



## TYPE APPROVAL CERTIFICATE

Certificate No.

: CPH15582-EL007

Initial Approval: 25th April, 2012.

Product

: Electric Cable

Manufacturer

: Helkama Bica Oy

Lakimiehenkatu 4, FIN-20780 Kaarina, Finland

Product Description: Type: LKSM-VDF 1.8/3 kV

Application : Halogen Free, flame retardant, screened power and control cable, design to meet requirements for

Variable Frequency Drives (VFD)

" See Appendix 1"

Approval Condition: Individual Product Certification is required.

that the above-mentioned product has been approved THIS IS TO CERTIFY in accordance with the relevant requirement of this Society's Rules and / or of the recognized standards as follows and entered in the "List of Approved Manufacturers and Type Approved Equipment".

Pt. 6, Ch. 1, Sec. 4 of the Rules for Classification, Steel Ships and IEC 60092-350, -351, -353, -359, 60332-3-22, 60754-1/-2, 61034

This Certificate is valid until 24th April, 2017. Issued at Daejeon, Korea on 25th April, 2012.

OREAN REGISTER OF SHIPPING

General Manager of Materials and Equipment Team

Note: 1: The approval will be automatically suspended and the Certificate become invalid from the expiry date of the Certificate in the event that the extension has not been granted or the renewal of the Certificate is not underway.

2: The manufacturer should notify this Society of any modification or changes that may affect the validity of this Certificate.

## Appendix 1

## Product Description and/or Approval Condition

Certificate No: CPH15582-EL007

Date of Issue: 25th April, 2012.

1. Product Description (Type : LKSM-VDF 1.8/3 kV)

- Rated Voltage : 1.8/3 kV

 Conductor Stranded, plain annealed copper Class 2 or Class 5

: HF XLPE Insulation

 Armour : Braided armour of annealed copper wires

Thermoplastic SHF1 Max. 90 °C - Sheath

- Temperature

- Number of cores Cross-sectional area 16 mm up to 300 mm 16 mm up to 240 mm

3 95 mm up to 150 mm with additional protective earth(PE) 3×16 mm

## 2. Documentation;

- Specification no. HBKQ 9 spec. 61 - Test report no. BV TT LKSM-VFD  $3\times120$  (2009.4.15)

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