XPSMCMCN0000SG

Instruction Sheet
(Original Language)

04/2018

EAV8282501.01

www.schneider-electric.com

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein. If you have any suggestions for improvements or amendments or have found errors in this publication, please notify us.

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All pertinent state, regional, and local safety regulations must be observed when installing and using this product. For reasons of safety and to help ensure compliance with documented system data, only the manufacturer should perform repairs to components.

When devices are used for applications with technical safety requirements, the relevant instructions must be followed.

Failure to use Schneider Electric software or approved software with our hardware products may result in injury, harm, or improper operating results.

Failure to observe this information can result in injury or equipment damage.

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About the Book

At a Glance

Document Scope

This information is about the installation and usage of the XPSMCMCN0000SG backplane connector accessory for the XPSMCMCP0802• Modular Safety Controller.

Validity Note

The characteristics that are presented in the present manual should be the same as those characteristics that appear online. In line with our policy of constant improvement, we may revise content over time to improve clarity and accuracy. If you see a difference between the manual and online information, use the online information as your reference.

Product Related Information

The XPSMCM• is built to the following safety integrity levels: SIL 3 according to EN/IEC 61508, SILcl 3 according to EN/IEC 62061, PL e category 4 according to EN ISO 13849-1 in accordance with the applicable standards. However, the definitive SIL and PL of the application depends on the number of safety-related components, their parameters, and the connections that are made, as per the risk analysis.

The module must be configured in accordance with the application-specific risk analysis and all the applicable standards.

Pay particular attention in conforming to any safety information, different electrical requirements, and normative standards that would apply to your adaptation.

⚠ WARNING

UNINTENDED EQUIPMENT OPERATION

Perform an in-depth risk analysis to determine the appropriate safety integrity level for your specific application, based on all the applicable standards.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

NOTE: Configuration of the module is the sole responsibility of the installer or user.

For all matters concerning functional safety, if necessary, contact the competent safety authorities or the competent trade associations of your country.

Consult the specific product documentation and the relative product and/or application standards to ensure correct use of modules connected to the XPSMCMCN0000SG within your specific application.

The ambient temperature of the installed system must be compatible with the operating temperature parameters stated on the product label and in the product specifications.

XPSMCMCN0000SG Backplane Expansion Connector

Safety-related Information

NOTE: The safety-related function can be compromised if this module is not used for the intended purpose and in accordance with the instructions in the present document. This module must only be used as safety-related equipment on machines intended to protect persons, material, and installations.

⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

- Do not install, operate, or maintain this equipment unless you are a trained professional electrician and qualified to perform these activities.
- Install and use this equipment only in locations known to be non-hazardous.
- Do not use the equipment described herein to supply external drives or contactors.
- Use the same ground supply (0 Vdc) to supply all modules of the Modular Safety Controller family.
- Disconnect all power from all equipment including connected input devices, contactors, and drives prior to removing any covers or doors, or installing or removing any accessories, hardware, cables, or wires.
- If connected drives or contactors contain stored energy, allow sufficient time after the removal of power for the stored energy to discharge in accordance with the instructions for those drives and contactors.
- Always use a properly rated voltage sensing equipment to confirm that the power is removed.
- Avoid contacting terminals with hand or tools until the power has been confirmed removed.
- Follow all electrical safety regulations and standards (for example, lockout/tag-out, phase grounding, barriers) to reduce the possibility of contact with hazardous voltages in the work area.
- Remove locks, tags, barriers, temporary ground straps, and replace and secure all covers, doors, accessories, hardware, cables, and wires and confirm that a proper ground connection exists before reapplying power to the unit.
- Complete thorough hardware tests and system commissioning to verify that line voltages are not present on the control circuits before using your hardware operationally.
- Use only the specified voltage when operating this equipment and any associated products.

Failure to follow these instructions will result in death or serious injury.

⚠ DANGER

LOSS OF DESIGNATED SAFETY FUNCTION

- Install the XPSMCM• Modular Safety Controller system in an enclosure with a degree of protection of at least IP 54.
- Always use an isolated power supply (PELV) to help prevent the application of line voltages to control circuitry in the case of short-circuits.

Failure to follow these instructions will result in death or serious injury.

⚠ DANGER

POTENTIAL FOR EXPLOSION OR UNINTENDED EQUIPMENT OPERATION

- Install and use the Modular Safety Controller in non-hazardous locations only.
- Do not use the Modular Safety Controller system for life support systems.

Failure to follow these instructions will result in death or serious injury.

NOTE: The observation of operating limits and duty cycles is of particular importance for equipment designed to perform a safety-related function. If this module has been subjected to electrical, mechanical, or environmental stresses in excess of its stated limits, do not use it.

⚠ WARNING

UNINTENDED EQUIPMENT OPERATION

- Do not exceed any of the rated operating limits for the equipment specified in the present document.
- Immediately cease using and replace any equipment that has or might have been subjected to conditions in excess of its rated operating limits.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

User Responsibilities

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user, machine builder, or system integrator to perform the appropriate and complete risk analysis, evaluation, and testing of the products with respect to the relevant specific application or use thereof.

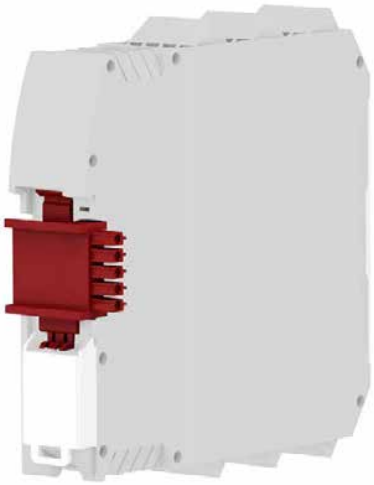
Neither Schneider Electric nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein. If you have any suggestions for improvements or amendments or have found discrepancies in this publication, notify Schneider Electric. All pertinent safety regulations must be observed when installing and using this product. For reasons of safety and to help ensure compliance with documented system data, only the manufacturer should perform repairs to components.

Qualified Personnel

Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. A qualified person is one who has skills and knowledge related to the construction and operation of this electrical equipment and its installation, and has received safety training to recognize and avoid the hazards involved.

Backplane Description

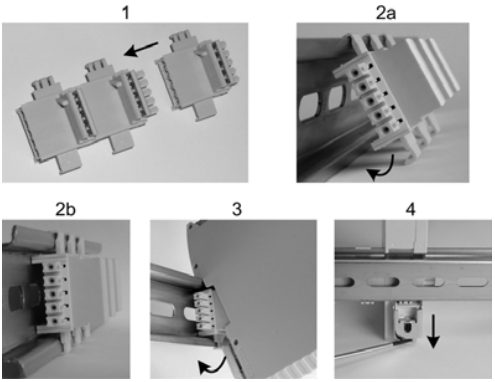
The XPSMCMCN0000SG is a 5-pole backplane expansion connector accessory which is used to connect the expansion modules to the Modular Safety Controller. The XPSMCMCN0000SG can only be configured in conjunction with the XPSMCMCP0802• Modular Safety Controller and its associated expansion modules.



NOTE: The XPSMCMCP0802• Modular Safety Controller does not include the backplane expansion connector accessory that must be ordered separately. However, one backplane expansion connector accessory is included with each input/output expansion module, except for the XPSMCMER0002• and XPSMCMER0004• modules which require no backplane connection.

Connecting Modules

To connect the Modular Safety Controller and expansion modules:

1. Connect the same number of backplane expansion connectors as the number of modules to be installed.	
2. Fix the connectors to the DIN 35 mm (EN ISO 5022) rail, connecting them on to the rail at the top first).	
3. Fasten the modules to the rail, arranging the contacts on the base of the module on the respective connector. Carefully press the module until it snaps into place.	
4. To remove a module, use a screwdriver to pull down the locking latch on the back of the module; then lift the module upwards and pull.	

Technical Characteristics

Backplane expansion connector-specific characteristics	
Connection to expansion modules	5-way backplane expansion
Ambient operating temperature	-10...+55 °C (14...131 °F)
Storage temperature	-20...+85 °C (-4...185 °F)
Relative humidity	10...95%
Maximum operation altitude	2000 m (6562 ft)
Dimensions	36.5 x 29.2 x 20.5 mm (1.44 x 1.15 x 0.8 in.)
Weight	5.2 g (0.18 Oz)

Checklist After Installation

The following must be verified:

Step	Action
1	Conduct a full functional test of the system (see *Validation* in the *Modular Safety Controller User Guide*.)
2	Verify that all the cables are correctly inserted and the terminal blocks are within correct torque for screw terminals.
3	Verify that all the LED indicators are correctly illuminating for the inputs and outputs used.
4	Verify the positioning and function of all input and output sensors and actuators used with the XPSMCM•.
5	Verify the correct mounting of XPSMCM• to the DIN rail.
6	Verify that all the external indicators (lamps/beacons/sirens) are correctly functioning.

EC Declaration of Conformity

CE

EC DECLARATION OF CONFORMITY

Copy of Document-no.: NHA3417601.00
Original Language

WE: **Schneider Electric Automation GmbH** / Schneiderplatz 1 / Marktheidenfeld 97828, Germany

hereby declare that the safety component

TRADEMARK: **SCHNEIDER ELECTRIC**

PRODUCT, TYPE: Modular Safety Controller – Communication Modules, Accessories

MODELS: XPSMCMCO0000CO•, XPSMCMCO0000DN•, XPSMCMCO0000EC•, XPSMCMCO0000EI•, XPSMCMCO0000EI2•, XPSMCMCO0000EM•, XPSMCMCO0000EP•, XPSMCMCO0000MB•, XPSMCMCO0000PB•, XPSMCMCO0000UB•, XPSMCMCN0000SG, TSXSCMCN•••, TSXESPPM•••, TSXESPP3•••

SERIAL NUMBER: YYXXZZZZ (YY: 10…99, XX: 01…53, ZZZZ: 0001…9999)

DATE OF MANUFACTURING: refer to device nameplate

all the essential protection requirements that are described in the following directives are defined, corresponding. Furthermore, the conformity with the following harmonized European standards explained:

DIRECTIVE:	HARMONIZED STANDARD:
DIRECTIVE 2004/108/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (EMC) of 15 December 2004 on the approximation of the laws of the Member States relating to electromagnetic compatibility and repealing Directive 89/336/EEC	EN 61131-2:2007
DIRECTIVE 2011/65/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (RoHS) of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment	EN 50581:2012

It is important that the safety component is subject to correct installation, maintenance and use conforming to its intended purpose, to the applicable regulations and standards, to the supplier's instructions and to accepted rules of the art.

First year of affixing CE marking: 2014

Marktheidenfeld, Germany
December 1st, 2014

I.A. Michael Schwelzer
Machine Solutions Certification Manager

The original EC Declaration of Conformity is available on our website: www.schneider-electric.com