

中国船级社 **CHINA CLASSIFICATION SOCIETY** 工厂认可证书

证书编号/Certificate No. JS20PWA00136 02

CERTIFICATE OF WORKS APPROVAL

兹证明本证书所述制造厂具备按照下列标准的要求生产本证书所列产品的能力和条件。

This is to certify that the manufacturer stated in the certificate meets the requirements of the standards listed below and is available with the ability and conditions to produce the products described in the certificate.

制造厂/Manufacturer

安徽天康(集团)股份有限公司 Anhui Tiankang (Group) Shares Co., Ltd

地址/Address

安徽天长市仁和南路20号 20 South Renhe Road, Tianchang, Anhui

产品名称/Product

船用控制和仪器回路用电缆

Shipboard Cables for Control and Instrumentation Circuits

附加标志/Notations

无/Ni1.

认可标准/Approval Standard

1. 中国船级社《钢质海船入级规范》(2018)及其修改通报第4篇第3章

Chapter 3, Part Four of China Classification Society Rules for Classification of Sea-Going Steel Ships 2018 and its Amendments 2. IEC 60092-350:2020《船舶电气设备第350 部分:船舶与海上设施用电力、控制和仪表电缆的通用结构和试验要求》 IEC 60092-350: 2020 Electrical Installations in Ships-Part 350: General Construction and Test Methods of Power, Control and Instruction Cables for Shipboard and Offshore Applications

3. IEC 60092-376:2017《船舶电气设备第376 部分:控制和仪器回路用150/250 V(300 V)电缆》

IEC60092-376:2017 Electrical Installations in Ships-Part 376:Cables for Control and Instrumentation Circuits 150/250V(300 V)

用于/Intended for

船舶与海上设施/Ships and Offshore Installations

产品明细/Product Description

船用控制和仪器回路用电缆/Shipboard Cables for Control and Instrumentation Circuits (M0001)

| 名称/Name | 属性(值)/Value | 单位/Unit |
|---|----------------------------|---------|
| 产品名称/Product Name | 见附页 See additional pages | |
| 型号/Type | 见附页 See additional pages | |
| 规格/Specification | 见附页 See additional pages | |
| 导体最高工作温度/Max. Working Temp. of Conductor | 见附页 See additional pages | |

证书有效期至/This Certificate is valid until

2025年01月29日/Jan. 29,2025

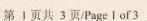
发证机构 中国船级社江苏分社 Issued by CCS Jiangsu Branch

签发日期 2021年01月25日 Jan. 25,2021 Date

本证书根据中国船级社规范和相关规定答发。所有证书页为《个》体,必须同时使用。纸质证书每页均须由本社盖章方为有效,电子证书含数字签名方有效,本证书复印件无效。任何单位和个从均介直播表或书选本证书的部分内容。有关方对所持证书的真实性有疑问时,可以向我社检验机构咨询。 This Certificate is issued pursuant to the Rutes of the Society and related regulation. All pages of the certificate are taken as a whole and are used simultaneously. No paper certificate page is valid without bearing the stamp of the Society, no electronic certificate is valid without the digital signature, and no copied form of the certificate is regarded as valid. Any part of the certificate is not to be extracted or abridged by any unit or individual in any form. Related parties who are doubted ab the authenticity of the certificate may inquire of the Society or its offices 联系方式/Contact Us,见本社官方网站/See official web site of the Society(http://www.ccs.org.cn)



UTN:P021-27069186







| 额定电压/Rated Voltage | 见附页 See additional pages | V |
|--------------------------------|--------------------------|---|
| 燃烧特性/Characteristic Under Fire | 见附页 See additional pages | |
| Conditions | | |

批准的图纸/Approved Drawings

图纸批准号/ Drawings Approval No.: NP13A00792, NP18A01308

产品认可试验报告/ Approval Test Report

试验报告编号/ Test Report No.: CT12-2618-8~12 试验报告日期/ Test Report Date: 2012-09-19

试验单位/Laboratory: 国家电线电缆质量监督检验中心 China National Centre for Quality Supervision and

Test of Electric Wire and Cable

试验单位地址/ Test Address: 上海市军工路1000号 No. 1000, Jungong Road, Discrit, Shanghai

试验报告编号/ Test Report No. : CT16-3473-1~7 试验报告日期/ Test Report Date : 2016-09-19

试验单位/Laboratory: 国家电线电缆质量监督检验中心 China National Centre for Quality Supervision and

Test of Electric Wire and Cable

试验单位地址/ Test Address: 上海市军工路1000号 No. 1000, Jungong Road, Discrit, Shanghai

认可后的产品检验方式/Method of Product Inspection after Approval

按照规范每批抽样检验的产品/The product inspected by sampling in term of the rules: 认可后的产品检验应由本社验船师根据本社规范规定每批抽样按批准的产品检验计划进行检验,经检验合格后由本社颁发船用产品证书。

After approval, product inspection should be carried out by sampling by the Surveyor of the Society in accordance with the approved product inspection scheme, and the Marine Product Certificate will be issued by the Society upon satisfactory inspection.

认可保持条件/Maintenance Requirements of Approval

1. 工厂认可后,如果图纸、技术文件、工艺规程有较大改变,应征得本社同意。若改变涉及或影响到产品的设计、主要制造材料、关键工艺或产品的特性、特征,则与特性有关的图纸和技术文件应经过本社审批,并在检验机构认为必要时,经本社检验人员到厂进行检查和见证有关试验,其结果应能证实仍符合认可条件。

After works approval, if there are any major changes to the drawings, technical documents, specifications, prior consent should be obtained from the survey office of the Society. If the changes involve or affect product design, major construction materials, key workmanship or product characteristics and properties, drawings and technical documents related to properties are to be examined and approved by the Society and, where deemed necessary by the survey office, the surveyor to the Society will go to the manufacturer to inspect or witness relevant tests and the results of the tests should be able to demonstrate compliance with the approval conditions

工厂的质量管理体系应保持有效运行,并且与认可时一致。如果质量管理体系发生改变,应经原体系认证机构审核并报本社批准。

The quality management system of the factory shall be ensure effective operation, and shall be the same as the situation of approval. If there are any changes to the quality management system, auditing of the original certification organization for quality management system and the society's approval shall be obtained.

3. 工厂认可证书获得者应接受本社每年一次的定期审核,定期审核日为认可证书期满之日对应的每一周年日,检查工作可在定期审核日的前后三个月内进行。Those who have obtained the certificate of works approval shall receive periodical audit done by the Society on an annual basis. The date of periodical audit shall be each anniversary date which corresponds to the date of expiry of the relevant certificate and the periodical audit may be done within a time span of three months before and after the annual surveillance date.

4. 在认可证书有效期内,本社检验人员可在未经事先通知的情况下对工厂的产品制造过程进行审核,以验证产品的生产是否符合业经本社批准的图纸和文件。工厂应予以配合。

Within the validity of the approval certificate, the surveyor to the Society may pay unannounced audit to the manufacturing process of the product in order to confirm whether it is in compliance with the drawings and documents approved by the Society. The factory should provide an active cooperation and necessary for the surveyor.

5. 认可证书有效期内,如果出现可能导致本社暂停或撤消认可的情况,工厂应及时采取有效的纠正措施。 Within the validity of the approval certificate, if cases occur that may cause the Society to suspend or withdraw the certificate, the manufacturer should take corrective actions in a prompt and effective manner.



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备注/Remarks

本证书由原工厂认可证书 (No. NJ16W00144_02, NJ18W00049_02) 换新并替代原证书。 This Certificate is renewed from and supersedes the previous Work Approval Certificate No. NJ16W00144_02, NJ18W00049_02.

本社已审核了产品厂无石棉声明,但本社的审核不免除产品厂按照合同关系向订货方保证产品无石棉的责任。 The declaration of asbestos-free submitted by manufacturer has been reviewed by the Society. However, liability of the manufacturer to guarantee the products are asbestos-free to purchaser under contract will not be exempted.

中国船级社江苏分社

CCS Jiangsu Branch

注:本证书含有附页,共2页 Note: The certificate is attached with additional 2 page(s)

CLASSIFICATION



品 明 细 **Product Description**

| | 产品名称/Names | 乙丙橡皮绝缘船用控制电缆/EPR insulated shipboard control cable |
|---|--|---|
| | 型号/Type | CKEPF, CKEPF86, CKEPF96, CKEPF80, CKEPF90, CKEPJ, CKEPJ85, CKEPJ95, CKEPJ80, CKEPJ90/SC, NC; |
| | • | CKEF/SA, NA |
| | 规格/Specification | 2~48 芯/2~48 Cores: 0.5~2.5 mm2 |
| | 型号/Type | CKEF80、CKEF90/SA,NA |
| 1 | 规格/Specification | 2~37 だ/2~37 Cores: 0.5~2.5 mm2 |
| | 燃烧特性/Characteristic of Under Fire Condition | SC, NC; SA, NA |
| | 导体最高工作温度/Max. Working Temp. of Conductor | 90 °C |
| | 额定电压/Rated Voltage | 150/250V (300V) |
| | 产品名称/Names | 交联聚乙烯绝缘船用控制电缆/XLPE insulated shipboard control and instrumentation cables |
| | 型号/Type | CKJ86、CKJ96、CKJ85、CKJ95、CKJPF、CKJPF86、CKJPF96、CKJPF80、CKJPF90、CKJPJ、CKJPJ85、CKJPJ95、CKJPJ80、CKJPJ90/SC, NC |
| | 规格/Specification | 2~48 芯/2~48 Cores: 0.5~2.5 mm2 |
| | 型号/Type | CKJPF83、CKJPF93/SC,NC |
| | | CKJV、CKJV80、CKJV90、CKJV82、CKJV92/SA, NA; |
| 2 | 规格/Specification | 2~37 芯/2~37 Cores: 0.5~2.5 mm2 |
| | 燃烧特性/Characteristic of Under Fire Condition | SC, NC; SA, NA |
| | 导体最高工作温度/Max. Working Temp. of Conductor | 90 ℃ |
| | 额定电压/Rated Voltage | 150/250V (300V) |
| 3 | 产品名称/Names | 交联聚乙烯绝缘船用通信和仪表电缆/XLPE insulated shipboard control and instrumentation cables |
| | 型号/Type | CHJ86、CHJ96、CHJ85、CHJ95、CHJPF、CHJPF86、CHJPF96、CHJPF80、CHJPF90、CHJPFP,CHJPFP85、CHJPFP86、CHJPFP95、CHJPFP96、CHJPFP80、CHJPFP90、CHJPJ, CHJPJ85、CHJPJ95、CHJPJ90、CHJPJ90、CHJPJP90/SC, NC |
| | | CHJV、CHJV82、CHJV92、CHJV80、CHJV90、CHJVP、CHJVP82、CHJVP92、CHJVP80、CHJVP90/SA, NA |
| | 规格/Specification | (1P,1T,1Q; 2P,3P,4P,5P,7P,10P,12P,14P,16P,19P,24P,30P,37P) * (0.5~2.5)mm2 |
| | 燃烧特性/Characteristic of Under Fire Condition | SC, NC; SA, NA |
| | 导体最高工作温度/Max. Working Temp. of Conductor | 90 °C |
| | 额定电压/Rated Voltage | 150/250V (300V) |



注/Note: 产品型号中字母含义/Meaning of the letters of the Type:

- 字母 1/1st Letter: CK 船用控制电缆/Shipboard Control Cables:
 - 船用通信和仪表电缆/Insulated shipboard control and instrumentation cables;
- E 乙丙橡皮绝缘/ Ethylene-propylene Rubber Insulation;
 - J 交联聚乙烯绝缘/Cross-linked Polyethylene Insulation;
- 字母 3/3rd Letter: F — 氯丁橡胶护套或内护套/PCP Inner Sheath;
 - 聚氯乙烯护套或内护套/PVC Inner Sheath;
 - 交联聚烯烃护套或内护套(热固性)/Cross-linked PO Sheath;
 - PF 聚烯烃护套或内护套(热塑性)/PO-SHF1 Inner Sheath:
- 8 镀锡(或不镀锡)铜丝编织 Tinned copper(or no tinned copper)wire braided; 字母 4/4th Letter:
 - 镀锌钢丝编织铠装/Galvanized Steel Wires Braid;
- 字母 5/5th Letter: 0 — 无外护套/Without Outer Sheath;
 - PVC 外护套/PVC Outer Sheath;
 - 聚烯烃外护套(热塑性) / PO-SHF1 Outer Sheath:
 - 5 交联聚烯烃外护套(热固型) Cross-linked PO outer sheath;
 - 6 聚烯烃护套(热塑型)/ PO-SHF1 Outer Sheath;
- 字母 6/6th Letter P — 线对屏蔽(镀锡丝或铜丝或铝箔)Tinned copper(or no tinned copper or aluminum foil)Wire or twisted pair with individual shield;
- 字母 7/7th Letter: 1P —— 二线组 Pairs(x2);
 - 三线组 Triples(x3);
 - 1Q 四线组 Quads(x4);

后缀/Trailing Suffix:

- SA 成東阻燃/Bunched Cable Flame Retardant(IEC 60332-3-22:2018);
- NA ---- 耐火、成束阻燃/Bunched Cable Flame Retardant, Fire resistant (IEC 60331-1/2 (2018), IEC 60332-3-22 Cat. A(2018));
- SC 成東阻燃、低烟、无卤/Bunched Cable Flame Retardant, Low Smoke, Halogen Free (IEC 60332-3-22:2018, IEC 60754-1/2:2011,IEC 61034-1/2:2013);
- 成束阻燃、低烟、无卤、耐火/Bunched Cable Flame Retardant, Low Smoke,Halogen Free,Fire resistant (IEC 60332-3-22:2018, IEC60331:2018, IEC 60754-1/2:2011, IEC 61034-1/2:2013);

******本证书附页完/ End of the additional pages*****



