

# Caledonian Medium Voltage Cables

www.caledonian-cables.com

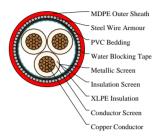
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### 6.35/11kV XLPE Insulated, MDPE Sheathed, Sheathed, Armoured MV Power Cables (Three Cores)

N2XSEYR2Y 3C95(CU/XLPE/CS/PVC/SWA/PE 6.35/11kV Class 2)

Caledonian No.: FGD400 12RVMX-R 3C95





### **APPLICATIONS**

They are suitable for installation mostly in power supply stations, indoors and in cable ducts,outdoors,underground and in water as well as for installation on cable trays for industries, switchboards and power stations.

#### **STANDARDS**

IEC 60502-2

### **CABLE CONSTRUCTION**

Conductor: Plain annealed bare copper wire, stranded according to IEC 60228 class 2.

Conductor Screen: Extruded layer of semi-conducting cross-linkable compound is applied over the conductor and shall cover the surface completely.

Insulation: Extruded cross-linked polyethylene (XLPE) according to IEC 60502-2&IEC 60811.

Insulaton Screen: Extruded layer of semi-conducting cross-linkable compound is applied over the insulation. Inner Covering & Fillers: Cables shall have an inner covering over the laid-up cores. The inner covering and fillers are made of non hygroscopic material like polypropylene, except if the cable is to be made longitudinally watertight. The inner covering is extruded in general but may be lapped if the interstices between the cores are filled.

Metallic Screen: The metallic layer shall be applied over each core or applied as a collective screen. The metallic screen shall consist of either copper tapes or a concentric layer of copper wires or a combination of tapes and wires.

Waterproof: Water blocking tape.

Bedding: Thermoplastic PVC compound.

Armour: Round Steel Wire Armour.

Outer Sheath: Thermoplastic MDPE compound Type ST7 according to IEC 60502-2.

### **COLOUR CODE**

Insulation Colour: Natural colouring with coloured stripe (brown, black, grey).

Sheath Colour: Red, other colours can be offered upon request.

### PHYSICAL AND THERMAL PROPERTIES



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Rated Voltage Uo/U:6.35/11KV
Operating Voltage (Um):12KV
Testing Voltage (rms):25.5KV
Operating Temperature: up to 90°C

Temperature Range: -5°C

Short Circuit Temperature( 5 seconds maximum duration ): 250°C

Bending Radius:15 x OD

### **Electrical Properties**

Current Rating Conditions: Ground Temperature: 20°C Ambient Temperature (air): 30°C

Depth of Soil: 0.8m

Thermal Resistance of Soil: 1.5K•m/W

### TECHNICAL CHARACTERISTICS

Nom. Cross- Section Area	DC Resistance	AC Resistance	Short Circuit Rating of Conductor CU/AL 1s	Capacitance	Charging Current	Short Circuit Rating of Metallic Screen Per Core 1 sec	Reactance	Inductance
mm²	μΩ/m	μΩ/m	kA	pF/m	mA/m	kA	μΩ/m	nH/m
95	193	248	13.3	334	0.67	4.3	99	320

### **DIMENSION AND PARAMETERS**

Nominal Cross- sectional Area	Nominal Insulation Thickness	Nominal Bedding Thickness	Metallic Screen Area	Nominal Sheath Thickness	Nominal Armour Wire Diameter	Approx. Overall Diameter	Approx. Weight
mm²	mm	mm	mm²	mm	mm	mm	kg/km
95	3.4	1.5	16	2.9	2.5	61.2	7180

### **Current Rating**

Nominal Cross- Section Area	Buried direct in Ground (Trefoil)	Buried direct in Ground (Flat spaced)	Laid in Single Way Duct (Trefoil)	Laid in Single Way Duct (Flat Touching)	Laid in Air (Trefoil)	Laid in Air (Flat Touching)	Laid in Air (Flat Spaced)
mm²	А	А	А	А	А	А	А
95	263	263	232	232	307	307	307



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Rated voltage