CU 600V XLPE Insulation. CT Rated - Sunlight Resistant - Silicone Free

Power Cable 600 Volt Single Conductor Copper, Cross Linked Polyethylene (XLPE) insulation XHHW-2 Polyvinyl Chloride (PVC) Jacket. CT Rated 1/0 and Larger - Sunlight Resistant - 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:** Cross Linked Polyethylene (XLPE) Type XHHW-2
3. **Overall Jacket:** Polyvinyl Chloride (PVC) Jacket

APPLICATIONS AND FEATURES:

Southwire's 600 Volt power cables are suited for use in wet and dry areas, conduits, ducts, troughs, trays, 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 - Silicone Free. Rated for 1000 lbs./FT maximum sidewall pressure.

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- UL 44 Thermoset-Insulated Wires and Cables
- UL 1685 Vertical-Tray Fire Propagation and Smoke Release Test (1/0 and Larger)
- 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

SAMPLE PRINT LEGEND:

{SQFTG} SOUTHWIRE {UL} XX AWG CU TYPE XHHW-2/PVC JKT XX MILS XLP XX MILS PVC SUNLIGHT RESISTANT FOR CT USE 600V 90°C

Table 1 – Weights and Measurements

Stock Number	Cond. Size	Strand Count	Diameter Over Conductor	Insul. Thickness	Jacket Thickness	Approx. OD	Copper Weight	Approx. Weight
	AWG/Kcmil	No. of Strands	inch	mil	mil	inch	lb/1000ft	lb/1000ft
890419	1/0	19	0.361	55	50	0.590	325	431
890181	2/0	19	0.405	55	50	0.634	410	526
TBA	3/0	19	0.456	55	50	0.666	518	614
890180	4/0	19	0.498	55	50	0.726	653	790
890023	250	37	0.542	65	60	0.836	771	970
TBA	300	37	0.610	65	60	0.860	926	997
890179	350	37	0.661	65	75	0.935	1080	1307
890022	500	37	0.789	65	75	1.060	1543	1807
TBA	600	61	0.865	80	75	1.175	1853	2111
890024	750	61	0.968	80	75	1.294	2315	2674
TBA	1000	61	1.117	80	75	1.427	3088	3410

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item

Table 2 – Electrical and Engineering Data

Stock Number	Cond. Size	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
890419	1/0	2.3	844	0.102	0.122	0.044	150	170
890181	2/0	2.5	1064	0.081	0.097	0.043	175	195
TBA	3/0	2.7	1342	0.064	0.078	0.042	200	225
890180	4/0	2.9	1692	0.051	0.062	0.041	230	260
890023	250	3.2	2000	0.043	0.053	0.041	255	290
TBA	300	3.4	2400	0.036	0.045	0.041	285	320
890179	350	3.7	2800	0.031	0.039	0.040	310	350
890022	500	5.3	4000	0.022	0.029	0.039	380	430
TBA	600	5.9	4800	0.018	0.025	0.039	420	475
890024	750	6.5	6000	0.014	0.022	0.038	475	535
TBA	1000	7.1	8000	0.011	0.018	0.037	545	615

* 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.