



Images not to scale. Follow table for dimensions

APPLICATION

POLY CAB HV 127/220 KV (245 kV) XLPE insulated cable with Copper conductor is suitable to use in high voltage transmission for external and direct burial applications in power network system.

CHARACTERISTICS

Voltage Rating

Nominal Voltage: 127/220 kV (245 kV)

Operation Temperature

Max. operating temperature: +90°C

Max. Short Circuit Temperature: 250°C

Bending Radius: 20D

: D is overall diameter of cable

Impulse Test Voltage

1050kV

CONSTRUCTION

- Conductor: Circular Compacted or segmental stranded Milliken Copper conductor as per IEC 60228, class 2
- Separator: Semi Conducting Tape
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: Crosslinked polyethylene
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound
- Separator: Semi Conducting Water Blocking Tape
- Shield: Aluminium Corrugated Sheath
- Outer Sheath: Extruded High-density polyethylene (HDPE) (PVC, also available per request), Colour: Black
- Optional Semi-conductive layer

OUTSTANDING FEATURES

- High life
- UV resistance
- Longitudinal water resistant
- Radial water resistant

STANDARD FOLLOWS

IEC 60228

IEC 62067

IS 7098-3

ICEA S-108-720

COMPLIANCE

- Conductor resistance IEC 60228

OUR ACCREDITATIONS



APPROVAL



DIMENSIONS AND WEIGHT:

Product Code	No. of Cores	Core Cross sectional Area	Conductor type	Insulation thickness (Approx.)	Sheath thickness (Approx.)	Diameter Overall (Nominal)	Weight (Approx.)
	No.	mm ²		mm	mm	mm	Kg/Km
EHIS27CXATPH001C400SAXXXX	1	400	Compact	27	4	100.0	12400
EHIS27CXATPH001C500SAXXXX	1	500	Compact	27	4	104.0	14000
EHIS27CXATPH001C630SAXXXX	1	630	Compact	27	4	107.0	15600
EHIS27CXATPH001C800SAXXXX	1	800	Compact	27	4	111.0	16800
EHIS27CXATPH001C01KSAXXXX	1	1000	Compact	27	4	116.0	19100
EHIS27CXATPH001C1K2SAXXXX	1	1200	Milliken	27	4	123.0	22000
EHIS27CXATPH001C1K4SAXXXX	1	1400	Milliken	27	4	127.0	24200
EHIS27CXATPH001C1K6SAXXXX	1	1600	Milliken	27	4	130.0	26400
EHIS27CXATPH001C1K8SAXXXX	1	1800	Milliken	27	4	133.0	28500
EHIS27CXATPH001C02KSAXXXX	1	2000	Milliken	27	4	136.0	30600
EHIS27CXATPH001C2K5SAXXXX	1	2500	Milliken	27	4	142.0	35700

ELECTRICAL CHARACTERISTICS:

Core Cross sectional Area	Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Approx. Star Reactance	Approx. Star Impedance	Approx. Capacitance	Surge Impedance	Cable Zero sequence Resistance	Cable Zero sequence Reactance	Cable Zero sequence Impedance
mm ²	Ω/km	Ω/km	Ω/km	Ω/km	μF/km	Ω	Ω/km	Ω/km	Ω/km
400	0.0470	0.0615	0.157	0.169	0.12	65	0.113	0.104	0.154
500	0.0366	0.0487	0.150	0.158	0.13	61	0.102	0.0977	0.141
630	0.0283	0.0388	0.144	0.149	0.14	57	0.0943	0.0919	0.132
800	0.0221	0.0316	0.139	0.143	0.15	54	0.0885	0.0868	0.124
1000	0.0176	0.0266	0.133	0.136	0.17	50	0.0841	0.0817	0.117
1200	0.0151	0.0203	0.129	0.131	0.18	48	0.0757	0.0772	0.108
1400	0.0129	0.0177	0.125	0.126	0.19	46	0.0719	0.0743	0.103
1600	0.0113	0.0158	0.123	0.124	0.20	44	0.0688	0.0719	0.0995
1800	0.0101	0.0144	0.121	0.122	0.21	43	0.0660	0.0703	0.0964
2000	0.0090	0.0132	0.119	0.120	0.21	42	0.0637	0.0683	0.0934
2500	0.0072	0.0112	0.115	0.116	0.23	40	0.0595	0.0646	0.0878

CURRENT RATING:

Core Cross sectional Area mm ²	Continuous current ratings for 3 single core cables, single ended bonded				Short Circuit Rating for 1 Sec.	
	In ground		In air			
	Trefoil 	Flat 	Trefoil 	Flat 		
400	532	573	753	829	57.2	
500	598	650	865	958	71.5	
630	669	734	989	1104	90.1	
800	739	820	1115	1257	114.4	
1000	801	902	1238	1411	143.0	
1200	899	1021	1430	1638	171.6	
1400	951	1095	1542	1785	200.2	
1600	993	1155	1638	1915	228.8	
1800	1026	1208	1718	2027	257.4	
2000	1059	1263	1801	2147	286.0	
2500	1117	1363	1959	2385	357.5	

Current ratings based on IEC 60287

Supply frequency	50 Hz
Maximum conductor temperature	90°C
Ambient air temperature	40°C
Ground temperature	30°C
Depth of laying	1000 m
Thermal resistivity of soil	1.5 K.m/W