

## 2/C, 3/C, 4/C CU 600 V FR-XLPE Thermoplastic CPE Jacket Power Cable. Color Method 1 Table 1

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



Image not to scale. See Table 1 for dimensions.

### CONSTRUCTION:

1. **Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8
2. **Insulation:** Fire Retardant Cross-Linked Polyethylene (FR-XLPE)
3. **Filler:** Paper or Polypropylene filler
4. **Binder:** Polyester flat thread binder tape
5. **Rip Cord:** Rip cord for ease of jacket removal
6. **Overall Jacket:** Black Thermoplastic Chlorinated Polyethylene (CPE) 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-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy

### SAMPLE PRINT LEGEND:

SOUTHWIRE X AWG X/C FR-XLPE CDRS 90C PVC JKT SUN. RES. DIR. BUR. 600V {MM/DD/YYYY} {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	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	Ω /1000ft	Ω /1000ft	inch	Amp	Amp	Amp
604296	6	2	0.174	45	0.268	60	0.664	285	0.411	0.514	2.6	55	65	75
619959	6	4	0.174	45	0.268	60	0.775	501	0.411	0.514	3.1	44	52	60

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

