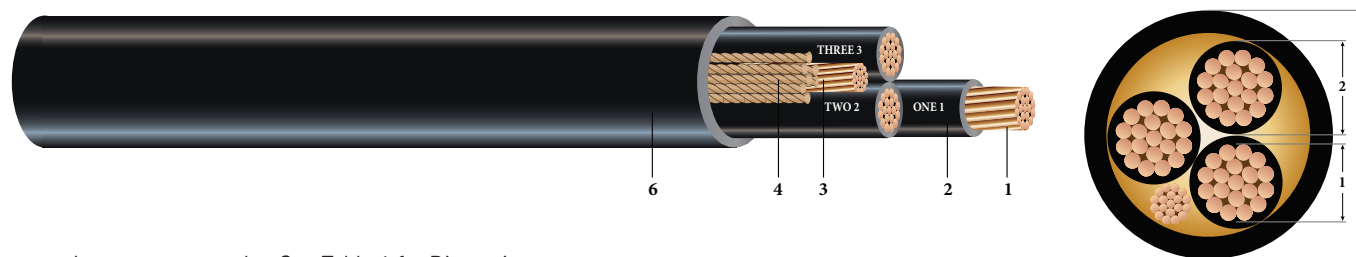


3/C CU 600 or 1000 V XLPE XHHW-2 PVC Power Cable Type TC-ER

Type TC-ER Power Cable 600 or 1000 Volt Three Conductor Copper, Cross Linked Polyethylene (XLPE) insulation XHHW-2 Polyvinyl Chloride (PVC) Jacket with 1 Bare CU Ground. Silicone Free



Images not to scale. See Table 1 for Dimensions

CONSTRUCTION:

- Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8
- Insulation:** Cross Linked Polyethylene (XLPE) Type XHHW-2
- Grounding Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8 (cable size 8 & 6 has insulated green ground)
- Filler:** Paper filler (cable size 8 & 6 uses Polypropylene filler)
- Binder:** Polyester flat thread binder tape for cable sizes larger than 2 AWG
- Overall Jacket:** Polyvinyl Chloride (PVC) Jacket

APPLICATIONS AND FEATURES:

Southwire's 600 or 1000 Volt Type TC-ER 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. 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. Silicone free cable

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper
- ASTM B8 Concentric-lay-standard copper
- UL 44 Thermoset Insulated wires And cables
- UL 1277 Electrical Power And Control Cable
- UL 1685 - Flame Test
- UL 1581 - Electrical Wires, Cables and Flexible Cords
- IEEE 1202/FT4 - Vertical Tray Flame Test (70,000 Btu/hr) And ICEA T-29-520 - (210,000 Btu/hr)
- 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

SAMPLE PRINT LEGEND:

SOUTHWIRE SIMpull{R} {UL} XXX AWG CU 3 CDRS TYPE TC-ER XHHW-2 CDRS GW 1 X XX AWG 90{D}C JACKET SUN-LIGHT RESISTANT DIRECT BURIAL 600V or 1000V {YYYY} PAT www.patentSW.com {SEQUENTIAL FOOTAGE MARKS} SEQ FEET



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SPEC 45252_PSS DIVISION DATE: 08/11/2019 Rev:2.2.18C

Table 1 – Weights & Measurements

Stock Code	Cond. Size	Dia Over Cond. (1)	Insul. Thickness	Dia Over Insul. (2)	Ground	Jacket Thickness	Approx. OD (6)	Copper Weight	Approx. Weight
	AWG	inches	inches	inches	No. x AWG	mils	inches	lbs./MFT	lbs./MFT
480590 [◇]	8	0.139	45	0.229	1 x 10	60	0.615	187	318
480608 [◇]	6	0.174	45	0.264	1 x 8	60	0.691	297	457
480616 [◇]	4	0.221	45	0.311	1 x 8	60	0.791	442	623
480624 [◇]	2	0.277	45	0.367	1 x 6	80	0.953	703	961
480632 [◇]	1	0.321	55	0.431	1 x 6	80	1.091	865	1186
480640 [◇]	1/0	0.360	55	0.470	1 x 6	80	1.175	1069	1425
480657 [◇]	2/0	0.404	55	0.514	1 x 6	80	1.270	1327	1725
480665 [◇]	3/0	0.454	55	0.564	1 x 4	80	1.378	1700	2148
480673 [◇]	4/0	0.510	55	0.620	1 x 4	80	1.499	2110	2615
480681 [◇]	250	0.558	65	0.688	1 x 4	80	1.646	2469	3061
480707 [◇]	350	0.661	65	0.791	1 x 3	110	1.929	3440	4254
480723 [◇]	500	0.789	65	0.919	1 x 2	110	2.205	4885	5867
583697	500	0.789	65	0.919	1 x 2/0	110	2.262	4885	6065
593173 [◇]	600	0.866	80	1.026	1 x 3/0	110	2.436	6131	7303
890388 [◇]	600	0.866	80	1.026	1 x 2	110	2.436	5822	7002
554410	750	0.968	80	1.128	1 x 1	110	2.656	7278	8610

All dimensions are nominal and subject to normal manufacturing tolerances

[◇] Standard stock item

Table 2 – Electrical and Engineering Data

Stock Code	Cond. Size AWG	Min. Bending Radius Inches	Max. Pull Tension lbs.	Resistance		Reactance X _L @ 60Hz Ω/MFT	Ø Short Circuit Current 6 Cycles Amps	Allowable Ampacities [†]		
				DC @ 25°C Ω/MFT	AC @ 90°C Ω/MFT			60 °C Amps	75 °C Amps	90 °C Amps
480590 [◇]	8	2.5	396	0.652	0.815	0.033	3754	40	50	55
480608 [◇]	6	2.8	630	0.411	0.514	0.031	5966	55	65	75
480616 [◇]	4	3.2	1002	0.258	0.323	0.030	9491	70	85	95
480624 [◇]	2	3.8	1593	0.162	0.203	0.028	15089	95	115	130
480632 [◇]	1	5.5	2009	0.129	0.162	0.028	19029	110	130	145
480640 [◇]	1/0	5.9	2534	0.102	0.128	0.028	24011	125	150	170
480657 [◇]	2/0	6.4	3194	0.081	0.102	0.027	30264	145	175	195
480665 [◇]	3/0	6.9	4027	0.064	0.081	0.027	38154	165	200	225
480673 [◇]	4/0	7.5	5078	0.051	0.064	0.026	48114	195	230	260
480681 [◇]	250	8.2	6000	0.043	0.055	0.027	56845	215	255	290
480707 [◇]	350	9.6	8400	0.031	0.040	0.026	79583	260	310	350
480723 [◇]	500	13.2	12000	0.022	0.029	0.025	113690	320	380	430
583697	500	13.5	12000	0.022	0.029	0.025	113690	320	380	430
593173 [◇]	600	13.6	14400	0.018	0.024	0.026	136428	350	420	475
890388 [◇]	600	14.6	14400	0.018	0.024	0.026	136428	350	420	475
554410	750	15.9	18000	0.014	0.020	0.025	170535	400	475	535

[†] Ampacities are based on Table 310.15 (B)(16) of the NEC, 2014 Edition. Ampacities of insulated conductors rated up to and including 2000 Volts, based on ambient temperature of 30°C (86°F)

