



# CU 600V PVC Insulation PVC Jacket Mini Split Type TC-ER-JP

CU 600V PVC Insulation PVC Jacket Mini Split Type THHN/THWN Rated at 75°C Wet 90°C Dry

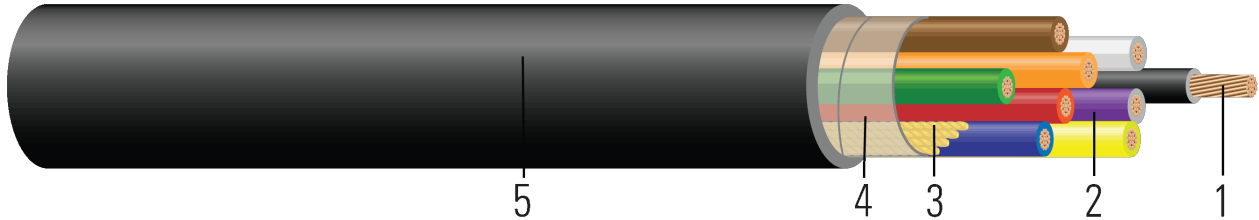


Image not to scale. See Table 1 for dimensions.

## CONSTRUCTION:

1. **Conductor:** Solid or stranded bare copper per ASTM B3 or B8
2. **Insulation:** Polyvinyl Chloride PVC with Nylon sheath
3. **Filler:** Polypropylene filler
4. **Binder:** Polyester flat thread binder tape
5. **Overall Jacket:** Polyvinyl Chloride (PVC) Jacket

## APPLICATIONS AND FEATURES:

Southwire's 600 Volt Type TC-ER-JP 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. Sunlight Resistant - For Direct Burial - Silicone Free - VW-1 Rated.

## SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- UL 83 Thermoplastic Insulated Wire and Cables (sizes 14 AWG to 1000 kcmil)
- UL 1277 Electrical Power and Control Tray Cables
- RoHS-3 Complies with European Directive 2015/863

## SAMPLE PRINT LEGEND:

{SQFTG} SOUTHWIRE{R} E75755 {UL} XX AWG (X.XX{mm2}) CU 7 CDRS TYPE TC-ER-JP THHN OR THWN CDRS 90{D}C JACKET SUNLIGHT RESISTANT DIRECT BURIAL 600 VOLTS {NOM}-ANCE





**Table 1 – Physical and Electrical Data**

| Stock Number | Cond. Size | Cond. Number | Cond. Strands | Insulation Color              | Insul. Thickness | Ground    | Jacket Thickness | Approx. OD | Copper Weight | Approx. Weight | DC Resistance @ 25°C | AC Resistance @ 75°C | Inductive Reactance | Min Bending Radius | Allowable Ampacity 75°C | Allowable Ampacity 90°C |
|--------------|------------|--------------|---------------|-------------------------------|------------------|-----------|------------------|------------|---------------|----------------|----------------------|----------------------|---------------------|--------------------|-------------------------|-------------------------|
|              | AWG        | No.          | strands       |                               | mil              | No. x AWG | mil              | inch       | lb / 1000ft   | lb / 1000ft    | Ω /1000ft            | Ω /1000ft            | Ω/1000ft            | inch               | Amp                     | Amp                     |
| 16 AWG       |            |              |               |                               |                  |           |                  |            |               |                |                      |                      |                     |                    |                         |                         |
| 585835◇      | 16         | 4            | 26            | BK, RD, WE, GN                | 20               | 1 x 16    | 45               | 0.343      | 32            | 72             | 4.487                | 5.406                | 0.033               | 1.4                | -                       | 18                      |
| 14 AWG       |            |              |               |                               |                  |           |                  |            |               |                |                      |                      |                     |                    |                         |                         |
| 138543◇      | 14         | 3            | 7             | BK, RD, GN                    | 20               | 1 x 14    | 45               | 0.337      | 38            | 75             | 2.631                | 3.170                | 0.058               | 1.3                | 20                      | 25                      |
| 595407◇      | 14         | 4            | 1             | BK, RD, WE, GN                | 20               | 1 x 14    | 45               | 0.348      | 50            | 89             | 2.631                | 3.170                | 0.058               | 1.4                | 16                      | 20                      |
| 582257◇      | 14         | 4            | 7             | BK, RD, WE, GN                | 20               | 1 x 14    | 45               | 0.351      | 51            | 93             | 2.631                | 3.170                | 0.058               | 1.4                | 16                      | 20                      |
| 408633◇      | 14         | 7            | 7             | BK, RD, BE, OE, YW, BN, RD/BK | 20               | 1 x 14    | 45               | 0.429      | 90            | 151            | 2.631                | 3.170                | 0.058               | 1.7                | 14                      | 17                      |

All dimensions are nominal and subject to normal manufacturing tolerances

◇ 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.

