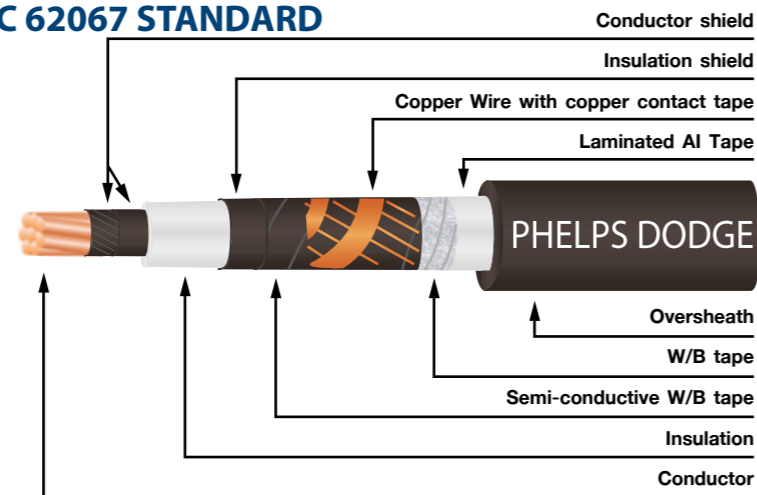


127/230 (245) kV COPPER CONDUCTOR WITH COPPER WIRE SHIELD AND LAMINATED ALUMINIUM TAPE

IEC 62067 STANDARD



APPLICATION :

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

Advantage :

Light weight, small overall diameter and easy to bend.

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 : Semi-conductive water blocking tape blocking layer
- Metallic shield : Annealed uncoated copper wire with copper contact tape
- Longitudinal water : Water blocking tape blocking layer
- Radial water barrier : Laminated aluminium tape
- Oversheath : Black PE (ST-7)

Cable Construction

Nominal cross-sectional area mm ²	Diameter of conductor (Approx.) mm	Diameter over insulation (Approx.) mm	Nominal area of copper wire shield mm ²	Nominal thickness of Al tape mm	Nominal thickness of oversheath mm	Overall diameter (Approx.) mm	Cable weight (Approx.) kg/km	Standard packing m
400	23.0	87.0	220	0.2	4.1	105	12,680	500/R
500	25.9	86.5	220	0.2	4.1	104	13,485	500/R
630	29.9	86.5	220	0.2	4.1	104	14,635	500/R
800	33.8	87.5	220	0.2	4.1	106	16,270	500/R
1,000	39.8	93.0	220	0.2	4.1	112	18,770	500/R
1,200	43.0	96.5	220	0.2	4.2	115	20,720	500/R
1,000(M)	39.1	90.5	220	0.2	4.1	109	18,285	500/R
1,200(M)	42.2	93.5	220	0.2	4.2	113	20,205	500/R
1,400(M)	45.7	97.0	220	0.2	4.3	116	22,405	500/R
1,600(M)	48.8	100.5	220	0.2	4.4	120	24,515	500/R
1,800(M)	51.6	104.0	220	0.2	4.6	124	26,745	400/R
2,000(M)	54.7	107.0	220	0.2	4.7	127	29,055	400/R
2,500(M)	61.1	114.5	220	0.2	4.9	135	34,485	300/R

(M) is Milliken conductor

R = Packing in reel

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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	0.0470	15,310	760	838	533	568	531	557
500	0.0366	13,610	871	971	599	644	600	632
630	0.0283	11,980	1,001	1,133	671	730	678	719
800	0.0221	10,690	1,133	1,301	740	816	757	808
1,000	0.0176	9,660	1,268	1,480	806	903	837	900
1,200	0.0151	9,170	1,352	1,593	847	959	889	962
1,000(M)	0.0176	9,160	1,329	1,540	842	936	868	931
1,200(M)	0.0151	8,720	1,431	1,672	892	1,002	931	1,003
1,400(M)	0.0129	8,280	1,539	1,816	944	1,071	996	1,080
1,600(M)	0.0113	7,920	1,630	1,941	986	1,129	1,049	1,144
1,800(M)	0.0101	7,750	1,707	2,045	1,022	1,180	1,099	1,203
2,000(M)	0.0090	7,440	1,786	2,158	1,056	1,230	1,145	1,261
2,500(M)	0.0072	7,000	1,935	2,375	1,117	1,325	1,235	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).