



SALES ORDER / SERIAL NUMBER : _____

EU Declaration of Conformity and Special Instructions

The Equipment: **PIR3502 Process Infrared Photometer
PUV3402 Process Ultraviolet Photometer**

The Manufacturer: **ABB Inc.**

The Address of: **3400 Rue Pierre-Ardouin, Québec, QC, Canada**

The Conformity: Products are built in accordance with the requirements of the quality standard ISO 9001:2015

Directive **2014/30/EU** of February 26, 2014 for Electromagnetic Compatibility (EMC); Industrial Environment, in accordance with the applicable conformity standard EN 61326-1:2013 and Technical File CERT0168 to demonstrate the fulfilment of the essential requirements specified in Annex I of the directive.

Directive **2014/35/EU** of February 26, 2014 for electrical equipment designed for use within certain voltage limits (LVD). The equipment described herein is constructed in accordance with the principles of good engineering practices with regard to safety matters, and provides adequate protection against other hazards specific to the Essential Health and Safety Requirements for electrical equipment for measurement, control, and laboratory use in accordance with the applicable conformity standard EN 61010-1:2010 to demonstrate the fulfilment of the safety objectives referred to in Article 3 and specified in Annex I of the directive.

Directive **2014/34/EU** of February 26, 2014 for Explosive Atmospheres (ATEX), concerning the design and construction of equipment and protective systems intended for use in a potentially explosive atmosphere, the technical rules and Type/EC-Type Examination certification, in accordance with the applied conformity standards: EN 60079-0:2012 +A11:2013, EN 60079-1:2007, EN 60079-2:2007 and EN 60079-11:2012, and Technical File CERT0168 to demonstrate the fulfilment of the essential health and safety requirements specified in Annex II of the directive, and furthermore, after doing a gap analysis, the following applicable (parts/clause of) harmonised standards have been met: EN/IEC 60079-0:2018, EN 60079-1:2014 and EN 60079-2:2014.

Equipment marking for potentially explosive atmosphere (temperature code is unit specific):

Zone 1: 0344 II 2 G; Ex db [ib] ib pxb IIB+H2 T4... T2 Gb LCIE 03 ATEX 6007 X / 04 (0081)*
Zone 2: II 3 G; Ex pzc IIB+H2 T4... T2 Gc (Self-Declared)

Notified Body responsible for Type/EC-Type Examination: LCIE Bureau Veritas (0081), Fontenay-aux-Roses – France.

*Notified Body responsible for Factory Surveillance: DEKRA Certificaiton B.V. (0344), Meander 1051, 6825 MJ, Arnhem, The Netherlands.

The Declaration, issued under the sole responsibility of the manufacturer on September 24th, 2020:

The manufacturer hereby declares that the process control equipment described herein is intended for use in a potentially explosive atmosphere and the object of the declaration is in conformity with the relevant European Union harmonization Legislation for the Directives set forth. Furthermore, the manufacturer attests that this equipment aligns with the New Legislative Framework (NLF) and satisfies the necessary requirements for equipment marking CE.

Marc Corriveau
General Manager

Jean-François Ferland
EX Responsible Person

Nicolas Hô
Quality Manager

ABB Inc.



NOTE:

Concerning conformity to the Directive **2011/65/EU** of June 8, 2011 for restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS II), including Decision No. 768/2008/EC of July 9, 2008, large-scale fixed installations, listed in Article 2(4)(e), do not apply to the directive. Reference to the exclusion of the EU Directive 2011/65/EU shall be in the **PMU Quebec City, Canada - RoHS 2 Conformity** statement.

Temperature, T-code T2 to T4 La température, T-code T2 à T4 Temperaturklasse T2 bis T4 Codice di Temperatura, da T2 a T4 Temperatura, T-code T2 a T4	Unit specific, stated on unit identification label Spécifique à chaque appareil, indiquée sur l'étiquette d'identification de l'appareil Typspezifisch, siehe typschild Specifico per ogni unità, dichiarato sull'etichetta di identificazione dell'unità Específico de la unidad, indicado en la etiqueta de la identificación de la unidad
Operating ambient temperature Température ambiante de fonctionnement Betriebsumgebungstemperatur Temperatura ambiente di esercizio Temperatura ambiente de funcionamiento	0 to 45 degrees Celsius 0 à 45 °C degrés Celsius 0 bis 45 °C Grad Celsius Da 0 a 45 gradi Celsius 0 a 50 grados centígrados
Electrical supply Paramètres d'alimentation Energieversorgung Alimentazione elettrica Parámetros específicos	115Vac 50/60 Hz 6A; 230Vac 50/60 Hz 3A 115Vac 50/60 Hz 6A; 230Vac 50/60 Hz 3A 115Vac 50/60 Hz 6A; 230Vac 50/60 Hz 3A 115Vca 50/60 Hz 6A; 230Vca 50/60 Hz 3A 115Vac 50/60 Hz 6A; 230Vac 50/60 Hz 3A
Minimum purge air supply Alimentation air minimum Minimale zündschutzgaszufuhr Consumo minimo di aria strumenti Suministro mínimo de aire	30 liters per minute 30 litres par minute 30 liter pro minute 30 litri al minuto 30 litros por minuto
Minimum overpressure Surpression minimale de l'enceinte Mindestüberdruck Sovrapressione minima Sobrepresion minima	0,5 mbar 0,5 mbar 0,5 mbar 0,5 mbar 0,5 mbar
Maximum leakage flow rate Débit de fuite maximal Maximale leckdurchflussrate Portata massima delle perdite Caudal maximo de fuga	47 liters per minute 47 litres par minute 47 liter pro minute 47 litri al minuto 47 litros por minuto
Maximum overpressure Surpression maximale Maximaler überdruck Sovrapressione massima Sobrepresion maxima	7,5 mbar 7,5 mbar 7,5 mbar 7,5 mbar 7,5 mbar
Containment System (optical purge) Système de confinement (balayage optique) Spülsystem (Optikspülung) Sistema di tenuta (purga ottica) Sistema de contención (purga óptica)	Category of release is limited to maximum 15cc per minute at 206,8 kPa La catégorie de déclenchement est limitée à une quantité maximum de 15 cm3 par minute, à une pression de 206,8 kPa Freisetzungskategorie ist beschränkt auf max. 15cc pro minute bei 206,8 kPa La categoria dello scarico è limitata ad un massimo di 15cc al minuto a 206,8 kPa La categoría de alivio se limita a un máximo de 15cc por minuto a 206,8 kPa
Minimum purge wait time Temps de purge Vorspülzeit Tempo di purga Tiempo de espera de purga	22 minutes @ 50 Hz; 19 minutes @ 60 Hz 22 minutes à 50 Hz; 19 minutes à 60 Hz 22 minuten bei 50 Hz; 19 minuten bei 60 Hz 22 minuti a 50 Hz; 19 minuti a 60 Hz 22 minutos a 50 Hz; 19 minutos a 60 Hz

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The User Is Responsible For Ensuring The Special Conditions For Safe Use:

The user is responsible for ensuring a quality electrical supply to the equipment. Natural lightning strikes, fast high voltage transients, low voltage conditions, or an unstable line voltage frequency may cause instrument performance degradation, function loss, or damage to the equipment. The manufacturer recommends that the installation include a suitable surge suppressor to protect the equipment, and that the user provide an instrument grade supply power that is free from potential electrical supply problems.

- **Warning** - the neutral and ground (earth) connections to the equipment must be at earth (0 volts) potential. Failure to maintain earth (0 volts) potential at these connection points constitutes a serious safety hazard.

- **Caution** – it is the responsibility of the user to ensure that all connections to the equipment are approved for area classification, that all field wiring, including signal wiring, has proper separation or insulation rated at 300V minimum to protect the conductors from potentially higher voltages, and that equipment is securely fastened to protective earth.

Red plastic plugs are threaded into all unused conduit hubs to protect the enclosure from debris during shipping and storage. These plugs are for temporary use only and are not intended for normal operation. The installer's responsibility is to remove all plastic plugs and then close each hub with rigid conduit, cable gland, or plug that is suitable for the area classification.

The equipment is not susceptible to radio frequency when properly installed in a Class A industrial environment. All interconnect devices must be properly grounded, and their interconnect cables must be shielded and terminated at the entry point of the equipment. Assurance of electromagnetic compatibility for the complete system is by isolating the equipment from all interconnected devices with a recommended minimum distance of three meters.

Zone 1: Intrinsic safety circuit of purge control device is 200 nF capacitance maximum / 1 mH inductance maximum.

Temperature code is dependent upon the electric cell heat option: T2 (300 °C) with high temperature heater, T3 (200 °C) with low temperature heater, and T4 (135 °C) with no heater is installed.

Pressure / temperature compensation maximum cable length: 3.05m for pressure sensor, 1.22m for temperature probe.

- **Caution** – display window may be electrostatically charged; it must be cleaned with a damp cloth only.

- **Warning** – this equipment is air purged. Enclosure shall not be opened unless the area is known to be non-hazardous, free of any flammable materials, or unless all devices within the enclosure have been de-energized. Power shall not be restored after enclosure has been opened, or after switching off overpressure, until enclosure has been purged for either 22 minutes @ 50 Hz or 19 minutes @ 60 Hz at the flow rate of 14 liters per minute.

The user is responsible for ensuring a reliable supply of protective gas, which is required for the purging system. In the event of purge / pressurization failure, normal electrical potential within the enclosure will remain non-incendive; however, their electrical circuits may not be intrinsically safe. The purge control device, therefore, provides an alarm contact to monitor the purge / pressurization status and to alert the user of a failure. Such a failure may require the isolation of remaining hazardous live circuits to ensure a safe area.

- **Warning** - do not open any enclosure in the presence of an explosive atmosphere; do not open any flameproof enclosure while energized.

Any modification affecting the essential health and safety requirements of the equipment, or the integrity of a type protection, shall be defined as substantial. It is the responsibility of the person conducting such modification to ensure a unit verification and approval by a Notified Body.

This controlled compliance document is incomplete without all pages and is subject to change without notice.

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