

CS-3 SERIES

E-RATED / MEDIUM VOLTAGE FUSES



HIGHLIGHTS:

- E-Rated
- UL Listed 5.5kV and 15.5kV
- Complies with ANSI C37.46

APPLICATIONS:

- Protection for 5.5, 8.25 or 15.5kV transformers or distribution system.



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.

5kV, 8kV and 15.5kV FERRULE MOUNTED FUSES

Amp-trap CS-3 E-rated 5kV 8kV and 15kV fuses have 2 or 3 inch 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 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. 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
- **Metal Embossed Catalog Number** and manufacturing date for lasting identification

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.

Approvals

- UL Listed to JEEG, “Fuses Over 600 Volts”

UL File # E143362

Spring-Reinforced Clips for CS-3 Fuses:

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

CS-3

E-RATED / MEDIUM VOLTAGE FUSES / A055F

5.5kV Ferrule Mounted

Catalog Numbering System

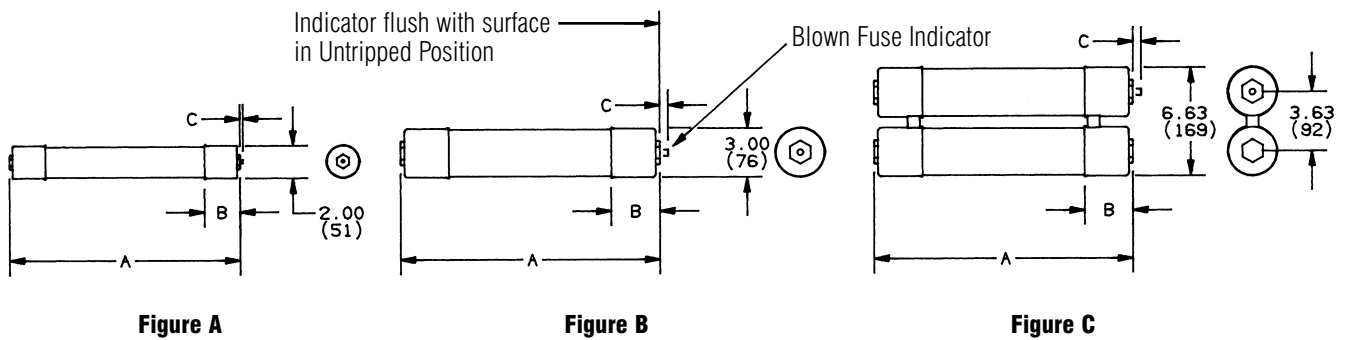
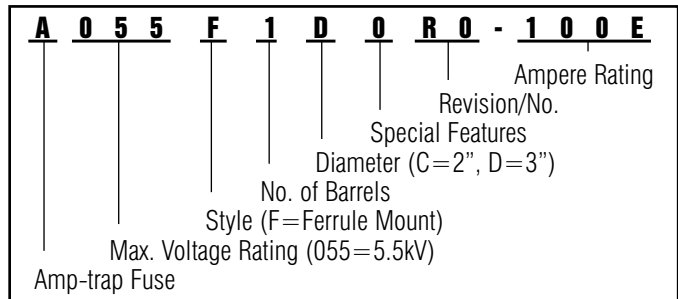


Figure A

Figure B

Figure C

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

NEW CATALOG NUMBER	OLD CATALOG NUMBER	AMPERE RATING	NUMBER OF BARRELS	FIG.	DIMENSIONS Inches (mm)			INTERRUPTING RATING RMS SYM.* AMPERES
					A	B	C	
5.5kV Max. — Ferrule Mounted Style — 12 (305mm) Clip Centers — 2 (50.8mm) Barrel Diameter								
A055F1COR0-5E A055F1COR0-7E A055F1COR0-10 A055F1COR0-15E A055F1COR0-20E A055F1COR0-25E A055F1COR0-30E A055F1COR0-40E A055F1COR0-50E A055F1COR0-65E	A550X5E-1B 5E A550X7E-1B 7E A550X10E-1B 10E A550X15E-1B 15E A550X20E-1B 20E A550X25E-1B 25E A550X30E-1B 30E A550X40E-1B 40E A550X50E-1B 50E A550X65E-1B 65E	5E 7E 10E 15E 20E 25E 30E 40E 50E 65E	1	A	14.11 (358)	2.2 (56)	.19 (4.8) Tripped Force 1 lb.	63,000
5.5kV Max. — Ferrule Mounted Style — 12 (305mm) Clip Centers — 3 (76.2mm) Barrel Diameter								
A055F1DOR0-10E A055F1DOR0-15E A055F1DOR0-20E A055F1DOR0-25E A055F1DOR0-30E A055F1DOR0-40E A055F1DOR0-50E A055F1DOR0-65E A055F1DOR0-80E A055F1DOR0-100E A055F1DOR0-125E A055F1DOR0-150E A055F1DOR0-175E A055F1DOR0-200E A055F2DOR0-250E A055F2DOR0-300E A055F2DOR0-350E A055F2DOR0-400E A055F2DOR0-450E	A550X10E-1F A550X15E-1F A550X20E-1F A550X25E-1F A550X30E-1F A550X40E-1F A550X50E-1F A550X65E-1F A550X80E-1F A550X100E-1F A550X125E-1 A550X150E-1 A550X175E-1 A550X200E-1 A550X250E-1 A550X300E-1 A550X350E-1 A550X400E-1 A550X450E-1	10E 15E 20E 25E 30E 40E 50E 65E 80E 100E 125E 150E 175E 200E 250E 300E 350E 400E 450E	1	B	15.88 (403)	3.0 (76)	0.5 (13) Tripped Force 2 lbs.	63,000
			2	C				

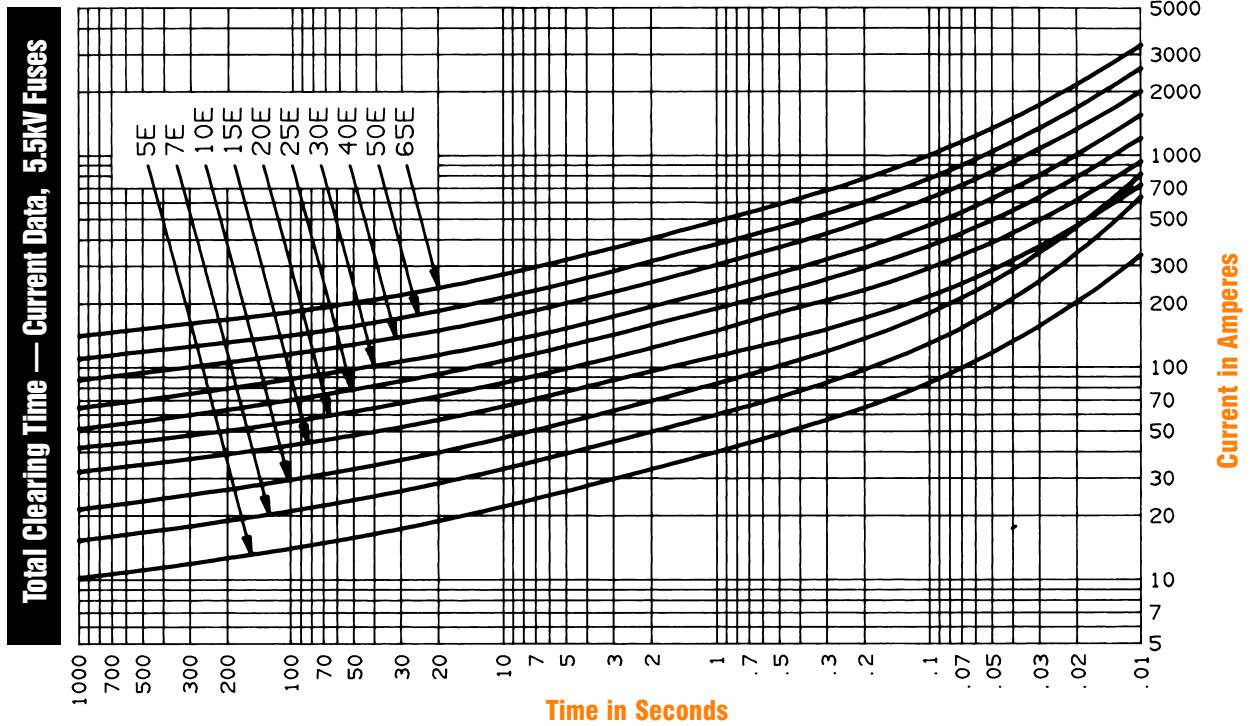
* RMS ASYM. AMPERES = RMS SYM. AMPERES x 1.6



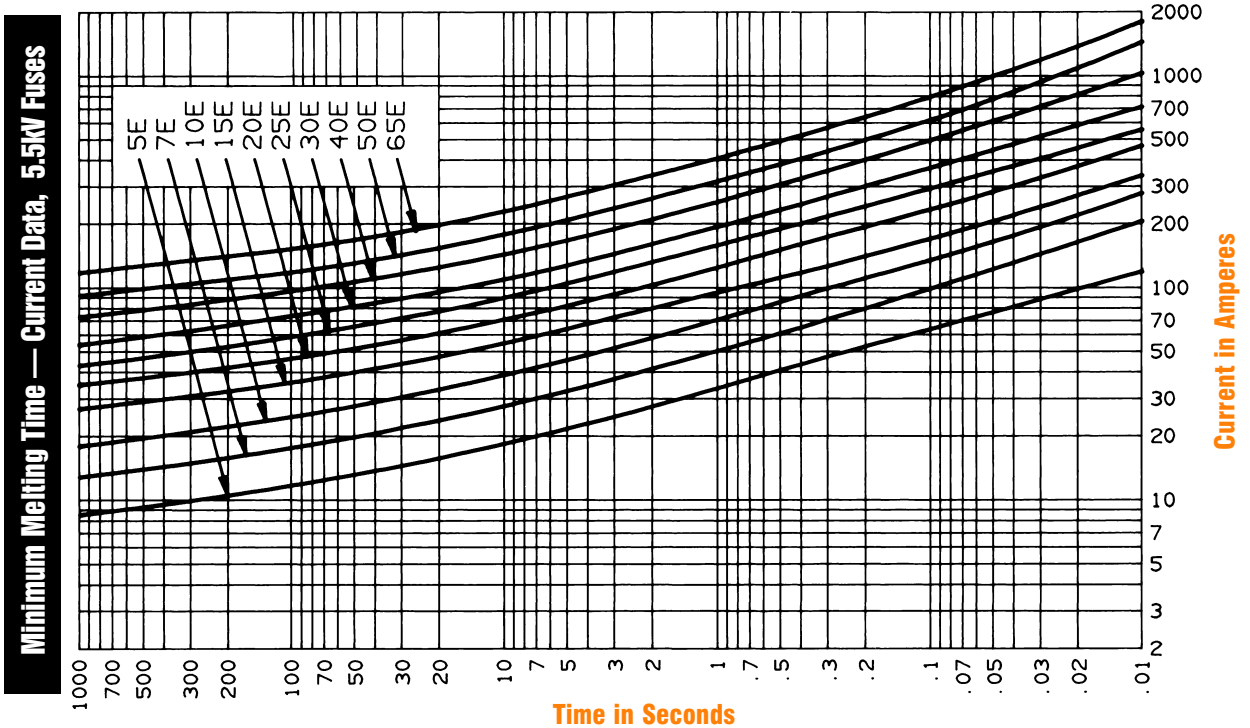
CS-3

E-RATED / MEDIUM VOLTAGE FUSES / A055F

A055F1COR0 — 5E to 65E



A055F1COR0 — 5E to 65E



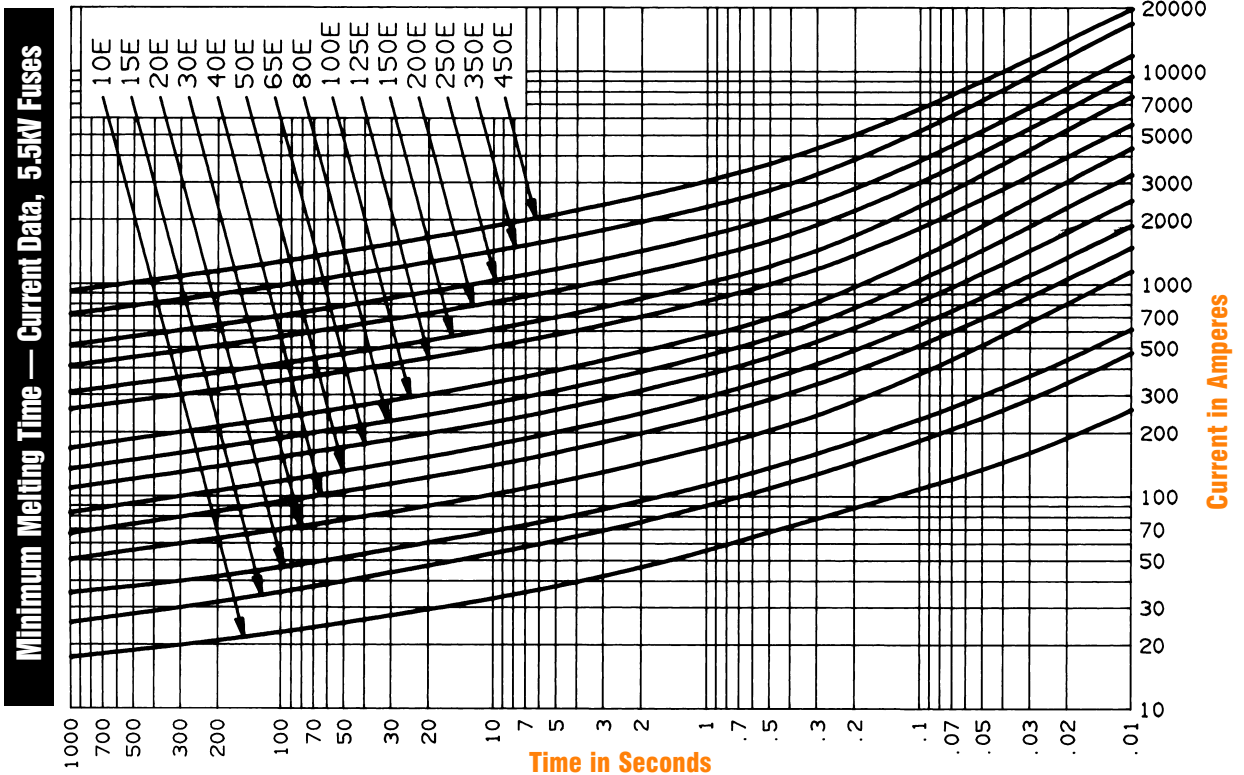
CS-3

E-RATED / MEDIUM VOLTAGE FUSES / A055F

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



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

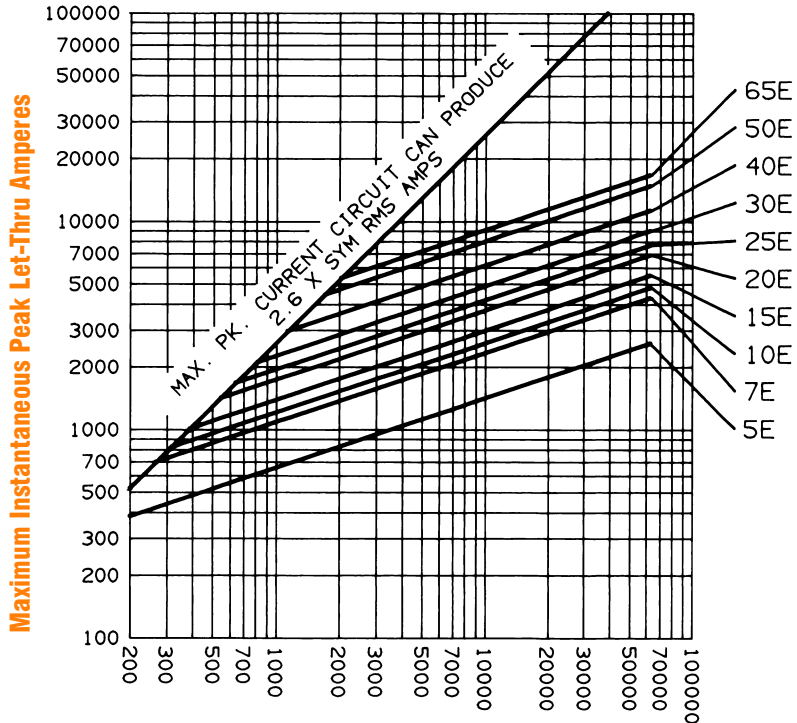


CS-3

E-RATED / MEDIUM VOLTAGE FUSES / A055F

A055F1C0R0 — 5E to 65E

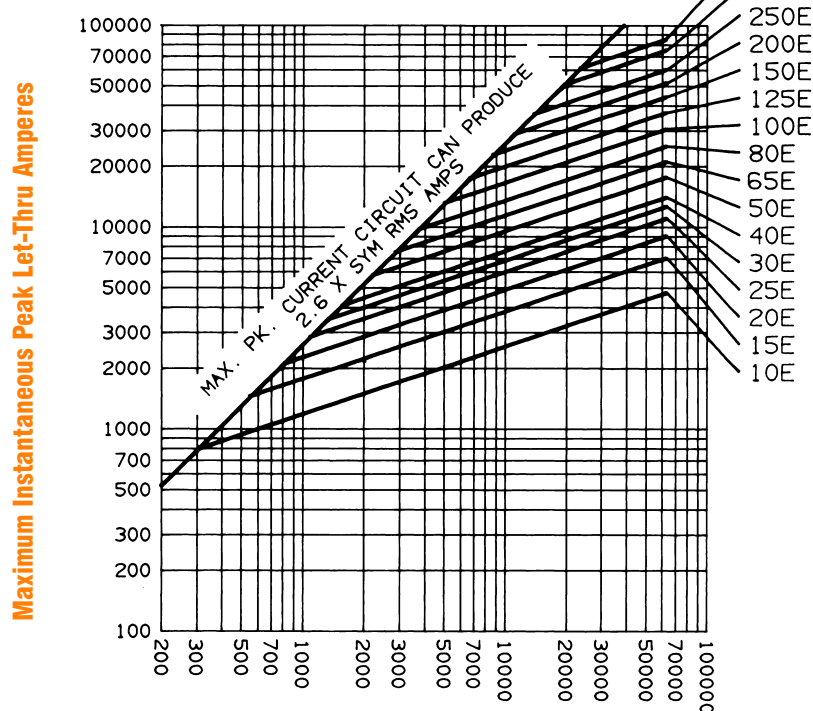
Peak Let-Thru Current Data, 5.5kV CS-3 Fuses



Available Current in RMS Symmetrical Amperes

A055F1D0R0 — 10E to 200E and A055F2D0R0 — 250E to 450E

Peak Let-Thru Current Data, 5.5kV CS-3 Fuses



Available Current in RMS Symmetrical Amperes

CS-3 SERIES

E-RATED / MEDIUM VOLTAGE FUSES

8.25kV Ferrule Mounted

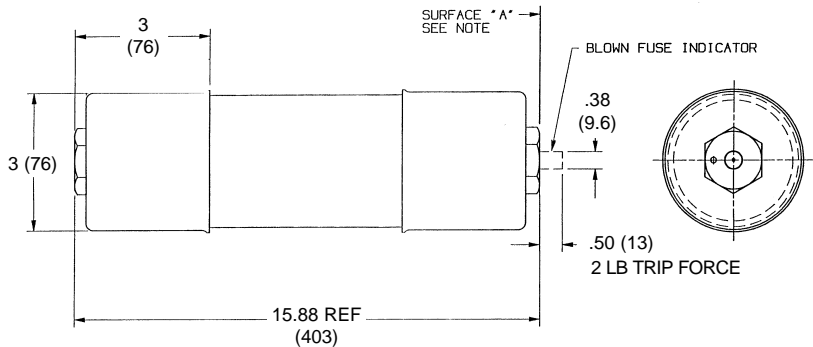


Figure A

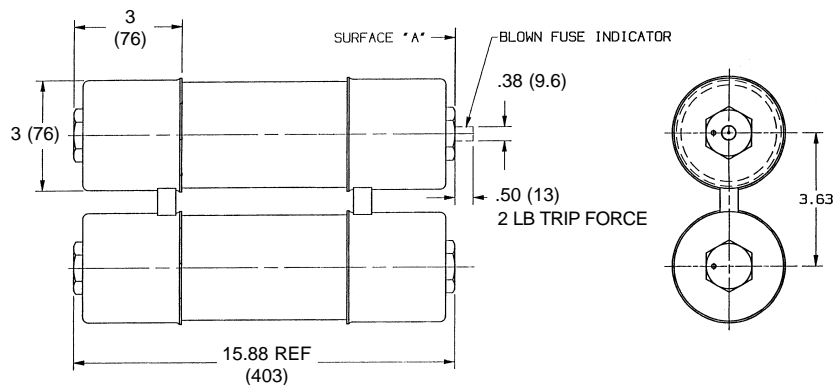


Figure B

CATALOG NUMBER	AMPERE RATING	NUMBER OF BARRELS	FIG.	INTERRUPTING RATING RMS SYM. AMPERES*
8.25kV MAX. FERRULE MOUNTED STYLE - 12" (305 mm) CLIP CENTER - 3" (76.2 mm) BARREL DIAMETER				
A825X10E-1	10E	1	A	50,000
A825X15E-1	15E	1	A	
A825X20E-1	20E	1	A	
A825X25E-1	25E	1	A	
A825X30E-1	30E	1	A	
A825X40E-1	40E	1	A	
A825X50E-1	50E	1	A	
A825X65E-1	65E	1	A	
A825X80E-1	80E	1	A	
A825X100E-1	100E	1	A	
A825X125E-1	125E	2	B	50,000
A825X150E-1	150E	2	B	
A825X200E-1	200E	2	B	

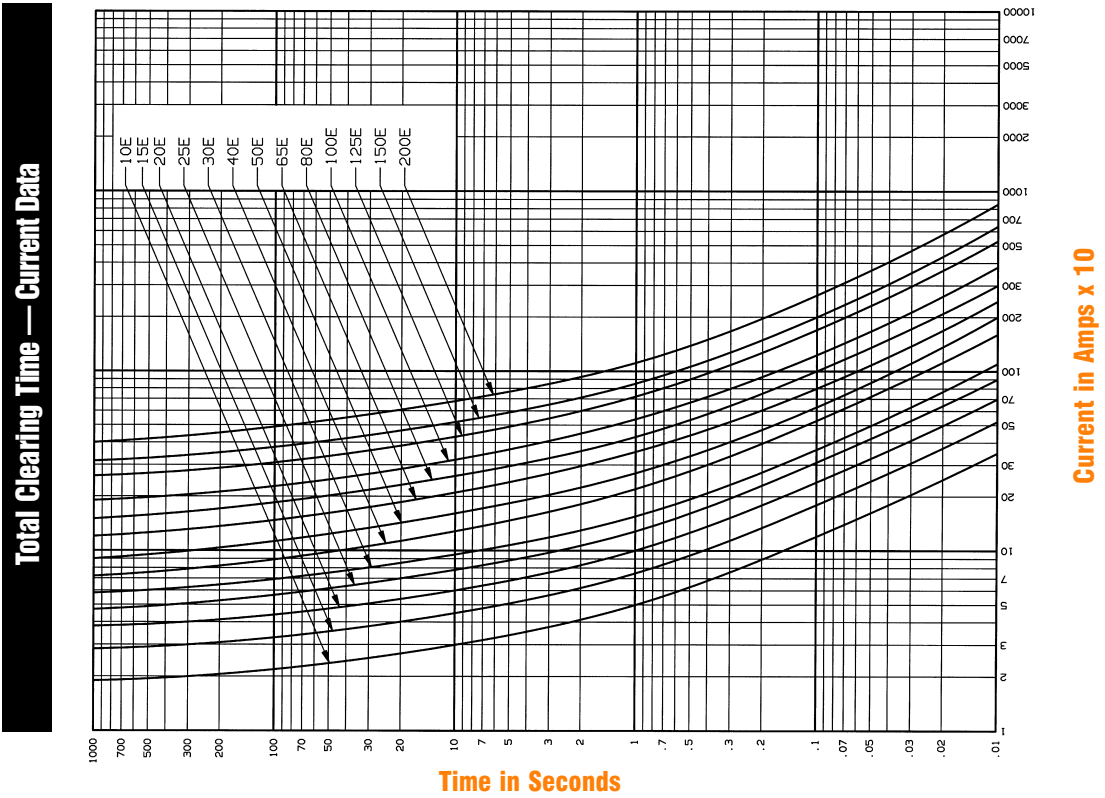
* RMS ASYM. AMPS = RMS SYM. AMPERES x 1.6



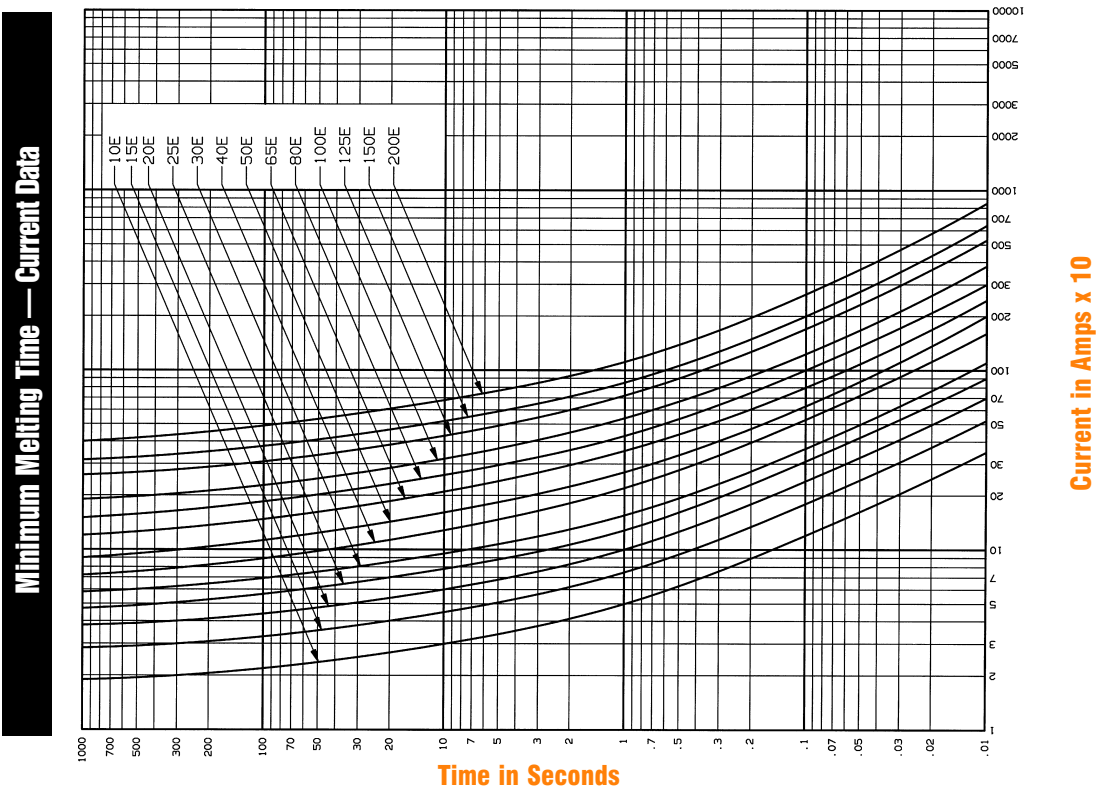
CS-3 SERIES

E-RATED / MEDIUM VOLTAGE FUSES

A825X (10E to 200E) -1



A825X (10E to 200E) -1

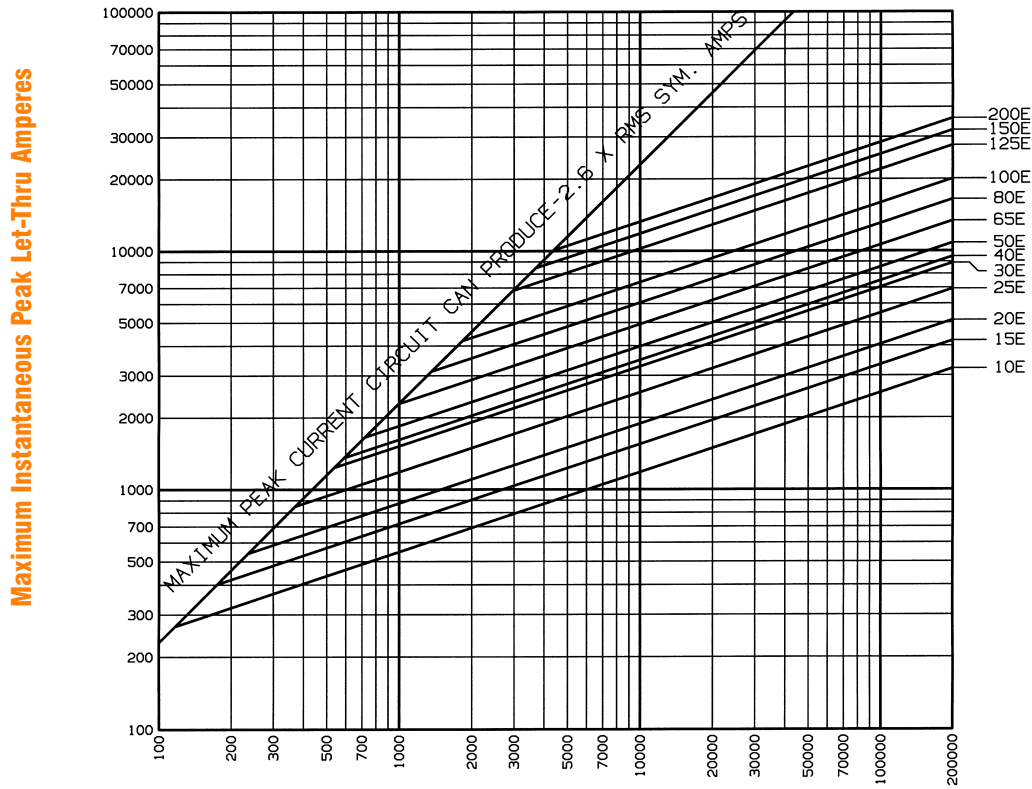


CS-3 SERIES

E-RATED / MEDIUM VOLTAGE FUSES

A825X (10E to 200E) -1

Peak Let-Thru Current Data, E-Rated Fuses



Available Current in RMS Symmetrical Amperes

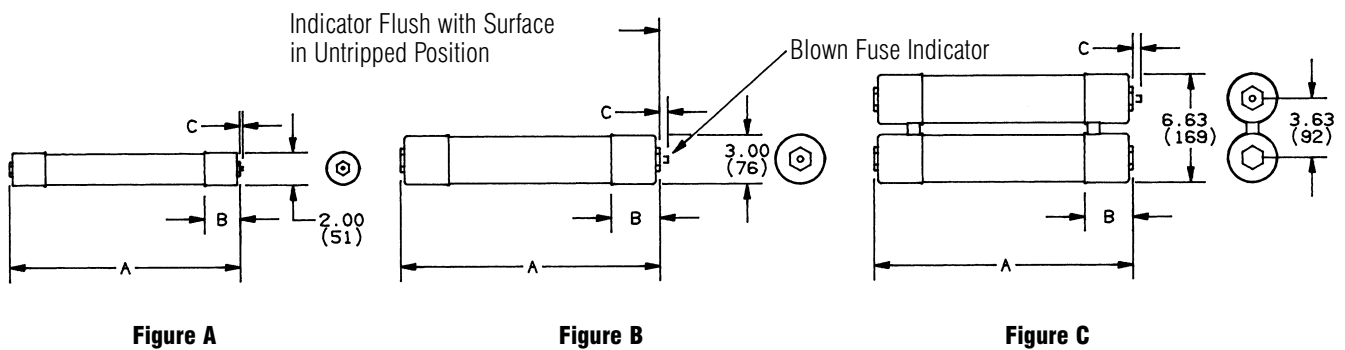
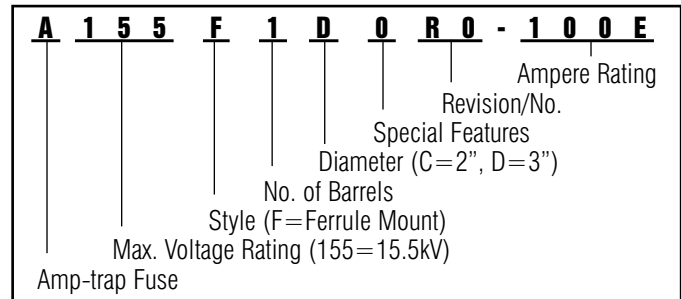


CS-3

E-RATED / MEDIUM VOLTAGE FUSES / A055F

15.5kV Ferrule Mounted

Catalog Numbering System



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

NEW CATALOG NUMBER	OLD CATALOG NUMBER	AMPERE RATING	NUMBER OF BARRELS	FIG.	DIMENSIONS Inches (mm)			INTERRUPTING RATING RMS SYM.* AMPERES
					A	B	C	
15.5kV Max. — Ferrule Mounted Style — 15 (381 mm) Clip Centers — 2 (50.8mm) Barrel Diameter								
A155F1C0R0-5E A155F1C0R0-7E A155F1C0R0-10E A155F1C0R0-15E A155F1C0R0-20E A155F1C0R0-25E A155F1C0R0-30E	A1550X6E-1B A1550X7E-1B A1550X10E-1B A1550X15E-1B A1550X20E-1B A1550X25E-1B A1550X30E-1B	5E 7E 10E 15E 20E 25E 30E	1	A	17.03 (433)	2.2 (56)	.19 (4.8) Tripped Force 1 lb.	50,000
15.5kV Max. — Ferrule Mounted Style — 15 (381mm) Clip Centers — 3 (76.2mm) Barrel Diameter								
A155F1D0R0-10E A155F1D0R0-15E A155F1D0R0-20E A155F1D0R0-25E A155F1D0R0-30E A155F1D0R0-40E A155F1D0R0-50E	A1550X0E-1F A1550X15E-1 A1550X20E-1 A1550X25E-1 A1550X30E-1 A1550X40E-1 A1550X50E-1	10E 15E 20E 25E 30E 40E 50E	1	B	18.87 (479)	3.0 (76)	0.5 (13) Tripped Force 2 lbs.	50,000
A155F2D0R0-65E A155F2D0R0-80E A155F2D0R0-100E	A1550X65E-1 A1550X80E-1 A1550X100E-1	65E 80E 100E	2	C				
15.5kV Max. — Ferrule Mounted Style — 18 (457mm) Clip Centers — 3 (76.2mm) Barrel Diameter								
A155F1D0R0-65E A155F1D0R0-80E A155F1D0R0-100E	A1550X65E-1D A1550X80E-1D A1550X100E-1D	65E 80E 100E	1	B	21.75 (552)	3.0 (76)	0.5 (13) Tripped Force 2 lbs.	50,000
A155F2D0R0-125E A155F2D0R0-150E A155F2D0R0-175E A155F2D0R0-200E	A1550X125E-1D A1550X150E-1D A1550X175E-1D A1550X200E-1D	125E 150E 175E 200E	2	C				

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

CS-3

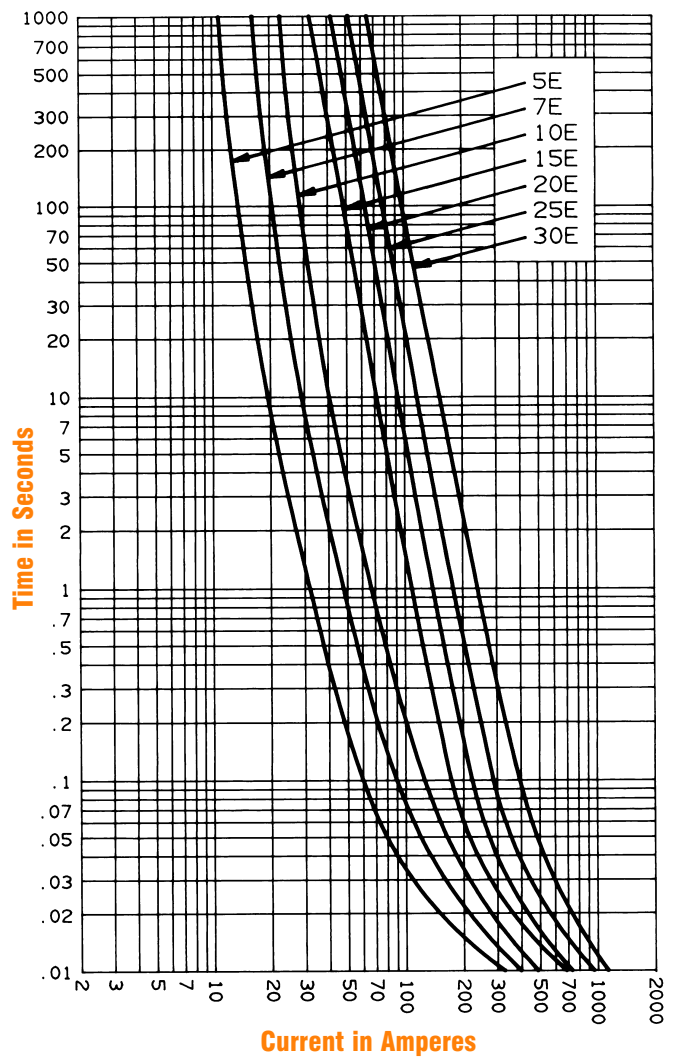
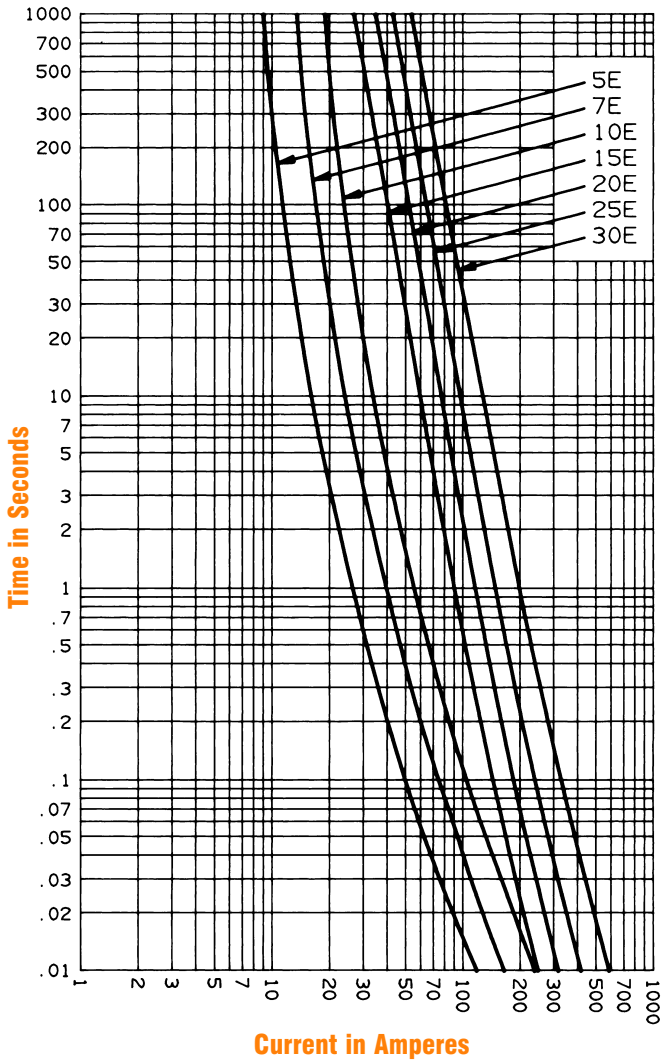
E-RATED / MEDIUM VOLTAGE FUSES / A055F

A155F1CORO — 5E to 30E

A155F1CORO — 5E to 30E

Minimum Melting Time — Current Data, 15.5kV Fuses

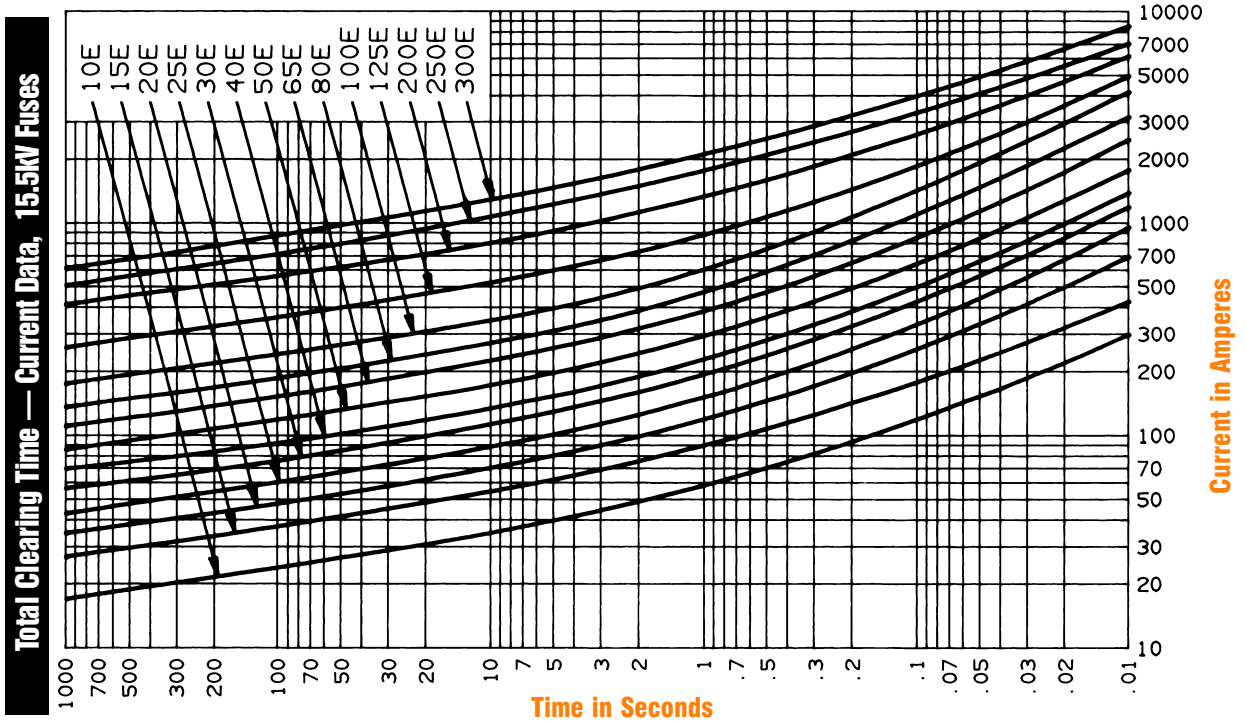
Total Clearing Time — Current Data, 15.5kV Fuses



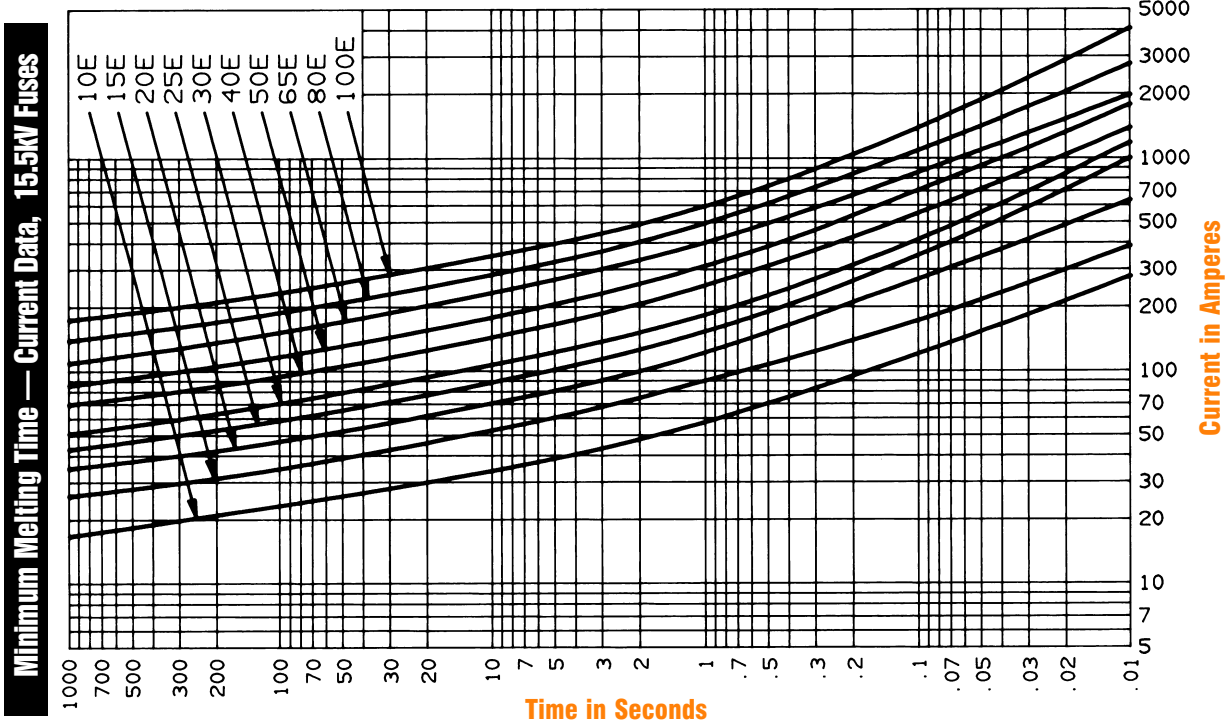
CS-3

E-RATED / MEDIUM VOLTAGE FUSES / A055F

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



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



CS-3

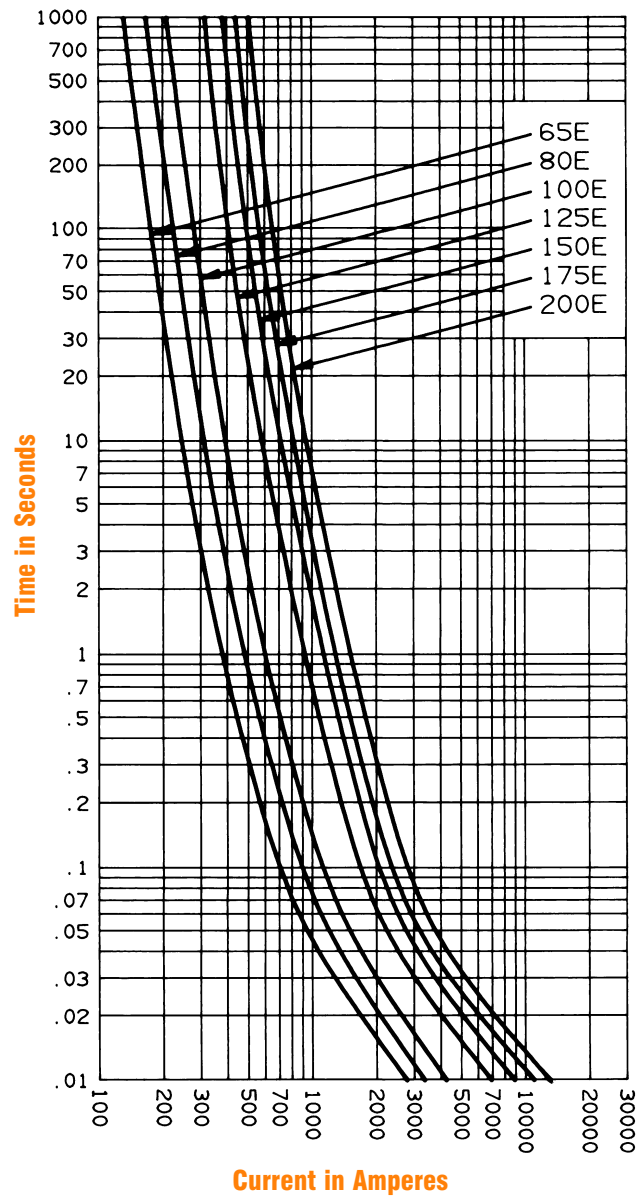
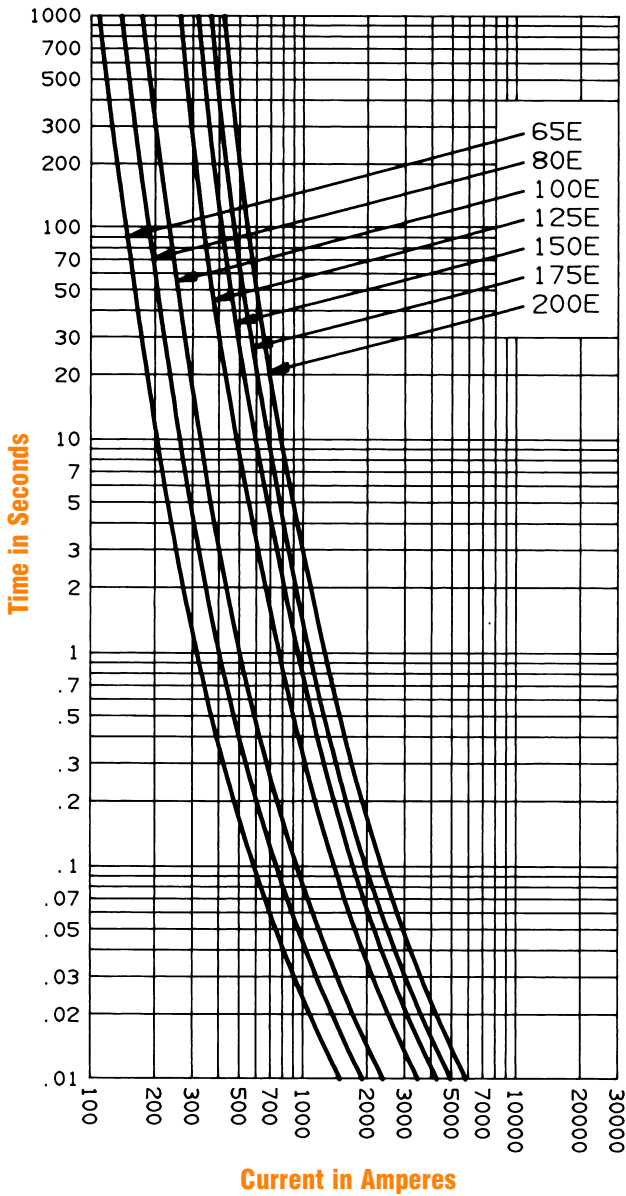
E-RATED / MEDIUM VOLTAGE FUSES / A055F

A155F1DORO — 65E to 100E and A155F2DORO — 125E to 200E

A155F1DORO — 65E to 100E and A155F2DORO — 125E to 200E

Minimum Melting Time — Current Data, 15.5kV Fuses

Total Clearing Time — Current Data, 15.5kV Fuses

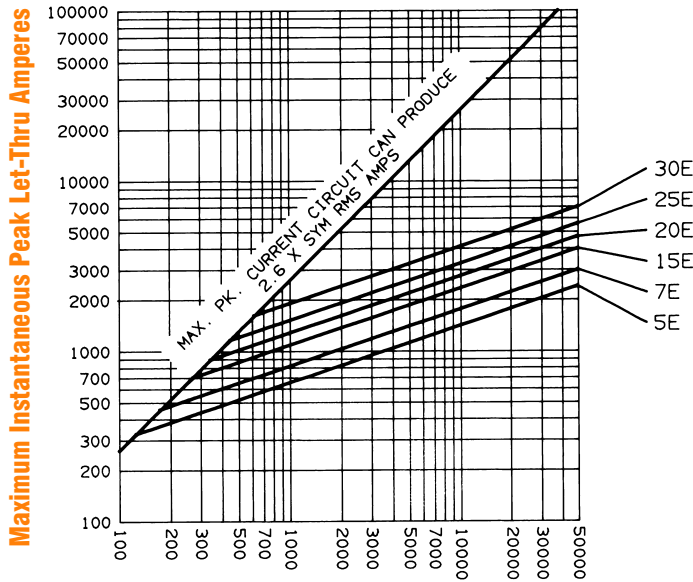


CS-3

E-RATED / MEDIUM VOLTAGE FUSES / A055F

A155F1C0R0 — 5E to 30E

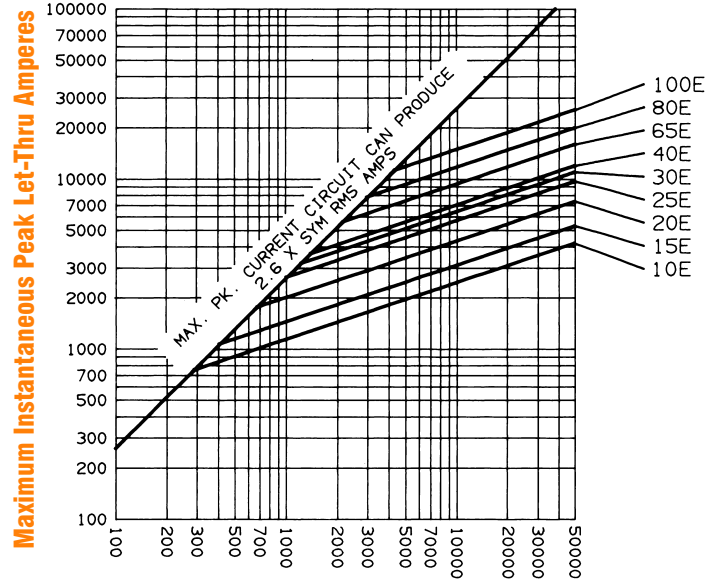
Peak Let-Thru Current Data, 15.5kV CS-3 Fuses



Available Current in RMS Symmetrical Amperes

A155F1D0R0 — 10E to 50E
A155F2D0R0 — 65E to 100E

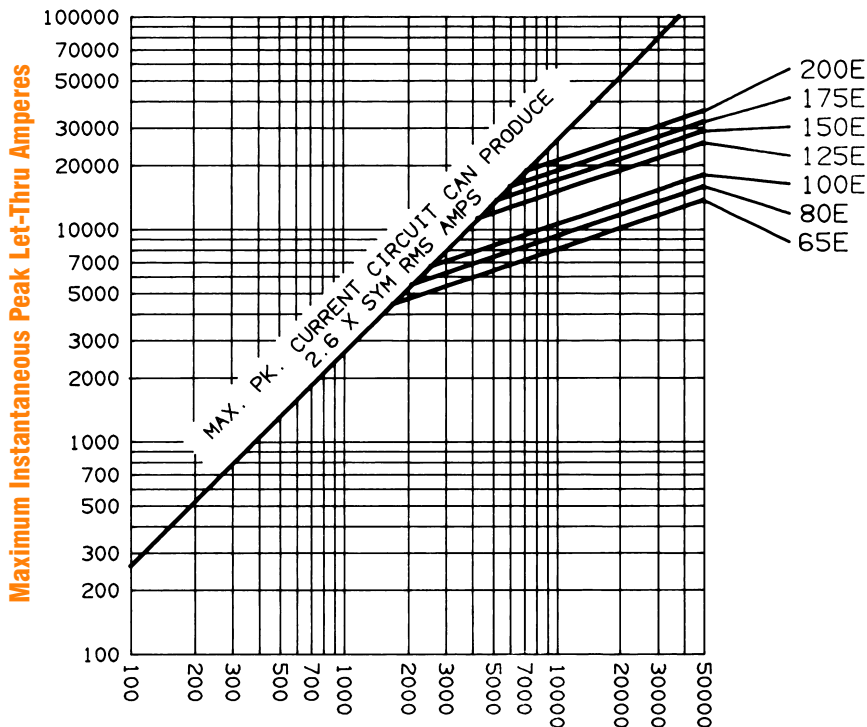
Peak Let-Thru Current Data, 15.5kV CS-3 Fuses



Available Current in RMS Symmetrical Amperes

A155F1D0R0 — 65E to 100E
A155F2D0R0 — 125E to 200E

Peak Let-Thru Current Data, 15.5kV CS-3 Fuses



Available Current in RMS Symmetrical Amperes