



中国船级社
CHINA CLASSIFICATION SOCIETY

证书编号/Certificate No.
PA22PTB00002

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

SCHNEIDER ELECTRIC FRANCE-CARROS

地址/Address

8EME RUE, ZI DE CARROS, 06516 CARROS CEDEX, FRANCE

产品名称/Product

电气元器件
Electrical Element
可编程逻辑控制器
Programmable Logic Controller

认可标准/Approval Standard

1. 中国船级社《钢质海船入级规范》（2022）及其变更通告 第7篇第2章
Chapter 2, Part 7 of China Classification Society Rules for the Classification of Sea-going Steel Ships 2022 and its Change Notices

用于/Intended for

船舶与海上设施/Ships and Offshore Installations

产品明细/Product Description

可编程逻辑控制器/Programmable Logic Controller (M0001)

名称/Name	属性(值)/Value	单位/Unit
型号/Type	Modicon M340, Modicon M580, Modicon X80	
系统组成/System Component	Refer to the attachment	

批准的图纸/Approved Drawings

图纸批准号/Drawings Approval No.: NP16A03995, NP22PPP02949

证书有效期至/This Certificate is valid until 2026年02月20日/ Feb. 20,2026

发证机构/Issued by 中国船级社巴黎办事处
CCS Paris Office

签发日期/Date 2022年12月26日
Dec. 26,2022

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，可以向我社检验机构咨询。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.



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:P022-16553097

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. : 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. : 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

试验报告编号/ Test Report No. : 201803215_001
试验报告日期/ Test Report Date : 2018-07-10
试验单位/ Laboratory: F-Lab F-Lab
试验单位地址/ Test Address: 37,Quai Paul Louis Merlin F-38050 GRENOBLE Cedex 9

试验报告编号/ Test Report No. : 202006041_001_v1
试验报告日期/ Test Report Date : 2020-11-20
试验单位/ Laboratory: F-Lab
试验单位地址/ Test Address: 37,Quai Paul Louis Merlin F-38050 GRENOBLE Cedex 9

试验报告编号/ Test Report No. : D5E00398C-C
试验报告日期/ Test Report Date : 2020-09-30
试验单位/ Laboratory: Aemc Lab
试验单位地址/ Test Address: 19,rue Francois Blumet-ZI de l'Argentiere-38360 SASSENAGE

试验报告编号/ Test Report No. : R1803137C3-E-C
试验报告日期/ Test Report Date : 2018-07-04
试验单位/ Laboratory: Aemc Lab
试验单位地址/ Test Address: 19,rue Francois Blumet-ZI de l'Argentiere-38360 SASSENAGE

试验报告编号/ Test Report No. : R1803137C9-E-C
试验报告日期/ Test Report Date : 2018-08-07
试验单位/ Laboratory: Aemc Lab
试验单位地址/ Test Address: 19,rue Francois Blumet-ZI de l'Argentiere-38360 SASSENAGE

试验报告编号/ Test Report No. : R1803137C6-E-C
试验报告日期/ Test Report Date : 2018-07-04
试验单位/ Laboratory: Aemc Lab
试验单位地址/ Test Address: 19,rue Francois Blumet-ZI de l'Argentiere-38360 SASSENAGE

试验报告编号/ Test Report No. : R1910328C3-E-C
试验报告日期/ Test Report Date : 2019-12-17
试验单位/ Laboratory: Aemc Lab
试验单位地址/ Test Address: 19,rue Francois Blumet-ZI de l'Argentiere-38360 SASSENAGE

试验报告编号/ Test Report No. : 1903S02V-01
试验报告日期/ Test Report Date : 2019-05-30
试验单位/ Laboratory: Schneider Electric-Site Horizon-LVEE
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. : 2005M01C/2005M01V
试验报告日期/ Test Report Date : 2020-03-31
试验单位/ Laboratory: Schneider Electric-Site Horizon-LVEE
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. : 2005M02V
试验报告日期/ Test Report Date : 2020-04-02

试验单位/ Laboratory: Schneider Electric-Site Horizon-LVEE
 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. : 2005M03V
 试验报告日期/ Test Report Date : 2020-04-03
 试验单位/ Laboratory: Schneider Electric-Site Horizon-LVEE
 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. : R1807289C3-E-C
 试验报告日期/ Test Report Date : 2018-12-06
 试验单位/ Laboratory: Aemc Lab
 试验单位地址/ Test Address: 19,rue Francois Blumet-ZI de l'Argentiere-38360 SASSENAGE

试验报告编号/ Test Report No. : R1807289C6-E-C
 试验报告日期/ Test Report Date : 2018-12-06
 试验单位/ Laboratory: Aemc Lab
 试验单位地址/ Test Address: 19,rue Francois Blumet-ZI de l'Argentiere-38360 SASSENAGE

试验报告编号/ Test Report No. : R1807289C7-E-C
 试验报告日期/ Test Report Date : 2018-12-06
 试验单位/ Laboratory: Aemc Lab
 试验单位地址/ Test Address: 19,rue Francois Blumet-ZI de l'Argentiere-38360 SASSENAGE

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

按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.

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

1. Approval Condition:

The equipment is not allowed to be exposed on weather deck area.

The approval is only about hardware this time.

Enclosure protection according to CCS rules to be provided upon installation on board.

2. Manufacture name and address:

1) Schneider Electric France-CARROS

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

3. 本证书由原型式认可证书 (No. :HB17T00043) 换新并替换原证书。

This certificate is renewed from and supersedes the previous Type Approval Certificate No. HB17T00043.

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.

中国船级社巴黎办事处

CCS Paris Office

注: 本证书含有附页, 共7页

Note: The certificate is attached with additional 7 page(s)

Product description

Modicon M340-M580-X80 Automation Platform:

	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 6040 (C)	Control Processor Unit
	BME P58 5040 (C)	Control Processor Unit
	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 H58 4040(C)(K)	Control Processor Unit Hot-Standby
	BME H58 2040(C) (K)	Control Processor Unit Hot-Standby
	BME D58 1020(C)	Control Processor Unit

	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
	BMX CPS 4002 (H)	Power Supply, redundant, high power AC
	BMX CPS 4022 (H)	Redundant HP 24-48 VDC Power Supply
	BMX CPS 3522(H)	Redundant HP 24-48 VDC Power Supply
	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(KH)	Digital input module, 32I 24VDC sink
	BMX DDI 6402 K(KH)	Digital input module, 64I 24VDC sink
	BMX DDI 3232(H)	32 * 12/24 Vdc input channels
	BMX DDI 3203 (H)	32 * 48 Vdc input channels
(*)	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(KC)	Digital output module, 32Q transistors source 0.1A

	BMX DDO 6402 K(KC)	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
	BMX DAI 1614	DIG 16X1 SUPERVISED IN 100 TO 120 VAC
	BMX DAI 1614 H	H DIG 16X1 SUPERVISED IN 100 TO 120 VAC
	BMX DAI 1615	DIG 16X1 SUPERVISED IN 200 TO 240 VAC
	BMX DAI 1615 H	H DIG 16X1 SUPERVISED IN 200 TO 240 VAC
	BMX DAI 16142	16 * 100...120 Vac input channels
	BMX DAO 1615	DIG 16X1 TRIAC OUT 24 TO 240 VAC
	BMX DAO 1615 H	H DIG 16X1 TRIAC OUT 24 TO 240 VAC
	BMX DRA 0815	DIG 8Q 125VDC/250VAC ISOLATED RELAYS
	BMX DRA 0815 H	H DIG 8Q 125VDC/250VAC ISOLATED RELAYS
	BMX DRC 0805	DIG 8NO/NC 125VDC/250VAC ISOLATED RELAYS
	BMX DRC 0805 H	H DIG 8NO/NC 125VDC/250VAC ISOLATED RELAYS
	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(H)	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(H)	Analog input module 8 current channels (HART)
(*)	BME AHO 0412(C)	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

	PRODUCT Reference	DESCRIPTION
	Communication device	
	BMX NOC 0402	Communication module Ethernet 10/100 RJ45
	BME NOC 0301 (C)	Full Communication Ethernet
	BME NOC 0311 (C)	Full FactoryCast Ethernet
	BME NOC 0321(C)	NOC Control
	BMX NOM 0200 (H)	2 serial link ports
	BME NOR 2200 H	RTU Communication module
	BMX NUA 0100	OPC UA module
	BMX NUA 0100 H	OPC UA module
	BMX NGD 0100	Global Data module
	BME NOS 0300(C)	Ethernet embedded switch
	BME NOP 0300(C)	M580 IEC 61850 Communication Module
	BME CXM 0100(H)	CANopen module
	BMX XBE 1000 (H)	Extension rack module
(*)	BMX EIA 0100	AS-interface module
	BMX NOR 0200 (H)	RTU communication module
	BMX NRP 0200(C)	Communication with optic fiber
	BMX NRP 0201(C)	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
	Counting & Positioning	
	BMX EHC 0200 (H)	Counting module, high speed 2Ch
	BMX EHC 0800 (H)	Counting module, high speed 8Ch
	BMX ETM 0200 (H)	Frequency module
	BMX MSP 0200	Positioning module (Pulse Output Train)
(*)	BMX EAE 0300 (H)	SSI encoder interface
	BMX ERT 1604 T	Time stamping
	BMX ERT 1604 H	Time stamping

	PRODUCT Reference	DESCRIPTION
	Backplanes	
(*)	BMX XBP 0400 (H)	Backplane, 4 slots
(*)	BMX XBP 0600 (H)	Backplane, 6 slots
(*)	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
(*)	BME XBP 0602(H)	Backplane, 6 slots, dual power supplies
(*)	BME XBP 1002(H)	Backplane, 10 slots, dual power supplies
	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
(*)	BMX FTB 2820	Terminal block kit, spring 28 points
(*)	BMX RMS 008MP	Memory card 8Mo
(*)	BMX RMS 008MPF	Memory card 8Mo / 8Mo Files
(*)	BMX RMS 128MPF	Memory card 8Mb / 128Mo files
(*)	BMX RMS 004GPF	4Go Memory card for M580 CPU
(*)	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)

	PRODUCT Reference	DESCRIPTION
	Accessories	
	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
	490 NAC 0100	HSBY socket
	490 NAC 0201	HSBY socket
	BMX FTB 4000(H)	CAGED TERMINAL STRIP 40 POINTS
	BMX FTB 4020(H)	SPRING TERMINAL STRIP 40 POINTS
	BMX FTW 305	FTB 40 WIRE 3M CABLE
	BMX FTW 505	FTB 40 WIRE 5M CABLE
	PACK & KIT	
	BMX XBE 2005	Extension Rack KIT (2 BMX XBE 1000 ; Cable BMX XBC 008K ; TSX TLY EX)
	SAFETY	
	BME P58 4040S	Safety processor
	BME P58 2040S	Safety processor
	BME P58 CPROS3	Safety coprocessor
	BMX CPS 4002S	Safety power supply 100...240 Vac
	BMX CPS 3522S	Redundant HP 125 VDC Power Supply
	BMX CPS 4022S	Redundant HP 24-48 VDC Power Supply
	BMX SAI 0410	Safety analogic inputs, 4 ch 4-20mA
	BMX SDI 1602	Safety digital inputs, 16 ch 24 Vdc
	BMX SDO 0802	Safety digital outputs, 8 ch 0,5 A, 24 Vdc
	BMX SRA 0405	Safety digital outputs, 4 ch, 5 A, 24Vdc/230Vac
	BME H58 4040S	Control Processor Unit Hot-Standby
	BME H58 2040S	Control Processor Unit Hot-Standby
	BME H58 6040S	Control Processor Unit Hot-Standby

All products comply with EMC class A without cabinet nor filter.

(*) These products comply with EMC Class B requirements without cabinet nor filter.

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

- Chemical aggressive environment.
 - IEC/EN 60721-3-3, Level 3C3 and 3C4
 - ISA S71.04, Level GX
 - 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.

Please refer to catalogue for more details.