

# GP4000M Series and LT4000 Series ATEX/IECEX Instruction Guide [www.pro-face.com](http://www.pro-face.com)

Concerning the use of GP4000M Series and LT4000 Series for applications in potentially explosive atmospheres (Zones 2/22)

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**Type examination certificate: INERIS 13ATEX3017X/01**  
**IECEX Certificate of Conformity: IECEX INE16.0015X**

## 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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NHA39411 01  
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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 Digital Electronics Corporation 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 GP4000M Series and LT4000 Series 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](http://www.pro-face.com).

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

GP4000M Series and LT4000 Series are only supplied with 24 Vdc.

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## Relevant Standards

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These terminals have been manufactured in accordance with:

- Standard EN 60079-0 (2012) + A11 (2013) and IEC 60079-0 Ed 6.0 (2011): Explosive atmospheres - Part 0: Equipment - General requirements.
- Standard EN 60079-15 (2010) and IEC 60079-15 Ed 4.0 (2010): Explosive atmospheres - Part 15: Equipment protection by type of protection "n".
- Standard EN 60079-31 (2014) and IEC 60079-31 Ed 2.0 (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 Ed4 (2007): Explosive atmospheres - Part 14: Electrical installations design, selection and erection.
- Standard EN 60079-17 (2007): 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.**

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## Permitted zones of application

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

- GP4000M Series and LT4000 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.

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## Installation, Operation and Maintenance

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Make sure you follow all the recommendations in the GP-4201TM/4301TM/4000M Hardware Manual and LT-4201TM/4301TM 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.
- 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 certified equipment in a protective enclosure providing at least IP54 protection when applied in zone 2 environments and IP6x when applied in zone 22 environments. This protective enclosure must be certified for hazardous areas zone 2 or 22.
- Do not open the protective enclosure while the system is powered up.
- Confirm that the power supply has been turned OFF before disconnecting, replacing or wiring modules.
- 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.
- The terminal must be protected against accidental shocks.
- Do not expose the terminal to direct sunlight.
- Do not allow layers of dust to form on GP4000M Series and LT4000 Series: it should be cleaned regularly.




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

**NOTE:** GP4000M Series and LT4000 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.

## Markings

ATEX and IECEx markings, applied to the GP4000M Series and LT4000 Series are as follows:

Models	Marking
PFXGM4201TAD PFXGM4301TAD PFXGP4B01D PFXXM4200TP PFXXM4300TP PFXLM4201TADDC PFXLM4201TADDK PFXLM4301TADDC PFXLM4301TADDK PFXLM4B01DDC PFXLM4B01DDK PFXLM4201TADAC PFXLM4201TADAK PFXLM4301TADAC PFXLM4301TADAK PFXLM4B01DAC PFXLM4B01DAK (maybe followed by C or W)	<b>Digital Electronics Corporation</b> <b>541-0041 Osaka Japan</b>    <b>INERIS 13ATEX3017X</b> <b>IECEx INE 16.0015X</b> <b>II 3 G D</b> <b>Ex nA nC IIC T4 Gc</b> <b>Ex tc IIIC T135°C Dc</b> <b>Tamb: 0°C to +50°C</b>  <b>WARNING</b> - Do not disconnect when circuit is live. - Potential electrostatic charging hazard (see instructions).
<b>NOTE:</b> Other required elements such as product reference, serial number and date code of manufacture are already marked on products.	

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## 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	 <b>Pro-face</b> by Schneider Electric
Product, Type	<b>Human Machine Interface</b> <b>GP4000M Series:</b> PFXGM4201TAD, PFXGM4301TAD, PFXGM4B01D, PFXXM4200TP, PFXXM4300TP Includes models with additional alphanumeric characters at the end of the model number.
List of reference and options	See the GP4000M Series and LT4000 Series 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: 2009, EN 60079-15: 2010, EN 60079-31: 2009
(*) According to art 41.2, certificates issued under Directive 94/9/EC shall be valid under this directive.	<b>EC Type examination certificate:</b> INERIS 13ATEX3017X/01 (*) and IECEx IINE 16.0015X    II 3 G D Ex nA nC IIC T4 Gc Ex tc IIIC T135°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](http://www.pro-face.com)

**Issued at Carros - FRANCE: April 20th, 2016**




Name: Alain BERNERD  
Industrial Control & Drives  
Customer Satisfaction & Quality  
Vice President




## 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	 <b>Pro-face</b> <small>by Schneider Electric</small>
Product, Type	<b>Human Machine Interface</b> <b>LT4000 Series:</b> PFXML4201TADDC, PFXML4201TADDK, PFXML4301TADDC, PFXML4301TADDK, PFXML4B01DDC, PFXML4B01DDK, PFXML4201TADAC, PFXML4201TADAK, PFXML4301TADAC, PFXML4301TADAK, PFXML4B01DAC, PFXML4B01DAK Includes models with additional alphanumeric characters at the end of the model number.
List of reference and options	See the GP4000M Series and LT4000 Series ATEX/IECEX Instruction Guide.

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