

GP-4100 Series Color Model ATEX/IECEX Instruction Guide

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Concerning the use of GP-4100 Series Color Model for applications
in potentially explosive atmospheres (Zones 2/22)

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Type examination certificate: INERIS 18ATEX3004X
IECEX Certificate of Conformity: IECEX INE 18.0011X

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 GP-4100 Series Color Model bears

 marking and provides important information when used in hazardous areas. 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.

GP-4100 Series Color Model is only supplied with 12...24 Vdc

Relevant Standards

These terminals 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 (2013): Explosive atmospheres - Part 14: Electrical installations design, selection and erection.
- Standard IEC 60079-17 (2013): Inspection and maintenance of electrical installations in hazardous areas.
- Standard EN 61241-14 (2004): Electrical apparatus for use in the presence of combustible dust, Part 14: Electrical apparatus protected by enclosures. Selection, installation and maintenance.
- 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 "Markings" to get information about the permitted zones of protection and the types of protection.

- GP-4100 Series Color Model 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 GP-4100 Series Color Model user 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.
- Make sure that the ambient temperature in protective enclosure never exceeds 50 °C.
- Confirm each interface (COM, Ethernet, USB, power line, ...) has been securely locked.
- Confirm that any USB cable has been attached with its appropriate clamp.
- Install the equipment 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.
- Do not install the equipment 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.
- Ensure that ground at power supply is properly connected.
- Do not use equipment that has been damaged.
- Implement method to avoid risk of electrostatic discharge at using zone 2 and 22 areas. See the details at Note.
- Do not expose the terminal to direct sunlight.
- Do not allow layers of dust to form on GP-4100 Series Color Model: it should be cleaned regularly.
- Do not use panel cutout adapter (e.g. PFXZCFAD31 by Pro-face) with screw type of installation fastener.
- Take into consideration during the installation, that the product underwent only a shock corresponding to an energy of a low risk at 2J.




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

NOTE: Front surface of GP-4100 Series Color Model 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.

Markings

ATEX and IECEx markings, applied to the GP-4100 Series Color Model is as follows:

Models	Marking
PFXGP4114T*D PFXGP4115T*D PFXGP4116T*D	<p data-bbox="415 278 868 329">Schneider Electric Japan Holdings Ltd. 541-0041 Osaka Japan</p> <div data-bbox="425 346 715 430"></div> <p data-bbox="415 470 666 605">INERIS 18ATEX3004X IECEx INE 18.0011X II 3 G D Ex nA nC IIC T5 Gc Ex tc IIIC T100°C Dc</p> <p data-bbox="415 637 640 659">Tamb: 0°C to +50°C</p> <p data-bbox="415 693 843 802">WARNING - Do not disconnect when circuit is live. - Potential electrostatic charging hazard (see instructions).</p>
<p data-bbox="118 845 881 1006">NOTE: Other required elements such as product reference, serial number and date code of manufacture are already marked on products. * is an alphanumeric characters and there is no impact safety related critical components and constructions. 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
Rueil Malmaison 92506 - France

Hereby declare under our own responsibility that the products:

Trademark	Pro-face
Product, Type	Human Machine Interface GP-4100 Series Color Model: PFXGP4114T*D, PFXGP4115T*D, PFXGP4116T*D Includes models with additional alphanumeric characters at the end of the model number.
List of reference and options	See the GP-4100 Series Color Model ATEX/IECEx Instruction Guide.

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 Type examination certificate: INERIS 18ATEX3004X and IECEx IINE 18.0011X  II 3 G D Ex nA nC IIC T5 Gc Ex tc IIIC T100°C Dc Tamb: 0°C to +50°C By INERIS: Parc Technologique ALATA, 60550 Verneuil 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

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