Fused loadbreak elbows

The fastest, most cost-effective way to improve a distribution system's reliability.

- Combined full-range current-limiting fusing 15/25 kV hotstick-operable, loadbreak elbow switching quickly improves the distribution system's reliability without the expense of adding a separate piece of switchgear or replacing existing sectionalizing cabinets
- Current-limiting fuses improve the fault close rating of the elbow (10 kA) to that of the fuse, thereby reducing the risk of component damage or personnel injury
- Neon voltage indicators (V2) attached to elbow test points to provide quick and convenient blown-fuse indication
- EPDM molded rubber deadfront construction enables elbows to be fully sealed and submersible, and they insulate, shield and eliminate exposed live parts
- Two-piece housing enables easy fuse replacement

Replace existing 200 A tap elbows with Elastimold fused elbows to protect light-duty underground distribution systems, including sub-loops, radial taps, junctions, transformers and other equipment.

Elastimold fused elbows provide full-range currentlimiting fusing with 50 kA interrupting capability. They are rated for 5 kV ungrounded to 28 kV grounded Wye. Plus they provide 15/25 kV hotstick-operable, loadbreak elbow switching.



Fused loadbreak elbows

Ratings

System voltage class (kV)	15	25*	25/28*
Nominal fuse voltage (kV)	8.3	15.5	17.2
Rated maximum fuse voltage (kV)	8.8/10	15.5	17.2
Frequency (Hz)	50/60	50/60	50/60
BIL impulse withstand (kV)	95	125	140
One-minute AC withstand (kV)	34	40	45
Fifteen-minute DC withstand (kV)	53	78	78
Corona extinction (kV)	11	19	21.5
Symmetrical interrupting capability (A)	50,000	50,000	50,000
Current rating (A)	3-80	6–20	3-45

Application information

Construction:	Submersible, non-venting, deadfront,
	corrosion resistant
Ambient temperature range:	-30 °C to 65 °C

* The 15.5 kV L-G rated fuse requires 75% grounded load to be applied on a 25 kV system. The 17.2 kV L-G rated fuse requires at least 75% grounded load to be applied on a 28 kV system.

Note: Fuses are only suitable for the system voltage class shown if the recovery voltage across the fuse will not exceed its rated maximum voltage. For three-phase applications, this generally requires that protected transformers be gndY-gndY and have at least 50% grounded load. Fuse replacement requires the elbow to be de-energized.

For applications with Delta connections or less than 50% grounded load, the fuse maximum voltage must be greater than system line to line voltage, which may require using the next larger system class housing and fuse.



Certified tests

Elastimold fused elbows have been designed and tested per applicable portions of IEEE, ANSI 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

IEEE 386 Standard for separable connectors

Fused loadbreak elbows

Electrical characteristics of Elastimold EFX-E elbow fuses

System voltage	Nominal fuse voltage	Current rating	Fuse cat. no.	Rated maximum _		uous cur (N2) (N	N6) (N7)	Peak arc voltage	Minimum melt I²t	Maximum total I²t (amp²-sec)	Fuse
class (kV)	rating (kV)	(amps)	(N1)	voltage (kV)	25 °C	40 °C	65 °C	(kV) (N5)	(amp²-sec)	(N3) (N4)	housing
15	8.3	3	EFX083003-E	10.0	4.3	4.2	3.9	30	100	350	168FLR1
		6	EFX083006-E	_	9.5	9.0	8.5	32	620	2,700	
		8	EFX083008-E	_	11.5	11.0	10.5	28	800	4,000	
		10	EFX083010-E	_	14.0	13.5	13.0	28	800	4,000	
	_	12	EFX083012-E	_	19.0	18.5	17.5	26	920	8,000	
	_	18	EFX083018-E	_	21.0	20.0	19.0	26	1,310	9,500	
		20	EFX083020-E	_	26.0	25.0	24.0	26	1,620	11,000	
		25	EFX083025-E	_	34.0	33.0	31.0	26	3,660	22,000	
		30	EFX083030-E	_	37.5	36.5	34.5	26	5,250	30,000	
		40	EFX083040-E	_	43.0	42.0	40.0	26	8,700	50,000	
		45	EFX083045-E		49.0	47.0	45.0	26	12,800	70,000	
		65	EFX083065-E	8.8	70.0	68.0	64.5	23	34,000	200,000	168FLR3
		80	EFX083080-E		80.0	77.5	73.5	22	51,200	280,000	
25	15.5	6	EFX155006-E	15.5	8.5	8.0	7.7	52	620	3,000	274FLR1
		8	EFX155008-E		10.5	10.0	9.5	40	800	4,300	
		10	EFX155010-E		13.0	12.5	12.0	40	800	4,300	
		12	EFX155012-E		16.0	15.5	15.0	38	920	8,000	
		18	EFX155018-E		20.0	19.5	18.5	38	1,620	13,000	
		20	EFX155020-E		23.5	22.5	21.5	38	2,200	16,500	
25/28	17.2	3	EFX172003-E	17.2	4.3	4.2	3.9	51	100	510	274FLR3
		6	EFX172006-E		9.5	9.0	8.5	54	620	3,250	
		8	EFX172008-E		11.5	11.0	10.5	46	800	4,600	
		10	EFX172010-E		14.0	13.5	13.0	46	800	4,600	
		12	EFX172012-E		18.0	17.5	16.5	43	920	8,500	
	_	18	EFX172018-E	_	20.0	19.5	18.5	45	1,310	10,000	
		20	EFX172020-E	_	24.0	23.0	22.0	45	1,620	12,500	
		25	EFX172025-E	_	31.5	30.5	29.0	45	3,660	27,500	
		30	EFX172030-E	_	35.5	34.5	32.5	45	5,250	37,500	
		40	EFX172040-E	_	41.0	40.0	38.0	45	8,700	62,500	
		45	EFX172045-E	_	46.0	45.0	42.5	45	12,800	87,500	

Notes

N1. Ratings have maximum interrupting capability of 50 kA, except 17.2 kV 3 A (EFX172003-E) which tested at 44 kA.

N2. Fuses have a rated maximum application temperature (RMAT) of 65 °C. RMAT is the maximum temperature of the air, in contact with the elbow housing, at which fuses have been shown to be suitable for use.

 $N3.\ Tabulated\ maximum\ total\ l^2t\ values\ are\ for\ currents\ of\ 50,000\ A\ at\ the\ nominal\ voltage\ of\ the\ fuse.\ Values\ for\ 8.3\ kV\ fuses\ at\ 10\ kV\ are\ approximately\ 30\%\ higher.$

Values for 17.2 kV fuses at 15.5 kV are approximately 20% lower.

 $N4.\ Maximum\ total\ l^2t\ values\ are\ reduced\ for\ currents\ below\ 50,000\ A.\ For\ example,\ at\ 10,000\ A,\ maximum\ total\ l^2t\ values\ are\ approximately\ 15\%\ less\ than\ the\ published\ values.$

N5. Peak arc voltages listed are for 50,000 A currents at the rated maximum voltage listed. Reduced currents and voltages will reduce the peak arc voltage.

Consult the factory for further information.

 $N6. \ Maximum \ continuous \ currents \ at \ ambient \ temperatures \ other \ than \ those \ listed \ may \ be \ determined \ by \ derating \ the \ fuses \ by \ .2\% \ per \ degree \ C \ over \ 25 \ ^{\circ}C.$

For example: At 40 °C the derating would be $15 \times .2 = 3\%$, making the maximum continuous current of a 17.2 kV, 25 A fuse $31.5 \times .97 = 30.5$ A.

N7. Time-current characteristic curves are published at 25 °C. Reduction in the long time melting current of the fuses (approximately one hour and longer) due to higher ambient temperatures is the same as described above for "Maximum continuous currents."

Fused loadbreak elbows

Recommended Elastimold EFX-E elbow fuse at 40 °C ambient temperature (single-phase transformer)

Recommended fus	e current ra	tings (aı	mps)													
Fuse voltage										8.3 kV				15.5	kV (17	.2 kV)
									Tr	ansforme	r 1-phase	e voltage	rating (kV) phas	e-to-gı	round
1-phase transformer		2.4		4.16		4.8		7.2		7.62		12		14.4		16
kVA	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В
10	=	6	_	6ª	-	3	_	3	-	3	_	6ª	_	6ª	-	(3ª)
15	-	10	_	6	-	6ª	_	3	-	3	-	6ª	_	6ª	_	(3ª)
25	12	20	_	8	-	8	_	6	-	6	_	6ª	_	6ª	_	(3)
37.5	20	25	_	12	-	12	_	8	-	6	_	6	_	6ª	_	(6ª)
50	25	40	18	20	12	20	10	12	-	10	-	6	-	6	-	(6ª)
75	45	65	20	30	20	25	12	20	12	18	-	10	_	8	_	(8)
100	65	80	30	45	25	40	18	25	18	25	12	18	10	12	_	(10)
167	_	_	65	80	45	65	25	45	25	45	18	(25)	18	20	(12)	(20)
250	_	_	80	_	80	_	45	65	45	65	(25)	(45)	20	(30)	(20)	(30)
333	_	_	-	_	-	_	65	_	80	_	(40)	_	(30)	(45)	(25)	(45)
500	-	-	-	-	-	_	_	-	_	_	_	_	(45)	_	(45)	_

Recommended Elastimold EFX-E elbow fuse at 40 °C ambient temperature (3-phase GNDY-GNDY transformers)

Recommended fuse	current	ratings	s (amps	s)														
Fuse voltage													ε	3.3 kV		1:	5.5 kV (1	7.2 kV)
											Tran	nsform	er 3-ph	ase volt	age ratin	ıg (kV),	phase to	phase
3-phase == GNDY-GNDY		2.4		4.16		4.8	7.2	-7.96		8.32		12.47	13.2	-14.4		20.8	22.	9-24.9
transformer kVA	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В
15	-	6	-	3	-	3	-	3ª	-	3ª	_	6ª	_	6ª	_	6ª	_	(3ª)
22.5	_	8	_	6ª	-	6ª	-	3	_	3	_	6ª	-	6ª	_	6ª	_	(3ª)
30	10	12	_	6	-	6	-	6ª	_	3	_	6ª	-	6ª	_	6ª	_	(3ª)
45	12	20	-	10	-	8	-	6	-	6ª	-	6ª	-	6ª	_	6ª	_	(3ª)
75	20	30	12	20	-	12	-	8	-	8	-	6	-	6	_	6ª	-	(3)
100	30	45	18	25	18	20	-	12	-	10	-	8	-	8	_	6ª	_	(6ª)
112.5	40	65	20	25	18	25	-	12	_	12	_	8	-	8	_	6	_	(6ª)
150	45	80	25	40	20	30	18	20	12	20	10	12	10	12	_	6	_	(6)
200	65	80	40	65	30	45	20	25	18	25	12	18	12	18	8	10	_	(8)
225	80	-	45	65	40	65	20	30	20	25	12	20	12	18	8	10	_	(10)
300	-	-	65	80	45	80	30	45	25	40	18	25	18	25	12	18	_	(12)
500	-	-	-	-	80	-	65	80	45	80	30	45	30	45	18	(25)	(18)	(25)
750	-	-	-	-	-	-	80	-	80	-	45	65	45	-	(25)	(45)	(25)	(40)
1,000	_	_	_	_	-	_	-	_	_	_	80	-	_	_	(40)	_	(40)	_

Notes

1.Column A = 140-200% of transformer rating and Column B = 200-300% of transformer rating.

2. Ratings in parentheses are 17.2 kV fuses.

3.8.3 kV, 3-45 A fuses and 15.5 kV, 6-20 A fuses are used in the small (size 1) elbow housing; 8.3 kV, 65-80 A fuses and 17.2 kV, 3-45 A fuses are used in the large (size 3) elbow fuse housing.

4. Recommended fuses meet inrush criteria of 12 times transformer full-load current for .1 second and 25 times transformer full-load current for .01 second. Fuses also meet cold-load pickup criteria of 6 times transformer full-load current for 1 second and 3 times transformer full-load current for 10 seconds.

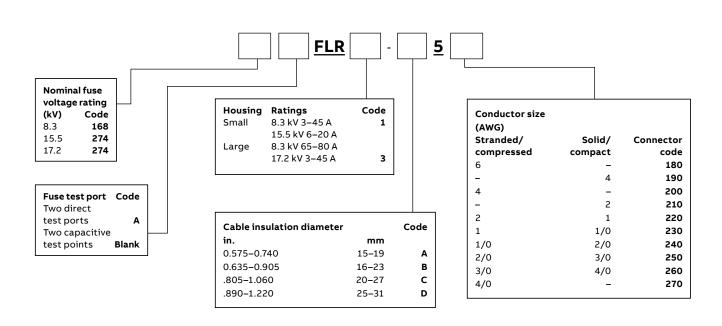
A. Fuse allows greater than 300% of transformer rating.

For applications with Delta connections or less than 50% grounded load, the fuse maximum voltage must be greater than system line to line voltage, which may require using the next larger system class housing and fuse.

Fuse housings

The following diagram shows how to construct a catalog number for fuse housings.

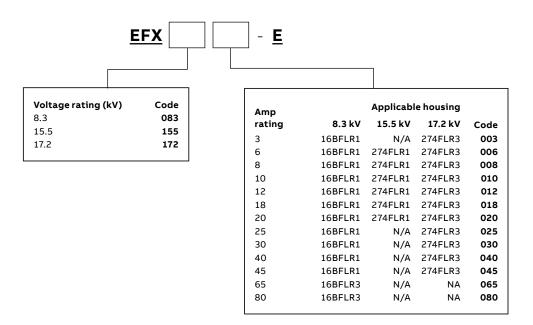
Indicates field that must be filled in to complete order.

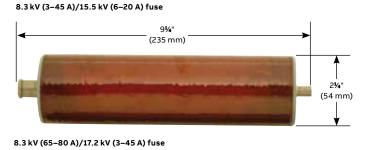


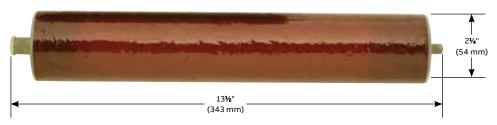


Full-range current-limiting fuses

The following diagram shows how to construct a catalog number for full-range current-limiting fuses.







Note: All dimensions rounded up to the nearest eighth inch.

Molded current-limiting fuses (MCLF)

You're covered. These fuses provide full-range protection through 50 kA interrupting current.

Molded current-limiting fuses

Molded current-limiting fuses feature modular construction with a center replaceable fuse section and interchangeable end fittings for elbow connection or direct attachment to equipment-mounted bushings. The various end fittings enable fuses to be applied throughout the system, including switchgear, junctions, transformers, cable runs and taps.

- EPDM molded rubber deadfront construction insulates, shields and eliminates exposed live parts
- Lightweight fuses are fully sealed and submersible
- Specially designed fuse elements with built-in low- and high-current interrupting capability provide full-range fault current protection through 50 kA
- Current-limiting protection limits the system available fault current and dramatically reduces stresses on equipment

- Internal fuse shield prevents corona and deterioration of the fuse element
- Modular construction with a center replaceable fuse section and interchangeable end fittings enables elbow connection or direct attachment to equipment-mounted bushings on junctions, transformers, cable runs and 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

Elastimold molded current-limiting fuses are available in:

- 80 A through 180 A ratings for applications on 5 kV systems
- 6 A through 115 A ratings for applications on 15 kV grounded Wye systems
- 6 A through 100 A ratings for applications on 25 kV grounded Wye systems
- 6 A through 50 A ratings for applications on 35 kV grounded Wye systems



Molded current-limiting fuses (MCLF)

Ratings

System voltage class (kV)	5	15	25/28*	35
Rated maximum fuse voltage (kV)	5.5	8.3/10**	15.5/17.2**	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	10-115	10-100	10-50

Application information

Construction:	deadfront, corrosion resistant
Ambient temperature range:	-30 °C to 65 °C for 6–50 A fuses;
	-30 °C to 40 °C for > 50 A fuses.

 $^{^{\}star}\,15.5\,\text{kV}\,\text{L-G}$ rated fuses require 75% grounded load to be applied

Notes: Fuse replacement requires the MCLF to be de-energized. Fuses are only suitable for the system voltage class shown if the recovery $% \left(x\right) =\left(x\right) +\left(x\right)$ voltage across the fuse will not exceed its rated maximum voltage. For $three-phase \ applications, this \ generally \ requires \ that \ protected$ transformers be GNDY-GNDY and have at least 50% grounded load.

For applications with Delta connections or less than 50% grounded load, the fuse maximum voltage must be greater than system line to line voltage, which may require using the next larger system class housing



Assembled fuse unit with optional wall-mounting bracket

Certified tests

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 and bushing interfaces

on a 25 kV system. ** 17.2 kV L-G rated fuses require at least 75% grounded load to be applied on a 28 kV system.

Molded current-limiting fuses (MCLF)

Electrical characteristics of encapsulated fuses used in MCLF

System voltage Class	Nominal fuse voltage	Current rating	Fuse cat. no.	Rated maximum voltage	continuous c	Maximum urrent (A) (N2) (N6)	Peak arc voltage	Minimum melt I²t	Maximum total I²t (amp¹-sec)
(kV)	rating (kV)	(amps)	(N1)	(kV)	25 °C	40 °C	(kV) (N5)	(amp²-sec)	(N3) (N4)
5	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
15	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		51	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
25/28	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	84	40	54,400	255,000
		100	M25CLF100		100	97	40	80,000	380,000
35		10	M35CLF010		14	13	61	800	4,800
		20	M35CLF020		23	22	60	1,620	13,000
	23.0	30	M35CLF030	23.0	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:

N1. Designs have a 50,000 A RMS symmetrical rating.

N2. 10–50 A fuses have a rated maximum application temperature of 65 °C, and 65–180 A fuses have a rated maximum application temperature of 40 °C. (RMAT is the maximum temperature of the air in contact with the MCLF housing at which the fuses have been shown suitable for use.)

N3. Tabulated maximum total I²t values are for currents of 50,000 A at the nominal voltage of the fuse. Fuses that have a rated maximum voltage higher than their nominal voltage rating will have a higher I²T let-through when applied at voltages up to these higher values. For example, maximum total I²t values are increased by approximately 30% when 8.3 kV fuses are applied at 10 kV and approximately 25% when 15.5 kV fuses are used at 17.2 kV.

N4. Maximum total I2T values are reduced for currents below 50,000 A. For example, at 10,000 A, I2t values are approximately 15% less than the published values.

N5. Peak arc voltages quoted are for 50,000 A currents at the rated maximum voltage listed. Reduced currents and voltages will reduce the peak arc voltage. Consult the factory for further information.

 $N6. \ Maximum \ continuous \ currents \ at \ higher \ ambient \ temperatures \ may \ be \ determined \ by \ derating \ the \ fuses \ by \ .2\% \ per \ degree \ C \ over \ 25 \ ^{\circ}C.$

For example: At 40 °C, the derating would be $15 \times .2 = 3\%$, making the maximum continuous current of a 20 A fuse $23.0 \times .97 = 22$ A.

Molded current-limiting fuses (MCLF)

Recommended MCLF at 40 °C ambient temperature (single-phase transformer)

Recommended fu	se current ra	atings	(amps)															
Fuse voltage								(5	.5 kV) 8	3.3 kV					15	5.5 kV		23 kV
											Transfor	mer 1-	phase	voltage	rating	(kV) ph	ase-to-g	round
1-phase transformer		2.4		4.16		4.8		7.2		7.62		12		14.4		16		19.9
kVA	A	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В
10	_	10ª	-	10ª	-	10ª	-	10ª	-	10ª	_	10ª	-	10ª	-	10ª	_	10ª
15	_	10	-	10ª	_	10ª	-	10ª	_	10ª	_	10ª	_	10ª	_	10ª	_	10ª
25	_	20	-	10	_	10	-	10ª	_	10ª	_	10ª	_	10a	-	10ª	_	10ª
37.5	20	30	-	20	-	20	_	10	-	10	_	10ª	-	10ª	_	10ª	_	10ª
50	30	40	20	30	-	20	_	10	-	10	_	10ª	-	10ª	_	10ª	_	10ª
75	50	65	30	40	20	30	_	20	_	20	_	10	_	10	_	10	_	10ª
100	65	(80)	40	50	30	50	20	30	20	30	_	20	_	10	-	10	_	10
167	(100)	(150)	65	(80)	50	65	30	50	30	50	20	30	20	30	_	20	_	20
250	(150)	-	(100)	(125)	(80)	(100)	50	65	50	65	30	50	30	40	20	30	20	30
333	(180)	-	(125)	(180)	(100)	(150)	65	100	65	100	50	65	30	50	30	50	20	40
500	_	-	(180)	_	(150)	-	115	-	115	_	65	100	65	80	50	-	40	_
750	_	-	-	-	-	-	-	-	-	-	100	-	80	100	_	-	_	_
1,000	_	_	_	_	_	-	_	_	_	_	_	_	100	-	_	_	_	_

Recommended MCLF at 40 °C ambient temperature (3-phase transformer GNDY-GNDY)

Recommended fuse	current r	atings	(amp	5)																
Fuse voltage												(5.	5 kV) 8	.3 kV			15	.5 kV		23 kV
												Tra	ansfori	mer 3-	phase vo	ltage	rating	(kV), p	hase to p	phase
3-phase GNDY-GNDY		2.4		4.16		4.8	7.2	2-7.96		8.32		12.47	13.2	-14.4		20.8	22.9-	-24.9		34.5
transformer kVA	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В
15	_	10ª	-	10ª	-	10ª	-	10ª	-	10ª	-	10ª	-	10ª	_	10ª	-	10ª	_	10ª
22.5	-	10	-	10ª	-	10ª	-	10ª	-	10ª	-	10ª	-	10ª	-	10ª	-	10ª	-	10ª
30	_	10	-	10ª	-	10ª	_	10ª	-	10ª	-	10ª	_	10ª	_	10ª	-	10ª	_	10ª
45	_	20	_	10	-	10	-	10ª	_	10ª	-	10ª	_	10ª	_	10ª	-	10ª	_	10ª
75	30	40	-	20	-	20	_	10	-	10	-	10ª	-	10ª	_	10ª	-	10ª	-	10ª
100	40	50	20	30	20	30	-	20	-	10	-	10	-	10	_	10ª	-	10ª	-	10ª
112.5	40	65	20	30	20	30	-	20	-	20	-	10	-	10	_	10ª	-	10a	_	10ª
150	50	(80)	30	50	30	40	20	30	-	20	-	10	-	10	_	10ª	-	10ª	_	10ª
200	65	(100)	40	65	40	50	20	30	20	30	-	20	-	20	-	10	-	10	-	10ª
225	(80)	(125)	50	65	40	65	30	40	30	50	-	20	-	20	_	10	-	10	-	10a
300	(100)	(150)	65	(100)	65	(80)	40	50	30	50	20	30	20	30	_	20	10	20	_	10
500	(180)	_	(100)	(150)	(100)	(125)	65	(80)	50	80	30	50	30	50	20	30	20	30	_	20
750	-	_	(180)	-	(125)	(180)	(80)	(125)	80	115	50	80	50	65	30	50	30	40	20	30
1,000	_	_	-	_	(180)	_	(125)	(180)	115	-	65	100	65	100	50	65	40	65	30	40
1,500	_	_	_	_	_	_	(180)	_	_	_	100	_	100	_	65	100	65	80	40	_
2,000	_	_	_	_	-	-	_	_	_	_	_	_	_	_	100	_	80	_	50	_

Notes

 $^{1.} Column \ A = 140 - 200\% \ of \ transformer \ rating \ and \ Column \ B = 200 - 300\% \ of \ transformer \ rating.$

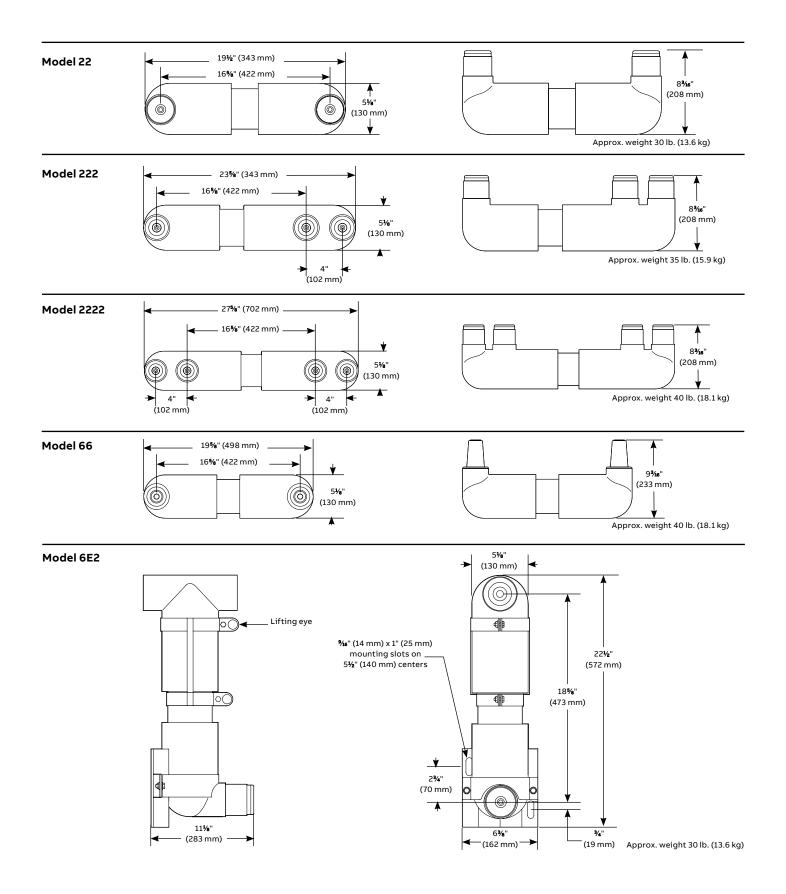
^{2.} Ratings in parentheses are 5.5 kV fuses.

^{3.} Recommended fuses meet inrush criteria of 12 times transformer full-load current for .1 second and 25 times transformer full-load current for .01 second. Fuses also meet cold-load pickup criteria of 6 times transformer full-load current for 1 second and 3 times transformer full-load current for 10 seconds.

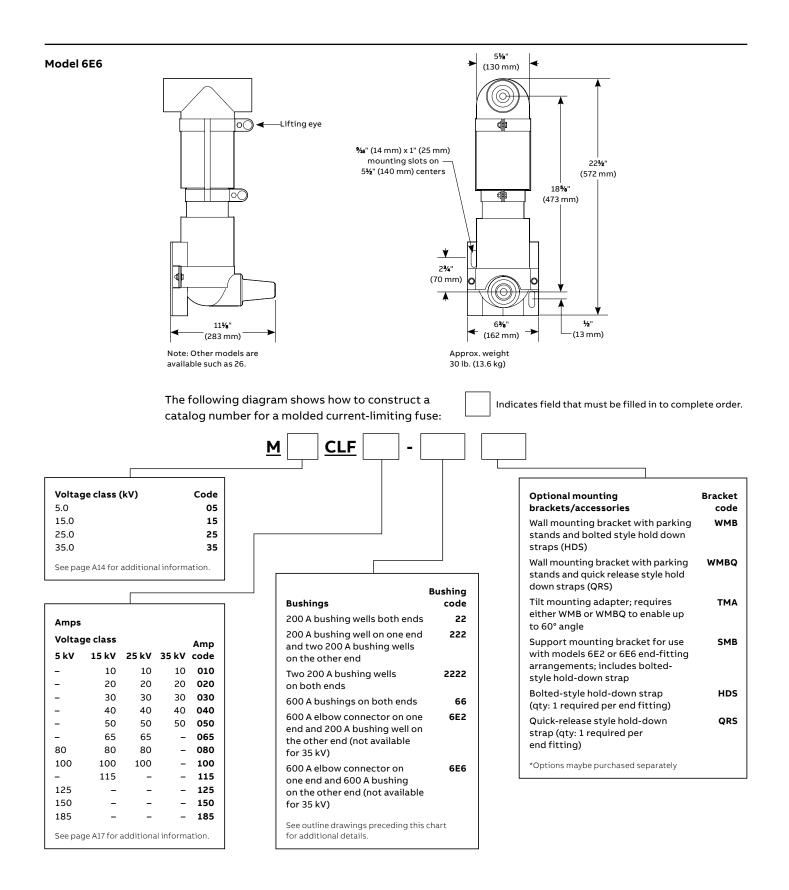
A. Fuse allows greater than 300% of transformer rating.

For applications with Delta connections or less than 50% grounded load, the fuse maximum voltage must be greater than system line to line voltage, which may require using the next larger system class housing and fuse.

Molded current-limiting fuses (MCLF)

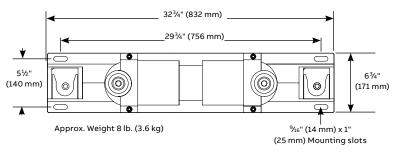


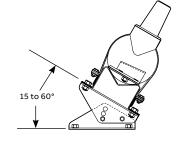
Molded current-limiting fuses (MCLF)



Molded current-limiting fuses (MCLF)

Mounting options





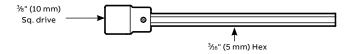
Optional WMB mounting bracket with adjustable parking stands for vertical mounting and fuse hold-down strips

Optional - TMA universal tilt mounting

Optimal end fittings

Cat. no.	Description	System voltage class (kV)	IEEE 386-1995 interface reference
EF2	200 A bushing well end fitting	5, 15, 25	Figure 3
EF22	Double 200 A bushing well end fitting	5, 15, 25	Figure 3
EF6	600 A bushing end fitting	5, 15, 25	Figures 11 and 13
EF6E	600 A elbow connector end fitting	5, 15, 25	Figure 11

Note: EF6E is equipped with a standard through-hole spade lug (Type 03700). Use this table only if end fittings are to be ordered and shipped separately from the fuse. See pages A98-A99 for assembled units.



Other options

Cat. no.	Description
MCLF-ADT	Hex wrench for set screw removal and replacement when disassembling
	end fittings. Supplied as standard with replacement fuses.