

Type 0AKK

Electric Vehicle Power Fuses

0AKK Series

RoHS Compliant

Description

1000 VDC rated ceramic tube fuse

Features



- Fast-Acting fuse for DC Application
- Reliability performance design refer to ISO8820-8&GB/T31465.6
- Designed to EV fuse standard UL248-20
- Excellent DC performance
- Fully compliance with EU Directive 2011/65/EU and amending directive 2015/863

Applications

EV/HEV/ESS Application



Physical Specifications

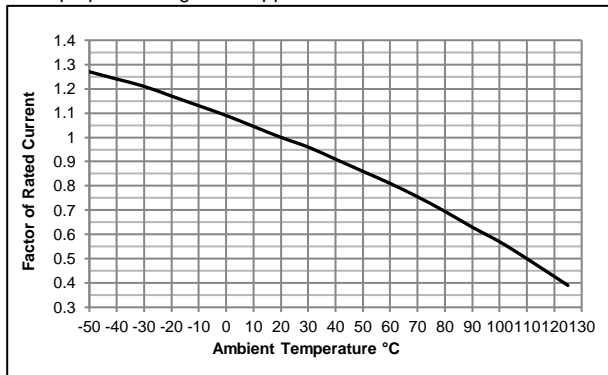
| | |
|-----------|---|
| Materials | Body : Ceramic |
| | Terminals : Tin Plated Copper |
| Marking | On Fuse : |
| | "bel", "0AKK", "Current Rating", |
| | "Interrupting Rating", "Voltage Rating" |
| | On Label : |
| | "bel", "0AKK", "Current Rating", "Voltage Rating", "Interrupting Rating", and "  ", "  "(China RoHS compliant). |

Ratings

| Voltage Rating (V) | Ampere Range / Volt @ I.R. ability* |
|---|-------------------------------------|
| 63A-350A / 1000V DC | 63A-350A / 1000V @ 50kA DC |
| *I.R.= Interrupting Rating = Short Circuit Rating(Amps) | |

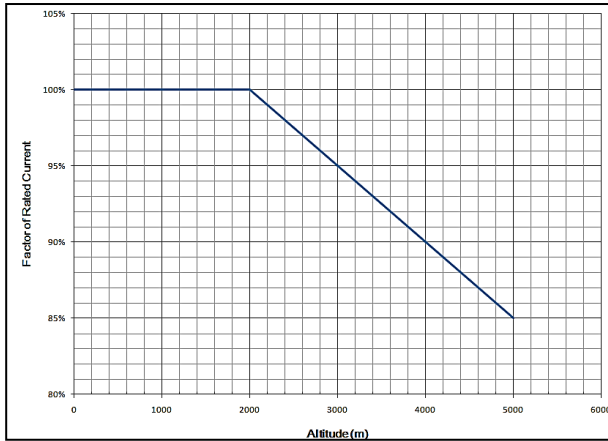
Temperature Re-Rating Curve

Operating Temperature: -40°C to +125°C,
with proper derating factor applied

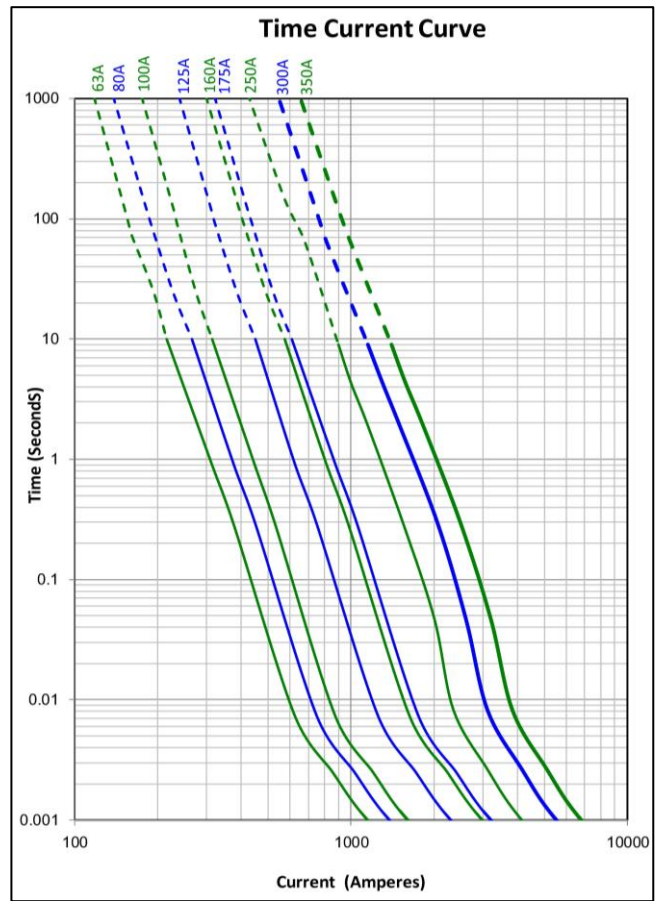


Re-rating with High altitude

The current load calculation formula of high altitude is:
 $I = I_n * (1 - (h-2000)/100 * (0.5/100))$, where h is the altitude and does not exceed 5000



Average Time Current Curve



Electrical Specifications

| Part Number | Rated Current | Voltage and Interrupting Ratings | I²t (A²sec) | | 0.5In Power loss (W) | 1.0In Power loss (W) |
|--------------|---------------|--|-------------|-----------------|----------------------|----------------------|
| | | | Pre-arcing | Total @ 1000Vdc | | |
| 0AKK-9630-xx | 63A | See Table of Ratings on Page 1 for Voltage and associated Interrupting Ratings | 720 | 4360 | 2.6 | 15.2 |
| 0AKK-9800-xx | 80A | | 1050 | 6710 | 3.2 | 18.6 |
| 0AKK-K100-xx | 100A | | 1560 | 10500 | 3.9 | 22.4 |
| 0AKK-K125-xx | 125A | | 3200 | 22600 | 4.5 | 25 |
| 0AKK-K160-xx | 160A | | 5400 | 43200 | 5.7 | 33.5 |
| 0AKK-K175-xx | 175A | | 6250 | 50000 | 6.9 | 41.4 |
| 0AKK-K250-xx | 250A | | 9600 | 43680 | 8.7 | 52 |
| 0AKK-K300-xx | 300A | | 17000 | 85000 | 9.8 | 59 |
| 0AKK-K350-xx | 350A | | 29000 | 158000 | 13 | 68 |

Consult manufacturer for other ratings
*Temperature Rise: <=50K with 50% of rated current



Specifications subject to change without notice

Bel Fuse Inc.
206 Van Vorst Street
Jersey City, NJ 07302 USA

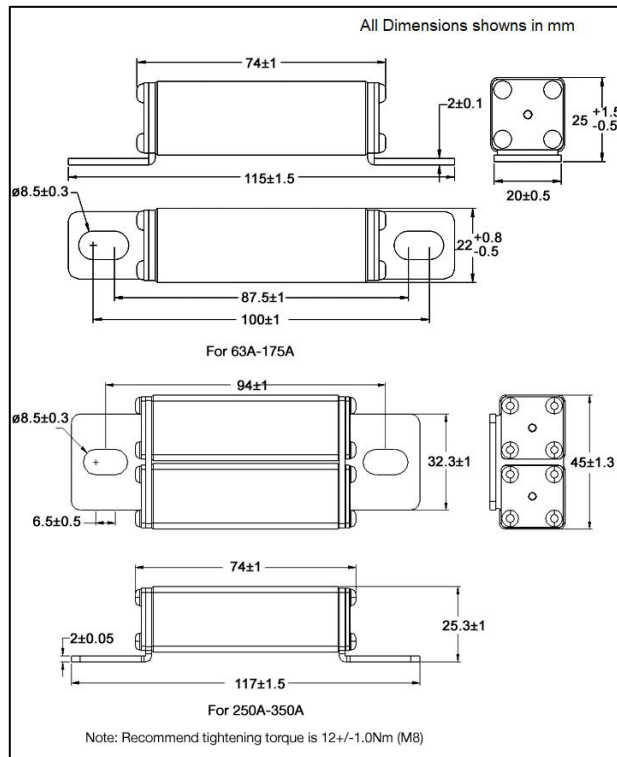
+1 201.432.0463
Bel.US.CS@belf.com
belfuse.com/circuit-protection

Fuse FGNO Explanation

0AKK - [XXXX] -XX [XXXX]=Ampere Rating; XX=See Ordering Information as below

| Amps | Bel FGNO[XXXX] | Amps | Bel FGNO[XXXX] |
|------|----------------|------|----------------|
| 63A | 9630 | 175A | K175 |
| 80A | 9800 | 250A | K250 |
| 100A | K100 | 300A | K300 |
| 125A | K125 | 350A | K350 |
| 160A | K160 | | |

Mechanical Dimensions



Ordering Information

0AKK - XXXX - X X

FUSE TYPE _____
0AKK

AMPERE RATING _____
Refer to fuse FGNO explanation table

PACKAGING CODE _____
B = Bulk

QUANTITY CODE _____
B = 8pcs/inner box, 144pcs/shipping carton (for 63A-175A)
A = 4pcs/inner box, 72pcs/shipping carton (for 250A-350A)

Packaging

| Packaging Option | Quantity | Packaging Code |
|----------------------|--|----------------|
| Bulk (for 63A-175A) | 8pcs/inner box, 144pcs/shipping carton | BB |
| Bulk (for 250A-350A) | 4pcs/inner box, 72pcs/shipping carton | BA |

Mouser Electronics

Authorized Distributor

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[0AKK-K350-BA](#) [0AKK-9630-BB](#) [0AKK-9800-BB](#) [0AKK-K100-BB](#) [0AKK-K125-BB](#) [0AKK-K160-BB](#) [0AKK-K175-BB](#)
[0AKK-K250-BA](#) [0AKK-K300-BA](#)