



TYPE APPROVAL CERTIFICATE No. ELE348919CS/001

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 LKM-HF 0.6/1 kV

(Cu/XLPE/LSOH 0.6/1 kV)

Applicant FLEI SRL

Via De Gasperi n. 82

20864 Agrate Brianza (MB)

ITALY

Manufacturer

FLEI SRL

Place of manufacture Via De Gasperi n. 82

20864 Agrate Brianza (MB)

ITALY

Reference standards

RINA Rules for the Classification of Ships Pt C, Ch 2, Sec 9; IEC

Standards (see Enclosure)

Issued in Genoa on January 28, 2020. This Certificate is valid until January 28, 2025

RINA Services S.p.A. Giovanni Carratino

This certificate consists of this page and 1 enclosure





TYPE APPROVAL CERTIFICATE No. ELE348919CS/001 Enclosure - Page 1 of 1 LKM-HF 0.6/1 kV (Cu/XLPE/LSOH 0.6/1 kV)

Materials/Components

Single and multicore power and control cables, unarmoured ,low smoke, halogen free, for ships and offshore units.

Rated voltage: 0.6/1 kV

Type: LKM-HF 0.6/1 kV

Maximum conductor temperature: 90°C

Marking: FLEI - n.. X sqmm2 - Type - 0.6/1 kV - IEC 60092-353 - IEC 60332.1.2 - IEC 60332.3.22 A - Year of

manufacture - CE

Construction:

conductor: flexible plain annealed copper wires (IEC 60228 Class.5)

insulation: XLPE outher sheath: SHF1

In accordance with: IEC 60228; IEC 60092-350; IEC 60092-353; IEC 60092-360; IEC 60332-1-2; IEC 60332-3-22 Cat.A; IEC 60754-1; IEC 61034-1; IEC 61034-2; RINA Rules for Ships; RINAMIL Rules; RINA Rules for FSRU; RINAMIL for FREMM..

Tecnichal specification:

Data Sheet FLEI N. RN PC-001; RN PC-002; Rev. 2 dated 14/03/2018.

Test Reports:

IMQ N. CN19-0039855-01 Rev.0 dated 2019/07/30

IMQ N. CN19-0039855-02 Rev.0 dated 2019/07/30

IMQ N. CN19-0039855-03 Rev.0 dated 2019/07/30

IMQ N. CN19-0039855-04 Rev.0 dated 2019/07/30

IMQ N. CN19-0039855-05 Rev.0 dated 2019/07/30

IMQ N. CN19-0039855-06 Rev.0 dated 2019/07/30

CSI 0864/DC/REA/19-4 dated 30/07/2019

CSI 0862/DC/REA/19-5 dated 29/07/2019

CSI 0862/DC/REA/19-6 dated 29/07/2019

CSI 0864/DC/REA/19-5 dated 30/07/2019 CSI 0862/DC/REA/19-4 dated 29/07/2019

CSI 0802/DC/REA/19-4 dated 29/07/2019

CSI 0864/DC/REA/19-6 dated 30/07/2019

CSI 0864/DC/REA/19-3 dated 30/07/2019 CSI 0862/DC/REA/19-3 dated 29/07/2019

CSI 0864/DC/REA/19-2 dated 30/07/2019

COI 0004/DC/NEA/19-2 dated 30/07/2018

CSI 0862/DC/REA/19-2 dated 29/07/2019

CSI 0864/DC/REA/19 dated 30/07/2019

CSI 0862/DC/REA/19-1 dated 29/07/2019

Note:

Components to be used according to the instructions given by the manufacturer.

The product is subject to the compliance with RINA Rules and Standards mentioned on the certificates

Type Approval certifies that a rappresentative 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.

Genoa January 28, 2020