中国船级社
CHINA CLASSIFICATION SOCIETY

证书格式号/Form: T01.02-HQ002358

型式认可证书
CERTIFICATE OF TYPE APPROVAL

证书编号/Certificate No. HB17T00043

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

可编程控制器

PROGRAMMABLE CONTROLLER— Modicon M340, Modicon M580, Modicon X80

制造厂/ Manufacturer

Schneider Electric

ZI Carros 8eme Rue, F-06516 Carros, France

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》（2015）及其修改通报第7篇第2章
Chapter 2, Part Seven of China Classification Society Rules for Classification of Sea-Going Steel Ships 2015 and its Amendments.

证书有效期至/ This Certificate is valid until 2022年2月20日 / Feb. 20, 2022

发证机构 Issued by 中国船级社汉堡分社 CCS Hamburg Branch

签发日期 Date 2018年2月21日 Feb. 21, 2018

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: 中国船级社汉堡分社 CCS Hamburg Branch 电话/Tel: 0049-40-3860890 传真/Fax: 0049-40-38608918

HB81982267
No. 16807892

产品明细/ Product Description

可编程控制器/PROGRAMMABLE CONTROLLER

产品型号/Type	: Modicon M340, Modicon M580, Modicon X80
电源/Power Supply	: 24VDC to 48VDC;125VDC;100VAC to 240VAC
系统组成/Components	: 见附页/See attachment pages

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

图纸批准号/ Drawings Approval No.	:	NP16A03995

产品认可试验报告/ Approval Test Report

试验报告编号/Test Report No.	:	S1A3340300-00
试验报告日期/Test Report Date	:	2009-04-19
试验单位/ Laboratory	:	- SCHNEIDER Electric
试验单位地址/ Test Address	:	- ZI Carros 8eme Rue, F-06516 Carros, France
试验报告编号/Test Report No.	:	NVE4157400 01
试验报告日期/Test Report Date	:	2016-05-30
试验单位/ Laboratory	:	- SCHNEIDER Electric
试验单位地址/ Test Address	:	- ZI Carros 8eme Rue, F-06516 Carros, France
试验报告编号/Test Report No.	:	HRB2730300 01
试验报告日期/Test Report Date	:	2013-01-22
试验单位/ Laboratory	:	- SCHNEIDER Electric
试验单位地址/ Test Address	:	- ZI Carros 8eme Rue, F-06516 Carros, France
试验报告编号/Test Report No.	:	EAV5002500 01
试验报告日期/Test Report Date	:	2014-02-17
试验单位/ Laboratory	:	- SCHNEIDER Electric
试验单位地址/ Test Address	:	- ZI Carros 8eme Rue, F-06516 Carros, France
试验报告编号/Test Report No.	:	BBV4529500 03
试验报告日期/Test Report Date	:	2010-12-08
试验单位/ Laboratory	:	- SCHNEIDER Electric
试验单位地址/ Test Address	:	- ZI Carros 8eme Rue, F-06516 Carros, France
试验报告编号/Test Report No.	:	S1A6162900_00
试验报告日期/Test Report Date	:	2010-04-21
试验单位/ Laboratory	:	- SCHNEIDER Electric
试验单位地址/ Test Address	:	ZI Carros 8eme Rue, F-06516 Carros, France

产品适用范围/ Application of the Product

船舶及海上设施/ 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

按照规范只认可不进行产品检验的产品/The product approved only in term of the rules:
认可后的产品检验由制造厂按本社批准的产品检验计划进行检验，经检验合格后由制造厂签发合格证明，并连同该产品的本社认可证书复印件一并交付用户，制造厂对产品符合公约、法规、本社规范和本社认可的标准规定负责。
After approval, product inspection should be carried out by the Manufacturer in accordance with the product inspection scheme approved by the Society. Upon satisfactory inspection, and the Quality Certificate issued by the Manufacturer should be provided to the purchaser together with the copy of the approval certificate issued by the Society. The manufacturer should take responsibility for the product being in compliance with the convention, statutory regulation, the Society rules and the standard accepted by the Society.

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..Approval Condition:

The equipment is not allowed to be exposed on weather deck area.
The approval is only about hardware this time.
Some units are compliant for bridge installation(See * mark items on additional page)
Enclosure protection according to CCS rules to be provided upon installation on board.

2. Maufacture name and address:
1)Schneider Electric.
Address: ZI Carros 8eme Rue, F-06516 Carros, France
2)PT Schneider Electric Manufacturing Batam.
Address Batamindo Industrial Park, Block 4&208, Muka Kuning, 29433 Batam Island, Indonesia.

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.

中国船级社汉堡分社
CCS Hamburg Branch

*****本证书正文完/ End of Text*****

注：本证书含有附页，共5页
Note:The certificate is attached with 5 additional page(s)

Product description

Modicon M340 is an automation platform comprising the modules indicated below.
It could be installed on board and connected to ABE7 (Pre-wired system) and to XBTGT, HMISTU, HMISTO (Human Machine Interfaces).
Before installation, read the instruction NHA3301400 regarding EMC
(✱) These products comply with EMC Class B requirements without cabinet nor filter for Bridge.

	PRODUCT Reference	DESCRIPTION
	CPU	
	BMX P34 1000 (H)	Processor, 1 channel Modbus
	BMX P34 2000	Processor, 2 channel Modbus
	BMX P34 2010	Processor, Modbus CANopen
	BMX P34 20102 (CL)	Processor, Modbus CANopen and Ethernet
(✱)	BMX P34 2020 (H)	Processor, Modbus Ethernet
	BMX P34 2030	Processor, Ethernet CANopen
	BMX P34 20302 (H) (CL)	Processor, Ethernet CANopen
(✱)	BMX PRA 0100	Peripheral Remote IO Adaptor
(✱)	BMX P34 20 ITRB	Processor, 2 channels dedicated to IT business
	BME P58 4040	Control Processor Unit
	BME P58 4020	Control Processor Unit
	BME P58 3040	Control Processor Unit
	BME P58 3020	Control Processor Unit
	BME P58 2040 (H)	Control Processor Unit
	BME P58 2020 (H)	Control Processor Unit
	BME P58 1020 (H)	Control Processor Unit
	BME H58 6040 (C)	Control Processor Unit Hot-Standby
	BME P58 5040 (C)	Control Processor Unit
	BME H58 4040	Control Processor Unit Hot-Standby
	BME H58 2040	Control Processor Unit Hot-Standby
	BME H58 4040K	Control Processor Unit Hot-Standby, bundle
	BME H58 2040K	Control Processor Unit Hot-Standby, bundle
	BME H58 6040C	Control Processor Unit Hot-Standby, coated
	BME H58 4040C	Control Processor Unit Hot-Standby, coated
	BME H58 2040C	Control Processor Unit Hot-Standby, coated

—To be continued—

	PRODUCT Reference	DESCRIPTION
	Power Supply	
(✱)	BMX CPS 2000	Power Supply, standard AC
(✱)	BMX CPS 2010	Power Supply, standard isolated DC
	BMX CPS 3020 (H)	Power Supply, high power isolated 24VDC to 48VDC
(✱)	BMX CPS 3500 (H)	Power Supply, high power AC
	BMX CPS 3540 T	Power Supply, high power AC
	Digital I / O	
	BMX DAI 0814	Digital input module, 08I, 100...120 Vac
(✱)	BMX DAI 0805	Digital input module, 08I, 220 Vac
(✱)	BMX DAI 1602 (H)	Digital input module, 16I 24VAC/24VDC source
(✱)	BMX DAI 1603 (H)	Digital input module, 16I 48VAC
(✱)	BMX DAI 1604 (H)	Digital input module, 16I, 100VAC to 120VAC
	BMX DAO 1605 (H)	Digital output module, 16Q triacs
(✱)	BMX DDI 1602 (H)	Digital input module, 16I 24VDC sink
	BMX DDI 1603 (H)	Digital input module, 16I 48VDC sink
	BMX DDI 1604 T	Digital input module, 16I 125 V DC sink
	BMX DDI 3202 K	Digital input module, 32I 24VDC sink
	BMX DDI 6402 K	Digital input module, 64I 24VDC sink
(✱)	BMX DDM 16022 (H)	Digital mixed I/O module, 8I 24VDC 8Q transistors source
	BMX DDM 16025 (H)	Digital mixed I/O module, 8I 24VDC 8Q relays
(✱)	BMX DDM 3202 K	Digital mixed I/O module, 16I 24VDC 16Q transistors source
(✱)	BMX DDO 1602 (H)	Digital output module, 16Q transistors source 0.5A
	BMX DDO 1612 (H)	Digital output module, 16Q sink transistors
	BMX DDO 3202 K	Digital output module, 32Q transistors source 0.1A
	BMX DDO 6402 K	Digital output module, 64Q transistors source 0.1A
(✱)	BMX DRA 0805 (H)	Digital relay output module, 8Q isolated relays
(✱)	BMX DRA 1605 (H)	Digital relay output module, 16Q relays
	BMX DRA 0804 T	Digital relay output module, 8Q isolated relays

—To be continued—

	PRODUCT Reference	DESCRIPTION
	Analog I / O	
(*)	BMX AMI 0410 (H)	Analog input module, 4 U/I In isolated high speed
(*)	BMX AMI 0800	Analog input module, 8 U/I In No Isolated Fast
(*)	BMX AMI 0810 (H)	Analog input module, 8 U/I In Isolated Fast
	BMX AMM 0600 (H)	Analog mixed I/O module, 4 In U/I, 2 Out U/I
(*)	BMX AMO 0210 (H)	Analog output module, 2 U/I isolated Out
(*)	BMX AMO 0410 (H)	Analog output module, 4 U/I Isolated out
(*)	BMX AMO 0802	Analog output module, 8 Current No Isolated out
	BMX ART 0414 (H)	Analog input module, 4 TC/RTD isolated Inputs
	BMX ART 0814 (H)	Analog input module, 8 TC/RTD isolated Inputs
	BME AHI 0812	Analog input module 8 current channels (HART)
	BME AHO 0412	Analog output module 8 current channels (HART)
	Communication device	
(*)	BMX NOE 0100 (H)	Communication module Ethernet 10/100 RJ45
(*)	BMX NOE 0110 (H)	M340 Factorycast module
	BMX NOC 0401	Communication module Ethernet 10/100 RJ45
	BMX NOC 0402	Communication module Ethernet 10/100 RJ45
	BME NOC 0301 (C)	Full Communication Ethernet
	~~BME NOC 0311 (C)~~	~~Full FactoryCast Ethernet~~
	BMX NOM 0200 (H)	2 serial link ports
	BMX XBE 1000 (H)	Extension rack module
(*)	BMX EIA 0100	AS-interface module
	BMX NOR 0200 (H)	RTU communication module
	BMX NRP 0200	Communication with optic fiber
	BMX NRP 0201	Communication with optic fiber
	BMX CRA 31200	Communication module IO adapter
	BMX CRA 31210 (C)	Communication module IO adapter
	BME CRA 31210 (C)	Communication module remote IO adapter

—To be continued—

	PRODUCT Reference	DESCRIPTION
	Counting & Positioning	
	BMX EHC 0200 (H)	Counting module, high speed 2Ch
	BMX EHC 0800 (H)	Counting module, high speed 8Ch
	BMX MSP 0200	Positioning module (Pulse Output Train)
	BMX EAE 0300 (H)	SSI encoder interface
	BMX ERT 1604 T	Time stamping
	Backplanes	
(*)	BMX XBP 0400 (H)	Backplane, 4 slots
(*)	BMX XBP 0400S	Backplane, 4 slots, NOT extendable, only in pack offer
(*)	BMX XBP 0600 (H)	Backplane, 6 slots
(*)	BMX XBP 0600S	Backplane, 6 slots, NOT extendable, only in pack offer
(*)	BMX XBP 0800 (H)	Backplane, 8 slots
(*)	BMX XBP 1200 (H)	Backplane, 12 slots
	BME XBP 0400 (H)	Backplane Ethernet, 4 slots
	BME XBP 0800 (H)	Backplane Ethernet, 8 slots
	BME XBP 1200 (H)	Backplane Ethernet, 12 slots
	Accessories	
	ABE7 CPA xxx	Wiring block for analog inputs
(*)	BMX FC...	Associated Cables
(*)	BMX FT...	Associated Cables
(*)	BMX FTB 2000	Terminal block kit, screw 20 std. points
(*)	BMX FTB 2010	Terminal block kit, screw 20 cir. points
(*)	BMX FTB 2020	Terminal block kit, spring 20 points
	PRODUCT Reference	DESCRIPTION
(*)	BMX FTB 2820	Terminal block kit, spring 28 points
(*)	BMX RMS 008MP	Memory card 8Mo
(*)	BMX RMS 008MPF	Memory card 8Mo / 8Mo Files

—To be continued—

	PRODUCT Reference	DESCRIPTION
(*)	BMX RMS 128MPF	Memory card 8Mb / 128Mo files
(*)	BMX RWS B000M	Memory card NOE Web B
(*)	BMX RWS C016M	Memory card NOE Web C 16Mo
(*)	BMX RWS FC032M	Memory Card 16Mo
(*)	BMX XBC xxxK	BusX Cord (xxx = length)
	BMX XCA USB Hxx	USB cable (x = length)
	BMX XEM 010	Protective cover
	BMX XSP xx00	Shield bar kit , xx slots
	BMX XTS CPSxx	Connector kit
	BMX XTS HSC20	Connector kit
(*)	TCS CCN...	Associated Cables
(*)	TCS MCN 3M4...	Modbus communication cables
	PACK & KIT	
	BMX XBE 2005	Extension Rack KIT (2 BMX XBE 1000 ; Cable BMX XBC 008K ; TSX TLY EX)
	BMX PAM 48000	M340 PACK alternative current, Digital 32 In 16 Out
	BMX PAM 48200	M340 PACK alternative current, Digital 32 In 16 Out, 2 free slots
	BMX PDM 48000	M340 PACK DC current, Digital 32 In 16 Out
	BMX PDM 48200	M340 PACK DC current, Digital 32 In 16 Out, 2 free slots
	BMX PDM 64100	M340 PACK DC current, Digital 32 In 32 Out, 1 free slot

(H) : Model No. followed by "H" could be installed in Harsh environment.

- Chemical aggressive environment.
  - IEC/EN 60721-3-3 classes 3C1R up to 3C3
  - ISA S71.04 classes G1 up to G3
  - IEC/EN60068-2-52 salt mist, test Kb level 2
- Extreme climatic environment :
  - Temperature : -25°C up to 70°C
  - Relative humidity : 93-95% and 25°c up to 70°C
  - Icing
  - Altitude up to 5000m

Note : Able to start in the temperature interval [-25°C,70°C], a monorack configuration can work at -40°C if it incorporated in an appropriated enclosure.

—The end—