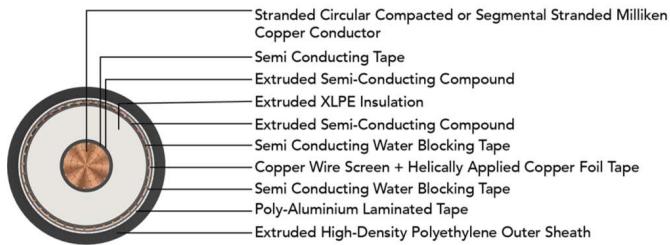


# POLYCAT HV CS+PAL IEC 60840 38/66 KV (72.5 KV) HV Cable with Cu Conductor, Cu Screen and Poly Al. laminated

**POLYCAT**  
IDEAS. CONNECTED.



Images not to scale. Follow table for dimensions

## APPLICATION

POLYCAT 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
- 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



**POLY CAB HV CS+PAL IEC 60840 38/66 KV (72.5 KV)**  
**HV Cable with Cu Conductor, Cu Screen and Poly Al.**  
**laminated**

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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
EHIS24CXUAPH001C240SAXXXX	1	240	Compact	11	3	57.0	5300
EHIS24CXUAPH001C300SAXXXX	1	300	Compact	11	3	59.0	6000
EHIS24CXUAPH001C400SAXXXX	1	400	Compact	11	3.2	62.0	6900
EHIS24CXUAPH001C500SAXXXX	1	500	Compact	11	3.2	65.0	8300
EHIS24CXUAPH001C630SAXXXX	1	630	Compact	11	3.4	69.0	9800
EHIS24CXUAPH001C800SAXXXX	1	800	Compact	11	3.6	73.0	11100
EHIS24CXUAPH001C01KSAXXXX	1	1000	Compact	11	3.8	79.0	13300
EHIS24CXUAPH001C1K2SAXXXX	1	1200	Milliken	11	3.8	82.0	15300
EHIS24CXUAPH001C1K4SAXXXX	1	1400	Milliken	11	4	86.0	17400
EHIS24CXUAPH001C1K6SAXXXX	1	1600	Milliken	11	4	89.0	19400
EHIS24CXUAPH001C1K8SAXXXX	1	1800	Milliken	11	4	93.0	21400
EHIS24CXUAPH001C02KSAXXXX	1	2000	Milliken	11	4	95.0	23300
EHIS24CXUAPH001C2K5SAXXXX	1	2500	Milliken	11	4	101.0	28100

**ELECTRICAL CHARACTERISTICS:**

Core Cross sectional Area	Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Approx. Star Reactance	Approx. Impedance	Approx. Star 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	0.0973	0.133	0.165	0.19	47	0.156	0.0781	0.174
300	0.0601	0.0782	0.128	0.150	0.21	44	0.141	0.0735	0.159
400	0.0470	0.0620	0.123	0.138	0.22	42	0.128	0.0687	0.145
500	0.0366	0.0494	0.118	0.128	0.25	39	0.118	0.0639	0.134
630	0.0283	0.0397	0.113	0.120	0.27	37	0.110	0.0598	0.125
800	0.0221	0.0327	0.109	0.114	0.29	35	0.105	0.0562	0.119
1000	0.0176	0.0279	0.106	0.110	0.32	32	0.101	0.0530	0.114
1200	0.0151	0.0206	0.102	0.104	0.35	30	0.095	0.0497	0.107
1400	0.0129	0.0181	0.100	0.102	0.38	29	0.0933	0.0481	0.105
1600	0.0113	0.0162	0.0987	0.100	0.40	28	0.0918	0.0465	0.103
1800	0.0101	0.0149	0.0973	0.0984	0.41	27	0.0907	0.0454	0.101
2000	0.0090	0.0137	0.0957	0.0967	0.43	27	0.0898	0.0441	0.100
2500	0.0072	0.0119	0.0928	0.0936	0.47	25	0.0882	0.0417	0.0976

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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 		
<b>mm<sup>2</sup></b>		<b>Amps</b>		<b>KAmps</b>		
240	435	455	607	690	34.3	
300	490	514	692	789	42.9	
400	556	585	801	916	57.2	
500	631	668	927	1067	71.5	
630	713	760	1069	1239	90.1	
800	795	855	1214	1420	114.4	
1000	873	947	1358	1605	143.0	
1200	1027	1095	1632	1895	171.6	
1400	1107	1187	1782	2077	200.2	
1600	1176	1267	1915	2242	228.8	
1800	1235	1338	2031	2390	257.4	
2000	1296	1411	2153	2549	286.0	
2500	1412	1558	2397	2876	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