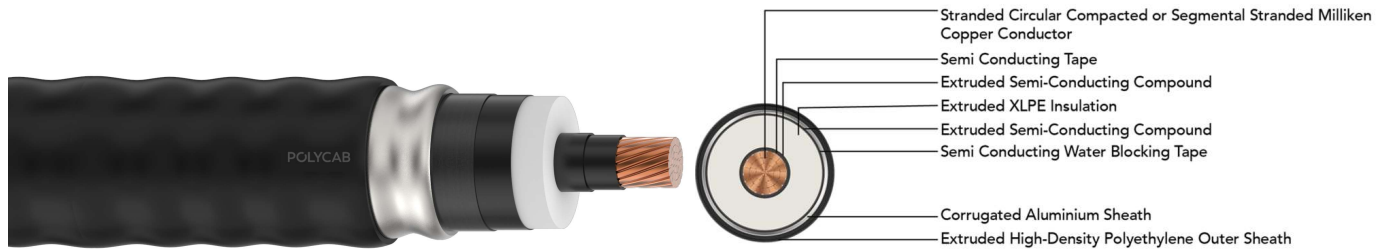


# POLYCAB HV AL.COR IEC 60840 64/110 KV (123 KV)

## HV Cable with Copper Conductor, Aluminium Corrugated Sheath



Images not to scale. Follow table for dimensions

### APPLICATION

POLYCAB HV 64/110 KV (123 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: 64/110 kV (123 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

550kV

### 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 60840

IS 7098-3

ICEA S-108-720

### COMPLIANCE

- Conductor resistance IEC 60228

### OUR ACCREDITATIONS



### APPROVAL



# POLYCAB HV AL.COR IEC 60840 64/110 KV (123 KV)

## HV Cable with Copper Conductor, Aluminium Corrugated Sheath

### 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 <sup>2</sup>		mm	mm	mm	Kg/Km
EHIS25CXATPH001C240SAXXXX	1	240	Compact	16	3.6	75.0	7700
EHIS25CXATPH001C300SAXXXX	1	300	Compact	16	3.6	77.0	8400
EHIS25CXATPH001C400SAXXXX	1	400	Compact	16	3.8	80.0	9400
EHIS25CXATPH001C500SAXXXX	1	500	Compact	16	4	84.0	10900
EHIS25CXATPH001C630SAXXXX	1	630	Compact	16	4	87.0	12500
EHIS25CXATPH001C800SAXXXX	1	800	Compact	16	4	91.0	13700
EHIS25CXATPH001C01KSAXXXX	1	1000	Compact	16	4	96.0	15900
EHIS25CXATPH001C1K2SAXXXX	1	1200	Milliken	16	4	103.0	18500
EHIS25CXATPH001C1K4SAXXXX	1	1400	Milliken	16	4	107.0	20600
EHIS25CXATPH001C1K6SAXXXX	1	1600	Milliken	16	4	110.0	22700
EHIS25CXATPH001C1K8SAXXXX	1	1800	Milliken	16	4	113.0	24800
EHIS25CXATPH001C02KSAXXXX	1	2000	Milliken	16	4	116.0	26700
EHIS25CXATPH001C2K5SAXXXX	1	2500	Milliken	16	4	122.0	31700


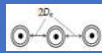

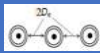
### ELECTRICAL CHARACTERISTICS:

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 <sup>2</sup>	Ω/km	Ω/km	Ω/km	Ω/km	μF/km	Ω	Ω/km	Ω/km	Ω/km
240	0.0754	0.0972	0.154	0.182	0.15	57	0.16	0.0985	0.188
300	0.0601	0.0780	0.148	0.167	0.16	54	0.145	0.0932	0.172
400	0.0470	0.0617	0.142	0.155	0.17	52	0.131	0.0874	0.157
500	0.0366	0.0490	0.136	0.145	0.19	48	0.12	0.0816	0.145
630	0.0283	0.0391	0.130	0.136	0.20	45	0.113	0.0763	0.136
800	0.0221	0.0320	0.125	0.129	0.22	43	0.106	0.0718	0.128
1000	0.0176	0.0270	0.121	0.124	0.24	40	0.101	0.0675	0.121
1200	0.0151	0.0204	0.117	0.119	0.26	38	0.0905	0.0638	0.111
1400	0.0129	0.0178	0.114	0.115	0.28	36	0.0855	0.0615	0.105
1600	0.0113	0.0160	0.112	0.113	0.29	35	0.0817	0.0595	0.101
1800	0.0101	0.0146	0.110	0.111	0.30	34	0.0784	0.0579	0.0975
2000	0.0090	0.0134	0.108	0.109	0.32	33	0.0754	0.0562	0.094
2500	0.0072	0.0115	0.105	0.106	0.35	31	0.07	0.0531	0.0879

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## HV Cable with Copper Conductor, Aluminium Corrugated Sheath

### CURRENT RATING:

Core Cross sectional Area mm <sup>2</sup>	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 	
	Amps				KAmps
240	427	452	591	653	34.3
300	479	509	671	745	42.9
400	541	579	772	862	57.2
500	609	657	887	999	71.5
630	683	744	1015	1155	90.1
800	754	832	1144	1317	114.4
1000	819	918	1270	1480	143.0
1200	927	1042	1476	1721	171.6
1400	982	1120	1591	1876	200.2
1600	1027	1185	1689	2013	228.8
1800	1063	1237	1772	2133	257.4
2000	1098	1294	1856	2259	286.0
2500	1159	1400	2016	2510	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