

XHH/XHHW-2

Copper Conductor



GENERAL INFORMATION

The XHH/XHHW-2 is a single insulated stranded conductor Class B or C annealed copper, with thermoset insulation materials composed by black crosslinked polyethylene (XLPE).

FEATURES

- The XHHW-2 cables are designed with a high resistance thermoset cross-linked polyethylene insulation to be installed on dry, damped or wet locations at temperatures not exceeding 90°C, and 1000V maximum operating voltage.
- Due to the cross-linked polyethylene insulation, the conductors provide a high performance for: mechanical stress, humidity, oils and chemical resistance.

CERTIFICATIONS AND DESIGN STANDARDS

Standards of design: ASTM B3, ASTM B8, ASTM B787 and UL 44

Certifications: UL E179372 and CIDET 08086

CABLE DESIGN

Conductor material	Copper
Core insulation material	XLPE

ELECTRICAL & THERMAL PARAMETERS

Nominal voltage U [V]	1,000
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INSTALLATION DETAILS

Application	Building Installations;Residential Installations;Industrial Installations
Outdoor installation	Yes
Underground installation	Yes
Suitable as installation cable	Yes

PHYSICAL & CHEMICAL PROPERTIES

Flame retardant	No
Oil resistant	Yes
Moisture resistance	Yes

SPECIFIC APPLICATIONS

- The XHHW-2 conductors are designed primarily for service entrance, feeders and branch circuits in commercial and residential applications.
- The XLPE cross-linked insulation provides high-performance during overload and short-circuit conditions.
- The high mechanical insulation strength and the wall thickness allows for underground feeder systems installed in ducts.
- The XHHW-2 cables can be installed in ducts either metallic or plastic in tray cables (certification required).

LEGEND ON THE CABLE

This cable, in some gauges, includes a legend indicating sequential meter-by-meter marking, which allows easy identification of the required length and the cutting point.

For 14 AWG to 6 AWG gauges, the legend to be printed is:

PRYSMIAN (R) PHELPS DODGE (R) XHHW-2 CU (GAUGE) AWG ((GAUGE) mm²) 600/1000 V XLPE, OIL AND GAS RESISTANT II (UL) E176603

For 4 AWG to 1000 kcmil gauges, the legend to be printed is:

PRYSMIAN (R) PHELPS DODGE (R) XHHW-2 CU (GAUGE) AWG ((GAUGE) mm²) 600/1000 V XLPE, OIL AND GAS RESISTANT II (UL) E176603 ■(SEQUENTIAL) m (GAUGE) AWG ((GAUGE) mm²)

PRODUCT DIMENSIONS & CHARACTERISTICS

AWG size	Nominal cross section conductor [mm ²]	Conductor strand count	Nominal thickness insulation [mm]	Diameter conductor [mm]	Cable weight [kg/km]	Conductor resistance at 20° C [Ohm/km]
6	13.3	7	1.14	6.81	92.53	2.14
6	13.3	7	1.14	6.81	138.99	1.35
4	21.2	19	1.14	8.18	212.63	0.85
2	33.6	19	1.14	9.47	326.58	0.53
1/0	53.5	19	1.4	11.99	518.19	0.34
2/0	67.4	19	1.4	13.08	646.32	0.27
3/0	85	19	1.4	14.38	806.29	0.21
4/0	107	19	1.4	15.8	1,005.57	0.17
350	177	37	1.65	20.09	1,654.73	0.11
400	203	37	1.65	21.23	1,882.96	0.09
500	253	37	1.65	23.34	2,343.66	0.07
600	304	61	2.03	26.06	2,843.76	0.06

The conductor operating amperage is defined by the installation condition and operating temperatures identified in the NEC. See TABLE 310.15(B)(16) NFPA 70 latest version. Note: The values given may vary according to the manufacturing tolerances.