RHH/RHW-2/USE-2

Copper Conductor

GENERAL INFORMATION

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

FEATURES

- Due to the cross-linked polyethylene insulation, the conductors provide a high performance for: mechanical stress, humidity, oils and chemical resistance.
- The carbon black insulation content provides UV resistance, allowing product installation directly exposed to sun light on tray cables, metal conduits and raceways.

CERTIFICATIONS AND DESIGN STANDARDS

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

Certifications:

- **UL E179372:** Applies to all available gauges.
- **UL E176603:** Applies to all available gauges.
- **CIDET 08086:** Applies to all available gauges.

Note:
For all gauges, the visible marking on the legend and the label shall be UL E179372, which corresponds to the USE-2 category, however, the cable also maintains the other two certifications indicated above.

CABLE DESIGN

Conductor material	Copper
Core insulation material	XLPE

ELECTRICAL & THERMAL PARAMETERS

Nominal voltage U [V]	1,000

INSTALLATION DETAILS

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

PRYSMIAN Central America & Caribbean Kilometer 11 General Cañas Highway. Heredia, Costa Rica Customer Service Hub: + (506) 2298-4800
info.centroamerica@prysmian.com www.prysmian.com

PHYSICAL & CHEMICAL PROPERTIES

Flame retardant	No
Oil resistant	Yes
Moisture resistance	Yes

SPECIFIC APPLICATIONS

- The RHHW-2/USE-2 conductors are designed primarily for service entrance (USE-2), feeders and branch circuits in commercial and residential applications.
- The XLPE crosslinked insulation provides high-performance during overload and short-circuit conditions.
- The high mechanical strength of the insulation and the oversized thickness allows for underground feeder systems installed as direct burial conductor.
- The RHHW-2/USE-2 cables can be installed in ducts either metallic or plastic in tray cables or directly buried (optional TC available).

LEGEND ON THE CABLE

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

For 10 AWG to 6 AWG gauges, the legend to be printed is:

PRYSMIAN (R) PHELPS DODGE (R) USE-2 OR RHH OR RHW-2 (SIZE) AWG ((SIZE) mm²) 600/1000V XLPE GR I AND GR II SUN-RES (UL) E179372

For 4 AWG to 4/0 AWG gauges, the legend to be printed is:

PRYSMIAN (R) PHELPS DODGE (R) USE-2 OR RHH OR RHW-2 (SIZE) AWG ((SIZE) mm²) 600/1000V XLPE GR I AND GR II SUN-RES (UL) E179372 ▪(SEQUENTIAL) m (SIZE) AWG ((SIZE) mm²)

For 250 kcmil to 1000 kcmil gauges, the legend to be printed is:

PRYSMIAN (R) PHELPS DODGE (R) USE-2 OR RHH OR RHW-2 (SIZE) kcmil ((SIZE) mm²) 600/1000V XLPE GR I AND GR II SUN-RES (UL) E179372 ▪(SEQUENTIAL) m (SIZE) kcmil ((SIZE) mm²)

phelps dodge
A Prysmian Brand

PRODUCT DIMENSIONS & CHARACTERISTICS

AWG size	Nominal cross section conductor [mm²]	Conductor strand count	Nominal thickness insulation [mm]	Diameter conductor [mm]	Cable weight [kg/km]	Conductor resistance at 20° C [Ohm/km]
10	5.26	7	1.14	5.23	61.63	3.41
8	8.37	7	1.14	5.99	92.19	2.14
6	13.3	7	1.52	7.72	148.7	1.35
10	5.26	19	1.14	5.2	62.2	3.41
8	8.37	19	1.52	6.73	101.3	2.14
6	13.3	19	1.52	7.68	148.15	1.35
4	21.2	19	1.52	8.79	224.91	0.848
2	33.6	19	1.52	10.31	343.21	0.534
1/0	53.5	19	2.03	13.21	551.74	0.335
2/0	67.4	19	2.03	14.32	682.94	0.266
3/0	85	19	2.03	15.59	847.97	0.211
4/0	107	19	2.03	17.02	1,057.07	0.167
250	127	37	2.41	18.99	1,255.96	0.142
300	152	37	2.41	20.34	1,495.38	0.118
350	177	37	2.41	21.62	1,733.23	0.101
400	203	37	2.41	22.76	1,965.61	0.0885
500	253	37	2.41	24.86	2,430.34	0.0709
600	304	61	2.79	27.58	2,935.15	0.059
750	380	61	2.79	30.17	3,635.97	0.0472

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.

PRYSMIAN Central America & Caribbean Kilometer 11 General Cañas Highway. Heredia, Costa Rica Customer Service Hub: + (506) 2298-4800
info.centroamerica@prysmian.com www.prysmian.com