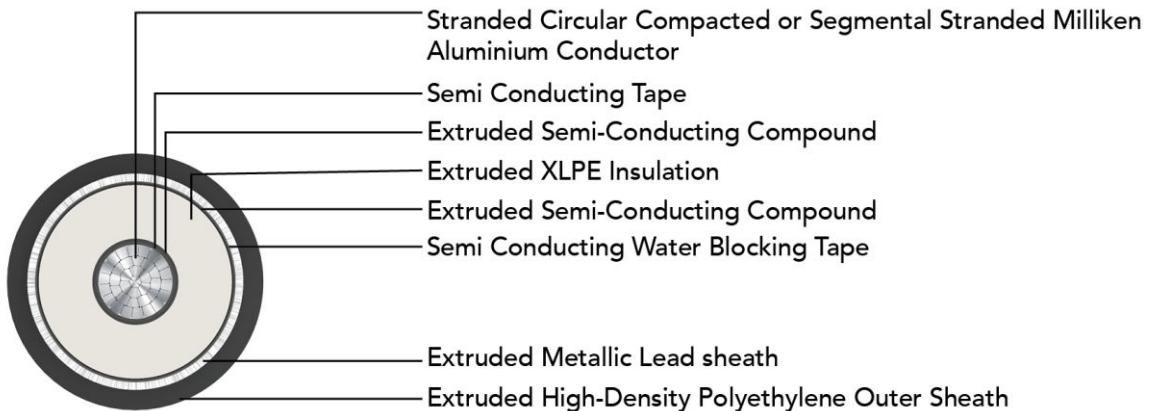


POLYCAT HV PB IEC 62067 127/220 kV (245 kV)

HV Cable with Aluminium Conductor, Lead Sheath



Outstanding Features

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

Application

POLYCAT HV 127/220 KV (245 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: 127/220 KV (245 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 62067

IS 7098-3

ICEA S-108-720

Impulse Test Voltage

1050kV

Compliance

- Conductor resistance IEC 60228

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
- Inner Sheath: Extruded Metallic Lead alloy
- Outer Sheath: Extruded High-density polyethylene (HDPE) (PVC, available as per demand), Colour: Black
- Optional Semi-conductive layer



OUR ACCREDITATION

ISO 9001 ISO 14001 ISO 45001



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HV Cable with Aluminium Conductor, Lead Sheath

DIMENSIONS AND WEIGHT:

| Product Code | No. of Cores | Core Cross sectional Area mm ² | Conductor type | Insulation thickness (Approx.) mm | Sheath thickness (Approx.) mm | Diameter Overall (Nominal) | Weight (Approx.) |
|---------------------------|--------------|---|----------------|-----------------------------------|-------------------------------|----------------------------|------------------|
| | | | | | | (Nominal) | Kg/Km |
| EHIS27AXUAPH001C400SAXXXX | 1 | 400 | Compact | 27 | 4 | 96.0 | 15300 |
| EHIS27AXUAPH001C500SAXXXX | 1 | 500 | Compact | 27 | 4 | 100.0 | 16200 |
| EHIS27AXUAPH001C630SAXXXX | 1 | 630 | Compact | 27 | 4 | 103.0 | 17200 |
| EHIS27AXUAPH001C800SAXXXX | 1 | 800 | Compact | 27 | 4 | 107.0 | 18800 |
| EHIS27AXUAPH001C01KSAXXXX | 1 | 1000 | Compact | 27 | 4 | 113.0 | 21600 |
| EHIS27AXUAPH001C1K2SAXXXX | 1 | 1200 | Milliken | 27 | 4 | 120.0 | 23900 |
| EHIS27AXUAPH001C1K4SAXXXX | 1 | 1400 | Milliken | 27 | 4 | 124.0 | 25800 |
| EHIS27AXUAPH001C1K6SAXXXX | 1 | 1600 | Milliken | 27 | 4 | 127.0 | 27100 |
| EHIS27AXUAPH001C1K8SAXXXX | 1 | 1800 | Milliken | 27 | 4 | 131.0 | 28800 |
| EHIS27AXUAPH001C02KSAXXXX | 1 | 2000 | Milliken | 27 | 4 | 133.0 | 30000 |
| EHIS27AXUAPH001C2K5SAXXXX | 1 | 2500 | Milliken | 27 | 4 | 139.0 | 32800 |

ELECTRICAL CHARACTERISTICS:

| Core Cross sectional Area mm ² | 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 | 0.154 | 0.184 | 0.12 | 64 | 0.160 | 0.102 | 0.190 |
| 500 | 0.0605 | 0.0789 | 0.148 | 0.168 | 0.13 | 60 | 0.145 | 0.0959 | 0.174 |
| 630 | 0.0469 | 0.0619 | 0.142 | 0.155 | 0.14 | 57 | 0.132 | 0.0908 | 0.160 |
| 800 | 0.0367 | 0.0493 | 0.137 | 0.146 | 0.15 | 54 | 0.124 | 0.0855 | 0.151 |
| 1000 | 0.0291 | 0.0402 | 0.131 | 0.137 | 0.17 | 50 | 0.119 | 0.0804 | 0.144 |
| 1200 | 0.0247 | 0.0319 | 0.126 | 0.130 | 0.18 | 47 | 0.116 | 0.0760 | 0.139 |
| 1400 | 0.0212 | 0.0275 | 0.123 | 0.126 | 0.19 | 45 | 0.114 | 0.0731 | 0.135 |
| 1600 | 0.0186 | 0.0242 | 0.121 | 0.123 | 0.20 | 44 | 0.114 | 0.0707 | 0.134 |
| 1800 | 0.0165 | 0.0216 | 0.119 | 0.121 | 0.21 | 42 | 0.114 | 0.0691 | 0.133 |
| 2000 | 0.0149 | 0.0196 | 0.117 | 0.119 | 0.21 | 42 | 0.115 | 0.0672 | 0.133 |
| 2500 | 0.0127 | 0.0169 | 0.113 | 0.114 | 0.23 | 40 | 0.119 | 0.0635 | 0.135 |

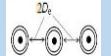
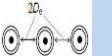
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POLY CAB HV PB IEC 62067 127/220 kV (245 kV)

HV Cable with Aluminium Conductor, Lead 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 ² | Amps | | | | KAmps | |
| 400 | 427 | 454 | 608 | 667 | 37.6 | |
| 500 | 486 | 519 | 705 | 777 | 47.0 | |
| 630 | 550 | 592 | 813 | 900 | 59.2 | |
| 800 | 618 | 669 | 932 | 1039 | 75.2 | |
| 1000 | 686 | 751 | 1058 | 1190 | 94.0 | |
| 1200 | 770 | 845 | 1214 | 1366 | 112.8 | |
| 1400 | 827 | 913 | 1325 | 1501 | 131.6 | |
| 1600 | 880 | 978 | 1429 | 1627 | 150.4 | |
| 1800 | 929 | 1039 | 1526 | 1746 | 169.2 | |
| 2000 | 975 | 1095 | 1620 | 1862 | 188.0 | |
| 2500 | 1049 | 1191 | 1784 | 2071 | 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 |



OUR ACCREDITATION

