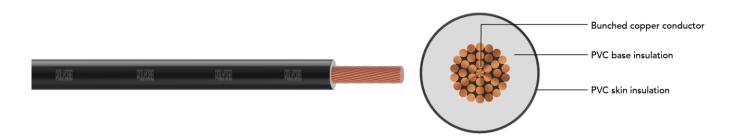


# ETIRA FR Building wire, 1100 V AC



### Application

ETIRA FR wire is suitable for use where high flexibility is of prime importance. This is also suitable for indoor installation in industries, household appliances and building electrification.

# **Voltage Rating**

1100 V

#### **Operation Temperature**

Fixed: -15°C to 70°C

#### Construction

- Annealed bunched copper conductor as per IS 8130, class 5.
- Insulated by PVC Type D with FR compound to IS 5831.

#### **Core Identification**

Red/Yellow/Blue/Black/Green/any customised colour

#### **Bending Radii**

Fixed installation Occasional

6 x Overall Diameter 4 x Overall Diameter

# **Electrical Property**

- High insulation resistance
- Higher current carrying capacity

# **Mechanical & Physical Properties**

- High Flexibility
- High surface lubrication suitable to conduit wiring
- Resistant to moisture for use in wet area
- High abrasion resistance
- Resistant to Acid & Alkali

# **Standard and References**

IS 8130:2013 IS 5831:1984 IS 694:2010

#### **Test Voltage**

3000 V AC at (20±5) °C

#### Compliance

Conductor resistance test Flammability Oxygen index Temperature index Approval IS 8130 IEC 60332-1 ASTM D 2863 IEC 60332-1







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# **ETIRA FR**

# Building wire, 1100 V AC

| Product code         | Nominal cross-<br>sectional area<br>mm <sup>2</sup> | No. of<br>wire/wire<br>dia.<br>No./mm | Nominal<br>insulation<br>thickness<br>mm | Overall dia.<br>(Approx.)<br>Mm |
|----------------------|---|---------------------------------------|--|---------------------------------|
| LDIS09CYUAYF001C.75S | 0.75  | 24/0.2                                | 0.6                                      | 2.3                             |
| LDIS09CYUAYF001C001S | 1   | 32/0.2                                | 0.6                                      | 2.5                             |
| LDIS09CYUAYF001C1.5S | 1.5   | 30/0.25                               | 0.6                                      | 2.8                             |
| LDIS09CYUAYF001C2.5S | 2.5   | 50/0.25                               | 0.7                                      | 3.6                             |
| LDIS09CYUAYF001C004S | 4   | 56/0.3                                | 0.8                                      | 4.2                             |
| LDIS09CYUAYF001C006S | 6   | 84/0.3                                | 0.8                                      | 4.7                             |

# **Electrical Characteristics**

Current carrying capacity and Max. DC conductor resistance.

| Nominal cross-<br>sectional area | Reference Method B<br>(enclosed in conduit on<br>a wall or in trunking<br>etc.) | Reference Method C<br>(clipped direct) | Maximum DC<br>conductor resistance<br>at 20°C |  |
|----------------------------------|---|--|---|--|
| mm²                              | Amp.  | Amp.                                   | Ω/km  |  |
| 0.75                             | 7   | 7.5                                    | 26  |  |
| 1                                | 11  | 12                                     | 19.5  |  |
| 1.5                              | 14  | 16                                     | 13.3  |  |
| 2.5                              | 19  | 22                                     | 7.98  |  |
| 4                                | 26  | 29                                     | 4.95  |  |
| 6                                | 31  | 37                                     | 3.3   |  |

The ambient temperature is 40°C.

Conductor operating temperature 70°C.

# **De-Rating Factor**

De-rating factor for various ambient temperature.

| Ambient Temperature | 35°C | 40°C | 45°C | 50°C | 55°C | 60°C | 65°C |
|---------------------|------|------|------|------|------|------|------|
| De-Rating Factor    | 1.08 | 1    | 0.91 | 0.82 | 0.7  | 0.57 | 0.4  |



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