

A. System Specifications and Ratings

- Maximum Voltage: 1,000 Volts
- Maximum Current: 80 Amps
- Allowable Wire: 14 AWG – 6 AWG
- Spacing: Please maintain a spacing of at least ½” between uninsulated live parts and fittings for conduit, armored cable, and uninsulated live parts of opposite polarity.
- Enclosure Rating: Type 3R
- Roof Slope Range: 2.5 – 12:12
- Max Side Wall Fitting Size: 1”
- Max Floor Pass-Through Fitting Size: 1”
- Ambient Operating Conditions: (-35°C) - (+75°C)
- Compliance:
 - JB-1.2: UL1741
 - Approved wire connectors: must conform to UL1741
- System Marking: **Interek Symbol and File #5019942**
- Periodic Re-inspections: If re-inspections yield loose components, loose fasteners, or any corrosion between components, components that are found to be affected are to be replaced immediately.

Table 1: Typical Wire Size, Torque Loads and Ratings

| | 1 Conductor | 2 Conductor | Torque | | | | |
|---|-------------|-------------|---------|-------------|-------------|---------|---------|
| | | | Type | NM | Inch Lbs | Voltage | Current |
| ABB ZS6 terminal block | 10-24 awg | 16-24 awg | Sol/Str | 0.5-0.7 | 6.2-8.85 | 600V | 30 amp |
| ABB ZS10 terminal block | 6-24 awg | 12-20 awg | Sol/Str | 1.0-1.6 | 8.85-14.16 | 600V | 40 amp |
| ABB ZS16 terminal block | 4-24 awg | 10-20 awg | Sol/Str | 1.6-2.4 | 14.6-21.24 | 600V | 60 amp |
| ABB M6/8 terminal block | 8-22 awg | | Sol/Str | .08-1 | 8.85 | 600V | 50 amp |
| Ideal 452 Red WING-NUT Wire Connector | 8-18 awg | | Sol/Str | Self Torque | Self Torque | 600V | |
| Ideal 451 Yellow WING-NUT Wire Connector | 10-18 awg | | Sol/Str | Self Torque | Self Torque | 600V | |
| Ideal, In-Sure Push-In Connector Part #39 | 10-14 awg | | Sol/Str | Self Torque | Self Torque | 600V | |
| WAGO, 2204-1201 | 10-20 awg | 16-24 awg | Sol/Str | Self Torque | Self Torque | 600V | 30 amp |
| WAGO, 221-612 | 10-20 awg | 10-24 awg | Sol/Str | Self Torque | Self Torque | 600V | 30 amp |
| Dottie DRC75 | 6-12 awg | | Sol/Str | Snap-In | Snap-In | | |
| ESP NG-53 | 4-6 awg | | Sol/Str | | 45 | 2000V | |
| | 10-14 awg | | Sol/Str | | 35 | | |
| ESP NG-717 | 4-6 awg | | Sol/Str | | 45 | 2000V | |
| | 10-14 awg | | Sol/Str | | 35 | | |
| Brumall 4-5,3 | 4-6 awg | | Sol/Str | | 45 | 2000V | |
| | 10-14 awg | | Sol/Str | | 35 | | |

Table 2: Minimum wire-bending space for conductors through a wall opposite terminals in mm (inches)

| Wire size, AWG or | | Wires per terminal (pole) | | | |
|-------------------|--------------------|---------------------------|-----------|-----------|-----------|
| | | 1 | 2 | 3 | 4 or More |
| kcmil | (mm ²) | mm (inch) | mm (inch) | mm (inch) | mm (inch) |
| 14-10 | (2.1-5.3) | Not specified | - | - | - |
| 8 | (8.4) | 38.1 (1-1/2) | - | - | - |
| 6 | (13.3) | 50.8 (2) | - | - | - |