Stock #: 619508 SPEC 85064

# 2/C, 3/C, 4/C CU 600 V FR-XLPE PVC 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 Polyvinyl Chloride (PVC) Jacket. Conductor Identification Method 1 Table 1

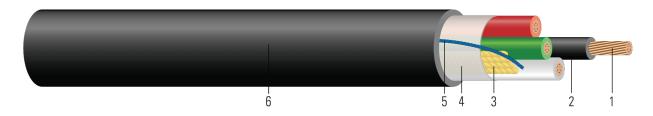


Image not to scale. See Table 1 for dimensions.

# **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: Polyvinyl Chloride (PVC) 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. 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 44 Thermoset-Insulated Wires and Cables
- UL 1277 Electrical Power and Control Tray Cables
- UL 1685 FT4 Vertical-Tray Fire Propagation and Smoke Release Test
- CSA <u>CSA marking is available upon request</u>
- CSA C22.2 No.230 Tray Cables Rated TC-ER
- 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)











Stock #: 619508 SPEC 85064

#### **SAMPLE PRINT LEGEND:**

### **UL Listed**

SOUTHWIRE E75755 {UL} XX AWG X/C FR-XLPE (XHHW-2) CDRS 90{D}C PVC JKT 600V TYPE TC-ER SUN. RES. DIRECT BURIAL YEAR {SEQUENTIAL FOOTAGE MARKS} SEQ FEET

# Non UL Listed

SOUTHWIRE X AWG X/C FR-XLPE CDRS 90C PVC JKT SUN. RES. DIR. BUR. 600V {MM/DD/YYYY} {SEQUENTIAL FOOTAGE MARKS} SEQ FEET

# **CSA Listed**

SOUTHWIRE #P 156205 CSA XX AWG X/C FR-XLPE CDRS 90C PVC JACKET, -40C, FT-4, SUN RES, DIR BUR, 600V {MM/DD/YYYY} {SEQUENTIAL FOOTAGE MARKS} SEQ FEET











**SPEC 85064** Stock #: 619508

# Table 1 – Physical and Electrical Data

Stock Number		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				Ω /1000ft		Amp	Amp	Amp
619508	8	4	0.142	45	0.232	60	0.688	352	0.653	0.849	2.8	32	40	44

All dimensions are nominal and subject to normal manufacturing tolerances











<sup>♦</sup> Cable marked with this symbol is a standard stock item

<sup>\*</sup> 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)

<sup>^</sup> UL listed part number