

CU 600V PVC-Nylon Insulation PVC Jacket THHN/THWN-2. CT Rated - Sunlight Resistant - For Direct Burial - Silicone Free

Type TC-ER Power Cable 600Volt Three Conductor Copper, Polyvinyl Chloride (PVC) with nylon layer insulation THHN/THWN-2 Polyvinyl Chloride (PVC) Jacket with 1 Bare CU Ground. CT Rated - Sunlight Resistant - For Direct Burial - Silicone Free.

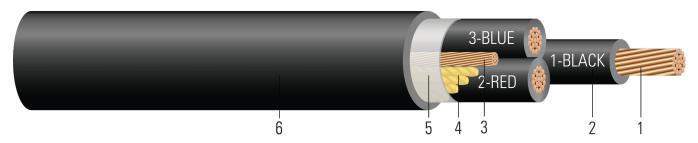


Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

- 1. **Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8
- 2. **Insulation**: Polyvinyl Chloride (PVC) with nylon layer Type THHN/THWN-2
- 3. **Grounding Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8 (cable size 8 & 6 has insulated green ground)
- 4. Filler: Paper filler (cable size 8 & 6 uses Polypropylene filler)
- 5. **Binder:** Polyester flat thread binder tape for cable sizes larger than 2 AWG
- 6. Overall Jacket: Polyvinyl Chloride (PVC) Jacket

APPLICATIONS AND FEATURES:

Southwire's 600 Volt Type TC-ER THHN/THWN-2 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 in dry or wet 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. Sunlight Resistant - For Direct Burial - Silicone Free

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- 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 3 (1-BLACK, 2-RED, 3-BLUE)
- ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy
- IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test







SAMPLE PRINT LEGEND:

{SQFTG} SOUTHWIRE® {UL} XX AWG (XX.X{mm2}) CU 3 CDRS TYPE TC-ER THHN OR THWN CDRS GW 1 X X AWG 90°C JACKET SUNLIGHT RESISTANT DIRECT BURIAL 600 VOLTS {NOM}-ANCE {YYYY}

Table 1 – Weights and Measurements

Con Siz		Strand Count	Diameter Over Conductor	Insul. Thickness	Ground	Jacket Thickness	Approx. OD	Copper Weight	Approx. Weight	Jacket Color
AW Kcm		No. of Strands	inch	mil	No. x AWG	mil	inch	lb/1000ft	lb/1000ft	
25	3	37	0.558	60	1 x 4	80	1.659	2469	3091	Black

All dimensions are nominal and subject to normal manufacturing tolerances

Table 2 – Electrical and Engineering Data

Cond. Size	Cond. Number	Min Bending Radius	Max Pull Tension	DC Resistance @ 25°C	AC Resistance @ 75°C	Inductive Reactance @ 60Hz	Allowable Ampacity At 75°C	Allowable Ampacity At 90°C
AWG/ Kcmil		inch	lb	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp
250	3	8.3	6000	0.043	0.053	0.041	255	290

^{*} Ampacities based upon 2023 NEC Table 310.16. See NEC sections 310.15 and 110.14(C) for additional requirements.





[♦] Cable marked with this symbol is a standard stock item

TBA stock codes are estimations only and actual product may vary. Please wait until a stock code is assigned to purchase connectors and/or fittings.