



TYPE APPROVAL CERTIFICATE  
No. ELE030518XT/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>U-HFFR m; U-HFFRA m; 0.6/1 kV</b>
<i>Applicant</i>	<b>UNIKA UNIVERSAL KABLO SANAYI VE TICARET A.S. VELIKOY SANAYI BOLGESI, CERKEZKOY Tekirdag TURKEY</b>
<i>Manufacturer</i>	<b>UNIKA UNIVERSAL KABLO SANAYI VE TICARET A.S.</b>
<i>Place of manufacture</i>	<b>VELIKOY SANAYI BOLGESI, CERKEZKOY Tekirdag TURKEY</b>
<i>Reference standards</i>	<b>IEC 60092-350; IEC 60092-353; IEC 60331-21.</b>

Issued in **ISTANBUL** on **April 13, 2018**. This Certificate is valid until **April 14, 2023**



  
RINA Services S.p.A.  
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This certificate consists of this page and 1 enclosure





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**U-HFFR m**

**U-HFFRA m**

**0.6/1 kV**

**Components**

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

Rated voltage: 0.6/1 kV

Type: U-HFFR m; U-HFFRA m.

Marking: Manufacturer name "type" 0.6/1 kV n x s mm<sup>2</sup> IEC 60332-3A IEC 60331 year of manufacture

**Construction:**

conductor: plain or tinned stranded copper

mica tape: hellically applied fire resistant mica tape

insulation: XLPE

inner covering: halogen-free flame retardant compound

tape: polyester tape

armour: plain or tinned copper wire braid

outer sheath:SHF1

In accordance with IEC 60228 (class. 2 or class. 5); IEC 60092-350; IEC 60092-360; IEC 60092-353; IEC 60332-1; IEC 60331; IEC 60332-3 Cat.A; IEC 60754-1; IEC 60754-2; IEC 61034-1; IEC 61034-2; RINAMIL Rules.

Maximum conductor temperature: 90°C

Number of cores: 1 - cross sectional area from 1 to 300 mm<sup>2</sup>

Number of cores: 2 - cross sectional area from 1 to 95 mm<sup>2</sup>

Number of cores: 3 - cross sectional area from 1 to 240 mm<sup>2</sup>

Number of cores: 4 - cross sectional area from 1 to 150 mm<sup>2</sup>

Number of cores from 5 to 37 - cross sectional area 1, 1.5, 2.5 mm<sup>2</sup>

Test report: UNIKA n. 726 dated 10/01/2008 & UNIKA dated 12/04/2018.

Technical Specification: UNIKA N. 500/TOVD/031 dated 27/12/2006 Rev.1 dated 01/11/2007.

This certificate annuls and replaces previous certificate no: ELE070117XT/012

**İSTANBUL April 13, 2018**



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