

Enclosed Disconnect Switches

LOW VOLTAGE SWITCHES



Mersen enclosed disconnect switches are designed to meet customers' 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	#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
	40	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		EAFS403RS0	EFFS403RS0	ECFS403RS0	EHFS403RS0	EBFS403RS0	EDFS403RS0
	60		EAFS603RP0	EFFS603RP0	ECFS603RP0	EHFS603RP0	EBFS603RP0	EDFS603RP0
UL 98	80		EAFS803RP0	EFFS803RP0	ECFS803RP0	EHFS803RP0	EBFS803RP0	EGFS803RP0
	30		E AFC303RP0	EFFC303RP0	ECFC303RP0	EHFC303RP0	EBFC303RP0	EGFC303RP0
	60		E AFC603RP0	EFFC603RP0	ECFC603RP0	EHFC603RP0	EBFC603RP0	EGFC603RP0
	100		E AFC1003RP0	EFFC1003RP0	ECFC1003RP0	EHFC1003RP0	EBFC1003RP0	EGFC1003RP0
	200		E AFC2003RP0	EFFC2003RP0	ECFC2003RP0	EHFC2003RP0	EBFC2003RP0	EGFC2003RP0
	400		E AFC4003RP0	EFFC4003RP0	ECFC4003RP0	EHFC4003RP0	EBFC4003RP0	EGFC4003RP0
	600		E ASC6003RP0	EFSC6003RP0	ECSC6003RP0	EHSC6003RP0	EBSC6003RP0	EGSC6003RP0
	800		E ASC8003RP0	EFSC8003RP0	ECSC8003RP0	EHSC8003RP0	EBSC8003RP0	EGSC8003RP0
NEMA ENCLOSURE 3 Pole, 600V 30-800A, Fused	1000		E ASC10003RP0	EFSC10003RP0	ECSC10003RP0	EHSC10003RP0	EBSC10003RP0	EGSC10003RP0
	1200		E ASC12003RP0	EFSC12003RP0	ECSC12003RP0	EHSC12003RP0	EBSC12003RP0	EGSC12003RP0
Ampere Rating (A)			Catalog Numbers					
Fuse Type			Catalog Numbers					
UL 98	30, compact	CC	EAFBCC303RP0	EFBCC303RP0	ECFBCC303RP0	EHFBCC303RP0	EBFBCC303RP0	EGFBCC303RP0
	30	J	EAFBX303RP0	EFBX303RP0	ECFBX303RP0	EHFBX303RP0	EBFBX303RP0	EGFBX303RP0
	60	J	EAFBX603RP0	EFBX603RP0	ECFBX603RP0	EHFBX603RP0	EBFBX603RP0	EGFBX603RP0
	100	J	EAFBX1003RP0	EFBX1003RP0	ECFBX1003RP0	EHFBX1003RP0	EBFBX1003RP0	EGFBX1003RP0
	200	J	EAFBX2003RP0	EFBX2003RP0	ECFBX2003RP0	EHFBX2003RP0	EBFBX2003RP0	EGFBX2003RP0
	400	J	EAFBJ4003RP0	EFBJ4003RP0	ECFBJ4003RP0	EHFBJ4003RP0	EBFBJ4003RP0	EGFBJ4003RP0
	600	J	EAFBJ6003RP0	EFBJ6003RP0	ECFBJ6003RP0	EHFBJ6003RP0	EBFBJ6003RP0	EGFBJ6003RP0
	800	L	EAFBL8003RP0	EFBL8003RP0	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.

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	3.36	7	2
	4X Stainless	5.91	5.91	4.72	5.2	3.36	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	7.15	3.36	7	2
	4X Stainless	7.87	5.91	4.72	7.15	3.36	7	2
	4X Non-Metallic	7	5	5	6.18	4.21	4	2
80A (M803) UL508	1	10	10	6	7	9	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	11.63	9.32	6.58	10.75	6	6	1

DIMENSIONS (IN / MM)

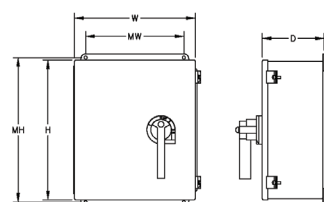


Figure 1

EJM16BSOS & EJM30BSx (enclosure size 1)

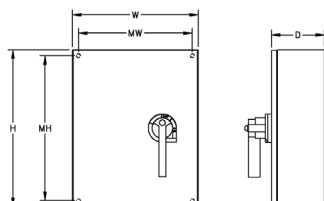
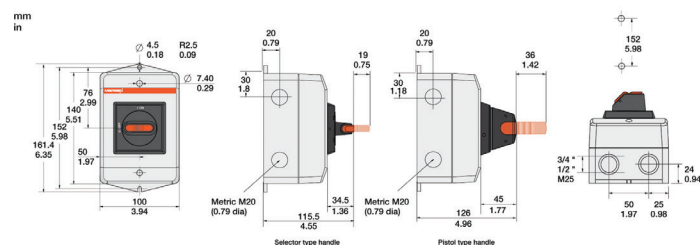
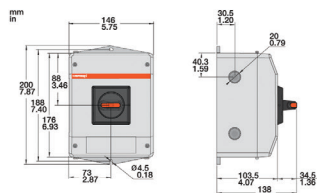
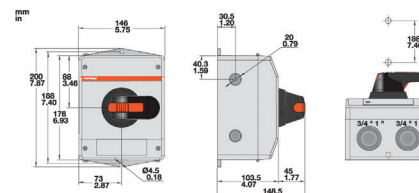


Figure 2

EJM60BSx (enclosure size 2)



EJM60BPx (enclosure size 2)



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	10	10	6	7	9	9.3	2
	3R	8	8	6	9	3	10.2	1
	12	8	6	6	8.75	4	7.6	1
	4	9.84	7.87	5.91	9.12	5.33	7.6	2
	4X Stainless	9.84	7.87	5.91	9.12	5.33	10.1	2
60A [M60U3] UL98	4X Non-Metallic	11.63	9.32	6.58	10.75	6	6.2	1
	1	10	10	6	7	9	16	2
	3R	10	8	6	11	3	17.6	1
	12	10	8	6	10.75	6	21.6	1
	4	9.84	7.87	5.91	9.12	5.33	21.9	2
100A [M100U3] UL98	4X Stainless	9.84	7.87	5.91	9.12	5.33	17.4	2
	4X Non-Metallic	11.63	9.32	6.58	10.75	6	12.9	1
	1	12	10	6	9	9	10.6	2
	3R	12	12	6	13	3	11.1	1
	12	12	12	6	12.75	10	12.3	1
200A [M200U3] UL98	4	11.81	9.84	5.91	11.08	7.3	11.8	2
	4X Stainless	12	10	6	12.75	8	9.8	1
	4X Non-Metallic	13.56	11.5	5.22	12.75	8	7.6	1
	1	24	20	8.62	21.88	15	68.6	2
	3R	24	20	8	25	13	88.6	1
400A [M400U3] UL98	12	24	20	8	25.25	14	70.1	1
	4	24	16	8	225	14.5	70.1	2
	4X Stainless	24	20	8	25.25	14	71	1
	4X Non-Metallic	24	16	9	26	15.11	59.3	1
	1	42	30	9.25	39.88	22.76	133	2
600A [M600U3] UL98	3R	42	30	12	43	27	154	1
	12	42	30	8	43.24	24	135	1
	4	42	36	10	40.5	34.5	161	2
	4X Stainless	42	30	10	43.24	24	139	1
	4X Non-metallic	40.75	32.87	11.81	38.66	31.65	67	1
800A [M800U3] UL98	1	42	30	9.25	39.88	22.76	140	2
	3R	42	30	12	43	27	161	1
	12	42	30	12	43.24	24	155	1
	4	42	36	8	43.24	30	163	1
	4X Stainless	42	36	10	40.5	34.5	163	2
1000A [M1200U3] UL98	4X Non-metallic	40.75	32.87	11.81	38.66	31.65	74	1
	1	42	30	9.25	39.88	22.76	162	2
	3R	48	36	12	29	27	227	1
	12	48	36	12	49.24	30	212	1
	4	48	36	12	49.24	30	221	1
1200A [M1200U3] UL98	4X Stainless	48	36	12	46.5	34.5	219	2
	4X Non-metallic	48.25	36.25	12	49.58	30	162	1
	1	48	36	13.25	45.88	28.76	222	2
	3R	48	36	12	29	27	227	1
	12	48	36	12	49.24	30	212	1
1200A [M1200U3] UL98	4	48	36	12	49.24	30	221	1
	4X Stainless	48	36	12	46.5	34.5	219	2
	4X Non-metallic	48.25	36.25	12	49.58	30	162	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	12	12	6	9	11	9.4	2
	3R	12	12	10	13	3	10.3	1
	12	12	10	8	12.75	8	10.8	1
	4	9.84	7.87	5.91	9.12	5.33	10.8	2
	4X Stainless	9.84	9.32	6.58	10.75	6	11.3	2
	4X Non-Metallic	11.63	9.31	6.93	10.75	6	9.7	1
30A (M30J12) UL 98	1	12	12	6	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	9.84	7.87	5.91	9.12	5.33	22.4	2
	4X Stainless	9.84	7.87	5.91	9.12	5.33	24.3	2
	4X Non-Metallic	11.63	9.3	6.93	10.75	6	9.7	1
60A (M60J30) UL 98	1	12	12	8	9	11	18.2	2
	3R	12	12	10	13	3	23.1	1
	12	12	10	8	12.75	8	14.6	1
	4	9.84	7.87	7.87	13.05	9.27	24.2	2
	4X Stainless	9.84	7.87	7.87	13.05	9.27	24.2	2
	4X Non-Metallic	13.56	11.4	6.57	12.75	8	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	21.25	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	19.6	17.6	8.8	18.87	12	25.6	1
200A (M200J30) UL 98	1	24	20	10.62	21.88	15	56.6	2
	3R	24	24	10	25	13	61.2	1
	12	24	16	8	25.25	10	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	29	20.85	10.63	30.75	19.6	46.3	1
400A (M400J30) UL 98	1	42	30	13.25	39.88	22.76	155	2
	3R	42	30	12	43	27	162	1
	12	42	30	12	43.24	24	156	1
	4	42	36	12	40.5	34.5	176	2
	4X Stainless	42	30	10	43.24	24	147	1
	4X Non-metallic	40.75	32.87	11.81	38.66	31.65	75	1
600A (M600J30) UL 98	1	42	30	13.25	39.88	22.76	172	2
	3R	42	30	12	43	27	179	1
	12	42	30	12	43.24	24	173	1
	4	42	36	12	40.5	34.5	193	2
	4X Stainless	42	30	10	43.24	24	164	1
	4X Non-metallic	40.75	32.87	11.81	38.66	31.65	92	1
800A (M800L30) UL 98	1	48	36	13.25	45.88	28.76	218	2
	3R	48	36	12	29	27	223	1
	12	48	36	12	49.24	30	208	1
	4	48	36	12	49.24	30	217	1
	4X Stainless	48	36	12	46.5	34.5	215	2
	4X Non-metallic	48.25	36.25	12	49.58	30	158	1

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