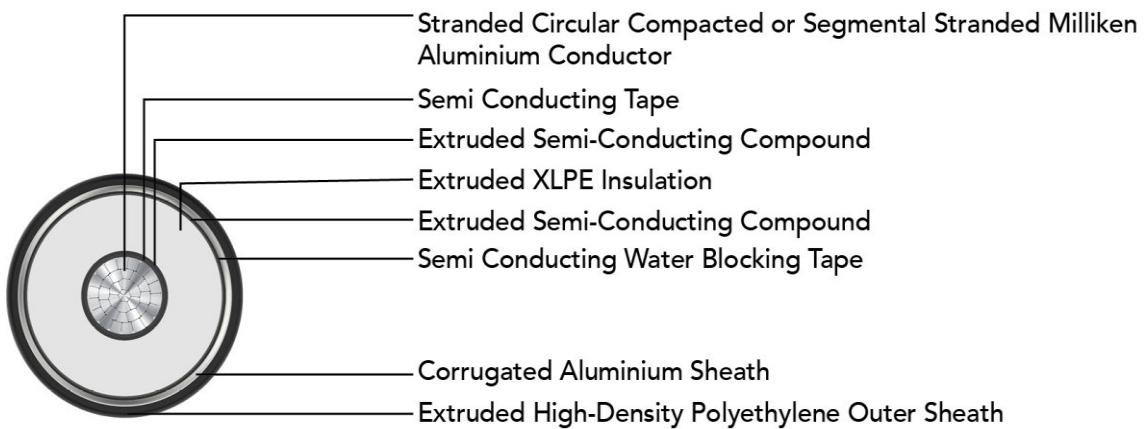


# POLYCAT HV AL.COR IEC 60840 64/110 kV (123 kV)

## HV Cable with Aluminium Conductor, Aluminium Corrugated Sheath



### Outstanding Features

- High life
- UV resistance
- Longitudinal water resistant
- Radial water resistant

### Application

POLYCAT HV 64/110 KV (123 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.

### Voltage Rating

Nominal Voltage: 64/110 KV (123 KV)

### Bending Radius: 20D

: D is overall diameter of cable

### Operation Temperature

Max. operating temperature: +90°C

Max. Short Circuit Temperature: 250°C

### Standard and References:

IEC 60228

IEC 60840

IS 7098-3

ICEA S-108-720

### 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
- Shield: Aluminium Corrugated Sheath
- Outer Sheath: Extruded High-density polyethylene (HDPE) (PVC, also available per request), Colour: Black
- Optional Semi-conductive layer

### Impulse Test Voltage

550kV

### Compliance

- Conductor resistance IEC 60228



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ISO 9001 ISO 14001 ISO 45001



## POLY CAB HV AL.COR IEC 60840 64/110 kV (123 kV)

### HV Cable with Aluminium Conductor, Aluminium Corrugated Sheath

#### DIMENSIONS AND WEIGHT:

Product Code	No. of Cores	Core Cross sectional Area mm <sup>2</sup>	Conductor type	Insulation thickness (Approx.) mm	Sheath thickness (Approx.) mm	Diameter Overall (Nominal) mm	Weight (Approx.)
							Kg/Km
EHIS25AXATPH001C400SAXXXX	1	400	Compact	16	3.8	80.0	7000
EHIS25AXATPH001C500SAXXXX	1	500	Compact	16	4	84.0	7800
EHIS25AXATPH001C630SAXXXX	1	630	Compact	16	4	87.0	8400
EHIS25AXATPH001C800SAXXXX	1	800	Compact	16	4	91.0	8800
EHIS25AXATPH001C01KSAXXXX	1	1000	Compact	16	4	96.0	9800
EHIS25AXATPH001C1K2SAXXXX	1	1200	Milliken	16	4	103.0	11200
EHIS25AXATPH001C1K4SAXXXX	1	1400	Milliken	16	4	107.0	12100
EHIS25AXATPH001C1K6SAXXXX	1	1600	Milliken	16	4	110.0	13000
EHIS25AXATPH001C1K8SAXXXX	1	1800	Milliken	16	4	113.0	13900
EHIS25AXATPH001C02KSAXXXX	1	2000	Milliken	16	4	116.0	14600
EHIS25AXATPH001C2K5SAXXXX	1	2500	Milliken	16	4	122.0	16500

#### ELECTRICAL CHARACTERISTICS:

Core Cross sectional Area mm <sup>2</sup>	Max. DC Resistance at 20°C Ω/km	Max. AC Resistance at 90°C Ω/km	Approx. Star Reactance Ω/km	Approx. Star Impedance Ω/km	Approx. Capacitance μF/km	Surge Impedance Ω	Cable Zero sequence Resistance Ω/km	Cable Zero sequence Reactance Ω/km	Cable Zero sequence Impedance Ω/km
400	0.0778	0.101	0.142	0.174	0.17	52	0.161	0.0874	0.183
500	0.0605	0.0790	0.136	0.157	0.19	48	0.143	0.0816	0.165
630	0.0469	0.0620	0.130	0.144	0.20	46	0.131	0.0768	0.152
800	0.0367	0.0496	0.125	0.134	0.22	43	0.120	0.0720	0.140
1000	0.0291	0.0405	0.121	0.128	0.24	40	0.111	0.0675	0.130
1200	0.0247	0.0320	0.117	0.121	0.26	38	0.0993	0.0638	0.118
1400	0.0212	0.0276	0.114	0.117	0.28	36	0.0928	0.0615	0.111
1600	0.0186	0.0243	0.112	0.115	0.29	35	0.0879	0.0595	0.106
1800	0.0165	0.0217	0.110	0.112	0.30	34	0.0836	0.0579	0.102
2000	0.0149	0.0197	0.108	0.110	0.32	33	0.0800	0.0562	0.0978
2500	0.0127	0.0171	0.105	0.106	0.35	31	0.0740	0.0531	0.0911

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### HV Cable with Aluminium Conductor, Aluminium Corrugated Sheath

#### 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	
400	428	455	608	675	37.6	
500	487	520	705	787	47.0	
630	551	593	813	914	59.2	
800	619	671	931	1055	75.2	
1000	686	753	1054	1207	94.0	
1200	768	845	1208	1383	112.8	
1400	822	914	1314	1517	131.6	
1600	870	976	1411	1642	150.4	
1800	913	1033	1501	1761	169.2	
2000	951	1086	1584	1873	188.0	
2500	1009	1174	1725	2074	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



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