

Place of manufacture

TYPE APPROVAL CERTIFICATE No. ELE015123XT/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.

| | Description | ELECTRIC CABLES |
|--|-------------|-----------------|
|--|-------------|-----------------|

Type U-HFFRAT m; U-HFFRAT m (I); U-HFFRAT m (C);

U-HFFRAT m (I+C)

Applicant UNIKA UNIVERSAL KABLO SANAYI VE TICARET A.S.

VELIKOY SANAYI BOLGESI, CERKEZKOY Tekirdag

TURKEY

Manufacturer UNIKA UNIVERSAL KABLO SANAYI VE TICARET A.S.

VELIKOY SANAYI BOLGESI, CERKEZKOY Tekirdag

TURKEY

Reference standards IEC 60092-350; IEC 60092-376; IEC 60331-21; RINA Rules for

the Classification of Ships; RINA Rules for Testing and Certification of Marine Materials and Equipment.

Issued in ISTANBUL on March 24, 2023. This Certificate is valid until March 25, 2028

RINA Services S.p.A.

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This certificate consists of this page and 1 enclosure





TYPE APPROVAL CERTIFICATE

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U-HFFRAT m

U-HFFRAT m (I)

U-HFFRAT m (C)

U-HFFRAT m (I+C)

Components

Shipboard control, instrumentation and communication cables, flame retardant, fire resisting, halogen free, low smoke emission.

Rated voltage: 250 V

Type: U-HFFRAT m; U-HFFRAT m (I); U-HFFRAT m (C); U-HFFRAT m (I+C).

Marking: Manufacturer name "type" 250 V n x p x s mm2 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 tape: polyester tape

drain wire: plain or tinned copper wire

individual screen: (I) - metal coated polyester tape collective screen: (C) - metal coated polyester tape

tape: polyester tape

armour: plain or tinned copper wire braid

outher sheath: SHF1

In accordance with IEC 60228 (class. 2 or class. 5); IEC 60092-350; IEC 60092-360; IEC 60092-376; 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, 2, 3, 4, 5, 7, 10, 12, 16, 19, 24, 27, 37 - cross sectional area 0.50, 0.75, 1, 1.5,2.5 mm2

Test report: UNIKA n.1013 dated 10/01/2008 & UNIKA dated 12/04/2018.

Technical Specification: UNIKA N. 500/TOVD/033 dated 27/12/2006 Rev. 1 dated 01/11/2007.

This certificate annuls and replaces previous certificate no: ELE030518XT/003.





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