

## CU 600 V FR-XLPE Shielded Thermoplastic CPE-TP Jacket Power Cable Color Method 1 Table 2

Power Cable 600 or 1000 Volt Three Conductor Copper, Fire Retardant Cross-Linked Polyethylene (FR-XLPE) insulation Shielded Thermoplastic Chlorinated Polyethylene (CPE-TP) Jacket Conductor Identification Method 1 Table 2



Image not to scale. See Table 1 for dimensions.

### CONSTRUCTION:

- Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8
- Insulation:** Fire Retardant Cross Linked Polyethylene (FR-XLPE)
- Filler:** Paper or Polypropylene filler
- Binder:** Polyester flat thread binder tape
- Shield:** 5 mils tape shield
- Rip Cord:** Rip cord for ease of jacket removal
- Overall Jacket:** Thermoplastic Chlorinated Polyethylene (CPE-TP) Jacket

### APPLICATIONS AND FEATURES:

Southwire's 600 Volt control cables are suited for use in wet and dry areas, conduits, ducts, troughs, trays, direct burial, aerial supported by a messenger, and where superior electrical properties are desired. These cables are capable of operating continuously at the conductor temperature not in excess of 90°C for normal operation in wet and dry locations, 130°C for emergency overload, and 250°C for short circuit conditions.

### SPECIFICATIONS:

- ASTM B3 Standard Specification for Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- ICEA S-73-532 Standard for Control, Thermocouple Extension and Instrumentation Cables
- ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy

### SAMPLE PRINT LEGEND:

SOUTHWIRE MASTER-DESIGN XX AWG XX/C FR-XLPE CDRS 90C COPPER SHIELDED CPE JKT 600V SUN. RES. DIRECT BURIAL YEAR {SEQUENTIAL FOOTAGE MARKS} SEQ FEET



**Table 1 – Physical and Electrical Data**

| Cond. Size | Cond. Number | Cond. Strands | Diameter Over Cond. | Insul. Thickness | Diameter Over Insulation | Jacket Thickness | Approx. OD | Approx. Weight | DC Resistance @ 25°C | AC Resistance @ 90°C | Min Bending Radius | Allowable Ampacity At 60°C * | Allowable Ampacity 75°C * | Allowable Ampacity 90°C * |
|------------|--------------|---------------|---------------------|------------------|--------------------------|------------------|------------|----------------|----------------------|----------------------|--------------------|------------------------------|---------------------------|---------------------------|
| AWG        | No.          | strands       | inch                | mil              | inch                     | mil              | inch       | lb /1000ft     | Ω /1000ft            | Ω /1000ft            | inch               | Amp                          | Amp                       | Amp                       |
| 8          | 2            | 7             | 0.139               | 45               | 0.229                    | 60               | 0.59       | 206            | 0.652                | 0.815                | 7.1                | 40                           | 50                        | 55                        |

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

