

How to install Automation Platforms for Merchant Navy applications

Schneider Electric
06516 Carros - France

DISCLAIMER

Instructions provided in this Technical Resolution do not substitute for Merchant Navies Rules applicable in ship manufacturing or ship maintenance & installation.

RELEVANT STANDARDS

These devices have been manufactured in accordance with:

- IACS-E10
- IEC 60945 with a selection of applicable sections
- IEC 60092-504 with a selection of applicable sections
- IEC61131-1, IEC61131-2, IEC61131-3

We cannot accept any responsibility for failure to observe these regulations.

RELEVANT PRODUCTS

These recommendations relate to Process Automation Control (Programmable Controllers, components of Distributed Control Systems and Remote IOs) for installation for Merchant Navy or off-shore applications

GENERAL INSTALLATION INSTRUCTIONS

Make sure that you follow all of the recommendations in the User Manuals and especially those listed below.

MERCHANT NAVIES INSTALLATION INSTRUCTIONS

General

Check the IP Code (Degrees of protection provided by enclosures) for compliance with your installation.

Check grounding and cabling guidelines for EMC mitigation measures in Schneider Electric user manuals.

Only analogue, digital and telecommunication signal pairs can be bounded against each other in one bundle or run in the same bundled cable.

The relay, variator, supply and power circuits must be separated from the pairs above.

Take special care when setting up the speed variators to separate the power connections from the data connections.

INSTRUCTION SHEET

Premium (TSX57)

For installation in GENERAL POWER DISTRIBUTION ZONE

To comply with EMC requirements in the GENERAL POWER DISTRIBUTION ZONE, products must be installed with accessories detailed in the table below:

Products	Instructions for Installation
All	Equipment is installed inside a EMC cabinet (e.g. NSYS3HF in the Schneider Electric catalogue) and fixed on a metallic grid. Power cables for TSXPSY must fitted : with Schaffner filter, FN 2070-1-06 on 48Vdc power supply, and Schaffner filter, FN 670-3/06 on 24Vdc power supply or equivalent.

Quantum (140 followed by letters and numbers)

For installation in GENERAL POWER DISTRIBUTION ZONE

To comply with EMC requirements in the GENERAL POWER DISTRIBUTION ZONE, products must be installed with accessories detailed in the table below:

Products	Instructions for Installation
All	Equipment is installed inside a EMC cabinet (e.g. NSYS3HF in the Schneider Electric catalogue) and fixed on a metallic grid.

INSTRUCTION SHEET

M340 / M580 (BMX or BME followed by letters and numbers)

Depending Merchant Navy agency, the system including this equipment can be verified before installation on board.

Please refer to current Type Approval or contact Schneider support for any further information.

Specific use on board: A.C. Modicon X80 Power supply and I/O modules shall be used in 110-230 V a.c. range only.

For installation in GENERAL POWER DISTRIBUTION ZONE	For installation in BRIDGE
Equipment is installed inside a EMC cabinet (e.g. NSYS3HF in the Schneider Electric catalogue) and fixed on a metallic grid, in order to obtain the necessary attenuation to comply with the limits for the frequency range 156-165 MHz.	All products comply without cabinet nor filter.
BME P58 6040 (C) BME P58 5040 (C) BME P58 4040 BME P58 4020 BME P58 3040 BME P58 3020 BME P58 2040 (H) BME P58 2020 (H) BME P58 1020 (H) BME H58 6040 (C) BME H58 4040 (K) (C) BME H58 2040 (K) (C) BME P58 4040S BME P58 2040S BME P58 CPROS3 BME H58 4040S BME H58 2040S BME H58 6040S BMX SAI 0410 BMX SDI 1602 BMX SDO 0802 BMX SRA 0405 BMX CPS 3540 T BMX CPS 4002 (H) (S) BMX CPS 4022 (H) (S) BMX CPS 3522 (H) (S) BMX XBE 1000 (H) BMX CRA 31200 BMX CRA 31210 (C) BME CRA 31210 (C) BMX DAI 0814 BMX DAI 1614 (H) BMX DAI 1615 (H) BMX DAI 0805 BMX DAI 1602 (H) BMX DAI 1603 (H) BMX DAO 1605 (H) BMX DAO 1615 (H) BMX DDI 1603 (H) BMX DDO 1612 (H) BMX DRA 0815 (H) BMX DRC 0805 (H) BMX AMM 0600 (H) BMX AMO 0802 (H) BMX ART 0814 (H) BME AHI 0812 (H) BME AHO 0412 (C) BME NOC 0301 (C) BME NOC 0311 (C)	BMX P34 1000 (H) BMX P34 2000 BMX P34 2010 BMX P34 20102 (CL) BMX P34 2020 (H) BMX P34 2030 BMX P34 20302 (H) (CL) BMX PRA 0100 BMX P34 20 ITRB BMX CPS 2000 BMX CPS 2010 BMX CPS 3020 (H) BMX CPS 3500 (H) BMX DAI 1604 (H) BMX DDI 1602 (H) BMX DDI 1604 T BMX DDI 3202 K (H) BMX DDI 6402 K (H) BMX DDM 16022 (H) BMX DDM 16025 (H) BMX DDM 3202 K BMX DDO 1602 (H) BMX DDO 3202 K (C) BMX DDO 6402 K (C) BMX DRA 0805 (H) BMX DRA 1605 (H) BMX DRA 0804 T BMX AMI 0410 (H) BMX AMI 0800 BMX AMI 0810 (H) BMX AMO 0210 (H) BMX AMO 0410 (H) BMX ART 0414 (H) BMX NOE 0100 (H) BMX NOE 0110 (H) BMX NOC 0401 BMX NOC 0402 BMX EHC 0200 (H) BMX EHC 0800 (H) BMX ETM 0200 H BMX MSP 0200 BMX XBP 0400 (H) BMX XBP 0600 (H) BMX XBP 0800 (H) BMX XBP 1200 (H)

INSTRUCTION SHEET

<p>BME NOC 0321 (C) BMX NOM 0200 (H) BMX NGD 0100 BME NOS 0300 (C) BME CXM 0100 (H) BMX EIA 0100 BMX NOR 0200 (H) BMX NRP 0200 (C) BMX NRP 0201 (C) BMX EAE 0300 (H) BMX ERT 1604 T BMX ERT 1604 H BME XBP 0400 (H) BME XBP 0800 (H) BME XBP 1200 (H) BME XBP 0602 (H) BME XBP 1002 (H) 490 NAC 0100 490 NAC 0201 BMX XBE 2005 BME NOP 0300 (C)</p>	
---	--