

# 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
- Full compliance with EU Directive 2011/65/EU and amending directive 2015/863

### Applications

EV/HEV/ESS Application



UK  
CA c  us CE

### Physical Specifications

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

### Safety Agency Approvals

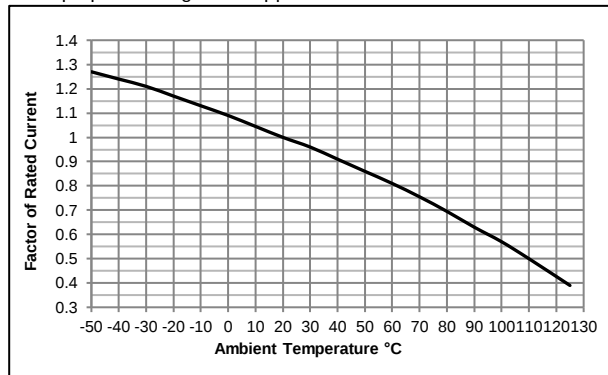
| Safety Agency                                                                       | Safety Agency Certificate | Ampere Rating/<br>Voltage Rating | Ampere Range / Volt<br>@ I.R. ability* |
|-------------------------------------------------------------------------------------|---------------------------|----------------------------------|----------------------------------------|
|  | E491441                   | 63A-350A / 1000V DC              | 63A-350A / 1000V @ 50kA DC             |
| *I.R.= Interrupting Rating = Short Circuit Rating(Amps)                             |                           |                                  |                                        |

# Type 0AKK

2 / 3

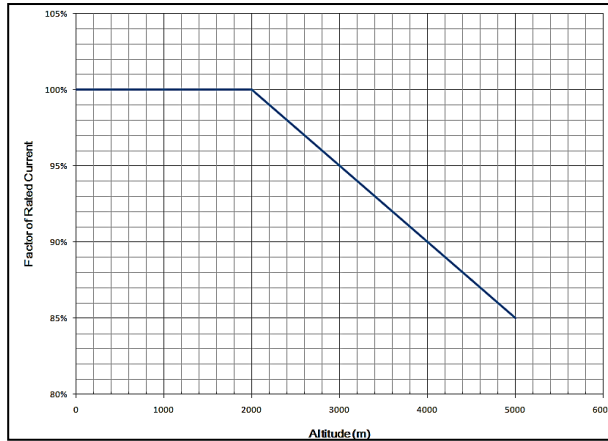
## Temperature Re-Rating Curve

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

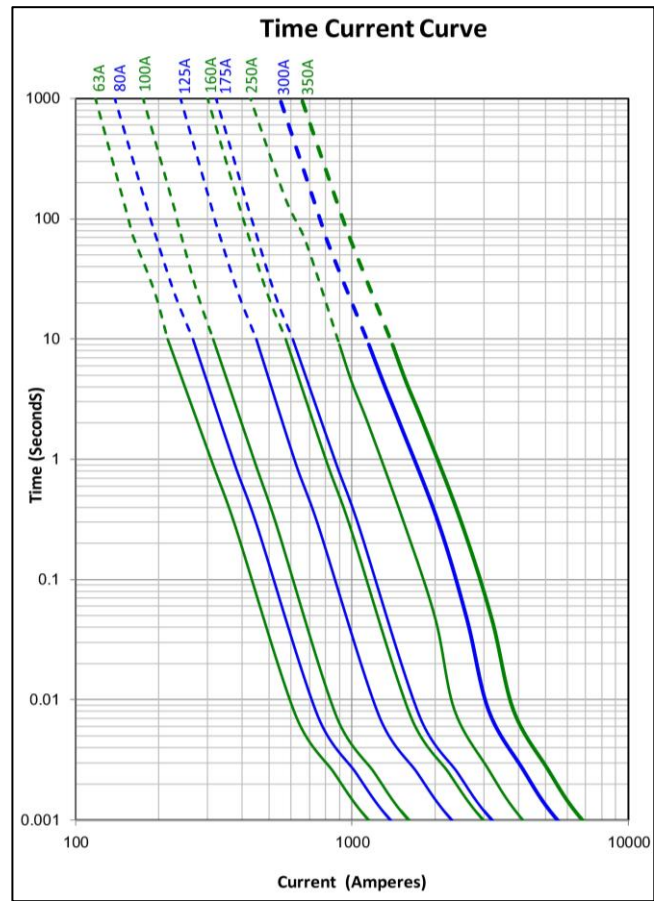


## Re-rating with High altitude

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) |                 | 0.5I <sub>n</sub> Power loss (W) | 1.0I <sub>n</sub> Power loss (W) | Agency Approvals |
|--------------|---------------|--------------------------------------------------------------------------------|-------------|-----------------|----------------------------------|----------------------------------|------------------|
|              |               |                                                                                | 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                             | Y                |
| 0AKK-9800-xx | 80A           |                                                                                | 1050        | 6710            | 3.2                              | 18.6                             | Y                |
| 0AKK-K100-xx | 100A          |                                                                                | 1560        | 10500           | 3.9                              | 22.4                             | Y                |
| 0AKK-K125-xx | 125A          |                                                                                | 3200        | 22600           | 4.5                              | 25                               | Y                |
| 0AKK-K160-xx | 160A          |                                                                                | 5400        | 43200           | 5.7                              | 33.5                             | Y                |
| 0AKK-K175-xx | 175A          |                                                                                | 6250        | 50000           | 6.9                              | 41.4                             | Y                |
| 0AKK-K250-xx | 250A          |                                                                                | 9600        | 43680           | 8.7                              | 52                               | Y                |
| 0AKK-K300-xx | 300A          |                                                                                | 17000       | 85000           | 9.8                              | 59                               | Y                |
| 0AKK-K350-xx | 350A          |                                                                                | 29000       | 158000          | 13                               | 68                               | Y                |

Consult manufacturer for other ratings

\*Temperature Rise: ≤50K with 50% of rated current



Specifications subject to change without notice

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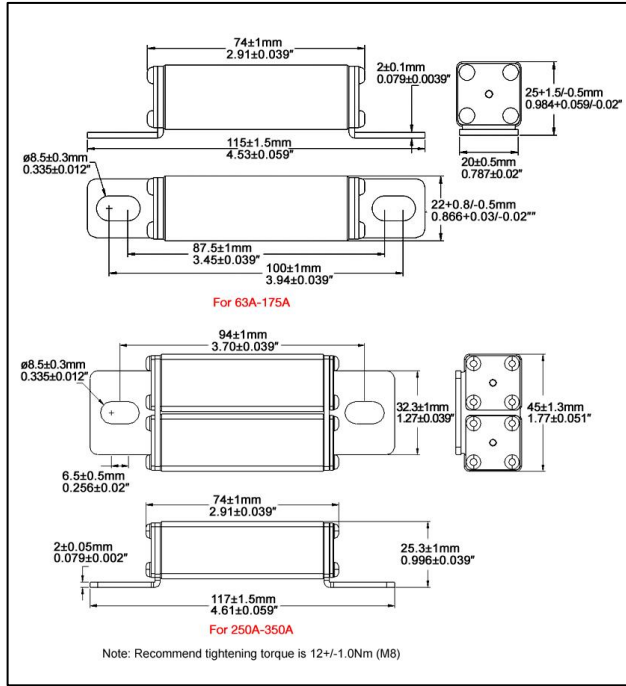
3 / 3

## 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

OAKK - XXXX - X X

FUSE TYPE \_\_\_\_\_  
OAKK

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             |