



TYPE APPROVAL CERTIFICATE

N. ELE305521CS

This is to certify that the product below is found to be in compliance with the applicable requirements of the RINA Type Approval system.

Description	Programmable Logic Controllers
Type	Modicon M340; M580; X80 I/O's
Applicant	Schneider Electric /Schneider Automation SaS ZI Carros, 8 ^{ème} Rue 06516 Carros France
Manufacturers	Schneider Electric Carros ZI Carros, 8 ^{ème} Rue 06516 Carros France PT Schneider Electric Manufacturing Batam Batamindo Industrial Park, Block 4 Muka Kuning _ Batam Island Indonesia
Testing Standards	RINA Rules for the Classification of Ships - Part C - Machinery, Systems and Fire protection. - Ch.3, Sect. 6, Table 1

Issued in **Genova** on **September 06, 2021**

This certificate is valid until **September 06, 2026**

RINA Services S.p.A.

Luigi Benedetti

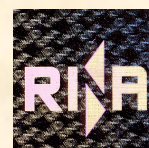




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Processor Module	Description	Notes
BMX P34 1000	Processor, Ethernet CANopen	
BMX P34 1000 H	Processor, 1 channel Modbus	
BMX P34 2000	Processor, 2 channel Modbus	
BMX P34 2010	Processor, Modbus CANopen	
BMX P34 20102	Processor, Modbus CANopen and Ethernet	
BMX P34 20102 CL	Processor, Modbus CANopen and Ethernet	
BMX P34 2020	Processor, Modbus Ethernet	(*)
BMX P34 2020 H	Processor, Modbus Ethernet	(*)
BMX P34 2030	Processor, Ethernet CANopen	
BMX P34 20302	Processor, Ethernet CANopen	
BMX P34 20302 H	Processor, Ethernet CANopen	
BMX P34 20302 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	Control Processor Unit	
BME P58 6040 C	Control Processor Unit	
BME P58 5040	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	Control Processor Unit	
BME P58 2040 H	Control Processor Unit	
BME P58 2020	Control Processor Unit	
BME P58 2020 H	Control Processor Unit	
BME P58 1020	Control Processor Unit	
BME P58 1020 H	Control Processor Unit	
BME H58 6040	Control Processor Unit Hot-Standby	
BME H58 6040 C	Control Processor Unit Hot-Standby	
BME H58 4040	Control Processor Unit Hot-Standby	
BME H58 4040 K	Control Processor Unit Hot-Standby	
BME H58 4040 C	Control Processor Unit Hot-Standby	
BME H58 2040	Control Processor Unit Hot-Standby	
BME H58 2040 K	Control Processor Unit Hot-Standby	
BME H58 2040 C	Control Processor Unit Hot-Standby	
BME D58 1020	Control Processor Unit	
BME D58 1020 C	Control Processor Unit	





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Power Supply modules	Description	Notes
BMX CPS 2000	Power Supply, standard AC	
BMX CPS 2010	Power Supply, standard isolated DC	(*)
BMX CPS 3020	Power Supply, high power isolated 24Vdc to 48Vdc	
BMX CPS 3020 H	Power Supply, high power isolated 24Vdc to 48Vdc	
BMX CPS 3500	Power Supply, high power AC	(*)
BMX CPS 3500 H	Power Supply, high power AC	(*)
BMX CPS 3540 T	Power Supply, high power AC	
BMX CPS 4002	Power Supply, redundant, high power AC	
BMX CPS 4002 H	Power Supply, redundant, high power AC	
BMX CPS 4022	Redundant HP 24-48 Vdc Power Supply	
BMX CPS 4022 H	Redundant HP 24-48 Vdc Power Supply	
BMX CPS 3522	Redundant HP 125 Vdc Power Supply	
BMX CPS 3522 H	Redundant HP 125 Vdc Power Supply	
Digital I/O modules		
BMX DAI 0814	Digital input module, 08I, 100...120 Vac	
BMX DAI 0805	Digital input module, 08I, 220 Vac	(*)
BMX DAI 1602	Digital input module, 16I, 24Vac/24Vdc source	(*)
BMX DAI 1602 H	Digital input module, 16I, 24Vac/24Vdc source	(*)
BMX DAI 1603	Digital input module, 16I, 48Vac	(*)
BMX DAI 1603 H	Digital input module, 16I, 48Vac	(*)
BMX DAI 1604	Digital input module, 16I, 100Vac to 120Vac	(*)
BMX DAI 1604 H	Digital input module, 16I, 100Vac to 120Vac	(*)
BMX DAO 1605	Digital output module, 16Q Triacs	
BMX DAO 1605 H	Digital output module, 16Q Triacs	
BMX DDI 1602	Digital input module, 16I, 24Vac/24Vdc source	(*)
BMX DDI 1602 H	Digital input module, 16I, 24Vac/24Vdc source	(*)
BMX DDI 1603	Digital input module, 16I, 48Vac	
BMX DDI 1603 H	Digital input module, 16I, 48Vac	
BMX DDI 1604 T	Digital input module, 16I, 125 Vdc sink	
BMX DDI 3202 K	Digital input module, 32I, 24Vdc sink	
BMX DDI 3202 KH	Digital input module, 32I, 24Vdc sink	
BMX DDI 6402 K	Digital input module, 64I, 24Vdc sink	
BMX DDI 6402 KH	Digital input module, 64I, 24Vdc sink	
BMX DDI 3232	Discrete input module, 32I, 12/24 Vdc input channels	
BMX DDI 3232 H	Discrete input module, 32I, 12/24 Vdc input channels	
BMX DDI 3203	Discrete input module, 32I, 48 Vdc input channels	
BMX DDI 3203 H	Discrete input module, 32I, 48 Vdc input channels	





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Digital I/O modules	Description	Notes
BMX DDM 16022	Digital mixed I/O module, 8I 24Vdc 8Q transistors source	(*)
BMX DDM 16022 H	Digital mixed I/O module, 8I 24Vdc 8Q transistors source	(*)
BMX DDM 16025	Digital mixed I/O module, 8I 24Vdc 8Q relays	
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	Digital output module, 16Q transistors source 0.5A	(*)
BMX DDO 1602 H	Digital output module, 16Q transistors source 0.5A	(*)
BMX DDO 1612	Digital output module, 16Q sink transistors	
BMX DDO 1612 H	Digital output module, 16Q sink transistors	
BMX DDO 3202 K	Digital output module, 32Q transistors source 0.1A	(*)
BMX DDO 3202 KC	Digital output module, 32Q transistors source 0.1A	
BMX DDO 6402 K	Digital output module, 64Q transistors source 0.1A	
BMX DDO 6402 KC	Digital output module, 64Q transistors source 0.1A	
BMX DRA 0805	Digital relay output module, 8Q isolated relays	(*)
BMX DRA 0805 H	Digital relay output module, 8Q isolated relays	(*)
BMX DRA 1605	Digital relay output module, 16Q relays	(*)
BMX DRA 1605 H	Digital relay output module, 16Q relays	(*)
BMX DRA 0804 T	Digital relay output module, 8Q isolated relays	
BMX DRA 0815	8 NO relay output module 125Vdc/250Vac	
BMX DRA 0815H	8 NO relay output module 125Vdc/250Vac	
BMX DRC 0805	8 NO/NC type C_ isolated relays Output module _ 125Vdc/250Vac	
BMX DRC 0805 H	8 NO/NC type C_ isolated relays Output module _ 125Vdc/250Vac	
BMX DAI 1614	Digital input module, 16 isolated channels 100-120Vac, supervised	
BMX DAI 1614 H	Digital input module, 16 isolated channels 100-120Vac, supervised	
BMX DAI 1615	Digital input module, 16 isolated channels 200-240Vac, supervised	
BMX DAI 1615 H	Digital input module, 16 isolated channels 200-240Vac, supervised	
BMX DAI 16142	Digital input module, 16 isolated channels 100-120Vac, supervised	
BMX DAO 1615	16 Channels isolated Triac 24-240Vac	
BMX DAO 1615 H	16 Channels isolated Triac 24-240Vac	
Analog I/O Modules		
BMX AMI 0410	Analog input module, 4 U/I In isolated high speed	(*)
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	Analog input module, 8 U/I In Isolated Fast	(*)
BMX AMI 0810 H	Analog input module, 8 U/I In Isolated Fast	(*)
BMX AMM 0600	Analog mixed I/O module, 4 In U/I, 2 Out U/I	
BMX AMM 0600 H	Analog mixed I/O module, 4 In U/I, 2 Out U/I	
BMX AMO 0210	Analog output module, 2 U/I isolated Out	(*)
BMX AMO 0210 H	Analog output module, 2 U/I isolated Out	(*)
BMX AMO 0410	Analog output module, 4 U/I Isolated out	(*)
BMX AMO 0410 H	Analog output module, 4 U/I Isolated out	(*)



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Analog I/O modules	Description	Notes
BMX AMO 0802	Analog output module, 8 Current, No Isolated input/output	(*)
BMX AMO 0802 H	Analog output module, 8 Current, No Isolated input/output	
BMX ART 0414	Analog input module, 4 TC/RTD isolated Inputs	
BMX ART 0414 H	Analog input module, 4 TC/RTD isolated Inputs	
BMX ART 0814	Analog input module, 8 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 isolated, (HART)	(*)
BME AHI 0812 H	Analog input module 8 current channels isolated, (HART)	(*)
BME AHO 0412	Analog output module , 4 current channels, isolated	(*)
BME AHO 0412 C	Analog output module , 4 current channels, isolated	(*)
Communication Device		
BMX NOE 0100	Communication module Ethernet 10/100 RJ45	(*)
BMX NOE 0100 H	Communication module Ethernet 10/100 RJ45	(*)
BMX NOE 0110	M340 Factorycast module	(*)
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	Full Communication Ethernet	
BME NOC 0301 C	Full Communication Ethernet	
BME NOC 0311	Full FactoryCast Ethernet	
BME NOC 0311 C	Full FactoryCast Ethernet	
BME NOC 0321	NOC Control	
BME NOC 0321 C	NOC Control	
BMX NOM 0200	2 serial link ports	
BMX NOM 0200 H	2 serial link ports	
BME NOR 2200 H	RTU Communication module, Ethernet base, 1 serial port for M580	
BMX NUA 0100	OPC UA module for M580	
BMX NUA 0100 H	OPC UA module for M580	
BMX NGD 0100	Global Data module	
BME NOS 0300	Ethernet embedded switch	
BME NOS 0300 C	Ethernet embedded switch	
BME NOP 0300	M580 IEC 61850 Communication Module	
BME NOP 0300 C	M580 IEC 61850 Communication Module	
BME CXM 0100	CANopen module	
BME CXM 0100 H	CANopen module	
BMX XBE 1000	Extension rack module	
BMX XBE 1000 H	Extension rack module	
BMX EIA 0100	AS-interface module	(*)



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Communication Device	Description	Notes
BMX NOR 0200	RTU communication module	
BMX NOR 0200 H	RTU communication module	
BMX NRP 0200	Communication with optic fiber	
BMX NRP 0200 C	Communication with optic fiber	
BMX NRP 0201	Communication with optic fiber	
BMX NRP 0201 C	Communication with optic fiber	
BMX CRA 31200	Communication module IO adapter	
BMX CRA 31210	Communication module IO adapter	
BMX CRA 31210 C	Communication module IO adapter	
BME CRA 31210	Communication module remote IO adapter	
BME CRA 31210 C	Communication module remote IO adapter	
Counting & Positioning		
BMX EHC 0200	Counter module, high speed 2ch (60kHz max)	
BMX EHC 0200 H	Counter module, high speed 2ch (60kHz max)	
BMX EHC 0800	Counter module, high speed 8ch (10kHz max)	
BMX EHC 0800 H	Counter module, high speed 8ch (10kHz max)	
BMX ETM 0200	Frequency input module, 2 ch, 0 to 500 kHz, (turbo machine)	
BMX ETM 0200 H	Frequency input module, 2 ch, 0 to 500 kHz, (turbo machine)	
BMX MSP 0200	PTO module, 2 Ch, 4 input 24Vdc nom.	
BMX EAE 0300	SSI encoder interface module 3 channels, 8...31 bits, 1 Mbaud	(*)
BMX EAE 0300 H	SSI encoder interface module 3 channels, 8...31 bits, 1 Mbaud	(*)
BMX ERT 1604 T	Multifunction Input module 16 I 24/24 to 125V, 4 groups of 4 inputs	
BMX ERT 1604 H	Multifunction Input module 16 I 24/24 to 125V, 4 groups of 4 inputs	
Backplanes		
BMX XBP 0400	Backplane, 4 slots	(*)
BMX XBP 0400 H	Backplane, 4 slots	(*)
BMX XBP 0600	Backplane, 6 slots	(*)
BMX XBP 0600 H	Backplane, 6 slots	(*)
BMX XBP 0800	Backplane, 8 slots	(*)
BMX XBP 0800 H	Backplane, 8 slots	(*)
BMX XBP 1200	Backplane, 12 slots	(*)
BMX XBP 1200 H	Backplane, 12 slots	(*)
BME XBP 0400	Backplane Ethernet, 4 slots	(*)
BME XBP 0400 H	Backplane Ethernet, 4 slots	(*)
BME XBP 0800	Backplane Ethernet, 8 slots	(*)
BME XBP 0800 H	Backplane Ethernet, 8 slots	(*)
BME XBP 1200	Backplane Ethernet, 12 slots	(*)
BME XBP 1200 H	Backplane Ethernet, 12 slots	(*)



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Backplanes	Description	Notes
BME XBP 0602	Backplane, 6 slots, dual power supplies	(*)
BME XBP 0602 H	Backplane, 6 slots, dual power supplies	(*)
BME XBP 1002	Backplane, 10 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	20-pin removable caged terminal blocks-1 x 0.34..1mm ²	(*)
BMX FTB 2010	20-pin removable screw clamp terminal blocks-1 or 2 x 0.34 .. 1.5mm ²	(*)
BMX FTB 2020	20-pin removable spring terminal blocks- 1 x 0.34..1 mm ²	(*)
BMX FTB 2820	28-pin removable spring terminal blocks- 1 x 0.34..1 mm ²	(*)
BMX RMS 008MP	SD flash Mem. card -8 Mb for M340	(*)
BMX RMS 008MPF	SD flash Mem. card -8 Mb, plus 8Mb file storage area for M340	(*)
BMX RMS 004GPF	SD flash Mem. card -4 GB for M580	(*)
BMX RWS B000M	SD flash Mem. card -8 Mb for M340 Ethernet module	(*)
BMX RWS C016M	SD flash Mem. Card -16 Mb for M340 Ethernet Module	(*)
BMX RWS FC032M	SD flash Mem. Card -32 Mb for M340 Ethernet module	(*)
BMX XBC xxxK	Backplane extension cables for M340	(*)
BMX XCA USB Hxx	USB PC cables for M340	
BMX XEM 010	Protective cover for unoccupied slot for M340	
BMX XSP xx00	Shielding connection kit for M340 rack - 8 slot	
BMX XTS CPSxx	Power supply terminal block	
BMX XTS HSC20	10 pin to 16 pin connectors for counter module _ for M340	
TCS CCN...	Cables	(*)
TCS MCN 3M4...	Modbus communication cables	(*)
490 NAC 0100	HSBY SFP Socket- RJ45	
490 NAC 0201	HSBY SFP Socket- FO singlemode	
BMX FTB 4000	Caged Terminal Strip 40 Points	
BMX FTB 4000 H	Caged Terminal Strip 40 Points	
BMX FTB 4020	Spring 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 3M Cable	
Pack & KIT		
BMX XBE 2005	Backplane Extender Kit for M340 (2 BMX XBE 1000 ; Cable BMX XBC 008K ; TSX TLY EX)	



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Safety	Description	Notes
BME P58 4040S	Processor module, Modicon M580, Safety SIL3, Level 4, Remote	
BME P58 2040S	Processor module, Modicon M580, Safety SIL3, Level 2, Remote	
BME P58 CPROS3	Processor module, Modicon M580, CoProcessor - Safety	
BMX CPS 4002S	Redundant power supply module 100..240 Vac - Safety	
BMX CPS 3522S	Redundant power supply module 125 Vdc - Safety	
BMX CPS 4022S	Redundant power supply module 24..48 Vdc - Safety	
BMX SAI 0410	Analog input module 4 inputs 4-20mA, I/O isolated - Safety	
BMX SDI 1602	Discrete input module - 16 input- 24Vdc, I/O not isolated - Safety	
BMX SDO 0802	discrete output module - 8 outputs - solid state 24 V Dc positive - Safety	
BMX SRA 0405	discrete output module - 4 outputs relay 5A, 24Vdc / 230Vac- Safety	
BME H58 2040S	Redundant HSBY processor module M580_ Safety SIL3 - Level 2	
BME H58 4040S	Redundant HSBY processor module M580_ Safety SIL3 - Level 4	
BME H58 6040S	Redundant HSBY processor module M580_ Safety SIL3 - Level 6	

(*): Compliant EMC Class B requirements without either cabinet or filter.

(C): Models may include suffix "C" when coated boards

(CL): Models may include suffix "CL" when without SD memory card

(T): Models may include suffix "T" for Extended operating temperature -25°C up to 70°C

(H): Models may be followed by "H" for Harsh Environment:

"Harsh" offer, allow Modicon M340 is used in severe environment:

- Chemical aggressive substances: products are tested according to IEC / EN 60721-3-3, Levels 3C3 and 3C4
ISA S71.04 Level GX
IEC/EN 60068-2-52 salt mist, test kb Level 2
IEC/EN 60721-3-3, Level 3S4
- Exposed at climatic aggressive environment:
Able to start in Ambient Temperature: -25°C up to 70°C

Test reports (2007):

Test configuration / functional: 0509S01C, 0512S02C, 0514S01C

EMC low frequency immunity: 0509S13V, 0509S18V, 0512S01V, 0514S09V

EMC high frequency immunity: 0509S14V, 0509S20V, 0512S11V, 0512S15V, 0512S05V, 0514S03V, 0514S15V

EMC emission: 0509S15V+2 annexes, 0512S06V+2annexes, 0514S04V+2annexes

Climatic: 0509S09V, 0509S10V, 0512S07V, 0512S08V, 0514S05V, 0514S06V

Mechanical: 0509S11V, 0512S09V, 0514S07V

Electrical safety: 0509S03V, 0509S05V, 0509S06V, 0512S03V, 0514S01V, 0512S14V





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Test reports (2010):

Test configuration / Functional:

SITIIAS: A09-061-WT-01, A10-002-WT-01, A09-001-WT1

SCHNEIDER: 0610S01C, 0610S02C, 0610S03C, 0605S01C, 0605S02C, 0803S01C, 0803S02C, 0803S03C, 0803S04C, 0803S05C, 0000584335, 0000578250

EMC low frequency immunity:

SITIIAS: A09-061-WT-01, A09-001-WT1,

SCHNEIDER: 0610S09V, 0605S07V, 0803S09V, 0803S16V, 0803S23V 0000584337

EMC high frequency immunity:

SITIIAS: A09-061-WT-01, A10-002-WT-01, A09-001-WT1,

SCHNEIDER: 0610S08V, 0605S11 V, 0610S12V, 0000580321, 0803S17V, 0803S10V

EMC Emission:

SITIIAS: A09-061-WT-01, A09-001-WT, A10-002-WT-01,

AEMCLab: R0804140C1-E-C ; R0708303C2-E

TUV: 4850008401100

SCHNEIDER: 0605S22E, 0605S08V 0610S03V, 0000580332, 0000580340, 0803S22V, 0803S26V, 0803S25V, 0803S27V

Climatic:

SITIIAS: A09-061-WT-01, A10-002-WT-01, A09-001-WT1

SCHNEIDER: 0605S12V, 0610S05V, 0610S04V, 0605S13V, 0000578237, 0803S19V, 0803S21V, 0803S14E, 0803S15E, 0000580340, 0000584340, 0803S28V, 0803S11V

Mechanical:

SITIIAS: A09-061-WT-01, A10-002-WT-01, A09-001-WT1

SCHNEIDER: 200800583-001, 2007-0958-01-A, 0610S06V, 0605S16V, 0000580324, 0000584341

Safety:

SITIIAS: A09-061-WT-01, A10-002-WT-01, A09-001-WT1,

SCHNEIDER: 0605S01V, 0605S18V, 0605S05V, 0803S07V, 0803S08V, 0803S01V, 0803S02V-01, 0803S03V, 0803S04V, 0803S06V, 0803S12V, 0911M01V, 0911M02V, 0911M03V, 0911M04V.

Test reports (2016):

Schneider Electric Test Synthesis

Doc. n.: BBV4529500, EAV5002500 01, HRB2730300 01, NVE4157400_M580_L2, SI A3340300-00, SIA6162900_00

Test reports (2021):

as described in the following Schneider Electric product test Synthesis:

PTS_M340_M580_IO Jul 2021: PHA8883800 04

PTS_M340_M580_L2_G2_HSBY-&-UAP_Jul 2021: NVE4157400 07

PTS_M580_Kooka Platform _ Jul 2021: MFR8124600 03

PTS_M580_Safety_ Jul 2021: QGH9327300 07

Technical description:

DIA6ED2110104EN Modicon M340 automation platform September 2014

DIA6ED2151012EN Modicon M580 automation platform April 2021

DIA6ED2131203EN Modicon X80 I/O modules platform February 2021 V12.0

