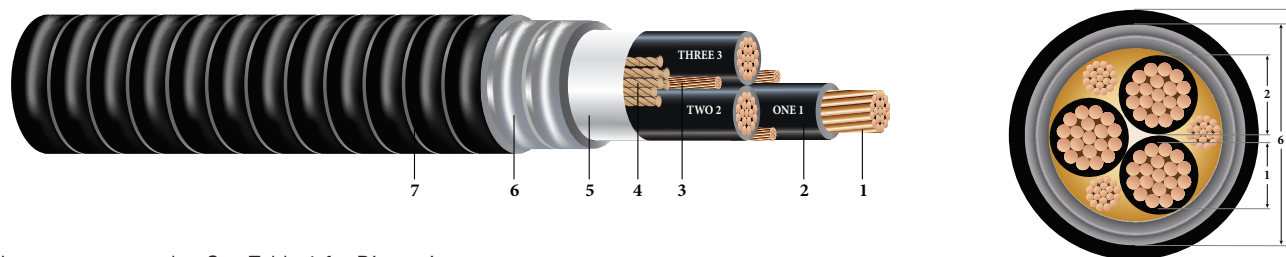


3/C CU 600V XLPE XHHW-2 ARMOR-X PVC Power Cable Type MC-HL

Type MC-HL Power Cable 600Volt Three Conductor Copper, Cross Linked Polyethylene (XLPE) insulation XHHW-2 Continuous Corrugated Welded Armor (Armor-X), Polyvinyl Chloride (PVC) Jacket with 3 Bare CU Ground



Images 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. **Grounding Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8
4. **Filler:** Paper filler (cable size 8 & 6 uses Polypropylene filler)
5. **Binder:** Polypropylene tape
6. **Armor:** Continuous Corrugated Welded Armor (Armor-X)
7. **Overall Jacket:** Polyvinyl Chloride (PVC) Jacket

APPLICATIONS AND FEATURES:

Southwire's 600 Volt Type MC-HL Armor-X® 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, 250°C for short circuit conditions, and -50°C for cold bend. For uses in Class I, II, and III, Division 1 and 2 hazardous locations per NEC Article 501, 502, and 503. Suitable for VFD application.

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper
- ASTM B8 Concentric-lay-standard copper
- UL 44 Thermoset Insulated wires And cables
- UL 1569 Metal-Clad Cables
- UL 1685 - Flame Test
- UL 1581 - Electrical Wires, Cables and Flexible Cords
- UL 1309 – Listed as Marine Shipboard Cable
- ABS Listed as CWCMC
- 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 EXXXXX #P# ARMOR-X (UL) [#AWG Or #kcmil] CU XHHW-2 XLPE/PVC 600V Type MC-HL For CT USE SUN. RES. For DIRECT BURIAL FT4 [-50°C] YEAR (NESC) [SEQUENTIAL FEET MARKS]



Southwire Company, LLC | One Southwire Drive, Carrollton, GA 30119 | www.southwire.com



Southwire®

Table 1 – Weights & Measurements

Stock Code	Cond. Size	Dia Over Cond. (1)	Insul. Thickness	Dia Over Insul. (2)	Dia. Over Armor (6)	Ground No. x AWG	Jacket Thickness	Approx. OD (7)	Copper Weight	Approx. Weight
	AWG	inches	inches	inches	inches		mils	inches	lbs./MFT	lbs./MFT
550593 [◇]	8	0.139	45	0.229	0.700	3 x 14	50	0.800	193	399
890513 [◇]	6	0.174	45	0.264	0.790	3 x 12	50	0.890	307	547
890514 [◇]	4	0.221	45	0.311	0.920	3 x 12	50	1.020	452	740
890515 [◇]	2	0.277	45	0.367	1.020	3 x 10	50	1.120	718	1062
TBA	1	0.321	55	0.431	1.220	3 x 10	50	1.320	880	1329
890516 [◇]	1/0	0.360	55	0.470	1.350	3 x 10	50	1.450	1084	1638
890517 [◇]	2/0	0.404	55	0.514	1.470	3 x 10	50	1.570	1342	1955
890518	3/0	0.454	55	0.564	1.540	3 x 8	60	1.660	1724	2424
890519 [◇]	4/0	0.510	55	0.620	1.670	3 x 8	60	1.790	2134	2910
890520 [◇]	250	0.558	65	0.688	1.845	3 x 8	60	1.965	2493	3390
890521 [◇]	350	0.661	65	0.791	2.200	3 x 6	60	2.320	3521	4600
890522 [◇]	500	0.789	65	0.919	2.430	3 x 6	75	2.580	4924	6259
646751	600	0.866	80	1.026	2.670	3 x 6	75	2.820	5860	7423
890523 [◇]	750	0.968	80	1.128	2.880	3 x 4	75	3.030	7408	9145

All dimensions are nominal and subject to normal manufacturing tolerances
[◇] Standard stock item

Table 2 – Electrical and Engineering Data

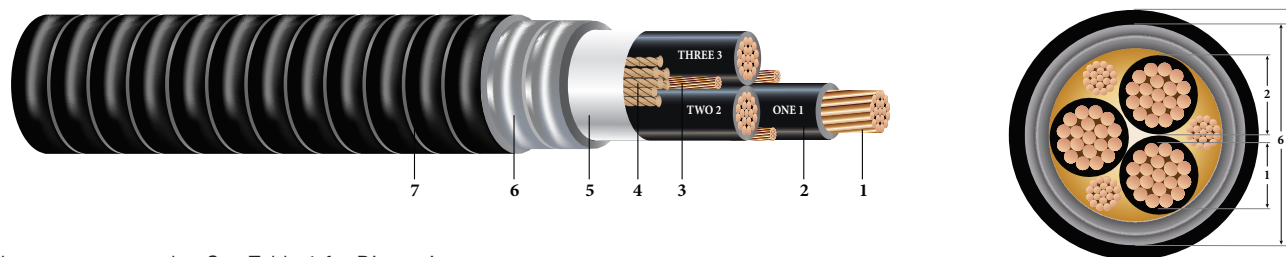
Stock Code	Cond. Size AWG	Min. Bending Radius Inches	Max. Pull Tension lbs.	Resistance		Reactance X _L @ 60Hz Ω/MFT	Ø Short Circuit Current 6 Cycles Amps	Allowable Ampacities [†]		
				DC @ 25°C Ω/MFT	AC @ 90°C Ω/MFT			60 °C Amps	75 °C Amps	90 °C Amps
550593 [◇]	8	5.6	396	0.652	0.815	0.033	3754	40	50	55
890513 [◇]	6	6.2	630	0.411	0.514	0.031	5966	55	65	75
890514 [◇]	4	7.1	1002	0.258	0.323	0.030	9491	70	85	95
890515 [◇]	2	7.8	1593	0.162	0.203	0.028	15089	95	115	130
TBA	1	9.2	2009	0.129	0.162	0.028	19029	110	130	145
890516 [◇]	1/0	10.2	2534	0.102	0.128	0.028	24011	125	150	170
890517 [◇]	2/0	11.0	3194	0.081	0.102	0.027	30264	145	175	195
890518	3/0	11.6	4027	0.064	0.081	0.027	38154	165	200	225
890519 [◇]	4/0	12.5	5078	0.051	0.064	0.026	48114	195	230	260
890520 [◇]	250	13.8	6000	0.043	0.055	0.027	56845	215	255	290
890521 [◇]	350	16.2	8400	0.031	0.040	0.026	79583	260	310	350
890522 [◇]	500	18.1	12000	0.022	0.029	0.025	113690	320	380	430
646751	600	19.7	14400	0.018	0.024	0.026	136428	350	420	475
890523 [◇]	750	21.2	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)



3/C CU 600V XLPE XHHW-2 ARMOR-X PVC Power Cable Type MC-HL

Type MC-HL Power Cable 600Volt Three Conductor Copper, Cross Linked Polyethylene (XLPE) insulation XHHW-2 Continuous Corrugated Welded Armor (Armor-X), Polyvinyl Chloride (PVC) Jacket with 3 Bare CU Ground



Images 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. **Grounding Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8
4. **Filler:** Paper filler (cable size 8 & 6 uses Polypropylene filler)
5. **Binder:** Polypropylene tape
6. **Armor:** Continuous Corrugated Welded Armor (Armor-X)
7. **Overall Jacket:** Polyvinyl Chloride (PVC) Jacket

APPLICATIONS AND FEATURES:

Southwire's 600 Volt Type MC-HL Armor-X® 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, 250°C for short circuit conditions, and -50°C for cold bend. For uses in Class I, II, and III, Division 1 and 2 hazardous locations per NEC Article 501, 502, and 503. Suitable for VFD application.

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper
- ASTM B8 Concentric-lay-standard copper
- UL 44 Thermoset Insulated wires And cables
- UL 1569 Metal-Clad Cables
- UL 1685 - Flame Test
- UL 1581 - Electrical Wires, Cables and Flexible Cords
- UL 1309 – Listed as Marine Shipboard Cable
- ABS Listed as CWCMC
- 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 EXXXXX #P# ARMOR-X (UL) [#AWG Or #kcmil] CU XHHW-2 XLPE/PVC 600V Type MC-HL For CT USE SUN. RES. For DIRECT BURIAL FT4 [-50°C] YEAR (NESC) [SEQUENTIAL FEET MARKS]



Southwire Company, LLC | One Southwire Drive, Carrollton, GA 30119 | www.southwire.com



Southwire®

Table 1 – Weights & Measurements

Stock Code	Cond. Size	Dia Over Cond. (1)	Insul. Thickness	Dia Over Insul. (2)	Dia. Over Armor (6)	Ground No. x AWG	Jacket Thickness	Approx. OD (7)	Copper Weight	Approx. Weight
	AWG	inches	inches	inches	inches		mils	inches	lbs./MFT	lbs./MFT
550593 [◇]	8	0.139	45	0.229	0.700	3 x 14	50	0.800	193	399
890513 [◇]	6	0.174	45	0.264	0.790	3 x 12	50	0.890	307	547
890514 [◇]	4	0.221	45	0.311	0.920	3 x 12	50	1.020	452	740
890515 [◇]	2	0.277	45	0.367	1.020	3 x 10	50	1.120	718	1062
TBA	1	0.321	55	0.431	1.220	3 x 10	50	1.320	880	1329
890516 [◇]	1/0	0.360	55	0.470	1.350	3 x 10	50	1.450	1084	1638
890517 [◇]	2/0	0.404	55	0.514	1.470	3 x 10	50	1.570	1342	1955
890518	3/0	0.454	55	0.564	1.540	3 x 8	60	1.660	1724	2424
890519 [◇]	4/0	0.510	55	0.620	1.670	3 x 8	60	1.790	2134	2910
890520 [◇]	250	0.558	65	0.688	1.845	3 x 8	60	1.965	2493	3390
890521 [◇]	350	0.661	65	0.791	2.200	3 x 6	60	2.320	3521	4600
890522 [◇]	500	0.789	65	0.919	2.430	3 x 6	75	2.580	4924	6259
646751	600	0.866	80	1.026	2.670	3 x 6	75	2.820	5860	7423
890523 [◇]	750	0.968	80	1.128	2.880	3 x 4	75	3.030	7408	9145

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
550593 [◇]	8	5.6	396	0.652	0.815	0.033	3754	40	50	55
890513 [◇]	6	6.2	630	0.411	0.514	0.031	5966	55	65	75
890514 [◇]	4	7.1	1002	0.258	0.323	0.030	9491	70	85	95
890515 [◇]	2	7.8	1593	0.162	0.203	0.028	15089	95	115	130
TBA	1	9.2	2009	0.129	0.162	0.028	19029	110	130	145
890516 [◇]	1/0	10.2	2534	0.102	0.128	0.028	24011	125	150	170
890517 [◇]	2/0	11.0	3194	0.081	0.102	0.027	30264	145	175	195
890518	3/0	11.6	4027	0.064	0.081	0.027	38154	165	200	225
890519 [◇]	4/0	12.5	5078	0.051	0.064	0.026	48114	195	230	260
890520 [◇]	250	13.8	6000	0.043	0.055	0.027	56845	215	255	290
890521 [◇]	350	16.2	8400	0.031	0.040	0.026	79583	260	310	350
890522 [◇]	500	18.1	12000	0.022	0.029	0.025	113690	320	380	430
646751	600	19.7	14400	0.018	0.024	0.026	136428	350	420	475
890523 [◇]	750	21.2	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)

