



中国船级社
CHINA CLASSIFICATION SOCIETY

证书格式号/Form: T01.02-
HQ000102

型式认可证书
CERTIFICATE OF TYPE APPROVAL

证书编号/Certificate No. SW18T00005_01

兹证明本证书所述制造厂生产的下列产品能够满足下面列明认可标准的要求。

This is to certify that the following products produced by the manufacturer stated in the certificate can meet the requirements of the approval standards listed below.

认可产品/ Product Approved

变频器

Frequency converter

制造厂/ Manufacturer

ABB Oy, Drives

Hiomotie 13, 00380 Helsinki, Finland

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》(2018)及其修改通报第4篇第1,2,3章
Chapter 1,2,3 Part Four of China Classification Society Rules for Classification of Sea-going Steel Ships 2018 and its Amendments
- 2.中国船级社《钢质海船入级规范》(2018)及其修改通报第7篇第1,2章
Chapter 1,2 Part Seven of China Classification Society Rules for Classification of Sea-going Steel Ships 2018 and its Amendments

证书有效期至/ **This Certificate is valid until**

2022年8月26日 / Aug. 26, 2022

发证机构 **中国船级社斯德哥尔摩办事处**
Issued by **CCS Stockholm Office**

签发日期 2019年3月18日
Date **Mar. 18, 2019**

本证书根据中国船级社《钢质海船入级规范》及有关程序规定签发。关于证书的有关规定见本证书页背面的说明。当本证书包括多页纸张时，则所有证书页为一个整体，必须同时使用。每一页证书均须由本社盖章方为有效。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。本认可证书不代表本社对个体产品质量的检验。有关各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。
This Certificate is issued pursuant to the Rules for Classification of Sea-going Steel Ships and related procedures of the Society. Refer to the back of the certificate for detailed requirements of the certificate. When the certificate consists of more than one page, all pages of the certificate are taken as a whole and are used simultaneously. No certificate page is valid without bearing the stamp of the Society 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. This approval certificate does not constitute the inspection of the Society about the quality of the unit/batch product. Related parties who are doubted about the authenticity of the certificate may inquire of the Society or its offices.

CCS
中国船级社

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中国船级社总部/CCS headquarters: 北京市东直门南大街9号船检大厦 邮编: 100007 电话/Tel: +86(10)58112288 传真/Fax: +86(10)58112811
CCS Mansion, 9 Dongzhimen Nan Da Jie, Beijing 100007, China 网址/Web Site: <http://www.ccs.org.cn>
本地检验机构/CCS Local Office: 中国船级社斯德哥尔摩办事处 CCS Stockholm Office 电话/Tel: + 46 8 578 77 111 传真/Fax: + 46 8 578 77 010

SW85609460
N^o. 16182903

产品明细/ Product Description

变频器/FREQUENCY CONVERTER	
型号/Type	: ACS880-01 Single Drives
额定电压/Rated Voltage	: 208~240 V, 380~415 V, 380~500 V, 525~690 V
频率/Frequency	: Rated frequency (Supply): 50/60 Hz ±5%; Output frequency: 0 to ±500 Hz
防护等级/Protect Class	: IP21/IP55
冷却方式/Cooling way	: Air-cooled (Dry clean air)

批准的图纸和设计计算书/ Approved Drawings and Design Calculations

图纸批准号/ Drawings Approval No. : NP14A01351, NP18A03521

产品认可试验报告/ Approval Test Report

试验报告编号/Test Report No. : 3AXD10000114572 (Summary sheet)
 试验报告日期/Test Report Date : 2014-08-05
 试验单位/ Laboratory : FIDRI-Factory, FIDRI R*D LAB., Nemko Oy, VTT, USABB R*D LAB.
 试验单位地址/ Test Address : Finland

试验报告编号/Test Report No. : 286948-1, 290245-1-1, 290542-1, 285151-2-1, 285151-2-2
 试验报告日期/Test Report Date : 2017-08-08
 试验单位/ Laboratory : SGS Fimko Ltd, VTT Expert Services Ltd, UL LLC, ABB Oy
 试验单位地址/ Test Address : Finland

产品适用范围/ Application of the Product

船舶与海上设施/Ships and Offshore Installations

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, 检查工作可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 periodical audit should be carried out within 3 months before and after the anniversary date which corresponds to the date of expiry of the relevant.

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

按照规范逐件检验的产品/The product inspected one by one 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逐件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 one by one 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.



对于原材料和零部件的检验要求/ Inspection Requirements for Materials and Components

产品如下原材料和零部件应由本社认可的制造厂生产/The following materials and components of the product should be manufactured by the factory approved by the Society:
无/Nil.

产品如下原材料和零部件应经本社检验/The following materials and components of the product should be inspected by the Society:
无/Nil.

产品如下原材料和零部件的制造厂清单, 经本社批准方可变更/The list of manufacturer for the following materials and components of the product should not be changed without the Society's approval:
无/Nil.

责任声明/Statement of Responsibility

本社的认可不影响、替代与本社授权或检验无关的各方对上述工厂的认可和发证, 并且不对与本社授权或检验无关的各方负责, 不承担其未经应允而承认、接受本社认可所导致的法律和经济责任。
The approval of the Society does not affect and replace any approval and certification of the manufacturer by any parties that bear no relation with this Society's authorization or survey and therefore takes no responsibility for these parties. The Society does not undertake any legal and economic liabilities arising from accepting this Society's certificate without prior permission from this Society.

其他/Others

1. ACS880-01系列技术规格详见附件。
For specific description of ACS880-01 series, refer to additional page.
2. 本证书由原型式认可证书 (No. GB15T00033) 变更并换新。
This certificate is modified and renewed from the previous Type Approval Certificate No. GB15T00033
3. 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.



*****本证书正文完/ End of Text*****

注: 本证书含有附页, 共1页

Note: The certificate is attached with 1 additional page(s)

Product Description

The ACS880-01 series are drives for controlling asynchronous AC induction motors, permanent magnet synchronous motors, AC induction servomotors and ABB synchronous reluctance motors (SynRM motors). The main cooling air fan of the drive is speed controlled and the auxiliary cooling fan on/off controlled.

Single drives	Nominal Voltage U_n (V)	Power		Frame sizes
		P_N (kW)	S_N (kVA)	
ACS880-01-XXXX-2	230	0.75 - 75	1.8 - 109	R1...R8
ACS880-01-XXXX-3	400	0.75 - 250	1.7 - 298	R1...R9
ACS880-01-XXXX-5	400	0.75 - 200	1.8 - 359	R1...R9
ACS880-01-XXXX-5	500	0.75 - 200	1.8 - 359	R1...R9
ACS880-01-XXXX-7	690	5.5 - 250	8.8 - 324	R3...R9

Note 1: For details of technical data and type designation label XXXX, refer to hardware manual of ACS880-01 3AUA0000078093.

Note 2: The ratings apply at an ambient temperature of 40 °C. In the temperature range + 40 to 55 °C, the rated output current is derated by 1% for every added 1 °C.

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型式认可证书
CERTIFICATE OF TYPE APPROVAL

证书编号/Certificate No. SW18T00005_02

兹证明本证书所述制造厂生产的下列产品能够满足下面列明认可标准的要求。

This is to certify that the following products produced by the manufacturer stated in the certificate can meet the requirements of the approval standards listed below.

认可产品/ Product Approved

变频器

Frequency converter

制造厂/ Manufacturer

ABB Oy, Drives

Hiomotie 13, 00380 Helsinki, Finland

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》(2018)及其修改通报第4篇第1,2,3章
Chapter 1,2,3 Part Four of China Classification Society Rules for Classification of Sea-going Steel Ships 2018 and its Amendments

证书有效期至/ This certificate is valid until

2022年8月26日 / Aug. 26, 2022

发证机构

中国船级社斯德哥尔摩办事处

签发日期

2019年3月18日

Issued by

CCS Stockholm Office

Date

Mar. 18, 2019

本证书根据中国船级社《钢质海船入级规范》及有关程序规定签发。关于证书的有关规定见本证书页背面的说明。当本证书包括多页纸张时，则所有证书页为一个整体，必须同时使用。每一页证书均须由本社盖章方为有效。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。本认可证书不代表本社对个体产品质量的检验。有关各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。

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中国船级社总部/CCS headquarters: 北京市东直门南大街9号船检大厦 邮编: 100007 电话/Tel: +86(10)58112288 传真/Fax: +86(10)58112811
CCS Mansion, 9 Dongzhimen Nan Da Jie, Beijing 100007, China 网址/Web Site: <http://www.ccs.org.cn>
本地检验机构/CCS Local Office: 中国船级社斯德哥尔摩办事处 CCS Stockholm Office 电话/Tel: + 46 8 578 77 111 传真/Fax: + 46 8 578 77 010

SW07800499

Nº 16182900

产品明细/ Product Description

变频器/FREQUENCY CONVERTER 型号/Type	: ACS880 series, for details see Others
额定电压/Rated Voltage	: 380~415 V, 380~500 V, 525~690 V
频率/Frequency	: 50/60 Hz ±5%
防护等级/Protect Class	: IP20/IP00
冷却方式/Cooling way	: Air-cooled(Dry clean air)

批准的图纸和设计计算书/ Approved Drawings and Design Calculations

图纸批准号/ Drawings Approval No. : NP16A02654

产品认可试验报告/ Approval Test Report

试验报告编号/Test Report No. : Summary sheet of test reports
 试验报告日期/Test Report Date : 2016-06-03
 试验单位/ Laboratory : SGS, Nemko Oy, VTT, ABB Oy
 试验单位地址/ Test Address : Finland

产品适用范围/ Application of the Product

船舶与海上设施/Ships and Offshore Installations

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, 检查工作可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 periodical audit should be carried out within 3 months before and after the anniversary date which corresponds to the date of expiry of the relevant.

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

按照规范逐件检验的产品/The product inspected one by one 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逐件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 one by one 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.



对于原材料和零部件的检验要求/ Inspection Requirements for Materials and Components

产品如下原材料和零部件应由本社认可的制造厂生产/The following materials and components of the product should be manufactured by the factory approved by the Society:
无/Nil.

产品如下原材料和零部件应经本社检验/The following materials and components of the product should be inspected by the Society:
无/Nil.

产品如下原材料和零部件的制造厂清单, 经本社批准方可变更/The list of manufacturer for the following materials and components of the product should not be changed without the Society's approval:
无/Nil.

责任声明/Statement of Responsibility

本社的认可不影响、替代与本社授权或检验无关的各方对上述工厂的认可和发证, 并且不对与本社授权或检验无关的各方负责, 不承担其未经应允而承认、接受本社认可所导致的法律和经济责任。
The approval of the Society does not affect and replace any approval and certification of the manufacturer by any parties that bear no relation with this Society's authorization or survey and therefore takes no responsibility for these parties. The Society does not undertake any legal and economic liabilities arising from accepting this Society's certificate without prior permission from this Society.

其他/Others

1. 业经本社认可的生产线:
Alternative manufacturing site approved by CCS:
Name: ABB AS
Address: Arukula tee 59, 75301 Juri, Harjumaa, Estonia
2. ACS880系列技术规格详见附页。
For specific description of ACS880 series, refer to additional page.
3. 本证书由原型式认可证书 (No. GB17T00009_01) 换新并替代原证书。
This certificate is renewed from and supersedes the previous Type Approval Certificate No. GB17T00009_01.
4. 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.



*****本证书正文完/ End of Text*****

注: 本证书含有附页, 共1页

Note: The certificate is attached with 1 additional page(s)

Product Description

The ACS880 series are drive modules and drive module packages for controlling asynchronous AC induction motors, permanent magnet synchronous motors, AC induction servomotors and ABB synchronous reluctance motors (SynRM motors).

Drive	Voltage U _n (V)	Power P _N (kW)	Power S _N (kVA)	Frame sizes
High power single drive module packages:				
ACS880-04XT-XXXX-3/5/7	380~415, 380~500, 525~690	599 - 1140	-	2×R10, 2×R11
ACS880-04-XXXX-3/5/7	380~415, 380~500, 525~690	532 - 2090	-	2×D7T+2×R8i, D8T...4×D8T + 2×R8i...4×R8i
ACS880-14/34-XXXX-3/5/7	380~415, 380~500, 525~690	238 - 2090	-	R8i...4×R8i+BLCL-XX-X + R8i...4×R8i
Supply module(s):				
ACS880-204-XXXX-3/5/7(IGBT)	380~415, 380~500, 525~690	-	138 - 5819	R6i+ALCL-05-5; R8i...10×R8i+5*BLCL-25-7
ACS880-304-XXXX-3/5/7(Diode)	380~415, 380~500, 525~690	-	430 - 5174	2×D7T, D8T...6×D8T
Inverter module(s):				
ACS880-104-XXXX-3/5/7	380~415, 380~500, 525~690	5.2 - 5320	8.3 - 3872	R5i, R6i, R7i, R8i...10×R8i
Brake module(s):				
ACS880-604-XXXX-3/5/7 (NBRA-types, 1-phase)	380~415, 380~500, 525~690	67 - 678 (continuous)	-	NBRA658, NBRA659...6×NBRA669
ACS880-604-XXXX-3/5/7 (nxR8i-types, 3-phases)	380~415, 380~500, 525~690	480 - 6180 (continuous)	-	R8i...5×R8i
DC/DC-converter module(s):				
ACS880-1604-XXXX-3/5/7	380~415, 380~500, 525~690	290 - 2721	-	R8i...5×R8i (DC output)

Note 1: For details of technical data and type designation label XXXX, refer to ACS880 Marine Supplement 3AXD50000037752.

Note 2: The ratings apply at an ambient temperature of 45 °C. In the temperature range +45 to 55 °C, the rated output current is derated by 1% for every





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CHINA CLASSIFICATION SOCIETY

证书格式号/Form: T01.02-
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CERTIFICATE OF TYPE APPROVAL

证书编号/Certificate No. SW18T00005_03

兹证明本证书所述制造厂生产的下列产品能够满足下面列明认可标准的要求。

This is to certify that the following products produced by the manufacturer stated in the certificate can meet the requirements of the approval standards listed below.

认可产品/ Product Approved

变频器

Frequency converter

制造厂/ Manufacturer

ABB Oy, Drives

Hiomotie 13, 00380 Helsinki, Finland

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》(2018)及其修改通报第4篇第1,2,3章
Chapter 1,2,3 Part Four of China Classification Society Rules for Classification of Sea-going Steel Ships 2018 and its Amendments

证书有效期至/ This Certificate is valid until

2022年8月26日 / Aug. 26, 2022

发证机构
Issued by 中国船级社斯德哥尔摩办事处
CCS Stockholm Office

签发日期
Date 2019年3月18日
Mar. 18, 2019

本证书根据中国船级社《钢质海船入级规范》及有关程序规定签发。关于证书的有关规定见本证书背面的说明。当本证书包括多页纸张时，则所有证书页为一个整体，必须同时使用。每一页证书均须由本社盖章方为有效。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。本认可证书不代表本社对个体产品质量的检验。有关各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 Rules for Classification of Sea-going Steel Ships and related procedures of the Society. Refer to the back of the certificate for detailed requirements of the certificate. When the certificate consists of more than one page, all pages of the certificate are taken as a whole and are used simultaneously. No certificate page is valid without bearing the stamp of the Society 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. This approval certificate does not constitute the inspection of the Society about the quality of the unit/batch product. Related parties who are doubted about the authenticity of the certificate may inquire of the Society or its offices.



中国船级社总部/CCS headquarters: 北京市东直门南大街9号船检大厦 邮编: 100007 电话/Tel: +86(10) 58112288 传真/Fax: +86(10) 58112811
CCS Mansion, 9 Dongzhimen Nan Da Jie, Beijing 100007, China 网址/Web Site: <http://www.ccs.org.cn>
本地检验机构/CCS Local Office: 中国船级社斯德哥尔摩办事处 Stockholm Office 电话/Tel: + 46 8 578 77 111 传真/Fax: + 46 8 578 77 010

SW02523763
N° 16182901

产品明细/ Product Description

变频器/FREQUENCY CONVERTER	
型号/Type	: ACS880 series, for details see Others
额定电压/Rated Voltage	: 380~415 V, 380~500 V, 525~690 V
频率/Frequency	: 50/60 Hz ±5%
防护等级/Protect Class	: IP22/IP42/IP54
冷却方式/Cooling way	: Air-cooled(Dry clean air)

批准的图纸和设计计算书/ Approved Drawings and Design Calculations

图纸批准号/ Drawings Approval No. : NP16A03788

产品认可试验报告/ Approval Test Report

试验报告编号/Test Report No. : Summary sheet of test reports
 试验报告日期/Test Report Date : 2017-04-13
 试验单位/ Laboratory : SGS, Nemko Oy, VTT, ABB Oy, INNVENTIA AB, TUV Rheinland, Intertek
 试验单位地址/ Test Address : Finland, Germany

产品适用范围/ Application of the Product

船舶与海上设施/Ships and Offshore Installations

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, 检查工作可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 periodical audit should be carried out within 3 months before and after the anniversary date which corresponds to the date of expiry of the relevant.

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

按照规范逐件检验的产品/The product inspected one by one 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逐件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 one by one 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.

对于原材料和零部件的检验要求/ Inspection Requirements for Materials and Components

产品如下原材料和零部件应由本社认可的制造厂生产/The following materials and components of the product should be manufactured by the factory approved by the Society:
无/Nil.

产品如下原材料和零部件应经本社检验/The following materials and components of the product should be inspected by the Society:
无/Nil.

产品如下原材料和零部件的制造厂清单, 经本社批准方可变更/The list of manufacturer for the following materials and components of the product should not be changed without the Society's approval:
无/Nil.

责任声明/Statement of Responsibility

本社的认可不影响、替代与本社授权或检验无关的各方对上述工厂的认可和发证, 并且不对与本社授权或检验无关的各方负责, 不承担其未经应允而承认、接受本社认可所导致的法律和经济责任。
The approval of the Society does not affect and replace any approval and certification of the manufacturer by any parties that bear no relation with this Society's authorization or survey and therefore takes no responsibility for these parties. The Society does not undertake any legal and economic liabilities arising from accepting this Society's certificate without prior permission from this Society.

其他/Others

1. 业经本社认可的生产线:
Alternative manufacturing site approved by CCS:
Name: ABB AS
Address: Arukula tee 59, 75301 Juri, Harjumaa, Estonia
2. ACS880系列技术规格详见附页。
For specific description of ACS880 series, refer to additional page.
3. 本证书由原型式认可证书 (No. GB17T00009_02) 换新并替代原证书。
This certificate is renewed from and supersedes the previous Type Approval Certificate No. GB17T00009_02.
4. 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.



*****本证书正文完/ End of Text*****

注: 本证书含有附页, 共1页

Note: The certificate is attached with 1 additional page(s)



Product Description

The ACS880 series are air-cooled cabinet-installed drives for controlling asynchronous AC induction motors, permanent magnet synchronous motors, AC induction servomotors and ABB synchronous reluctance motors (SynRM motors).

Drive	Voltage U _n (V)	Power P _N (kW)	Power S _N (kVA)	Frame sizes
Cabinet-built ACS880 single drives and ACS880 multi-drives:				
ACS880-07-XXXX-3/5/7	380~415, 380~500, 525~690	52 - 2660		R6...R11, 2×D7T + 2×R8i, 1...4×D8T + 2...5×R8i
ACS880-17/37-XXXX-3/5/7	380~415, 380~500, 525~690	152 - 3040		R11, R8i...6×R8i + R8i...6×R8i
ACS880 multi-drives	380~415, 380~500, 525~690	Refer to EN_ACS880_multidrives_catalog 3AUA0000115037		
Supply unit (s):				
ACS880-207-XXXX-3/5/7(IGBT)	380~415, 380~500, 525~690		278 - 5819	R8i...4×R8i, 6×R8i, 8×R8i, 10×R8i
ACS880-307-XXXX-3/5/7(Diode)	380~415, 380~500, 525~690		430 - 5174	2×D7T, D8T...6×D8T
Inverter unit (s):				
ACS880-107-XXXX-3/5/7	380~415, 380~500, 525~690	5.2 - 5320	8.3 - 6466	R5i, R6i, R7i, R8i...10×R8i
Brake unit (s):				
ACS880-607-XXXX-3/5/7 (NBRA-types, 1-phase)	380~415, 380~500, 525~690	91 - 678 (continuous)	-	NBRA659...6×NBRA669
ACS880-607-XXXX-3/5/7 (nxR8i-types, 3-phases)	380~415, 380~500, 525~690	480 - 6180 (continuous)	-	R8i...5×R8i
DC/DC-converter unit (s):				
ACS880-1607-XXXX-3/5/7	380~415, 380~500, 525~690	290 - 2721	-	R8i...5×R8i (DC output)

Note 1: For details of technical data and type designation label XXXX, refer to ACS880 Marine Supplement 3AXD50000039629.

Note 2: The ratings apply at an ambient temperature of 45 °C. In the temperature range +45 to 55 °C, the rated output current is derated by 1% for every





中国船级社
CHINA CLASSIFICATION SOCIETY

证书格式号/Form: T01.02-
HQ000102

型式认可证书
CERTIFICATE OF TYPE APPROVAL

证书编号/Certificate No. SW18T00005_04

兹证明本证书所述制造厂生产的下列产品能够满足下面列明认可标准的要求。

This is to certify that the following products produced by the manufacturer stated in the certificate can meet the requirements of the approval standards listed below.

认可产品/ Product Approved

变频器

Frequency converter

制造厂/ Manufacturer

ABB Oy, Drives

Hiomotie 13, 00380 Helsinki, Finland

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》(2018)及其修改通报第4篇第1,2,3章
Chapter 1,2,3 Part Four of China Classification Society Rules for Classification of Sea-going Steel Ships 2018 and its Amendments
- 2.中国船级社《钢质海船入级规范》(2018)及其修改通报第3篇第2章
Chapter 2 Part Three of China Classification Society Rules for Classification of Sea-going Steel Ships 2018 and its Amendments

证书有效期至/ This Certificate is valid until

2022年8月26日 / Aug. 26, 2022

发证机构 中国船级社斯德哥尔摩办事处
Issued by CCS Stockholm Office

签发日期 2019年3月18日
Date Mar. 18, 2019

本证书根据中国船级社《钢质海船入级规范》及有关规定签发。关于证书的有关规定见本证书页背面的说明。当本证书包括多页纸张时，则所有证书页为一个整体，必须同时使用。每一页证书均须由本社盖章方为有效。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。本认可证书不代表本社对个体产品质量的检验。有关各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。
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中国船级社总部/CCS headquarters: 北京市东直门南大街9号船检大厦 邮编: 100007 电话/Tel: +86(10)58112288 传真/Fax: +86(10)58112811
CCS Mansion, 9 Dongzhimen Nan Da Jie, Beijing 100007, China 网址/Web Site: <http://www.ccs.org.cn>
本地检验机构/CCS Local Office: 中国船级社斯德哥尔摩办事处 CCS Stockholm Office 电话/Tel: +46 8 578 77 111 传真/Fax: +46 8 578 77 010

SW52410583
No. 16182902

产品明细/ Product Description

变频器/FREQUENCY CONVERTER	
型号/Type	: ACS880-07CLC Compact Drive
额定电压/Rated Voltage	: 525~690 V
频率/Frequency	: 50/60 Hz ±5%
防护等级/Protect Class	: IP42/IP54
冷却方式/Cooling way	: Liquid-cooled

批准的图纸和设计计算书/ Approved Drawings and Design Calculations

图纸批准号/ Drawings Approval No. : NP18A00567

产品认可试验报告/ Approval Test Report

试验报告编号/Test Report No. : Summary sheet of test reports
 试验报告日期/Test Report Date : 2017-04-13
 试验单位/ Laboratory : SGS, Nemko Oy, VTT, ABB Oy, INNVENTIA AB, TUV Rheinland, Intertek
 试验单位地址/ Test Address : Finland, Germany

产品适用范围/ Application of the Product

船舶与海上设施/Ships and Offshore Installations

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, 检查工作可在周年日的前后三个月内进行。
If belong to the situation of the production 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 periodical audit should be carried out within 3 months before and after the anniversary date which corresponds to the date of expiry of the relevant.

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

按照规范逐件检验的产品/The product inspected one by one 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逐件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 one by one 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.



对于原材料和零部件的检验要求/ Inspection Requirements for Materials and Components

产品如下原材料和零部件应由本社认可的制造厂生产/The following materials and components of the product should be manufactured by the factory approved by the Society:
无/Nil.

产品如下原材料和零部件应经本社检验/The following materials and components of the product should be inspected by the Society:
无/Nil.

产品如下原材料和零部件的制造厂清单, 经本社批准方可变更/The list of manufacturer for the following materials and components of the product should not be changed without the Society's approval:
无/Nil.

责任声明/Statement of Responsibility

本社的认可不影响、替代与本社授权或检验无关的各方对上述工厂的认可和发证, 并且不对与本社授权或检验无关的各方负责, 不承担其未经应允而承认、接受本社认可所导致的法律和经济责任。
The approval of the Society does not affect and replace any approval and certification of the manufacturer by any parties that bear no relation with this Society's authorization or survey and therefore takes no responsibility for these parties. The Society does not undertake any legal and economic liabilities arising from accepting this Society's certificate without prior permission from this Society.

其他/Others

1. ACS880-07CLC技术规格详见附页。
For specific description of ACS880-07CLC, refer to additional page.
2. 本证书由原型式认可证书 (No. GB17T00009_02) 变更。
This certificate is modified from the previous Type Approval Certificate No. GB17T00009_02.
3. 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.



*****本证书正文完/ End of Text*****

注: 本证书含有附页, 共1页

Note: The certificate is attached with 1 additional page(s)



Product Description

The ACS880-07CLC is a liquid-cooled cabinet-installed drive for controlling asynchronous AC induction motors, permanent magnet synchronous motors and AC induction servomotors. The drive consists of several cubicles that contain the supply and motor terminals, 1 to 8 diode supply module(s), 1 to 8 inverter modules, and optional equipment.

Compact drive	Nominal Voltage U_n (V)	Power P_N (kW)	Power S_N (kVA)	Frame sizes
ACS880-07CLC-XXXXX-7	690	355 - 6000	466 - 7720	1×D8D+1×R8i ... 8×D8D+8×R8i
Diode supply unit(s):				
ACS880-304LC-XXXXX-7 + A019	690	932 - 6784	-	1×D8D ... 8×D8D
ACS880-307LC-XXXXX-7 + A019	690	932 - 6784	-	1×D8D ... 8×D8D
Inverter unit(s):				
ACS880-104LC-XXXXX-7	690	355 - 6000	-	1×R8i 8×R8i
ACS880-107LC-XXXXX-7	690	355 - 6000	-	1×R8i 8×R8i
Chopper unit(s)				
ACS880-607LC-XXXXX-7	690	119 - 714 (continuous)	-	1×NBRW-669C... 6×NBRW-669C
ACS880-604LC-XXXXX-7	690	119 - 714 (continuous)	-	1×NBRW-669C... 6×NBRW-669C
ACS880-607LC-XXXXX-7 (with resistor)	690	54 - 324 (continuous)	-	1×NBRW-669C... 6×NBRW-669C
ACS880-604LC-XXXXX-7 (with resistor)	690	54 - 324 (continuous)	-	1×NBRW-669C... 6×NBRW-669C

Cooling unit(s)	Nominal Voltage U_n (V)	Cooling Power P_N (kW)	Internal flow (l/min)	External flow (l/min)
ACS880-1007LC-0070/0195	380/400, 660/690	70 / 195	95 / 270	117 / 467

Note 1: For details of technical data and type designation label XXXX, refer to hardware manual of ACS880-07CLC 3AXD50000131457.

Note 2: Above ratings apply at an ambient air temperature of 45 °C and a coolant temperature of 40 °C. In the temperature range +45 to 55 °C, the rated output current is derated by 0.5 percentage points for every added 1 °C.

