



1. COMPACTED COPPER CONDUCTOR 2. CONDUCTOR SEMI-CON

2. CONDUCTOR SEMI-CON
3. XLPE INSULATION
4. INSULATION SEMI-CON
5. COPPER TAPE SCREEN
6. FR PVC INNER SHEATH
7. ALUMINIUM WIRE ARMOUR
8. FR PVC OUTER SHEATH

NEELKANTH CABLES LIMITED

DATA SHEET

SINGLE CORE XLPE ARMOURED REDUCED FLAME PROPAGATION (FR) MEDIUM VOLTAGE CABLE

Single Core Cable Description: Copper Conductor, Semi-conducting conductor Screen, XLPE Insulated, Semi-conducting Insulation screen, Metallic screen over Individual Core,FR- PVC Inner Sheathed, Aluminium Wire Armoured, Overall FR-PVC Outer Sheathed, Medium Voltage Cable.

NEELKANTH CABLES LIMITED

Reference Standard As per SANS:1339:2017 6.35/11 kV

Voltage Rating (Uo / U) 12 kV Maximum Operating Voltage (Um) Operating Temperature 90°C Max. Temp. During Short Circuit 250°C

Range of Product Single Core 50 Sq.mm up to 1000 Sq.mm

Application

These Medium Voltage Single Core Cables are Designed for Electricity Power Distributation , Suitable for Installation in Power Supply Stations, Commercial , Industrial and Urban Residential Networks, Indoors and in Cable Ducts, Outdoors, Undergrounds and as well as for Installation on Cable Trays for industries, Switchboards and the power Stations.

Construction

Conductor Annealed Plain Copper Compacted Round Stranded Conductors to carry Current and withstand Pulling Stresses During Cable Laying.

Conductors Complying with SANS 1411-1 Class-2

Inner Semi-Conducting Screen

Extruded Layer of Semi-Conducting Screen over Conductor to Smooth the Electric Field at the Conductor and Firmly Bonded to the Insulation to exclude all air voids ,and Prevent Concentration of electric field of the interface between the Insulation and the Inner Semi-Conductor. Semi-

Conducting Compound Complying with SANS 1339

The Insulation of XLPE (Cross-Linked Polyethylene) Rated Voltage, Lightning Overoltage, Switching Overvoltage, and Withstand the Various Voltage Insulation

Field Stress During the Cable Service Life.as per SANS 1411-4

Core Semi-Conducting Screen

Extruded Layer of Semi-Conducting Screen over the Insulation . The Screen is Tightly Fitted to the Insulation to Exclude all air Voids, Prevent Concentration of electric field of the interface between the Insulation and the Semi-Conductor. Semi-Conducting Compound Complying with SANS

Metallic Screen The Metallic Screen Shall Consist of either Copper Tapes or a Concentric layer of Copper Wires. The Metallic Layer may be applied over the

Individual Cores .Metallic Screen Provide no Electric Field outer side the Cable, An Active Conductor for the Capactive and Zero-Sequence short-circuit

current, and Contribution to Mechanical Protection, as per SANS 1339

Filler (Optional) PVC or Polypropylene yarn

The Inner-sheath Comprises a layer of Extruded as per Requirement PVC Applied Under the Armour, Inner-sheath Compound Complying with SANS Inner

Sheath/Bedding 1411-2

The Armour Consists of Round Aluminium Wire for Single Core Cable, Applied over the Inner-sheath. Armour Material Compllying with SANS 1411-6 Armour

Outer Sheath The Over all Outer-sheath Comprises a layer of Extruded as per Requirement PVC and Applied Over the Armour to Insulate the Mettalic Screen From

the Surrounding Medium to Protact the Mettalic Screen From Corrosion to Reduce the contribution of cables to Fire Propagation and Contribute to

Mechanical Protection. Outer sheath Compound Complying with SANS 1411-2.

Colour: Black with Red Stripe or as per Requirement

Technical Characteristic

Voltage Grade 6.35/11 kV

Test Voltage 22 kV for 5 Minute (3.5 Uo r.m.s)

Temperature Rating -15°C to +90°C SANS 6291 Partial Discharge Resistivity of Semi-conducting Screen SANS 6284-2 SANS 60332 Part-3-24 Flame Retardent

Minimum Installation Bending Radius 15(D+d)

> D= Nominal Diameter of the Cable, d=Nominal Diameter of the Conductor

Marking & Packing

NEELKANTH CABLES, CABLE SIZE, 6.35/11 kV CU/XLPE/CTS/PVC-FR/AWA/PVC-FR ELECTRIC CABLE, YEAR Marking over the sheath

OF MANUFACTURING

Sequentail Length Marking Shall be provided on outer sheath at every one Meter

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- COMPACTOR COPPER CONDUCTOR
- 1. 2. 3. 4.
- COMPACTOR COPPER CONI CONDUCTOR SEMI-CON XLPE INSULATION INSULATION SEMI-CON COPPER TAPE SCREEN LHFR PVC INNER SHEATH ALUMINIUM WIRE ARMOUR
- 8. LHFR PVC OUTER SHEATH

DATA SHEET

SINGLE CORE XLPE ARMOURED, REDUCED HALOGEN EMIISSION, REDUCED FLAME PROPAGATION (LHFR) MEDIUM VOLTAGE CABLE

Single Core Cable Description: Copper Conductor, Semi-conducting conductor Screen, XLPE Insulated, Semi-conducting Insulation screen, Metallic screen over Individual Core, LHFR-PVC Inner Sheathed, Aluminium Wire Armoured, Overall LHFR-PVC Outer Sheathed, Medium Voltage Cable.

NEELKANTH CABLES LIMITED Reference Standard As per SANS:1339:2017

Voltage Rating (Uo / U) 6.35/11 kV Maximum Operating Voltage (Um) 12 kV Operating Temperature 90°C Max. Temp. During Short Circuit 250°C

Range of Product Single Core 50 Sq.mm up to 1000 Sq.mm

Application

These Medium Voltage Single Core Cables are Designed for Electricity Power Distributation, Suitable for Installation in Power Supply Stations, Commercial, Industrial and Urban Residential Networks, Indoors and in Cable Ducts, Outdoors, Undergrounds and as well as for Installation on Cable Trays for industries, Switchboards and the power Stations.

Construction

Annealed Plain Copper Compacted Round Stranded Conductors to carry Current and withstand Pulling Stresses During Cable Laying. Conductor

Conductors Complying with SANS 1411-1 Class-2

Inner Semi-Conducting Screen

Extruded Layer of Semi-Conducting Screen over Conductor to Smooth the Electric Field at the Conductor and Firmly Bonded to the Insulation to exclude

all air voids and Prevent Concentration of electric field of the interface between the Insulation and the Inner Semi-Conductor. Semi-Conducting

Compound Complying with SANS 1339

Insulation The Insulation of XLPE (Cross-Linked Polyethylene)Rated Voltage, Lightning Overoltage, Switching Overvoltage, and Withstand the Various Voltage

Field Stress During the Cable Service Life.as per SANS 1411-4

Core Semi-Conducting Screen

Extruded Layer of Semi-Conducting Screen over the Insulation . The Screen is Tightly Fitted to the Insulation to Exclude all air Voids, Prevent Concentration of electric field of the interface between the Insulation and the Semi-Conductor. Semi-Conducting Compound Complying with SANS

Metallic Screen The Metallic Screen Shall Consist of either Copper Tapes or a Concentric layer of Copper Wires . The Metallic Layer may be applied over the Individual

Cores .Metallic Screen Provide no Electric Field outer side the Cable, An Active Conductor for the Capactive and Zero-Sequence short-circuit current, and

Contribution to Mechanical Protection. as per SANS 1339

Filler (Optional) PVC or Polypropylene yarn

The Inner-sheath Comprises a layer of Extruded as per Requirement PVC-LHFR Applied Under the Armour, Inner-sheath Compound Complying with Inner

Sheath/Bedding SANS 1411-2

The Armour Consists of Round Aluminium Wire for Single Core Cable, Applied over the Inner-sheath. Armour Material Compllying with SANS 1411-6 Armour

Outer Sheath The Over all Outer-sheath Comprises a layer of Extruded as per Requirement PVC-LHFR and Applied Over the Armour to Insulate the Mettalic Screen

From the Surrounding Medium to Protact the Mettalic Screen From Corrosion to Reduce the contribution of cables to Fire Propagation and Contribute to

Mechanical Protection. Outer sheath Compound Complying with SANS 1411-2.

Colour: Black with Blue Stripe or as per Requirement

Technical Characteristic

Voltage Grade 6.35/11 kV

22 kV for 5 Minute (3.5 Uo r.m.s) Test Voltage

Temperature Rating -15°C to +90°C Partial Discharge SANS 6291 Resistivity of Semi-conducting Screen SANS 6284-2 SANS 60332 Part-3-24 Reduced Flame Retardent **SANS 5956** Reduced Halogen Emission

> 15(D+d) D= Nominal Diameter of the Cable. d=Nominal Diameter of the Conductor

Marking & Packing

Minimum Installation Bending Radius

NEELKANTH CABLES . CABLE SIZE. 6.35/11 kV CU/XLPE/CTS/PVC-LHFR/AWA/PVC-LHFR ELECTRIC CABLE . Marking over the sheath

YEAR OF MANUFACTURING

Sequentail Length Marking Shall be provided on outer sheath at every one Meter

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- 1. COMPACTED COPPER CONDUCTOR
 2. CONDUCTOR SEMI-CON
 3. XLPE INSULATION
 4. INSULATION SEMI-CON
 5. COPPER TAPE SCREEN
 6. NHLSFR INNER SHEATH
 7. ALUMINIUM WIRE AND SEMINION SEMINION SHEATH
 8. ALUMINIUM WIRE AND SEMINION SHEATH 1. COMPACTED COPPER CONL 2. CONDUCTOR SEMI-CON 3. XLPE INSULATION 4. INSULATION SEMI-CON 5. COPPER TAPE SCREEN 6. NHLSFR INDER SHEATH 7. ALUMINIUM WIRE ARMOUR 8. NHLSFR OUTER SHEATH

DATA SHEET

SINGLE CORE XLPE ARMOURED, ZERO HALOGEN EMISSION, REDUCED SMOKE EMISSION, REDUCED FLAME PROPAGATION (NHLSFR) MEDIUM VOLTAGE CABI F

Single Core Cable Description: Copper Conductor, Semi-conducting conductor Screen, XLPE Insulated, Semi-conducting Insulation screen, Metallic screen over Individual Core, NHLSFR (Polyolefin) Inner Sheathed, Aluminium Wire Armoured, Overall NHLSFR (Polyolefin) Outer Sheathed, Medium Voltage Cable.

NEEL KANTH CABLES LIMITED Make Reference Standard As per SANS:1339:2017

Voltage Rating (Uo / U) 6.35/11 kV Maximum Operating Voltage (Um) 12 kV Operating Temperature 90°C Max. Temp. During Short Circuit 250°C

Range of Product Single Core 50 Sq.mm up to 1000 Sq.mm

Application

These Medium Voltage Single Core Cables are Designed for Electricity Power Distributation , Suitable for Installation in Power Supply Stations, Commercial , Industrial and Urban Residential Networks, Indoors and in Cable Ducts, Outdoors, Undergrounds and as well as for Installation on Cable Trays for industries, Switchboards and the power Stations.

Construction

Conductor Annealed Plain Copper Compacted Round Stranded Conductors to carry Current and withstand Pulling Stresses During Cable Laying,

Conductors Complying with SANS 1411-1 Class-2

Inner Semi-Conducting Extruded Layer of Semi-Conducting Screen over Conductor to Smooth the Electric Field at the Conductor and Firmly Bonded to the Insulation to exclude all air voids and Prevent Concentration of electric field of the interface between the Insulation and the Inner Semi-Conductor. Semi-Conducting

Compound Complying with SANS 1339

Insulation The Insulation of XLPE (Cross-Linked Polyethylene)Rated Voltage, Lightning Overoltage, Switching Overvoltage, and Withstand the Various Voltage

Field Stress During the Cable Service Life as per SANS 1411-4

Core Semi-Conducting Screen

Extruded Layer of Semi-Conducting Screen over the Insulation . The Screen is Tightly Fitted to the Insulation to Exclude all air Voids, Prevent Concentration of electric field of the interface between the Insulation and the Semi-Conductor. Semi-Conducting Compound Complying with SANS

The Metallic Screen Shall Consist of either Copper Tapes or a Concentric layer of Copper Wires . The Metallic Layer may be applied over the Individual Metallic Screen

Cores .Metallic Screen Provide no Electric Field outer side the Cable, An Active Conductor for the Capactive and Zero-Sequence short-circuit current, and

Contribution to Mechanical Protection. as per SANS 1339

Filler (Optional) PVC or Polypropylene yarn

The Inner-sheath Comprises a layer of Extruded as per Requirement NHLSFR (Polyolefin) Applied Under the Armour, Inner-sheath Compound Inner

Sheath/Bedding Complying with SANS 1411-5

Armour The Armour Consists of Round Aluminium Wire for Single Core Cable, Applied over the Inner-sheath.Armour Material Compllying with SANS 1411-6

Outer Sheath The Over all Outer-sheath Comprises a layer of Extruded as per Requirement NHLSFR (Polyolefin) and Applied Over the Armour to Insulate the

Mettalic Screen From the Surrounding Medium, to Protact the Mettalic Screen From Corrosion, to Reduce the contribution of cables to Fire

Propagation, and Contribute to Mechanical Protection. Outer sheath Compound Complying with SANS 1411-5.

Colour: Black with White Stripe or as per Requirement

Technical Characteristic

Voltage Grade 6.35/11 kV

Test Voltage 22 kV for 5 Minute (3.5 Uo r.m.s)

Temperature Rating -15°C to +90°C Partial Discharge SANS 6291 Resistivity of Semi-conducting Screen SANS 6284-2 SANS 60332 Part-3-24 Reduced Flame Retardent Zero Halogen Emission SANS 60754-2 Minimum Installation Bending Radius 15(D+d)

> D= Nominal Diameter of the Cable. d=Nominal Diameter of the Conductor

Marking & Packing

NEELKANTH CABLES, CABLE SIZE, 6.35/11 kV CU/XLPE/CTS/NHLSFR/AWA/NHLSFR ELECTRIC CABLE, YEAR Marking over the sheath

OF MANUFACTURING

Sequentail Length Marking Shall be provided on outer sheath at every one Meter Cable Length Multiple of 250/500 or as per Requirement Wooden Drum Fully Packed with Lagging Type of Drum

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- 1. COMPACTED COPPER CONDUCTOR
 2. CONDUCTOR SEMI-CON
 3. XLPE INSULATION
 4. INSULATION SEMI-CON
 5. COPPER TAPE SCREEN
 6. PVC INNER SHEATH
 7. ALUMINIUM WIRE ARMOUR
 8. PE OUTER SHEATH

DATA SHEET

SINGLE CORE XLPE ARMOURED, UV STABILIZED POLYETHYLENE OUTER SHEATHED (PE) MEDIUM VOLTAGE CABLE

Single Core Cable Description: Copper Conductor, Semi-conducting conductor Screen, XLPE Insulated, Semi-conducting Insulation screen, Metallic screen over Individual Core, PVC-FR Inner Sheathed, Aluminium Wire Armoured, Overall UV Stabilized Polyethylene (PE) Outer Sheathed, Medium Voltage Cable.

NEELKANTH CABLES LIMITED Make

Reference Standard As per SANS:1339:2017

6.35/11 kV Voltage Rating (Uo / U) Maximum Operating Voltage (Um) 12 kV Operating Temperature 90°C Max. Temp. During Short Circuit 250°C

Range of Product Single Core 50 Sq.mm up to 1000 Sq.mm

Application

These Medium Voltage Single Core Cores Cables are Designed for Electricity Power Distributation ,Suitable for Installation in Power Supply Stations, Commercial ,Industrial and Urban Residential Networks, Indoors and in Cable Ducts, Outdoors, Undergrounds and as well as for Installation on Cable Trays for industries, Switchboards and the power Stations.

Construction

Conductor Annealed Plain Copper Compacted Round Stranded Conductors to carry Current and withstand Pulling Stresses During Cable Laying.

Conductors Complying with SANS 1411-1 Class-2

Inner Semi-Conducting Screen

Extruded Layer of Semi-Conducting Screen over Conductor to Smooth the Electric Field at the Conductor and Firmly Bonded to the Insulation to exclude

all air voids ,and Prevent Concentration of electric field of the interface between the Insulation and the Inner Semi-Conductor. Semi-Conducting

Compound Complying with SANS 1339

The Insulation of XLPE (Cross-Linked Polyethylene)Rated Voltage, Lightning Overroltage, Switching Overvoltage, and Withstand the Various Voltage Insulation

Core Semi-Conducting Screen

Extruded Layer of Semi-Conducting Screen over the Insulation . The Screen is Tightly Fitted to the Insulation to Exclude all air Voids, Prevent Concentration of electric field of the interface between the Insulation and the Semi-Conductor. Semi-Conducting Compound Complying with SANS

Metallic Screen The Metallic Screen Shall Consist of either Copper Tapes or a Concentric layer of Copper Wires .The Metallic Layer may be applied over the Individual

Cores .Metallic Screen Provide no Electric Field outer side the Cable, An Active Conductor for the Capactive and Zero-Sequence short-circuit current, and

Contribution to Mechanical Protection. as per SANS 1339

Filler (Optional) PVC or Polypropylene yarn

The Inner-sheath Comprises a layer of Extruded as per Requirement PVC-FR, Applied Under the Armour, Inner-sheath Compound Complying with Inner

Sheath/Bedding SANS 1411-2

Armour The Armour Consists of Round Aluminium Wire for Single Core Cable, Applied over the Inner-sheath. Armour Material Compllying with SANS 1411-6

Outer Sheath The Over all Outer-sheath Comprises a layer of Extruded as per Requirement Polyethylene (PE) and Applied Over the Armour to Insulate the Mettalic

Screen From the Surrounding Medium to Protact the Mettalic Screen From Corrosion to Reduce the contribution of cables to Fire Propagation and

Contribute to Mechanical Protection. Outer sheath Compound Complying with SANS 1411-7.

Colour: Black or as per Requirement

Technical Characteristic

Voltage Grade 6.35/11 kV

22 kV for 5 Minute (3.5 Uo r.m.s) Test Voltage

Temperature Rating -15°C to +90°C Partial Discharge SANS 6291 Resistivity of Semi-conducting Screen SANS 6284-2 Minimum Installation Bending Radius 15(D+d)

D= Nominal Diameter of the Cable, d=Nominal Diameter of the Conductor

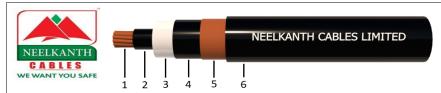
Marking & Packing

NEELKANTH CABLES, CABLE SIZE, 6.35/11 kV CU/XLPE/CTS/PVC-FR/AWA/PE, ELECTRIC CABLE, YEAR OF Marking over the sheath

MANUFACTURING

Sequentail Length Marking Shall be provided on outer sheath at every one Meter

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- COMPACTER COPPER CONDUCTOR
 CONDUCTOR SEMI-CON
 XLPE INSULATION
 INSULATION SEMI-CON
 COPPER TAPE SCREEN

- 6. FR PVC OUTER SHEATH

DATA SHEET

SINGLE CORE XLPE UNARMOURED REDUCED FLAME PROPAGATION (FR) MEDIUM VOLTAGE CABLE

Single Core Cable Description: Copper Conductor, Semi-conducting conductor Screen, XLPE Insulated, Semi-conducting Insulation screen, Metallic screen over Individual Core, Overall FR-PVC Outer Sheathed, Medium Voltage Cable.

Make NEELKANTH CABLES LIMITED Reference Standard As per SANS:1339:2017

6.35/11 kV Voltage Rating (Uo / U) Maximum Operating Voltage (Um) 12 kV Operating Temperature 90°C Max. Temp. During Short Circuit 250°C

Range of Product Single Core 50 Sq.mm up to 1000 Sq.mm

Application

These Medium Voltage Single Core Cables are Designed for Electricity Power Distributation, Suitable for Installation in Power Supply Stations, Commercial, Industrial and Urban Residential Networks, Indoors and in Cable Ducts, Outdoors, Undergrounds and as well as for Installation on Cable Trays for industries, Switchboards and the power Stations

Construction

Conductor Annealed Plain Copper Compacted Round Stranded Conductors to carry Current and withstand Pulling Stresses During Cable Laying.

Conductors Complying with SANS 1411-1 Class-2

Inner Semi-Conducting Screen

Extruded Layer of Semi-Conducting Screen over Conductor to Smooth the Electric Field at the Conductor and Firmly Bonded to the Insulation to exclude all air voids ,and Prevent Concentration of electric field of the interface between the Insulation and the Inner Semi-Conductor. Semi-Conducting

Compound Complying with SANS 1339

The Insulation of XLPE (Cross-Linked Polyethylene)Rated Voltage, Lightning Overoltage, Switching Overvoltage, and Withstand the Various Voltage Insulation

Field Stress During the Cable Service Life.as per SANS 1411-4

Core Semi-Conducting Screen

Extruded Layer of Semi-Conducting Screen over the Insulation . The Screen is Tightly Fitted to the Insulation to Exclude all air Voids, Prevent

Concentration of electric field of the interface between the Insulation and the Semi-Conductor. Semi-Conducting Compound Complying with SANS 1339

The Metallic Screen Shall Consist of either Copper Tapes or a Concentric layer of Copper Wires . The Metallic Layer may be applied over the Individual Metallic Screen

Cores .Metallic Screen Provide no Electric Field outer side the Cable, An Active Conductor for the Capactive and Zero-Sequence short-circuit current, and

Contribution to Mechanical Protection. as per SANS 1339

Filler (Optional) PVC or Polypropylene yarn

Outer Sheath The Over all Outer-sheath Comprises a layer of Extruded as per Requirement PVC and Applied Over the Armour to Insulate the Mettalic Screen From

the Surrounding Medium,to Protact the Mettalic Screen From Corrosion,to Reduce the contribution of cables to Fire Propagation,and Contribute to

Mechanical Protection. Outer sheath Compound Complying with SANS 1411-2.

Colour: Black with Red Stripe or as per Requirement

Technical Characteristic

Voltage Grade

22 kV for 5 Minute (3.5 Uo r.m.s) Test Voltage -15°C to +90°C Temperature Rating

Partial Discharge SANS 6291 Resistivity of Semi-conducting Screen SANS 6284-2 SANS 60332 Part-3-24 Flame Retardent

Minimum Installation Bending Radius 20(D+d)

D= Nominal Diameter of the Cable,

d=Nominal Diameter of the Conductor

Marking & Packing

NEELKANTH CABLES, CABLE SIZE, 6.35/11 kV CU/XLPE/CTS/PVC-FR ELECTRIC CABLE, YEAR OF

Marking over the sheath MANUFACTURING

Sequentail Length Marking Shall be provided on outer sheath at every one Meter

Multiple of 250/500 or as per Requirement Cable Length Type of Drum Wooden Drum Fully Packed with Lagging

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1. COMPACTED COPPER CONDUCTOR
2. CONDUCTOR SEMI-COM
3. XLPE INSULATION
4. INSULATION SEMI-CON
5. COPPER TAPE SCREEN

6. LHFR PVC OUTER SHEATH

NEELKANTH CABLES LIMITED

DATA SHEET

SINGLE CORE XLPE UNARMOURED, REDUCED HALOGEN EMIISSION, REDUCED FLAME PROPAGATION (LHFR) MEDIUM VOLTAGE CABLE

Single Core Cable Description: Copper Conductor, Semi-conducting conductor Screen, XLPE Insulated, Semi-conducting Insulation screen, Metallic screen over Individual Core, Overall LHFR-PVC Outer Sheathed, Medium Voltage Cable.

NEELKANTH CABLES LIMITED Make As per SANS:1339:2017 Reference Standard

6.35/11 kV Voltage Rating (Uo / U) Maximum Operating Voltage (Um) 12 kV Operating Temperature 90°C Max. Temp. During Short Circuit 250°C

Range of Product Single Core 50 Sq.mm up to 1000 Sq.mm

Application

These Medium Voltage Single Core Cables are Designed for Electricity Power Distributation, Suitable for Installation in Power Supply Stations, Commercial, Industrial and Urban Residential Networks, Indoors and in Cable Ducts, Outdoors, Undergrounds and as well as for Installation on Cable Trays for industries, Switchboards and the power Stations.

Construction

Conductor Annealed Plain Copper Compacted Round Stranded Conductors to carry Current and withstand Pulling Stresses During Cable Laying.

Conductors Complying with SANS 1411-1 Class-2

Inner Semi-Conducting Screen

Extruded Layer of Semi-Conducting Screen over Conductor to Smooth the Electric Field at the Conductor and Firmly Bonded to the Insulation to exclude all air voids ,and Prevent Concentration of electric field of the interface between the Insulation and the Inner Semi-Conductor. Semi-Conducting

Compound Complying with SANS 1339

Insulation The Insulation of XLPE (Cross-Linked Polyethylene) Rated Voltage, Lightning Overoltage, Switching Overvoltage, and Withstand the Various Voltage

Field Stress During the Cable Service Life.as per SANS 1411-4

Core Semi-Conducting Screen

Extruded Layer of Semi-Conducting Screen over the Insulation . The Screen is Tightly Fitted to the Insulation to Exclude all air Voids, Prevent

Concentration of electric field of the interface between the Insulation and the Semi-Conductor. Semi-Conducting Compound Complying with SANS 1339

Metallic Screen The Metallic Screen Shall Consist of either Copper Tapes or a Concentric layer of Copper Wires . The Metallic Layer may be applied over the Individual

Cores .Metallic Screen Provide no Electric Field outer side the Cable, An Active Conductor for the Capactive and Zero-Sequence short-circuit current, and

Contribution to Mechanical Protection. as per SANS 1339

Filler (Optional) PVC or Polypropylene yarn

The Over all Outer-sheath Comprises a layer of Extruded as per Requirement PVC-LHFR and Applied Over the Armour to Insulate the Mettalic Screen **Outer Sheath**

From the Surrounding Medium,to Protact the Mettalic Screen From Corrosion,to Reduce the contribution of cables to Fire Propagation, and Contribute to

Mechanical Protection. Outer sheath Compound Complying with SANS 1411-2.

Colour: Black with Blue Stripe or as per Requirement

Technical Characteristic

Voltage Grade 6.35/11 kV

Test Voltage 22 kV for 5 Minute (3.5 Uo r.m.s)

Temperature Rating -15°C to +90°C SANS 6291 Partial Discharge Resistivity of Semi-conducting Screen SANS 6284-2 SANS 60332 Part-3-24 Reduced Flame Retardent

SANS 5956 Reduced Halogen Emission Minimum Installation Bending Radius 20(D+d)

D= Nominal Diameter of the Cable, d=Nominal Diameter of the Conductor

Marking & Packing

NEELKANTH CABLES, CABLE SIZE, 6.35/11 kV CU/XLPE/CTS/PVC-LHFR ELECTRIC CABLE, YEAR OF Marking over the sheath

MANUFACTURING

Sequentail Length Marking Shall be provided on outer sheath at every one Meter

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1. COMPACTED COPPER CONDUCTOR

- 2. CONDUCTOR SEMI-CON
 3. XLPE INSULATION
 4. INSULATION SEMI-CON
 5. COPPER TAPE SCREEN
- 6. NHLSFR OUTER SHEATH

NEELKANTH CABLES LIMITED

DATA SHEET

SINGLE CORE XLPE UNARMOURED, ZERO HALOGEN EMISSION, REDUCED SMOKE EMISSION, REDUCED FLAME PROPAGATION (NHLSFR) MEDIUM VOLTAGE CABLE

Single Core Cable Description: Copper Conductor, Semi-conducting conductor Screen, XLPE Insulated, Semi-conducting Insulation screen, Metallic screen over Individual Core, Overall NHLSFR(Polyolefin) Outer Sheathed, Medium Voltage Unarmoured Cable.

NEEL KANTH CABLES LIMITED Make Reference Standard As per SANS:1339:2017

6.35/11 kV Voltage Rating (Uo / U) Maximum Operating Voltage (Um) 12 kV 90°C Operating Temperature Max. Temp. During Short Circuit 250°C

Range of Product Single Core 50 Sq.mm up to 1000 Sq.mm

Application

These Medium Voltage Single Core Cables are Designed for Electricity Power Distributation, Suitable for Installation in Power Supply Stations, Commercial, Industrial and Urban Residential Networks, Indoors and in Cable Ducts, Outdoors, Undergrounds and as well as for Installation on Cable Trays for industries, Switchboards and the power Stations

Construction

Conductor Annealed Plain Copper Compacted Round Stranded Conductors to carry Current and withstand Pulling Stresses During Cable Laying.

Conductors Complying with SANS 1411-1 Class-2

Inner Semi-Conducting Screen

Extruded Layer of Semi-Conducting Screen over Conductor to Smooth the Electric Field at the Conductor and Firmly Bonded to the Insulation to exclude

all air voids and Prevent Concentration of electric field of the interface between the Insulation and the Inner Semi-Conductor. Semi-Conducting

Compound Complying with SANS 1339

The Insulation of XLPE (Cross-Linked Polyethylene) Rated Voltage, Lightning Overoltage, Switching Overvoltage, and Withstand the Various Voltage Insulation

Field Stress During the Cable Service Life.as per SANS 1411-4

Core Semi-Conducting Screen

Extruded Layer of Semi-Conducting Screen over the Insulation . The Screen is Tightly Fitted to the Insulation to Exclude all air Voids, Prevent Concentration of electric field of the interface between the Insulation and the Semi-Conductor. Semi-Conducting Compound Complying with SANS

1339

The Metallic Screen Shall Consist of either Copper Tapes or a Concentric layer of Copper Wires .The Metallic Layer may be applied over the Individual Metallic Screen

Cores Metallic Screen Provide no Electric Field outer side the Cable, An Active Conductor for the Capactive and Zero-Sequence short-circuit current, and

Contribution to Mechanical Protection. as per SANS 1339

Filler (Optional) PVC or Polypropylene yarn

Outer Sheath The Over all Outer-sheath Comprises a layer of Extruded as per Requirement NHLSFR (Polyolefin) and Applied Over the Armour to Insulate the Mettalic

Screen From the Surrounding Medium, to Protact the Mettalic Screen From Corrosion, to Reduce the contribution of cables to Fire Propagation, and

Contribute to Mechanical Protection. Outer sheath Compound Complying with SANS 1411-5.

Colour: Black with White Stripe or as per Requirement

Technical Characteristic

Voltage Grade 6.35/11 kV

Test Voltage 22 kV for 5 Minute (3.5 Uo r.m.s)

Temperature Rating -15°C to +90°C SANS 6291 Partial Discharge Resistivity of Semi-conducting Screen SANS 6284-2 SANS 60332 Part-3-24 Reduced Flame Retardent Zero Halogen Emission SANS 60754-2

> D= Nominal Diameter of the Cable. d=Nominal Diameter of the Conductor

Marking & Packing

Minimum Installation Bending Radius

NEELKANTH CABLES, CABLE SIZE, 6.35/11 kV CU/XLPE/CTS/NHLSFR ELECTRIC CABLE, YEAR OF Marking over the sheath

MANUFACTURING

Shall be provided on outer sheath at every one Meter Sequentail Length Marking

20(D+d)

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- 1. COMPACTED COPPER CONDUCTOR
 2. CONDUCTOR SEMI-CON
 3. XLPE INSULATION
 4. INSULATION SEMI-CON
 5. COPPER TAPE SCREEN

- 6. PE OUTER SHEATH

DATA SHEET

SINGLE CORE XLPE UNARMOURED, UV STABILIZED POLYETHYLENE OUTER SHEATHED (PE) MEDIUM VOLTAGE CABLE

Single Core Cable Description: Copper Conductor, Semi-conducting conductor Screen, XLPE Insulated, Semi-conducting Insulation screen, Metallic screen over Individual Core, Overall UV Stabilized Polyethylene (PE) Outer Sheathed, Medium Voltage Unarmoured Cable.

NEELKANTH CABLES LIMITED Make Reference Standard As per SANS:1339:2017

6.35/11 kV Voltage Rating (Uo / U) Maximum Operating Voltage (Um) 12 kV Operating Temperature 90°C Max. Temp. During Short Circuit 250°C

Range of Product Single Core 50 Sq.mm up to 1000 Sq.mm

These Medium Voltage Single Core Cores Cables are Designed for Electricity Power Distributation, Suitable for Installation in Power Supply Stations, Commercial, Industrial and Urban Residential Networks, Indoors and in Cable Ducts, Outdoors, Undergrounds and as well as for Installation on Cable Trays for industries, Switchboards and the power Stations.

Construction

Annealed Plain Copper Compacted Round Stranded Conductors to carry Current and withstand Pulling Stresses During Cable Laying. Conductor

Conductors Complying with SANS 1411-1 Class-2

Inner Semi-Conducting Screen

Extruded Layer of Semi-Conducting Screen over Conductor to Smooth the Electric Field at the Conductor and Firmly Bonded to the Insulation to exclude all air voids ,and Prevent Concentration of electric field of the interface between the Insulation and the Inner Semi-Conductor. Semi-Conducting

Compound Complying with SANS 1339

Insulation The Insulation of XLPE (Cross-Linked Polyethylene) Rated Voltage, Lightning Overoltage, Switching Overvoltage, and Withstand the Various Voltage

Field Stress During the Cable Service Life.as per SANS 1411-4

Core Semi-Conducting Screen

Extruded Layer of Semi-Conducting Screen over the Insulation . The Screen is Tightly Fitted to the Insulation to Exclude all air Voids, Prevent

Concentration of electric field of the interface between the Insulation and the Semi-Conductor. Semi-Conducting Compound Complying with SANS 1339

The Metallic Screen Shall Consist of either Copper Tapes or a Concentric layer of Copper Wires . The Metallic Layer may be applied over the Individual Metallic Screen

Cores .Metallic Screen Provide no Electric Field outer side the Cable, An Active Conductor for the Capactive and Zero-Sequence short-circuit current, and

Filler (Optional) PVC or Polypropylene yarn

Outer Sheath The Over all Outer-sheath Comprises a layer of Extruded as per Requirement Polyethylene (PE) and Applied Over the Armour to Insulate the Mettalic

Screen From the Surrounding Medium, to Protact the Mettalic Screen From Corrosion, to Reduce the contribution of cables to Fire Propagation, and

Contribute to Mechanical Protection. Outer sheath Compound Complying with SANS 1411-7.

Colour: Black or as per Requirement

Technical Characteristic

Voltage Grade 6 35/11 kV

Test Voltage 22 kV for 5 Minute (3.5 Uo r.m.s)

-15°C to +90°C Temperature Rating Partial Discharge SANS 6291 Resistivity of Semi-conducting Screen SANS 6284-2 Minimum Installation Bending Radius 20(D+d)

D= Nominal Diameter of the Cable, d=Nominal Diameter of the Conductor

Marking & Packing

NEELKANTH CABLES, CABLE SIZE, 6.35/11 kV CU/XLPE/CTS/PE, ELECTRIC CABLE, YEAR OF Marking over the sheath

MANUFACTURING

Sequentail Length Marking Shall be provided on outer sheath at every one Meter

Cable Length Multiple of 250/500 or as per Requirement Wooden Drum Fully Packed with Lagging Type of Drum

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