



## Multi-Conductor CU 600V TFN PVC TC-ER

Services CableTechSupport@southwire.com

### **Specifications**

\* ASTM B3: Standard Specification for Soft or Annealed Copper Wire

\* ASTM B8: Concentric-Lay-Stranded Copper Conductors

\* UL 66: Fixture Wire

\* UL 83: Thermoplastic Insulated Wires and Cables

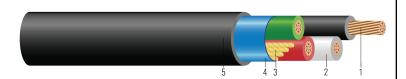
\* UL 1277: Electrical Power and Control Tray Cables

\* UL 1685: Vertical-Tray Fire Propagation and Smoke Release Test

\* ICEA S-58-679: Control Cable Conductor Identification Method 1 Table 1

\* 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



Cable image is for reference only and does not depict actual cable construction

#### Construction

- 1) Conductor: Class B stranded bare copper per ASTM B-3 and B-8
- 2) Insulation: Polyvinyl Chloride (PVC) with nylon layer 19 Mils thick
- 3) Filler: Polypropylene filler as needed
- 4) Binder: aluminum/polyester foil shield
- 5) Overall Jacket: Polyvinyl Chloride (PVC) Jacket

# **Applications and Features**

Southwire's 600 Volt Type TC-ER 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 75°C in wet locations and 90°C in dry locations, 105°C for emergency overload, and 150°C for short circuit conditions. For uses in Class I, II, and III, Division 2 hazardous locations per NEC Article 501 and 502. Constructions with 3 or more conductors are listed for exposed runs (TC-ER) per NEC 336.10.

## **Print Legend**

{SQFTG} SOUTHWIRE{R} 18 AWG (0.82mm2) 4/C SHIELDED PVCN/PVC TYPE TC-ER PVC/NYLON E75755 MASTER-DESIGN (UL) 600V 90{D}C DRY/75{D}C WET OIL RES I SUNLIGHT RESISTANT DIRECT BURIAL -- PLTC SUN RES --- FPL SUN RES --- NPLF SUN RES

Stock Code	Size	Conductor Count	Insulation Thickness	Jacket Thickness	Overall OD	Overall Weight	Min Bend Radius	Ampacity 90°C
-	AWG	-	mils	mils	inches	lbs. /1,000'	inches	amps
771524	18	4	20	45	0.303	57	1.21	14

\* Dimensions are nominal and subject to normal manufacturing tolerances. \* Sample print legend, actual may vary.

Ampacities are based on Table 310.16 of the NEC 2020 Edition. Ampacities of insulated conductors rated up to and including 2000 Volts with not more than three current-carrying conductors in raceway, cable or direct buried based on ambient temperature of 30°C (86°F). Ampacities have been adjusted for more than three current-carrying conductors based on Table 310.15(C) 1.

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Cust. Spec Approval:

Drn/Chk By:	UP	Req By:	MN	3/23/2023
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