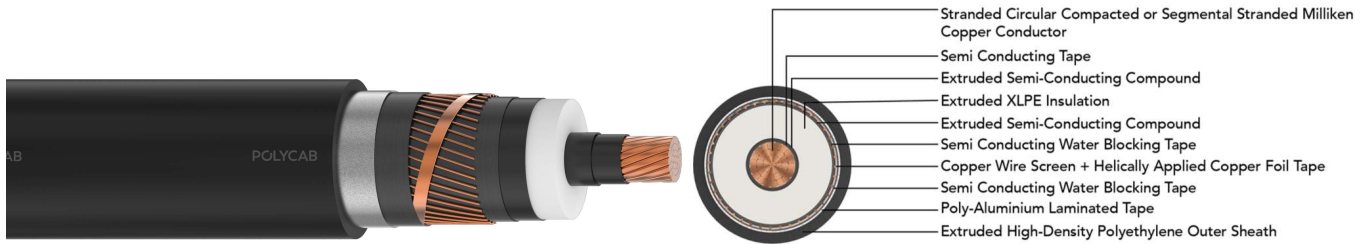


# POLYCAB HV CS+PAL IEC 60840 64/110 KV (123 KV)

## HV Cable with Cu Conductor, Cu Screen and Poly Al. laminated



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
- 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), 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



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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 <sup>2</sup>		mm	mm	mm	Kg/Km
EHIS25CXUAPH001C240SAXXXX	1	240	Compact	16	3.4	67.0	6100
EHIS25CXUAPH001C300SAXXXX	1	300	Compact	16	3.4	70.0	6900
EHIS25CXUAPH001C400SAXXXX	1	400	Compact	16	3.6	73.0	7800
EHIS25CXUAPH001C500SAXXXX	1	500	Compact	16	3.6	76.0	9200
EHIS25CXUAPH001C630SAXXXX	1	630	Compact	16	3.8	80.0	10600
EHIS25CXUAPH001C800SAXXXX	1	800	Compact	16	4	84.0	12500
EHIS25CXUAPH001C01KSAXXXX	1	1000	Compact	16	4	89.0	14700
EHIS25CXUAPH001C1K2SAXXXX	1	1200	Milliken	16	4	94.0	16700
EHIS25CXUAPH001C1K4SAXXXX	1	1400	Milliken	16	4	100.0	18800
EHIS25CXUAPH001C1K6SAXXXX	1	1600	Milliken	16	4	103.0	20800
EHIS25CXUAPH001C1K8SAXXXX	1	1800	Milliken	16	4	106.0	22800
EHIS25CXUAPH001C02KSAXXXX	1	2000	Milliken	16	4	109.0	24700
EHIS25CXUAPH001C2K5SAXXXX	1	2500	Milliken	16	4	116.0	29600





### 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	0.144	0.174	0.15	55	0.156	0.0900	0.180
300	0.0601	0.0781	0.138	0.159	0.16	52	0.141	0.0851	0.165
400	0.0470	0.0618	0.133	0.147	0.17	50	0.128	0.0798	0.151
500	0.0366	0.0491	0.128	0.137	0.19	46	0.118	0.0744	0.139
630	0.0283	0.0393	0.122	0.128	0.20	44	0.110	0.0697	0.130
800	0.0221	0.0322	0.118	0.122	0.22	41	0.105	0.0656	0.124
1000	0.0176	0.0273	0.114	0.117	0.24	39	0.101	0.0617	0.118
1200	0.0151	0.0205	0.110	0.112	0.26	37	0.0953	0.0582	0.112
1400	0.0129	0.0179	0.108	0.109	0.28	35	0.0933	0.0560	0.109
1600	0.0113	0.0161	0.105	0.106	0.29	34	0.0918	0.0541	0.107
1800	0.0101	0.0147	0.104	0.105	0.30	33	0.0907	0.0527	0.105
2000	0.0090	0.0135	0.102	0.103	0.32	32	0.0898	0.0512	0.103
2500	0.0072	0.0117	0.0987	0.0994	0.35	30	0.0882	0.0483	0.101

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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 <sup>2</sup>	Amps				KAmps
240	436	456	603	672	34.3
300	491	515	688	769	42.9
400	558	587	796	892	57.2
500	634	670	921	1037	71.5
630	718	762	1062	1204	90.1
800	802	859	1207	1379	114.4
1000	882	951	1352	1557	143.0
1200	1032	1099	1612	1833	171.6
1400	1114	1192	1761	2011	200.2
1600	1184	1272	1893	2173	228.8
1800	1244	1343	2009	2315	257.4
2000	1307	1418	2131	2469	286.0
2500	1427	1563	2374	2783	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