

## AT8 EV Fuse



### Features

- Reliable clearing of DC fault currents
- High cycling performance
- Low watt losses
- Ultra-compact size and power density
- High breaking capacity to 20kA
- QR code marks on each fuse for traceability

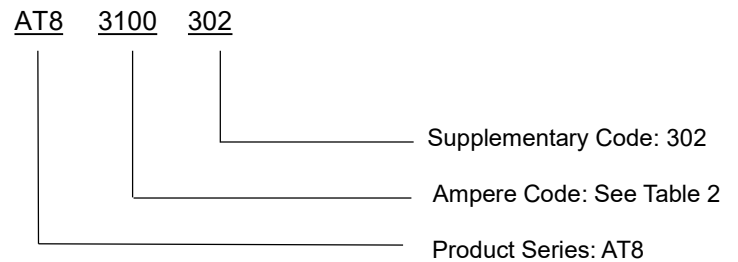
### Description

Adler AT8 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 800 VDC in ratings from 50A to 200A.

### Agency Information

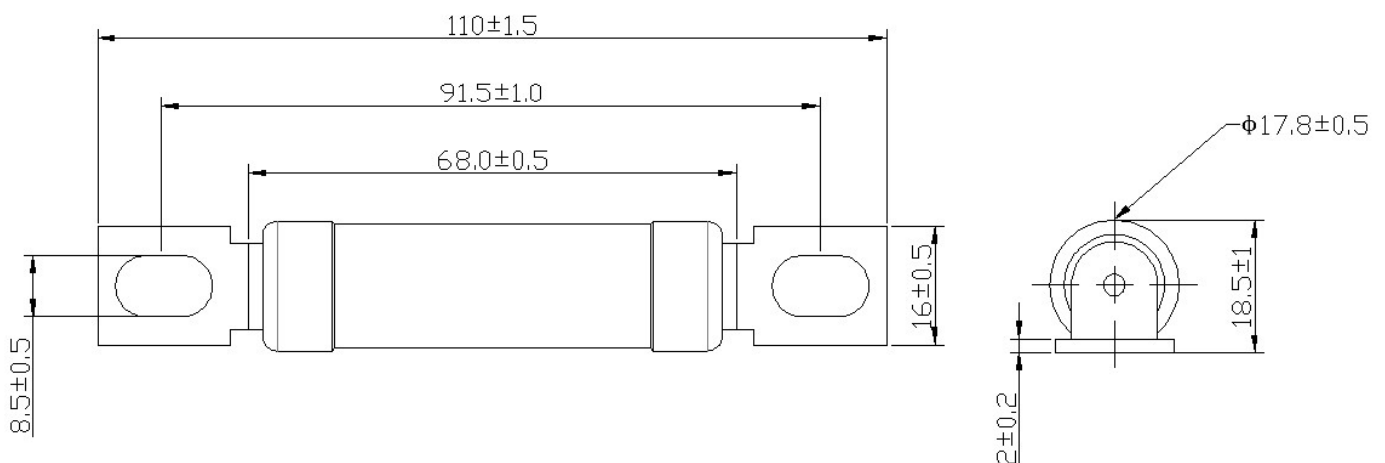
- Designed to UL 248-20, UL 248-13
- UL Recognized Component(UL File: E485737)
- Manufactured under IATF 16949 quality system
- RoHS and REACH Compliant

### Part Numbering System

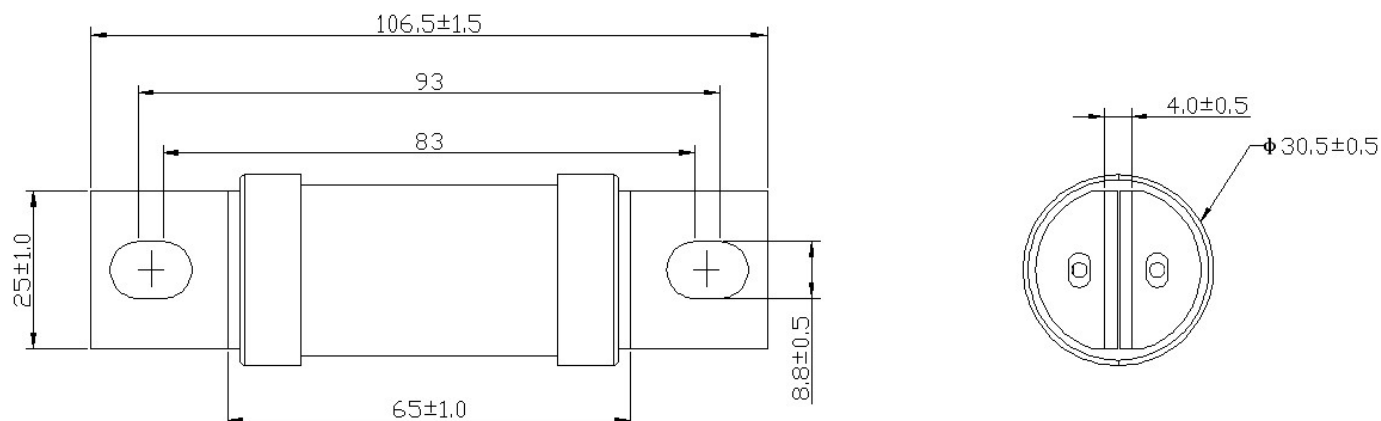


### Dimensions (mm)

AT8xxxx302



AT8xxx702



## Electrical Specifications

Table 2

| Size  | Part Number | Rated Current | Ampere Code | Rated Voltage | Breaking Capacity | Pre-Arcing I <sup>2</sup> t (A <sup>2</sup> sec) | Watt Loss (W) |
|-------|-------------|---------------|-------------|---------------|-------------------|--------------------------------------------------|---------------|
| (mm)  |             |               |             |               | UL **             |                                                  | 1.0In         |
| 18x68 | AT82500302  | 50 A          | 2500        | 800Vdc        | 10kA              | 8500                                             | 9.5           |
|       | AT82600302  | 60 A          | 2600        | 800Vdc        | 10kA              | 12000                                            | 12            |
|       | AT82700302  | 70 A          | 2700        | 800Vdc        | 10kA              | 21000                                            | 13            |
|       | AT82800302  | 80 A          | 2800        | 800Vdc        | 10kA              | 25000                                            | 15            |
|       | AT83100302  | 100 A         | 3100        | 800Vdc        | 10kA              | 50000                                            | 18            |
| 30x65 | AT83100702  | 100 A         | 3100        | 800Vdc        | 20kA              | 3970                                             |               |
|       | AT83125702  | 125 A         | 3125        | 800Vdc        | 20kA              | 5780                                             | -             |
|       | AT83150702  | 150 A         | 3150        | 800Vdc        | 20kA              | 8850                                             | -             |
|       | AT83175702  | 175 A         | 3175        | 800Vdc        | 20kA              | 12250                                            | -             |
|       | AT83200702  | 200 A         | 3200        | 800Vdc        | 20kA              | 16000                                            | -             |

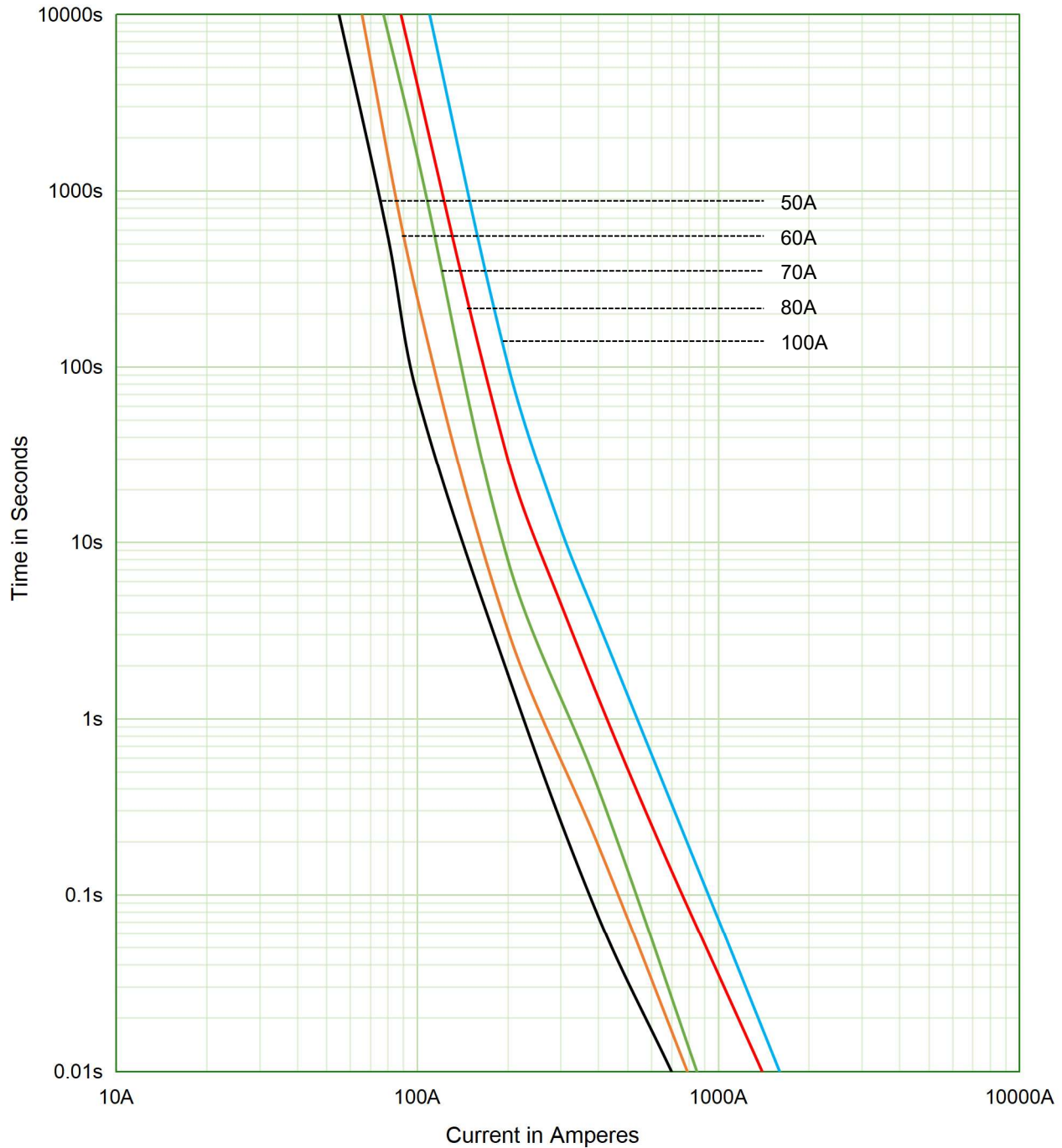
- \*\* --- UL File: c
- AT8xxx302 and AT8xxx702 recommend mounting torque is 12±1.0Nm (M8)
- Temperature rise: AT8xxx302 with 0.6In ≤45K; AT8xxx702 with 0.5In ≤ 45K.

## TIME VS CURRENT CHARACTERISTIC

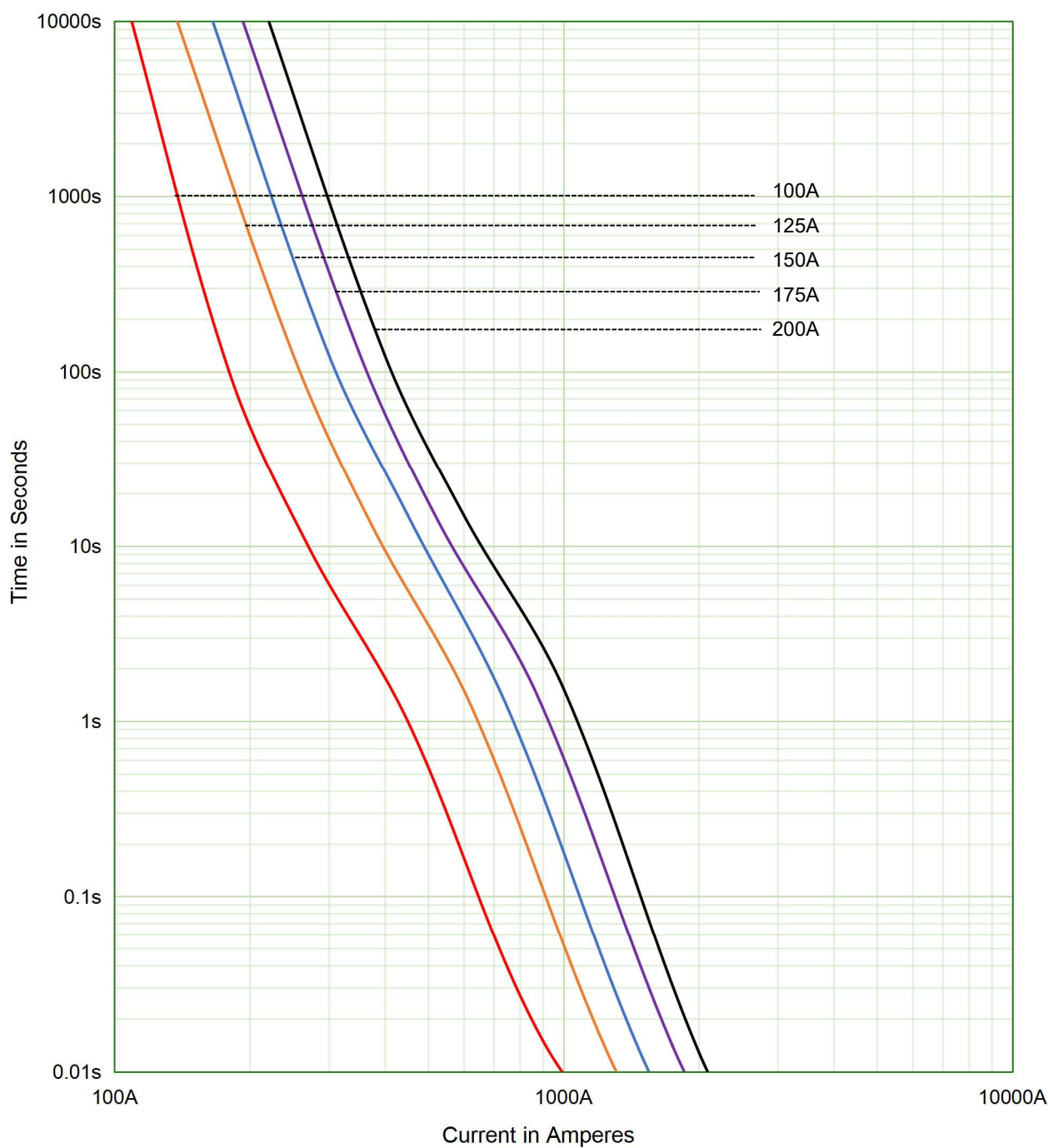
| Part Number            | 100% | 200%     | 300%      | 500%      |
|------------------------|------|----------|-----------|-----------|
| AT8xxx302<br>AT8xxx702 | >4H  | 1 – 300s | 0.2 – 30s | 0.1 - 10s |

## TIME CURRENT CURVE

AT8xxx302

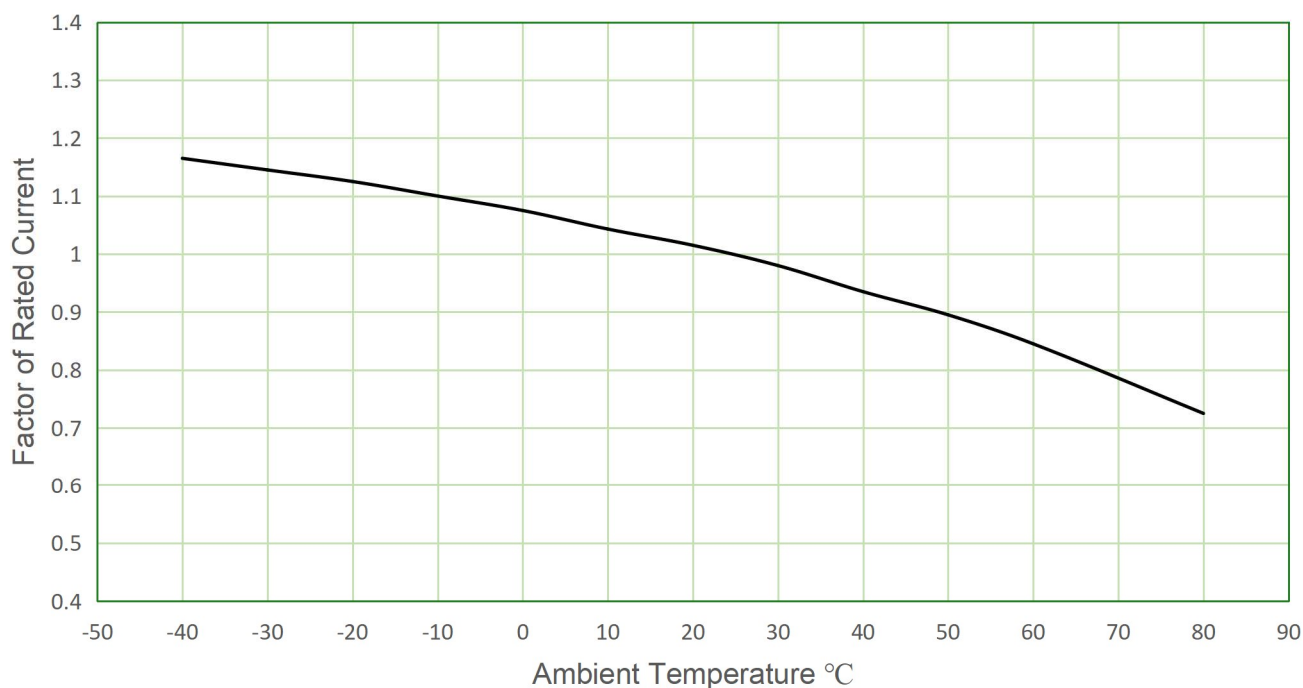


AT8xxx702

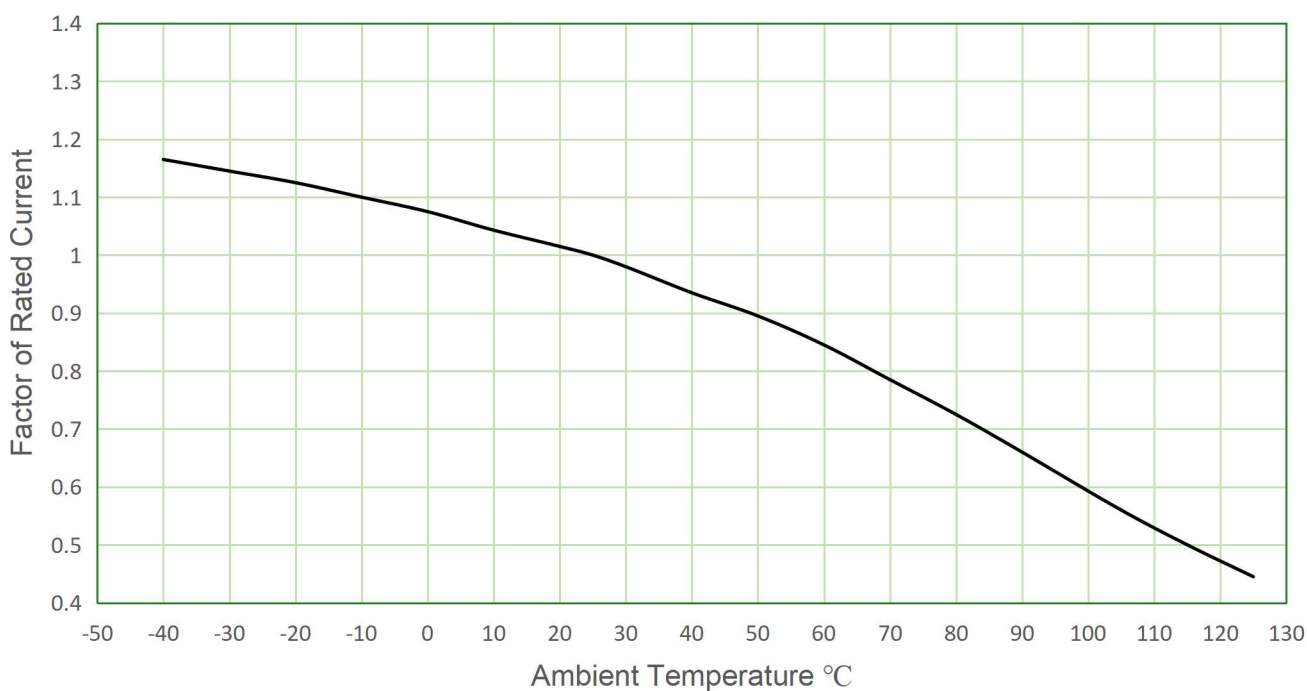


## TEMPERATURE DERATING CURVE

AT8xxx302



AT8xxx702



## TRANSPORTATION and STORAGE

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

## CONDITIONS for OPERATION in SERVICE

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

- Normal temperature: -5°C to 40°C.
- The altitude of the site of installation of these fuses should not exceed 2000 m above sea level.
- The air should be clean and its relative humidity does not exceed 50% at the maximum temperature of 40°C.
- Higher relative humidities are permitted at lower temperatures, e.g. 90 % at 20°C.
- Under these conditions, moderate condensation may occasionally occur due to variation in temperature.

For operating conditions other than above, please contact the manufacturer.

## PACKAGING INFORMATION

| Part No   | Inner box |           |           |              | Outer box                |                    |                      |           |           |           |
|-----------|-----------|-----------|-----------|--------------|--------------------------|--------------------|----------------------|-----------|-----------|-----------|
|           | L<br>(mm) | W<br>(mm) | H<br>(mm) | Qty<br>(pcs) | Qty boxes /<br>outer box | Net Weight<br>(kg) | Gross<br>Weight (kg) | L<br>(mm) | W<br>(mm) | H<br>(mm) |
| AT8xxx302 | 118       | 115       | 45        | 12           | 24                       | 15.091             | 16.639               | 385       | 250       | 210       |
| AT8xxx702 | 107.5     | 31        | 31        | 1            | 110                      | 18.370             | 19.819               | 385       | 250       | 210       |

## Web Resources

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