## 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-todate 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 $5,000 \mathrm{~A}$ available on request, please consult us)


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## Non-Fused Load Break Switches FsSC

Catalog Numbers (amps) - FSSC

## Compact, UL98



## UL and CSA Characteristics

| Technical characteristics |  | 30A | 60A | 100A |
| :---: | :---: | :---: | :---: | :---: |
| Short circuit rating at 480 VAC |  | 100kA | 100kA | 100kA |
| Short circuit rating at 600 VAC |  | 100kA | 100kA | 25 kA |
| Fuse type |  | J | $J$ | $J$ |
| Max. fuse rating (A) |  | 30 | 60 | 100 |
| Max. horsepower rating / Max. motor FLA 3 ph |  |  |  |  |
| 220-240 VAC |  | 10/28 | $20 / 54$ | $20 / 54$ |
| 440-480 VAC |  | $20 / 27$ | $40 / 52$ | $50 / 65$ |
| 600 VAC |  | $25 / 27$ | $50 / 52$ | $50 / 52$ |
| Max. horsepower rating / Max. motor FLA single phase |  |  |  |  |
| 120 VAC |  | 5/56 | $5 / 56$ | 5/56 |
| 240 VAC |  | $10 / 50$ | $10 / 50$ | $10 / 50$ |
| 480 VAC |  | $25 / 55$ | $25 / 55$ | $25 / 55$ |
| Connection |  |  |  |  |
| Solid | 1 wire | \#12-\#10 | \#12-\#10 | \#12-\#10 |
| Stranded | 1 wire | \#12-2/0 | \#12-2/0 | \#12-2/0 |
| Auxiliary Contacts |  |  |  |  |
| Electrical characteristic |  | A300 | A300 | A300 |

## Non-Fused Load Break Switches fssc, sx, sxDC

Dimensions (in/mm) for Front and Side Operation
FSSC 30 to 100A


SX and SXDC 100 to 400A

|  |  | Terminal |  | Switch body |  |  |  |  |  | Switch mounting |  |  |  |  | Connection terminal |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ampere <br> Rating(A) | dimen. <br> C | AC | AD | $\begin{aligned} & \text { F } \\ & 3 p . \end{aligned}$ | $\begin{aligned} & F \\ & 4 p . \end{aligned}$ | H | $\begin{aligned} & \mathrm{J} 1 \\ & 3 \mathrm{p} . \end{aligned}$ | $\begin{aligned} & \mathrm{J} 1 \\ & \text { 4p. } \end{aligned}$ | K | $\begin{aligned} & M \\ & 3 p . \end{aligned}$ | $\begin{aligned} & M \\ & 4 p \end{aligned}$ | N | R1 | R2 | T | U | V | W | Y | Z | AA | CA |
| 100-200 | 3.72 in | 10.1 | 3.05 | 7.09 | 9.06 | 4.22 | 2.17 | 4.13 | 1.8 | 6.3 | 8.27 | 5.31 | 0.35 | 0.27 | 1.97 | 0.98 | 1.18 | 0.43 | 0.14 | 1.35 | 6.3 | 0.6 |
| 100-200 | 94.6 mm | 256 | 77.5 | 180 | 230 | 107 | 55 | 105 | 45.6 | 160 | 210 | 135 | 9 | 7 | 50 | 25 | 30 | 11 | 3.5 | 34.4 | 160 | 15 |
| 400 | 4.92 in | 16 | 4.51 | 9.05 | 11.4 | 6.53 | 2.95 | 5.31 | 2.65 | 8.26 | 10.6 | 7.6 | 0.35 | 0.27 | 2.56 | 1.77 | 1.97 | 0.43 | 0.2 | 2.08 | 10.2 | 0.8 |
| 400 | 128 mm | 406 | 115 | 230 | 290 | 166 | 75 | 135 | 67.5 | 210 | 270 | 195 | 9 | 7 | 65 | 45 | 50 | 13 | 5 | 53 | 260 | 20 |



## Non-Fused Load Break Switches Fssc, sx, sxDC, sc

Dimensions (in/mm) for External Front Operation Handles
S type pistol handle

HSPBL HSPRL HSPB4L HSPR4L


HSPBEL


Side operation


Front operation

(1) Conventional fixing (from rear): $D=1.22$ to $1.45 \mathrm{in} / 31$ to 37 mm .

Fast fixing (external, door closed): $D=1.45 \mathrm{in} / 37 \mathrm{~mm}$, fast fixing is acheived with special clips that avoid drilling for fixation of the handle on the door. Clips are included.

## Non-Fused Load Break Switches Fssc, sx, sxDC

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


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

Jumper Bars - SXDC


400A and 200A \#SX4J
Note: Large size is for heat dissipation.


