

### **3.30: Technical Information**

#### Current Carrying Capacity

##### How to Use

The choice of an appropriate conductor, with respect to current carrying capacity, usually depends on one or more factors which vary according to application. These factors include the temperature in which the lead wire operates, temperature rise of equipment, limitations of insulation, voltage drop, and location of wires as in free air or enclosed, such as formed by a compartment, tubing, or a bundle of wires.

For these reasons it is not practical to provide a general chart showing the current carrying capacity of Lead Wire for all conditions. Accordingly, the values shown in Table 3 are MAXIMUM for a single conductor in free air, based on ambient temperature of 30°C. For actual use temperatures above an ambient temperature of 30°C, reduce the maximum ampacity by use of correction factor in Table 5 to correct the values in Table 3 and Table 4.