 / SX1004	SX2002 / SX2003 / SX2004	SX4002 / SX4003 / SX4004
Ampere Rating	A	100	200	400
Rated Insulation voltage Ui (V)	V	1000	1000	1000
Rated impulse voltage (Uimp)	kV	12	12	12
Operation Current Ie (A)				
400 V AC	AC-22A	100	200	400
	AC-23A	100	200	400
690 V AC	AC-22A	100	200	400
	AC-23A	100	200	315
Motor Power (kW)				
400 V AC	AC-23A	51	100	220
500 V AC	AC-23A	63	140	220
690	AC-23A	90	185	295
Max.peak let through current (gG)	kA peak	17.6	32	40
Connection				
Minimum Cu cable section	mm ²	25	50	185
Minimum Cu busbar section	mm ²	-	-	-

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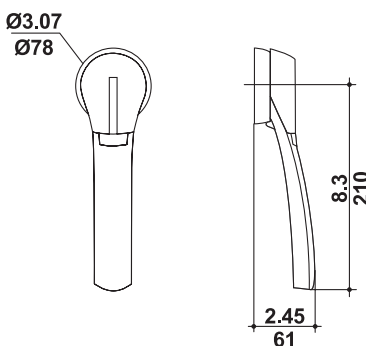
Dimensions (in/mm) for External Front Operation Handles

S type pistol handle

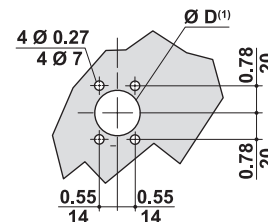
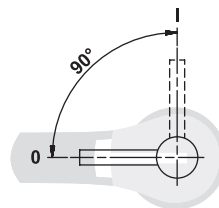
HSPBL
HSPRL
HSPB4L
HSPR4L



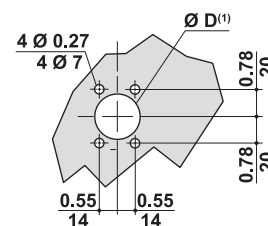
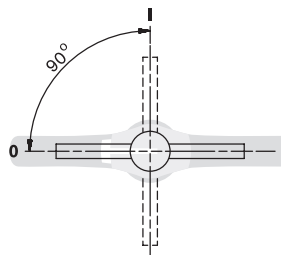
HSPBEL
HSPREL
HSPB4EL
HSPR4EL



Side operation

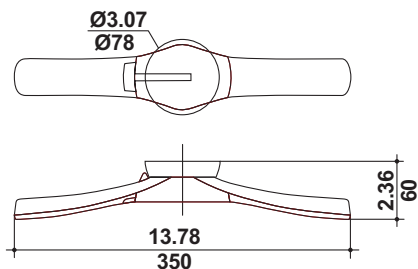


Front operation



S type pistol double handle

HSTB4
HSTR4

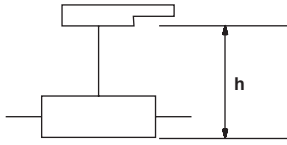


- (1) Conventional fixing (from rear): $D = 1.22$ to 1.45 in / 31 to 37 mm.
Fast fixing (external, door closed): $D = 1.45$ in / 37 mm, fast fixing is achieved with special clips that avoid drilling for fixation of the handle on the door. Clips are included.

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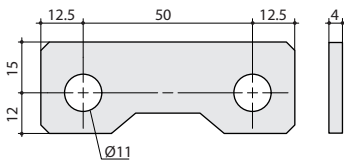
Dimensions (in/mm) from Backplate to Door Distance with Shaft Extension - FSSC, SX, SC

Minimum distance (in / mm)

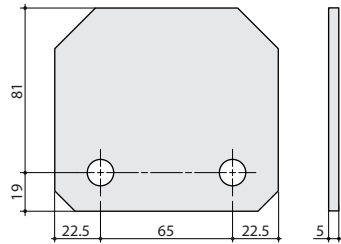


H & C Minimum Dimension	All HSP Handles	
	In	mm
FSSC	6	153
SX 100-200A	6	152
SX 400A	8	203
SC 600-1200 A	8.70	221

Jumper Bars - SXDC



100A and 200A #SX2J



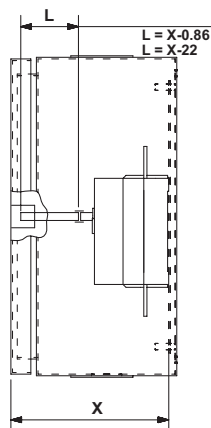
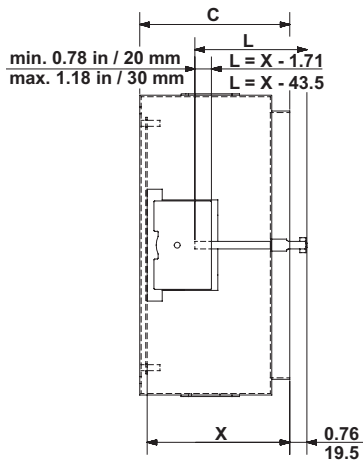
400A and 200A #SX4J

Note: Large size is for heat dissipation.

SX4003
SX4004
SXDC4003
SXDC4004

SC600
SC6004
SC800
SC8004

SC1000
SC10004
SC1200
SC12004

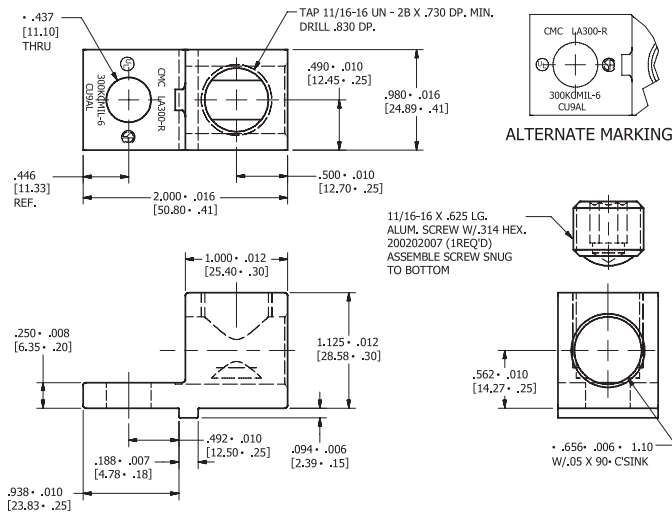


Non-Fused Load Break Switches SX, SXDC, SC

Dimensions (in/mm) for Terminal Lugs

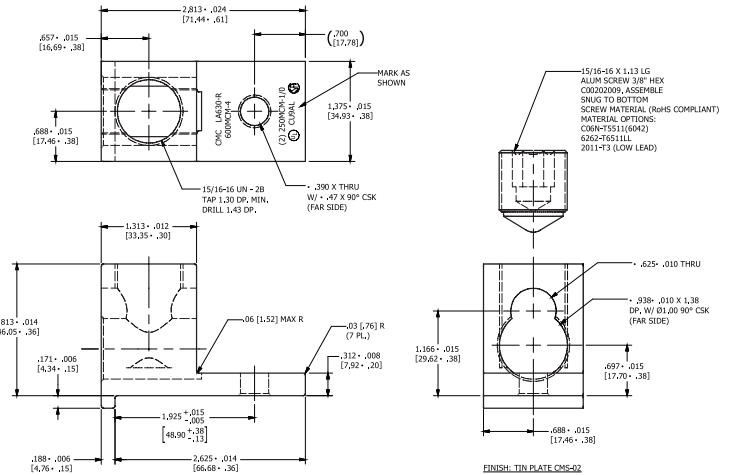
For use with SX series switches

TL200X



1 wire 300kcmil / 0 - #6

TL400X

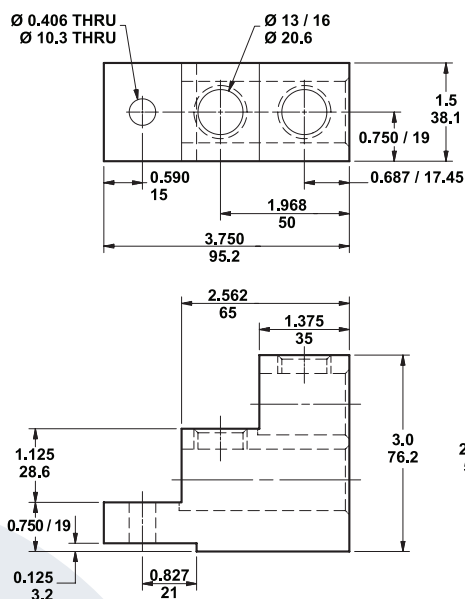


2 wire 250kcmil - 1/0

TL600 and TL1200

TL600: For use with SC 600 (1 lug per terminal)

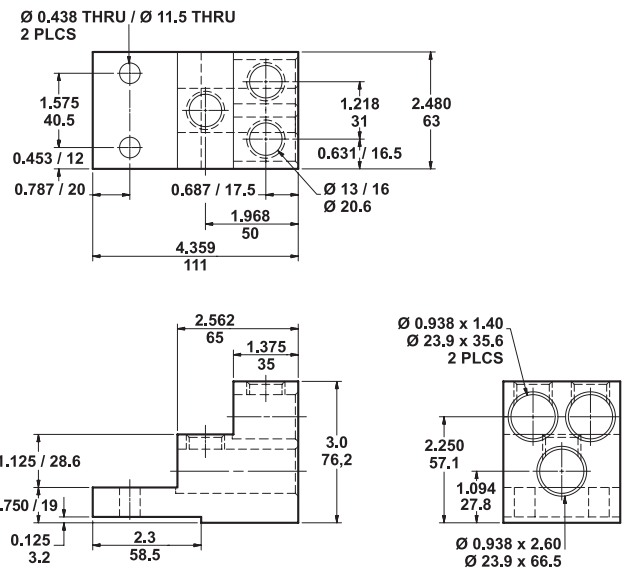
TL1200: For use with SC 800, 1000 & 1200 (2 lugs per terminal)



2 wires 600 MCM-2

TL 800

For use with SC 800



3 wires 600 MCM-2