Molded Current-Limiting Fuses provide full-range fault current protection using specially designed fuse elements, rated through 23kV line to ground and 50kA interrupting current.

Construction is modular with a center replaceable fuse section and interchangeable end fittings for elbow connection or direct attachment to equipment mounted bushings. The various end fittings allow fuses to be applied throughout the system including switchgear, junctions, transformers, cable runs and taps.

Elastimold® Molded Current-Limiting Fuses are available in:

- 80 thru 180 Amp ratings for applications on 5kV systems (see Table 1)
- 6 thru 115 Amp ratings for applications on 8.7/15kV grounded Wye systems (see Table 1)
- 6 thru 100 Amp ratings for applications on 15/25kV grounded Wye systems (see Table 1)
- 6 thru 50 Amp ratings for applications on 20/35kV grounded Wye systems (see Table 1)

FEATURE	BENEFIT/DESCRIPTION
EPDM Molded Rubber Deadfront Construction	Fully sealed and submersible Light weight Insulate, shield and eliminate exposed live parts
Specially designed fuse elements with built-in low and high current interrupting capability	Full-Range fault current protection through 50kA
Current-limiting protection. Fault clearing occurs in less than one half cycle	Limits the system available fault current and dramatically reduces stresses on equipment
Modular construction with a center replaceable fuse section and interchangeable end fittings	Allow elbow connection or direct attachment to equipment mounted bushings Flexibility of installation on junctions, transformers, cable runs, taps
Compact	Suitable for padmount, subsurface or vault installations
304 stainless steel brackets and hold down straps available	Accommodate a wide variety of mounting arrangements

CERTIFIED TESTS & PERFORMANCE

Elastimold® Molded Current-Limiting Fuses have been designed and tested per applicable portions of IEEE, ANSI, NEMA and other industry standards including:

ANSI C37.40 Standard for Current-Limiting Fuse Service Conditions.

ANSI C37.41 Standard for Current-Limiting Fuse Design and Testing.

ANSI C37.47 Standard for Current-Limiting Fuse Ratings and Specifications.

ANSI/IEEE 386 Standard for Separable Connectors & Bushing Interfaces.

RATINGS

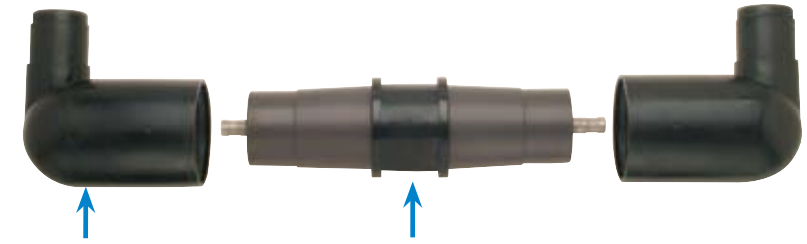
System Voltage Class (kV)	5	15	25/28*	35
Rated Maximum Fuse Voltage (kV)	5.5	10*	17.28*	23
Frequency (Hz)	50/60	50/60	50/60	50/60
BIL Impulse Withstand (kV)	60	95	125/140	150
One Minute AC Withstand (kV)	34	34	40-45	50
Fifteen Minute DC Withstand (kV)	53	53	78	103
Corona Extinction (kV)	11	11	19/21.5	26
Symmetrical Interrupting Capability (Amp)	50,000	50,000	50,000	50,000
Current Rating (Amp)	80-180	6-115	6-100	6-50

APPLICATION INFORMATION

Construction: Submersible, non-venting, deadfront, corrosion resistant.

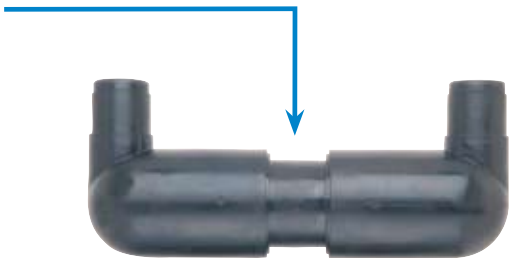
Ambient Temperature Range:– 30 to +65 degrees centigrade for 6-50 Amp fuses;
– 30 to +40 degrees centigrade for >50 Amp fuses.

* These maximum design voltages apply to fuses rated between 6-50 Amp; for fuses with higher amperage rating the maximum design voltage is 8.3 kV for 15 kV systems and 15.5 kV for 25/28 kV systems.



Interchangeable Molded Rubber End Fittings

Replaceable Molded Rubber Current-Limiting Fuse



Assembled Fuse Unit

Assembled Fuse Unit with Optional Wall Mounting Bracket

ELECTRICAL CHARACTERISTICS OF ENCAPSULATED FUSES USED IN MCLF

Fuse Voltage Rating (kV)	Current Rating (A)	Fuse Catalog Number	Rated Maximum Voltage (kV)	Maximum Continuous Current 25°C	Maximum Continuous Current 40°C	Peak Arc Voltage (kV) (3)	Minimum Melt I^2t (AMP^2-SEC)	Maximum Total I^2t (2) (AMP^2-SEC)
5.5	80	M05CLF080	5.5	86	84	15	22,100	110,000
	100	M05CLF100		108	105	15	56,700	280,000
	125	M05CLF125		137	133	15	109,200	530,000
	150	M05CLF150		159	154	15	176,000	860,000
	180	M05CLF180		185	180	15	259,000	1,270,000
8.3	10	M15CLF010	10.0	14	13	28	800	4,000
	20	M15CLF020		23	22	26	1,620	11,000
	30	M15CLF030		35	33	26	5,250	30,000
	40	M15CLF040		43	41	26	8,700	50,000
	50	M15CLF050		50	47	26	12,800	70,000
	65	M15CLF065	8.3	73	71	25	25,200	100,000
	80	M15CLF080		87	84	25	47,000	185,000
	100	M15CLF100		106	103	25	78,300	330,000
	115	M15CLF115		120	116	25	115,150	480,000
15.5	10	M25CLF010	17.2	14	13	46	800	3,700
	20	M25CLF020		23	22	45	1,620	10,000
	30	M25CLF030		35	33	45	5,250	30,000
	40	M25CLF040		43	41	45	8,700	50,000
	50	M25CLF050		47	45	45	12,800	70,000
	65	M25CLF065	15.5	68	66	40	25,200	110,000
	80	M25CLF080		88	85	40	54,400	255,000
	100	M25CLF100		100	100	40	80,000	380,000
23.0	10	M35CLF010	23.0	14	13	61	800	4,800
	20	M35CLF020		23	22	60	1,620	13,000
	30	M35CLF030		35	33	60	5,250	38,000
	40	M35CLF040		41	40	60	8,700	61,000
	50	M35CLF050		47	46	60	12,800	82,000

NOTES:
1. Designs have a 50,000 Amps rms. Symmetrical Rating.
2. Maximum total I^2t values are reduced for currents below 50,000A. For example, at 10,000A, I^2t values are approximately 15% less than the published values.
3. Peak arc voltages quoted are for 50,000A currents at the rated maximum voltage listed. Reduced currents and voltages will reduce the peak arc voltage. Consult the factory for further information.

FUSE ORDERING INFORMATION

To completely specify and order a Molded Current-Limiting Fuse:

1. Select the Fuse Catalog Number from Table 1 based on the amperage and system voltage class. This table is also used to order spare or replacement fuses.
2. From Table 2 select a suffix for the Model Number based on the required fuse end fittings. If end fittings are to be ordered and shipped separately from the fuse, use Table 4.
3. Select Mounting Options (if required) from Table 3.

EXAMPLE:

To order a fuse for application in a 25kV system (17.2 line-to-ground), rated 50 Amp with factory assembled 200 Amp Deepwell end fittings and no mounting provision, specify:

CATALOG NO. M25CLF50-22
Mounting Options (See Table 3)

TABLE 1 – FUSE CATALOG NUMBERS

Amperage Rating	5kV Catalog No.	8.7/15kV GRD-Y* Catalog No.	15/25kV GRD-Y† Catalog No.	20/35kV GRD-Y Catalog No.
10	–	M15CLF010	M25CLF010	M35CLF010
20	–	M15CLF020	M25CLF020	M35CLF020
30	–	M15CLF030	M25CLF030	M35CLF030
40	–	M15CLF040	M25CLF040	M35CLF040
50	–	M15CLF050	M25CLF050	M35CLF050
65	–	M15CLF065	M25CLF065	–
80	M05CLF080	M15CLF080	M25CLF080	–
100	M05CLF100	M15CLF100	M25CLF100	–
125/115	M05CLF125	M15CLF115	–	–
150	M05CLF150	–	–	–
180	M05CLF180	–	–	–

NOTE: Fuses rated 6, 8, 12, 18 and 25 Amps are also available by special request.
Contact Factory for additional information.
Grounded Y systems must have enough grounded load to prevent the recovery voltage from exceeding the fuse's maximum voltage.
* For 65 Amp and higher, the fuses have a rated maximum voltage of 8.3 kV
† For 65 Amp and higher, the fuses have a rated maximum voltage of 15.5 kV

TABLE 2 – FUSE END FITTING ARRANGEMENTS

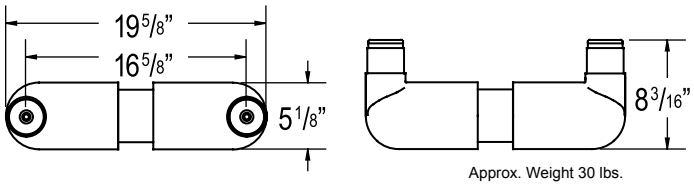
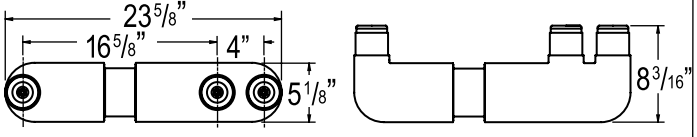
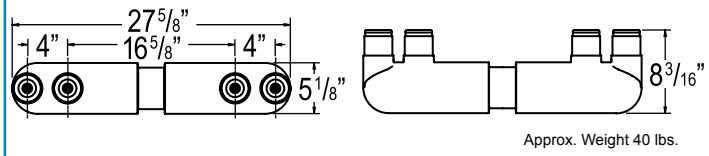
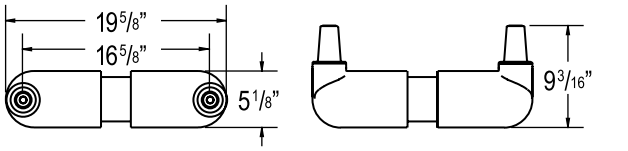
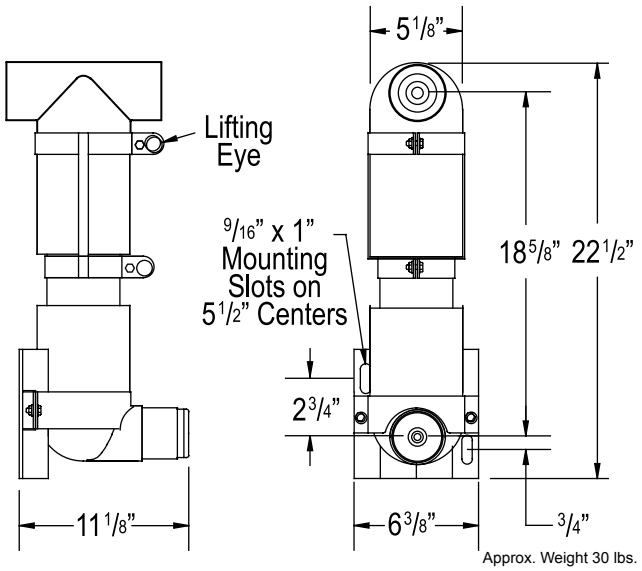
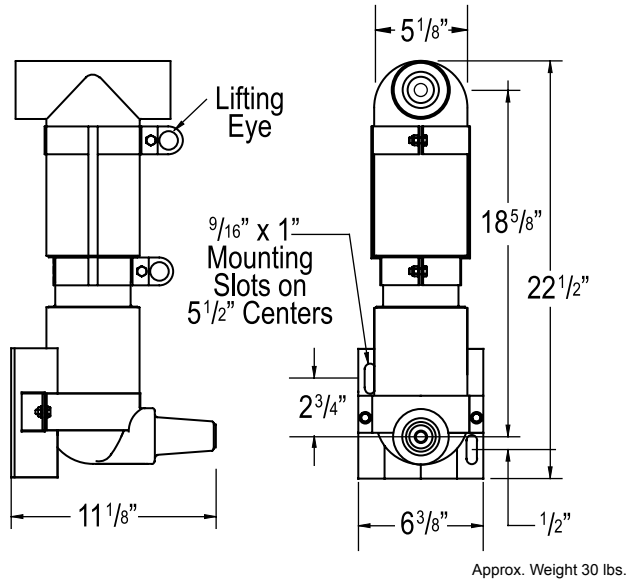
Outline	Model No.	Description
 Approx. Weight 30 lbs.	22	200 Amp Deepwell on both ends.
 Approx. Weight 35 lbs.	222	200 Amp Deepwell on one end and two 200 Amp Deepwells on the other end.

TABLE 2 – FUSE END FITTING ARRANGEMENTS (CONTINUED)

Outline	Model No.	Description
 Approx. Weight 40 lbs.	2222	Two 200 Amp Deepwell on both ends.
 Approx. Weight 30 lbs.	66	600 Amp Bushing on both ends.
 Approx. Weight 30 lbs.	6E2	600 Amp Elbow Connector on one end for attachment to equipment and a 200 Amp Deepwell on the other end. This arrangement is not available at 20/35kV
 Approx. Weight 30 lbs.	6E6	600 Amp Elbow Connector on one end for attachment to equipment and a 600 Amp bushing on the other end. This arrangements is not available at 20/35kV

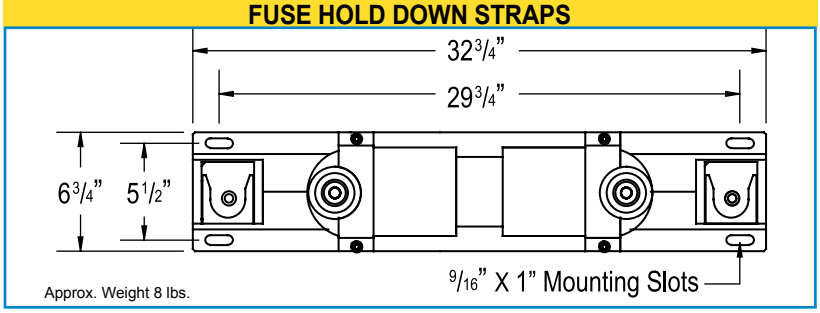
Note: Other models are available such as 26.

TABLE 3 – FUSE MOUNTING OPTIONS

Option Number	Description
HDS	Bolted Style Hold Down Strap (Qty: 1 required per end fitting)
QRS	Quick Release Style Hold Down Strap (Qty: 1 required per end fitting)
WMB	Wall Mounting Bracket with Parking Stands and Bolted Style Hold Down Straps (HDS)
WMBQ	Wall Mounting Bracket with Parking Stands and Quick Release Style Hold Down Straps (QRS)
SMB	Support Mounting Bracket for use with Models 6E2 or 6E6 endfitting arrangements. Includes Bolted Style Hold Down Strap (HDS).
TMA-EM	Tilt Mounting Adapter. Bolts to bottom of Wall Mounting Bracket WMB or WMBQ to allow up to 60° angle mounting. (Qty 2 required per installation)

NOTE: The Option number should be added as a suffix to the MCLF catalog number.

OPTIONAL MOUNTING BRACKET WITH ADJUSTABLE PARKING STANDS FOR VERTICAL MOUNTING AND FUSE HOLD DOWN STRAPS



OPTIONAL UNIVERSAL MOUNTING TILT ADAPTERS

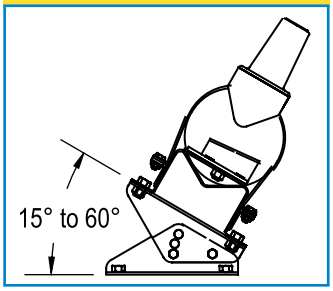


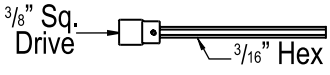
TABLE 4 – END FITTING CATALOG NUMBERS

Use this table only if end fittings are to be ordered and shipped separately from the fuse. Use Table 2 for assembled units.

Catalog Number	Description	System Voltage Class	IEEE 386-1995 Interface Reference
EF2 200	Amp Deepwell End Fitting (kV)	5,15,25 & 35	Figure 3
EF22	Double 200 Amp Deepwell End Fitting (kV)	5,15,25 & 35	Figure 3
EF6 600	Amp Bushing End Fitting(kV)	5, 15, 25 & 35	Figure 11
EF6E	600 Amp Elbow Connector End Fitting (kV)	5,15 & 25	Figure 11

NOTE: EF6E is equipped with a standard thru hole spade lug (Type 03700).

OTHER OPTIONS

Catalog Number	Description
MCLF-ADT (Assembly/Disassembly Tool) 	Hex Wrench for set screw removal and replacement when disassembling end fittings. Supplied as standard with replacement fuses.