



# NIPPON KAIJI KYOKAI

Certificate No.  
TA10102M

## *Certificate of Type Test*

MANUFACTURER: UNIKA UNIVERSAL KABLO SAN. VE. TIC. A.S., Turkey  
PRODUCT: 0.6/1kV Halogen free, flame retardant shipboard power cables with low smoke emission  
TYPE NO.: Refer to the attached sheet  
TYPE TEST NO.: 10T803  
PARTICULARS: Refer to the attached sheet  
STANDARD: IEC 60092-353 (1995), IEC 60092-350 (2008),  
IEC 60754-1/2 (1997), IEC 61034-1/2 (2005),  
IEC 60332-3-22 Cat. A (2000)  
DOCUMENTATION: D1/D25, D2/D25, D3/D25, D4/D25, D5/D25

THIS IS TO CERTIFY that the above mentioned product has been approved by the NIPPON KAIJI KYOKAI in accordance with the Society's type test requirements for electrical equipment and cables.

This certificate is valid until the 3 February 2015

Issued at Tokyo on the 4 February 2010.

T. Narisawa  
General Manager  
Machinery Department

Attached sheet to Cert. No. TA10102M

PARTICULARS:

Rating voltage	Type of cable	No. of cores	Cross section (mm <sup>2</sup> )
0.6/1 kV	U-HF m U-HF m (C)	1.0	1-300
		2.0	1-95
		3.0	1-240
		4.0	1-150
		5-37	1, 1.5, 2.5
<b>Construction:</b> Conductor: Strand or bunch of annealed plain or tinned copper wires – make up: class 2. or 5. Insulation: XLPE, permanent operating temperature: 90°C (XLPE acc. IEC 60092-351) Inner covering: Halogen free flame retardant thermoplastic extruded compound or plastic tapes Tape: Polyester tape (C): Collective screen of metal coated polyester tape with plain or tinned copper drain wire Outer jacket: Polyolefin based thermoplastic HFFR compound (SHF 1 acc. IEC 60092-359)			
0.6/1 kV	U-HFA m U-HFA m (C) U-HFA m EMC	1.0	1-300
		2.0	1-95
		3.0	1-240
		4.0	1-150
		5-37	1, 1.5, 2.5
<b>Construction:</b> Conductor: Strand or bunch of annealed plain or tinned copper wires – make up: class 2. or 5. Insulation: XLPE, permanent operating temperature: 90°C (XLPE acc. IEC 60092-351) Inner covering: Halogen free flame retardant thermoplastic extruded compound or plastic tapes Tape: Polyester tape (C): Collective screen of metal coated polyester tape with plain or tinned copper drain wire EMC: Copper coated polyester tape Armour: Plain or tinned copper wire braid Outer jacket: Polyolefin based thermoplastic HFFR compound (SHF 1 acc. IEC 60092-359)			

— The End —



# NIPPON KAIJI KYOKAI

Certificate No.  
TA10103M

## *Certificate of Type Test*

MANUFACTURER: UNIKA UNIVERSAL KABLO SAN. VE. TIC. A.S., Turkey  
PRODUCT: 0.6/1kV Halogen free, flame retardant, fire resistant  
shipboard power cables with low smoke emission  
TYPE NO.: Refer to the attached sheet  
TYPE TEST NO.: 10T804  
PARTICULARS: Refer to the attached sheet  
STANDARD: IEC 60092-353 (1995), IEC 60092-350 (2008),  
IEC 60331-21 (1999), IEC 60754-1/2 (1997),  
IEC 61034-1/2 (2005), IEC 60332-3-22 Cat. A (2000)  
DOCUMENTATION: D10/D25, D11/D25, D12/D25, D13/D25

THIS IS TO CERTIFY that the above mentioned product has been approved by the NIPPON KAIJI KYOKAI in accordance with the Society's type test requirements for electrical equipment and cables.

This certificate is valid until the 3 February 2015

Issued at Tokyo on the 4 February 2010.

T. Narisawa  
General Manager  
Machinery Department

Attached sheet to Cert. No. TA10103M

PARTICULARS:

Rating voltage	Type of cable	No. of cores	Cross section (mm <sup>2</sup> )
0.6/1 kV	U-HFFR m U-HFFR m (C)	1.0	1-300
		2.0	1-95
		3.0	1-240
		4.0	1-150
		5-37	1, 1.5, 2.5
<b>Construction:</b> Conductor: Strand or bunch of annealed plain or tinned copper wires – make up: class 2. or 5. Mica tape: Hellically applied fire resistant mica tape Insulation: XLPE, permanent operating temperature: 90°C (XLPE acc. IEC 60092-351) Inner covering: Halogen free flame retardant thermoplastic extruded compound or plastic tapes Tape: Polyester tape (C): Collective screen of metal coated polyester tape with plain or tinned copper drain wire Outer jacket: Polyolefin based thermoplastic HFFR compound (SHF 1 acc. IEC 60092-359)			
0.6/1 kV	U-HFFRA m U-HFFRA m (C)	1.0	1-300
		2.0	1-95
		3.0	1-240
		4.0	1-150
		5-37	1, 1.5, 2.5
<b>Construction:</b> Conductor: Strand or bunch of annealed plain or tinned copper wires – make up: class 2. or 5. Mica tape: Hellically applied fire resistant mica tape Insulation: XLPE, permanent operating temperature: 90°C (XLPE acc. IEC 60092-351) Inner covering: Halogen free flame retardant thermoplastic extruded compound or plastic tapes Tape: Polyester tape (C): Collective screen of metal coated polyester tape with plain or tinned copper drain wire Armour: Plain or tinned copper wire braid Outer jacket: Polyolefin based thermoplastic HFFR compound (SHF 1 acc. IEC 60092-359)			

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