

**127/230 (245) kV COPPER CONDUCTOR WITH CORRUGATED ALUMINIUM SHEATH
IEC 62067 STANDARD**

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APPLICATION :

Preferably used for urban networks.
Suitable for use in duct, trays and direct burial in ground.

Advantages :

Perfect radial moisture barrier and excellent earth fault current carrying capacity.

Max. Conductor Temperature :

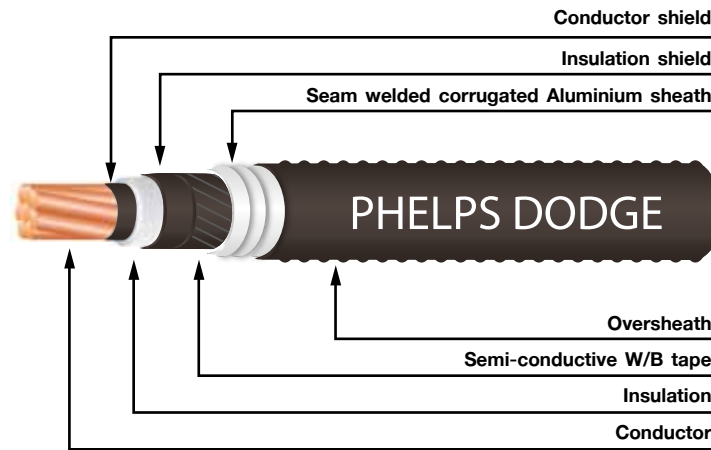
90 °C

AC TEST VOLTAGE :

318 kV (30 minutes)

REFERENCE STANDARD :

IEC 62067



CONSTRUCTION :

- Conductor : Round compact stranded or Milliken conductor
- Conductor shield : Semi-conducting tape and/or extruded semi-conducting cross-linked polyethylene
- Insulation : Cross-linked polyethylene
- Insulation shield : Semi-conducting cross-linked polyethylene
- Longitudinal water blocking layer : Semi-conductive water blocking tape
- Metallic shield and radial water barrier : Seam welded corrugated Aluminium sheath
- Oversheath : Black PE (ST-7)

Electrical Properties and Current Rating (A)

Nominal cross-sectional area mm ²	Maximum DC resistance of conductor at 20°C Ω/km	Minimum insulation resistance at 20°C MΩ-km	Current rating in air* (A)		Current rating direct burial* (A)		Current rating in PE duct in ground* (A)	
			Trefoil ≥0.5xD _c	Flat ≥0.5xD _c	Trefoil 1 m	Flat 1 m	Trefoil 1 m	Flat 1 m
400	0.047	15,310	763	837	536	571	540	565
500	0.0366	13,580	875	970	602	647	611	642
630	0.0283	11,980	1,005	1,130	673	733	689	729
800	0.0221	10,690	1,134	1,297	741	818	768	818
1,000	0.0176	9,220	1,268	1,480	800	901	844	909
1,200	0.0151	8,760	1,349	1,593	839	955	895	969
1,000(M)	0.0176	9,160	1,320	1,530	832	933	877	942
1,200(M)	0.0151	8,720	1,418	1,660	879	997	938	1,013
1,400(M)	0.0129	8,280	1,520	1,801	925	1,063	1,000	1,088
1,600(M)	0.0113	7,920	1,606	1,922	962	1,119	1,053	1,152
1,800(M)	0.0101	7,750	1,676	2,023	992	1,165	1,098	1,208
2,000(M)	0.0090	7,440	1,749	2,132	1,022	1,212	1,142	1,265
2,500(M)	0.0072	7,000	1,884	2,342	1,072	1,299	1,225	1,374

(M) is Milliken conductor

***CONDITION :**

1. Ambient air temperature 40°C
2. Ground temperature 30°C
3. Thermal resistivity of soil 1.2 K-m/W
4. Depth of laying 1.0 m
5. Axial spacing between phase cable is 2xOD_{cable} or 2xOD_{duct}
6. Metallic shield and/or sheath bonded at single point or cross-bonded (no sheath circulating current).

Cable Construction

Nominal cross-sectional area mm ²	Diameter of conductor (Approx.) mm	Diameter over insulation (Approx.) mm	Nominal thickness of Al sheath mm	Nominal thickness of oversheath mm	Overall diameter (Approx.) mm	Cable weight (Approx.) kg/km	Standard packing m
400	23.0	87.0	2.3	4.4	119	13,550	500/R
500	26.0	86.5	2.3	4.4	119	14,350	500/R
630	29.9	86.5	2.3	4.4	119	15,470	500/R
800	33.8	87.5	2.3	4.4	120	17,070	500/R
1,000	39.8	90.0	2.5	4.5	123	19,390	500/R
1,200	43.0	93.5	2.5	4.6	127	21,420	500/R
1,000(M)	39.1	90.5	2.5	4.5	123	19,400	500/R
1,200(M)	42.2	93.5	2.5	4.6	127	21,350	500/R
1,400(M)	45.7	97.0	2.5	4.7	131	23,640	500/R
1,600(M)	48.8	100.5	2.5	4.8	134	25,830	500/R
1,800(M)	51.6	104.0	2.5	4.9	138	28,120	400/R
2,000(M)	54.7	107.0	2.5	5.0	141	30,500	400/R
2,500(M)	61.1	114.5	2.5	5.0	149	36,010	300/R

(M) is Milliken conductor

R = Packing in reel