

# 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.

## Highlights:

- 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
- Separate disconnect means within sight of all motor loads to comply with NEC® Article 430
- Circuit isolation
- Service entrance ratings available
- Food processing
- Conveyor systems
- Harsh industrial environments



## Ratings:

### Fusible

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

### Non-Fusible

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

**Volts** : 600VDC  
**Amps** : 100 to 400A

## Approvals:

- UL 508A
- UL 508
- UL 98
- CSA
- IEC versions available



# Enclosed Disconnect Switches

## Part Numbering Guideline (example)

ED	FS	30	3	R	S	0	-
Enclosure Type	Switch Type	Amp Rating	Number of Poles	Color of handle: R = Red/yellow B = Black	Type of handle: S = Selector P = Pistol	Auxiliary contacts: See chart below	Other options

Switch Type		Part Numbers	Auxiliary Contact Suffix				
			0	1	2	3	4
FS	UL 508 Non-Fused	M163 to M803	None	1 NO	1 NC	1 NO + NC	1 NO + NO
FC or SC	UL 98 Non-Fused	M30U to M1200U	None	1 NO	1 NC	1 NO + NC	1 NO + NO
FB	UL 98 Fused	MxxC, J, L	None	1 NO	1 NC	1 NO + NC	1 NO + NO

## Other Options

Please consult factory for availability and suffix for any other options including:

- Neutral blocks (N)
- If terminal shrouds are necessary, add a "T" to the end of the part number.
- Special Request
  - Pilot Lights
  - Pushbuttons
  - 2 or 3 position selector switches

## All enclosed switches are provided with a standard integral ground lug

Box type	Switch type	Ground lug wire size
NEMA/UL	16 – 60A	(2) #4 – #14
NEMA/UL	80 – 125A	(2) 1/0 – #14
NEMA/UL	200 – 400A	(2) 600kcmil – #2
NEMA/UL	600A & above	Consult Factory

Note: EDFs 40A, 60A & 80A use grounding stud

## Enclosure Application Information

Enclosure Type	Intended Use and Description
NEMA 1	Indoor use primarily to provide a degree of protection against contact with the enclosed equipment and against a limited amount of falling dirt.
NEMA 3R	Intended for outdoor use primarily to provide a degree of protection against rain, sleet, and damage from external ice formation.
NEMA 12	Intended for indoor use primarily to provide a degree of protection against circulating dust, falling dirt, and dripping non-corrosive liquids.
NEMA 4	Intended for indoor or outdoor use primarily to provide a degree of protection against windblown dust and rain, splashing water, hose-directed water, and damage from external ice formation.
NEMA 4X	Intended for indoor or outdoor use primarily to provide a degree of protection against corrosion, wind blown dust and rain, splashing water, hose-directed water, and damage from ice formation.
IEC IP65	Total protection against dust and protected against water jets from any hosed direction.

# Enclosed Disconnect Switches

NEMA ENCLOSURE 3 Pole, 600V 30-1200A, Non-fused		1	3R	12	4	4X Stainless	4X Non-Metallic
	Ampere Rating (A)	Catalog Numbers					
UL 508	30	Special compact polycarbonate enclosures					EJM30BS0
	60	Special compact polycarbonate enclosures					EJM60BS0
	16	EAFS163RS0	EFFS163RS0	ECFS163RS0	EHFS163RS0	EBFS163RS0	EDFS163RS0
	25	EAFS253RS0	EFFS253RS0	ECFS253RS0	EHFS253RS0	EBFS253RS0	EDFS253RS0
	30	EAFS303RS0	EFFS303RS0	ECFS303RS0	EHFS303RS0	EBFS303RS0	EDFS303RS0
	40	Special hinged cover, SS				EBFS403RS0-H	
	40	EAFS403RS0	EFFS403RS0	ECFS403RS0	EHFS403RS0	EBFS403RS0	EDFS403RS0
	60	EAFS603RP0	EFFS603RP0	ECFS603RP0	EHFS603RP0	EBFS603RP0	EDFS603RP0
UL 98	80	EAFS803RP0	EFFS803RP0	ECFS803RP0	EHFS803RP0	EBFS803RP0	EGFS803RP0
	30	EAFS303RP0	EFFS303RP0	ECFS303RP0	EHFS303RP0	EBFS303RP0	EGFS303RP0
	60	EAFS603RP0	EFFS603RP0	ECFS603RP0	EHFS603RP0	EBFS603RP0	EGFS603RP0
	100 50	EAFS1003RP0	EFFS1003RP0	ECFS1003RP0	EHFS1003RP0	EBFS1003RP0	EGFS1003RP0
	200	EAFS2003RP0	EFFS2003RP0	ECFS2003RP0	EHFS2003RP0	EBFS2003RP0	EGFS2003RP0
	400	EAFS4003RP0	EFFS4003RP0	ECFS4003RP0	EHFS4003RP0	EBFS4003RP0	EGFS4003RP0
	600	EAFS6003RP0	EFFS6003RP0	ECFS6003RP0	EHFS6003RP0	EBFS6003RP0	EGFS6003RP0
	800	EAFS8003RP0	EFFS8003RP0	ECFS8003RP0	EHFS8003RP0	EBFS8003RP0	EGFS8003RP0
	1000	EAFS10003RP0	EFFS10003RP0	ECFS10003RP0	EHFS10003RP0	EBFS10003RP0	EGFS10003RP0
	1200	EAFS12003RP0	EFFS12003RP0	ECFS12003RP0	EHFS12003RP0	EBFS12003RP0	EGFS12003RP0

NEMA ENCLOSURE 3 Pole, 600V 30-800A, Fused			1	3R	12	4	4X Stainless	4X Non-Metallic
	Ampere Rating (A)	Fuse Type	Catalog Numbers					
UL 98	30, compact	CC	EAFBCC303RP0	EFFBCC303RP0	ECFBCC303RP0	EHFBCC303RP0	EBFBCC303RP0	EGFBCC303RP0
	30	J	EAFBX303RP0	EFFBX303RP0	ECFBX303RP0	EHFBX303RP0	EBFBX303RP0	EGFBX303RP0
	60	J	EAFBX603RP0	EFFBX603RP0	ECFBX603RP0	EHFBX603RP0	EBFBX603RP0	EGFBX603RP0
	100	J	EAFBX1003RP0	EFFBX1003RP0	ECFBX1003RP0	EHFBX1003RP0	EBFBX1003RP0	EGFBX1003RP0
	200	J	EAFBX2003RP0	EFFBX2003RP0	ECFBX2003RP0	EHFBX2003RP0	EBFBX2003RP0	EGFBX2003RP0
	400	J	EAFBJ4003RP0	EFFBJ4003RP0	ECFBJ4003RP0	EHFBJ4003RP0	EBFBJ4003RP0	EGFBJ4003RP0
	600	J	EAFBJ6003RP0	EFFBJ6003RP0	ECFBJ6003RP0	EHFBJ6003RP0	EBFBJ6003RP0	EGFBJ6003RP0
	800	L	EAFBL8003RP0	EFFBL8003RP0	ECFBL8003RP0	EHFBL8003RP0	EBFBL8003RP0	EGFBL8003RP0

Notes: Each of the above enclosed switches are listed having a red/yellow handle. Simply replace the "RS" or "RP" with a "BS" or "BP" to receive with a black handle. The non-metallic enclosures are comprised of "ED" polycarbonate and "EG" polyester fiberglass.

# Enclosed Disconnect Switches

Switch Rating	Enclosure Type	H height (in)	W width (in)	D depth (in)	MH mounting height (in)	MW mounting width (in)	Shipping Weight (lbs)	Figure No.
16-40A (M163-M403) UL508	1	8	8	6	5	7	10	2
	3R	8	8	6	9	3	11	1
	12	8	6	6	8.75	4	7	1
	4	5.91	5.91	4.72	5.2	3.35	7	2
	4X Stainless	5.91	5.91	4.72	5.2	3.35	7	2
	4X Non-Metallic	7	5	5	6.18	4.21	2	2
60A (M633) UL508	1	8	8	6	5	7	10	2
	3R	8	8	6	9	3	10	1
	12	8	6	6	8.75	4	7	1
	4	7.87	5.91	4.72	7.17	3.35	7	2
	4X Stainless	7.87	5.91	4.72	7.17	3.35	7	2
	4X Non-Metallic	7	5	5	6.18	4.21	4	2
80A (M803) UL508	1	10	8	6	7	7	10.6	2
	3R	10	8	6	11	3	11.1	1
	12	10	8	6	10.75	6	12.3	1
	4	9.84	7.87	5.91	9.13	5.31	9.8	2
	4X Stainless	9.84	7.87	5.91	9.13	5.31	9.8	2
	4X Non-Metallic	11.3	9.31	5.43	10.75	6	6	1
100A (M100U3) UL98	1	10	8	6	7	7	10.6	2
	3R	10	8	6	11	3	11.1	1
	12	10	8	6	10.75	6	12.3	1
	4	10	8	6	10.75	6	11.8	1
	4X Stainless	9.84	7.87	5.91	9.13	5.31	9.8	2
	4X Non-Metallic	11.31	9.31	5.43	10.75	6.02	7.6	1

## Dimensions (in / mm)

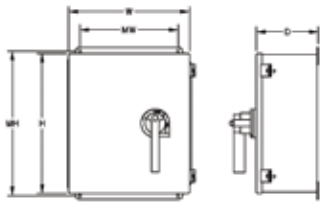


Figure 1

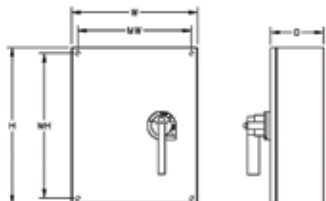
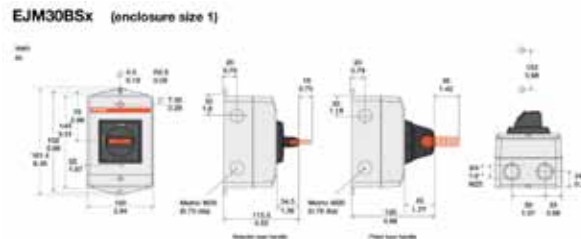
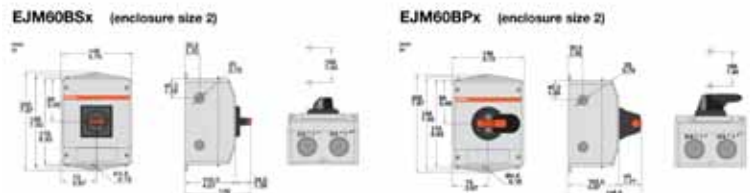


Figure 2



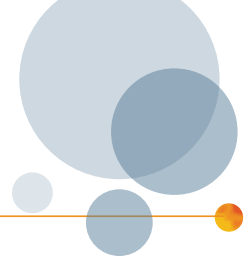
# Enclosed Disconnect Switches

Switch Rating	Enclosure Type	H height (in)	W width (in)	D depth (in)	MH mounting height (in)	MW mounting width (in)	Shipping Weight (lbs)	Figure No.
30A (M30U3) UL98	1	8	8	6	5	5	9.3	2
	3R	8	8	6	9	3	10.2	1
	12	7.87	5.91	4.72	5.2	3.35	7.6	1
	4	7.87	5.91	4.72	5.2	3.35	7.6	1
	4X Stainless	9.844	7.87	5.91	9.13	5.31	10.1	2
	4X Non-Metallic	9.3	7.31	4.96	8.74	4.01	6.2	1
60A (M60U3) UL98	1	12	12	6	9	11	16	2
	3R	12	10	6	13	3	17.6	1
	12	12	12	6	12.75	10	21.6	1
	4	12	12	6	12.75	10	21.9	1
	4X Stainless	11.81	9.84	5.91	11.1	7.28	17.4	2
	4X Non-Metallic	13.3	11.29	7.1	12.75	8.01	12.9	1
200A (M200U3) UL98	1	30	20	8.62	27.5	15	68.6	2
	3R	30	14	8	31	13	88.6	1
	12	30	20	8	28.5	18.5	70.1	2
	4	30	20	8	28.5	18.5	70.1	2
	4X Stainless	30	20	10	28.5	18.5	71	1
	4X Non-Metallic	32.87	25	11.81	34.72	22.91	59.3	1

Note: Dimensions are subject to change! Please consult factory for verification.



# Enclosed Disconnect Switches



Switch Rating	Enclosure Type	H height (in)	W width (in)	D depth (in)	MH mounting height (in)	MW mounting width (in)	Shipping Weight (lbs)	Figure No.
30A (M30CC30) UL 98	1	8	8	6	5	7	9.4	2
	3R	8	8	6	9	3	10.3	1
	12	9.84	7.87	5.91	9.13	5.31	10.8	1
	4	9.84	7.87	5.91	9.13	5.31	10.8	1
	4X Stainless	9.84	7.87	5.91	9.13	5.31	11.3	2
	4X Non-Metallic	11.31	9.31	6.93	10.75	6.02	9.7	1
30A (M30J30) UL 98	1	12	12	8	9	11	18.3	2
	3R	12	12	10	13	3	23.2	1
	12	12	10	8	12.75	8	14.4	1
	4	13.78	11.81	7.87	13.07	9.25	22.4	2
	4X Stainless	13.78	11.81	7.87	13.07	9.25	24.3	2
	4X Non-Metallic	11.31	9.31	6.93	10.75	6.02	9.7	1
60A (M60J30) UL 98	1	12	12	8	9	11	18.2	2
	3R	12	12	10	13	5	23.1	1
	12	12	10	8	12.75	8	14.6	1
	4	13.78	11.81	7.87	13.07	9.25	24.2	2
	4X Stainless	13.78	11.81	7.87	13.07	9.25	24.2	2
	4X Non-Metallic	15.32	13.3	8.19	14.75	10	17.5	1
100A (M100J30) UL 98	1	20	16	8.62	17.88	11	35.2	2
	3R	18	18	10	19	13	41.3	1
	12	20	16	8	21.24	10	35.2	1
	4	20	16	8	18.5	14.5	39	2
	4X Stainless	20	16	8	18.5	14.5	38.1	2
	4X Non-Metallic	19.31	17.31	9.58	18.74	12	25.6	1
200A (M200J30) UL 98	1	24	20	8.62	21.96	12.76	56.6	2
	3R	24	24	10	25	13	61.2	1
	12	24	20	8	25.24	14	51	1
	4	24	20	8	22.5	18.5	49.5	2
	4X Stainless	24	20	8	22.5	18.5	50.5	2
	4X Non-Metallic	28.94	21	10.63	30.79	18.97	46.3	1

Note: Dimensions are subject to change! Please consult factory for verification.