

# XTREM OFFSHORE RFOU VFD EMC

## Offshore power VDF EMC

IEC 60092-353 / NEK TS 606



## DESIGN

### 1. Conductor

Class 5 tinned copper, based on IEC 60228.

### 2. Grounding conductor

From 6 mm<sup>2</sup>, the grounding conductor is divided into three conductors; the equivalent section of the three protective conductors together is approximately 50% of the section of the phase conductor.

### 3. Insulation

Halogen Free Ethylene propylene, type EPR according to IEC 60092-351.

The standard identification is the following:

4G ..... brown + black + grey + green/yellow (up to 4 mm<sup>2</sup> conductors)

3x + 3G..... brown + black + grey + green/yellow (3x) (from 6 mm<sup>2</sup> conductors)

### 4. Bedding

Halogen Free compound.

### 5. Screen

Copper-polyester tape helically placed over the bedding. The tape serves as a screen. Over the tape there is a tinned copper braid screen. The tape and the braid act as a double screen to cut out all of the electromagnetic interference. The screen has a cover of 100% and its total section is approximately 10% of one of the conductors.

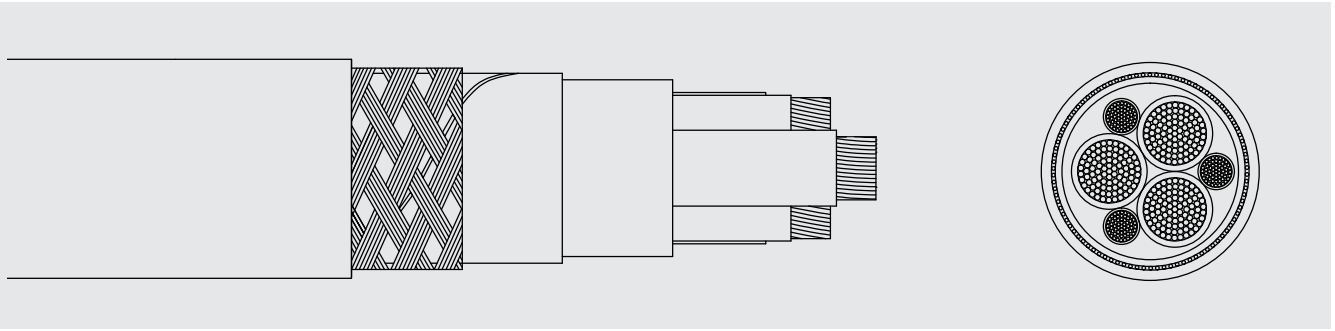
### 6. Outer sheath

Mud resistant thermosetting compound, black colour, low smoke and halogen free, type SHF MUD.

## APPLICATIONS

Our offshore power Variable Frequency Drive (VFD) cables have been designed for use in drive systems where variable frequency drives are used to protect equipment against the effects of electro-magnetic interference (EMI). As well as the appropriate screening the outer-sheath is based on IEC 60092-353 and NEK TS 606. Suitable for fixed installation.





## CHARACTERISTICS



### Electrical performance

LOW VOLTAGE 0,6/1kV



### Standards

IEC 60092-353 / NEK TS 606



### Approvals

DNV-GL  
ABS  
CE  
ROHS



### Thermal performance

Maximum service temperature: 90°C.  
Maximum short-circuit temperature: 250°C (maximum 5 s).  
Minimum service temperature: fixed -40°C mobile -25°C.



### Fire performance

Flame non-propagation based on UNE-EN 60332-1 and IEC 60332-1.  
Fire non-propagation based on UNE-EN 60332-3-22 and IEC 60332-3-22.  
LSZH (Low Smoke Zero Halogen) based on UNE-EN 60754-1 and IEC 60754-1.  
Low smoke emission based on UNE-EN 61034 and IEC 61034.: Light transmittance > 60%  
Low corrosive gases emission based on UNE-EN 60754-2 and IEC 60754-2.



### Mechanical performance

Mechanical stress impact: AG3. High severity  
Minimum bending radius: 6 x cable diameter.



### Chemical performance

Chemical & oil resistance: excellent.



### Water performance

Water resistance: AD6 waves.



### Other

Metre by metre marking.



### Installation conditions

Open air  
Wall attached  
On tray  
In conduit



### Applications

Oil rigs  
Marine use  
Public places



### Mud resistance

According to NEK TS 606



## DIMENSIONS

Cross section (mm <sup>2</sup> )	Diameter (mm)	Weight (Kg/km)	Open Air 45°C (A)	Voltage drop (V/A·km)	Max. Conductor resistance at 20°C (Ohm/Km)
3 x 25 + 3G6	25,7	1.610	110	1,76	0,7950
3 x 35 + 3G6	28,3	2.070	137	1,25	0,5650
3 x 50 + 3G10	33,4	2.700	167	0,87	0,3930
3 x 70 + 3G16	37,0	3.600	214	0,61	0,2770
3 x 95 + 3G16	42,5	4.800	259	0,46	0,2100
3 x 120 + 3G25	45,9	5.865	301	0,36	0,1640
3 x 150 + 3G25	51,3	7.250	347	0,29	0,1320
3 x 185 + 3G35	56,2	9.000	397	0,24	0,1080
3 x 240 + 3G50	62,8	10.800	468	0,18	0,0817