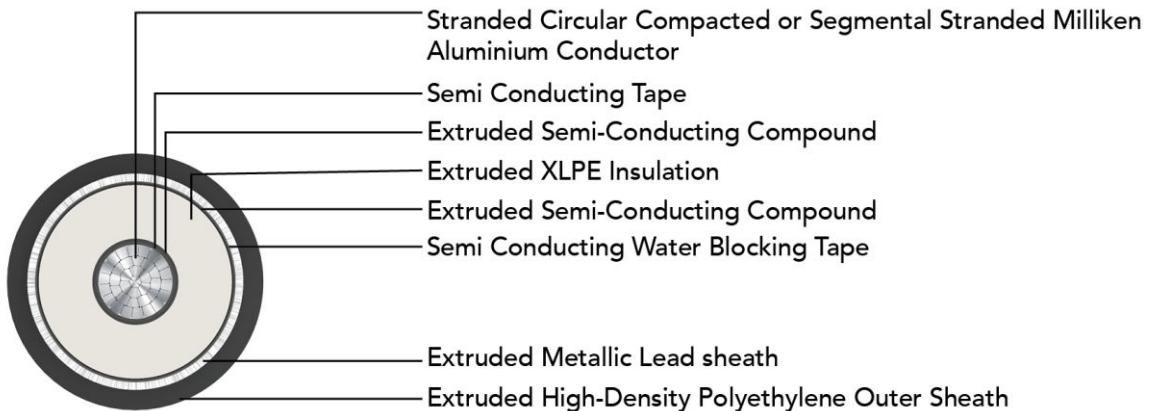


## POLY CAB HV PB IEC 60840 38/66 kV (72.5 kV)

### HV Cable with Aluminium Conductor, Lead Sheath



#### Outstanding Features

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

#### Application

POLY CAB HV 38/66 KV (72.5 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: 38/66 kV (72.5 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
- Inner Sheath: Extruded Metallic Lead alloy
- Outer Sheath: Extruded High-density polyethylene (HDPE) (PVC, available as per demand), Colour: Black
- Optional Semi-conductive layer

#### Impulse Test Voltage

325kV

#### Compliance

- Conductor resistance IEC 60228



#### OUR ACCREDITATION

ISO 9001 ISO 14001 ISO 45001



## POLY CAB HV PB IEC 60840 38/66 kV (72.5 kV)

### HV Cable with Aluminium Conductor, Lead Sheath

#### DIMENSIONS AND WEIGHT:

| Product Code              | No.<br>of<br>Cores<br>No. | Core<br>Cross<br>sectional<br>Area<br>mm <sup>2</sup> | Conductor<br>type | Insulation<br>thickness<br>(Approx.)<br>mm | Sheath<br>thickness<br>(Approx.)<br>mm | Diameter<br>Overall<br>(Nominal)<br>mm | Weight<br>(Approx.) |
|---------------------------|---------------------------|---|-------------------|--|--|--|---------------------|
|                           |                           |   |                   |  |  |  | Kg/Km               |
| EHIS24AXUAPH001C400SAXXXX | 1                         | 400   | Compact           | 11   | 3.2                                    | 63.0                                   | 7600                |
| EHIS24AXUAPH001C500SAXXXX | 1                         | 500   | Compact           | 11   | 3.4                                    | 67.0                                   | 8500                |
| EHIS24AXUAPH001C630SAXXXX | 1                         | 630   | Compact           | 11   | 3.4                                    | 70.0                                   | 9400                |
| EHIS24AXUAPH001C800SAXXXX | 1                         | 800   | Compact           | 11   | 3.6                                    | 75.0                                   | 10600               |
| EHIS24AXUAPH001C01KSAXXXX | 1                         | 1000  | Compact           | 11   | 3.8                                    | 81.0                                   | 12700               |
| EHIS24AXUAPH001C1K2SAXXXX | 1                         | 1200  | Milliken          | 11   | 4                                      | 88.0                                   | 14600               |
| EHIS24AXUAPH001C1K4SAXXXX | 1                         | 1400  | Milliken          | 11   | 4                                      | 93.0                                   | 16100               |
| EHIS24AXUAPH001C1K6SAXXXX | 1                         | 1600  | Milliken          | 11   | 4                                      | 96.0                                   | 17200               |
| EHIS24AXUAPH001C1K8SAXXXX | 1                         | 1800  | Milliken          | 11   | 4                                      | 99.0                                   | 18600               |
| EHIS24AXUAPH001C02KSAXXXX | 1                         | 2000  | Milliken          | 11   | 4                                      | 102.0                                  | 19600               |
| EHIS24AXUAPH001C2K5SAXXXX | 1                         | 2500  | Milliken          | 11   | 4                                      | 108.0                                  | 22400               |

#### ELECTRICAL CHARACTERISTICS:

| Core<br>Cross<br>sectional<br>Area<br>mm <sup>2</sup> | Max. DC<br>Resistance<br>at 20°C<br>Ω/km | Max. AC<br>Resistance<br>at 90°C<br>Ω/km | Approx.<br>Star<br>Reactance<br>Ω/km | Approx. Star<br>Impedance<br>Ω/km | Approx.<br>Capacitance<br>μF/km | Surge<br>Impedance<br>Ω | Cable Zero<br>sequence<br>Resistance<br>Ω/km | Cable Zero<br>sequence<br>Reactance<br>Ω/km | Cable Zero<br>sequence<br>Impedance<br>Ω/km |
|---|--|--|--------------------------------------|-----------------------------------|---------------------------------|-------------------------|--|---|---|
| 400   | 0.0778                                   | 0.101                                    | 0.127                                | 0.162                             | 0.22                            | 43                      | 0.171  | 0.0716                                      | 0.185                                       |
| 500   | 0.0605                                   | 0.0792                                   | 0.121                                | 0.145                             | 0.25                            | 39                      | 0.155  | 0.0668                                      | 0.169                                       |
| 630   | 0.0469                                   | 0.0624                                   | 0.117                                | 0.133                             | 0.27                            | 37                      | 0.143  | 0.0629                                      | 0.156                                       |
| 800   | 0.0367                                   | 0.0500                                   | 0.113                                | 0.124                             | 0.29                            | 35                      | 0.136  | 0.0591                                      | 0.148                                       |
| 1000  | 0.0291                                   | 0.0410                                   | 0.109                                | 0.116                             | 0.32                            | 33                      | 0.131  | 0.0555                                      | 0.142                                       |
| 1200  | 0.0247                                   | 0.0321                                   | 0.105                                | 0.110                             | 0.35                            | 31                      | 0.126  | 0.0521                                      | 0.136                                       |
| 1400  | 0.0212                                   | 0.0277                                   | 0.103                                | 0.107                             | 0.38                            | 29                      | 0.125  | 0.0505                                      | 0.135                                       |
| 1600  | 0.0186                                   | 0.0245                                   | 0.101                                | 0.104                             | 0.4                             | 28                      | 0.126  | 0.0489                                      | 0.135                                       |
| 1800  | 0.0165                                   | 0.0219                                   | 0.0998                               | 0.102                             | 0.41                            | 28                      | 0.125  | 0.0477                                      | 0.134                                       |
| 2000  | 0.0149                                   | 0.0199                                   | 0.0982                               | 0.100                             | 0.43                            | 27                      | 0.126  | 0.0464                                      | 0.134                                       |
| 2500  | 0.0127                                   | 0.0173                                   | 0.0954                               | 0.0970                            | 0.47                            | 25                      | 0.130  | 0.0440                                      | 0.137                                       |

#### OUR ACCREDITATION



# POLY CAB HV PB IEC 60840 38/66 kV (72.5 kV)

## HV Cable with Aluminium Conductor, Lead Sheath

### CURRENT RATING:

| Core Cross<br>sectional Area | Continuous current ratings for 3 single core cables,<br>single ended bonded       |   |   |   | Short Circuit<br>Rating for<br>1 Sec. |  |
|------------------------------|---|---|---|---|---------------------------------------|--|
|                              | In ground   |   | In air  |   |                                       |  |
|                              | Trefoil   | Flat  | Trefoil   | Flat  |                                       |  |
|                              |  |  |  |  |                                       |  |
| mm <sup>2</sup>              | Amps  |   |   |   | KAmps                                 |  |
| 400                          | 432   | 458   | 631   | 724   | 37.6                                  |  |
| 500                          | 491   | 523   | 734   | 847   | 47.0                                  |  |
| 630                          | 556   | 597   | 847   | 984   | 59.2                                  |  |
| 800                          | 625   | 676   | 971   | 1139  | 75.2                                  |  |
| 1000                         | 693   | 758   | 1102  | 1306  | 94.0                                  |  |
| 1200                         | 783   | 855   | 1275  | 1505  | 112.8                                 |  |
| 1400                         | 844   | 927   | 1393  | 1653  | 131.6                                 |  |
| 1600                         | 898   | 993   | 1503  | 1794  | 150.4                                 |  |
| 1800                         | 947   | 1055  | 1604  | 1928  | 169.2                                 |  |
| 2000                         | 993   | 1113  | 1702  | 2058  | 188.0                                 |  |
| 2500                         | 1069  | 1213  | 1877  | 2296  | 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

