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

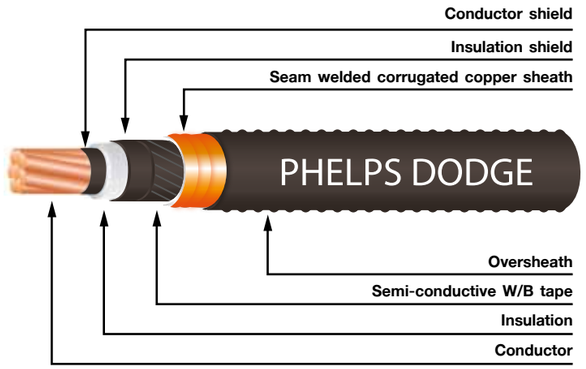
APPLICATION :
Preferably used for urban networks. Suitable for use in duct, trays and direct burial in ground.

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 copper sheath
Oversheath	:	Black PE (ST-7)

Cable Construction

Nominal cross-sectional area mm²	Diameter of conductor (Approx.) mm	Diameter over insulation (Approx.) mm	Nominal thickness of Cu sheath mm	Nominal thickness of oversheath mm	Overall diameter (Approx.) mm	Cable weight (Approx.) kg/km	Standard packing m
400	23.0	87.0	1.0	4.4	117	14,420	500/R
500	26.0	86.5	1.0	4.4	116	15,210	500/R
630	29.9	86.5	1.0	4.3	116	16,300	500/R
800	33.8	87.5	1.0	4.3	117	17,910	500/R
1,000	39.8	90.0	1.0	4.4	120	20,070	500/R
1,200	43.0	93.5	1.0	4.5	123	22,110	500/R
1,000(M)	39.1	90.5	1.0	4.4	120	20,070	500/R
1,200(M)	42.2	93.5	1.0	4.5	124	22,040	500/R
1,400(M)	45.7	97.0	1.0	4.6	127	24,360	500/R
1,600(M)	48.8	100.5	1.0	4.7	131	26,570	400/R
1,800(M)	51.6	104.0	1.0	4.8	135	28,890	400/R
2,000(M)	54.7	107.0	1.0	4.9	138	31,300	400/R
2,500(M)	61.1	114.5	1.0	5.2	146	37,000	300/R

(M) is Milliken conductor

R = Packing in reel

PHELPS DODGE CABLE TYPE EHXLP-CCS

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Electrical Properties and Current Rating (A)

Nominal cross-sectional area mm²	Maximum DC resistance of conductor at 20°C Ω/km	Minimum insulation resistance at 20°C MΩ-km	Current rating in air* (A) Trefoil ≥0.5xD$_e$	Current rating in air* (A) Flat ≥0.5xD$_e$	Current rating direct burial* (A) Trefoil 1 m	Current rating direct burial* (A) Flat 1 m	Current rating in PE duct in ground* (A) Trefoil 1 m	Current rating in PE duct in ground* (A) Flat 1 m
400	0.047	15,310	763	835	539	572	540	563
500	0.0366	13,580	876	969	606	648	611	640
630	0.0283	11,980	1,007	1,130	679	735	690	728
800	0.0221	10,690	1,139	1,297	749	821	770	817
1,000	0.0176	9,220	1,276	1,481	814	907	848	908
1,200	0.0151	8,760	1,360	1,594	854	962	899	969
1,000(M)	0.0176	9,160	1,332	1,532	849	940	882	942
1,200(M)	0.0151	8,720	1,433	1,664	898	1,005	944	1,013
1,400(M)	0.0129	8,280	1,538	1,805	947	1,073	1,008	1,089
1,600(M)	0.0113	7,920	1,626	1,928	986	1,130	1,061	1,154
1,800(M)	0.0101	7,750	1,699	2,029	1,018	1,177	1,107	1,210
2,000(M)	0.0090	7,440	1,774	2,139	1,048	1,225	1,152	1,267
2,500(M)	0.0072	7,000	1,912	2,347	1,102	1,314	1,237	1,377

(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).