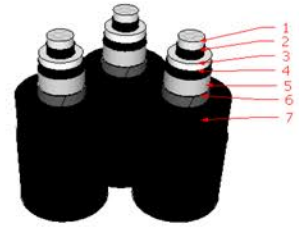


Technical Offer For Triplex Cables IN Princable of IEC 60502-2 & NFC 33-226

Twisted cable 12 / 20 (24) KV with compacted circular stranded Plain Aluminum conductor , Extruded by semi conducting layer as conductor screen, XLPE insulated, Extruded by semi conducting layer as insulation screen (Stripable type) Screened by AL FOIL , and extruded by colored Medium Density Poly Ethylene (MDPE) as an outer sheath

General Information:

Short Description: AL /XLPE/ MDPE
 Voltage: 12 / 20 (24) KV
 Conductor: Stranded Aluminum Conductor according to IEC 60228 Class 2
 Inner Semi Conductor: Extruded Inner Semi Conductor (Bonded Type)
 Insulation / Temperature: Cross Linked Polyethylene according to IEC 60502-2 / 90°C
 Outer Semi Conductor: Extruded Outer Semi Conductor (Stripable Type)
 Semi Conductive Water Blocking Tape : Applied
 Screening Type : AL FOIL
 Sheathing Material / Color: MDPE / BLACK



Cable Marking:

ENERGYA POWER CABLES-ELSEWEDY HELAL No. Core X Size MM2 12/20 KV AL/XLPE/MDPE 2021 Meter Marking

NOTE:

Phases are Identified by tapes

Packing:

- Cable shall be supplied in lengths as indicated in technical schedule on wooden or steel reels up to the manufacturer.
- Both ends of the cable shall be sealed to prevent the ingress of moisture during transportation and storage.
- Each reel shall be marked with type, size and length of Cable, and weight.
- This information shall be written on metallic tag nailed properly to the flange.

Tests:

Routine tests generally to IEC 60502-2 are performed on the cables and test certificate will be supplied on request.
 Electrical Resistance of the conductors shall be tested on IEC 60228.
 Voltage Test: No breakdown of The insulation shall occur, The applied Voltage and duration will be as Per IEC 60502-2

Electrical Data:

Maximum conductor operating temperature: 90 °C
 Maximum screen operating temperature: 80 °C
 Maximum conductor temperature during S.C: 250 °C
 Maximum Screen temperature during S.C: 160 °C
 Laying conditions at trefoil formation are as below:
 -Soil thermal resistivity 100 °C.Cm/Watt
 -Burial depth 0.5 m
 -Ground temperature 20 °C
 -Air temperature 30 °C
 -Frequency 50 Hz

Drawing Description

- 1 Aluminium Conductor
- 2 Inner Semi Conductor
- 3 XLPE Insulation
- 4 Outer Semi Conductor
- 5 Semi Conductive water blocking Tape
- 6 AL foil
- 7 MDPE Sheath

Specifications:

No. of Cores	Size (mm ²)	Approximate Outer Diameter (mm)± 4mm	Approximate Cable Weight (Kg/Km)± 5%	Minimum Bending Radius (mm)	Cutting Length (MT)	Packing Type	Flange Diameter (mm)	Drum outer Width (mm)	min thickness of sheathing (mm)	Insulation Thickness (Nominal) (mm)	Inner S.C Thickness (Nominal) (mm)	Outer S.C Thickness (Nominal) (mm)
3 X 1 X 240		77.1	4278	1300	400	WOODEN DRUM	2350	1600	1.56	4.5	0.6	0.7

-Electrical Data:

Size (MM2)	Maximum Conductor DC Resistance at Max.	Conductor AC Resistance at Max.	Capacitance (mF/Km)	Charging Current (A/Km)	Dielectric Losses (W/Km)	Reactance at 50 Hz	Screen S.C.C	Conductor S.C.C for	Current Rating	
	Resistance at 20 °C (Ω/Km)	Operating Temp. and 50Hz (Ω/Km)				(ohm/km)			1 sec (KA)	1 sec (KA)
3 X 1 X 240	0.125	0.161	0.321	1.21	58.08	0.153	2	22.488	465	509

-The above data is approximate and subjected to manufacturing tolerance.

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