

MERSEN
Expertise, our source of energy

GLOBAL LINE
OF PREMIUM COMPACT
LOW VOLTAGE SWITCHGEAR

UL LOW VOLTAGE
DISCONNECT
SWITCHES



MERSEN'S LINE OF PREMIUM LOW VOLTAGE SWITCHGEAR



THE SAFEST WAY TO SWITCH POWER ON AND OFF IN YOUR INDUSTRIAL CONTROL PANELS

You need a range of disconnect switches for your industrial control requirements ranging from “Service Entrance Rated” to motor isolation. You need DIN-rail and direct mountable disconnect switches that conform to UL 508 and UL 98. You need a range of handles, shafts and accessories to select from.

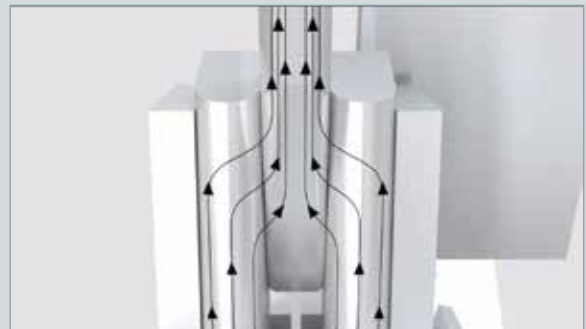
Mersen Electrical Power has the broadest range of switches in the industry, with a full line of accessories to accommodate virtually any application. Mersen disconnect switches are extremely durable and versatile. Designed to make and break power circuits on load, Mersen’s line of switches all utilize innovative knife blade technology. The self-cleaning knife blade contacts create a more reliable contact than conventional push contacts offered in competitor’s products. Contacts are pushed together under normal load and during fault conditions, whereas competing products’ contacts are pushed apart creating arcing, damage and sacrificing future reliability.

Mersen Disconnect Switches

- **Flexibility for your application:** Mounting flexibility, adjustable shaft depth, and rotating mounting feet give you options.
- **Small Footprint:** Mersen’s line of switches contain many products that are narrower than the competition, saving valuable panel space.
- **Durability:** Mersen’s core switch technology is made to withstand many operations, in load breaking, load making, and non-load applications. Metal mounting feet on UL 98 switches are difficult to damage.

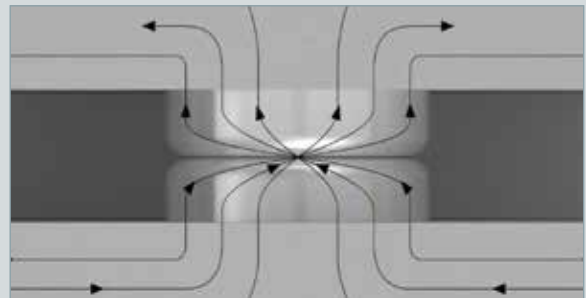
Mersen Switch Technology

Knife Contact Technology: Electrical contact is reinforced during fault



Other Technologies

Competitor’s Product: Push contacts have less surface area and magnetic forces push contacts apart, causing damage.

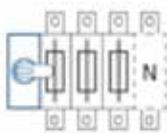


UL 98 FUSIBLE DISCONNECT SWITCHES

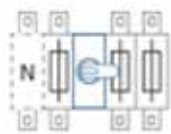


Mersen’s fusible disconnect switches are listed to UL 98 and bear the CE mark conforming to IEC 60947-3. They are “service entrance” devices capable of fully rated load-break and load-make. While long-term safety, reliability, and functionality are always paramount in the design of our products, these switches are also engineered to have the smallest footprint. The modular design allows for multiple pole/handle configurations and avoids phase-to-phase arcing. The fuse doors cannot open when the switch is in the “ON” position, and all switches are double-break, which isolates both fuse clips from voltage during fuse replacement. The switches’ “Test” position allows actuation of the auxiliary contacts without main power. Power taps enable energizing a CPT or surge device without the need for a separate terminal block. A wide range of ergonomic handles and accessories is available.

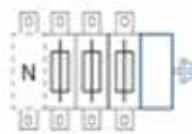
CONFIGURATIONS



Gearbox on the side



Gearbox in the middle



Side operated

CATALOG NUMBER DESIGNATION

M Switch	60 Ampacity	J Type	3 Number of Poles/Left of handle	0 Number of Poles/Right of handle	Revision	S Special Configuration
M = Mersen AC Switch	30-1200	CC = CC fused J = J fused L = L fused	1, 2, 3, 4, etc. (N = Neutral)	Blank = < 200A non-fused, 0, 2	Blank = 0	S = side-operated N = Non-fused switched Neutral F = Rod-Flange Actuated

RATINGS UL

- **Volts:** 600VAC
- **Amps:** 30, 60, 100, 200, 400, 600, 800, and 1200A
- **Short-Circuit Current Rating (SCCR):** Up to 200kA with Class CC, J, or L Fuses

FEATURES/BENEFITS

- Multiple Configurations
- Compact size
- Adjustable shaft depth
- Flexible mounting
- Double break, isolating live and load side of fuse
- Interlocked fuse doors

APPROVALS

- All UL Fusible Disconnect Switch switches meet UL & CSA requirements
- UL listed guide WHTY, File E191605 for UL 98 (ratings from 30A to 1200A)
- IEC 60947-3



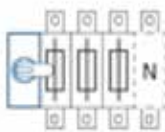
UL 98 NON-FUSIBLE DISCONNECT SWITCHES



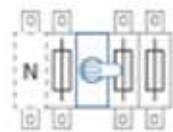
Mersen’s non-fusible disconnect switches are listed to UL 98 and bear the CE mark as conformance to IEC 60947-3. They are “service entrance” devices that are capable of fully rated load-break and load-make. All switches over 100A have windows to provide visual indication of the contact status. Engineered to have the smallest footprint, these switches also employ a modular design that enables the handle to be placed amongst the poles or at the ends.

A wide range of ergonomic handles and accessories is available to accommodate multiple applications.

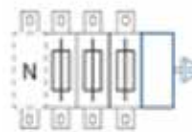
CONFIGURATIONS



Gearbox on the side



Gearbox in the middle



Side operated

CATALOG NUMBER DESIGNATION

M Switch	200 Ampacity	U Type	3 Number of Poles/Left of handle	0 Number of Poles/Right of handle	Revision	Special Configuration
M = Mersen AC Switch	16-1200	U = non-fused UL 98	1-3	Blank = < 200A non-fused, 0, 2, 3	Blank = 0	F = Flange-mount Actuation DM = Door mounted

*Not all configurations are available

RATINGS (UL)

- **Volts:** 600VAC
- **Amps:** 30A, 60A, 100A, 200A, 400A, 600A, 800A, 1200A
- **Short-Circuit Current Rating (SCCR):** Up to 200kA with fuses. Suitable as motor disconnect

FEATURES/BENEFITS

- Service entrance rated
- Front or side operation
- Most compact size
- Internally mounted auxiliary contacts
- Flange mounting accessories
- Flexible mounting
- Adjustable shaft depth

APPROVALS

- All UL switches meet the requirements of UL and CSA
- UL listed guide WHTY, File E191605 for UL 98 (ratings from 30 A to 1200 A)
- IEC 60947-3



UL 508 NON-FUSIBLE DISCONNECT SWITCHES (M163 - M803)



The M-series Load Break Switch is the most compact industrial-grade switch on the market. Capable of making or breaking loads up to 600V (UL), it is suitable as a motor disconnect. Extremely compact and robust, these switches have a variety of mounting options including DIN-rail, base, or door-mounting. A wide assortment of handles, shafts and accessories is available to accommodate any installation requirement.

RATINGS (UL)

- **Volts:** 600VAC
- **Amps:** 20, 30, 40, 63, and 80A. Suitable as motor disconnect up to 40hp.

FEATURES/BENEFITS

- Compact
- Robust
- DIN-rail, base, or door-mounting
- Choice of handles and shafts
- Padlockable
- Side-mount auxiliary contacts and additional poles
- Double-break, silver-plated contacts

APPLICATIONS

- Line of sight disconnect
- Electrical isolation
- Branch-circuit switch
- Motor disconnect

APPROVALS

- UL 508 listed E196672
- IEC 60947-3



CATALOG NUMBER DESIGNATION			
M Switch	80 Ampacity	3 Number of Poles	Special Configurations
M = Mersen AC Switch	16-80		DM: Door Mounting

PV-RATED DISCONNECT SWITCHES



Mersen offers a range of DC disconnect switches especially designed for PV applications, in one- and two-circuit configurations for both 1000V and 1500V DC applications. The technology inside the switch and the visible contacts allow a quick, safe, and reliable DC breaking at all current levels up to 1500VDC. The product is ready and simple to install independent of the polarity, with limited power losses, and a smaller footprint than competition.

CATALOG NUMBER DESIGNATION

MD Switch	100 Ampacity	E Type	1 Number of Poles/Left of handle	1 Number of Poles/Right of handle	Revision
MD = Mersen DC Switch	100-500A	E = IEC U = UL-listed V = 1500V	1, 2, 3	1, 2, 3	Blank = 0

RATINGS

- **Volts:** 1000 and 1500VDC
- **Amps:** IEC: 100 to 500A, UL98: 100 to 400A
- **Short-Circuit Current Rating (SCCR):** 5 to 10kA for higher ratings

FEATURES/BENEFITS

- EC version and UL version
- Visible contacts
- Compact footprint
- Direct installation for floating polarity configuration
- Jumper bar available for grounded configuration

APPLICATIONS

- Medium and large power photovoltaic installations up to 1500VDC
- “Make and break” on load and provide safety isolation at string combiner box level

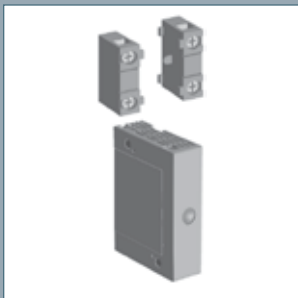
APPROVALS

- UL98B File #E466972 WHVA
- IEC 60947-3 CE



DISCONNECT SWITCH ACCESSORIES

Customize your Mersen Disconnect Switch with a wide variety of accessories, including Auxiliary Contacts, Fourth Poles, Handles, Shafts, Mechanical Interlocks, Terminal Shrouds, Lugs, and Jumpers.



Auxiliary Contacts



Fourth Poles



Handles, Shafts, Mechanical Interlocks



Terminal Shrouds, Lugs, and Jumpers

ENCLOSED DISCONNECT SWITCHES



Mersen enclosed disconnect switches are designed to meet customer's requirements for compact and durable individual disconnecting means. Both fusible and non-fusible versions are available in a variety of enclosure types resulting in one of the largest available ranges in the industry. The enclosed disconnect switch range offers safety, ease of installation, space savings and operational convenience to end-users.

Mersen features NEMA style, Type 4X non-metallic and stainless steel enclosures that are extremely durable and provide the ultimate protection for harsh environments and conditions. These rugged enclosure types are often used in areas where "wash down" applications are required.

RATINGS

Fusible

- **Volts:** 600VAC
- **Amps:** 30 to 800A

Non-Fusible

- **Volts:** 600VAC
- **Amps:** 16 to 1200A

FEATURES/BENEFITS

- Suitable for use as motor disconnect
- Meets OSHA lockout/tagout requirements
- NEMA rated enclosures
- Knockouts provided
- Easy screw mounting
- Selector or pistol handles in black or red/yellow
- Clear ON/OFF indication

APPLICATIONS

- Load break switching or circuit isolation
- Separate disconnect means within sight of all motor loads to comply with NEC® Article 430
- Food processing
- Conveyor systems
- Harsh industrial environments

APPROVALS

- UL, CSA, IEC versions available



ABOUT MERSEN ELECTRICAL PROTECTION & CONTROL

Mersen is an industry leader in electrical protection serving needs across a wide range of industrial applications. Mersen offers a comprehensive range of UL, IEC, and special purpose fuses, fuse holders, and power distribution blocks for use in industrial control panels.



UL, IEC, and Special Purpose Fuses



Fuse Holders



Power Distribution Blocks



Surge Protective Devices



MERSEN IS A GLOBAL EXPERT
IN ELECTRICAL POWER AND
ADVANCED MATERIALS

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