

DATA SHEET

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

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

Make Reference Standard Voltage Rating (Uo / U) Maximum Operating Voltage (Um) Operating Temperature Max. Temp. During Short Circuit NEELKANTH CABLES LIMITED As per IEC 60502-2 18/30 kV 36 Kv 90°C 250°C

Three Core 50 Sq.mm up to 300 Sq.mm

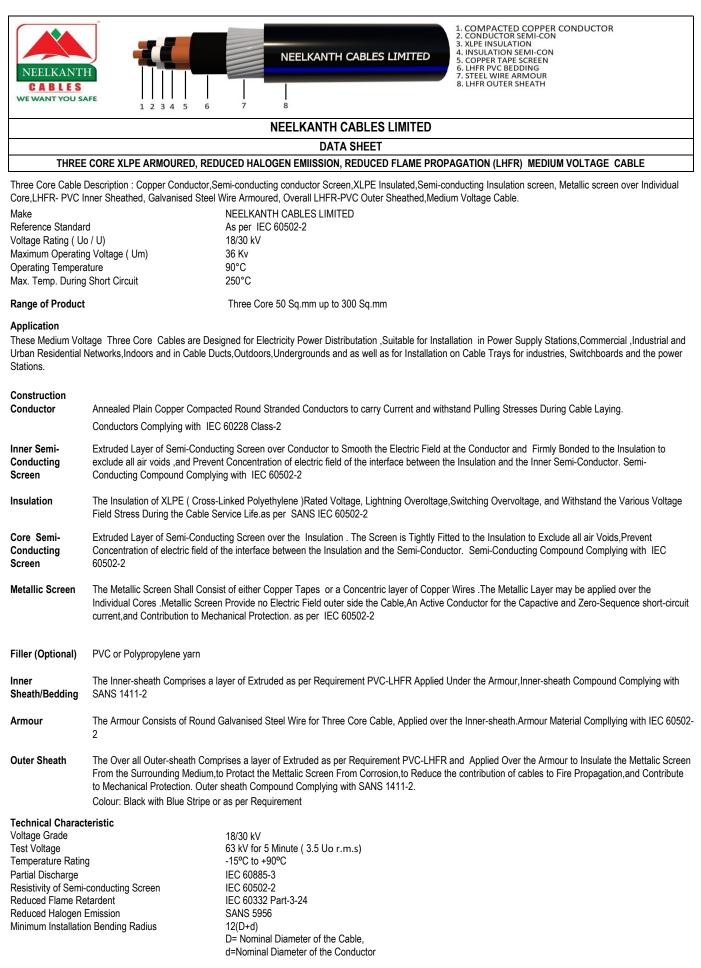
Range of Product

Application

These Medium Voltage Three 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 Conner Comna	cted Round Stranded Conductors to carry Current and withstand Pulling Stresses During Cable Laying.
Conductor	Conductors Complying with IEC	
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 IEC 60502-2	
Insulation		Linked Polyethylene)Rated Voltage, Lightning Overoltage,Switching Overvoltage, and Withstand the Various Voltage ervice Life.as per SANS IEC 60502-2
Core Semi- Conducting Screen	3	cting Screen over the Insulation . The Screen is Tightly Fitted to the Insulation to Exclude all air Voids, Prevent the interface between the Insulation and the Semi-Conductor. Semi-Conducting Compound Complying with IEC
Metallic Screen	allic 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-circl current, and Contribution to Mechanical Protection. as per IEC 60502-2	
Filler (Optional)	al) PVC or Polypropylene yarn	
Inner Sheath/Bedding	The Inner-sheath Comprises a layer of Extruded as per Requirement PVC Applied Under the Armour, Inner-sheath Compound Complying with IEC 60502-2	
Armour	The Armour Consists of Round Galvanised Steel Wire for Three Core Cable, Applied over the Inner-sheath. Armour Material Compllying with IEC 60502 2	
Outer Sheath	r Sheath The Over all Outer-sheath Comprises a layer of Extruded as per Requirement PVC-FR and Applied Over the Armour to Insulate the Mettalic Scree From the Surrounding Medium,to Protact the Mettalic Screen From Corrosion,to Reduce the contribution of cables to Fire Propagation,and Contrib to Mechanical Protection. Outer sheath Compound Complying with IEC 60502-2. Colour: Black with Red Stripe or as per Requirement	
Technical Charac	teristic	
Voltage Grade Test Voltage		18/30 kV 63 kV for 5 Minute (3.5 Uo r.m.s)
Temperature Ratin	g	-15°C to +90°C
Partial Discharge		IEC 60885-3
Resistivity of Semi-conducting Screen Flame Retardent		IEC 60502-2 IEC 60332 Part-3-24
Minimum Installation Bending Radius		12(D+d) D= Nominal Diameter of the Cable, d=Nominal Diameter of the Conductor
Marking & Packin	g	
Marking over the sl	•	NEELKANTH CABLES , CABLE SIZE, 18/30 KV CU/XLPE/CTS/PVC-FR/SWA/PVC-FR ELECTRIC CABLE , YEAR
Sequentail Length	Marking	OF MANUFACTURING Shall be provided on outer sheath at every one Meter
Cable Length	-	Multiple of 250/500 or as per Requirement
Type of Drum		Wooden Drum Fully Packed with Lagging

Data Sheet No.	10207	Page 1 of 1
Version	01	Issue Date: 29/04/2021



Marking & Packing Marking over the sheath	NEELKANTH CABLES , CABLE SIZE, 18/30 kV CU/XLPE/CTS/PVC-LHFR/SWA/PVC-LHFR ELECTRIC CABLE ,
Sequentail Length Marking Cable Length	YEAR OF MANUFACTURING Shall be provided on outer sheath at every one Meter Multiple of 250/500 or as per Requirement
Type of Drum	Wooden Drum Fully Packed with Lagging

Data Sheet No.	10208	Page 1 of 1
Version	01	Issue Date: 29/04/2021



NEELKANTH CABLES LIMITED DATA SHEET

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

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

Make	NEELKANTH CABLES LIMITED
Reference Standard	As per IEC 60502-2
Voltage Rating (Uo / U)	18/30 kV
Maximum Operating Voltage (Um)	36 Kv
Operating Temperature	90°C
Max. Temp. During Short Circuit	250°C

Range of Product

Version

Three Core 50 Sq.mm up to 300 Sq.mm

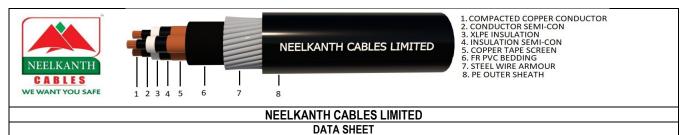
Application

These Medium Voltage Three 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 IEC 60228 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 IEC 60502-2			
Insulation		inked Polyethylene)Rated Voltage, Lightning Ov rvice Life.as per SANS IEC 60502-2	veroltage,Switching Overvoltage, and Withstand the Various Voltage	
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 IEC 60502 2			
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 IEC 60502-2			
Filler (Optional)	PVC or Polypropylene yarn			
Inner Sheath/Bedding	The Inner-sheath Comprises a layer of Extruded as per Requirement NHLSFR (Polyolefin) Applied Under the Armour, Inner-sheath Compound Complying with SANS 1411-5		olyolefin) Applied Under the Armour,Inner-sheath Compound	
Armour	The Armour Consists of Round Galvanised Steel Wire for Three Core Cable, Applied over the Inner-sheath. Armour Material Compllying with IEC 60502- 2			
Outer Sheath	heath The Over all Outer-sheath Comprises a layer of Extruded as per Requirement NHLSFR (Polyolefin) and Applied Over the Armour to Insulate the Screen From the Surrounding Medium, to Protact the Mettalic Screen From Corrosion, to Reduce the contribution of cables to Fire Propagation, an Contribute to Mechanical Protection. Outer sheath Compound Complying with SANS 1411-5.		sion, to Reduce the contribution of cables to Fire Propagation, and	
	Colour: Black with White Stripe o	r as per Requirement		
Technical Charac	teristic			
Voltage Grade		18/30 kV		
Test Voltage		63 kV for 5 Minute (3.5 Uo r.m.s)		
Temperature Ratin	g	-15°C to +90°C IEC 60885-3		
Partial Discharge Resistivity of Semi-	conducting Screen	IEC 60502-2		
Reduced Flame Re	•	IEC 60332 Part-3-24		
Zero Halogen Emission		SANS 60754-2		
Minimum Installation Bending Radius		12(D+d)		
		D= Nominal Diameter of the Cable, d=Nominal Diameter of the Conductor		
Marking & Packin	a			
			/ CU/XLPE/CTS/NHLSFR/SWA/NHLSFR ELECTRIC CABLE , YEAR	
- (OF MANUFACTURING	Notor	
		Shall be provided on outer sheath at every one Meter Multiple of 250/500 or as per Requirement		
-		Wooden Drum Fully Packed with Lagging		
	Data Sheet No.	10209	Page 1 of 1	

01

Issue Date: 29/04/2021



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

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

Make
Reference Standard
Voltage Rating (Uo / U)
Maximum Operating Voltage (Um)
Operating Temperature
Max. Temp. During Short Circuit

NEELKANTH CABLES LIMITED As per IEC 60502-2 18/30 kV 36 Kv 90°C 250°C

Range of Product

Three Core 50 Sq.mm up to 300 Sq.mm

Application

These Medium Voltage Three 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 IEC 60228 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 IEC 60502-2		•
Insulation		inked Polyethylene)Rated Voltage, Lightning Ov rvice Life.as per SANS IEC 60502-2	eroltage,Switching Overvoltage, and Withstand the Various Voltage
Core Semi- Conducting Screen			ghtly Fitted to the Insulation to Exclude all air Voids,Prevent i-Conductor. Semi-Conducting Compound Complying with IEC 60502-
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 IEC 60502-2		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Filler (Optional)	PVC or Polypropylene yarn		
Inner Sheath/Bedding	The Inner-sheath Comprises a layer of Extruded as per Requirement PVC-FR, Applied Under the Armour, Inner-sheath Compound Complying with SANS 1411-2		
Armour	The Armour Consists of Round Galvanised Steel Wire for Three Core Cable, Applied over the Inner-sheath. Armour Material Compllying with SANS 141 6		
Outer Sheath	ath The Over all Outer-sheath Comprises a layer of Extruded as per Requirement Polyethylene (PE) and Applied Over the Armour to Insulate the Me 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.		sion, to Reduce the contribution of cables to Fire Propagation, and
	Colour: Black or as per Requirem	nent	
Technical Characteristic Voltage Grade Test Voltage Temperature Rating Partial Discharge Resistivity of Semi-conducting Screen Minimum Installation Bending Radius		18/30 kV 63 kV for 5 Minute (3.5 Uo r.m.s) -15°C to +90°C IEC 60885-3 IEC 60502-2 12(D+d) D= Nominal Diameter of the Cable, d=Nominal Diameter of the Conductor	
Marking & Packing	9		
		MANUFACTURING	CU/XLPE/CTS/PVC-FR/SWA/PE, ELECTRIC CABLE, YEAR OF
Sequentail Length Cable Length	Marking	Shall be provided on outer sheath at every one Multiple of 250/500 or as per Requirement	Meter
Type of Drum		Wooden Drum Fully Packed with Lagging	
	Data Sheet No.	10210	Page 1 of 1

Data Sheet No.	10210	Page 1 of 1
Version	01	Issue Date: 29/04/2021



DATA SHEET

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

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

Make	NEELKANTH CABLES LIMITED
Reference Standard	As per IEC 60502-2
Voltage Rating (Uo / U)	18/30 kV
Maximum Operating Voltage (Um)	36 Kv
Operating Temperature	90°C
Max. Temp. During Short Circuit	250°C

Range of Product

Three Core 50 Sq.mm up to 300 Sq.mm

Application

These Medium Voltage Three 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 IEC 60228 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 exclud 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 IEC 60502-2			
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 IEC 60502-2		reroltage,Switching Overvoltage, and Withstand the Various Voltage	
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 IEC 60 2			
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 Individua Cores . Metallic Screen Provide no Electric Field outer side the Cable, An Active Conductor for the Capactive and Zero-Sequence short-circuit current, an Contribution to Mechanical Protection. as per IEC 60502-2			
Filler (Optional)) PVC or Polypropylene yarn			
Inner Sheath/Bedding	The Inner-sheath Comprises a layer of Extruded as per Requirement PVC Applied Under the Armour, Inner-sheath Compound Complying with IEC 609 2		d Under the Armour, Inner-sheath Compound Complying with IEC 60502-	
Outer Sheath	The Over all Outer-sheath Comprises a layer of Extruded as per Requirement PVC-FR 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 Mechanical Protection. Outer sheath Compound Complying with IEC 60502-2. Colour: Black with Red Stripe or as per Requirement			
Technical Characteristic Voltage Grade Test Voltage Temperature Rating Partial Discharge Resistivity of Semi-conducting Screen Flame Retardent Minimum Installation Bending Radius		18/30 kV 63 kV for 5 Minute (3.5 Uo r.m.s) -15°C to +90°C IEC 60885-3 IEC 60502-2 IEC 60332 Part-3-24 15(D+d) D= Nominal Diameter of the Cable, d=Nominal Diameter of the Conductor		
Marking & Packin		NEELKANTH CABLES , CABLE SIZE, 18/30 k	/ CU/XLPE/CTS/PVC-FR/PVC-FR ELECTRIC CABLE , YEAR OF	
Marking over the sheath		MANUFACTURING		
		Shall be provided on outer sheath at every one Meter Multiple of 250/500 or as per Requirement		
Type of Drum		Wooden Drum Fully Packed with Lagging		
	Data Sheet No.	10211	Page 1 of 1	

Data Sheet No.	10211	Page 1 of 1
Version	01	Issue Date: 29/04/2021





6

1. COMPACTED COPPER CONDUCTOR 2. CONDUCTOR SEMI-CON 3. XLPE INSULATION 4. INSULATION SEMI-CON 5. COPPER TAPE SCREEN 6. LHFR BEDDING 7. LHFR OUTER SHEATH

NEELKANTH CABLES LIMITED

DATA SHEET

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

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

Make	NEELKANTH CABLES LIMITED
Reference Standard	As per IEC 60502-2
Voltage Rating (Uo / U)	18/30 kV
Maximum Operating Voltage (Um)	36 Kv
Operating Temperature	90°C
Max. Temp. During Short Circuit	250°C

Range of Product

Three Core 50 Sq.mm up to 300 Sq.mm

Application

These Medium Voltage Three 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 IEC 60228 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 IEC 60502-2	
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 IEC 60502-2	
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 IEC 60502-2	
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 IEC 60502-2	
Filler (Optional)	PVC or Polypropylene yarn	
Inner Sheath/Bedding	The Inner-sheath Comprises a layer of Extruded as per Requirement PVC-LHFR Applied Under the Armour, Inner-sheath Compound Complying with SANS 1411-2	
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 Test Voltage Temperature Rating Partial Discharge Resistivity of Semi-conducting Screen Reduced Flame Retardent Reduced Halogen Emission Minimum Installation Bending Radius		18/30 kV 63 kV for 5 Minute (3.5 Uo r.m.s) -15°C to +90°C IEC 60885-3 IEC 60502-2 IEC 60332 Part-3-24 SANS 5956 15(D+d) D= Nominal Diameter of the Cable, d=Nominal Diameter of the Conductor
Marking & Packing Marking over the sheath Sequentail Length Marking Cable Length		NEELKANTH CABLES , CABLE SIZE, 18/30 kV CU/XLPE/CTS/PVC-LHFR/PVC-LHFR ELECTRIC CABLE , YEAR OF MANUFACTURING Shall be provided on outer sheath at every one Meter Multiple of 250/500 or as per Requirement Wooden Drum Fully Packed with Lagging

Data Sheet No.	10212	Page 1 of 1
Version	01	Issue Date: 29/04/2021





NEELKANTH CABLES LIMITED

1. COMPACTED COPPER CONDUCTOR 2. CONDUCTOR SEMI-CON 3. XLPE INSULATION 4. INSULATION SEMI-CON 5. COPPER TAPE SCREEN 6. NHLSFR BEDDING 7. NHLSFR OUTER SHEATH

NEELKANTH CABLES LIMITED

DATA SHEET

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

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

Make	NEELKANTH CABLES LIMITED
Reference Standard	As per IEC 60502-2
Voltage Rating (Uo / U)	18/30 kV
Maximum Operating Voltage (Um)	36 Kv
Operating Temperature	90°C
Max. Temp. During Short Circuit	250°C

Range of Product

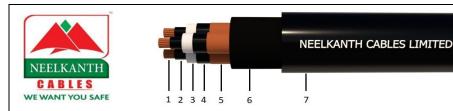
Three Core 50 Sq.mm up to 300 Sq.mm

Application

These Medium Voltage Three 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 IEC 60228 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 IEC 60502-2		
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 IEC 60502-2		
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 IEC 60502-2		
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 IEC 60502-2		
Filler (Optional)	PVC or Polypropylene yarn		
Inner Sheath/Bedding	The Inner-sheath Comprises a layer of Extruded as per Requirement NHLSFR(Polyolefin) Applied Under the Armour, Inner-sheath Compound Complying with SANS 1411-5		
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		
Temperature Rating -15°C to +90°C Partial Discharge IEC 60885-3 Resistivity of Semi-conducting Screen IEC 60502-2 Reduced Flame Retardent IEC 60332 Part-3 Zero Halogen Emission SANS 60754-2 Minimum Installation Bending Radius 15(D+d) D= Nominal Dian		63 kV for 5 Minute (3.5 Uo r.m.s) -15°C to +90°C IEC 60885-3 IEC 60502-2 IEC 60332 Part-3-24 SANS 60754-2	
Marking & Packing	g		
Marking over the sheath NEELKANTH CABLES, CABLE SIZE, 18/30 kV CU/XLPE/CTS/NHLSFR/NHLSFR ELECTRIC CABLE, YEA MANUFACTURING		/ CU/XLPE/CTS/NHLSFR/NHLSFR ELECTRIC CABLE , YEAR OF	
Sequentail Length Cable Length Type of Drum	o i i i		Meter
	Data Sheet No.	10213	Page 1 of 1

Data Sheet No.	10213	Page 1 of 1
Version	01	Issue Date: 29/04/2021



NEELKANTH CABLES LIMITED

DATA SHEET THREE CORE XLPE UNARMOURED, UV STABILIZED POLYETHYLENE OUTER SHEATHED (PE) MEDIUM VOLTAGE CABLE

1. COMPACTED COPPER CONDUCTOR 2. CONDUCTOR SEMI-CON 3. XLPE INSULATION 4. INSULATION SEMI-CON 5. COPPER TAPE SCREEN 6. FR PVC BEDDING 7. PE OUTER SHEATH

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

Make	NEELKANTH CABLES LIMITED
Reference Standard	As per IEC 60502-2
Voltage Rating (Uo / U)	18/30 kV
Maximum Operating Voltage (Um)	36 Kv
Operating Temperature	90°C
Max. Temp. During Short Circuit	250°C

Range of Product

Three Core 50 Sq.mm up to 300 Sq.mm

Application

These Medium Voltage Three 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 IEC 60228 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 IEC 60502-2		
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 IEC 60502-2		
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 IEC 60502-2		
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 IEC 60502-2		
Filler (Optional)	PVC or Polypropylene yarn		
Inner Sheath/Bedding	The Inner-sheath Comprises a layer of Extruded as per Requirement PVC-FR Applied Under the Armour, Inner-sheath Compound Complying with iec 60502-2		
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 Test Voltage Temperature Rating Partial Discharge Resistivity of Semi-conducting Screen Minimum Installation Bending Radius		18/30 kV 63 kV for 5 Minute (3.5 Uo r.m.s) -15°C to +90°C IEC 60885-3 IEC 60502-2 15(D+d) D= Nominal Diameter of the Cable, d=Nominal Diameter of the Conductor	
Marking & Packing	g		
Marking over the sheath		NEELKANTH CABLES , CABLE SIZE, 18/30 kV CU/XLPE/CTS/PVC-FR/PE, ELECTRIC CABLE , YEAR OF MANUFACTURING	
Sequentail Length Marking S		Shall be provided on outer sheath at every one Meter	
Cable Length Type of Drum	5		
	Data Sheet No.	10214	Page 1 of 1

Data Sheet No.	10214	Page 1 of 1
Version	01	Issue Date: 29/04/2021