ROYAL GUARD™ CU 600V EPR Insulation Thermoset CPE-TS Jacket RHH/RHW-2. CT Rated - Sunlight Resistant - For Direct Burial - Silicone Free

Power Cable 600Volt Single Conductor Copper, Lead Free Ethylene Propylene Rubber (EPR) insulation RHH/RHW-2 USE-2 Cross-Linked/Thermoset Chlorinated Polyethylene (CPE-TS) Jacket. CT Rated 1/0 and Larger - For Direct Burial - Sunlight Resistant - Oil Resistant - Silicone Free



Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Class B compressed stranded tinned copper per ASTM B33 and ASTM B8
2. **Binder Tape:** Mylar Tape
3. **Insulation:** Lead Free Ethylene Propylene Rubber (EPR) Type RHH/RHW-2 USE-2
4. **Overall Jacket:** Lead Free & Silicone-Free Cross-Linked/Thermoset Chlorinated Polyethylene (CPE-TS) Jacket

APPLICATIONS AND FEATURES:

Southwire's 600 Volt 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 for normal operation in wet and dry locations, 130°C for emergency overload, and 250°C for short circuit conditions. CT Rated 1/0 and Larger - Sunlight Resistant - Oil Resistant - Silicone Free.

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- ASTM B33 Standard Specification for Tin-Coated Soft or Annealed Copper Wire
- UL 44 Thermoset-Insulated Wires and Cables
- UL 854 Service Entrance Cable
- UL 1685 FT4 Vertical-Tray Fire Propagation and Smoke Release Test
- ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy
- CT USE Sizes 1/0 AWG and Larger
- IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test
- VW-1 (Vertical-Wire) Flame Test

SAMPLE PRINT LEGEND:

SOUTHWIRE® ROYAL GUARD® XX AWG ({mm2}) E32071 {UL} RHH/RHW-2 OR USE-2 90°C 600V SUN RES VW-1 PRI PRII -40°C FT4 -- IEEE 1202 {MM/DD/YY} {SEQUENTIAL FOOTAGE MARKS} SEQ FEET

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Table 1 – Weights and Measurements

Cond. Size	Cond. Number	Strand Count	Diameter Over Conductor	Insul. Thickness	Dia. Over Insulation	Jacket Thickness	Approx. OD	Copper Weight	Approx. Weight	Jacket Color
AWG/ Kcmil		No. of Strands	inch	mil	inch	mil	inch	lb/1000ft	lb/1000ft	
500	1	37	0.789	65	0.919	65	1.092	1544	1817	BK

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.

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
500	1	5.5	4000	0.021	0.027	0.039	380	430

***** Ampacities based upon 2023 NEC Table 310.16 and do not take into account the overcurrent protection limitations in NEC 240.4(D) of 15 Amps for 14 AWG CU, 20 Amps for 12 AWG CU, and 30 Amps for 10 AWG CU (independent of the conductor temperature rating and stranding if size is present in table). Also, see NEC sections 310.15 and 110.14(C) for additional requirements.
***** Inductive Reactance is based on non-ferrous conduit with one diameter spacing center-to-center.

Size and Color

Size	GRN
4	652233
2	594504
2/0	594506
4/0	594507

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