MPRXCX® FLEXISHIP® EMC 1.8/3 (3.6) kV

MPRXCX® FLEXISHIP EMC 1.8/3kV 3x95+3G16

Reference: 13136720

CONTACT

Market information
industryprojects.business@lynxeogroup.com

Cables for variable frequency drives

STANDARDS

Product IEC 60228

Installation IEC 60092-350; IEC 60092-353; IEC 60092-360

Test a; IEC 60332-1; IEC 60332-3-22; IEC 60754-1; IEC 61034

APPLICATION

Motor supply cable for frequency converters controlled low voltage AC drives on ships, called VFD applications. MPRXCX® FLEXISHIP® EMC cables are designed with a special coverage, copper-polyester tape and braid, which provide a 100% EMC protection. Insulation with low dielectric constant is used to reduce reflected wave voltage peak magnitude.
Symmetrical insulated ground wires, placed in corner, can reduce reflected wave and return common mode noisy currents back to the drive. Enhanced insulation is implemented for 1.8/3(3.6) kV cable to fulfil periodic peak voltage up to 3 kV due to harmonics.
These cables are used on board of ships in all locations for fixed installations.

Design

1. **Conductor**
   Flexible bare copper
   Class 5
2. **Insulation**
   XLPE (cross-linked polyethylene)
3. **Optional**
   Symmetrical return earth conductors
4. **Inner covering**
   Lapped or extruded
5. **Screen / Armouring**
   Copper / polyester tape
   Bare copper braid
6. **Outer sheath**
   Polyolefin SHF1
   Colour: red

Example of marking:
LYNXEO 279 MPRXCX FLEXISHIP EMC 1.8/3kV "n"x"s"mm2 90°C
IEC 60092-353 IEC 60332-3-22 Cat. A ww/yy + metric marking

Core Identification
3 cores: black-grey-brown
Earth: green/yellow split in 3 conductors

Conductor flexibility
Flexible class 5

Halogen free
IEC 60754-1

Rated Voltage Uo/U (Um)
1.8 / 3 (3.6) kV

Fire retardant
EN IEC 60332-3-22 (cat A)

Flame retardant
IEC 60332-1

Smoke density
IEC 61034

Gases corrosivity
IEC 60754-2

Electro magnetic interference resistance
Yes

All drawings, designs, specifications, plans and particulars of weights, size and dimensions contained in the technical or commercial documentation of Lynxeo is indicative only and shall not be binding on Lynxeo or be treated as constituting a representation on the part of Lynxeo.

MPRXCX® FLEXISHIP® EMC 1.8/3 (3.6) kV

MPRXCX® FLEXISHIP EMC 1.8/3kV 3x95+3G16

CHARACTERISTICS

Construction characteristics	
Conductor material	Bare copper
Conductor flexibility	Flexible class 5
Insulation	XLPE (Cross-linked Polyethylene)
Screen	Copper - Polyester tape
Inner sheath	Lapped or extruded inner covering
Armour type	Bare copper braid
Outer sheath	Polyolefin
With Green/Yellow core	Yes
Sheath colour	Red
Halogen free	IEC 60754-1
Construction type	3x95+3G16
Dimensional characteristics	
Number of cores	3
Conductor cross-section	95 mm²
Nominal outer diameter	42.4 mm
Minimum outer diameter	44.0 mm
Maximum outer diameter	48.5 mm
Approximate weight	4678 kg/km
Earth conductor cross section	16 mm²
Number of auxiliary conductors	3
Electrical characteristics	
Permissible current rating in open air	205 A
Rated Voltage Uo/U (Um)	1.8 / 3 (3.6) kV
Usage characteristics	
Fire retardant	EN IEC 60332-3-22 (cat A)
Flame retardant	IEC 60332-1
Smoke density	IEC 61034
Gases corrosivity	IEC 60754-2
Electro magnetic interference resistance	Yes
Operating temperature, range	-30 ... 80 °C
Max. conductor temperature in service	90 °C

All drawings, designs, specifications, plans and particulars of weights, size and dimensions contained in the technical or commercial documentation of Lynxeo is indicative only and shall not be binding on Lynxeo or be treated as constituting a representation on the part of Lynxeo.