



ATEX Safety Instruction Manual

PSx1200 series



Note: This manual contains only safety instructions.

For the complete installation and user manuals, data sheets and certificates, supplier code of conduct, code of ethics, terms and conditions of sale and warranty please refer to www.gminternational.com.

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1 Installation information

1.1 General

PSx1200 series are apparatus installed into standard EN/IEC60715 TH 35 DIN-Rail or wall or frontal rack mounted located in Safe Area or Zone 2 within the specified operating temperature limits (for complete details please refer to table 1). They can be mounted with the orientation specified in the instruction manual over the entire ambient temperature range.

The end user is responsible to ensure that the operating temperature of the module is not exceeded in the end use application.

Units must be protected against dirt, dust, extreme mechanical (e.g. vibration, impact and shock) and thermal stress, and casual contacts.

Electrical connections are accommodated by polarized removable screw terminal blocks or fixed terminal blocks which can be plugged in/out into a powered unit without suffering or causing any damage. Connect only one individual conductor per each clamping point, use conductors suitable for size of each terminal block. The wiring cables have to be proportionate in base to the current and the length of the cable.

PSx1200 series must be installed, operated and maintained only by qualified personnel, in accordance to the relevant national/international installation standards (e.g. EN/IEC 60079-14 Explosive atmospheres - Part 14: Electrical installations design, selection and erection), following the established installation rules.

All circuits connected to PSx1200 must comply with the overvoltage category II (or better) according to EN/IEC 60664-1.

Failure to properly installation or use of the equipment may risk to damage the unit or severe personal injury.

For those models having a relay output: connect relay contacts checking the load rating to be within the contact maximum rating. To prevent relay contacts from damaging, connect an external protection (fuse or similar), chosen according to the relay breaking capacity diagram from installation instructions (for complete details please refer to table 2, if present).

For those models having a transistor output: connect transistor contacts checking the load rating to be within the contact maximum rating (for complete details please refer to table 2, if present).

For those models having contacts rated more than 50 Vac or 75 Vdc: de-energize main power source (turn off power supply voltage) and disconnect plug-in terminal blocks before opening the enclosure to avoid electrical shock when connected to live hazardous potential.

Storage: if the unit is not installed directly on a system (parts for spare or expansion with long storage periods), it must be conveniently stocked. Stocking area characteristics must comply with the following parameters: temperature -45 to +80°C; humidity 0 to 95%.

Vibration: no prolonged vibration should be perceivable in the stocking area to avoid loosening of parts or fatigue ruptures of components terminals.

Pollution: presence of pollutant or corrosive gases or vapours must be avoided to prevent corrosion of conductors and degradation of insulating surfaces.

For complete instruction manual, datasheet and certifications please refer to our website

www.gminternational.com.

1.2 Installation for zone 2 application

De-energize power source (turn off power supply voltage) before plug or unplug the terminal blocks or before servicing, unless area is known to be nonhazardous.

Warning: substitution of components may impair suitability for zone 2.

Electrostatic Hazard: to avoid electrostatic hazard, the enclosure of PSx1200 series must be cleaned only with a damp or antistatic cloth.

1.2.1 Special conditions for safe use

The equipment shall only be used in an area of at least pollution degree 2, as defined in EN/IEC 60664-1. When installed in zone 2, the unit shall be installed in an enclosure that provides a minimum ingress protection of IP54 in accordance with EN/IEC 60079-0. The enclosure must have a door or cover accessible only by the use of a tool.

1.3 Inspection, maintenance and repair

The unit cannot be repaired by the end user and must be returned to the manufacturer or his authorized representative.

If enclosure needs to be cleaned use only a cloth lightly moistened by a mixture of detergent in water.

2 Certification data

2.1 Table 1: Certificates and operating temperature

Model family	Certificate n.	Standards	Markings	Operating temperature
PSD1220	BVS 18 ATEX E 004 X	EN 60079-0 EN 60079-11 EN 60079-15 EN 60079-7	II 3G Ex ec nC ic IIC T4 Gc	-40 ÷ 60 °C
PSD1220-098	BVS 18 ATEX E 004 X	EN 60079-0 EN 60079-11 EN 60079-15 EN 60079-7	II 3G Ex ec nC ic IIC T4 Gc	-40 ÷ 60 °C
PSS1250	BVS 15 ATEX E 006 X	EN 60079-0 EN 60079-11 EN 60079-15 EN 60079-7	II 3G Ex ec nC IIC T4 Gc	-40 ÷ 70 °C
PSW1250	BVS 15 ATEX E 006 X	EN 60079-0 EN 60079-11 EN 60079-15 EN 60079-7	II 3G Ex ec nC IIC T4 Gc	-40 ÷ 70 °C

2.2 Table 2: Contacts ratings

Model family	Contacts type	Contacts function	Contacts ratings
PSD1220	Relay	Fault	2 A 50 Vac 100 VA, 2 A 24 Vdc 48 W resistive load
PSD1220-098	Relay	Fault	2 A 50 Vac 100 VA, 2 A 24 Vdc 48 W resistive load
PSS1250	Relay	Fault	2 A 50 Vac 100 VA, 2 A 24 Vdc 48 W resistive load
PSW1250	Relay	Fault	2 A 50 Vac 100 VA, 2 A 24 Vdc 48 W resistive load

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