



TYPE APPROVAL CERTIFICATE
No. ELE066114CS/003

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>	LKAM-HF 150/250V (300V); LKAM-SHF2 150/250V (300V).
<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 60092-376.

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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LKAM-HF 150/250V (300V)

LKAM-SHF2 150/250V (300V).

Materials/Components

Shipboard screened control and instrumentation cables, flame retardant, for fixed installations in marine and offshore units.

Rated voltage: 150/250 V (300V)

Type: LKAM-HF 150/250 V (300V); LKAM-SHF2 150/250 V (300V).

Marking: Cable type - n X s mm² - 250 V - +90°C - IEC 60092-376 - 60332-3-22 HELKAMA - month-year - length marking.

Construction:

conductor: stranded plain or tinned copper conductor (IEC 60228 Class 2).

insulation: XLPE

stranding: cores stranded together.

covering: wrapped tape(s) of non-hygrosopic material

collective screen: laminated electrostatic screen. Aluminium polyester tape with a drain wire

sheath: SHF1

Max. conductor temperature: +90°C.

In accordance to rules IEC 60228 cl.2; IEC 60092-350; IEC 60092-351; IEC 60092-376; IEC 60092-359; IEC 60092-360 as applicable; IEC 60332-1-2; IEC 60332-3-22; IEC 60754-1; IEC 60754-2; IEC 61034-1; IEC 61034-2; RINAMIL rules.

Conductor size:

cross sectional area 0.5, 0.75, 1.0, mm².

Technical specification: HBKQ 9 spec.66 dated 29/07/2010/dk.

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.

Other Place of Manufacturing:

HELKAMA BICA (SHANGHAI) Co., Ltd
Plot 1-2, MingHang Export Processing
Zone, SHANGHAI, 201401 P.R.C.

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Genova April 7, 2015