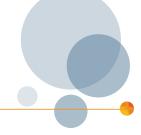
# **Temperature De-Rating**



Ampere ratings for fuses are based on specific test conditions. External factors which influence the ampere rating of a fuse are terminal connections, air flow across the fuse, and ambient temperature.

The following formulas should be used when de-rating a fuse's ampere rating for use at an increased ambient temperature of up to 80°C.

80°C Maximum ambient temperature for installations.

#### **Temperature De-Rating for Low Voltage Fuses**

A4J; A2D; A6D; A2K; A6K; TR; TRS

$$I_{new} = I_{rated} \quad \sqrt{\frac{125 - T_A}{100}}$$

I<sub>new</sub> = New Ampere Rating

I<sub>rated</sub> = Nameplate Current Rating

 $T_{\Delta}$  = Ambient Temperature in °C

FORM 101; A2Y; A6Y; A3T; A6T; DCT; ATM; ATMR; ATDR; ATQR; AJT; HSJ; A4BQ; A4BY; A4BT

$$I_{new} = I_{rated} \quad \sqrt{\frac{150 - T_A}{125}}$$

I<sub>new</sub> = New Ampere Rating

I<sub>rated</sub> = Nameplate Current Rating

 $T_{\Delta}$  = Ambient Temperature in °C

OT; OTS; TRM

$$I_{new} = I_{rated} \quad \sqrt{\frac{110 - T_A}{85}}$$

I<sub>new</sub> = New Ampere Rating

 $I_{rated}$  = Nameplate Current Rating

 $T_{\Delta}$  = Ambient Temperature in °C

## **Temperature De-Rating**



80°C Maximum ambient temperature for installations.

## **Temperature De-Rating for UltraSafe™ Fuse Holders**

USM; USCC; US3J; US6J; US14; US22

#### **Multiple Poles**

Number of Poles	Coefficient
1 - 2 - 3	1
4 - 5 - 6	0.8
7 - 8 - 9	0.7
>10	0.6

#### **Temperature De-Rating**

Temperature	Coefficient
20°C	1
30°C	0.95
40°C	0.9
50°C	0.8

### **Temperature De-Rating for Medium Voltage Fuses**

A055F1C0R0-5E thru 65E; A055C1C0R0-450E,500E,600E; A055F2D0R0-400E,450E; A055B3D0R0-750E,900E; A155C1D0R0-80E,100E; A155C2D0R0-125E; A155C3D0R0-150E,300E; A155F1C0R0-5E thru 30E; A155F1D0R0-100E; A155F2D0R0-150E,175E,200E; A480R12R thru 36R; A072B1DAR0-2R thru 12R; A072B2DAR0-18R,24R; A072F1D0R0-2R thru 12R; A072F2DAR0-18R,24R; 9F60; 9F62

$$I_{new} = I_{rated} \quad \sqrt{\frac{140 - T_A}{100}}$$

 $I_{new}$  = New Ampere Rating  $I_{rated}$  = Nameplate Current Rating  $T_{\Delta}$  = Ambient Temperature in °C

A240R2R thru 36R; A480R2R thru 9R; A055C1D0R0-10E thru 400E;

A055C3D0R0-500E,600E; A055F1D0R0-10E thru 200E; A055F2D0R0-250E,300E,350E; A155C1D0R0-10E thru 65E; A155F1D0R0-10E thru 80E; A155F2D0R0-65E,80E,100E,125E

$$I_{new} = I_{rated} \quad \sqrt{\frac{115 - T_A}{75}}$$

 $I_{new}$  = New Ampere Rating  $I_{rated}$  = Nameplate Current Rating  $T_{\Delta}$  = Ambient Temperature in °C

