



Images not to scale. Follow table for dimensions

APPLICATION

POLYCAT 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
- 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), Color: 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



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

IDEAS. CONNECTED.

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
EHIS27CXUAPH001C400SAXXXX	1	400	Compact	27	4	94.0	11200
EHIS27CXUAPH001C500SAXXXX	1	500	Compact	27	4	97.0	12200
EHIS27CXUAPH001C630SAXXXX	1	630	Compact	27	4	101.0	13700
EHIS27CXUAPH001C800SAXXXX	1	800	Compact	27	4	105.0	15700
EHIS27CXUAPH001C01KSAXXXX	1	1000	Compact	27	4	109.0	18000
EHIS27CXUAPH001C1K2SAXXXX	1	1200	Milliken	27	4	115.0	20100
EHIS27CXUAPH001C1K4SAXXXX	1	1400	Milliken	27	4	120.0	22300
EHIS27CXUAPH001C1K6SAXXXX	1	1600	Milliken	27	4	123.0	24500
EHIS27CXUAPH001C1K8SAXXXX	1	1800	Milliken	27	4	127.0	26600
EHIS27CXUAPH001C02KSAXXXX	1	2000	Milliken	27	4	130.0	28600
EHIS27CXUAPH001C2K5SAXXXX	1	2500	Milliken	27	4	136.0	33700

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	0.0616	0.152	0.164	0.12	63	0.111	0.0999	0.149
500	0.0366	0.0488	0.145	0.153	0.13	60	0.101	0.0936	0.138
630	0.0283	0.0389	0.139	0.144	0.14	56	0.0934	0.0880	0.128
800	0.0221	0.0317	0.134	0.138	0.15	53	0.0878	0.0831	0.121
1000	0.0176	0.0267	0.129	0.132	0.17	49	0.0839	0.0783	0.115
1200	0.0151	0.0203	0.124	0.126	0.18	47	0.0785	0.0739	0.108
1400	0.0129	0.0177	0.121	0.122	0.19	45	0.0764	0.0711	0.104
1600	0.0113	0.0159	0.119	0.120	0.20	43	0.0750	0.0687	0.102
1800	0.0101	0.0145	0.117	0.118	0.21	42	0.0739	0.0672	0.0999
2000	0.0090	0.0133	0.115	0.116	0.21	42	0.0729	0.0653	0.0979
2500	0.0072	0.0113	0.111	0.112	0.23	39	0.0714	0.0616	0.0943

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. KAmps	
	In ground		In air			
	Trefoil	Flat	Trefoil	Flat		
400	554	583	778	850	57.2	
500	630	665	900	986	71.5	
630	714	756	1037	1141	90.1	
800	799	852	1180	1305	114.4	
1000	881	944	1323	1474	143.0	
1200	1021	1086	1562	1726	171.6	
1400	1102	1176	1706	1893	200.2	
1600	1173	1257	1834	2043	228.8	
1800	1234	1327	1946	2173	257.4	
2000	1297	1399	2065	2315	286.0	
2500	1419	1544	2303	2606	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