

British BS 88 — 690V: 6-710A

CT, ET, FE, EET, FEE, FM, FMM, MT, MMT

Specifications

Description: BS 88 style stud-mount fuses.

Dimensions: See dimensions illustrations.

Ratings:

Volts: — 690Vac/500Vdc

Amps: — 6-710A

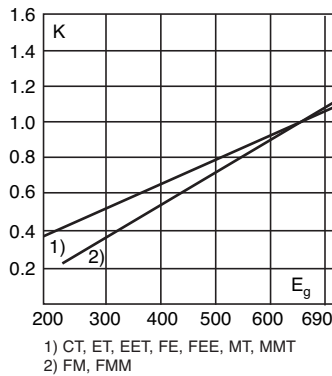
IR: — 200kA RMS Sym.

Agency Information: CE, Designed and tested to: BS 88 Part 4, IEC 269 Part 4, UL Recognized. MT and MMT — 350Vdc (IEC) rating. Consult Cooper Bussmann for UL Recognition status.

Electrical Characteristics

Total Clearing I^2t

The total clearing I^2t at rated voltage and at power factor of 15% are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_g , (rms).

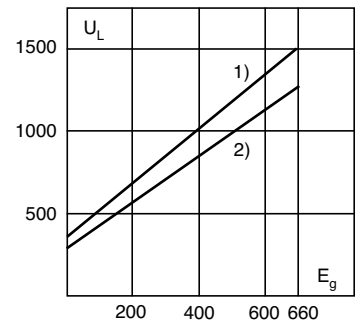


1) CT, ET, EET, FE, FEE, MT, MMT
2) FM, FMM



Arc Voltage

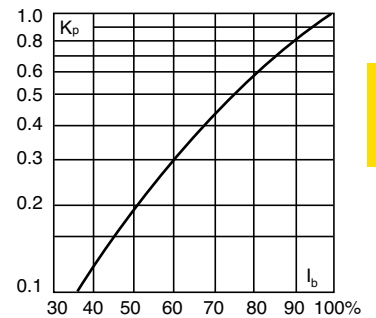
This curve gives the peak arc voltage, U_L , which may appear across the fuse during its operation as a function of the applied working voltage, E_g , (rms) at a power factor of 15%.



1) CT
2) ET, FE, EET, FEE, FM, FMM

Power Losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the power losses at load currents lower than the rated current. The correction factor, K_p , is given as a function of the RMS load current, I_b , in % of the rated current.



Features and Benefits

- Excellent cycling capability
- Excellent DC performance
- Low arc voltage and low energy let-through (I^2t)
- Low watts loss

Typical Applications

- DC common bus
- DC drives
- Power converters/rectifiers
- Reduced voltage starters

Dimensions (mm)

Fig. 1: CT

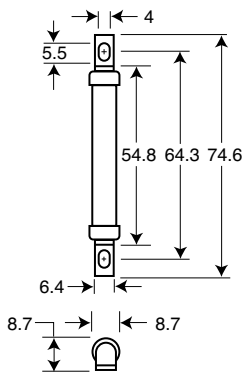


Fig. 2: ET, FE

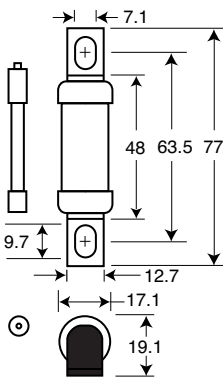


Fig. 3: EET, FEE

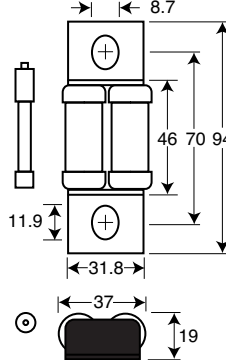


Fig. 4: FM, MT

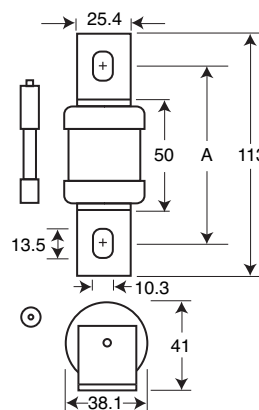
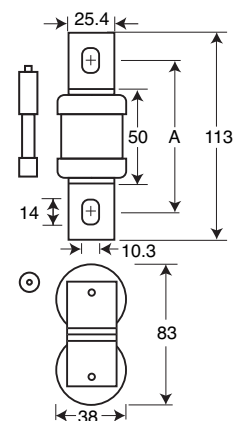


Fig. 5: FMM, MMT



Figs. 4 & 5 "A" Dimensions

| Type | "A" |
|------|---------|
| FM | 80-85mm |
| FMM | 80-85mm |
| MT | 85mm |
| MMT | 85mm |

1mm = 0.0394" / 1" = 25.4mm

Data Sheet: 720024

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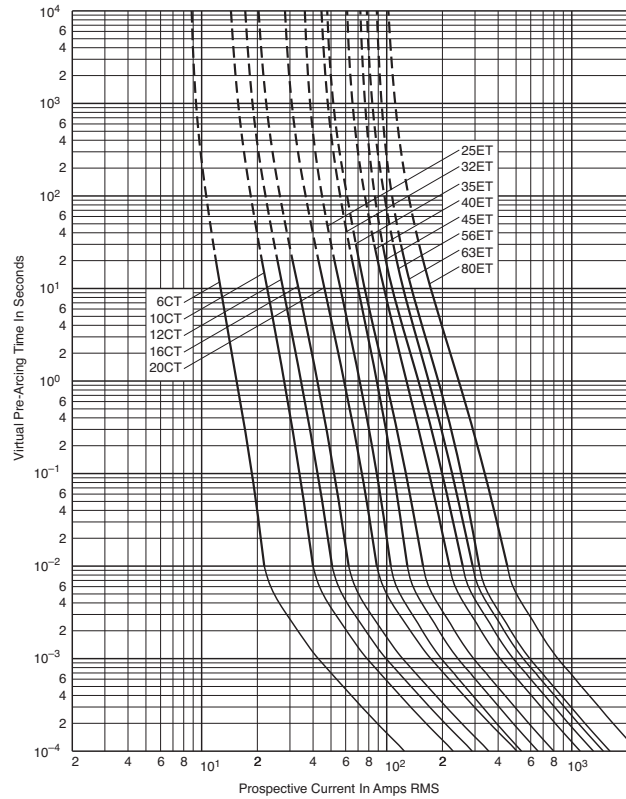
Catalog Numbers

| Catalog Numbers | Type | Electrical Characteristics | | | | |
|-----------------|------|----------------------------|-------------|------------------|------------------|------------|
| | | Rated Current RMS-Amps | Pt (A² Sec) | | | Watts Loss |
| | | | Pre-arc | Clearing at 415V | Clearing at 660V | |
| 6CT | CT | 6 | 1.8 | 8.5 | 12 | 2 |
| 10CT | | 10 | 7 | 30 | 48 | 3 |
| 12CT | | 12 | 10 | 40 | 65 | 3 |
| 16CT | | 16 | 16 | 66 | 110 | 7 |
| 20CT | | 20 | 32 | 150 | 220 | 7 |
| 25ET | ET | 25 | 25 | 150 | 250 | 7 |
| 32ET | | 32 | 32 | 190 | 350 | 11 |
| 35ET | | 35 | 52 | 310 | 500 | 11 |
| 40ET | | 40 | 103 | 600 | 900 | 9 |
| 45ET | | 45 | 103 | 680 | 1100 | 11 |
| 56ET | | 56 | 135 | 950 | 1500 | 14 |
| 63ET | | 63 | 171 | 1200 | 2000 | 16 |
| 80ET | | 80 | 360 | 2500 | 4000 | 18 |
| 35FE | FE | 35 | 33 | 130 | 200 | 9 |
| 40FE | | 40 | 52 | 180 | 300 | 9 |
| 45FE | | 45 | 76 | 270 | 450 | 11 |
| 50FE | | 50 | 103 | 380 | 600 | 11 |
| 63FE | | 63 | 135 | 480 | 750 | 12 |
| 71FE | | 71 | 210 | 600 | 950 | 17 |
| 80FE | | 80 | 250 | 900 | 1500 | 20 |
| 90FE | | 90 | 360 | 1300 | 2100 | 20 |
| 100FE | 100 | 470 | 1800 | 2800 | 23 | |
| 90EET | EET | 90 | 490 | 3000 | 4500 | 19 |
| 110EET | | 110 | 600 | 4000 | 6500 | 27 |
| 140EET | | 140 | 1050 | 7000 | 12000 | 35 |
| 160EET | | 160 | 1500 | 10000 | 17000 | 39 |
| 100FEE | FEE | 100 | 400 | 1600 | 2400 | 24 |
| 120FEE | | 120 | 540 | 1900 | 3100 | 32 |
| 140FEE | | 140 | 850 | 2500 | 3800 | 36 |
| 160FEE | | 160 | 1000 | 3700 | 5700 | 46 |
| 180FEE | | 180 | 1400 | 5300 | 8400 | 46 |
| 200FEE | | 200 | 1900 | 7100 | 11400 | 52 |
| 180FM | FM | 180 | 1400 | 7500 | 13500 | 40 |
| 200FM | | 200 | 2600 | 10500 | 18500 | 40 |
| 225FM | | 225 | 3700 | 14500 | 26500 | 44 |
| 250FM | | 250 | 5200 | 20500 | 37500 | 48 |
| 280FM | | 280 | 7000 | 30500 | 55000 | 48 |
| 315FM | | 315 | 10000 | 40000 | 77000 | 55 |
| 350FM | | 350 | 15000 | 60000 | 105000 | 55 |
| 400FMM | FMM | 400 | 10000 | 40000 | 72500 | 85 |
| 450FMM | | 450 | 15000 | 60000 | 105000 | 90 |
| 500FMM | | 500 | 20000 | 82000 | 150000 | 100 |
| 550FMM | | 550 | 30000 | 120000 | 215000 | 100 |
| 630FMM | | 630 | 45000 | 180000 | 310000 | 100 |
| 700FMM | | 700 | 60000 | 245000 | 420000 | 120 |
| 160MT | | MT | 160 | 2400 | 15000 | 25000 |
| 180MT | 180 | | 3800 | 25000 | 38000 | 26 |
| 200MT | 200 | | 6000 | 40000 | 58000 | 27 |
| 250MT | 250 | | 11500 | 80000 | 110000 | 32 |
| 280MT | 280 | | 16500 | 100000 | 150000 | 35 |
| 315MT | 315 | | 19000 | 125000 | 180000 | 42 |
| 355MT | 355 | | 22000 | 160000 | 200000 | 51 |
| 180MMT | MMT | 180 | 1650 | 12000 | 18000 | 42 |
| 200MMT | | 200 | 2200 | 16000 | 23000 | 42 |
| 225MMT | | 225 | 3700 | 26000 | 40000 | 42 |
| 280MMT | | 280 | 6600 | 47000 | 70000 | 47 |
| 315MMT | | 315 | 8600 | 62000 | 91000 | 51 |
| 355MMT | | 355 | 13500 | 97000 | 140000 | 54 |
| 400MMT | | 400 | 21000 | 150000 | 220000 | 60 |
| 450MMT | | 450 | 30000 | 220000 | 320000 | 57 |
| 500MMT | | 500 | 42000 | 300000 | 450000 | 64 |
| 560MMT | | 560 | 60000 | 430000 | 640000 | 64 |
| 630MMT | | 630 | 68500 | 500000 | 720000 | 86 |
| 710MMT | | 710 | 78000 | 600000 | 850000 | 105 |

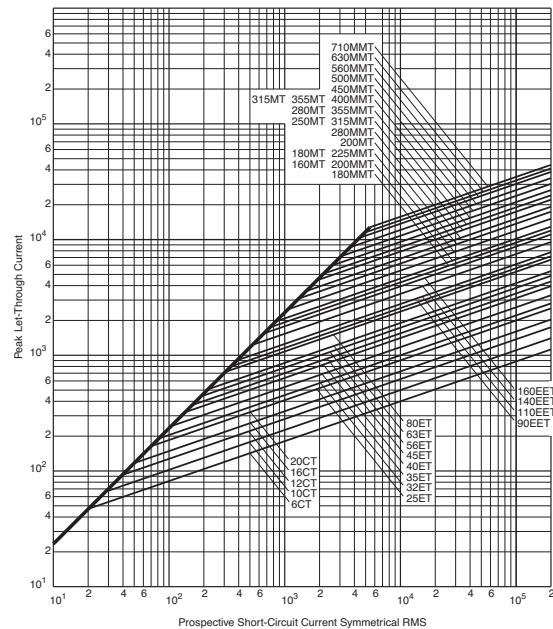
• Watts loss provided at rated current.
 • Note: FC, 8ET, 12ET, 15ET, 20ET, 65EET and 75EET are available for replacement purposes on existing equipment.
 • See accessories on page 195.

CT 6-20, ET 25-80A: 690V

Time-Current Curve



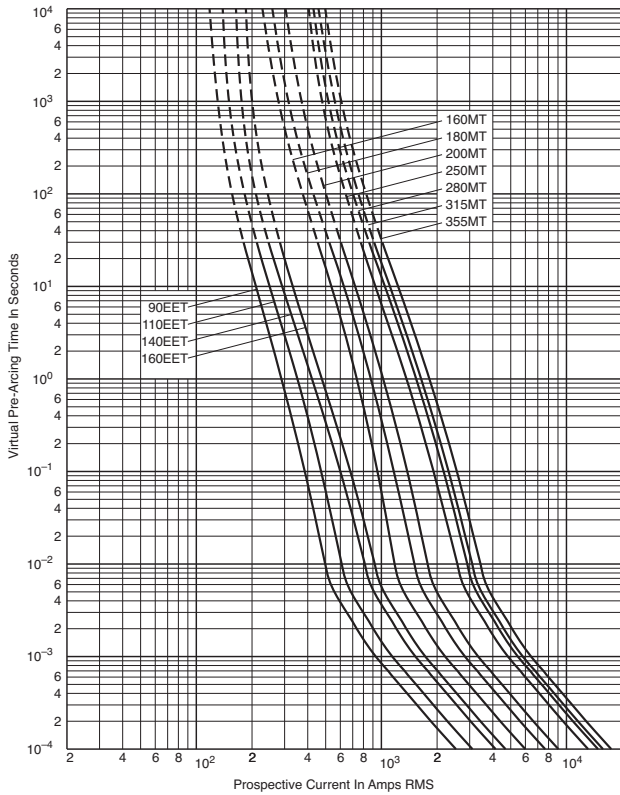
Peak Let-Through Curve



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EET 90-160A, MT 160-355A: 690V

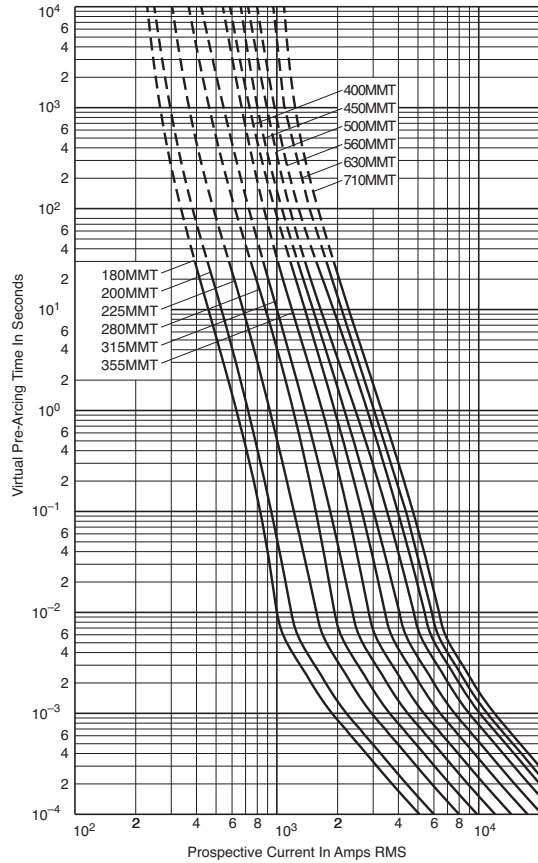
Time-Current Curve



Data Sheet: 35785313

MMT 180-710A: 690V

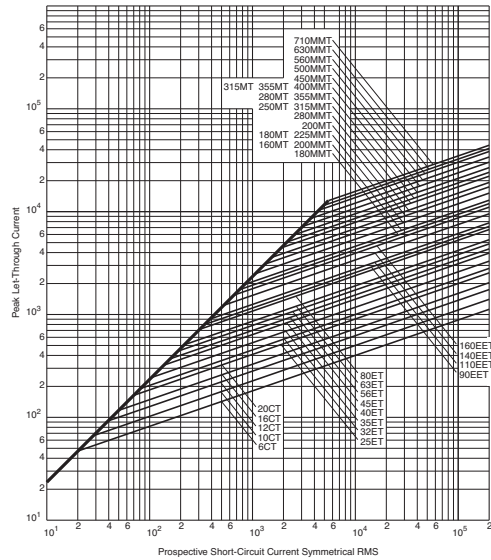
Time-Current Curve



Data Sheet: 35785311

High Speed Fuses

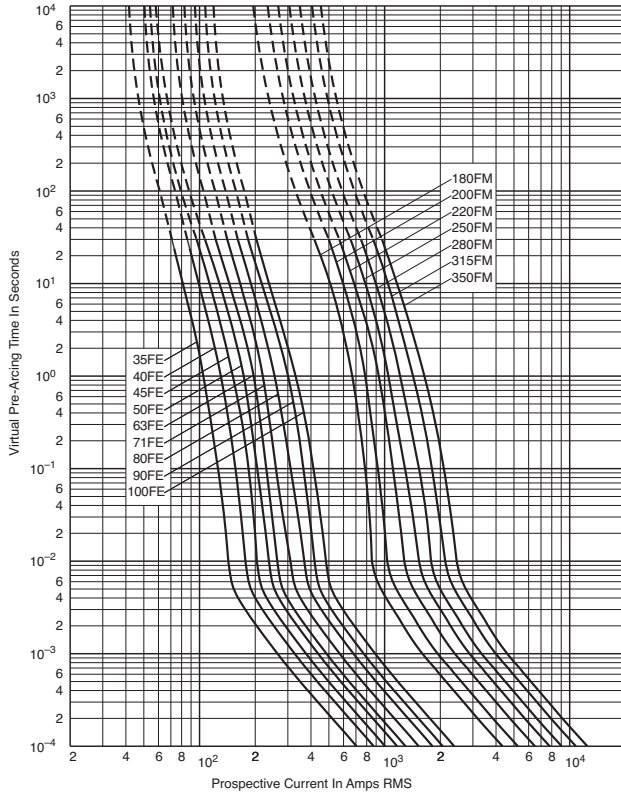
Peak Let-Through Curve



British BS 88 — 690V: 6-710A

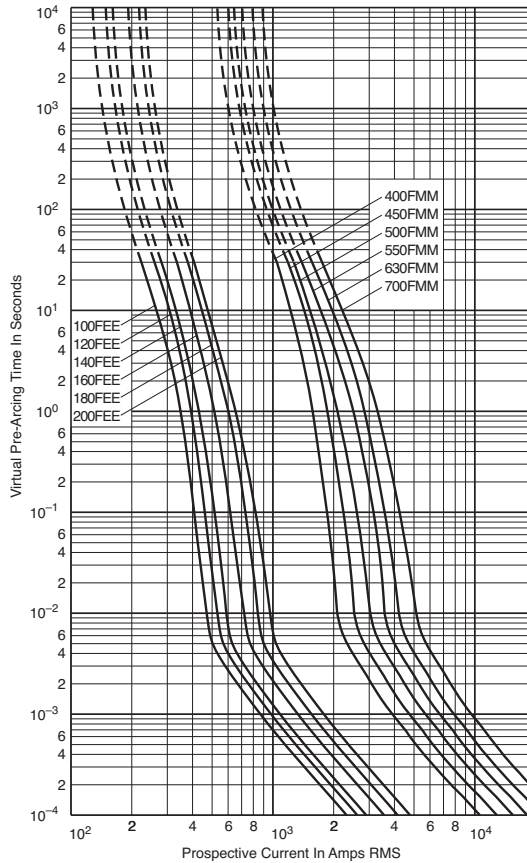
FE 35-100A & FM 180-350A: 690V

Time-Current Curve

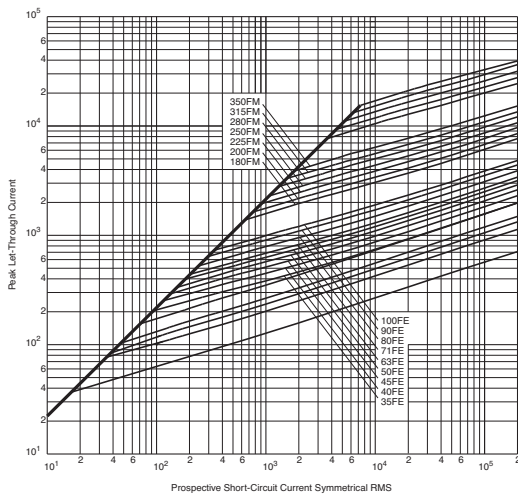


FEE 100-200A & FMM 400-700A: 690V

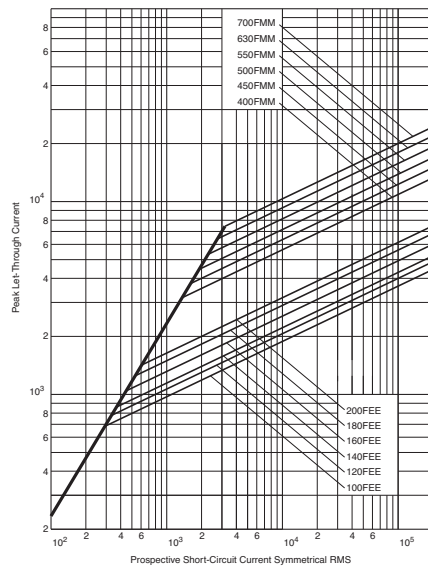
Time-Current Curve



Peak Let-Through Curve



Peak Let-Through Curve



Data Sheet: 35785314

Data Sheet: 35785292