



TYPE APPROVAL CERTIFICATE

No. ELE066114CS/023

This is to certify that the product below is found to be in compliance with the applicable requirement of the RINA type approval system.

<i>Description</i>	ELECTRIC CABLES
<i>Type</i>	LKEM-HF 0.6/1 kV.
<i>Applicant</i>	HELKAMA BICA OY LAKIMIEHENKATU 4 FIN 20780 KAARINA FINLAND
<i>Manufacturer</i>	HELKAMA BICA OY
<i>Place of manufacture</i>	LAKIMIEHENKATU 4 FIN 20780 KAARINA FINLAND
<i>Reference standards</i>	RINA Rules for the Classification of Ships, Part C, Chapter 2, Section 9; RINA Rules for Testing and Certification of Marine Materials and Equipment; IEC 60092-350; IEC 60092-353.

Issued in **Genova** on **April 7, 2015**. This Certificate is valid until **April 7, 2020**

RINA Services S.p.A.
Valerio Bonanni

This certificate consists of this page and 1 enclosure



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LKEM-HF 0.6/1 kV.

Materials/Components

Shipboard power and control cables, halogen free with low smoke emission, flame retardant, for switchboard internal wiring.

Rated voltage: 0.6/1 kV

Type: LKEM-HF 0.6/1 kV

Marking: LKEM-HF - n X s mm² - 0.6/1 kV - +90°C - HELKAMA - month-year - lenght marking.

Construction:

conductor: stranded plain or tinned copper

insulation: HF90

Max. conductor temperature: +90°C.

In accordance to rules IEC 60228 cl.5; IEC 60092-350; IEC 60092-351; IEC 60092-353; IEC 60092-359; IEC 60092-360 as applicable; IEC 60332-1-2; IEC 60754-1; IEC 60754-2; IEC 601034-1; IEC 61034-2; RINAMIL Rules.

Technical specification: HBKQ 9 spec.33 dated 03/08/2010; TS/LKEM-HF dated 26/10/2010.

Note/Remarks:

The product is subject to the compliance with RINA Rules and Standards mentioned on the certificates

Type Approval certifies that a representative sample of the products has been found to meet the applicable design criteria

Any modification of change shall not be valid until approval is granted by RINA as a result of due assessment.

The present Certificate cancel and supersedes the previous N, ELE438810CS/001 dated September 7, 2011.

Other Place of Manufacturing:

a) HELKAMA BICA (SHANGHAI) Co., Ltd.

Plot 1-2 Minghang Export Processing Zone, Shanghai, 201401 P:R.C.

b) HELKAMA BICA Oy

Lasitehtaankatu 12, FI-10960 Hanko, Finland.

 **Genova April 7, 2015**