# Type Approval Certificate

[ Electric Cable ]

**Initial Approval** 10 January 2025

**Manufacturer** Anhui Tiankang (Group) Shares Co., Ltd.
No.20, South Renhe Road, Tianchang City, Anhui Province, PRC

**Product Description** XLPE insulated, SHF1 or SHF2 sheathed LV Power Cable
- Rating : 0.6/1kV

″ See Appendix 1 ″

**Approval Condition** ″ See Appendix 1 ″

**THIS IS TO CERTIFY** that the above-mentioned product has been approved in accordance with the relevant requirement of this Society's Rules and / or of the recognized standards as follows.

Pt. 6, Ch. 1, Sec. 5 of the Rules for Classification, Steel Ships and IEC 60092-350, -353, -360, IEC 60092-376, IEC 60332-1, -3-22 Cat.A.

This Certificate is valid until 9 January 2030

Issued at Shanghai, China on 10 January 2025

This certificate is signed electronically in accordance with IMO FAL.5/Circ.39/Rev.2. Validation and authentication of the certificate can be confirmed from "http://e-cert.krs.co.kr" by using the tracking No(ME25002486040) and certificate No.(NAJ49590-EL002).

**KOREAN REGISTER**

*General Manager of*
*Ship System Solution Team*
*CHINA KR Co., Ltd.*

***Note :*** *1. This certificate will be valid subject to complying with the approval conditions described on the certificate and/or on the Rules of this Society.*
*2. This certificate will be invalid from the expiry date aforementioned unless the extension or renewal has been granted to the applicant or the manufacturer.*
*3. Any significant modifications or changes in design or construction to the above product without approval from this Society will render this certificate invalid.*
*4. Should the specified rules, regulations or standards be amended during the validity of this certificate, the product is to be re-approved by this Society in accordance with the requirements as amended.*

# Product Description and/or Approval Condition

**Date of Issue :** 10 January 2025

## A. Product Description

### 1. Product Specification

1) Specification & Standard

- Rated voltage : 0.6/1kV (IEC 60092-353)
- Temperature class : 90℃ (IEC 60092-360)
- Flame retardant : IEC 60332-1 and IEC 60332-3-22(Cat.A)

2) Design Construction

- Cable series : C : Shipboard power Cable
- Conductor : Stranded tinned annealed copper wires or Stranded annealed copper wires as per IEC 60228, Class2 or 5
- Insulation : J : XLPE (Cross-linked polyethylene)
- Sheath : PF: Halogen-free flame retardant thermoplastic compound(SHF1)
  PJ: Halogen-free flame retardant thermoset compound(SHF2)
- Construction : R : Flexible copper conductor
- Armor : 8 : Copper wire or tinned-copper wire braid armor
  9 : Galvanized Steel Wires braid armor
- Outer Sheath : 0 : Without outer sheath
  5 : Halogen-free flame retardant thermoset compound(SHF2)
  6 : Halogen-free flame retardant thermoplastic compound(SHF1)
- Flammability : SC : Bunched Cable Flame Retardant, Low Smoke, Halogen Free
  NC(NSC) : Bunched Cable Flame Retardant, Fire resistance, Low Smoke and halogen free

3) Product Range

| Rated Voltage | Type (symbol) | No. of Cores | Cross Section(㎟) | Max. Conductor Temp.(℃) |
|---|---|---|---|---|
| 0.6/1 kV | CJ86, CJ96, CJ85, CJ95, CJPJ, CJPJ85, CJPJ95, CJPJ80, CJPJ90, CJPF, CJPF80, CJPF90, CJPF86, CJPF96 /SC, NC(NSC) CEF80, CEF90 /DA,SA,NA(NSA) | 1 | 1 ~ 240 | 90 |
| | | 2 | 1 ~ 120 | |
| | | 3 | 1 ~ 240 | |
| | | 4,5 | 1 ~ 185 | |
| | | 4(3+E) | 2.5/1.5 ~ 185/95 | |
| | | 6 ~ 37 | 1 ~ 4 | |
| | CJPJR, CJPJR80, CJPJR90, CJPJR85, CJPJR95/SC, NC(NSC) | | | |
| | CJPFR, CJPFR80, CJPFR90, CJPFR86, CJPFR96/SC, NC(NSC) | | | |

- Conductor Cross-section
  : 1.0, 1.5, 2.5, 4, 6, 10, 16, 25, 35, 50, 70, 95, 120, 150, 185, 240, 300
- Number of Core
  : 4, 5, 6, 7, 10, 12, 14, 16, 19, 24, 27, 30, 33, 37

### 2. Approved Drawings and Documents

1) Data Sheet
   - Technical Specifications for XLPE Insulation Shipboard Power Cable with rated voltage 0.6/1kV (2024.03)

### 3. Test Reports, etc.

1) Test Report
   - CT16-3471-3(2016.09.19), CT16-3471-4 (2016.09.19), TN24-1613A1E (2024.05.13)

2) Cable Specification and etc.
   - Shipboard cable specification
   - Product description

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## B. Approval Condition

### 1. Application & Limitation

1) This approval is granted on the basis of the test report and the approved documentation.

### 2. Individual Product Cert. and Drawing Approval Requirement

1) Individual Product Certification is required.

### 3. Marking

1) Voltage grade, Cable symbol, Number of conductors and conductor size,
Type of flame retardant, Manufacturer's name, Year of manufacture,
Applied cable version

### 4. Others

N/A

< End of Certificate >