



中国船级社
CHINA CLASSIFICATION SOCIETY

证书编号/Certificate No.
SH25PTB00147

型式认可证书
CERTIFICATE OF TYPE 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

苏州英威腾电力电子有限公司
INVT POWER ELECTRONICS (SUZHOU) CO., LTD.

地址/Address

苏州高新区科技城昆仑山路1号
1# Kunlun Mountain Road, Science & Technology Town, Gaoxin District, Suzhou, Jiangsu, China

产品名称/Product

变频器
Frequency Converter

附加标志/Notations

无/Nil.

认可标准/Approval Standard

1. 中国船级社《钢质海船入级规范》第4篇第3章
Chapter 3, Part Four of China Classification Society Rules for Classification of Sea-Going Steel Ships
2. 中国船级社《钢质海船入级规范》第8篇第15章
Chapter 15, Part Eight of China Classification Society Rules for Classification of Sea-going Steel Ships

用于/Intended for

船舶/Ships

产品明细/Product Description

变频器/Frequency Converter (M0001)

名称/Name	属性(值)/Value	单位/Unit
型号/Type	详见附页 See Additional Page(s)	
额定输入电压/Rated Input Voltage	详见附页 See Additional Page(s)	
额定输入电流/Rated Input Current	详见附页 See Additional Page(s)	
额定输出电压/Rated Output Voltage	详见附页 See Additional Page(s)	

证书有效期至/This Certificate is valid until 2030年03月01日/ Mar. 01,2030

发证机构/Issued by 中国船级社上海分社
CHINA CLASSIFICATION SOCIETY Shanghai Branch

签发日期/Date 2025年08月13日
Aug. 13,2025

本证书根据中国船级社规范和相关规定签发。所有证书页为一个整体，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为有效，本证书复印件无效。任何单位和个人均不应摘录或节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，可以向本社检验机构咨询。本证书凡是未注明版本的规范，其（发证时）最新版本适用于本证书。
This Certificate is issued pursuant to the Rules 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 certificates 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 about the authenticity of the certificate may inquire of the Society or its offices. For Rules with no version indication, their latest version (at the time of issuance of the certificate) applies to the certificate.

Form No: T01.

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:P025-09132128

外壳防护等级/Degree of Protection of Enclosure	详见附页 See Additional Page(s)	
额定输出电流/Rated Output Current	详见附页 See Additional Page(s)	
额定输出功率/Rated Output Power	详见附页 See Additional Page(s)	
频率/Frequency	详见附页 See Additional Page(s)	
冷却方式/Cooling Method	详见附页 See Additional Page(s)	

批准的图纸/Approved Drawings

图纸批准号/Drawings Approval No.: SH20PPP20287, SH22PPP20205, SH22PPP20714, SH25PPP20438

产品认可试验报告/ Approval Test Report

试验报告编号/ Test Report No.: 20IAX0801Y11-0520.1~20IAX0801Y11-0520.6

试验报告日期/ Test Report Date: 2021-02-02

试验单位/ Laboratory: 上海电器设备检测所有限公司 Shanghai Testing & Inspection Institute for Electrical Equipment Co., Ltd.

试验单位地址/ Test Address: 上海市武宁路505号 No. 505 Wuning Road, Shanghai, China.

试验报告编号/ Test Report No.: 22X0594-s

试验报告日期/ Test Report Date: 2022-10-19

试验单位/ Laboratory: 苏州电器科学研究院股份有限公司 Suzhou Electrical Apparatus Science Research Institute Co., Ltd.

试验单位地址/ Test Address: 江苏省苏州市吴中区越溪前珠路5号 No.5 Qianzhu Rd., Yuexi, Wuzhong District, Suzhou.

试验报告编号/ Test Report No.: 23IAS01P08D32-33649

试验报告日期/ Test Report Date: 2024-01-25

试验单位/ Laboratory: 上海电器设备检测所有限公司 Shanghai Testing & Inspection Institute for Electrical Equipment Co., Ltd.

试验单位地址/ Test Address: 上海市武宁路505号 No. 505 Wuning Road, Shanghai, China.

试验报告编号/ Test Report No.: 25IAS01P08D32-30233

试验报告日期/ Test Report Date: 2025-07-30

试验单位/ Laboratory: 上海电器设备检测所有限公司 Shanghai Testing & Inspection Institute for Electrical Equipment Co., Ltd.

试验单位地址/ Test Address: 上海市武宁路505号 No. 505 Wuning Road, Shanghai, China.

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

按规范认可后应进行产品检验的产品/The product should be inspected 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 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. 型式认可后, 如果产品及其重要零部件的设计、所用材料或制造方法有所改变, 且影响到产品的主要特性、特征; 或产品的性能指标有所更改, 且超过认可的范围, 则有关图纸和文件应经检验机构审批。并在检验机构认为必要时, 经本社检验人员见证有关试验和进行检查, 其结果应能证实仍符合认可条件。

After type approval, if there are changes to the design, materials used or manufacturing method of the product and important components and such changes affect major characteristics and properties of the product, or property indexes of the product are changed and exceed the scope of approval, related drawings and documents are to be examined and approved by the concerned survey office. Where deemed necessary by the survey office, the surveyor to the Society will go to witness relevant tests and conduct inspection and the results should be able to demonstrate compliance with the approval conditions.

2. 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. 认可证书有效期内, 如果出现可能导致本社取消认可的情况, 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 withdraw the approval, the manufacturer should take corrective actions in a prompt and effective manner.

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. 如果属于获得型式认可B 模式证书, 且无需颁发船用产品证书/等效证明文件的情况, 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, 检查工作应在周年日的前后三个月内进行。

If belong to the situation of the product has type approval mode B certificate, and marine product certificate/equivalent document is not necessary, those who have obtained the certificate should be subject to periodical audit every year. 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 shall be done within a time span of three months before and after the annual surveillance date.

备注/Remarks

本证书由原型式认可证书 (No. SH24PTB00291) 变更并替代原证书。

This Certificate is modified from and supersedes the previous Type Approval Certificate No. SH24PTB00291.

当环境温度高于40℃, 或海拔高于1000米时, GD880 (风冷) 系列产品应降容使用。

When the ambient temperature is higher than 40℃ or the altitude is higher than 1000m, GD880 (air cooling) series of products should be used with Low load or load restriction.

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.

中国船级社上海分社

CCS Shanghai Branch

注: 本证书含有附页, 共3页

Note: The certificate is attached with additional 3 page(s)

GD350系列变频器/GD350 series Frequency Converter

序号/ NO.	名称/ Name	型号/Type	额定输入电压/ Rated Input Voltage [V]	额定输入电流/ Rated Input Current [A]	额定输入频率/ Rated Input Frequency [Hz]	额定输出电压/ Rated Out Voltage [V]	额定输出电流/ Rated Out Current [A]	额定输出频率/ Rated Out Frequency [Hz]	额定输出功率/ Rated Out Power [kW]	外壳防护等级/Degree of Protection of Enclosure	冷却方式/ Cooling Method
1	变频器	GD350-030G-4-CCS	AC380~480	70	47~63	AC380~480	60	0~400	30	IP20	强迫风冷/ Forced air cooling
2	变频器	GD350-037G-4-CCS	AC380~480	80	47~63	AC380~480	75	0~400	37		
3	变频器	GD350-045G-4-CCS	AC380~480	98	47~63	AC380~480	92	0~400	45		
4	变频器	GD350-055G-4-CCS	AC380~480	128	47~63	AC380~480	115	0~400	55		
5	变频器	GD350-075G-4-CCS	AC380~480	139	47~63	AC380~480	150	0~400	75		
6	变频器	GD350-090G-4-CCS	AC380~480	168	47~63	AC380~480	180	0~400	90		
7	变频器	GD350-110G-4-CCS	AC380~480	201	47~63	AC380~480	215	0~400	110		
8	变频器	GD350-132G-4-CCS	AC380~480	265	47~63	AC380~480	260	0~400	132		
9	变频器	GD350-160G-4-CCS	AC380~480	310	47~63	AC380~480	305	0~400	160		
10	变频器	GD350-200G-4-CCS	AC380~480	385	47~63	AC380~480	380	0~400	200		
11	变频器	GD350-220G-4-CCS	AC380~480	430	47~63	AC380~480	425	0~400	220		
12	变频器	GD350-250G-4-CCS	AC380~480	460	47~63	AC380~480	480	0~400	250		
13	变频器	GD350-280G-4-CCS	AC380~480	500	47~63	AC380~480	530	0~400	280		
14	变频器	GD350-315G-4-CCS	AC380~480	580	47~63	AC380~480	600	0~400	315		
15	变频器	GD350-355G-4-CCS	AC380~480	625	47~63	AC380~480	650	0~400	355		
16	变频器	GD350-400G-4-CCS	AC380~480	715	47~63	AC380~480	720	0~400	400		
17	变频器	GD350-500G-4-CCS	AC380~480	890	47~63	AC380~480	860	0~400	500		

GD880系列变频器/GD880 series Frequency Converter

序号/ NO.	名称/ Name	型号/Type	额定输入电压/ Rated Input Voltage [V]	额定输入电流/ Rated Input Current [A]	额定输入频率/ Rated Input Frequency [Hz]	额定输出电压/ Rated Out Voltage [V]	额定输出电流/ Rated Out Current [A]	额定输出频率/ Rated Out Frequency [Hz]	额定输出功率/ Rated Out Power [kW]	外壳防护等级/Degree of Protection of Enclosure	冷却方式/ Cooling Method
18	制动单元	GD880-41-0500-4	DC510~720	781	/	DC0~720	3 X 310	/	500	IP00	强迫风冷/ Forced air cooling
19	制动单元	GD880-41-0750-4	DC510~720	1171	/	DC0~720	3 X 465	/	750		
20	制动单元	GD880-41-0870-6	DC700~1035	781	/	DC0~1035	3 X 310	/	870		
21	制动单元	GD880-41-1300-6	DC700~1035	1171	/	DC0~1035	3 X 465	/	1300		
22	逆变单元	GD880-51-0245-4	DC510~720	300	/	AC0~400	245	0~400	110		
23	逆变单元	GD880-51-0299-4	DC510~720	366	/	AC0~400	299	0~400	132		
24	逆变单元	GD880-51-0349-4	DC510~720	428	/	AC0~400	349	0~400	160		
25	逆变单元	GD880-51-0395-4	DC510~720	484	/	AC0~400	395	0~400	200		
26	逆变单元	GD880-51-0516-4	DC510~720	632	/	AC0~400	516	0~400	250		
27	逆变单元	GD880-51-0639-4	DC510~720	783	/	AC0~400	639	0~400	355		
28	逆变单元	GD880-51-0757-4	DC510~720	927	/	AC0~400	757	0~400	400		
29	逆变单元	GD880-51-0900-4	DC510~720	1103	/	AC0~400	900	0~400	500		
30	逆变单元	GD880-51-0062-6	DC700~1035	76	/	AC0~690	62	0~400	55		
31	逆变单元	GD880-51-0082-6	DC700~1035	100	/	AC0~690	82	0~400	75		
32	逆变单元	GD880-51-0099-6	DC700~1035	121	/	AC0~690	99	0~400	90		
33	逆变单元	GD880-51-0125-6	DC700~1035	153	/	AC0~690	125	0~400	110		
34	逆变单元	GD880-51-0144-6	DC700~1035	176	/	AC0~690	144	0~400	132		
35	逆变单元	GD880-51-0192-6	DC700~1035	235	/	AC0~690	192	0~400	160		
36	逆变单元	GD880-51-0217-6	DC700~1035	266	/	AC0~690	217	0~400	200		
37	逆变单元	GD880-51-0270-6	DC700~1035	331	/	AC0~690	270	0~400	250		
38	逆变单元	GD880-51-0340-6	DC700~1035	417	/	AC0~690	340	0~400	315		
39	逆变单元	GD880-51-0410-6	DC700~1035	502	/	AC0~690	410	0~400	400		
40	逆变单元	GD880-51-0530-6	DC700~1035	649	/	AC0~690	530	0~400	500		
41	逆变单元	GD880-51-0600-6	DC700~1035	735	/	AC0~690	600	0~400	560		
42	逆变单元	GD880-51-0650-6	DC700~1035	796	/	AC0~690	650	0~400	630		
43	逆变单元	GD880-51-0720-6	DC700~1035	882	/	AC0~690	720	0~400	710		

GD880系列变频器/GD880 series Frequency Converter

序号/ NO.	名称/ Name	型号/Type	额定输入电压/ Rated Input Voltage [V]	额定输入电流/ Rated Input Current [A]	额定输入频率/ Rated Input Frequency [Hz]	额定输出电压/ Rated Out Voltage [V]	额定输出电流/ Rated Out Current [A]	额定输出频率/ Rated Out Frequency [Hz]	额定输出功率/ Rated Out Power [kW]	外壳防护等级/Degree of Protection of Enclosure	冷却方式/ Cooling Method
44	基本整流单元	GD880-71-0718-4	AC380~480	718	47~63	DC513~648	879	/	475	IP00	强迫风冷/ Forced air cooling
45	基本整流单元	GD880-71-0980-4	AC380~480	980	47~63	DC513~648	1200	/	648		
46	基本整流单元	GD880-71-0570-6	AC500~690	570	47~63	DC675~932	698	/	650		
47	基本整流单元	GD880-71-0815-6	AC500~690	815	47~63	DC675~932	998	/	920		
48	变频器单元	GD880-11-0340-6-LC	AC500~690	287	47~63	AC0~690	340	0~400	315	IP00	水冷/ Water-cooling
49	变频器单元	GD880-11-0410-6-LC	AC500~690	364	47~63	AC0~690	410	0~400	400		
50	变频器单元	GD880-11-0530-6-LC	AC500~690	455	47~63	AC0~690	530	0~400	500		
51	整流单元	GD880-61-2000-6-LC	AC500~690	2000	47~63	DC675~932	2510	/	2283		
52	逆变单元	GD880-51-0410-6-LC	DC700~1035	502	/	AC0~690	410	0~400	400		
53	逆变单元	GD880-51-0530-6-LC	DC700~1035	649	/	AC0~690	530	0~400	500		
54	逆变单元	GD880-51-0600-6-LC	DC700~1035	735	/	AC0~690	600	0~400	560		
55	逆变单元	GD880-51-0650-6-LC	DC700~1035	796	/	AC0~690	650	0~400	630		