

# Enclosed

## Disconnect Switches

### 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.

#### 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

#### 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

#### APPROVALS:

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



### 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
  - Push buttons
  - 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

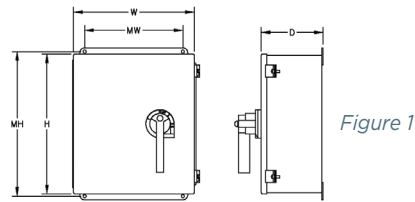
Enclosure Type		Intended Use and Description
NEMA	1	Indoor use primarily to provide a degree of protection against contact with the enclosed equipment and against a limited amount of falling dirt.
NEMA	3R	Intended for outdoor use primarily to provide a degree of protection against rain, sleet, and damage 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.

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	16	Special compact polycarbonate enclosures					EJM16BS0S	
	30	Special compact polycarbonate enclosures					EJM30BS0	
	60	Special compact polycarbonate enclosures					EJM60BS0	
	16	EAFS163RSO	EFFS163RSO	ECFS163RSO	EHFS163RSO	EBFS163RSO	EDFS163RSO	
	25	EAFS253RSO	EFFS253RSO	ECFS253RSO	EHFS253RSO	EBFS253RSO	EDFS253RSO	
	30	EAFS303RSO	EFFS303RSO	ECFS303RSO	EHFS303RSO	EBFS303RSO	EDFS303RSO	
	40	Special hinged cover, SS				EBFS403RSO-H		
	40	EAFS403RSO	EFFS403RSO	ECFS403RSO	EHFS403RSO	EBFS403RSO	EDFS403RSO	
	60	EAFS603RPO	EFFS603RPO	ECFS603RPO	EHFS603RPO	EBFS603RPO	EDFS603RPO	
UL 98	80	EAFS803RPO	EFFS803RPO	ECFS803RPO	EHFS803RPO	EBFS803RPO	EGFS803RPO	
	30	E AFC303RPO	EFFC303RPO	ECFC303RPO	EHFC303RPO	EBFC303RPO	EGFC303RPO	
	60	E AFC603RPO	EFFC603RPO	ECFC603RPO	EHFC603RPO	EBFC603RPO	EGFC603RPO	
	100 50	E AFC1003RPO	EFFC1003RPO	ECFC1003RPO	EHFC1003RPO	EBFC1003RPO	EGFC1003RPO	
	200	E AFC2003RPO	EFFC2003RPO	ECFC2003RPO	EHFC2003RPO	EBFC2003RPO	EGFC2003RPO	
	400	E AFC4003RPO	EFFC4003RPO	ECFC4003RPO	EHFC4003RPO	EBFC4003RPO	EGFC4003RPO	
	600	E ASC6003RPO	EFSC6003RPO	ECSC6003RPO	EHSC6003RPO	EBSC6003RPO	EGSC6003RPO	
	800	E ASC8003RPO	EFSC8003RPO	ECSC8003RPO	EHSC8003RPO	EBSC8003RPO	EGSC8003RPO	
	1000	E ASC10003RPO	EFSC10003RPO	ECSC10003RPO	EHSC10003RPO	EBSC10003RPO	EGSC10003RPO	
1200	E ASC12003RPO	EFSC12003RPO	ECSC12003RPO	EHSC12003RPO	EBSC12003RPO	EGSC12003RPO		
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	EAFBCC303RPO	EFFBCC303RPO	ECFBCC303RPO	EHFBCC303RPO	EBFBCC303RPO	EGFBCC303RPO
	30	J	EAFBX303RPO	EFFBX303RPO	ECFBX303RPO	EHFBX303RPO	EBFBX303RPO	EGFBX303RPO
	60	J	EAFBX603RPO	EFFBX603RPO	ECFBX603RPO	EHFBX603RPO	EBFBX603RPO	EGFBX603RPO
	100	J	EAFBX1003RPO	EFFBX1003RPO	ECFBX1003RPO	EHFBX1003RPO	EBFBX1003RPO	EGFBX1003RPO
	200	J	EAFBX2003RPO	EFFBX2003RPO	ECFBX2003RPO	EHFBX2003RPO	EBFBX2003RPO	EGFBX2003RPO
	400	J	EAFBJ4003RPO	EFFBJ4003RPO	ECFBJ4003RPO	EHFBJ4003RPO	EBFBJ4003RPO	EGFBJ4003RPO
	600	J	EAFBJ6003RPO	EFFBJ6003RPO	ECFBJ6003RPO	EHFBJ6003RPO	EBFBJ6003RPO	EGFBJ6003RPO
	800	L	EAFBL8003RPO	EFFBL8003RPO	ECFBL8003RPO	EHFBL8003RPO	EBFBL8003RPO	EGFBL8003RPO

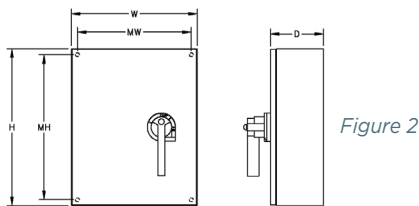
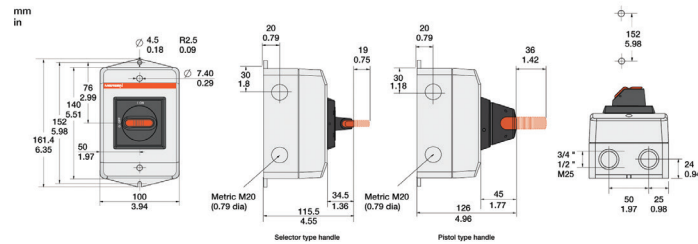
Notes: Each of the above enclosed switches are listed having a red/yellow handle. Simply replace the "RS" or "RP" with a "BS" or "BP" to receive with a black handle. The non-metallic enclosures are comprised of "ED" polycarbonate and "EG" polyester fiberglass.

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

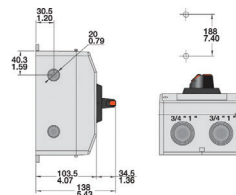
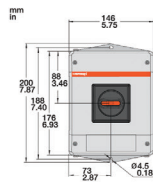
DIMENSIONS (IN / MM)



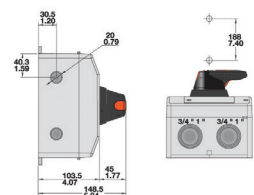
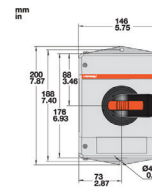
EJM16BS0S & EJM30BSx (enclosure size 1)



EJM60BSx (enclosure size 2)



EJM60BPx (enclosure size 2)



DS

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.

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 (M30CC12) 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.