



**TYPE APPROVAL CERTIFICATE**  
No. **ELE196009CS/002**

**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>	<b>ELECTRIC CABLES</b>
<i>Type</i>	<b>LKSM-HF 0.6/1 kV</b>
<i>Applicant</i>	<b>HELKAMA BICA OY LAKIMIEHENKATU 4 FIN 20780 KAARINA FINLAND</b>
<i>Manufacturer</i>	<b>HELKAMA BICA OY</b>
<i>Place of manufacture</i>	<b>LAKIMIEHENKATU 4 FIN 20780 KAARINA FINLAND</b>
<i>Reference standards</i>	<b>IEC 60092-350; IEC 60092-353</b>

Issued in **Genoa** on **April 8, 2010**. This Certificate is valid until **April 8, 2015**

*Valerio Bonanni*

RINA  
**Valerio Bonanni**

This certificate consists of this page and 1 enclosure





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**LKSM-HF 0.6/1 kV**

**Materials/Components**

Shipboard power cables, flame retardant, low smoke emission, halogen free.

Rated voltage: 0.6/1 kV

Type: LKSM-HF 0.6/1 kV

Marking: "lot number" LKSM-HF n x s mm<sup>2</sup> 0.6/1 kV 90°C IEC 60092-353 IEC 60332-3-22 HELKAMA  
"month-year" "length marking"

**Construction:**

conductor: stranded red copper (IEC 60228 Class 2 or Class 5)

insulation: XLPE

inner covering: separator tape wrapping

screen: plain copper wire braid

sheath: SHF1

In accordance to IEC 60228 cl.2 and cl.5; IEC 60092-350; IEC 60092-351; IEC 60092-353; IEC 60092-359; IEC 60754-1; IEC 61034-1; IEC 61034-2; IEC 60332-1; IEC 60332-3 cat.A.

Maximum conductor temperature: 90°C

Number of conductors: 1 - cross sectional area 1,5 - 300 mm<sup>2</sup>

Number of conductors: 2 - cross-sectional area 1,5 - 95 mm<sup>2</sup>

Number of conductors: 3 - cross-sectional area 1,5 - 240 mm<sup>2</sup>

Number of conductors: 4 - cross-sectional area 1,5 - 120 mm<sup>2</sup>

Number of conductors: 5 - cross-sectional area 1,5- 25 mm<sup>2</sup>

Number of conductors: 7,10,12,14,16,19,24,27,37 - cross sectional area 1,5 - 2,5 mm<sup>2</sup>.

Technical Specification: HELKAMA SPECIFICATION HBKQ 9.SPEC.5 1.11.2006/dk.



**Genoa April 6, 2010**