1/C CU 600V XLPE XHHW-2 PVC Power Cable

Power Cable 600Volt Single Conductor Copper, Cross Linked Polyethylene (XLPE) insulation XHHW-2 Polyvinyl Chloride (PVC) Jacket

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. For uses in Class I, II, and III, Division 2 hazardous locations per NEC Article 501 and 502. Rated for 1000 lbs./FT maximum sidewall pressure.

SPECIFICATIONS:

- ASTM B3 Standard Specification for 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-58-679 Control Cable Conductor Identification Method 4
- 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 MASTER-DESIGN {UL} XXX KCMIL CU TYPE XHHW-2/PVC JKT XX MILS XLP XX MILS PVC SUNLIGHT RESISTANT FOR CT USE 600V

Table 1 – Weights and Measurements

Stock Number	Cond. Size	Diameter Over Conductor	Insul. Thickness	Diameter Over Insulation	Jacket Thickness	Approx. OD	Copper Weight	Approx. Weight
	AWG/ Kcmil	inch	mil	inch	mil	inch	lb/1000ft	lb/1000ft
TBA	1/0	0.360	55	0.470	45	0.560	326	412
890181	2/0	0.404	55	0.514	45	0.604	411	506
TBA	3/0	0.454	55	0.564	45	0.654	518	623
TBA	4/0	0.510	55	0.620	45	0.710	653	770
TBA	250	0.558	65	0.688	45	0.778	772	907
TBA	300	0.611	65	0.741	65	0.871	926	1104
890179	350	0.661	65	0.791	65	0.921	1081	1271
890022	500	0.789	65	0.919	65	1.049	1544	1766
TBA	600	0.866	80	1.026	65	1.156	1853	2118
890024	750	0.968	80	1.128	65	1.258	2316	2607
TBA	1000	1.117	80	1.277	65	1.407	3088	3418

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

† 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 30ºC (86ºF).

Table 2 – Electrical and Engineering Data

Stock Number	Cond. Size	Min Bending Radius	Max Pull Tension	DC Resistance @ 25°C	AC Resistance @ 90°C	Inductive Reactance @ 60Hz	Allowable Ampacity At 60° C†	Allowable Ampacity At 75° C†	Allowable Ampacity At 90° C†
	AWG/ Kcmil	inch	lb	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp	Amp
TBA	1/0	2.2	845	0.102	0.128	0.032	125	150	170
890181	2/0	2.4	1065	0.081	0.102	0.031	145	175	195
TBA	3/0	2.6	1342	0.064	0.081	0.030	165	200	225
TBA	4/0	2.8	1693	0.051	0.064	0.029	195	230	260
TBA	250	3.1	2000	0.043	0.055	0.029	215	255	290
TBA	300	3.5	2400	0.036	0.046	0.030	240	285	320
890179	350	3.7	2800	0.031	0.039	0.029	260	310	350
890022	500	5.2	4000	0.022	0.028	0.028	320	380	430
TBA	600	5.8	4800	0.018	0.024	0.028	350	420	475
890024	750	6.3	6000	0.014	0.020	0.028	400	475	535
TBA	1000	7.0	8000	0.011	0.016	0.027	455	545	615

† 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 30ºC (86ºF).