# UL Standard Fuses（VRP）

E356490 RoHS

A type contact

B type contact

Ordering Information:

VRP-XXX X XXX V XX

- AC, DC
- Voltage rating
- Contact type code
- Current rating

**Notes**: Contact type: A or B

**Description:**

VRP series rated at 700V is a kind of fast acting Fuse designed according to UL standard, They can Used in DC drivers, power converters, rectifiers, etc.

**Features:**

- Designed according to UL248
- Complying with CE and RoHS
- Suitable for sort-circuit
- UL/CUL certified (File No.E356490) only for 700VACDC
- Low $I^2t$ for greatest protection of semiconductor circuits
- Low watts loss
- Operating class: aR

**Ratings:**

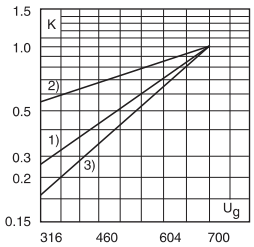
Voltage Rating:700V AC/DC 800VDC

Current Rating: 5A-1200A

Interrupt Rating: 200kA AC /50kA AC / 50kA DC

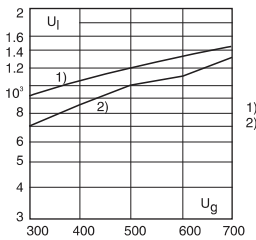
50KA@800VDC

## Electrical Characteristics:



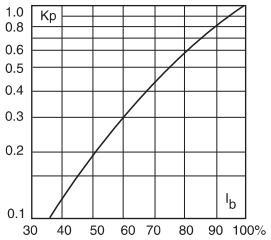

1) 35-100 Amp Range
2) 125-600 Amp Range
3) 700-1200 Amp Range

Total Clearing $I^2$ t




1) 125-600 Amp Range
2) 35-100 & 700-1200 Amp Range

Arc Voltage




Power Losses

## Electrical Dimensions:

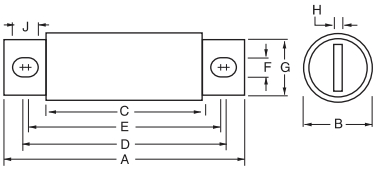



Fig.1

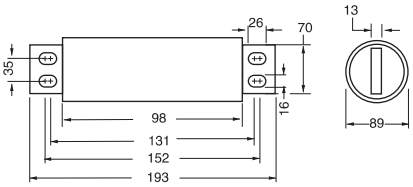



Fig.2

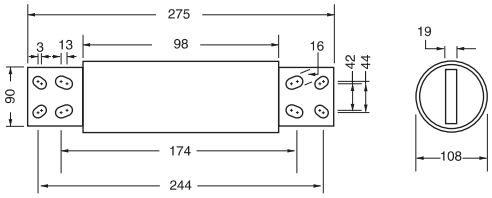



Fig.3

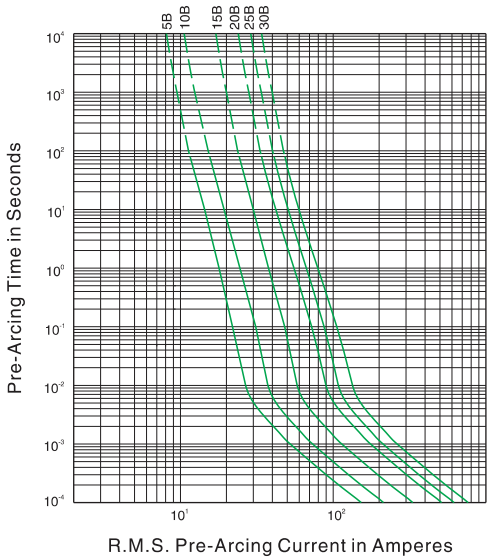
| Catalog Numbers | Ref.Fig | Current Rating(A) | Mechanical Dimensions(mm) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | A | B | C | D | E | F | G | H | J |
| VRP | 1 | 5-30 | 73 ±1.5 | 14 ±0.2 | 47 ±1.0 | 63 ±1.0 | 63 ±1.0 | 6 ±0.2 | 10 ±0.5 | 2 ±0.2 | 6 ±0.5 |
| | 1 | 32-60 | 111 ±2.0 | 21 ±0.2 | 70 ±1.5 | 94 ±1.5 | 84 ±1.5 | 9 ±0.2 | 18 ±0.5 | 3 ±0.2 | 14 ±1.0 |
| | 1 | 70-100 | 112 ±2.0 | 24 ±0.3 | 72 ±1.5 | 92 ±1.5 | 91 ±1.5 | 9 ±0.2 | 19 ±0.5 | 3 ±0.2 | 10 ±1.0 |
| | 1 | 125-200 | 129 ±2.0 | 38 ±0.3 | 72 ±1.5 | 106 ±1.5 | 89 ±1.5 | 10.4 ±0.5 | 25 ±0.5 | 6.3 ±0.3 | 19 ±1.0 |
| | 1 | 225-400 | 129 ±2.0 | 51 ±0.5 | 72 ±1.5 | 109 ±1.5 | 90 ±1.5 | 10.4 ±0.5 | 38 ±0.5 | 6.3 ±0.3 | 20 ±1.0 |
| | 1 | 450-600 | 168 ±3.0 | 51 ±0.5 | 72 ±1.5 | 145 ±2.0 | 121 ±2.0 | 13 ±0.5 | 38 ±0.5 | 6 ±0.3 | 25 ±1.0 |
| | 1 | 700-800 | 180 ±3.0 | 65 ±0.5 | 72 ±1.5 | 145 ±2.0 | 113 ±2.0 | 17 ±0.5 | 51 ±1.0 | 10 ±0.5 | 33 ±1.0 |
| | 2 | 900-1000 | Shown in Fig.2 | | | | | | | | |
| | 3 | 1200 | Shown in Fig.3 | | | | | | | | |

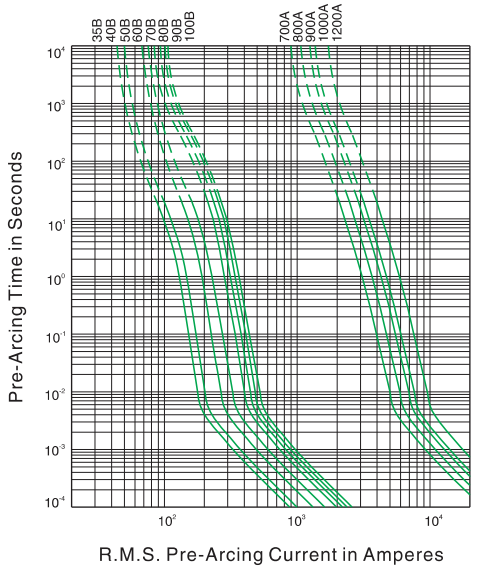
## Electrical Specifications:

| Catalog Numbers | Current Rating(A) | Pre-arc $I^2t(A^2S)$ | Clearing $I^2t(A^2S)$ | Power Loss (W) | Voltage Rating | Interrupt Rating | Carton Qty | Remark |
|---|---|---|---|---|---|---|---|---|
| VRP | 5 | 1.7 | 11 | 1.46 | 700V AC<br>700V DC<br>800VDC | 200kA@700V AC<br>50kA@700V DC<br>50kA@700V AC<br>30KA@800VDC（1ms） | 3 | A/B type contacts |
| | 10 | 3.8 | 22 | 3.88 | | | | |
| | 15 | 11 | 82.5 | 5.34 | | | | |
| | 20 | 27 | 198 | 5.82 | | | | |
| | 25 | 45 | 374 | 6.79 | | | | |
| | 30 | 56 | 495 | 8.73 | | | | |
| | 35 | 35 | 176 | 11.64 | | | | |
| | 40 | 75 | 352 | 11.64 | | | | |
| | 50 | 134 | 660 | 11.64 | | | | |
| | 60 | 211 | 1045 | 15.04 | | | | |
| | 70 | 306 | 2200 | 17.46 | | | | |
| | 80 | 361 | 2640 | 20.37 | | | | |
| | 90 | 418 | 2970 | 24.25 | | | | |
| | 100 | 545 | 3850 | 26.19 | | | | |
| | 125 | 1850 | 8030 | 27.16 | | | | A type contacts |
| | 150 | 2910 | 12870 | 31.04 | | | | |
| | 175 | 4210 | 18370 | 33.95 | | | | |
| | 200 | 5560 | 24200 | 41.71 | | | | |
| | 225 | 7710 | 34430 | 43.65 | | | | |
| | 250 | 10600 | 46750 | 46.56 | | | | |
| | 300 | 17500 | 78320 | 56.26 | | | | |
| | 350 | 23600 | 105160 | 63.05 | | | | |
| | 400 | 30500 | 137500 | 75.66 | | | | |
| | 450 | 36200 | 150700 | 91.18 | | | | |
| | 500 | 45100 | 187000 | 103.79 | | | | |
| | 600 | 66800 | 275000 | 118.34 | | | | |
| | 700 | 54200 | 330000 | 121.25 | | | | |
| | 800 | 78500 | 495000 | 135.80 | | | | |
| | 900 | 91600 | 583000 | 145.50 | | | | |
| | 1000 | 121000 | 660000 | 164.90 | | | | |
| | 1250 | 196000 | 1210000 | 184.30 | | | | |

## ● Electrical Characteristics:

Average Time-Current Curve

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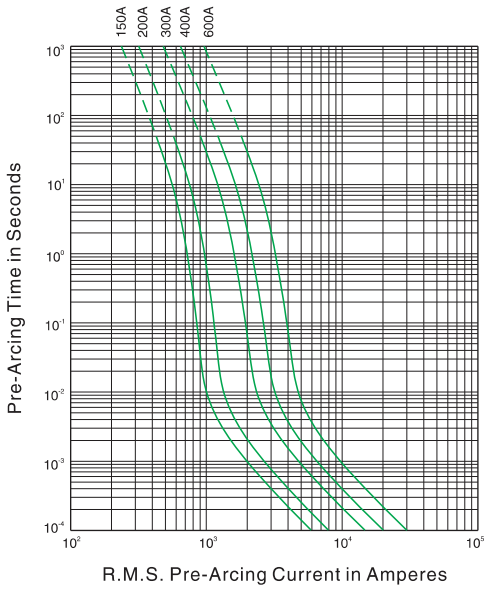
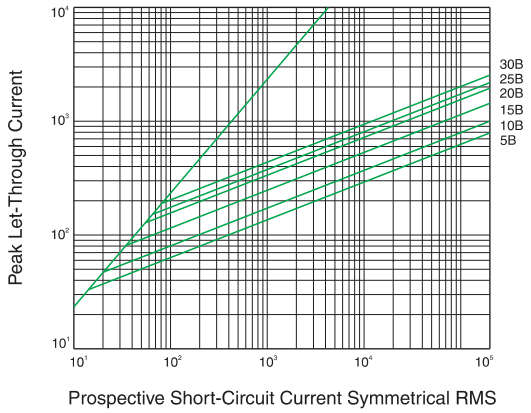
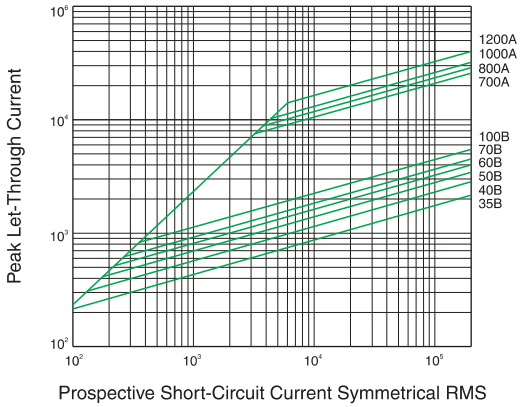
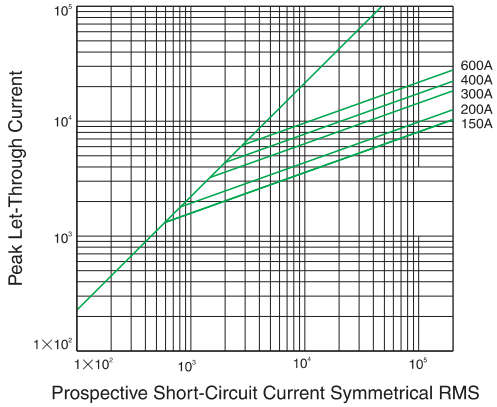



Peak Let-Thru Curve




Peak Let-Thru Curve




Peak Let-Thru Curve