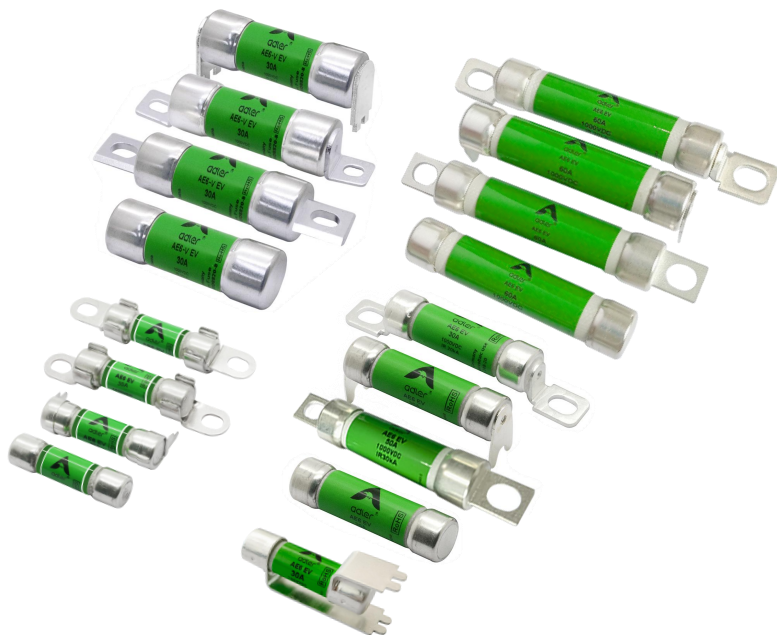


## AE6 EV Fuse



### FEATURES

- 1000 VDC automotive fuse
- Rated Current: 5-30 A (10x38 mm)  
20-50 A (14x51 mm)  
35-60 A (14x65 mm)  
10-70 A (22x65 mm)
- Max. BC: 30 kA@1000 VDC
- Max. BC: 50 kA@1000 VDC (22x65 mm)
- Min BC: 2In@1000VDC
- Time Constant:  $2 \pm 0.5\text{ms}$
- Size: 10x38 mm, 14x51 mm, 14x65 mm, 22x65mm

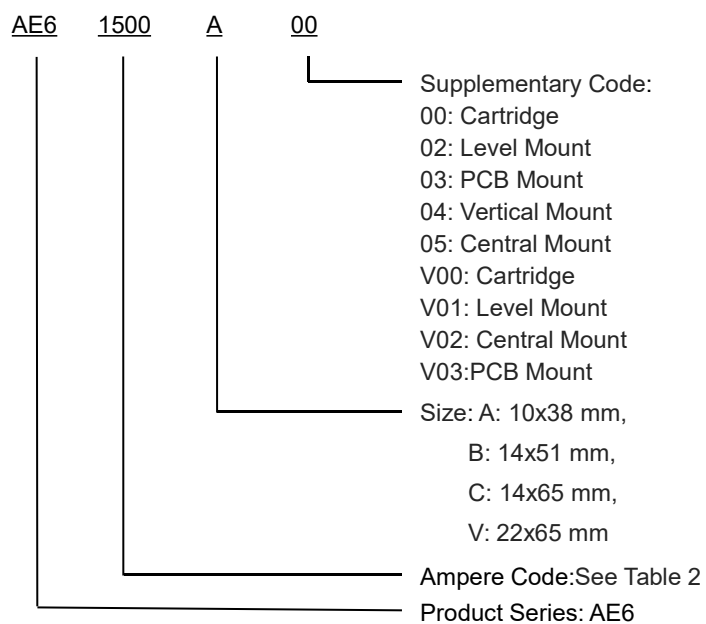
### DESCRIPTION

Adler AE6 series EV fuses are specially engineered and tested to provide best-in-class protection performance in protecting high power battery charging and managing systems of Electrical Vehicles and Hybrid Electrical Vehicles, up to 1000 Vdc In ratings from 5A to 70A.

### AGENCY INFORMATION

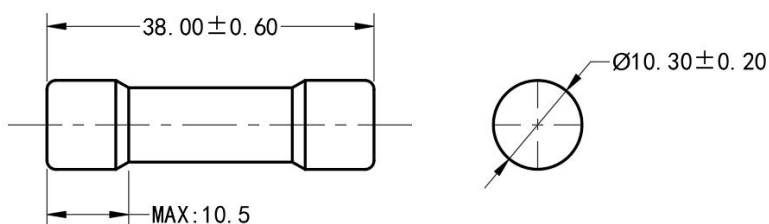
- Ref. to UL 248-20, ISO 8820-8, JASO D622,
- GB/T 31465.6
- Approval: TÜV and UL(10x38mm)
- Manufactured under IATF 16949 quality system
- RoHS and REACH Compliant

### PART NUMBERING SYSTEM

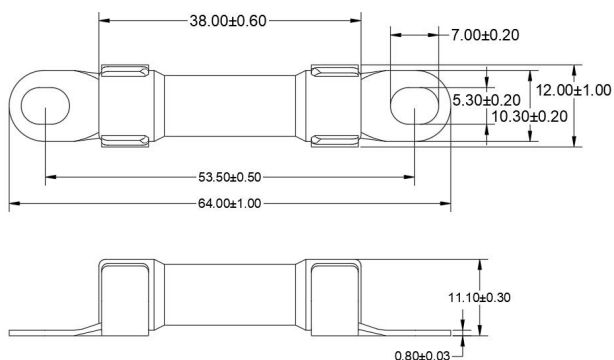


### DIMENSIONS (10x38mm): 5-30 A

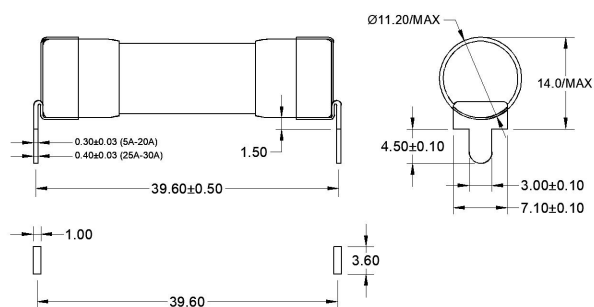
AE6xxxxA00



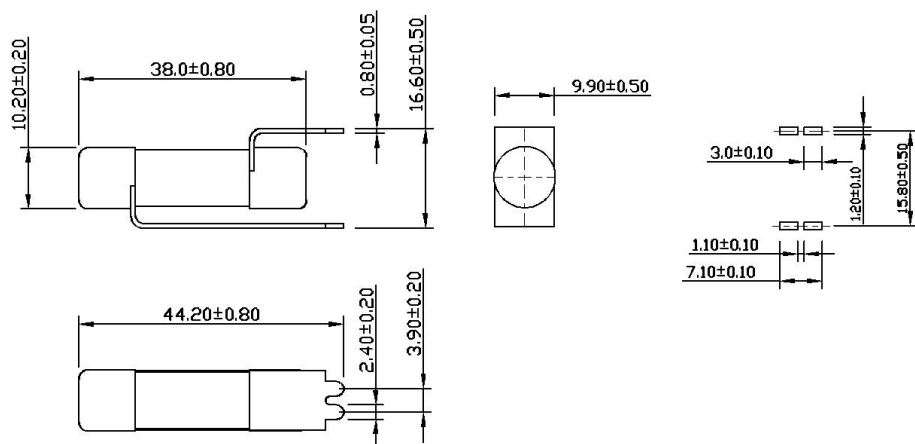
AE6xxxxA02



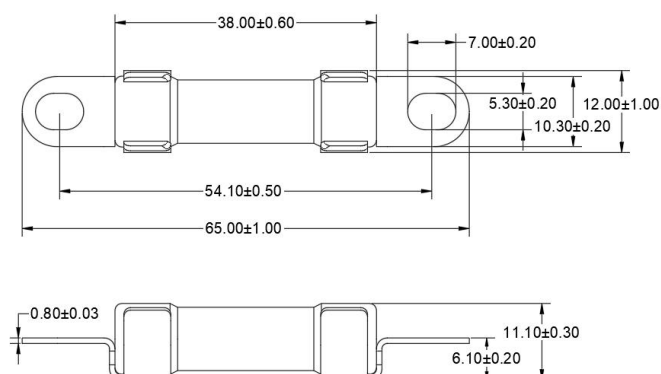
AE6xxxxA03



AE6xxxxA04

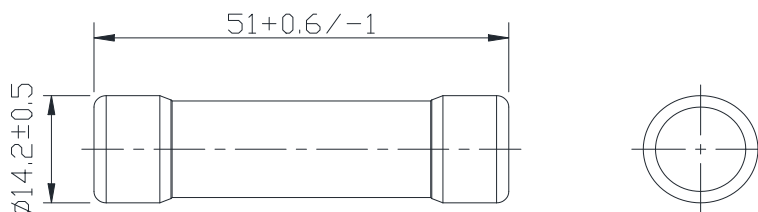


AE6xxxxA05

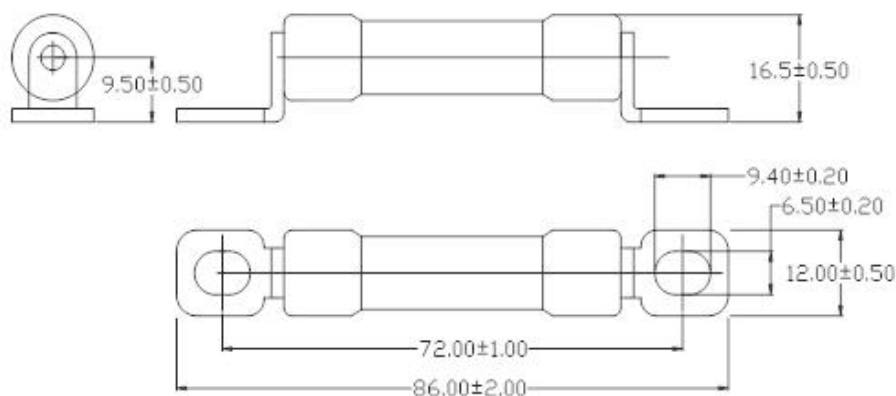


**DIMENSIONS (14x51mm): 20-50 A**

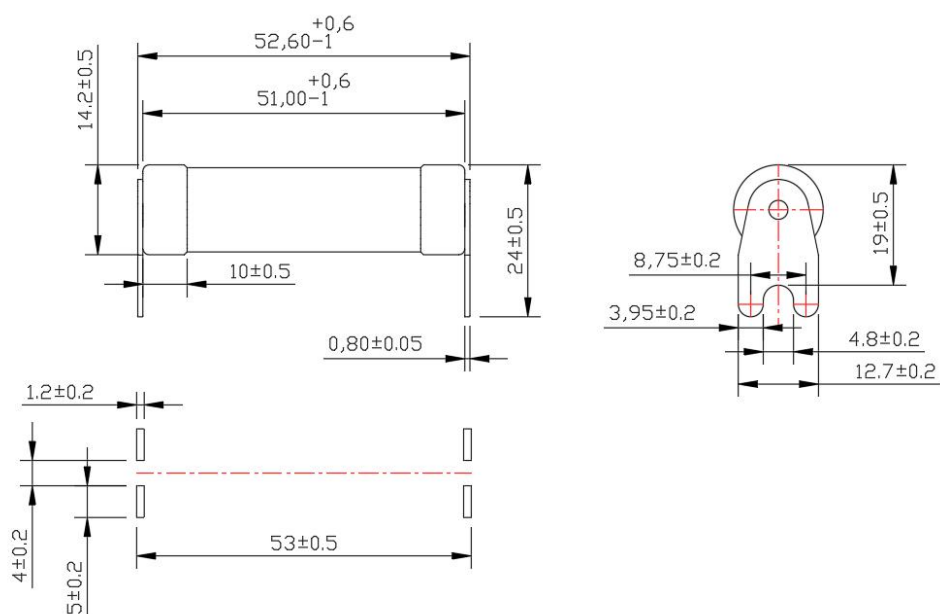
AE6xxxxB00



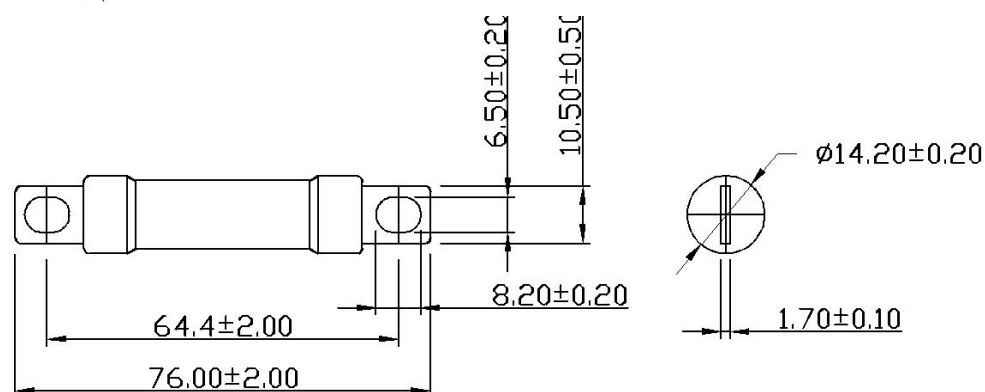
AE6xxxxB02



AE6xxxxB03

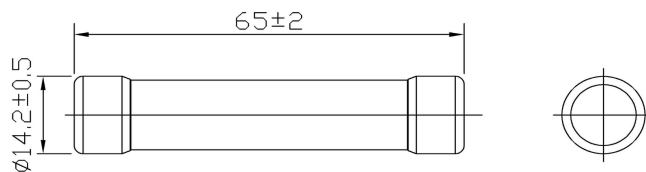


AE6xxxxB05

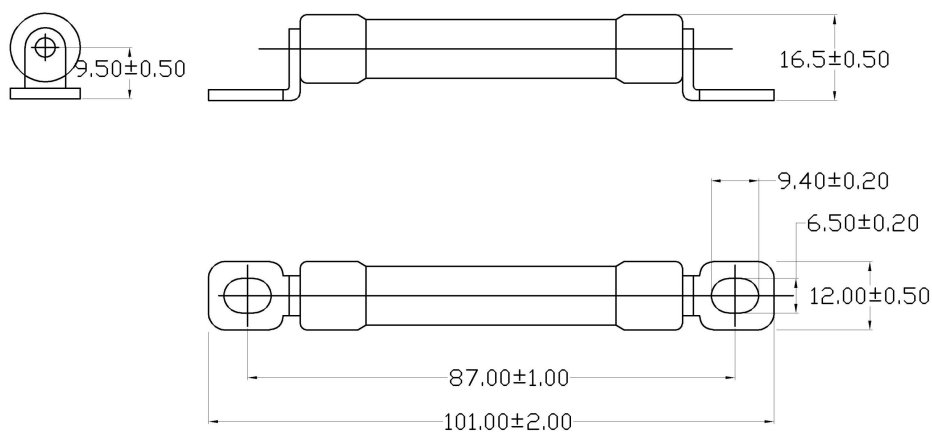


**DIMENSIONS (14x65mm): 35-60 A**

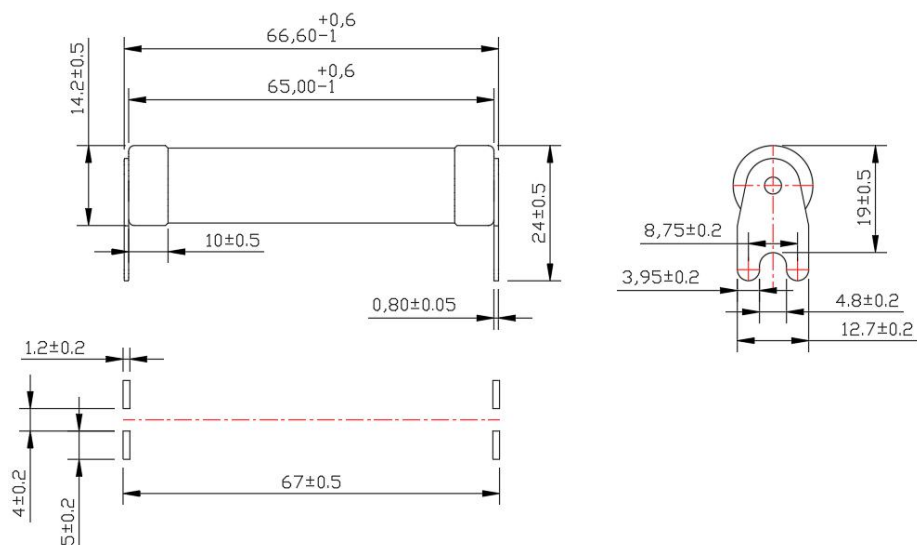
AE6xxxxC00



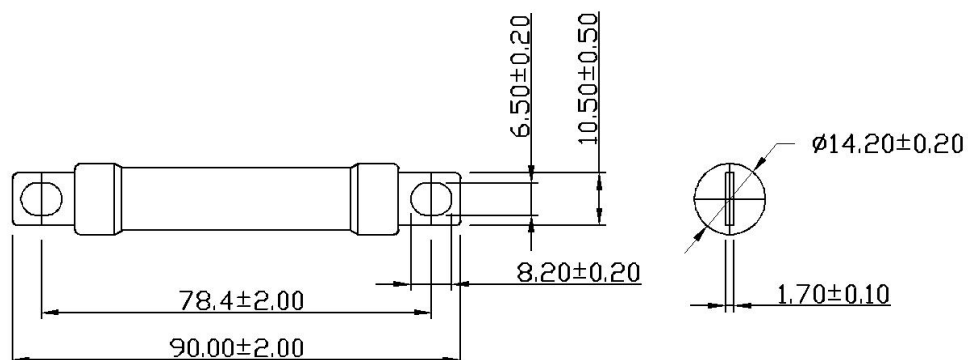
AE6xxxxC02



AE6xxxxC03

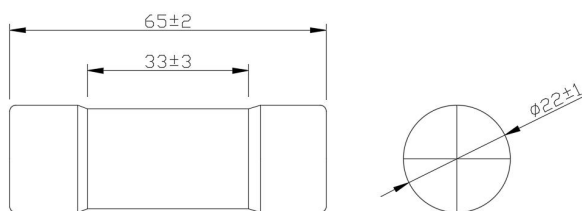


AE6xxxxC05

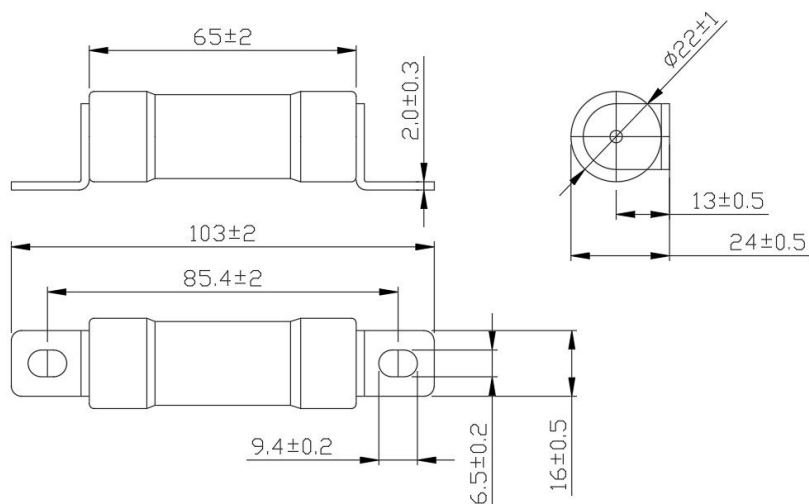


**DIMENSIONS (22x65mm): 10-80 A**

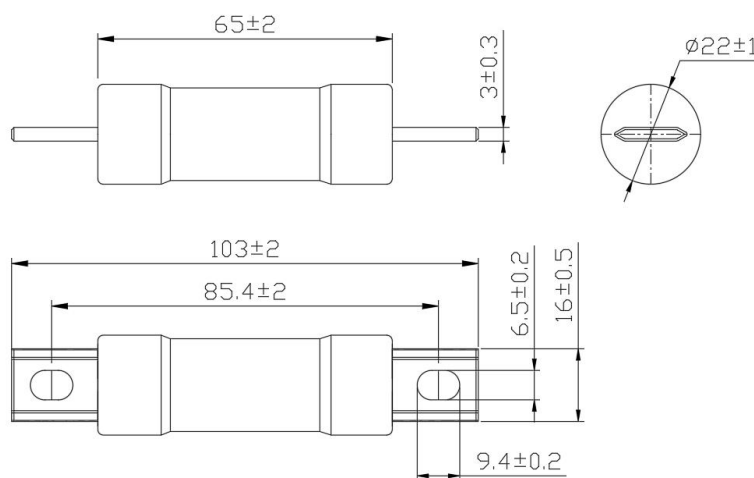
AE6xxxV00



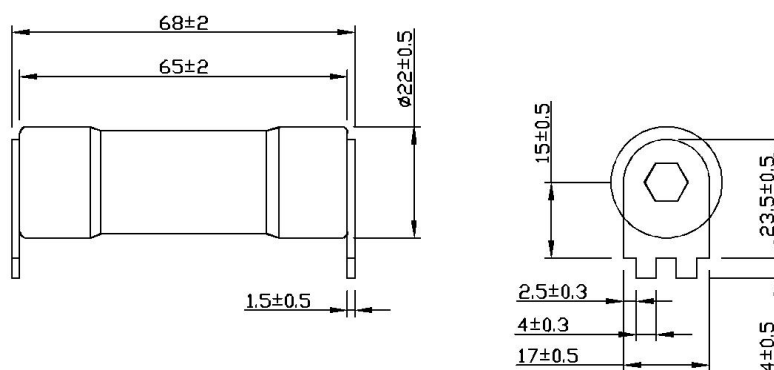
AE6xxxV01



AE6xxxV02



AE6xxxV03



## Packing information

| Fuse Size  | Box specifications (mm) | Packing quantity / per container | Weight / PCS (g) | Mounting Method | mounting requirements |
|------------|-------------------------|----------------------------------|------------------|-----------------|-----------------------|
| AE6xxxxA00 | 410×215×160             | 1200pcs                          | 7.6±3%           | BH114           | -                     |
| AE6xxxxA02 | 410×215×160             | 720pcs                           | 11.5±3%          | M5              | 4.5±1                 |
| AE6xxxxA03 | 410×215×160             | 1200pcs                          | 8.6±3%           | -               | -                     |
| AE6xxxxA05 | 410×215×160             | 720pcs                           | 11.5±3%          | M5              | 4.5±1                 |
| AE6xxxxA04 | 410×215×160             | 480pcs                           | 9.7±3%           | -               | -                     |
| AE6xxxxB00 | 410×215×160             | 648pcs                           | 16±3%            | BH214           |                       |
| AE6xxxxB02 | 410×215×160             | 308pcs                           | 15.7±3%          | M6              | 6±1                   |
| AE6xxxxB03 | 410×215×160             | 288pcs                           | 22.6±3%          | -               |                       |
| AE6xxxxB05 | 410×215×160             | 432pcs                           | 24.3±3%          | M6              | 6±1                   |
| AE6xxxxC00 | 410×215×160             | 432pcs                           | 18.3±3%          | -               | -                     |
| AE6xxxxC02 | 410×215×160             | 242pcs                           | 26.8±3%          | M6              | 6±1                   |
| AE6xxxxC03 | 410×215×160             | 270pcs                           | 25.2±3%          | -               | -                     |
| AE6xxxxC05 | 410×215×160             | 378pcs                           | 25.3±3%          | M6              | 6±1                   |
| AE6xxxxV00 | 410×215×160             | 112pcs                           | 56.1±3%          | -               | -                     |
| AE6xxxxV01 | 410×215×160             | 120pcs                           | 69.6±3%          | M6              | 6±1                   |
| AE6xxxxV02 | 410×215×160             | 120pcs                           | 69.7±3%          | M6              | 6±1                   |
| AE6xxxxV03 | 410×215×160             | 112pcs                           | 65.2±3%          | -               | -                     |

## ELECTRICAL SPECIFICATIONS

| Size (mm) | Part Number |             |            |               | Rated Current | Ampere Code | Rated Voltage | Breaking Capacity  | I <sup>2</sup> t (A <sup>2</sup> s) |       | Dissipation (W)    |                    | Certifications |    |
|-----------|-------------|-------------|------------|---------------|---------------|-------------|---------------|--------------------|-------------------------------------|-------|--------------------|--------------------|----------------|----|
|           | Cartridge   | Level Mount | PCB Mount  | Central Mount |               |             |               |                    | Pre-Arcing                          | Total | 0.7 I <sub>n</sub> | 1.0 I <sub>n</sub> | TÜV            | UL |
| 10x38     | AE61500A00  | AE61500A02  | AE61500A03 | AE61500A05    | 5 A           | 1500        | 1000 VDC      | 30 kA@<br>1000 VDC | 105                                 | 182   | 0.8                | 1.6                | ●              | ●  |
|           | AE61600A00  | AE61600A02  | AE61600A03 | AE61600A05    | 6 A           | 1600        |               |                    | 115                                 | 196   | 1.0                | 2.3                | ●              | ●  |
|           | AE61800A00  | AE61800A02  | AE61800A03 | AE61800A05    | 8 A           | 1800        |               |                    | 135                                 | 220   | 1.2                | 2.4                | ●              | ●  |
|           | AE62100A00  | AE62100A02  | AE62100A03 | AE62100A05    | 10 A          | 2100        |               |                    | 160                                 | 255   | 1.0                | 2.0                | ●              | ●  |
|           | AE62120A00  | AE62120A02  | AE62120A03 | AE62120A05    | 12 A          | 2120        |               |                    | 255                                 | 410   | 1.1                | 2.2                | ●              | ●  |
|           | AE62150A00  | AE62150A02  | AE62150A03 | AE62150A05    | 15 A          | 2150        |               |                    | 370                                 | 620   | 1.7                | 2.5                | ●              | ●  |
|           | AE62200A00  | AE62200A02  | AE62200A03 | AE62200A05    | 20 A          | 2200        |               |                    | 590                                 | 1800  | 1.8                | 3.1                | ●              | ●  |
|           | AE62250A00  | AE62250A02  | AE62250A03 | AE62250A05    | 25A           | 2200        |               |                    | 770                                 | 3200  | 1.9                | 3.8                | ●              | ●  |
|           | AE62300A00  | AE62300A02  | AE62300A03 | AE62300A05    | 30 A          | 2300        |               |                    | 1080                                | 5070  | 2.0                | 4.5                | ●              | ●  |
| 14x51     | AE62200B00  | AE62200B02  | AE62200B03 | AE62200B05    | 20 A          | 2200        | 1000 VDC      | 30 kA<br>@1000 VDC | 975                                 | 2150  | 2.2                | 3.8                | ●              | ●  |
|           | AE62250B00  | AE62250B02  | AE62250B03 | AE62250B05    | 25 A          | 2250        |               |                    | 1240                                | 3150  | 2.4                | 4.4                | ●              | ●  |
|           | AE62300B00  | AE62300B02  | AE62300B03 | AE62300B05    | 30 A          | 2300        |               |                    | 1950                                | 4450  | 2.8                | 5.2                | ●              | ●  |
|           | AE62350B00  | AE62350B02  | AE62350B03 | AE62350B05    | 35 A          | 2300        |               |                    | 2700                                | 7500  | 1.8                | 6.0                | ●              | ●  |
|           | AE62400B00  | AE62400B02  | AE62400B03 | AE62400B05    | 40 A          | 2400        |               |                    | 3450                                | 10.8K | 2.1                | 7.0                | ●              | ●  |
|           | AE62450B00  | AE62450B02  | AE62450B03 | AE62450B05    | 45 A          | 2450        |               |                    | 4600                                | 14.2K | 2.2                | 7.1                | ●              | ●  |
|           | AE62500B00  | AE62500B02  | AE62500B03 | AE62500B05    | 50 A          | 2500        |               |                    | 6380                                | 17.6K | 2.3                | 7.5                | ●              | ●  |
| 14x65     | AE62350C00  | AE62350C02  | AE62350C03 | AE62350C05    | 35 A          | 2350        | 1000 VDC      | 30 kA<br>@1000 VDC | 2900                                | 8.15K | 2.5                | 6.4                | ●              | ●  |
|           | AE62400C00  | AE62400C02  | AE62400C03 | AE62400C05    | 40 A          | 2400        |               |                    | 5270                                | 12.0K | 2.7                | 7.7                | ●              | ●  |
|           | AE62450C00  | AE62450C02  | AE62450C03 | AE62450C05    | 45 A          | 2450        |               |                    | 7450                                | 13.9K | 2.8                | 7.8                | ●              | ●  |
|           | AE62500C00  | AE62500C02  | AE62500C03 | AE62500C05    | 50 A          | 2500        |               |                    | 9300                                | 16.0K | 2.9                | 7.9                | ●              | ●  |
|           | AE62600C00  | AE62600C02  | AE62600C03 | AE62600C05    | 60 A          | 2600        |               |                    | 12.5K                               | 19.6K | 3.0                | 9.0                | ●              | ●  |

| Size<br>(mm) | Part Number    | Rated Current | Ampere Code | Rated Voltage | Breaking Capacity  | I <sup>2</sup> t (A <sup>2</sup> s) |       | Dissipation (W)    |                    | Certifications |    |
|--------------|----------------|---------------|-------------|---------------|--------------------|-------------------------------------|-------|--------------------|--------------------|----------------|----|
|              | Vertical Mount |               |             |               |                    | Pre-Arcing                          | Total | 0.7 I <sub>n</sub> | 1.0 I <sub>n</sub> | TÜV            | UL |
| 10x38        | AE61500A04     | 5 A           | 1500        | 1000 VDC      | 30 kA@<br>1000 VDC | 105                                 | 182   | 0.8                | 1.6                | ○              | ○  |
|              | AE61600A04     | 6 A           | 1600        |               |                    | 115                                 | 196   | 1.0                | 2.3                | ○              | ○  |
|              | AE61800A04     | 8 A           | 1800        |               |                    | 135                                 | 220   | 1.2                | 2.4                | ○              | ○  |
|              | AE62100A04     | 10 A          | 2100        |               |                    | 160                                 | 255   | 1.0                | 2.0                | ○              | ○  |
|              | AE62120A04     | 12 A          | 2120        |               |                    | 255                                 | 410   | 1.1                | 2.2                | ○              | ○  |
|              | AE62150A04     | 15 A          | 2150        |               |                    | 370                                 | 620   | 1.7                | 2.5                | ○              | ○  |
|              | AE62200A04     | 20 A          | 2200        |               |                    | 590                                 | 1800  | 1.8                | 3.1                | ○              | ○  |
|              | AE62250A04     | 25A           | 2200        |               |                    | 770                                 | 3200  | 1.9                | 3.8                | ○              | ○  |
|              | AE62300A04     | 30 A          | 2300        |               |                    | 1080                                | 5070  | 2.0                | 4.5                | ○              | ○  |

| Size<br>(mm) | Part Number |             |               |            | Rated<br>Current | Ampere<br>Code | Rated<br>Voltage | Breaking<br>Capacity | I <sup>2</sup> t (A <sup>2</sup> s) |       | Dissipation (W)    |                    | Certifications |    |
|--------------|-------------|-------------|---------------|------------|------------------|----------------|------------------|----------------------|-------------------------------------|-------|--------------------|--------------------|----------------|----|
|              | Cartridge   | Level Mount | Central Mount | PCB Mount  |                  |                |                  |                      | Pre-Arcing                          | Total | 0.7 I <sub>n</sub> | 1.0 I <sub>n</sub> | TÜV            | UL |
| 22x65        | AE62100V00  | AE62100V01  | AE62100V02    | AE62100V03 | 10 A             | 2100           | 1000 VDC         | 50 kA<br>@1000 VDC   | 280                                 | 750   | 1.5                | 3.5                | ○              | ○  |
|              | AE62120V00  | AE62120V01  | AE62120V02    | AE62120V03 | 12 A             | 2120           |                  |                      | 430                                 | 870   | 1.6                | 3.6                | ○              | ○  |
|              | AE62150V00  | AE62150V01  | AE62150V02    | AE62150V03 | 15 A             | 2150           |                  |                      | 560                                 | 1080  | 1.7                | 3.7                | ○              | ○  |
|              | AE62200V00  | AE62200V01  | AE62200V02    | AE62200V03 | 20 A             | 2200           |                  |                      | 990                                 | 2270  | 2                  | 4.3                | ○              | ○  |
|              | AE62250V00  | AE62250V01  | AE62250V02    | AE62250V03 | 25 A             | 2250           |                  |                      | 1250                                | 3160  | 2.1                | 4.5                | ○              | ○  |
|              | AE62300V00  | AE62300V01  | AE62300V02    | AE62300V03 | 30 A             | 2300           |                  |                      | 1710                                | 4450  | 2.4                | 5.3                | ○              | ○  |
|              | AE62350V00  | AE62350V01  | AE62350V02    | AE62350V03 | 35 A             | 2350           |                  |                      | 3210                                | 8360  | 2.6                | 5.9                | ○              | ○  |
|              | AE62400V00  | AE62400V01  | AE62400V02    | AE62400V03 | 40 A             | 2400           |                  |                      | 5360                                | 12.2K | 2.1                | 6.5                | ○              | ○  |
|              | AE62450V00  | AE62450V01  | AE62450V02    | AE62450V03 | 45 A             | 2450           |                  |                      | 7650                                | 14.1K | 2.6                | 8.3                | ○              | ○  |
|              | AE62500V00  | AE62500V01  | AE62500V02    | AE62500V03 | 50 A             | 2500           |                  |                      | 9530                                | 16.5K | 2.7                | 8.5                | ○              | ○  |
|              | AE62600V00  | AE62600V01  | AE62600V02    | AE62600V03 | 60 A             | 2600           |                  |                      | 13.0K                               | 20.8K | 2                  | 9                  | ○              | ○  |
|              | AE62700V00  | AE62700V01  | AE62700V02    | AE62700V03 | 70 A             | 2700           |                  |                      | 16.5K                               | 35.5K | 2.3                | 11.4               | ○              | ○  |

## TIME VS CURRENT CHARACTERISTIC

| Rated Current | 110 % | 135 % | 150 %     | 200 %     | 300 %    | 500 %    |
|---------------|-------|-------|-----------|-----------|----------|----------|
| 5-80 A        | >4 h  | <1 h  | 10-1000 s | 0.5-100 s | 0.1-15 s | 0.05-1 s |

## OPERATING CONDITIONS

Where the following conditions apply, fuses complying with this standard are deemed capable of operating satisfactorily without further qualification.

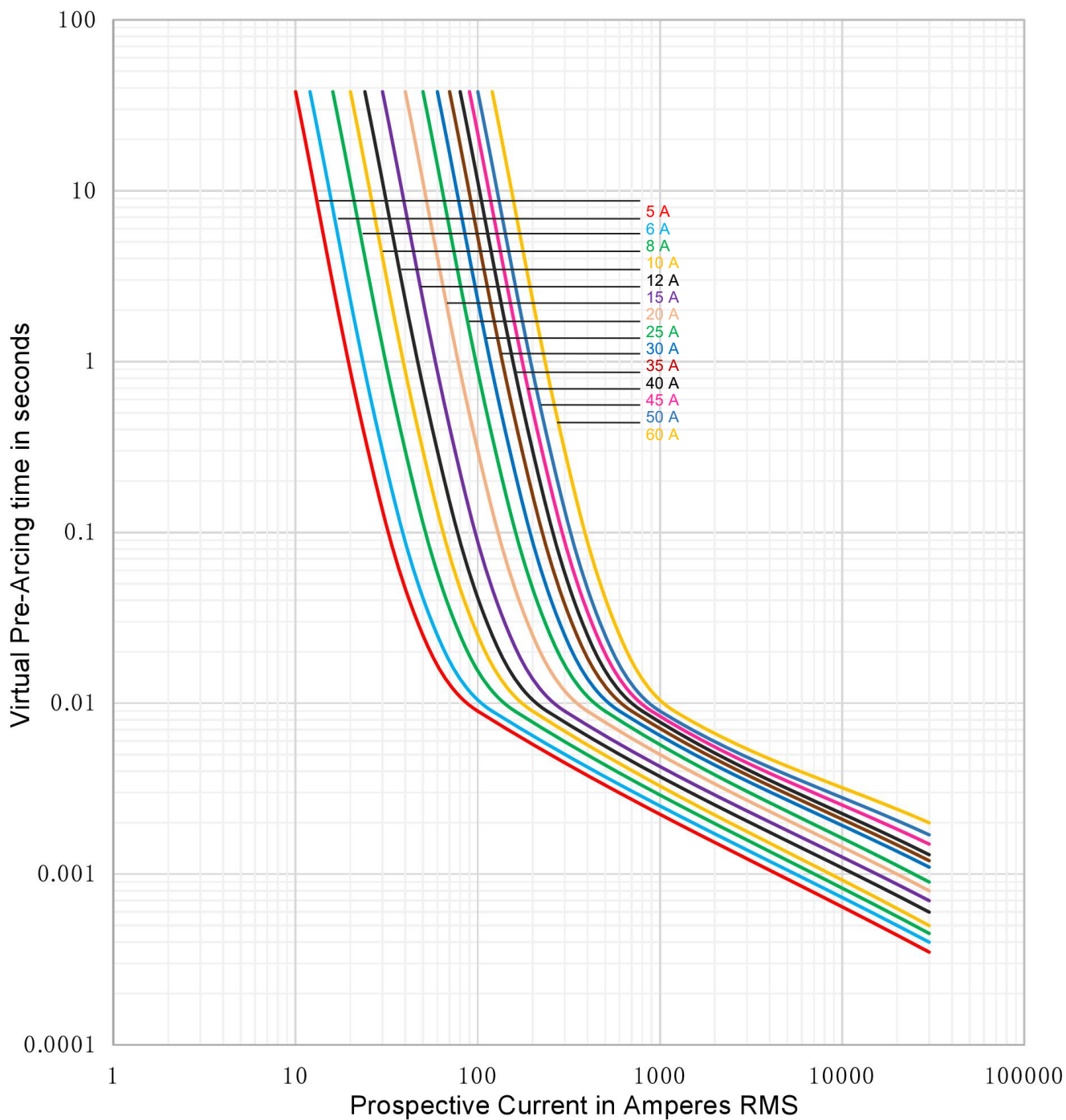
- Normal temperature: -5°C-40°C, permissible operating temperature: -40°C-120°C.
- The altitude of the normal site of installation of the fuses does not exceed 2000m and permissible altitude site of installation does not exceed 5000m.
- The air is clean and its relative humidity does not exceed 50 % at the maximum temperature of 40°C.
- Higher relative humidity is permitted at lower temperatures, e.g. 90 % at 20°C.
- Pollution grade III.
- Under these conditions, moderate condensation may occasionally occur due to variation in temperature.
- For operating conditions other than above, please contact manufacturer.

## STORAGE

During transportation and storage, avoid water seepage and mechanical damage.

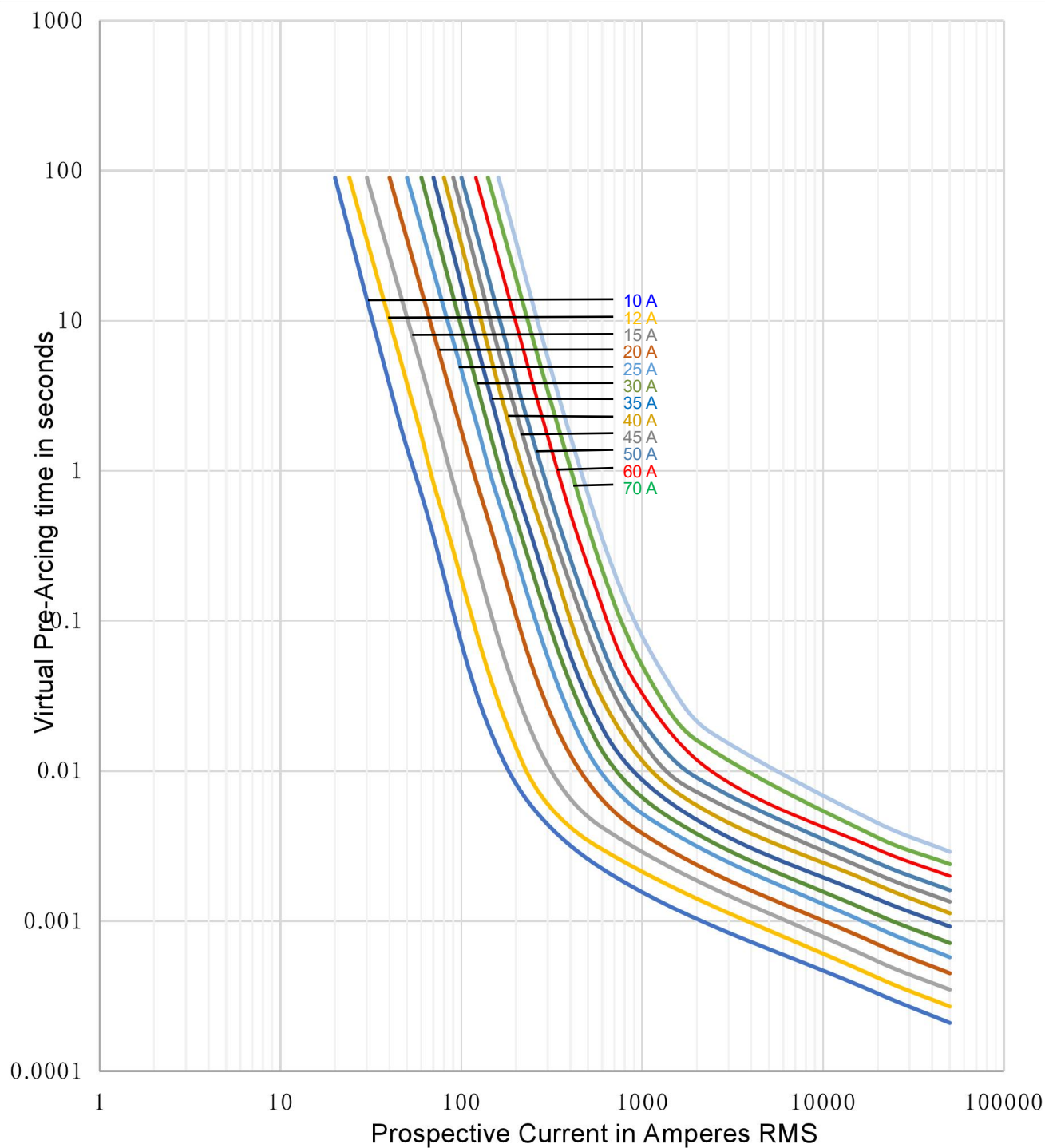
## TIME CURRENT CURVE

Average Current Curve (I-T Curve)

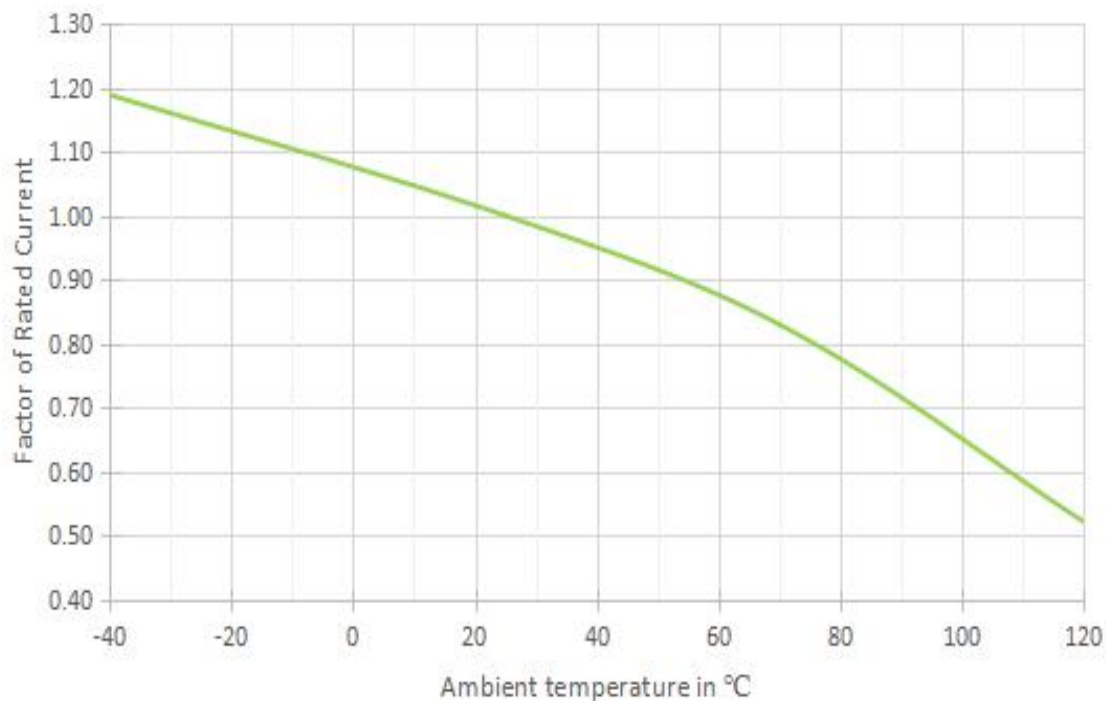


## TIME CURRENT CURVE

Average Current Curve (I-T Curve) — AE6xxxxVxx



## Temperature derating curve



## WEB RESOURCES

Download the latest technical documents: [www.adlerelectric.com](http://www.adlerelectric.com). Specifications are subject to change without notice.