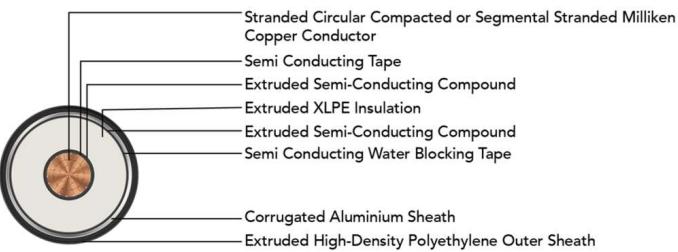


# POLY CAB HV AL.COR IEC 60840 38/66 KV (72.5 KV) HV Cable with Copper Conductor, Aluminium Corrugated Sheath

**POLY CAB**  
IDEAS. CONNECTED.



Images not to scale. Follow table for dimensions

## APPLICATION

POLY CAB HV 38/66 KV (72.5 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: 38/66 kV (72.5 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

325kV

## 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



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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
EHIS24CXATPH001C240SAXXXX	1	240	Compact	11	3.2	64.0	6400
EHIS24CXATPH001C300SAXXXX	1	300	Compact	11	3.2	66.0	7200
EHIS24CXATPH001C400SAXXXX	1	400	Compact	11	3.4	69.0	8100
EHIS24CXATPH001C500SAXXXX	1	500	Compact	11	3.6	73.0	9600
EHIS24CXATPH001C630SAXXXX	1	630	Compact	11	3.6	76.0	11000
EHIS24CXATPH001C800SAXXXX	1	800	Compact	11	3.8	80.0	12300
EHIS24CXATPH001C01KSAXXXX	1	1000	Compact	11	4	86.0	14500
EHIS24CXATPH001C1K2SAXXXX	1	1200	Milliken	11	4	93.0	17000
EHIS24CXATPH001C1K4SAXXXX	1	1400	Milliken	11	4	97.0	19100
EHIS24CXATPH001C1K6SAXXXX	1	1600	Milliken	11	4	100.0	21100
EHIS24CXATPH001C1K8SAXXXX	1	1800	Milliken	11	4	103.0	23100
EHIS24CXATPH001C02KSAXXXX	1	2000	Milliken	11	4	106.0	25000
EHIS24CXATPH001C2K5SAXXXX	1	2500	Milliken	11	4	112.0	29900

**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	0.145	0.175	0.19	49	0.166	0.0883	0.188
300	0.0601	0.0780	0.140	0.160	0.21	46	0.150	0.0836	0.172
400	0.0470	0.0618	0.134	0.148	0.22	44	0.135	0.0782	0.156
500	0.0366	0.0491	0.128	0.137	0.25	40	0.125	0.0726	0.145
630	0.0283	0.0393	0.123	0.129	0.27	38	0.115	0.0679	0.134
800	0.0221	0.0322	0.118	0.122	0.29	36	0.107	0.0638	0.125
1000	0.0176	0.0274	0.114	0.117	0.32	34	0.103	0.0598	0.119
1200	0.0151	0.0205	0.110	0.112	0.35	32	0.0980	0.0560	0.113
1400	0.0129	0.0179	0.107	0.108	0.38	30	0.0949	0.0540	0.109
1600	0.0113	0.0161	0.105	0.106	0.40	29	0.0904	0.0522	0.104
1800	0.0101	0.0147	0.104	0.105	0.41	28	0.0864	0.0511	0.100
2000	0.0090	0.0135	0.102	0.103	0.43	28	0.0829	0.0496	0.0966
2500	0.0072	0.0116	0.0992	0.0999	0.47	26	0.0765	0.0469	0.0897

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**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	
240	427	452	595	666	34.3
300	478	509	676	760	42.9
400	540	579	778	881	57.2
500	608	657	894	1021	71.5
630	681	743	1022	1181	90.1
800	751	831	1151	1347	114.4
1000	815	915	1276	1515	143.0
1200	930	1045	1494	1769	171.6
1400	988	1121	1612	1930	200.2
1600	1034	1188	1712	2070	228.8
1800	1070	1242	1794	2192	257.4
2000	1106	1299	1880	2319	286.0
2500	1167	1404	2039	2576	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