

American Fuses E-Rated

5.5kV, 8.25kV and 15.5kV - CS 3 Series



5kV, 8 kV and 15kV Ferrule mounted fuses

Amp-trap CS-3 E-rated 5kV, 8kV and 15kV fuses have either 2" or 3" diameter barrels with ferrules and are mounted in spring reinforced clips. They are UL listed as "general purpose current-limiting fuses" and are for use indoors (or outdoors in a weathertight enclosure). The unique time-current characteristic of Ferraz Shawmut E-rated fuses allows them to be closely sized to transformer full-load rated current, as recommended by IEEE guidelines, without being affected by normal magnetizing inrush current. CS-3 fuses are typically sized at transformer rated current of 133%, thereby providing superior overall protection.

Features/Benefits

- UL Listed for compatibility with UL listed equipment
- Ferrule mounting for standard clips and interchangeability with other brands of fuses
- Current Limiting for superior equipment protection
- Blown-fuse indicator gives positive identification of open fuse
- Non-venting for silent operation

Ratings

A055F

AC: 5E to 450E
5.5kV, 63kA I.R. Sym.

A825X

AC: 10E to 200E
8.25kV, 50kA I.R. Sym.

A155F

AC: 5E TO 200E
15.5kV, 50kA I.R. Sym.

Highlights



- E-Rated
- UL Listed
- Complies with ANSI C37.46

Applications

Protection for 5.5, 8.25 or 15.5kV transformers or distribution systems

Definitions

E-rating

E-rated fuses operate as follows:

100E or less - must melt in 300 seconds (5 mins.) on 200 to 240% of E (ampere) rating.
Over 100E - must melt in 600 seconds (10 mins.) on 220 to 264% of E (ampere) rating.

Example - A 100E fuse must melt in 300 seconds with an applied current of 200 to 240 amperes.

General Purpose Current-Limiting Fuse

A general purpose current-limiting power fuse is one that is capable of interrupting all currents from its rated interrupting rating down to the current that causes melting of the fusible element in one hour.

Spring-Reinforced Clips for CS-3 Fuses:

228-700-530 (One pair of clips)
For 3" diameter, 2 barrels max.

Approvals

UL Listed to JEEG, "Fuses Over 600 Volts"
File # E 143362

Medium voltage fuses

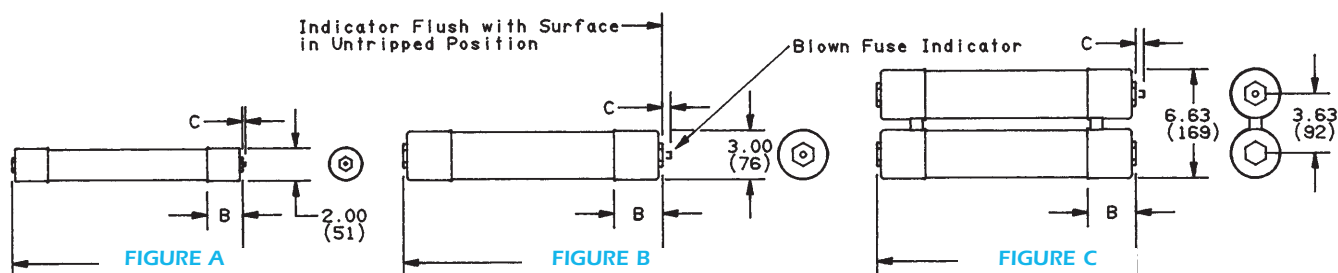
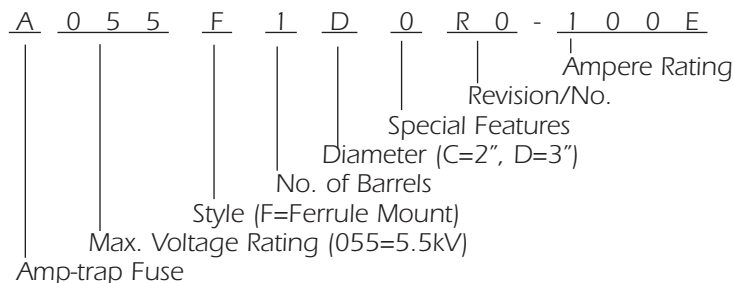
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E-Rated

5.5kV, 8.25kV and 15.5kV - CS 3 Series

5.5kV Ferrule Mounted

CATALOG NUMBERING SYSTEM



Reference Numbers, Ratings, Dimensions, CS-3 Series, 5.5kV

Catalog Number	Reference Number	Ampere Rating	Number of Barrels	Fig.	Dimensions Inches (mm)			Interrupting Rating RMS SYM. *Amp.
					A	B	C	

5.5kV Max. – Ferrule Mounted Style – 12" (305mm) Clip Centers – 2" (50.8mm) Barrel Diameter

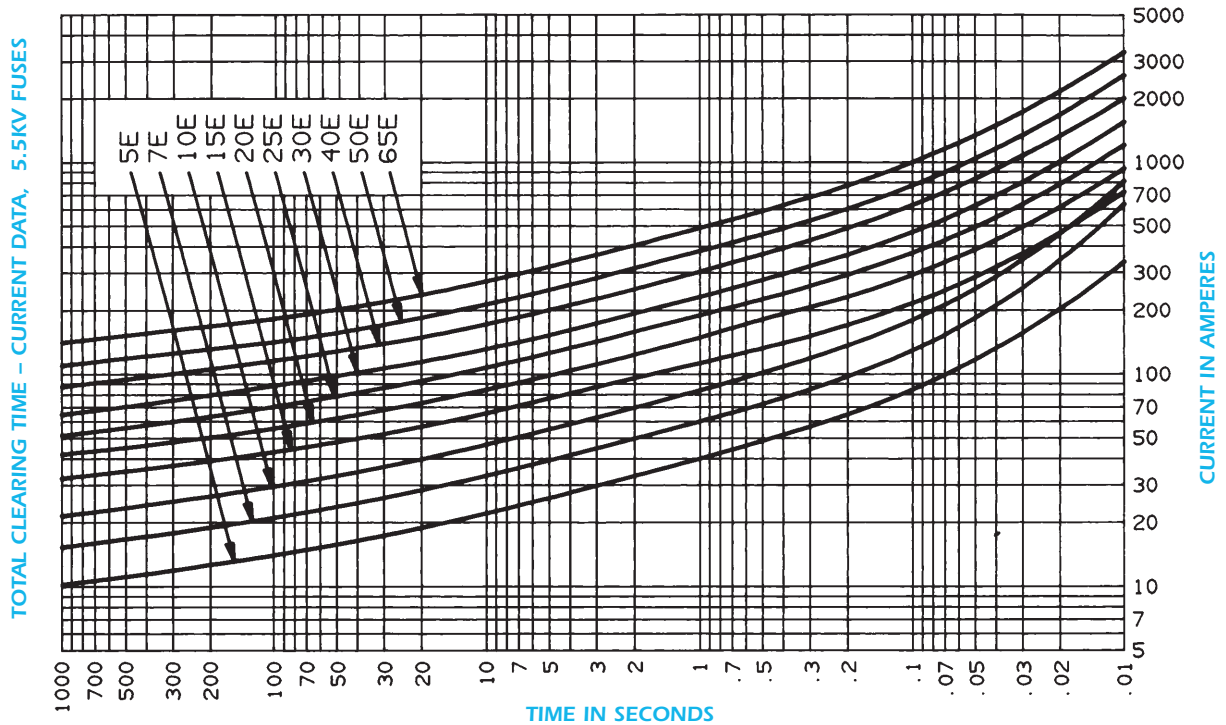
A055F1CORO-5E	S213364	5E	1	A	14.11 (358)	2.2 (56)	.19 (4.8) Tripped Force 1 lb.	63,000
A055F1CORO-7E	T214377	7E						
A055F1CORO-10E	A222709	10E						
A055F1CORO-15E	P223228	15E						
A055F1CORO-20E	E201047	20E						
A055F1CORO-25E	N201561	25E						
A055F1CORO-30E	H203557	30E						
A055F1CORO-40E	V212331	40E						
A055F1CORO-50E	J212850	50E						
A055F1CORO-65E	J213862	65E						

5.5kV Max. – Ferrule Mounted Style – 12" (305mm) Clip Centers – 3" (76.2mm) Barrel Diameter

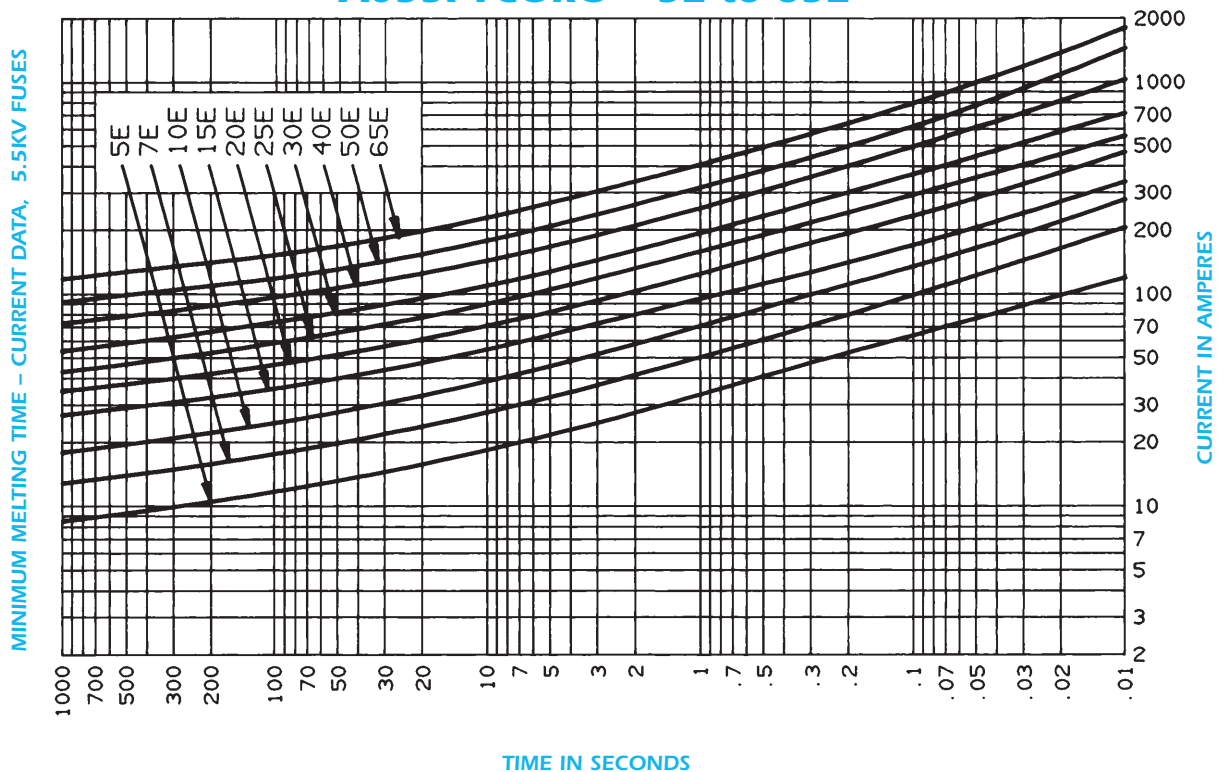
A055F1DORO-10E	T214883	10E	1	B	15.88 (403)	3.0 (76)	0.5 (13) Tripped Force 2 lbs.	63,000
A055F1DORO-15E	M218465	15E						
A055F1DORO-20E	T221967	20E						
A055F1DORO-25E	C222711	25E						
A055F1DORO-30E	Q223229	30E						
A055F1DORO-40E	G201049	40E						
A055F1DORO-50E	Q201563	50E						
A055F1DORO-65E	V203591	65E						
A055F1DORO-80E	A211301	80E						
A055F1DORO-100E	V214378	100E	2	C	15.88 (403)	3.0 (76)	0.5 (13) Tripped Force 2 lbs.	63,000
A055F1DORO-125E	Y217440	125E						
A055F1DORO-150E	G217954	150E						
A055F1DORO-175E	F218988	175E						
A055F1DORO-200E	Y219510	200E						
A055F2DORO-250E	G218989	250E						
A055F2DORO-300E	Z219511	300E	2	C	15.88 (403)	3.0 (76)	0.5 (13) Tripped Force 2 lbs.	63,000
A055F2DORO-350E	V221968	350E						
A055F2DORO-400E	D222712	400E						
A055F2DORO-450E	R223230	450E						

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A055F1CORO – 5E to 65E



A055F1CORO – 5E to 65E



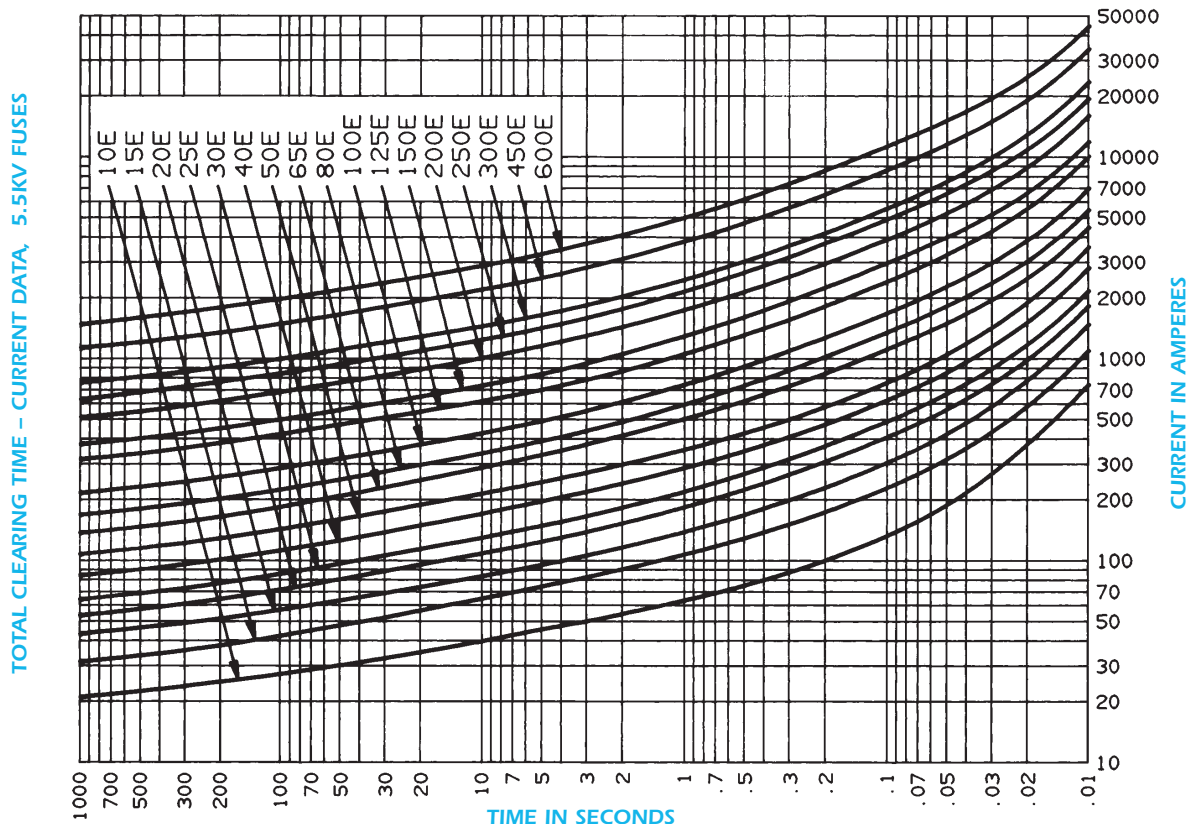
Medium voltage fuses

American Fuses

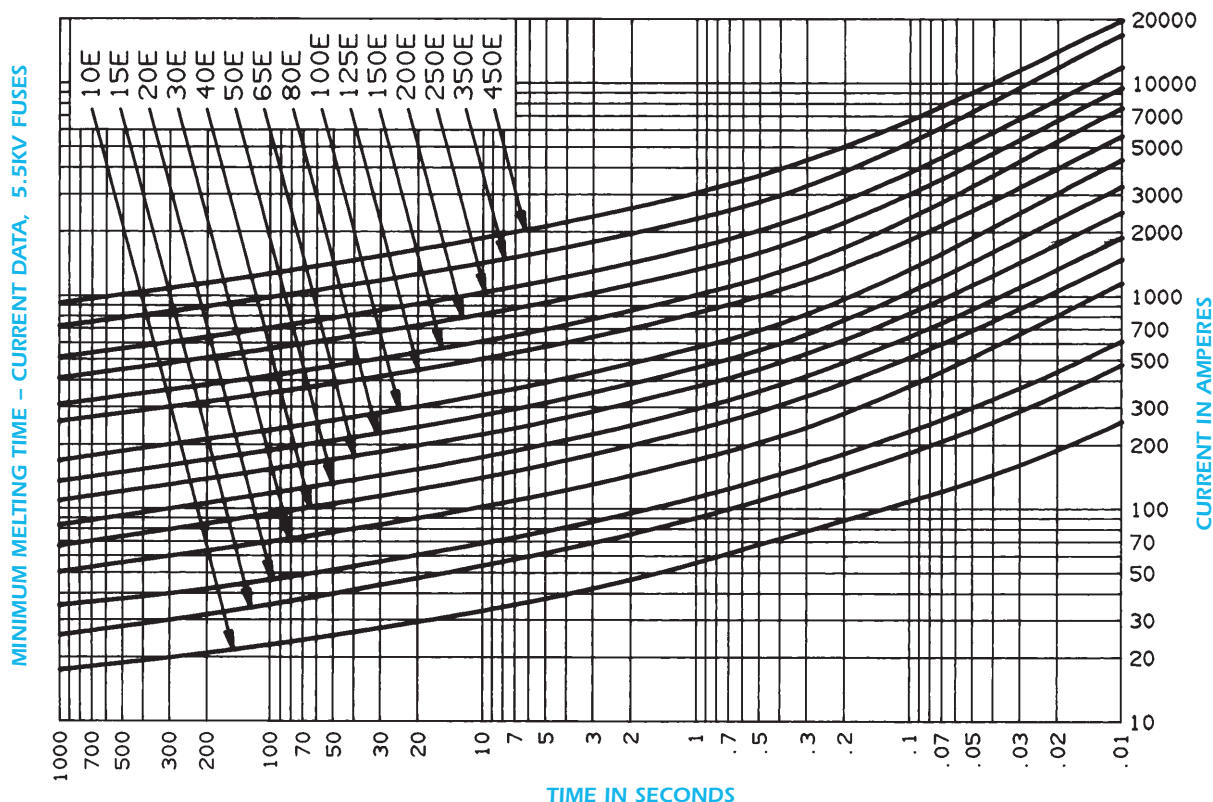
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5.5kV, 8.25kV and 15.5kV - CS 3 Series

A055F1DORO – 10E to 200E and A055F2DORO – 250E to 450E

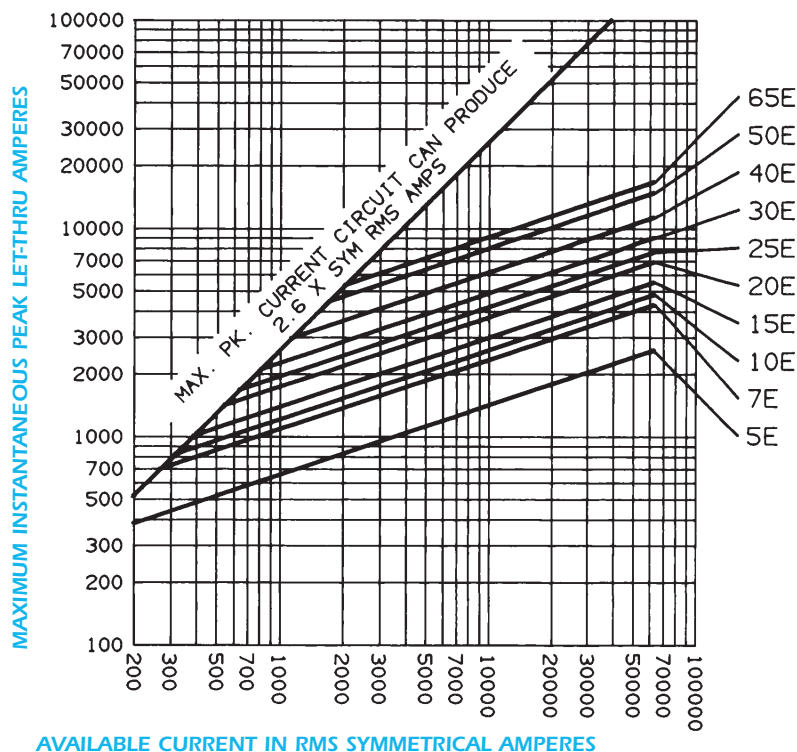


A055F1DORO – 10E to 200E and A055F2DORO – 250E to 450E

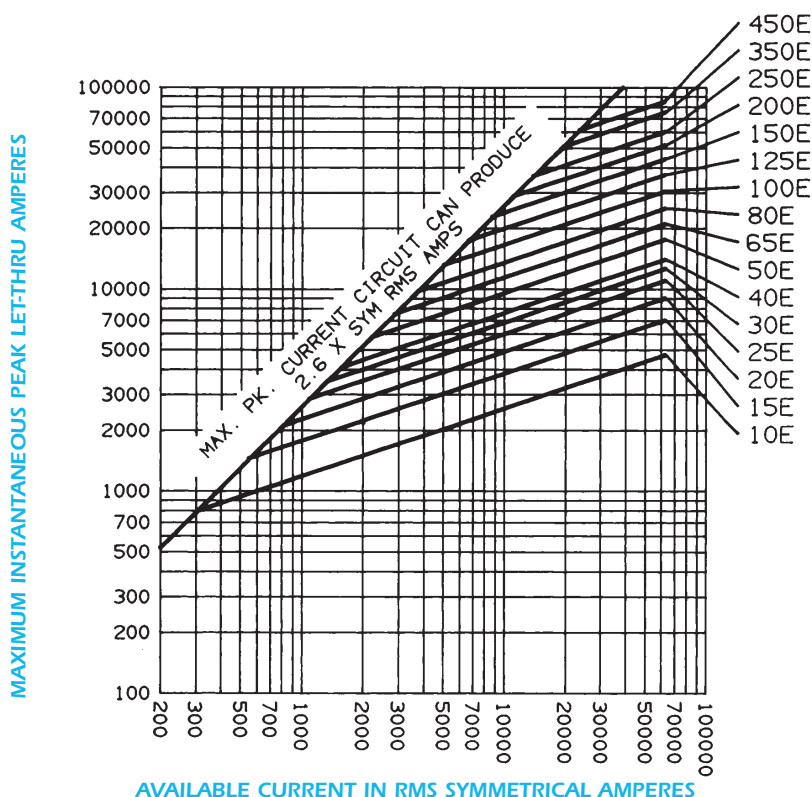


American Fuses E-Rated 5.5kV, 8.25kV and 15.5kV - CS 3 Series

A055F1CORO - 5E to 65E Peak Let-Thru Current Data, 5.5kV CS-3 Fuses



A055F1DORO - 10E to 200E and A055F2DORO - 250E to 450E Peak Let-Thru Current Data, 5.5kV CS-3 Fuses



Medium voltage fuses

American Fuses

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5.5kV, 8.25kV and 15.5kV - CS 3 Series

8.25kV Ferrule Mounted

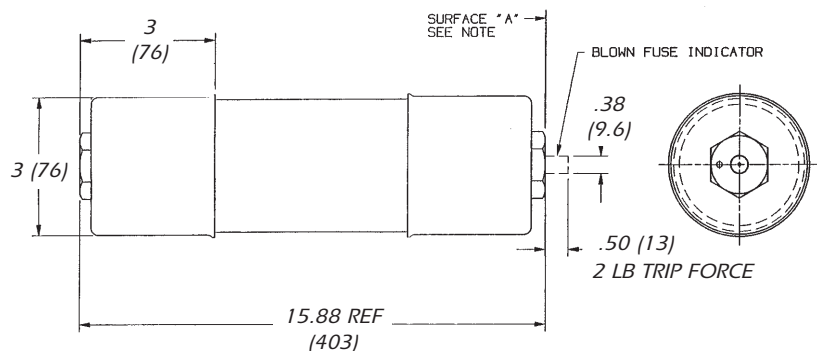


FIGURE A

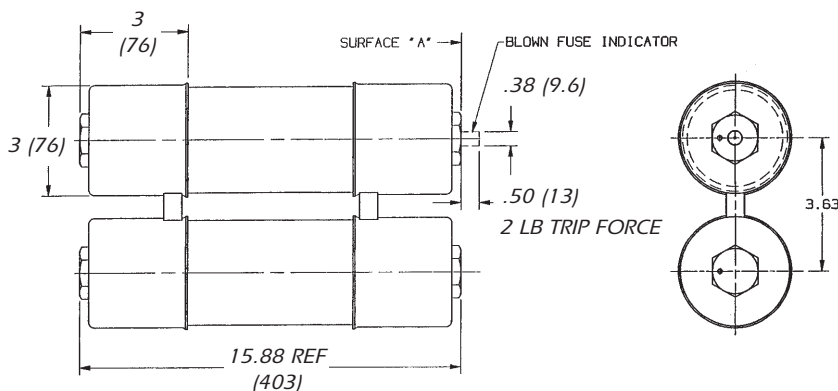


FIGURE B

Catalog Number	Reference Number	Ampere Rating	Number of Barrels	Figure SYM. Amperes*	Interrupting Rating RMS
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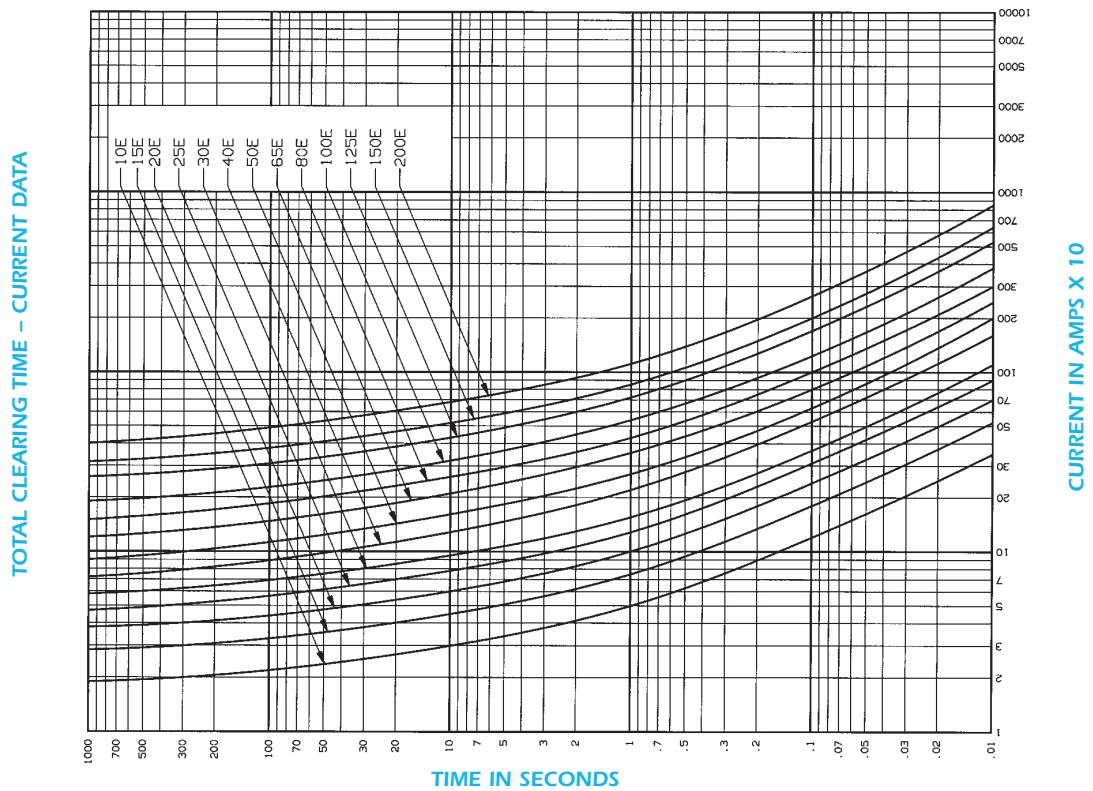
8.25kV Max. – Ferrule Mounted Style – 12" (305mm) Clip Center – 3" (76.2mm) Barrel Diameter

A825X10E-1	-	10E	1	A	50,000
A825X15E-1	-	15E	1	A	
A825X20E-1	C215903	20E	1	A	
A825X25E-1	G216413	25E	1	A	
A825X30E-1	P216926	30E	1	A	
A825X40E-1	L217958	40E	1	A	
A825X50E-1	R218469	50E	1	A	
A825X65E-1	K218992	65E	1	A	
A825X80E-1	C219514	80E	1	A	50,000
A825X100E-1	M211818	100E	1	A	
A825X125E-1	A212336	125E	2	B	
A825X150E-1	N213866	150E	2	B	
A825X200E-1	X214886	200E	2	B	

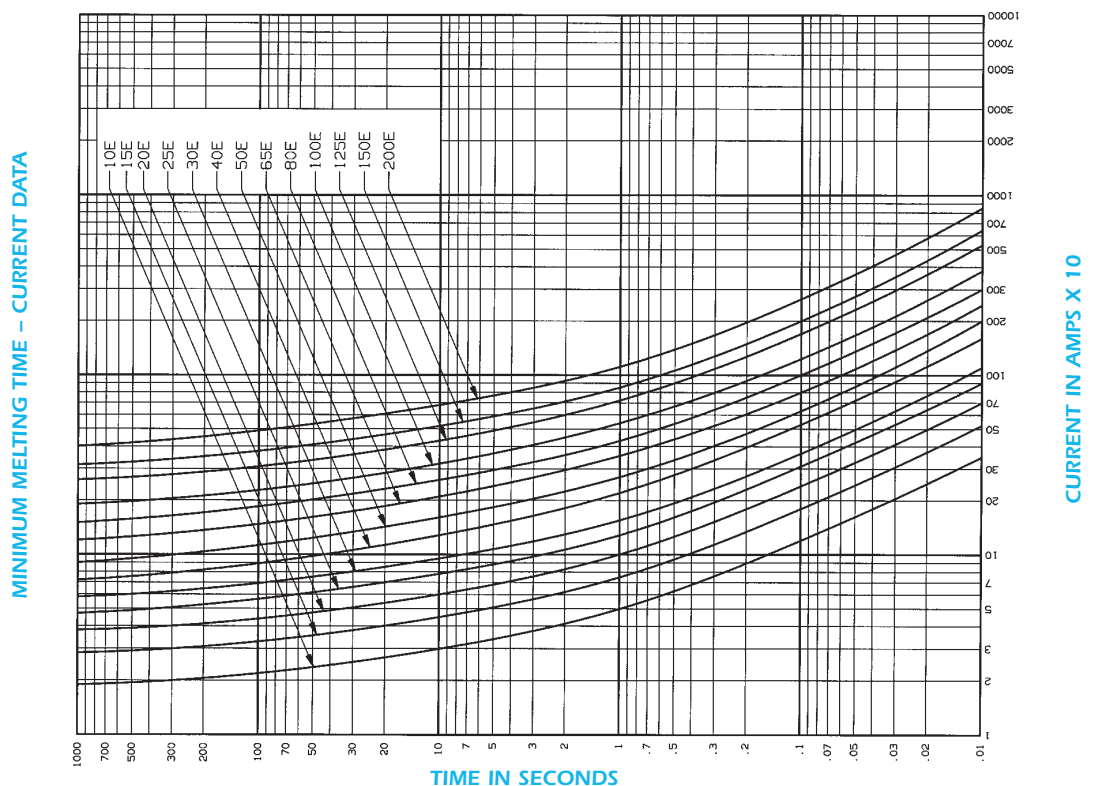
* RMS ASYM. AMPS = RMS SYM. AMPERES x 1.6

American Fuses E-Rated 5.5kV, 8.25kV and 15.5kV - CS 3 Series

A825X (10E to 200E) -1



A825X (10E to 200E) -1



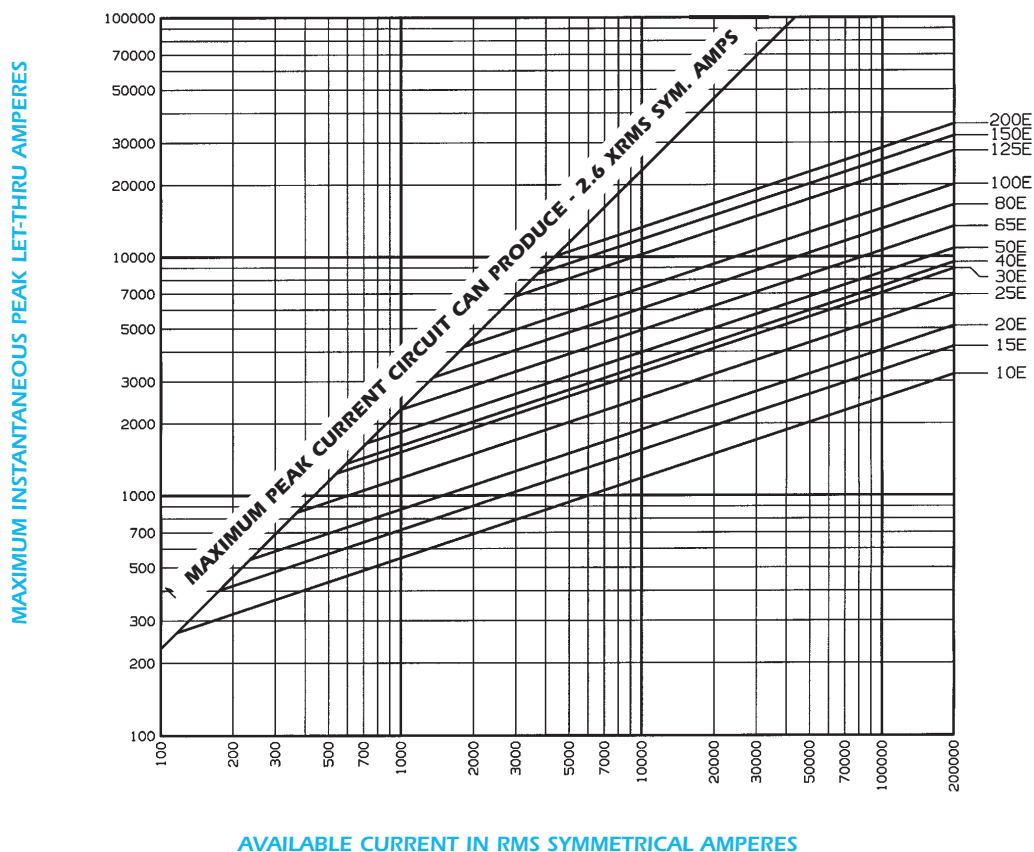
Medium voltage fuses

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5.5kV, 8.25kV and 15.5kV - CS 3 Series

A825X (10E to 200E) -1 Peak Let-Thru Current Data, E-Rated Fuses



American Fuses E-Rated

15.5kV Ferrule Mounted

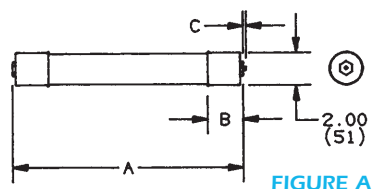


FIGURE A

*Indicator Flush with Surface
in Untripped Position*

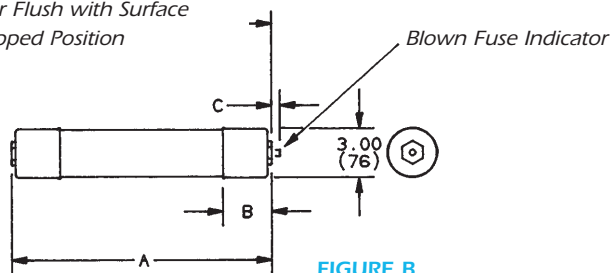


FIGURE B

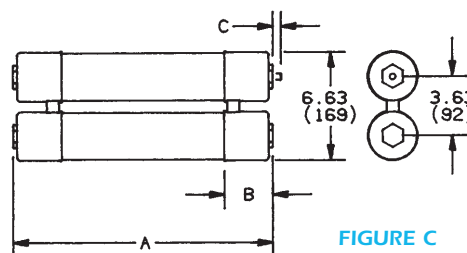


FIGURE C

Catalog Numbering System, Ratings, Dimensions, CS-3 Series, 15.5kV

Catalog Number	Reference Number	Ampere Rating	Number of Barrels	Fig.	Dimensions Inches (mm)			Interrupting Rating RMS SYM.*Amp
					A	B	C	

15.5kV Max. – Ferrule Mounted Style – 15" (381 mm) Clip Centers – 2" (50.8mm) Barrel Diameter

A155F1CORO - 5E	E218E987	5E	1	A	17.03 (433)	2.2 (56)	.19 (4.8) Tripped Force 1 lb.	50,000
7E	X219509	7E						
10E	S214882	10E						
15E	X215392	15E						
20E	L216923	20E						
25E	F217953	25E						
30E	L218464	30E						

15.5kV Max. – Ferrule Mounted Style – 15" (381mm) Clip Centers – 3" (76.2mm) Barrel Diameter

A155F1DORO - 10E	E216411	10E	1	B	18.87 (479)	3.0 (76)	0.5 (13) Tripped Force 2 lbs.	50,000
15E	A217442	15E						
20E	J217956	20E						
25E	P218467	25E						
30E	H218990	30E						
40E	A219512	40E						
50E	W221969	50E						
A155F2DORO - 65E	Q218468	65E	2	C				
80E	J218991	80E						
100E	B215902	100E						

15.5kV Max. – Ferrule Mounted Style – 18" (457mm) Clip Centers – 3" (76.2mm) Barrel Diameter

A155F1DORO - 65E	S223231	65E	1	B	21.75 (552)	3.0 (76)	0.5 (13) Tripped Force 2 lbs.	50,000
80E	J201051	80E						
100E	A215901	100E						
A155F2DORO - 125E	F216412	125E	2	C				
150E	N216925	150E						
175E	B217443	175E						
200E	K217957	200E						

* $RMS\ ASYM.\ AMPERES = RMS\ SYM.\ AMPERES \times 1.6$

Medium voltage fuses

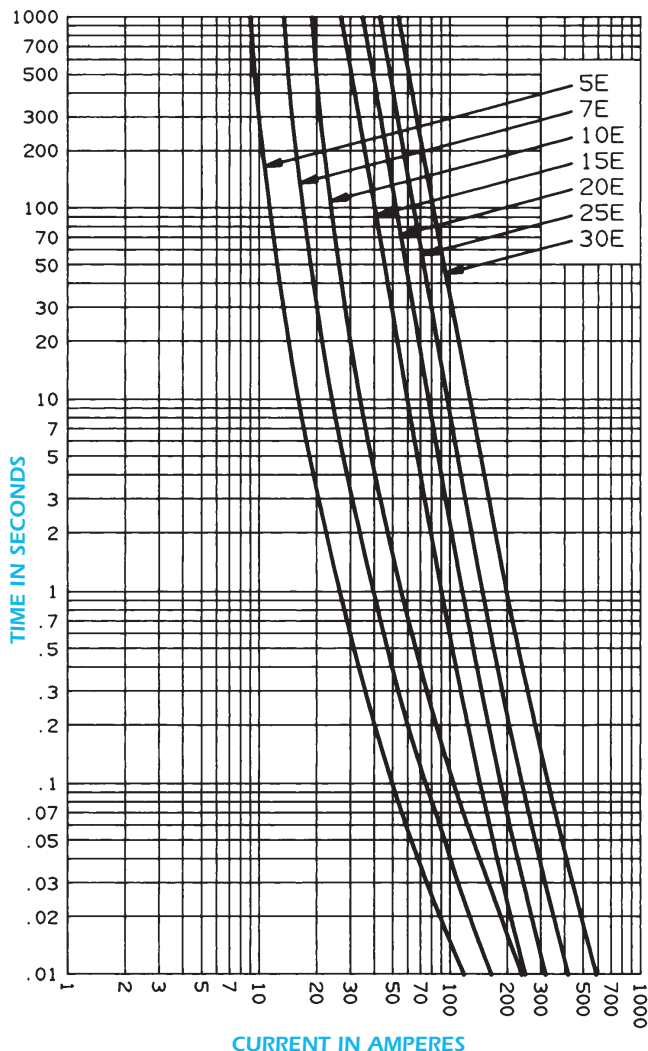
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5.5kV, 8.25kV and 15.5kV - CS 3 Series

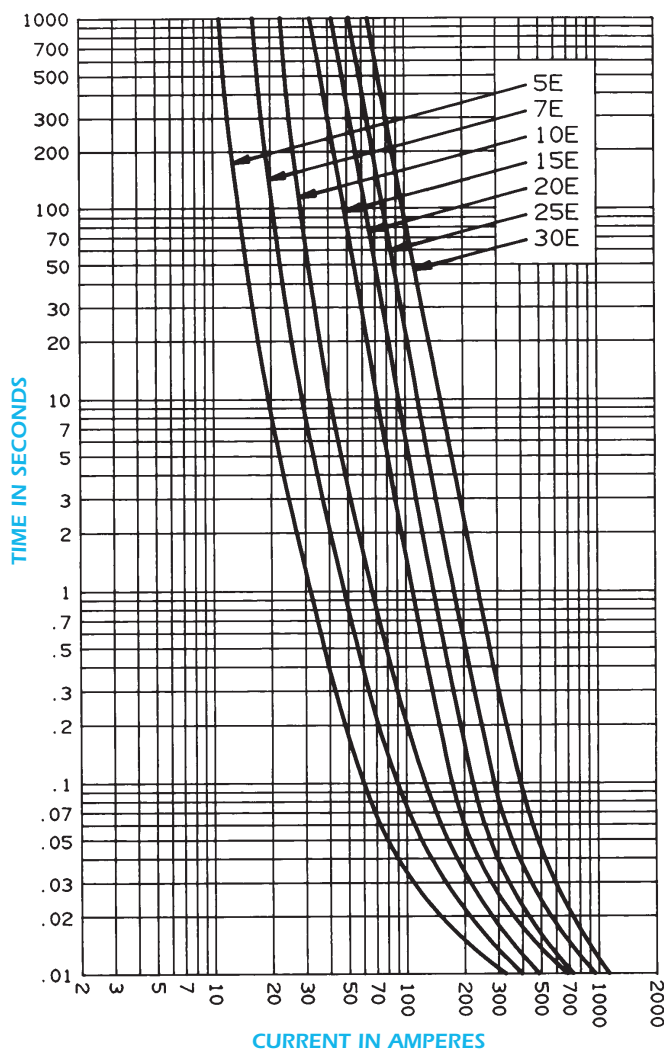
A155F1CORO – 5E to 30E

Minimum Melting Time – Current Data, 15.5kV Fuses



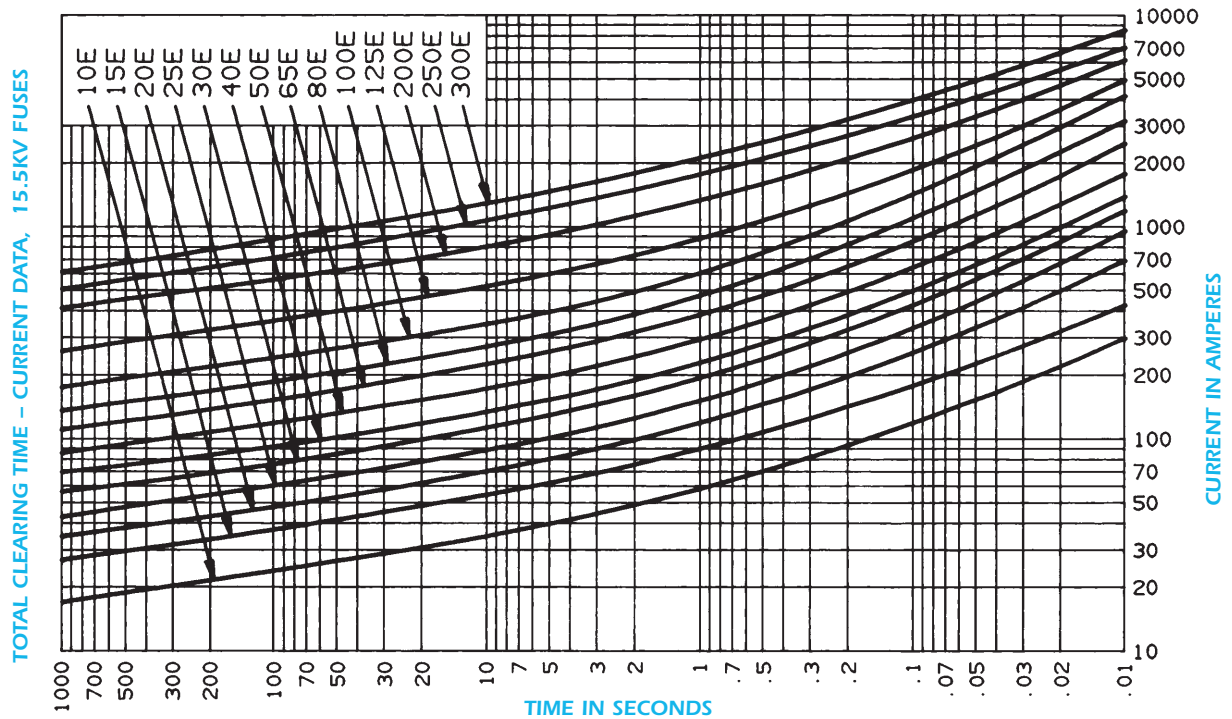
A155F1CORO – 5E to 30E

Total Clearing Time – Current Data, 15.5kV Fuses

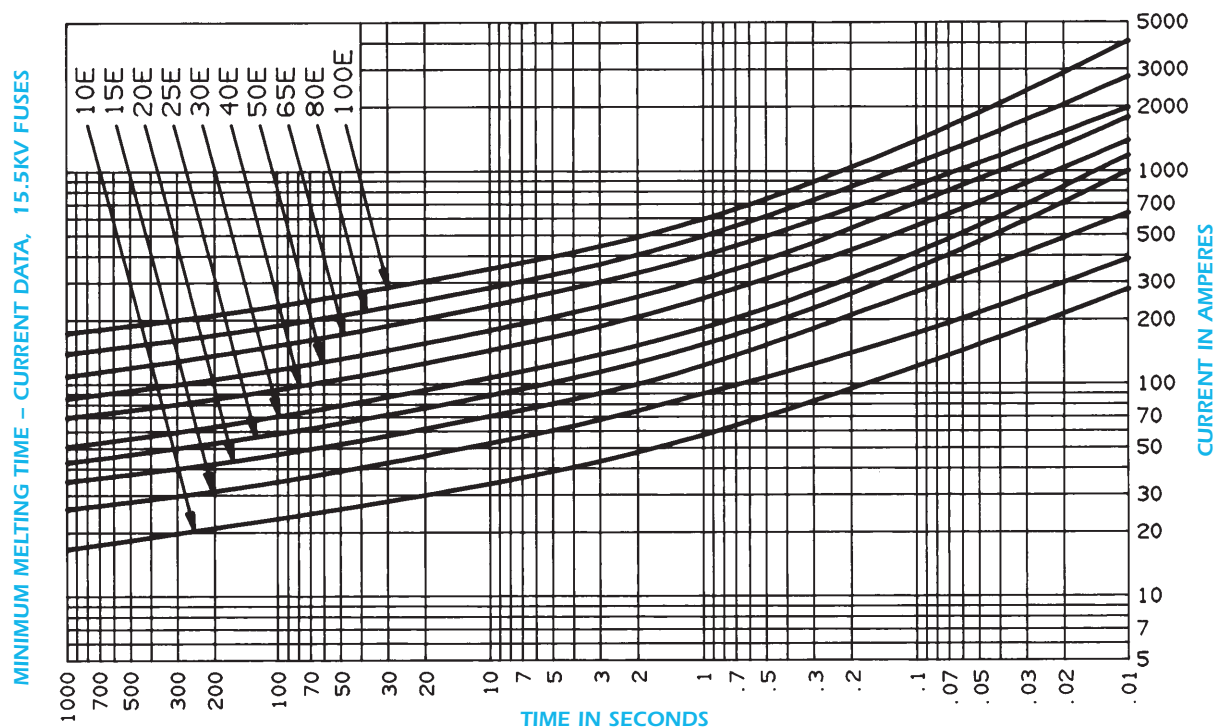


American Fuses E-Rated 5.5kV, 8.25kV and 15.5kV - CS 3 Series

A155F1DORO - 10E to 50E and A155F2DORO - 65E to 100E



A155F1DORO - 10E to 50E and A155F2DORO - 65E to 100E



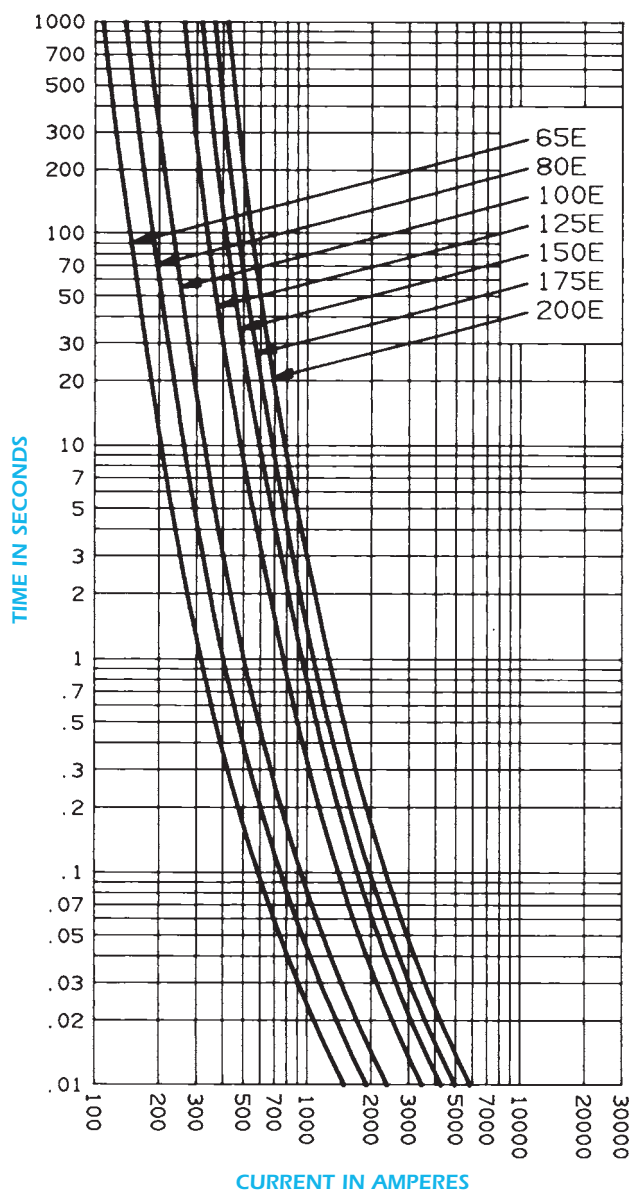
Medium voltage fuses

American Fuses

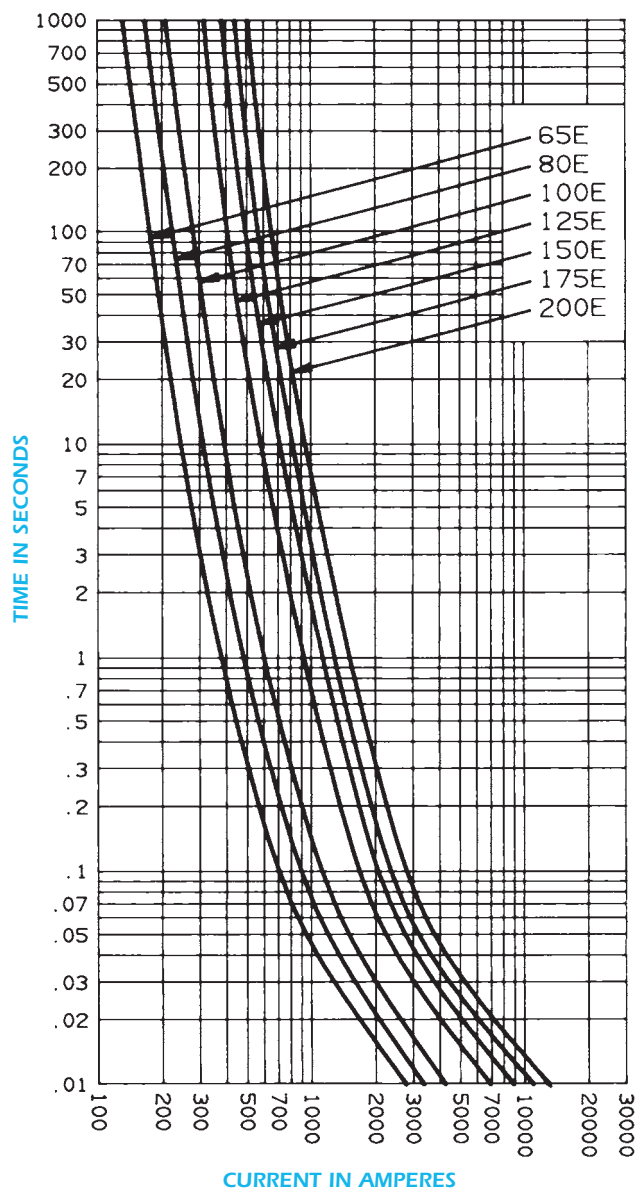
E-Rated

5.5kV, 8.25kV and 15.5kV - CS 3 Series

A155F1DORO – 65E to 100E and A155F2DORO – 125E to 200E Minimum Melting Time – Current Data, 15.5kV Fuses

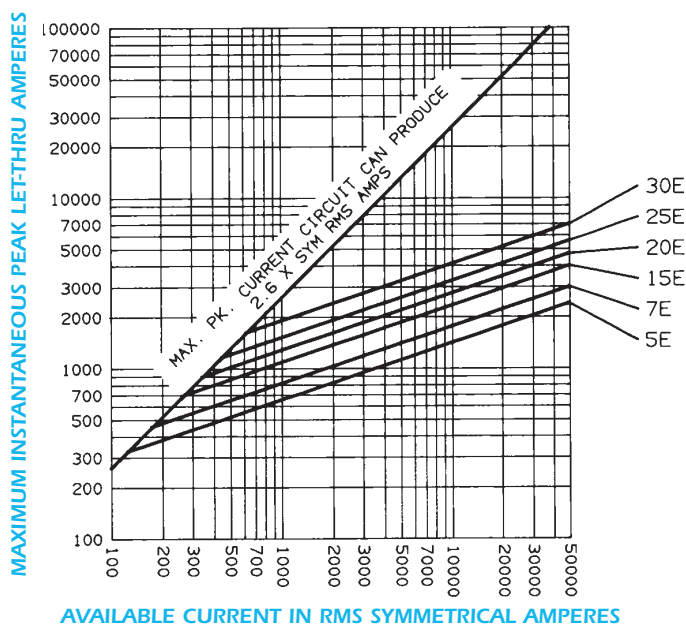


A155F1DORO – 65E to 100E and A155F2DORO – 125E to 200E Total Clearing Time – Current Data, 15.5kV Fuses

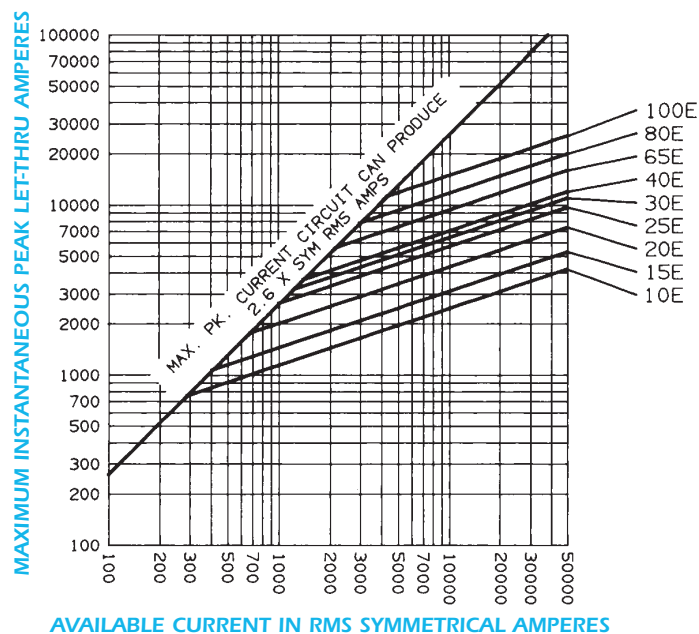


American Fuses E-Rated 5.5kV, 8.25kV and 15.5kV - CS 3 Series

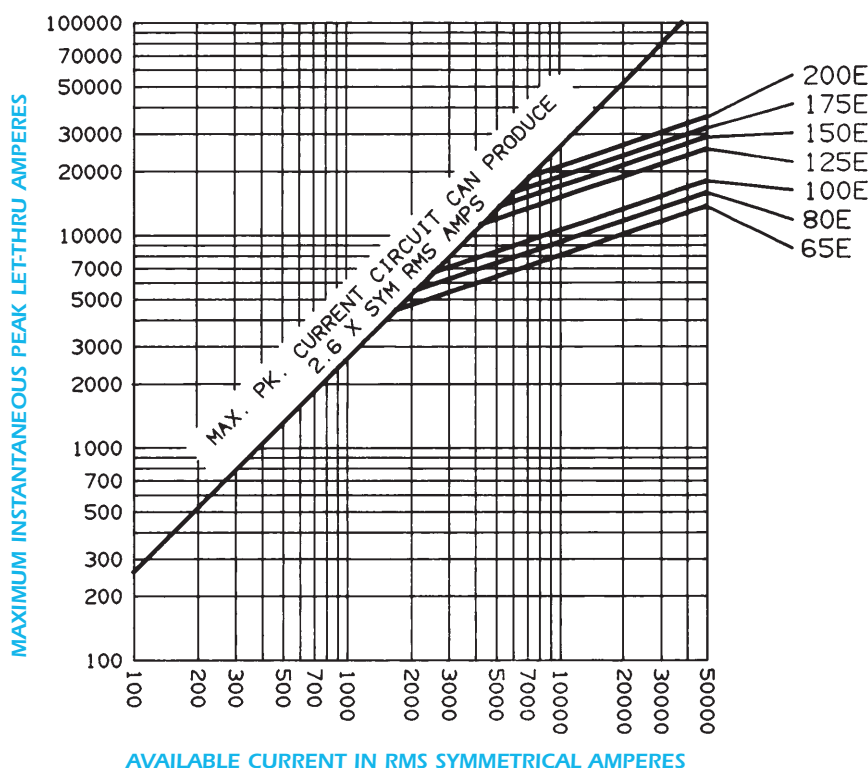
A155F1CORO – 5E to 30E Peak Let-Thru Current Data, 15.5kV CS-3 Fuses



A155F1DORO – 10E to 50E A155F2DORO – 65E to 100E Peak Let-Thru Current Data, 15.5kV CS-3 Fuses



A155F1DORO – 65E to 100E A155F2DORO – 125E to 200E Peak Let-Thru Current Data, 15.5kV CS-3 Fuses



American Fuses E-Rated 5.5kV - Bolt-in Series



5kV Bolt-in fuses

Amp-trap Bolt-in Series E-rated fuses are single, double or triple barrel (3" diam.) with end mounts designed for bolting directly to equipment bus or terminal pads. They are UL listed and are for use indoors (or outdoors in a weatherproof enclosure). The unique time-current characteristic of Ferraz Shawmut E-rated fuses allows them to be closely sized to transformer full load rated current, as recommended by IEEE guidelines, without being affected by normal magnetizing inrush current. Bolt-in fuses are typically sized at transformer rated current of 133%, thereby providing superior overall protection.

Features/Benefits

- **UL Listed** for compatibility with UL listed equipment
- **Bolt-in mounting** for direct connection to bus or terminals
- **Current Limiting** for superior equipment protection
- **Blown-fuse indicator** gives positive identification of open fuse
- **Non-venting** for silent operation
- **Metal Embossed Catalog Number** and manufacturing date for lasting identification

Ratings

A055B

AC: 10E to 900E
5500V max, 63kA I.R. Sym.

Approvals

- UL Listed to JEEG, "Fuses Over 600 Volts"
- UL File # E143362



Highlights

- E-Rated
- UL Listed
- Complies with ANSI C37.46

Applications

- Protection for 5.5kV transformers or distribution systems

Definitions

E-rating

E-rated fuses operate as follows:
Over 100E - must melt in 600 seconds (10 mins.) on 220 to 264% of E (ampere) rating.
Example - A 750E fuse must melt in 600 seconds with an applied current of 1650 to 1980 amperes.

General Purpose Current-Limiting Fuse

A general purpose current-limiting power fuse is one that is capable of interrupting all currents from its rated interrupting rating down to the current that causes melting of the fusible element in one hour.

Medium voltage fuses

American Fuses

E-Rated

5.5kV - Bolt-in Series

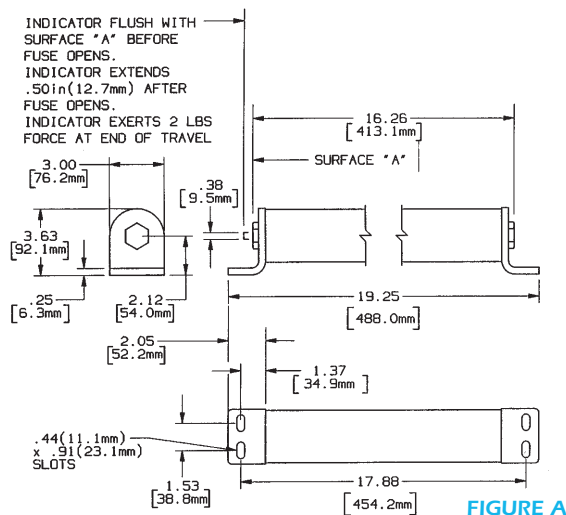


FIGURE A

CATALOG NUMBERING SYSTEM

A 0 5 5 B 1 D A R 0 - 5 0 E
 Amp-trap Fuse Max. Voltage Rating (055=5.5kV) Style (B= Bolt-in Mount) No. of Barrels Diameter (D=3") Special Features Revision/No. Ampere Rating

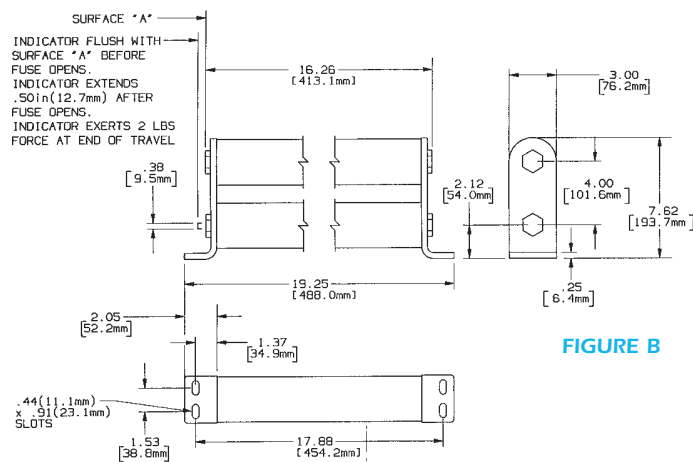


FIGURE B

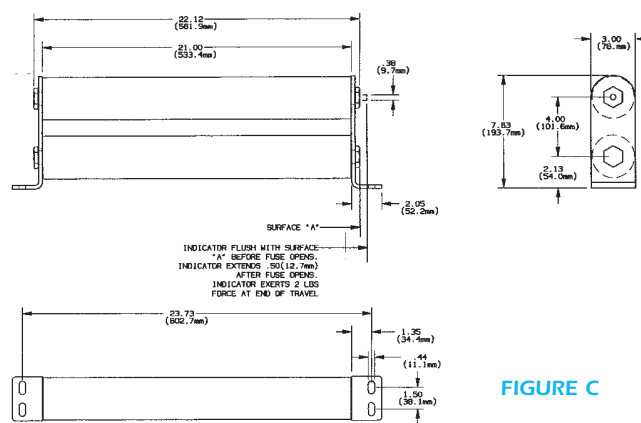


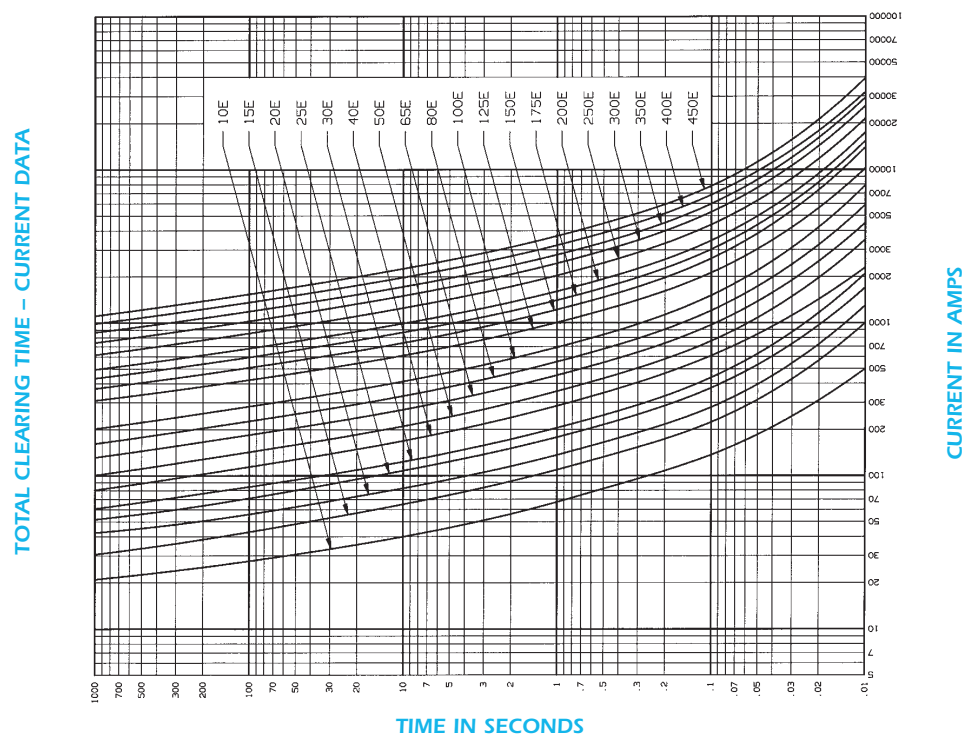
FIGURE C

Designation	Reference Number	Ampere Rating	Number Of Barrels	Figure	Interrupting Rating RMS SYM. Amperes*
5.5kV Max. – Bolt-in Style – 17.88" (454mm) Hole Centers – 3" (76.2mm) Barrel Diameter					
A055B1DARO-10E		10E	1	A	63,000
A055B1DARO-15E		15E	1	A	
A055B1DARO-20E		20E	1	A	
A055B1DARO-25E		25E	1	A	
A055B1DARO-30E		30E	1	A	
A055B1DARO-40E		40E	1	A	
A055B1DARO-50E		50E	1	A	
A055B1DARO-65E		65E	1	A	
A055B1DARO-80E		80E	1	A	
A055B1DARO-100E		100E	1	A	
A055B1DARO-125E		125E	1	A	
A055B1DARO-150E		150E	1	A	
A055B1DARO-175E		175E	1	A	
A055B1DARO-200E		200E	1	A	
5.5kV Max. – Bolt-in Style – 17.88" (454mm) Hole Centers – 3" (76.2mm) Barrel Diameter					
A055B2DARO-250E	S221966	250E	2	B	63,000
A055B2DARO-300E	B222710	300E	2	B	
A055B2DARO-350E	F201048	350E	2	B	
A055B2DARO-400E	P201562	400E	2	B	
A055B2DARO-450E	W212332	450E	2	B	
5.5kV Max. – Bolt-in Style – 23.73 (602,7mm) Hole Centers – 3" (76.2mm) Barrel Diameter					
A055B2DORO-450E		450E	2	C	63,000
A055B2DORO-500E		500E	2	C	
A055B2DORO-600E		600E	2	C	

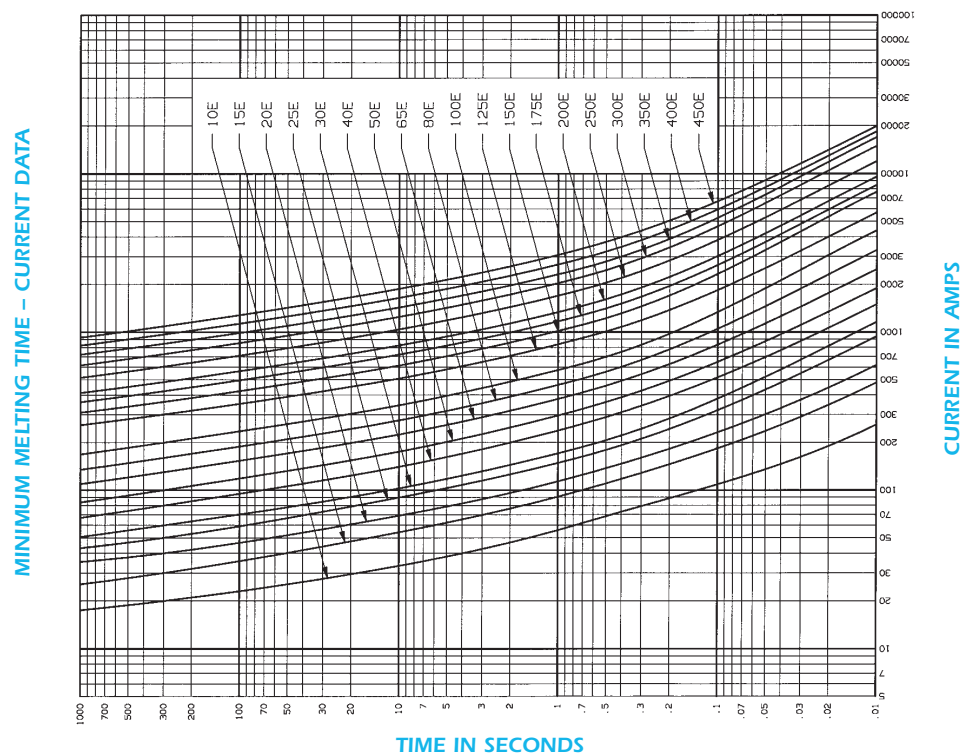
* RMS ASYM. AMPS = RMS SYM. AMPERES x 1.6

American Fuses E-Rated 5.5kV - Bolt-in Series

A055B1DARO - 10E to 200E - A055B2DARO - 250E to 450E



A055B1DARO - 10E to 200E - A055B2DARO - 250E to 450E



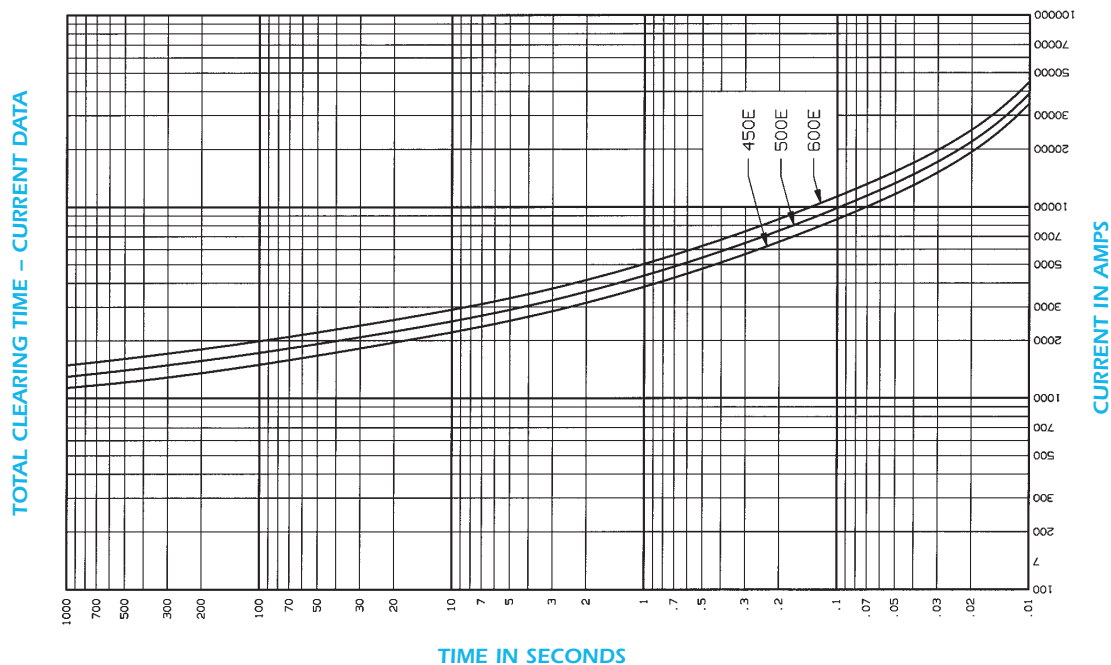
Medium voltage fuses

American Fuses

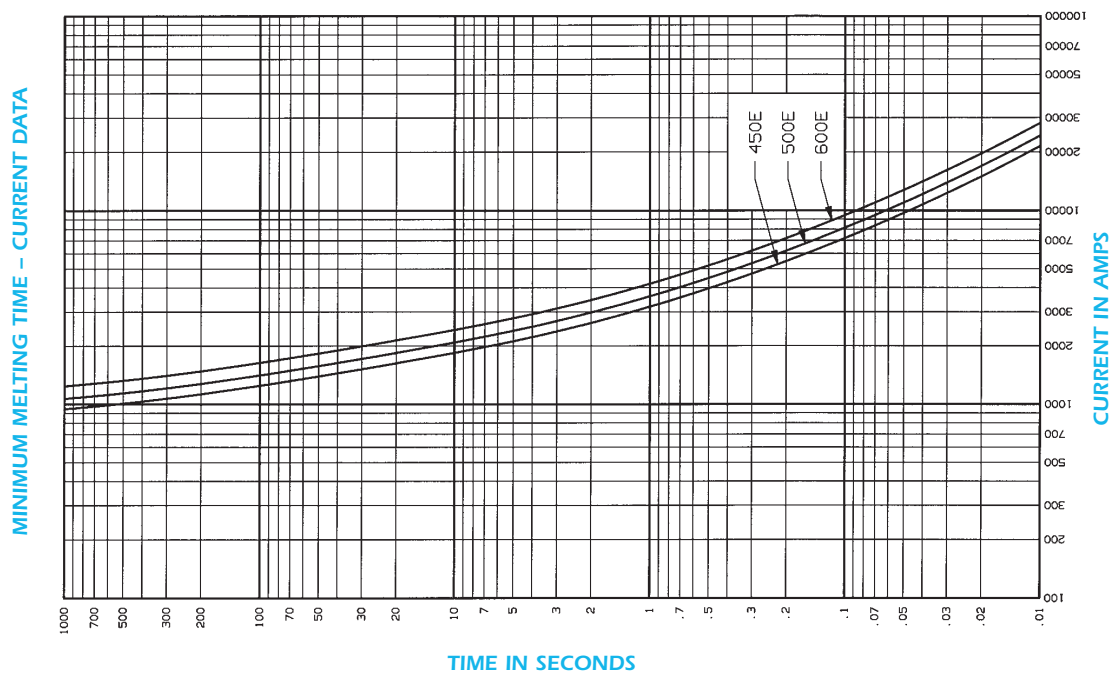
E-Rated

5.5kV - Bolt-in Series

A055B2D0RO - 450E to 600E

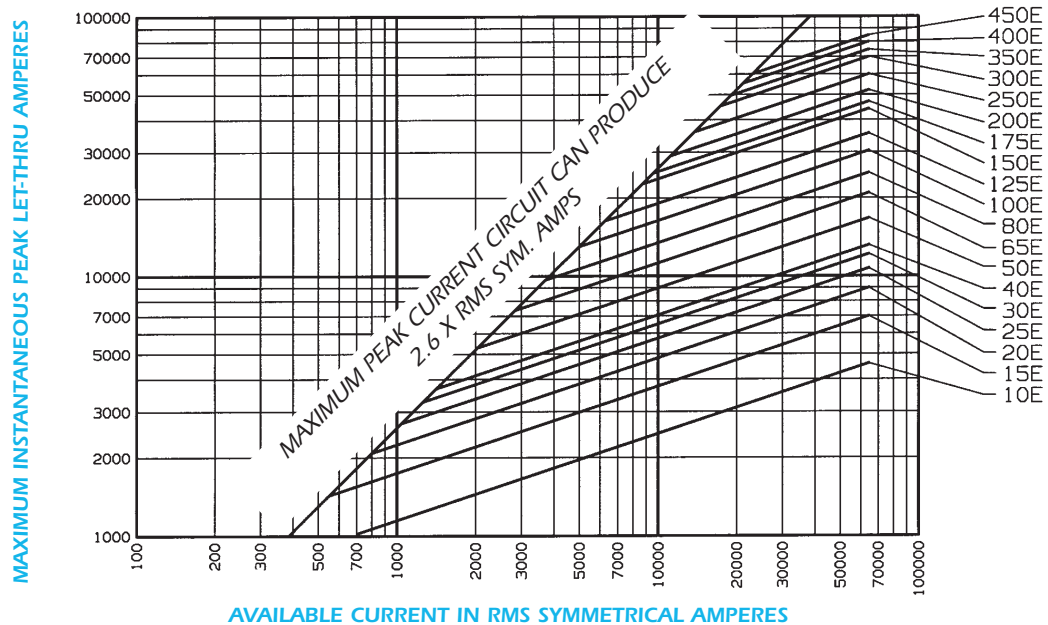


A055B2D0RO - 450E to 600E

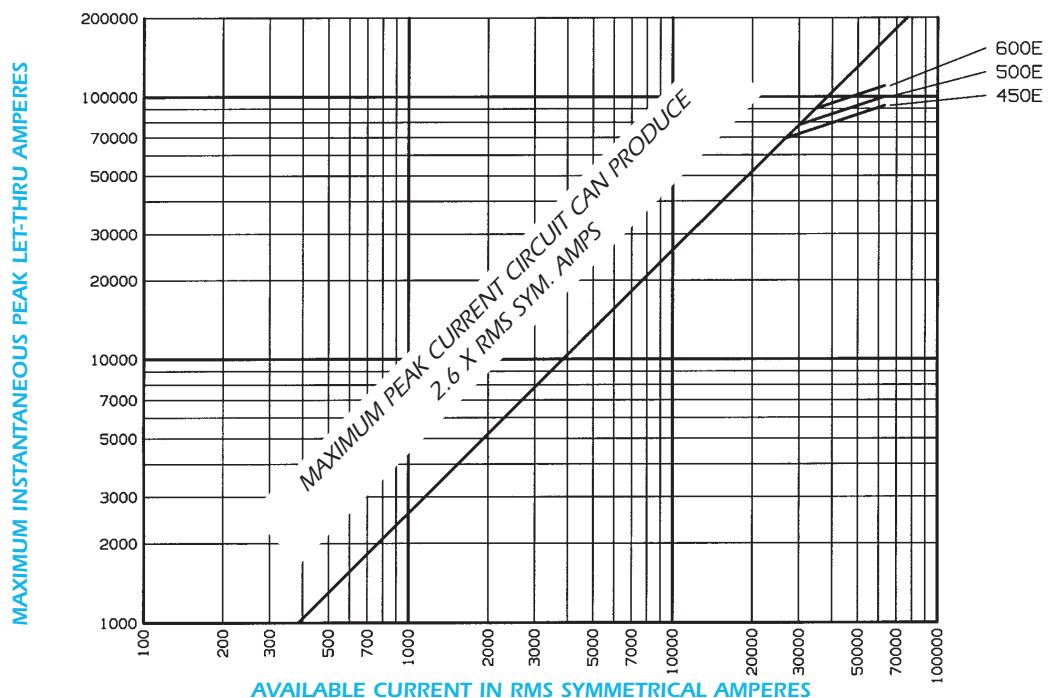


American Fuses E-Rated 5.5kV - Bolt-in Series

A055B1DARO - 10E to 200E - A055B2DARO - 250E to 450E Peak Let-Thru Current Data, E-Rated Fuses



A055B2D0RO - 450E to 600E Peak Let-Thru Current Data, E-Rated Fuses

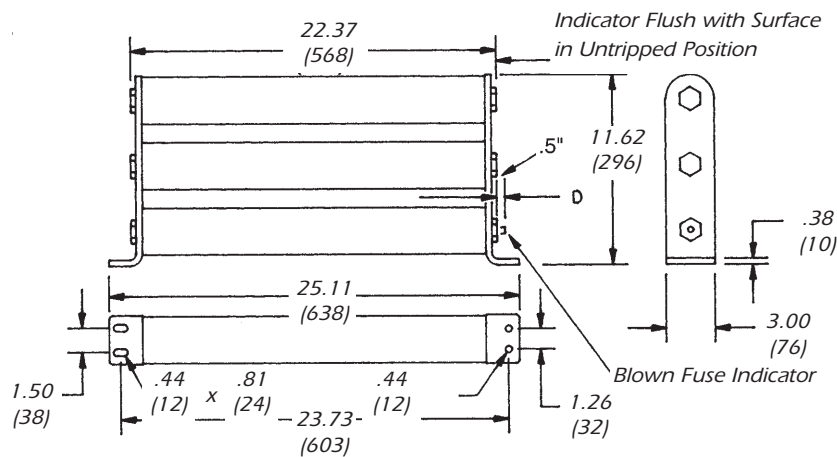
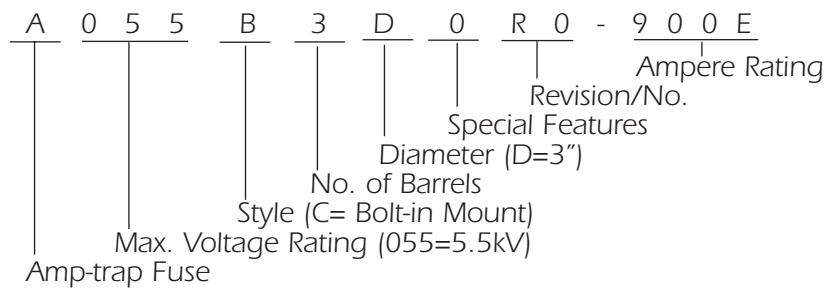


Medium voltage fuses

American Fuses E-Rated 5.5kV - Bolt-in Series

5.5kV Bolt-in

CATALOG NUMBERING SYSTEM



Catalog Numbers, Ratings, Dimensions, Bolt-in Series, 5.5kV

Designation	Reference Number	Old Catalog Number	Ampere Rating	Number of Barrels	Interrupting Rating RMS SYM.* Amperes
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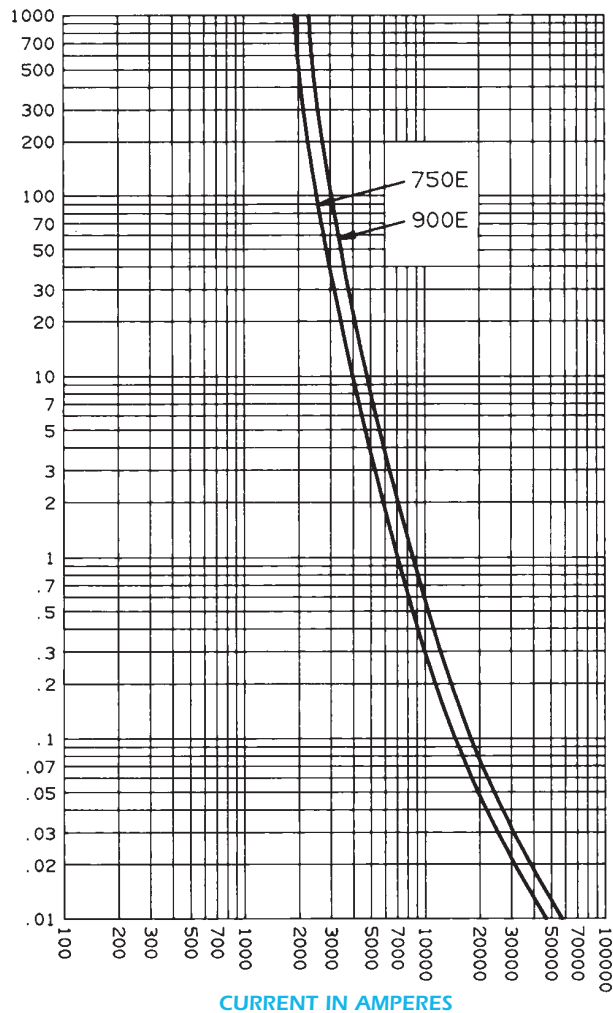
5.5kV Max. - Bolt-in Style - 23.73" (603mm) Hole Centers - 3" (76.2mm) Barrel Diameter

A055B3DORO-750E 900E	K212851 T213365	A550X750E-4 900E-4	750E 900E	3	63,000
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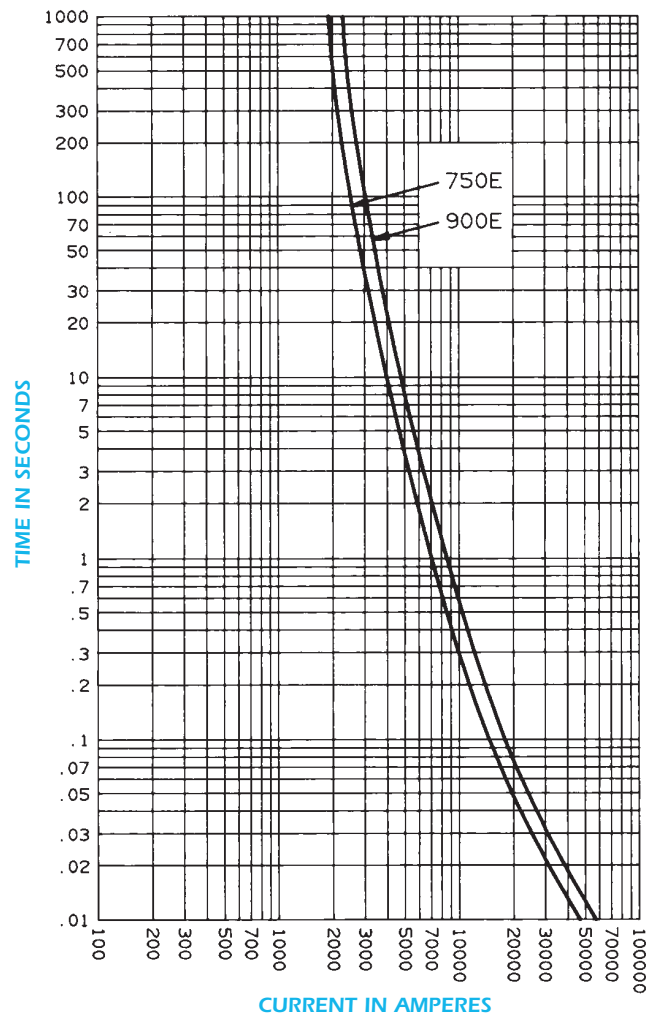
* RMS ASYM. AMPERES = RMS SYM. AMPERES x 1.6

American Fuses E-Rated Bolt-in Series

A055B3DORO – 750E to 900E
Minimum Melting Time – Current
Data, 5.5kV Fuses

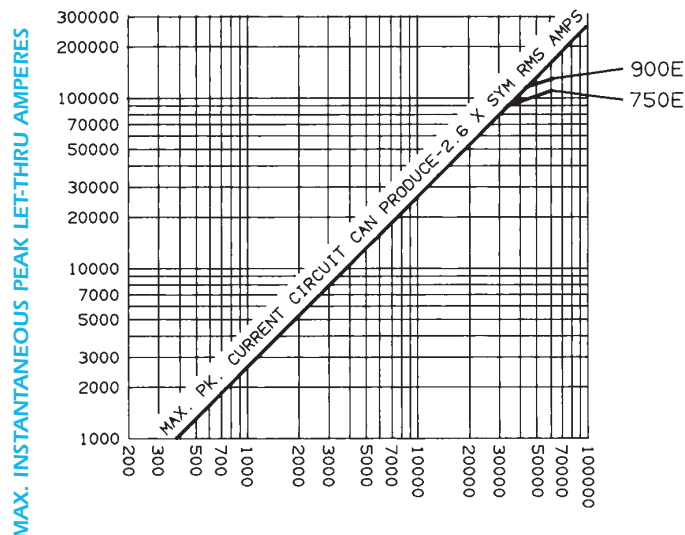


A055B3DORO – 750E to 900E
Total Clearing Time – Current
Data, 5.5kV Fuses



A055B3DORO – 750E to 900E

PEAK LET-THRU CURRENT
DATA – 5.5KV BOLT-IN FUSES



American Fuses E-Rated 5.5kV - 15.5kV CL-14 series

5kv and 15kV Clip-Lock Mounted Fuses



Amp-trap CL-14 E-rated 5kV and 15kV fuses have 3" diameter barrels and mount in unique cam-locking clips, for superior connections as well as easy installation and replacement. They are UL listed as "general purpose current-limiting fuses" and are for use indoors (or outdoors in a weatherproof enclosure). The unique time-current characteristic of Ferraz Shawmut E-rated fuses allows them to be closely sized to transformer full load rated current, as recommended by IEEE guidelines, without being affected by normal magnetizing inrush current. CL-14 fuses are typically sized at transformer rated current of 133%, thereby providing superior overall protection.

Features/Benefits

- **UL Listed** for compatibility with UL listed equipment
- **Clip-Lock mounting** for reliable high integrity connection into circuit
- **Current limiting** for superior equipment protection
- **Blown-fuse indicator** gives positive identification of open fuse
- **Non-venting** for silent operation
- **Metal Embossed Catalog Number** and manufacturing date for lasting identification

Ratings

A055C

AC: 10E to 600E
5.5kV, 63kA I.R. Sym.

A155C

AC: 10E TO 300E
15.5kV, 50kA I.R. Sym

Highlights

- E-Rated
- UL Listed 5.5kV
- Complies with ANSI C37.46

Applications

Protection for 5.5kV or 15.5kV transformers or distribution systems

Approvals

- UL Listed to JEEG, "Fuses Over 600 Volts"
- UL File # E143362

Definitions



E-rating

E-rated fuses operate as follows:

100E or less - must melt in 300 seconds (5 mins.) at 200 to 240% of E (ampere) rating.

Over 100E - must melt in 600 seconds (10 mins.) at 220 to 264% of E (ampere) rating.

Example - A 100E fuse must melt in 300 seconds with an applied current of 200 to 240 amperes.

General Purpose Current-Limiting Fuse

A general purpose current-limiting power fuse is one that is capable of interrupting all currents from its rated interrupting rating down to the current that causes melting of the fusible element in one hour.

Clip-Lock Clips for CL-14 Fuses:

228-700-520 (One pair of clips)

Medium voltage fuses

American Fuses

E-Rated

5.5kV - 15.5kV CL-14 series

5.5kV Clip-Lock Mounted

CATALOG NUMBERING SYSTEM

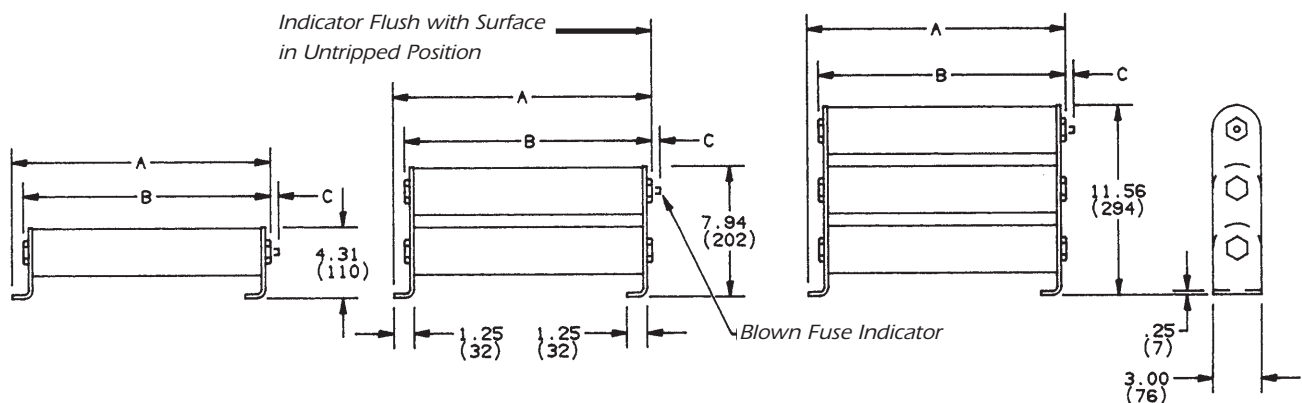
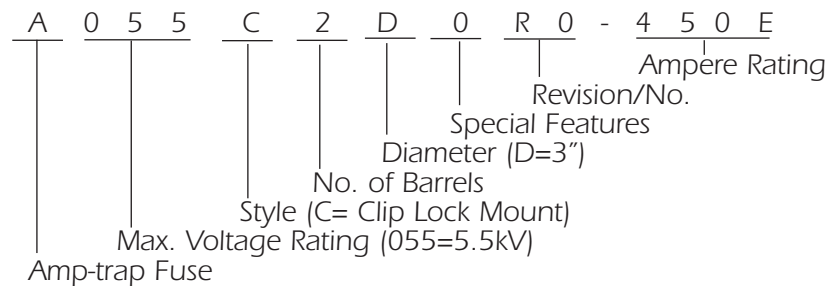


FIGURE A

FIGURE B

FIGURE C

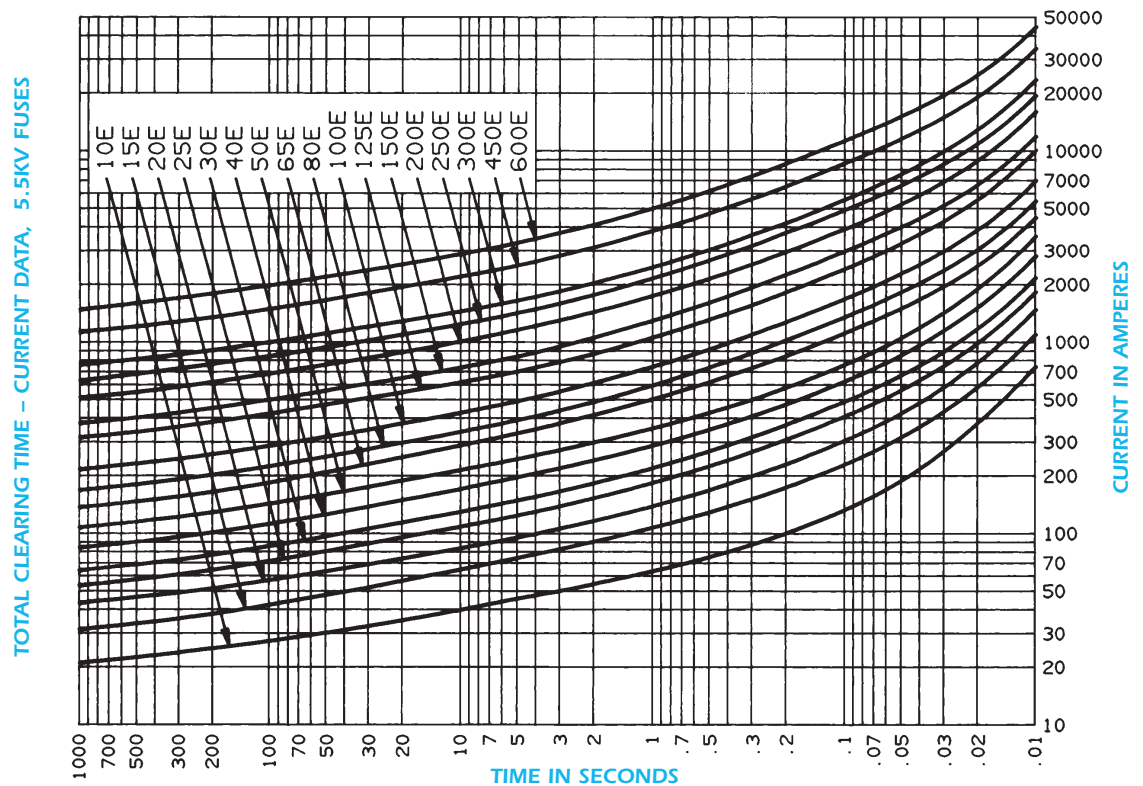
Catalog Numbers, Ratings, Dimensions, CL-14 Series, 5.5kV

New Catalog Number	Reference Number	Old catalog Number	Ampere Rating	Number of Barrels	Fig.	Dimensions Inches (mm)			Interrupting Rating RMS SYM Amperes
						A	B	C	
5.5kV Max. – Clip-Lock Style – 15.25" (387mm) Clip Centers – 3" (76.2mm) Barrel Diameter									
A055C1DORO-10E	R213363	225-007-937	10E	1	A	16.81 (427)	16.12 (410)	0.5 (13) Tripped Force 2 lbs.	63,000
15E	Q214880	938	15E						
20E	X215898	939	20E						
25E	J216921	940	25E						
30E	D217951	941	30E						
40E	C218985	942	40E						
50E	V219507	943	50E						
65E	Q221964	944	65E						
80E	Z222708	945	80E						
100E	G212848	946	100E						
125E	G213860	947	125E						
150E	R214375	948	150E						
5.5kV Max. – Clip Lock Style – 21.25" (540mm) Clip Centers – 3" (76.2mm) Barrel Diameter									
A055C1DORO-200E	V215390	225-007-949	200E	1	A	22.81 (580)	22.12 (562)	0.5 (13) Tripped Force 2 lbs.	63,000
250E	B216408	950	250E						
300E	W217438	951	300E						
400E	J218462	952	400E						
A055C2DORO-450E	N223227	953	450E	2	B				
500E	D201046	954	500E						
600E	M201560	955	600E						

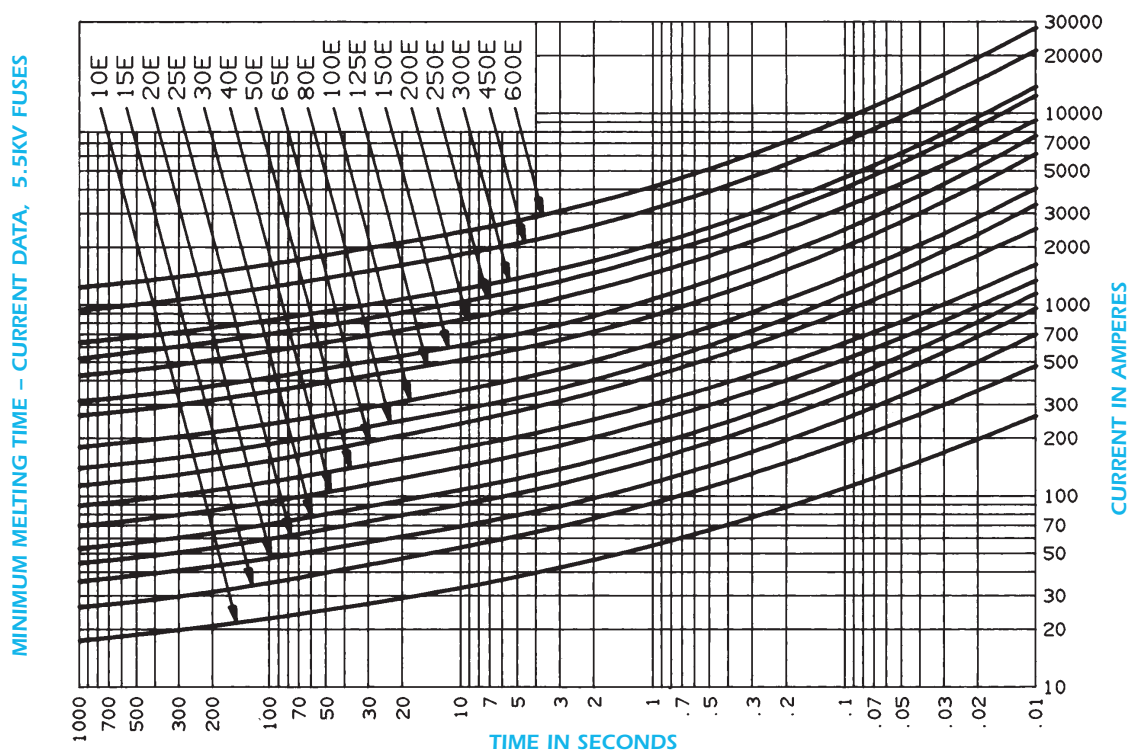
* RMS ASYM. Amperes = RMS SYM. Amperes x 1.6

American Fuses E-Rated 5.5kV - 15.5kV CL-14 series

A055C1DORO – 10E to 400E and A055C2DORO – 450E to 600E



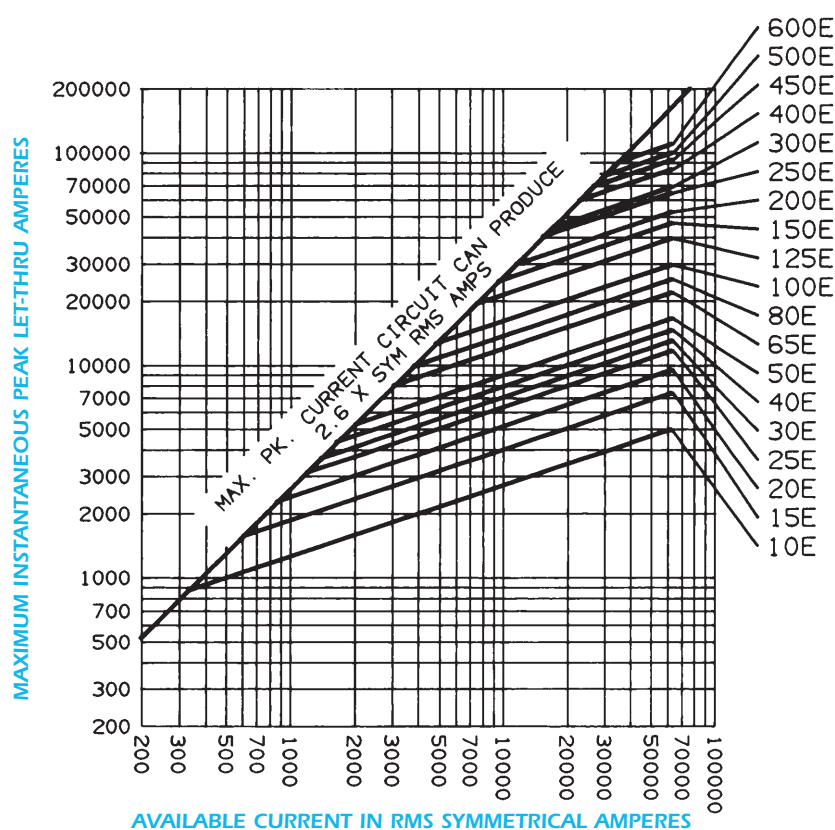
A055C1DORO – 10E to 400E and A055C2DORO – 450E to 600E



Medium voltage fuses

American Fuses E-Rated Bolt-in Series

A055C1DORO – 10E to 400E and A055C2DORO – 450E to 600E Peak Let-Thru Current Data, 5.5kV CL-14 Fuses



American Fuses E-Rated 5.5kV - 15.5kV CL-14 series

15.5kV Clip-Lock Mounted

CATALOG NUMBERING SYSTEM

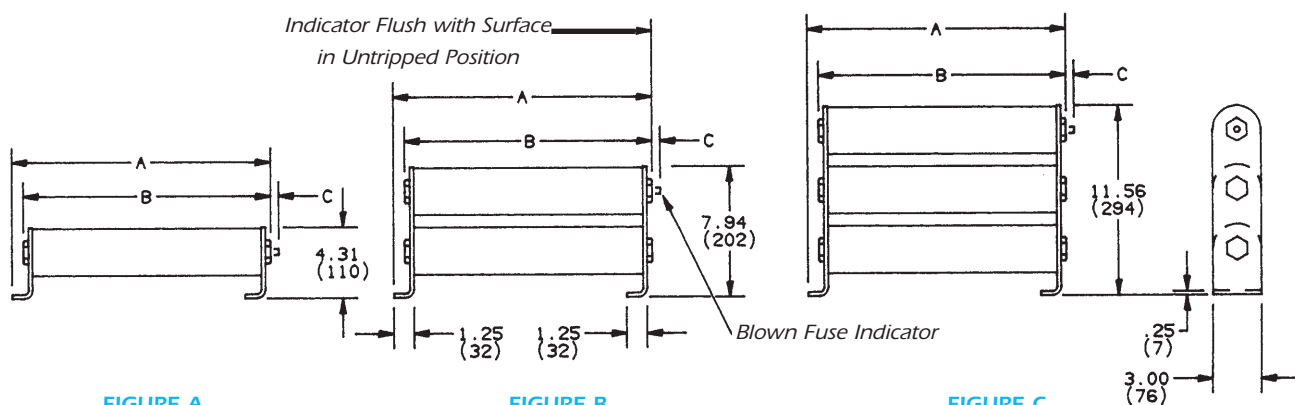
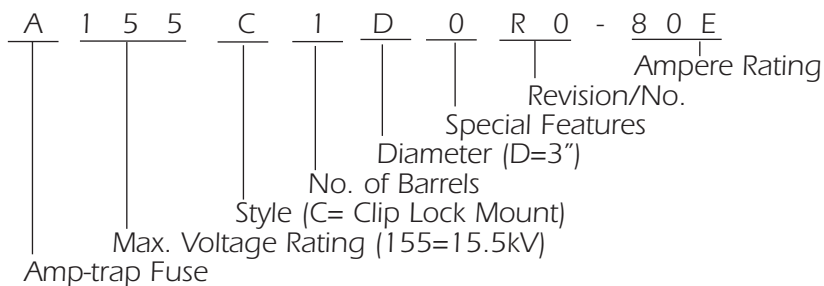


FIGURE A

FIGURE B

FIGURE C

Reference and Catalog Numbers, Ratings, Dimensions, CL-14 Series, 15.5kV

New Catalog Number	Reference Number	Old catalog Number	Ampere Rating	Number of Barrels	Fig.	Dimensions Inches (mm)			Interrupting Rating RMS SYM Amperes
						A	B	C	
15.5kV Max. – Clip-Lock Style – 18.25" (464mm) Clip Centers – 3" (76.2mm) Barrel Diameter									
A155C1DORO-10E	Z211300	225-007-967	10E	1	A	19.81 (504)	19.12 (486)	0.5 (13) Tripped Force 2 lbs.	50,000
15E	T212330	968	15E						
20E	H212849	969	20E						
25E	H213861	970	25E						
30E	S214376	971	30E						
40E	R214881	972	40E						
50E	W215391	973	50E						
15.5kV Max. – Clip-Lock Style – 21.25" (540mm) Clip Centers – 3" (76.2mm) Barrel Diameter									
A155C1DORO-65E	Y215899	225-007-974	65E	1	A	22.81 (580)	22.12 (562)	0.5 (13)	50,000
80E	C216409	975	80E						
100E	F203463	976	100E						
A155C2DORO-125E	K216922	977	125E	2	B				
A155C3DORO-150E	K218463	978	150E						
200E	D218986	979	200E	3	C			Tripped Force . 2 lbs	
250E	W219508	980	250E						
300E	R221965	981	300E						

* RMS ASYM. Amperes = RMS SYM. Amperes x 1.6

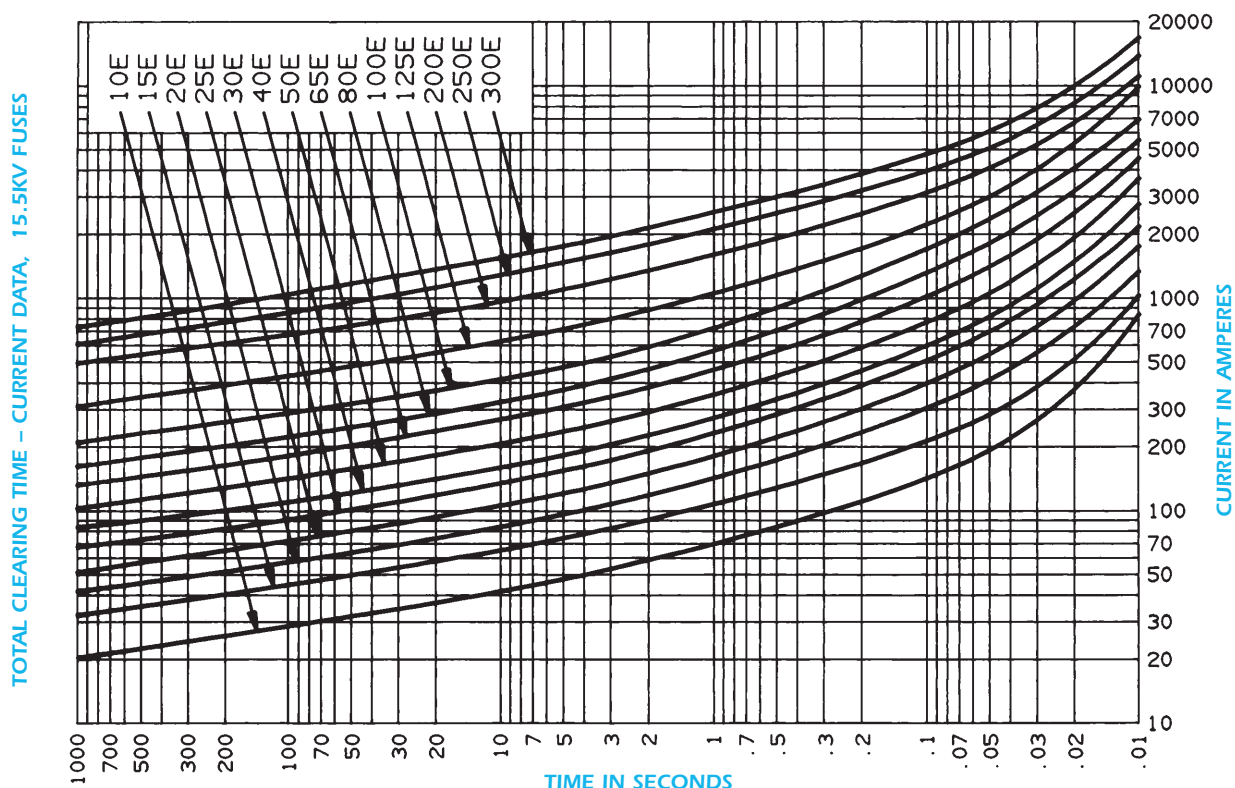
Medium voltage fuses

American Fuses

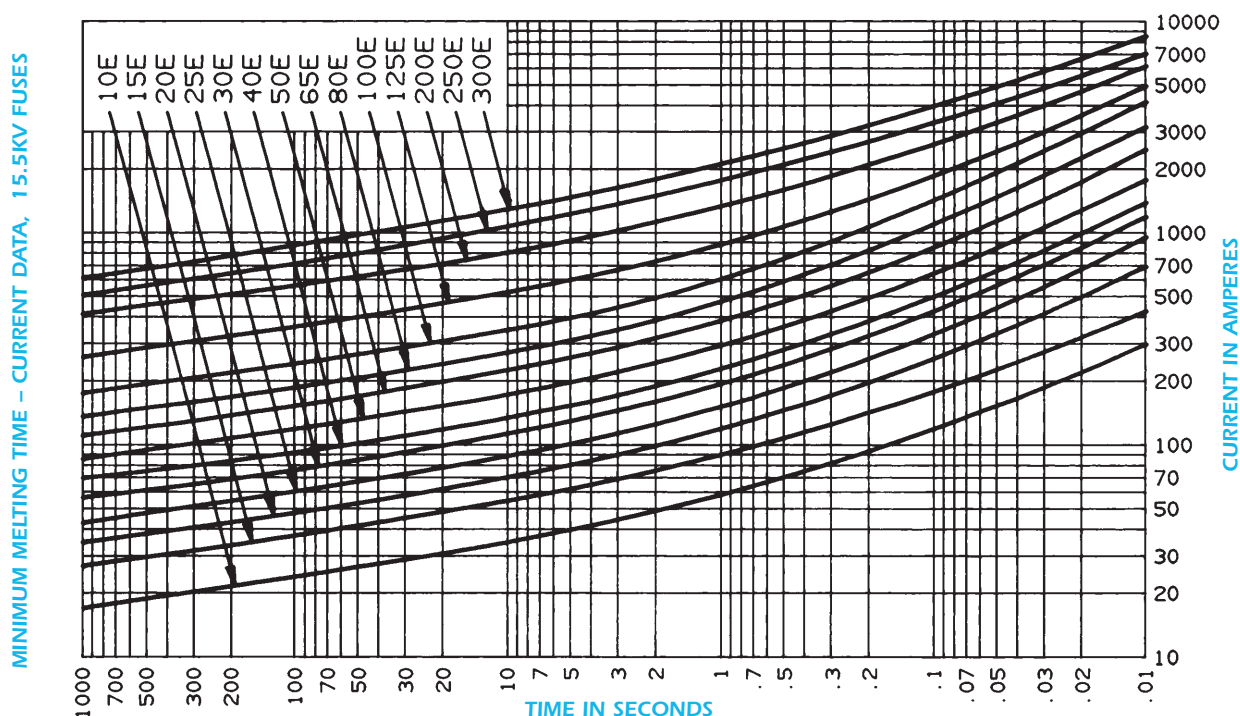
E-Rated

5.5kV - 15.5kV CL-14 series

A155C1DORO - 10E to 100E / A155C2DORO - 125E
A155C3DORO - 150E to 300E

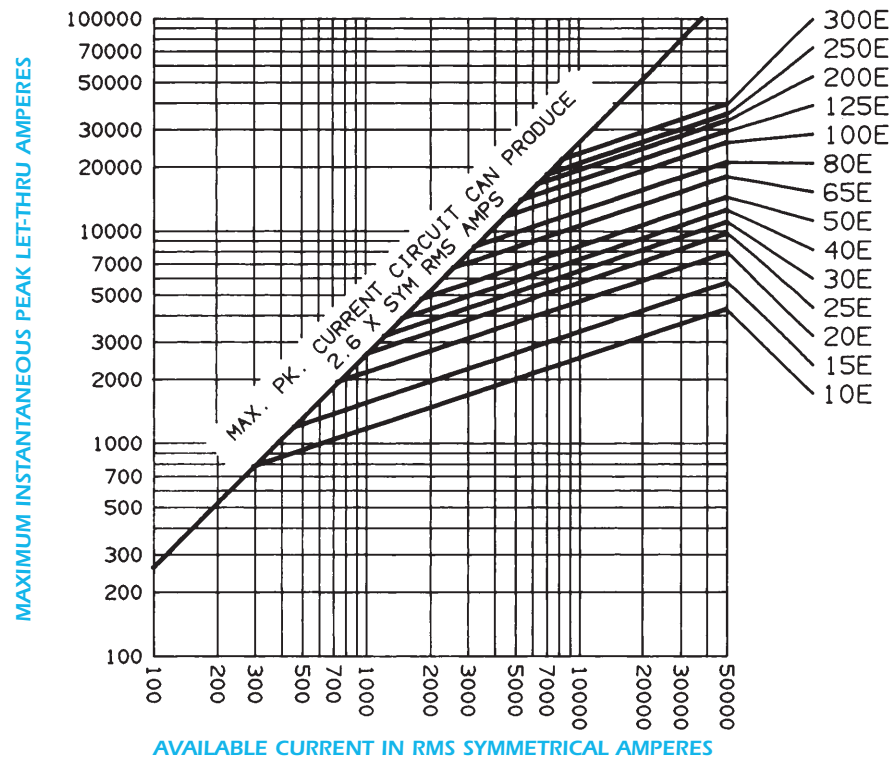


A155C1DORO - 10E to 100E / A155C2DORO - 125E
A155C3DORO - 150E to 300E



American Fuses E-Rated 5.5kV - 15.5kV CL-14 series

A155C1DORO - 10E to 100E - A155C2DORO - 125E A155C3DORO - 150E to 300E Peak Let-Thru Current Data, 15.5kV CL-14 Fuses



American Fuses

R-Rated

2.4kV - 4.8kV/7.2kV - A 240R/A 480R/A 072F/A 072B



R-RATED MOTOR STARTER FUSES

Amp-trap® R-rated fuses are current-limiting, high interrupting rating fuses intended for the short-circuit protection of medium voltage motors and motor controllers. R-rated fuses have a minimum interrupting rating and must be coordinated with overload relays in combination motor starters. The motor starter manufacturer generally specifies the R-rated fuse size. Amp-trap R-rated fuses are rated 2R to 36R, at 2.4, 4.8, and 7.2kV. 4.8 and 7.2kV fuses are UL Recognized. The 4.8kV (A480R) is available with hookeye tab. The 7.2kV (A072F) series has the same dimensions as the 4.8kV (A480R), allowing smaller 7.2kV equipment or 4.8kV upgrades. The A072B is a bolt-in 7.2kV fuse.

Features/Benefits

- **Ferrule mounting** for standard clips and interchangeability with other brands of fuses.
- **7.2kV** series has the same dimensions as 4.8kV fuses, allowing compact, higher voltage-rated equipment designs.
- **7.2kV** bolt-in design for improved design flexibility.
- Optional hookeye on 4.8 kV for non load-break isolation by hookstick.

Ratings

A240R

AC: 2R to 36R
2750V, 45kA I.R. Sym.

A480R

AC: 2R to 36R
5500V, 63kA I.R. Sym.

A072F - A072B

AC: 2R to 24R
7200V, 50kA I.R. Sym.

Back-up type Current-Limiting Fuse:

A current limiting fuse which can interrupt any current between its rated minimum interrupting current and its maximum interrupting current. Backup fuses are not designed or intended to open under overload conditions.

Highlights



- R-Rated
- UL Recognized in 4.8 and 7.2 kV ratings

Applications

Short circuit protection of medium voltage motors and motor controllers

Approvals

- Ferraz Shawmut certified
 - A240R @ 2750V, 45kA Sym.
- UL Recognized Component
 - A480R @ 5080V, 50kA, Sym.
 - A072F @ 7200V, 50kA, Sym.
 - A072B @ 7200V, 50kA, Sym.
- UL file # E93367

Spring-reinforced clips

- 228-700-530 (one pair of clips) For 3" diameter, 2 barrels max.

Medium voltage fuses

American Fuses

R-Rated

2.4kV - 4.8kV/7.2kV - A 240R/A 480R/A 072F/A 072B

A240R 2.4kV Ferrule Style

Indicator flush with surface
2 lb. Force (Tripped)

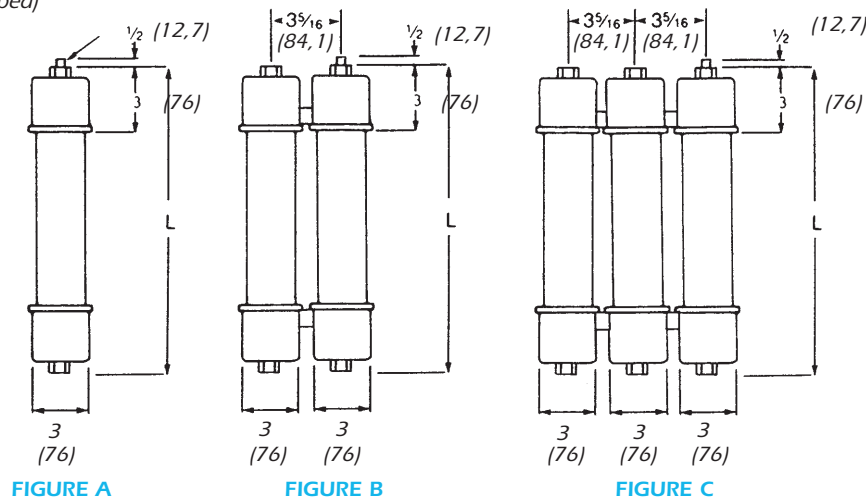


FIGURE A

FIGURE B

FIGURE C

Catalog and Reference Numbers, Ratings, Dimensions, 2.4kV

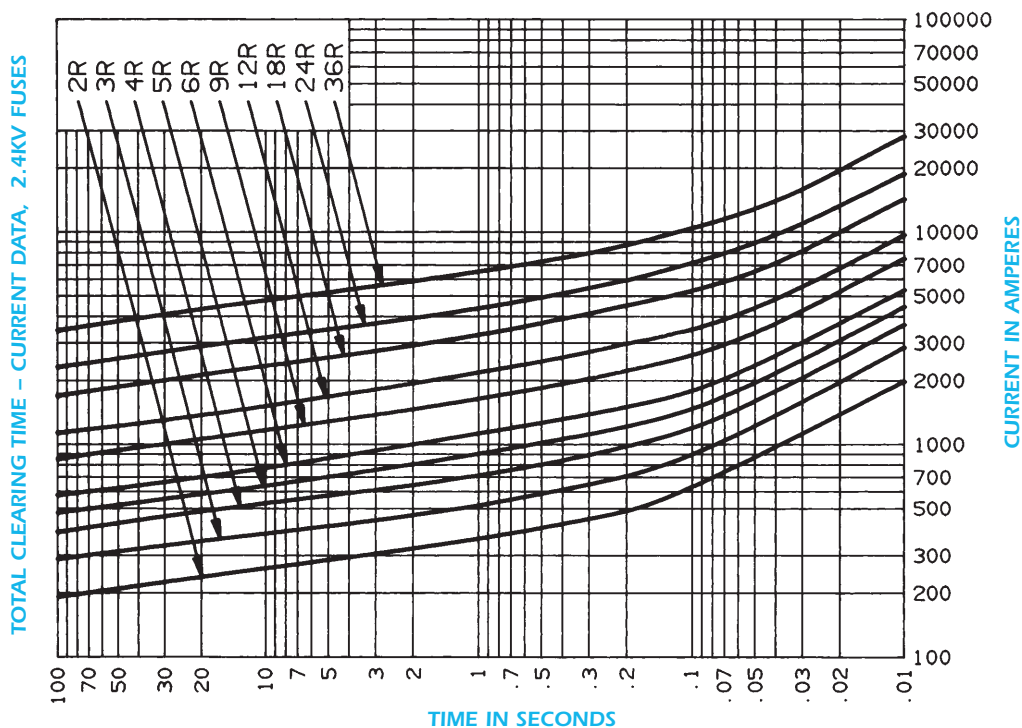
Fig.	Catalog Number	Reference Number	Size	Continuous Ampere Rating at 40°	Dim. L	Minimum Interrupting Rating Rms Amperes	Maximum Tested	
	Standard						RMS Asym	RMS Sym
A240R								
A	A240R2R	J201557	2R	70	10-7/8 (276mm)	170	70kA @ 2750V	45kA @ 2750V
	A240R3R	F211812	3R	100		250		
	A240R4R	E212846	4R	130		340		
	A240R6R	E213858	6R	170		500		
	A240R9R	P214373	9R	200		760		
	A240R12R	R219504	12R	230		1000		
B	A240R18R	N221962	18R	390		1500		
	A240R24R	L223225	24R	450		1950		
C	A240R36R	W211297	36R**	650		2900		

* This rating defines the fuse's long-term thermal capability per ANSI C37 46-1981 and should not be the sole factor for selecting a specific R-rating.

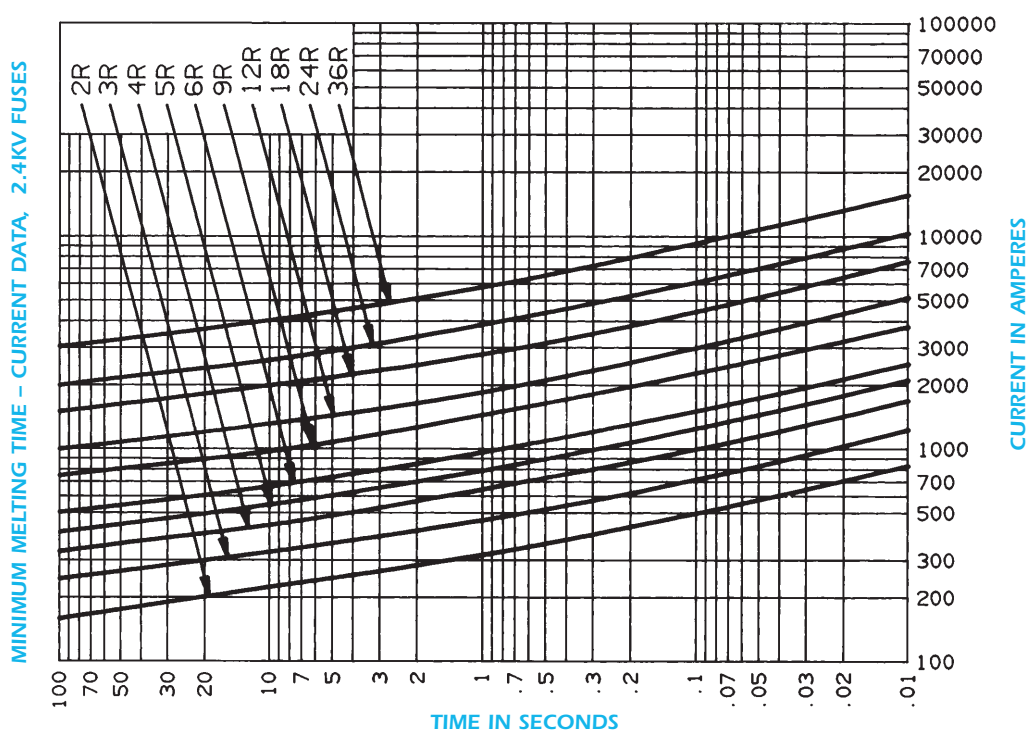
** Not recommended for use in fuse clips which grasp only one barrel.

2.4kV - 4.8kV/7.2kV - A 240R/A 480R/A 072F/A 072B

A240R2R to 36R, 2400 Volts



A240R2R to 36R, 2400 Volts



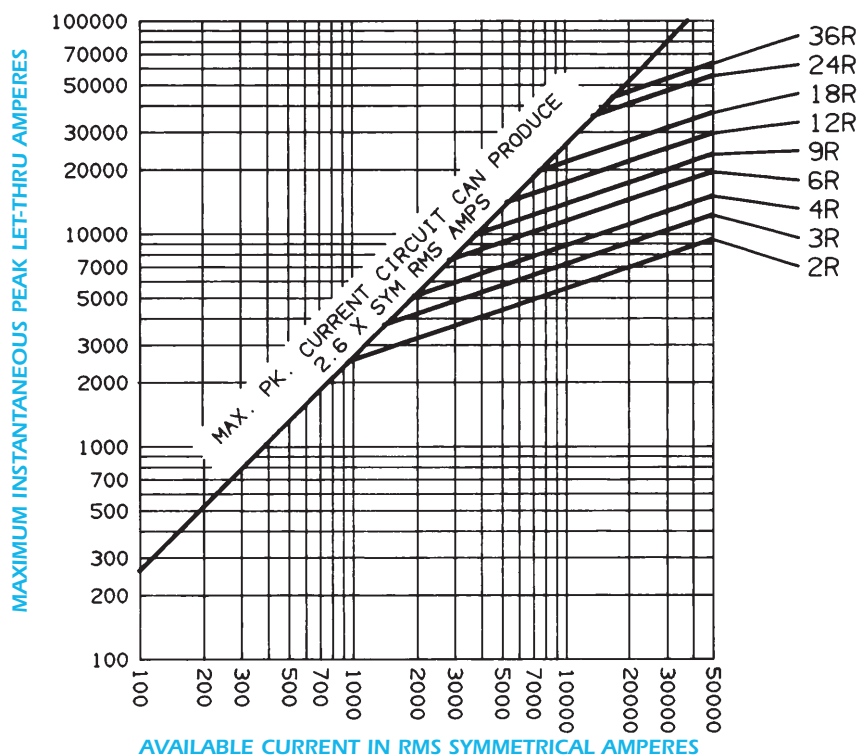
Medium voltage fuses

American Fuses

R-Rated

2.4kV - 4.8kV/7.2kV - A 240R/A 480R/A 072F/A 072B

A240R2R to 36R, 2400 Volts
Peak Let-Thru Current Data, R-Rated Fuses



American Fuses

R-Rated

2.4kV - 4.8kV/7.2kV - A 240R/A 480R/A 072F/A 072B

A480R 4.8kV Ferrule Style

Indicator flush with surface
2 lb. Force (Tripped)

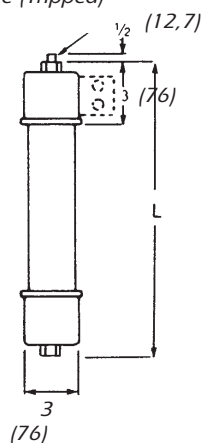


FIGURE A

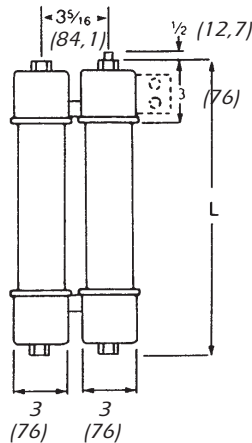


FIGURE B

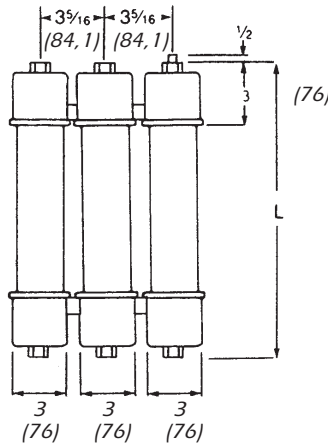
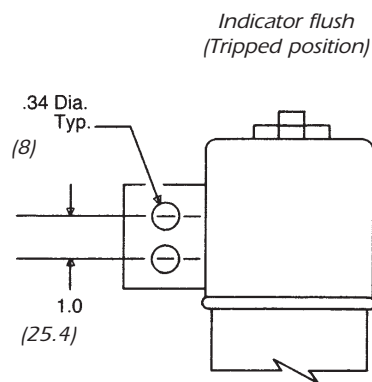


FIGURE C



Hookeye illustration

Catalog and Reference Numbers, Ratings, Dimensions, 4.8kV

Fig.	Catalog Number	Reference Number	Size	Continuous Ampere Rating at 40°	Dim. L	Minimum Interrupting Rating Rms Amperes	1 Phase Interrupting Rating			
							UL Component Recognition		Maximum Tested	
							RMS Asym	RMS Sym	RMS Asym	RMS Sym

A480R-1

A	A480R2R-1	P221963	a2R	70		190				
	A480R3R-1	K201558	3R	100		225				
	A480R4R-1	G211813	4R	130		330				
	A480R5R-1	Q213362	5R	150		400	80kA @ 5080V	50kA @ 5080V	100kA @ 5500V	63kA @ 5500V
	A480R6R-1	Q214374	6R	170	15-7/8 (403mm)	500				
	A480R9R-1	W215897	9R	200		740				
B	A480R12R-1	N214878	12R	230		955				
	A480R18R-1	Z216406	18R	390		1440				
C	A480R24R-1	H218461	24R	450		1910				
	A480R36R-1	C201045	36R**	650		2810				

A480R-1HE with hookeye

A	A480R2R-1HE	X222706	2R	70		190				
	A480R3R-1HE	S203428	3R	100		225				
	A480R4R-1HE	R212328	4R	130		330				
	A480R5R-1HE	F213859	5R	150		400	80kA @ 5080V	50kA @ 5080V	100kA @ 5500V	63kA @ 5500V
	A480R6R-1HE	P214879	6R	170	16-1/8 (410mm)	500				
	A480R9R-1HE	A216407	9R	200		740				
B	A480R12R-1HE	S215388	12R	230		955				
	A480R18R-1HE	G216919	18R	390		1440				
C	A480R24R-1HE	A218983	24R	450		1910				

* This rating defines the fuse's long-term thermal capability per ANSI C37 46-1981 and should not be the sole factor for selecting a specific R-rating.

** Not recommended for use in fuse clips which grasp only one barrel.

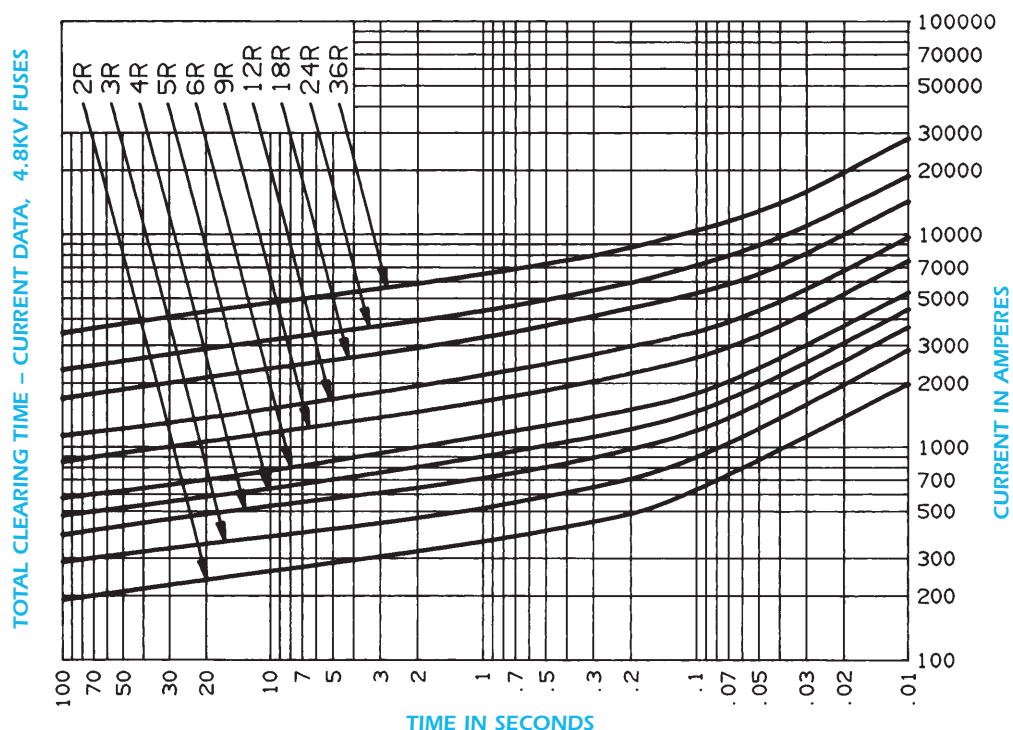
Medium voltage fuses

American Fuses

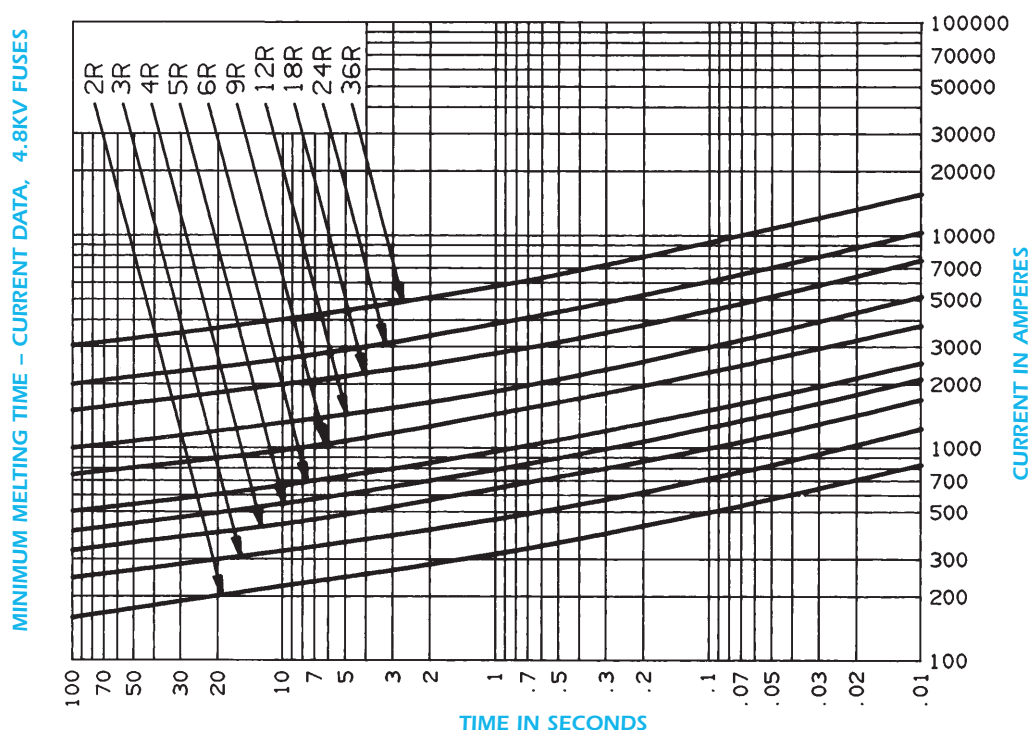
R-Rated

2.4kV - 4.8kV/7.2kV - A 240R/A 480R/A 072F/A 072B

A480R-1, and A480R-1HE, 4800 Volts



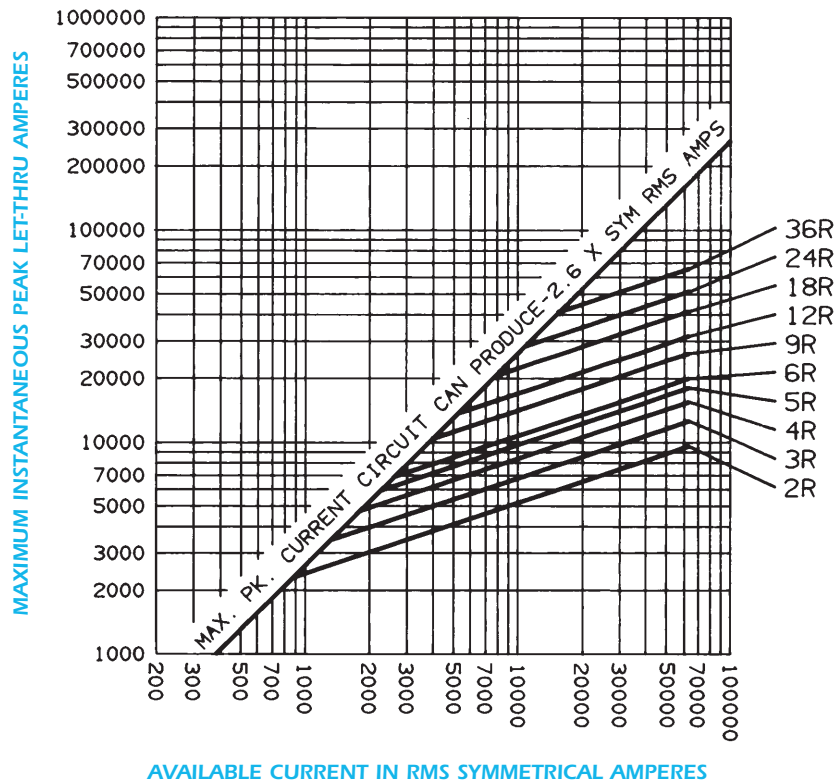
A480R-1, and A480R-1HE, 4800 Volts



American Fuses
R-Rated

2.4kV - 4.8kV/7.2kV - A 240R/A 480R/A 072F/A 072B

A480R-1 and A480R-1HE, 4800 Volts Peak Let-Thru Current Data, R-Rated Fuses



Medium voltage fuses

American Fuses

R-Rated

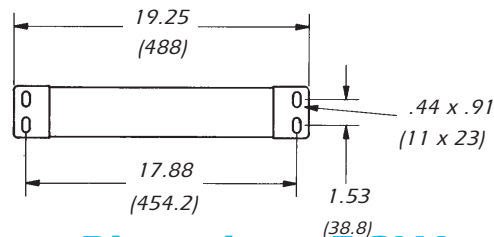
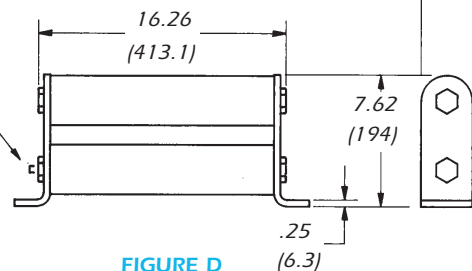
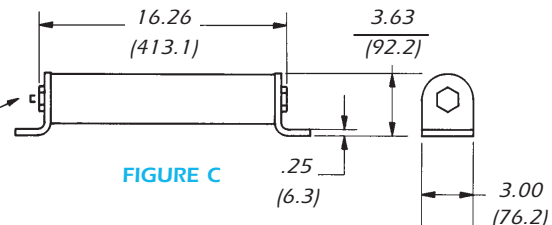
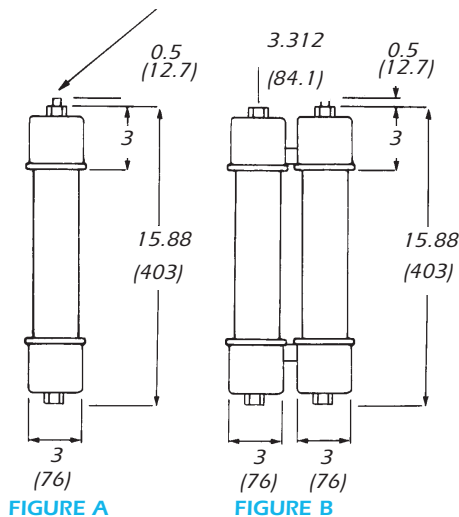
2.4kV - 4.8kV/7.2kV - A 240R/A 480R/A 072F/A 072B

7.2kV Ferrule & Bolt-in Types

CATALOG NUMBERING SYSTEM

Amp-trap Fuse 072 F 1 D 0 R 0 - 12R R Rating

Special Features
Diameter (D=3")
No. of Barrels
Style (F=Ferrule, B=Bolt-in Mount)
Nominal Voltage Rating (072=7.2kV)
Blown Fuse Indicator
Extends 0.5 in. (12.7mm) when fuse opens, with 2 lbs. of force at end of travel



Reference and Catalog Numbers, Ratings, Dimensions, 7.2kV

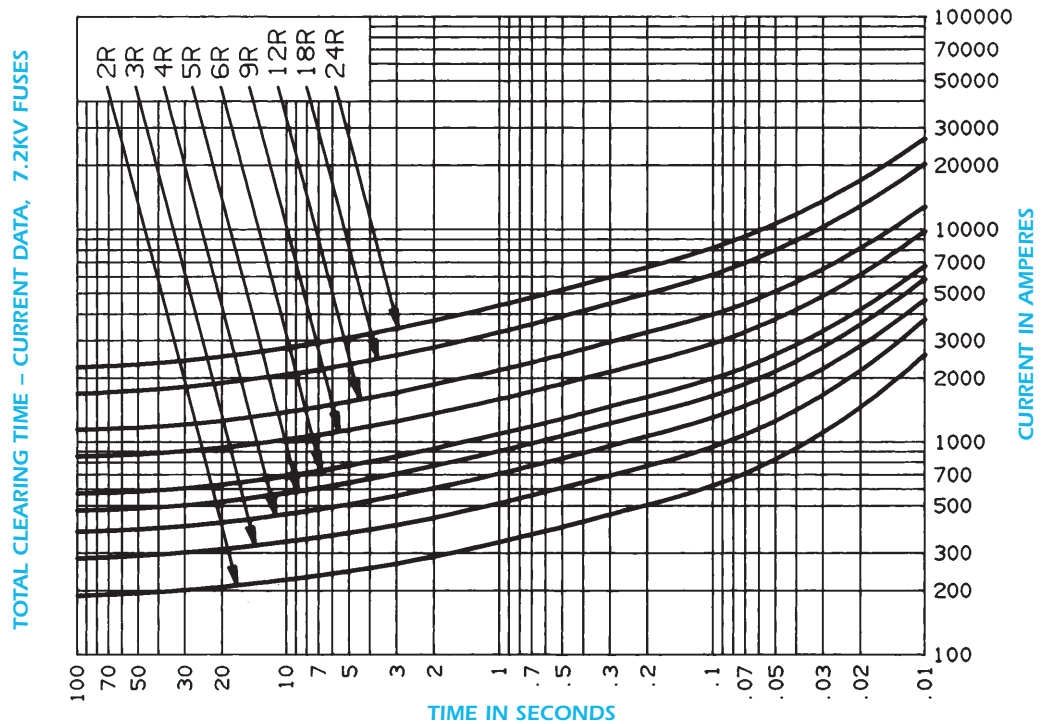
Figure	Catalog Number	Reference Number	Rating	Allowable Continuous Ampere Rating at 40°C	Minimum Interrupting Rating RMS Amperes	1 Phase Interrupting Rating UL Component Recognition	
						RMS Asym.	RMS Sym.
Ferrule Type							
A	A072F1DORO-2R	M214877	2R	70	190	80kA @ 7200V	50kA @ 7200V
	A072F1DORO-3R	R215387	3R	100	225		
	A072F1DORO-4R	T215895	4R	130	330		
	A072F1DORO-5R	Y216405	5R	150	400		
	A072F1DORO-6R	F216918	6R	170	500		
	A072F1DORO-9R	T217436	9R	200	740		
B	A072F1DORO-12R	N214372	12R	230	955		
	A072F2DORO-18R	G218460	18R	390	1440		
	A072F2DORO-24R	Z218982	24R	450	1910		
Bolt-in Type							
C	A072B1DARO-2R	H201556	2R	70	190	80kA @ 7200V	50kA @ 7200V
	A072B1DARO-3R	R203427	3R	100	225		
	A072B1DARO-4R	V211296	4R	130	330		
	A072B1DARO-5R	E211811	5R	150	400		
	A072B1DARO-6R	P212326	6R	170	500		
	A072B1DARO-9R	D212845	9R	200	740		
D	A072B1DARO-12R	B201044	12R	230	955		
	A072B2DARO-18R	N213360	18R	390	1440		
	A072B2DARO-24R	D213857	24R	450	1910		

American Fuses

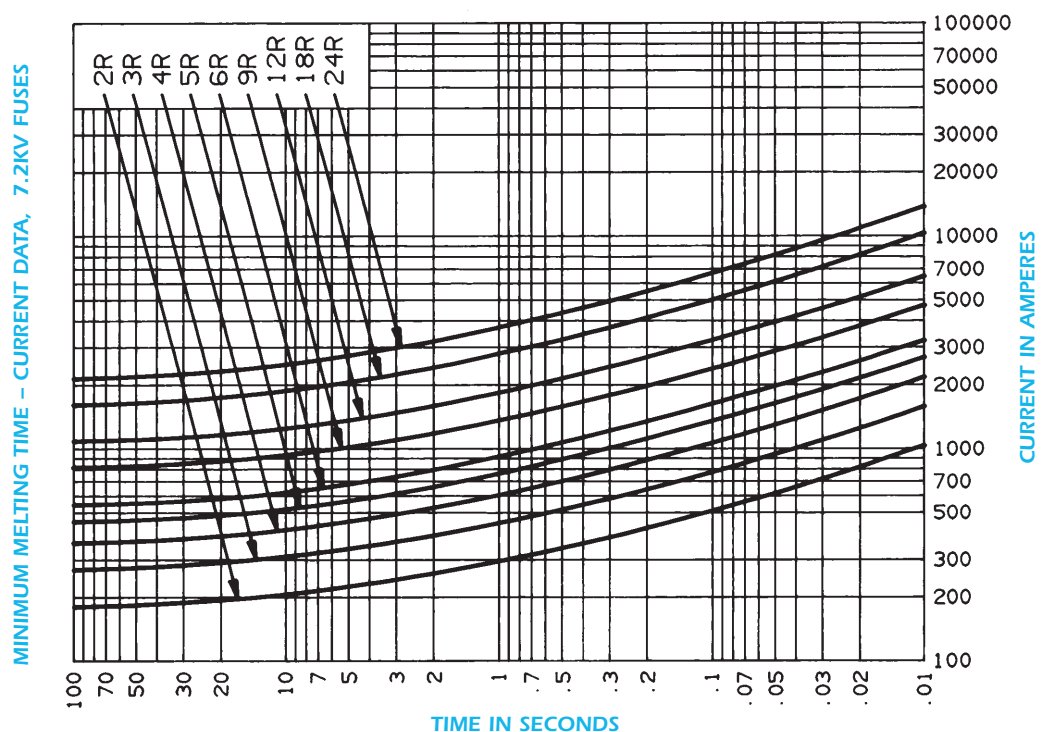
R-Rated

2.4kV - 4.8kV/7.2kV - A 240R/A 480R/A 072F/A 072B

A072F and A072B, 7200 Volts



A072F2 and A072B, 7200 Volts



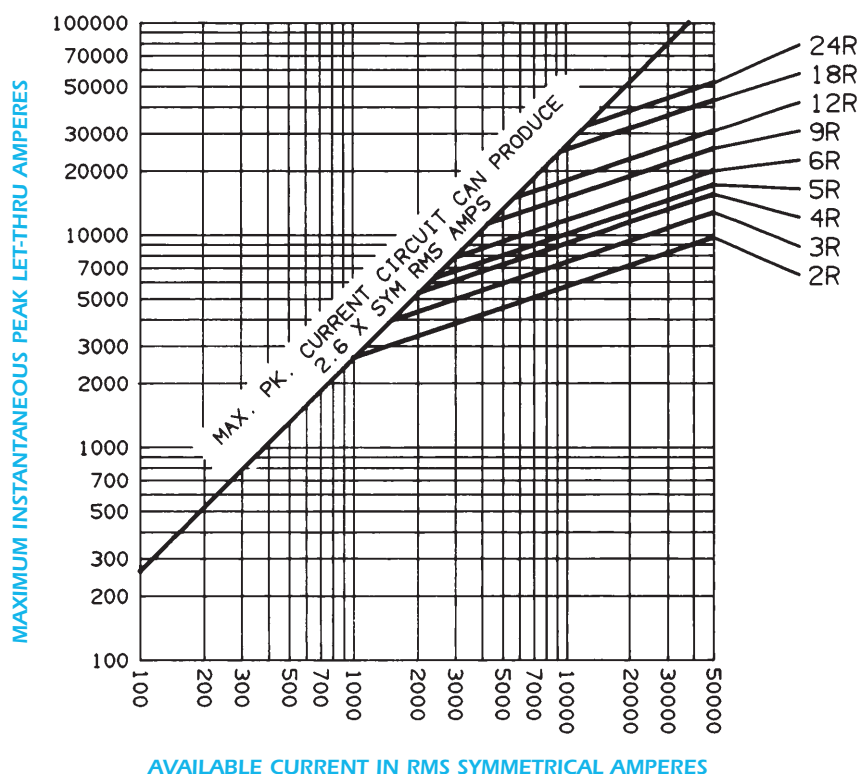
Medium voltage fuses

American Fuses

R-Rated

2.4kV - 4.8kV/7.2kV - A 240R/A 480R/A 072F/A 072B

AO72F and A072B2, 7200 Volts Peak Let-Thru Current Data, R-Rated Fuses



American Fuses R-Rated

3.3kV/5.3kV/7.2kV - A 033D1/A055D1/A072D1



R-RATED IEC DIN Style MV FUSES

Amp-trap R-rated DIN style fuses are current limiting, high interrupting rating fuses, intended for the short circuit protection of medium voltage motors and motor controllers. This product range offers North

American R-rated performance in the IEC 282-1 DIN mounting configuration of 442mm. R-rated fuses are applied as back up fuses that have a minimum interrupting rating, and must be coordinated with overload relays in combination motor starters.

Amp-trap R-rated, DIN type fuses are offered in voltage ratings of 3.3kV, 5.3kV and 7.2kV in ratings from 2R to 19R. All fuses within this product group are UL component recognized.

Features/Benefits

- **Clip Mount DIN 45:** R-rated fuses with North American ANSI characteristics in a standard DIN 442mm size.

Ratings

A033D1

AC: 2R to 19R*
3300V max, 65kA I.R. Sym.

A055D1

AC: 2R to 19R*
5300V max, 65kA I.R. Sym.

A072D1

AC: 2R to 19R*
7200V max, 65kA I.R. Sym.

Back-up type Current-Limiting Fuse:

A current limiting fuse which can interrupt any current between its rated minimum interrupting current and its maximum interrupting current. Backup fuses are not designed or intended to open under overload conditions.

Highlights

- R-Rated
- UL Recognized

* **Note:** Ratings above 19R may be achieved by paralleling fuses. Please consult factory for details.

Applications

Short circuit protection of medium voltage motors and motor controllers

Approvals



- UL Recognized Component
- UL file # E93367

Spring-reinforced clips

- MR45 & Spring ref.# L096472

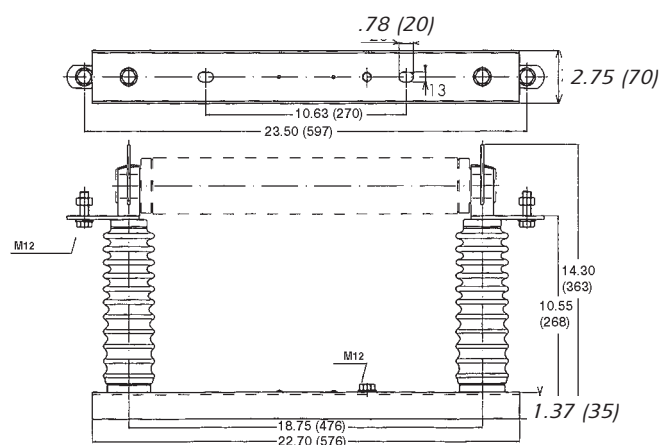
Fuse-Holder

- SI 24/442 Ref # K209425
In compliance with IEC 282-1, DIN standard 43625.

Definitions

R-Rating:

An "R" rated fuse will melt in the range of 15 to 35 seconds at a value of current equal to 100 times the "R" rating.



Medium voltage fuses

American Fuses

R-Rated

3.3kV/5.3kV/7.2kV - A 033D1/A055D1/A072D1

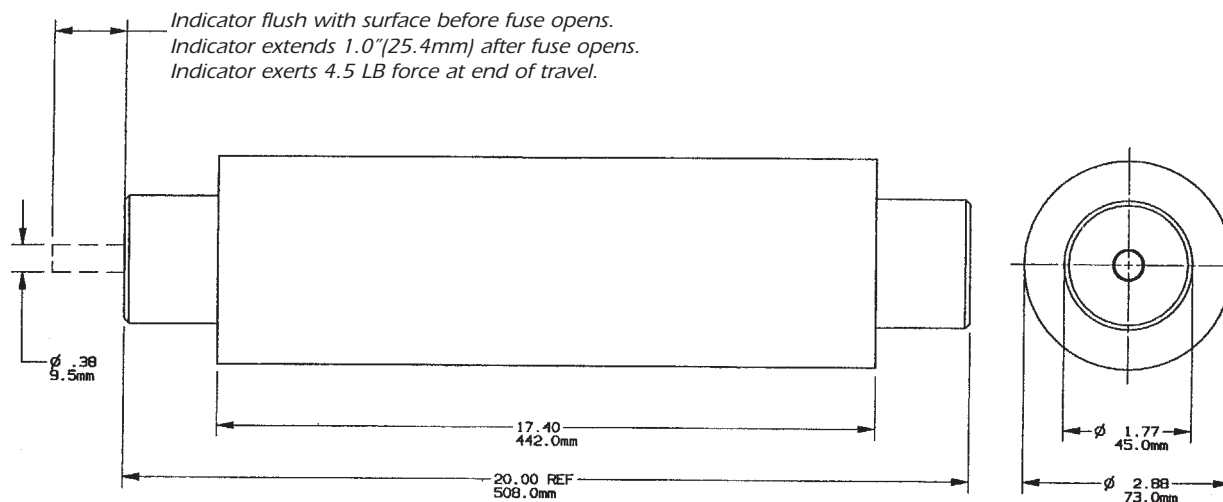


FIGURE A

Fig.	Designation	Reference Number	Size	Continuous Amp Rating at 55°C**	Continuous Amp Rating at 40°C**	Minimum Inter. Rating RMS Amperes	1 Phase Interrupting Rating Maximum Tested	
							RMS Asym	RMS sym

3.3kV Max. DIN IEC Style 442 mm

A	A033D1DSRO-2R		2R	63	70	180	100kA @ 3300V	65kA @ 3300V
	A033D1DSRO-3R		3R	90	100	270		
	A033D1DSRO-4R		4R	115	130	355		
	A033D1DSRO-5R		5R	135	150	450		
	A033D1DSRO-6R		6R	150	170	550		
	A033D1DSRO-9R		9R	180	200	710		
	A033D1DSRO-12R		12R	210	230	1100		
	A033D1DSRO-13R		13R*	230	260	1200		
	A033D1DSRO-16R		16R*	270	300	1500		
	A033D1DSRO-19R		19R*	280	310	1700		

5.5kV Max. DIN IEC Style 442 mm

A	A055D1DSRO-2R		2R	63	70	180	100kA @ 5500V	65kA @ 5500V
	A055D1DSRO-3R		3R	90	100	270		
	A055D1DSRO-4R		4R	115	130	355		
	A055D1DSRO-5R		5R	135	150	450		
	A055D1DSRO-6R		6R	150	170	550		
	A055D1DSRO-9R		9R	180	200	710		
	A055D1DSRO-12R		12R	210	230	1100		
	A055D1DSRO-13R		13R*	230	260	1200		
	A055D1DSRO-16R		16R*	270	300	1500		
	A055D1DSRO-19R		19R*	280	310	1700		

7.2kV Max. DIN IEC Style 442 mm

A	A072D1DSRO-2R		2R	63	70	180	100kA @ 7200V	65kA @ 7200V
	A072D1DSRO-3R		3R	90	100	270		
	A072D1DSRO-4R		4R	115	130	355		
	A072D1DSRO-5R		5R	135	150	450		
	A072D1DSRO-6R		6R	150	170	550		
	A072D1DSRO-9R		9R	180	200	710		
	A072D1DSRO-12R		12R	210	230	1100		
	A072D1DSRO-13R		13R*	230	260	1200		
	A072D1DSRO-16R		16R*	270	300	1500		
	A072D1DSRO-19R		19R*	280	310	1700		

* 13R, 16R and 19R are not standard ratings defined in ANSI C37.46.

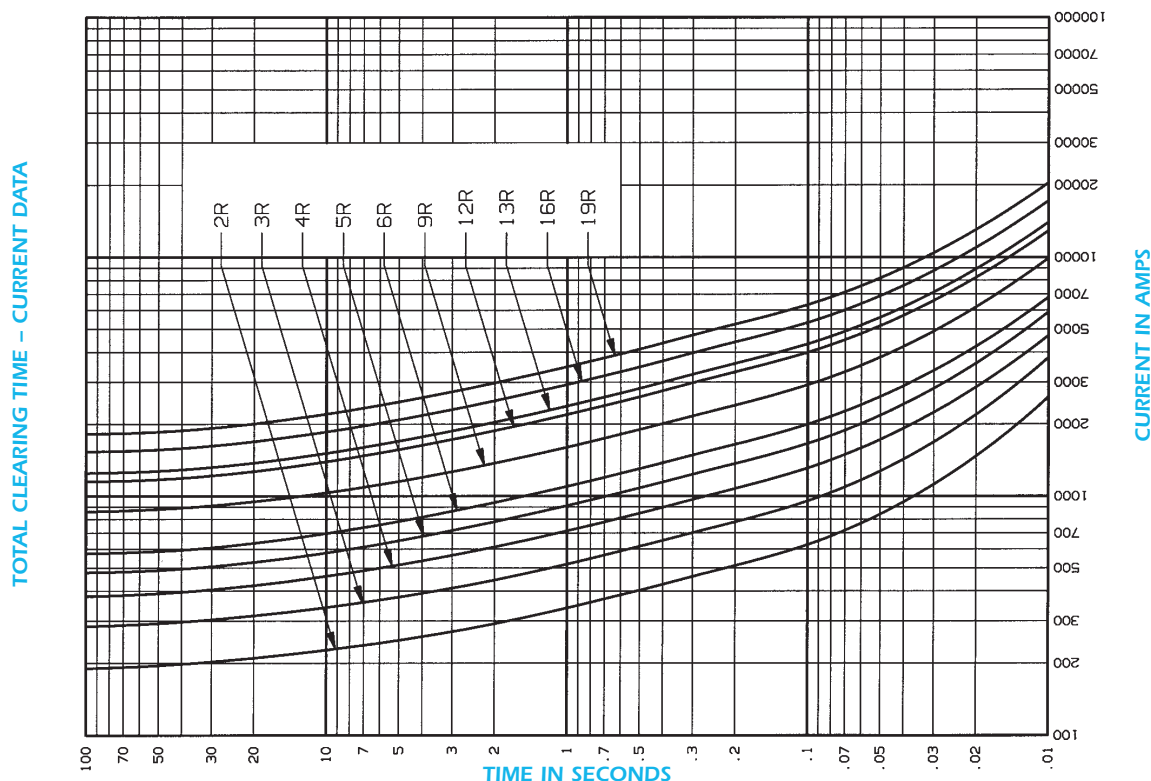
** This rating defines the thermal capability of the fuse per ANSI 37.46 and should not be the sole factor in fuse selection.

American Fuses

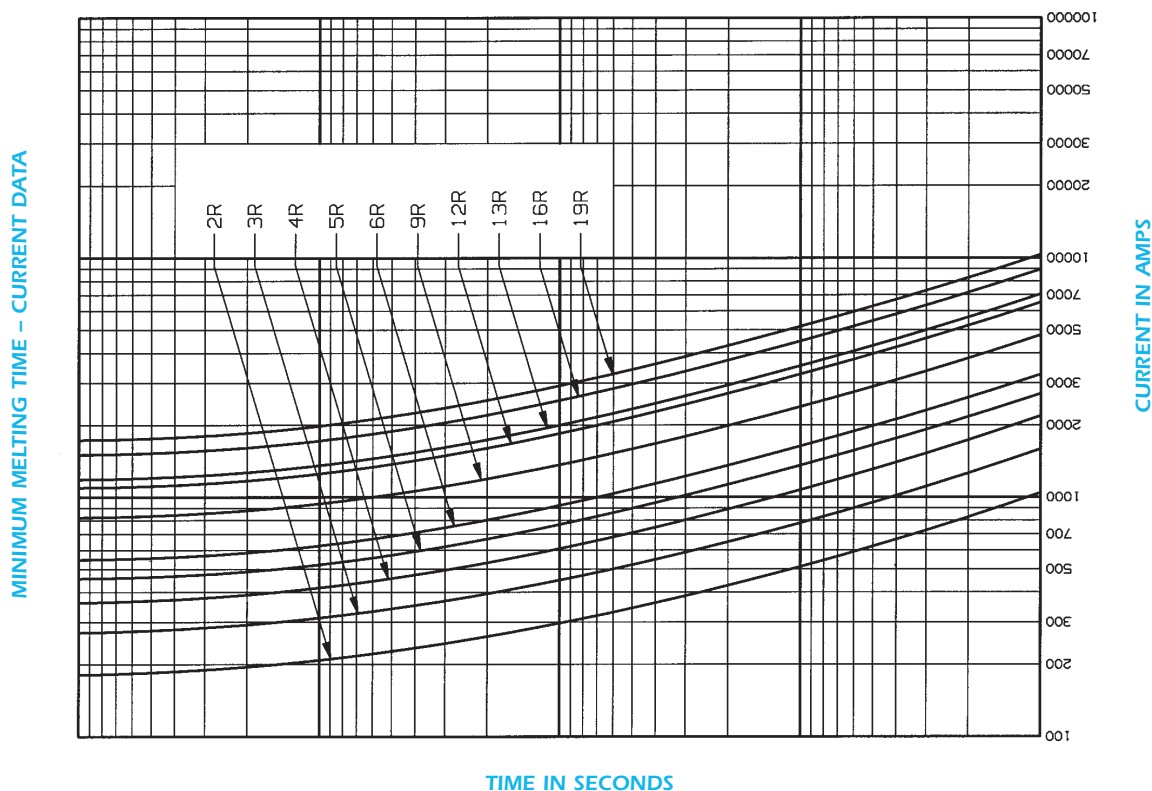
R-Rated

3.3kV/5.3kV/7.2kV - A 033D1/A055D1/A072D1

A033D1, 3300 Volts - A055D1, 5300 Volts - A072D1, 7200 Volts



A033D1, 3300 Volts - A055D1, 5300 Volts - A072D1, 7200 Volts



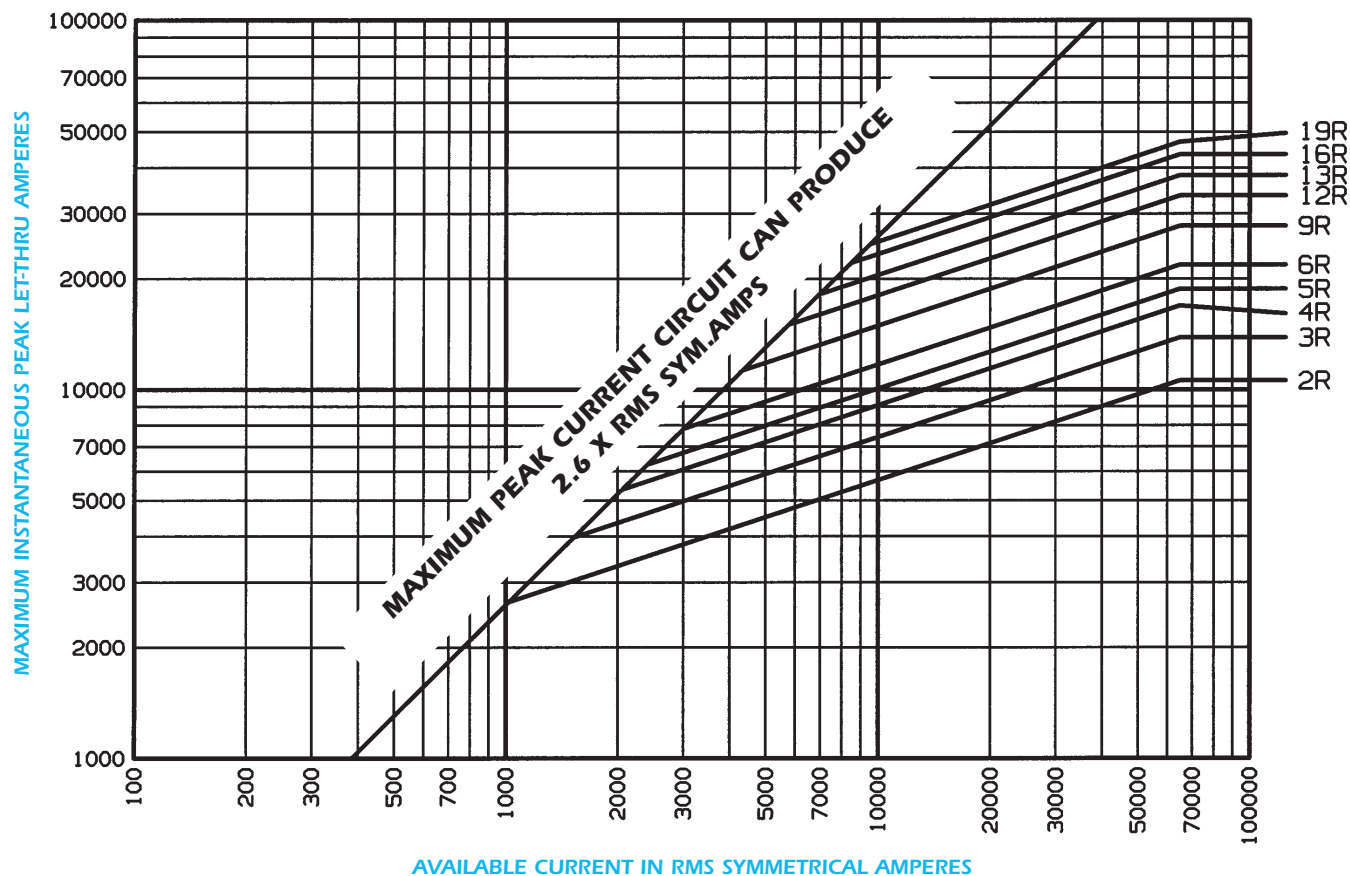
Medium voltage fuses

American Fuses

R-Rated

3.3kV/5.3kV/7.2kV - A 033D1/A055D1/A072D1

A033D1, 3300 Volts - A055D1, 5300 Volts - A072D1, 7200 Volts Peak Let-Thru Current Data, R-Rated Fuses



American Fuses

Potential Transformer Fuses (E-Rated)

2.4kV to 7.2 kV - A240T / A480T / A500 / A072T



POTENTIAL TRANSFORMER FUSES

Ferraz Shawmut E-rated PT fuses are current limiting fuses with high interrupting rating, used for primary winding-protection of potential transformers. They are small dimension, ferrule-type fuses and mounted in standard clips. Ratings are 1/2E to 5E at 2.4, 4.8, and 5.0 kV at 7.2kV rating are 1/2E to 3E

Features/Benefits

- Current limiting protection for transformers
- Ferrule mounting for ease of installation in standard clips
- Compact size saves valuable mounting space
- Fiberglass body provides dimensional stability in harsh industrial environments
- Metal embossed catalog number for lasting identification

Highlights

- E-Rated
- Current-Limiting

Applications

Primary protection for 2.4, 4.8, 5.0 or 7.2kV potential transformer

Ratings

A240T

AC: 1/2E to 5E
2400VAC, 50kA I.R. Sym.

A480T

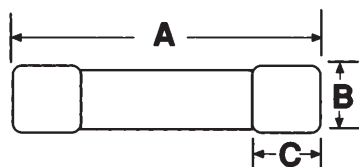
AC: 1/2E to 5E
4800VAC, 50kA I.R. Sym.

A500T

AC: 1/2E to 5E
5000VAC, 50kA I.R. Sym.

A720T

AC: 1E to 3E
7200VAC, 50kA I.R. Sym.



Dimensions

Catalog Number Prefix	Dimensions - inches			Fuse Clips*	
	A	B	C	Centers	Cat. NO.
A240T	4-5/8	13/16	5/8	4.0"	CO8917P
A480T	5-5/8	13/16	5/8	5.0"	CO8917P
A500T	5-5/8	1	9/16	5.0"	-
A720T	9-1/2	13/16	5/8	8.88"	CO8917P

Standard Fuse Ampere Ratings, Catalog and Reference Numbers

E-Rating	Catalog Number				Reference Number			
	2400V	4800V	5000V	7200V	2400V	4800V	5000V	7200V
1/2E	A240T1/2E	A480T1/2E	A500T1/2E-1	A720T1/2E-1	P212855	C215397	S218470	Z203710
1E	A240T1E	A480T1E	A500T1E-1	A720T1E-1	P213867	D215904	D219515	E211305
2E	A240T2E	A480T2E	A500T2E-1	A720T2E-1	A214383	H216414	X221970	P211820
3E	-	A480T3E	A500T3E-1	A720T3E-1	-	Q216927	G222715	C212338
4E	-	A480T4E	A500T4E-1	-	-	C217444	W223234	-
5E	A240T5E	A480T5E	A500T5E-1	-	Y214887	M217959	W201568	-

Medium voltage fuses

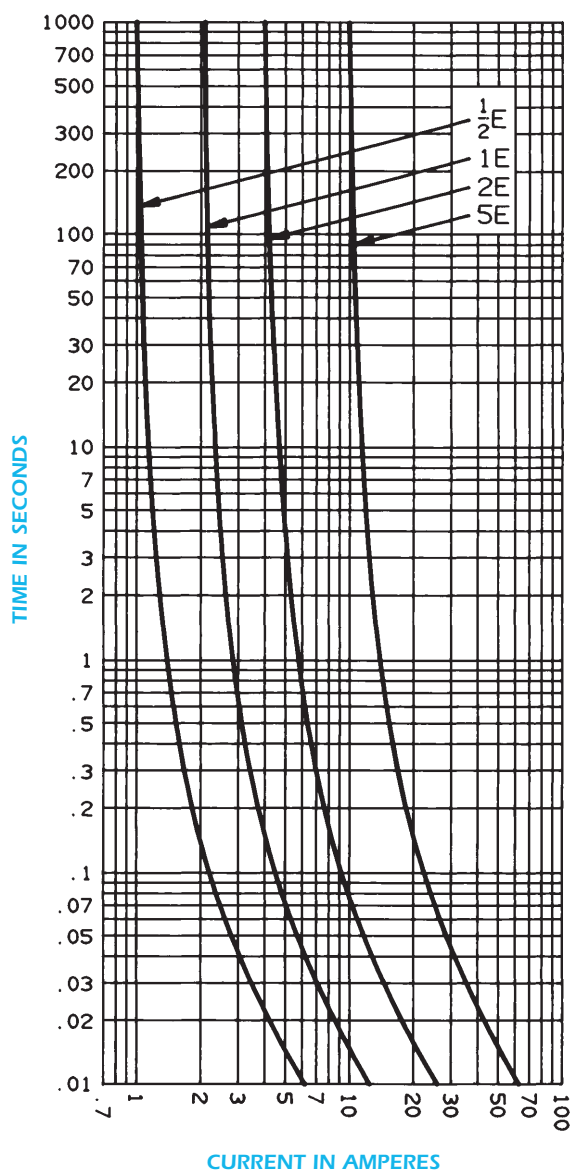
American Fuses

Potential Transformer Fuses (E-Rated)

2.4kV to 7.2 kV - A240T / A480T / A500 / A072T

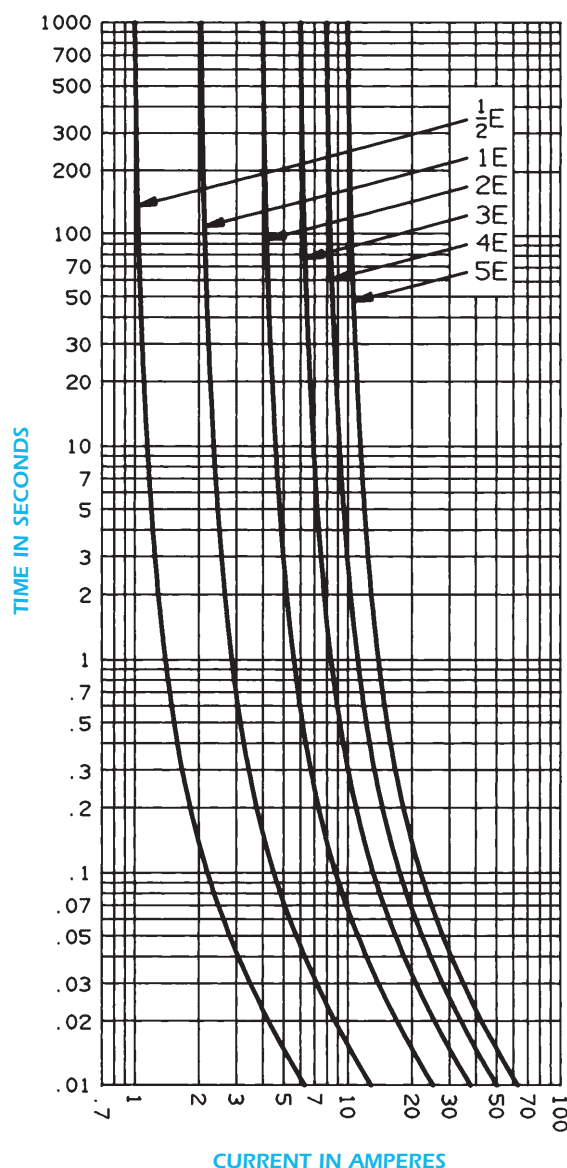
A240T1/2E to 5E

MELTING TIME – CURRENT DATA - PT FUSES - 2400V



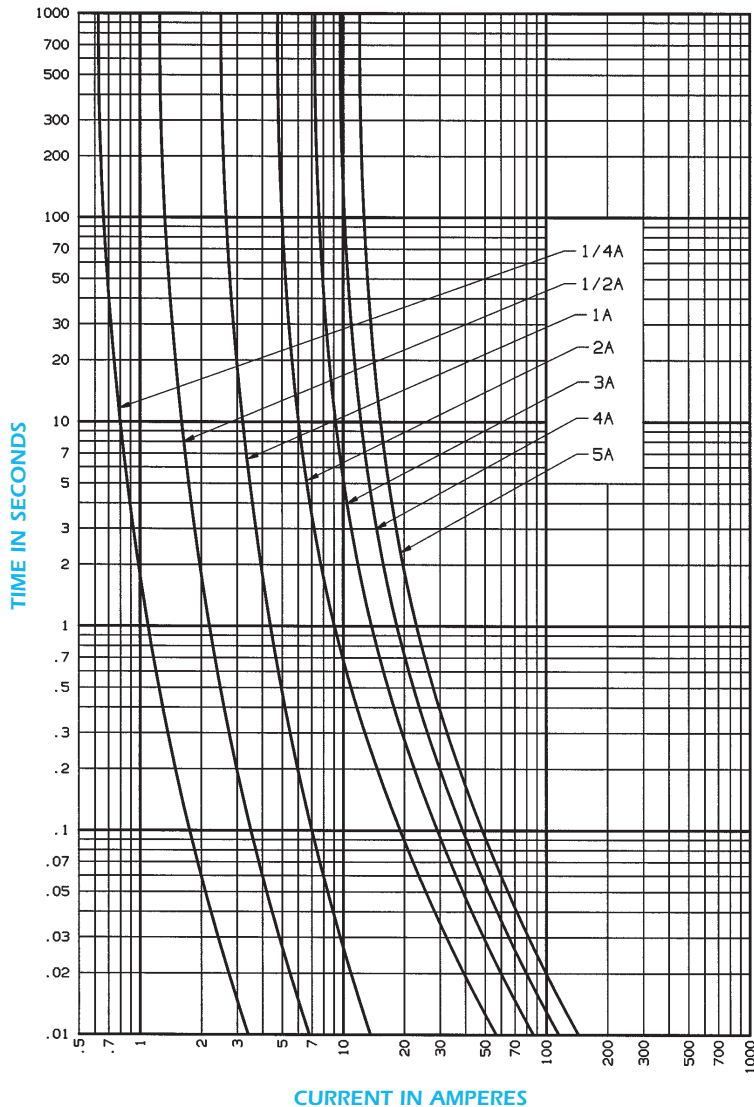
A480T1/2E to 5E

MELTING TIME – CURRENT DATA - PT FUSES - 4800V

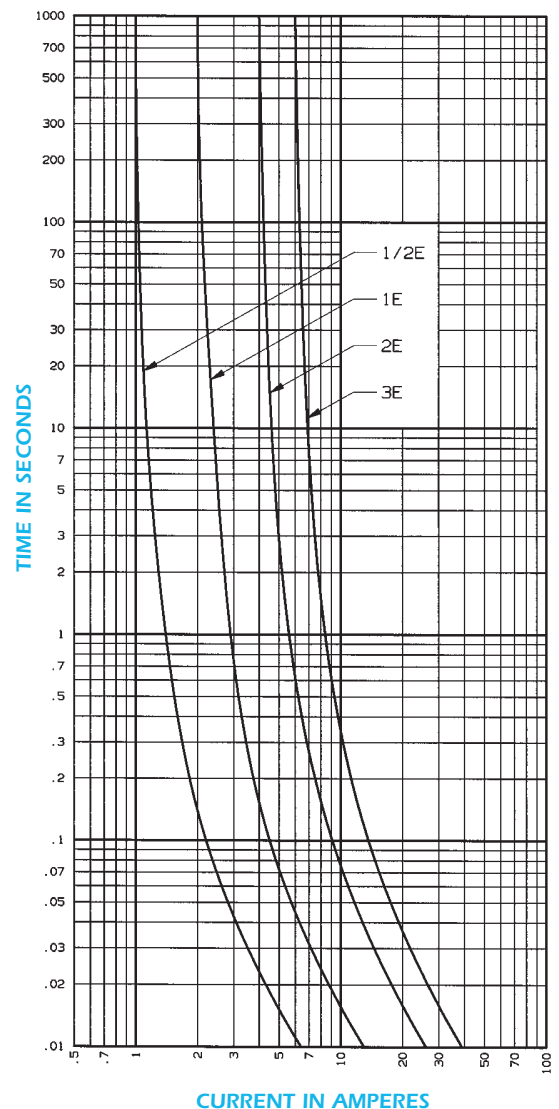


American Fuses Potential Transformer Fuses (E-Rated) 2.4kV to 7.2 kV - A240T / A480T / A500 / A072T

A500T1/2E-1 to 5E-1 Melting Time Current Data - PT Fuses - 5000V



A720T1E-1 and A720T2E-1 Melting Time - Current Data PT Fuses - 7200V



American Fuses Capacitor



As a complement to the wide variety of fuse lines developed by Ferraz Shawmut for every market and application type, we also offer a line of capacitor fuses ranging from 600 VAC to 5500 VAC. The Ferraz Shawmut capacitor fuse range offers many models with the same electrical ratings but with various blade, studs, or end-contact designs in order to satisfy specific customer needs.

Features/Benefits

- Cartridge type
- Full range operation
- Indicator for most types
- Direct mounting on capacitor
- Prevent rupture of failed capacitor
- Special mounting brackets available

Ratings

600VAC to 5500VAC
6A to 300A

Ratings Table

Ampere Rating	Voltage Rating Range					
	600V	1500V	2400V	3000V	4300V	5500V
6 to 25 Amps	■				■	■
30 to 50 Amps	■			■	■	■
60 to 95 Amps	■	■	■	■	■	■
100 to 150 Amps	■	■	■	■	■	
160 to 300 Amps	■	■	■	■		

Mounting Configurations

Please consult factory for mounting configurations availability

TYPE 10 - INNER THREAD TO SCREW



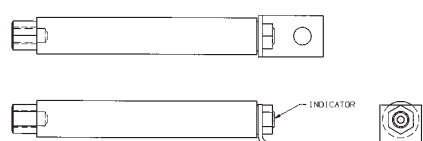
TYPE 15 - EXTERNAL FEMALE TO BOLT



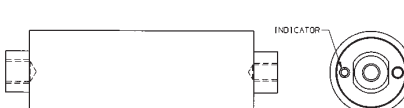
TYPE 20 - SCREW TO BOLT (FLAT BRACKET)



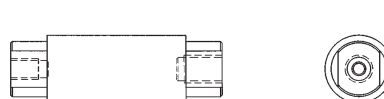
TYPE 30 - EXTERNAL FEMALE TO BOLT (L BRACKET)



TYPE 40 - EXTERNAL FEMALE TO EXTERNAL FEMALE



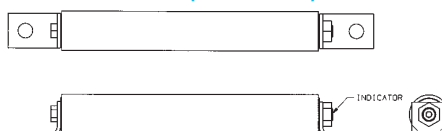
TYPE 121 - EXTERNAL FEMALE TO EXTERNAL FEMALE



TYPE 50 - SCREW TO BOLT (L BRACKET)



TYPE 60 - BOLT (L BRACKET) TO BOLT (L BRACKET)



TYPE 70 TUBE TO TUBE

