

Multi-Conductor CU 600 V FR-XLPE Thermoplastic CPE-TP Jacket Power Cable Color Method 1 Table 1

Power Cable 600 Volt Copper Conductors, Flame Retardant Cross Linked Polyethylene (FR-XLPE) Insulation Thermoplastic Chlorinated Polyethylene (CPE-TP) Jacket, Control Cable Conductor Identification Method 1 Table 1. Silicone Free



Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

- Conductor:** 7 strands class B compressed bare copper per ASTM B3 and ASTM B8
- Insulation:** Flame Retardant Cross Linked Polyethylene (FR-XLPE)
- Filler:** Polypropylene filler on cables with 5 or less conductors
- Binder:** Polyester flat thread binder tape applied for cables with more than 5 conductors
- Rip Cord:** Rip cord for ease of jacket removal
- Overall Jacket:** Thermoplastic Chlorinated Polyethylene (CPE-TP) Jacket

APPLICATIONS AND FEATURES:

Southwire's 600 Volt power 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. UL rated constructions can be used in Class I, II, and III, Division 2 hazardous locations per NEC Article 501 and 502. UL rated constructions with 3 or more conductors are listed for exposed runs (TC-ER) per NEC 336.10.

SPECIFICATIONS:

- ASTM B3 Standard Specification for Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- UL 1277 Electrical Power and Control Tray Cables
- ICEA S-58-679 Control Cable Conductor Identification Method 1 Table 1
- ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy
- IEEE 1202 FT4 Vertical Tray Flame Test (70,000 Btu/hr) and ICEA T-29-520 - (210,000 Btu/hr)
- VW-1 (Vertical-Wire) Flame Test



SAMPLE PRINT LEGEND:

UL Listed

SOUTHWIRE E75755 {UL} XX AWG X/C FR-XLPE XHHW-2 TYPE TC CDRS 90C CPE JKT 600V SUNLIGHT RESISTANT MM/
YYYY{SEQUENTIAL FOOTAGE MARKS} SEQ FEET

Non UL Listed

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



Table 1 – Physical and Electrical Data

| Stock Number | Cond. Size | Cond. Number | Diameter Over Cond. | Insul. Thickness | Diameter Over Insulation | Jacket Thickness | Approx. OD | Copper Weight | 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. | inch | mil | inch | mil | inch | lb /1000ft | lb /1000ft | Ω /1000ft | Ω /1000ft | inch | Amp | Amp | Amp |
| 604224 | 8 | 2 | 0.142 | 45 | 0.232 | 60 | 0.588 | 103 | 201 | 0.162 | 0.211 | 2.4 | 40 | 50 | 55 |

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

* Ampacities are based on Table 310.15 (B)(16) of the NEC, 2017 Edition. Ampacities of insulated conductors rated up to and including 2000 Volts, based on ambient temperature of 30°C (86°F)

^ UL Listed part number

! No binder

