

GP4000 Series

ATEX/IECEx Instruction Guide www.pro-face.com

Concerning the use of GP4000 Series for applications in potentially explosive atmospheres (Zones 2/22)

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Type examination certificate: INERIS 12ATEX3008X
IECEx Certificate of Conformity: IECEx INE16.0058X
Type examination certificate: CML 21UKEX4780X

SAFETY INSTRUCTIONS

Read these instructions carefully, and look at the equipment to become familiar with the device before trying to install, operate, or maintain it. The following special messages may appear throughout this documentation or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.



The addition of this symbol to a “Danger” or “Warning” safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

 **DANGER**

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.



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WARNING

WARNING indicates a hazardous situation which, if not avoided, **could result in** death or serious injury.

CAUTION

CAUTION indicates a hazardous situation which, if not avoided, **could result in** minor or moderate injury.


NOTICE

NOTICE is used to address practices not related to physical injury.

PLEASE NOTE

Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric or any of its affiliates or subsidiaries (hereinafter, referred to as Schneider Electric) for any consequences arising out of the use of this material. A qualified person is one who has skills and knowledge related to the construction and operation of electrical equipment and its installation, and has received safety training to recognize and avoid the hazards involved.

SCOPE

This present document applies when the GP4000 Series bears  marking. They are supplied only with 24 Vdc. This documentation has to be kept and always refer to those instructions for installation, operation, maintenance or evolution of your system.

You can download this instruction guide at www.pro-face.com.

If any translation is needed, you can contact your local Pro-face support or sales center.

Relevant Standards

These devices have been manufactured in accordance with:

- Standard EN 60079-0 (2012) + A11 (2013) and IEC 60079-0 (2011): Explosive atmospheres - Part 0: Equipment - General requirements.
- Standard EN 60079-15 (2010) and IEC 60079-15 (2010): Explosive atmospheres - Part 15: Equipment protection by type of protection “n”.
- Standard EN 60079-31 (2014) and IEC 60079-31 (2013): Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure “t”.



DANGER

POTENTIAL FOR EXPLOSION


Install, use, and maintain these modules in accordance with:

- Standard IEC 60079-14: Explosive atmospheres - Part 14: Electrical installations design, selection and erection.
- Standard EN 60079-17: Inspection and maintenance of electrical installations in hazardous areas.
- Edicts, by-laws, laws, directives, circulars, standards, regulations and any other document relating to where the apparatus is installed.

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

Permitted zones of application

Refer to the section titled "Markings" to get information about the permitted zones of protection and the types of protection.

- GP4000 Series installed in zones 2/22 hazardous areas must be certified and bear the  marking.
- Ensure with the marking that the terminals are compatible with the conditions permitted for the hazardous area at the site where it is being used.

Installation, Operation and Maintenance

Make sure you follow all the recommendations in the GP4000 Series Hardware Manual and additionally those listed below.



DANGER

POTENTIAL FOR EXPLOSION

- Confirm that the location is free from explosively hazardous gases or dust before connecting or disconnecting equipment, replacing or wiring modules.
- The service temperature in the suitable enclosure must not exceed 50°C or 55°C (refer to marking).
- Confirm each interface (COM1, COM2, LAN), field wiring terminal blocks and the SD Card / Battery Cover have been securely locked.
- Confirm USB cables are attached with its appropriate clamp.
- Install the modules in an enclosure EPL Gc insuring a minimal ingress protection IP54 for use in zone 2 and in an enclosure EPL Dc insuring a minimal ingress protection IP6X for use in zone 22.
- Make sure the purging test inside the product is performed and validated in accordance with IEC 60079-2 when installed in an IP4X pressurized enclosure.
- Do not install the modules in the environment more than Pollution Degree 2 as defined in IEC 60664-1.
- Do not open the enclosure when an explosive atmosphere is present.
- Confirm that the power supply has been turned OFF before disconnecting, replacing or wiring modules.
- Ensure that the FG (Functional Ground) on the power supply is properly connected to ground.
- Use only screw fasteners suitable for installations in explosive atmospheres.
- Do not use damaged equipment.
- Implement method to avoid risk of electrostatic discharge at using zone 2/ 22 areas. See the details at NOTE.
- Take into consideration during the installation, that the product underwent only a shock corresponding to an energy of a low risk at 2J.
- Use only the identical replacement battery (PFXZCBBT1) for the product equipped with the replaceable battery.

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

NOTE: GP4000 Series have risk of electrostatic discharge. If the product is operating in zone 2/22 areas, the following instructions must be applied:

- Use non-conductive gloves (e.g. Electrosoft Latex Gloves by Honeywell Safety) made of leather, plastic or rubber whose surface resistance is more than 1 GΩ at 23 ± 2 °C and 50 ± 5 % relative humidity.
- Use a non-conductive touch pen (e.g. CA7-TPPEN/ALL-01 by Pro-face) made of plastic material whose surface resistance is more than 1 GΩ at 23 ± 2 °C and 50 ± 5 % relative humidity to all terminals.



CAUTION










ENVIRONMENTAL HAZARDS TO THE EQUIPMENT

- Do not allow layers of dust to form on the GP4000 Series. Clean the unit regularly.
- Ensure that the GP4000 Series are installed according to its manufacturer's specifications.

Failure to follow this instruction can result in injury or equipment damage.

Markings


ATEX and IECEx markings applied to the GP4000 Series, are as follows:

<p>Models: PFXGP4301TAD, PFXGP4303TAD, PFXGP4401TAD, PFXGP4501TAD, PFXGP4501TMD, PFXGP4503TAD, PFXGP4601TAD, PFXGP4601TMD, PFXGP4603TAD</p>	<p>Models: PFXGP4201TAD, PFXGP4201TADW, PFXGP4203TAD, PFXGP4301TADW, PFXGP4401WADW, PFXGP4501TADW</p>	<p>Models: PFXGP4501TADLC, PFXGP4601TADLC</p>
<p>Schneider Electric Japan Holdings Ltd. 541-0041 Osaka Japan</p> <p>  </p> <p>INERIS 12ATEX3008X IECEX INE 16.0058X CML 21UKEX4780X II 3 G D Ex nA nC IIC T5 Gc Ex tc IIIC T100°C Dc Tamb: 0°C to +55°C WARNING - Do not disconnect when circuit is live. - Potential electrostatic charging hazard (see instructions).</p>	<p>Schneider Electric Japan Holdings Ltd. 541-0041 Osaka Japan</p> <p>  </p> <p>INERIS 12ATEX3008X IECEX INE 16.0058X CML 21UKEX4780X II 3 G D Ex nA nC IIC T5 Gc Ex tc IIIC T100°C Dc Tamb: 0°C to +50°C WARNING - Do not disconnect when circuit is live. - Potential electrostatic charging hazard (see instructions).</p>	<p>Schneider Electric Japan Holdings Ltd. 541-0041 Osaka Japan</p> <p>  </p> <p>INERIS 12ATEX3008X IECEX INE 16.0058X CML 21UKEX4780X II 3 G D Ex nA nC IIC T6 Gc Ex tc IIIC T85°C Dc Tamb: 0°C to +50°C WARNING - Do not disconnect when circuit is live. - Potential electrostatic charging hazard (see instructions).</p>
<p>NOTE: Other required elements such as product reference, serial number and date code of manufacture are already marked on products. All models may be followed by alphanumeric characters and there is no impact safety related critical components and constructions.</p>		


EU DECLARATION OF CONFORMITY

We: Schneider Electric Industries SAS
 35 rue Joseph Monier
 F - 92506 Rueil Malmaison

Hereby declare under our sole responsibility that the products:

Trademark	 Pro-face™ by Schneider Electric
Product, Type	Human Machine Interface GP4000 Series: PFXGP4201TAD, PFXGP4201TADW, PFXGP4203TAD, PFXGP4301TAD, PFXGP4303TAD, PFXGP4301TADW, PFXGP4401TAD, PFXGP4401WADW, PFXGP4501TAD, PFXGP4501TMD, PFXGP4503TAD, PFXGP4501TADW, PFXGP4601TAD, PFXGP4601TMD, PFXGP4603TAD Includes models with additional alphanumeric characters at the end of the model number.

Are in conformity with the requirements of the following directives and conformity was checked in accordance with the following standards.

Directive	Harmonized standard / Notified body reference
ATEX Directive 2014/34/EU	EN 60079-0: 2012/A11:2013(*), EN 60079-15: 2010, EN 60079-31: 2014
(*) A review against harmonized standard EN IEC 60079:2018, shows no significant changes relevant to these models, so standard EN 60079: 2012 continues to represent the "state of art".	Type examination certificate: INERIS 12ATEX3008X and IECEx INE 16.0058X II 3 G D  Ex nA nC IIC T5 or T6 Gc Ex tc IIIC T100°C or T85°C Dc Tamb: 0°C to +50°C or +55°C By INERIS: Parc Technologique ALATA, 60550 Verneuill en Halatte - France

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. This declaration becomes invalid in the case of any modification to the products not authorized by us.

Compliance with the ATEX Directives will require the application of ATEX guide giving requirements, details and advices for installation of products used. The guides are available on www.pro-face.com

Issued at Osaka - JAPAN: October 11th, 2021




Name: Hakim GRIB
 Digital Plant
 Certification Director

UK DECLARATION OF CONFORMITY




We: Manufacturer
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Telford, TF3 3BL - United Kingdom

Hereby declare under our sole responsibility that the products:

Trademark	 Pro-face [™] by Schneider Electric
Product, Type	Human Machine Interface GP4000 Series: PFXGP4201TAD, PFXGP4201TADW, PFXGP4203TAD, PFXGP4301TAD, PFXGP4303TAD, PFXGP4301TADW, PFXGP4401TAD, PFXGP4401WADW, PFXGP4501TAD, PFXGP4501TMD, PFXGP4503TAD, PFXGP4501TADW, PFXGP4601TAD, PFXGP4601TMD, PFXGP4603TAD Includes models with additional alphanumeric characters at the end of the model number.

Are in conformity with the requirements of the following directives and conformity was checked in accordance with the following standards.

Regulation	Designated standard / Approved body reference
SI 2016 No. 1107	EN 60079-0: 2012/A11:2013(*), EN 60079-15: 2010, EN 60079-31: 2014
(*) A review against harmonized standard EN IEC 60079:2018, shows no significant changes relevant to these models, so standard EN 60079: 2012 continues to represent the "state of art".	Type examination certificate: CML 21UKEX4780X  II 3 G D  Ex nA nC IIC T5 or T6 Gc  Ex tc IIIC T100°C or T85°C Dc Tamb: 0°C to +50°C or +55°C By Eurofins E&E CML Limited: Ellesmere Port CH65 4LZ - UK

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. This declaration becomes invalid in the case of any modification to the products not authorized by us.

Compliance with the ATEX Regulations will require the application of ATEX guide giving requirements, details and advices for installation of products used. The guides are available on www.pro-face.com

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