POLYCAB HV. CS+PAL IEC 62067 127/220 KV (245 KV)
HV Cable with AL Conductor, Cu Screen and Poly Al. laminated

Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB HV 127/220 KV (245 kV) XLPE insulated cable with Aluminium 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 Aluminium 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
- Metallic Insulation Screen: Copper Wires + Helically applied Copper Foil Tape
- Separator: Semi Conducting Water Blocking Tape
- Shield: Poly-Al. laminated Tape
- 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

NABL

APPROVAL

CPRI APPROVED FQC

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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
EHIS27AXUAPH001C400SAXXXX	1	400	Compact	27	4	94.0	8900
EHIS27AXUAPH001C500SAXXXX	1	500	Compact	27	4	97.0	9200
EHIS27AXUAPH001C630SAXXXX	1	630	Compact	27	4	101.0	9900
EHIS27AXUAPH001C800SAXXXX	1	800	Compact	27	4	105.0	10800
EHIS27AXUAPH001C01KSAXXXX	1	1000	Compact	27	4	109.0	12000
EHIS27AXUAPH001C1K2SAXXXX	1	1200	Milliken	27	4	115.0	12900
EHIS27AXUAPH001C1K4SAXXXX	1	1400	Milliken	27	4	120.0	13900
EHIS27AXUAPH001C1K6SAXXXX	1	1600	Milliken	27	4	123.0	14800
EHIS27AXUAPH001C1K8SAXXXX	1	1800	Milliken	27	4	127.0	15700
EHIS27AXUAPH001C02KSAXXXX	1	2000	Milliken	27	4	130.0	16500
EHIS27AXUAPH001C2K5SAXXXX	1	2500	Milliken	27	4	136.0	18600

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	0.0778	0.101	0.152	0.182	0.12	63	0.141	0.0999	0.173
500	0.0605	0.0789	0.145	0.165	0.13	60	0.124	0.0936	0.155
630	0.0469	0.0619	0.140	0.153	0.14	56	0.111	0.0886	0.142
800	0.0367	0.0494	0.134	0.143	0.15	53	0.101	0.0834	0.131
1000	0.0291	0.0403	0.129	0.135	0.17	49	0.0941	0.0783	0.122
1200	0.0247	0.0320	0.124	0.128	0.18	47	0.0872	0.0739	0.114
1400	0.0212	0.0275	0.121	0.124	0.19	45	0.0838	0.0711	0.110
1600	0.0186	0.0243	0.119	0.121	0.20	43	0.0812	0.0687	0.106
1800	0.0165	0.0216	0.117	0.119	0.21	42	0.0791	0.0672	0.104
2000	0.0149	0.0197	0.115	0.117	0.21	42	0.0775	0.0653	0.101
2500	0.0127	0.0170	0.111	0.112	0.23	39	0.0753	0.0616	0.0973

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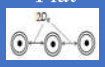
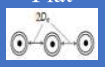
CURRENT RATING:

Core Cross sectional Area	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 	
mm^2	Amps				KAmps
400	433	455	608	664	37.6
500	495	522	708	774	47.0
630	565	597	820	898	59.2
800	640	679	944	1039	75.2
1000	717	763	1078	1192	94.0
1200	815	863	1246	1373	112.8
1400	884	940	1368	1512	131.6
1600	948	1010	1483	1642	150.4
1800	1009	1079	1592	1766	169.2
2000	1065	1140	1696	1886	188.0
2500	1160	1247	1882	2105	235.0

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