SALES ORDER / SERIAL NUMBER : _____

Declaration of Conformity and Special Instructions

The Equipment: **Reid Vapor Pressure Analyzer, Types Type RVP4500SE; Type RVP4501SE, Type RVP4503SE; Type RVP4540SE; Type RVP4550SE**

The Manufacturer: ABB Inc.

The Address of: 3400 Rue Pierre-Ardouin, Québec, Qc, G1P 0B2, Canada

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

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, and in accordance with the applicable conformity standard EN50581:2012 and Technical File RVP4500-RoHS_TF170722 to demonstrate the fulfilment of the essential requirements specified in Article 4 of the directive.

Directive **2014/30/EU** of February 26, 2014 for Electromagnetic Compatibility (EMC); Industrial Environment, in accordance with the applicable conformity standard EN61326:2013 and Technical File RVP4500 / EMC 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 EU-Type Examination certification, in accordance with the applied conformity standards: EN60079-0:2012+A11:2013 and EN60079-1:2014, and Technical File RVP4500 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 (parts/clauses of) harmonized standards have been met: EN 60079-0:2018.

Equipment marking for potentially explosive atmospheres:

CE 0344 Ex II 2 G; Ex db IIB T3, Gb; EU-Type Examination Certificate # ITS 13ATEX 17817X Issue R.0

Notified Body responsible for EU-Type Examination Certificate: Intertek Italy SpA (# 2575), Via Miglioli, 2/A - 20063 Cernusco sul Naviglio, Milano - Italy

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 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
Digitally signed by Marc Corriveau
DN: cn=Marc Corriveau, c=CH, o=ABB Information Systems Ltd, ou=CA
Date: 2021.06.04 08:03:51 -04'00'

Marc Corriveau
General Manager

Jean-Francois Ferland
Digitally signed by Jean-Francois Ferland
DN: cn=Jean-Francois Ferland, ou=Normal
Date: 2021.06.03 13:18:52 -04'00'

Jean-François Ferland
EX Responsible Person

Alexandre Robinet
Digitally signed by Alexandre Robinet
DN: cn=Alexandre Robinet, ou=Normal
Date: 2021.06.04 10:19:54 -04'00'

Alexandre Robinet
Quality Manager

Operating ambient temperature Température ambiante de fonctionnement Betriebsumgebungstemperatur Temperatura ambiente di esercizio Temperatura ambiente de funcionamiento	0 to 32 degrees Celsius, 0 to 40 degrees Celsius with Vortex option 0 à 32 degrés de Celsius, 0 à 40 °C avec option de vortex 0 bis 32 grad celsius, 0 bis 40 °C mit Vortex-Option Da 0 a 32 gradi Celsius, da 0 a 40 gradi Celsius con raffreddatore a Vortex opzionale 0 a 32 grados centígrado, 0 a 40 grados centígrados con la opción de vórtice
Electrical supply Paramètres d'alimentation Energieversorgung Alimentazione elettrica Parámetros específicos	100/240 Vac; 50/60 Hz; 250 VA 100/240 Vac; 50/60 Hz; 250 VA 100/240 Vac; 50/60 Hz; 250 VA 100/240 Vca; 50/60 Hz; 250 VA 100/240 Vac; 50/60 Hz; 250 VA

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.

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.

- Warning - enclosure shall not be opened unless the area is known to be non-hazardous, or unless all devices within the enclosure have been de-energized. The removal of electrical supply power, de-energizing the apparatus, and the removal of electrical power from external communication is required before opening the flameproof enclosure, during maintenance, or whenever exposing any electrical component to a potentially explosive atmosphere.

Approved cable glands or conduit seals, either with or without adapters or reducers, are required at the entry hole for each connection to components within the flameproof enclosure. Approved blanking plugs are required for all unused entry holes. All installed cable glands, conduit sealing fittings (stopping box), adapters and blanking elements must be fitted with certified flameproof components and have a minimum gas marking equal to the marking on the device. Install an approved electrical conducting type lubricant on entry threads, and ensure that their engagement meets or exceeds a minimum of five threads. Original flameproof joint dimensions are available from the manufacturer: Akron Electric for the selector switch, Akron Electric or Killark for the enclosures and ABB – Lewisburg for the flame arrestors and interconnect conduit bushing.

Inspect and clean the machined flange flame joint surface of both the cover and the housing. Surfaces must be smooth, free of nicks, scratches, dirt, or any foreign particle buildup that would prevent a proper seal. Surfaces must seat fully against each other to provide a proper explosion-proof joint. Clean surfaces by wiping with a clean, lint-free cloth. Apply a light coat of an approved lubricant to the flange surfaces before closing the cover.

Install supplied cover bolts only, and then tighten all bolts to 30 ft. lbs. (40.7 Newton/meter) making certain that no cover bolt is omitted. Verify that the bolted joint does not allow for a 0.0015-inch (0.038 mm) thick feeler gauge to enter the joint more than 1/8-inch (3.2mm) at any point. Recommendation is to visually inspect all bolts and the flame joint on regular intervals. **MISSING BOLTS OR AN IMPROPER JOINT CAN RESULT IN AN EXPLOSION, CREATING A POTENTIAL FOR PHYSICAL INJURY OR PROPERTY DAMAGE!**

The maximum ambient temperature is 32°C unless the optional vortex cooler is cooling the process sample at 8 scfm (226.5 LPM). The operating temperature range for the optional vortex cooler is between 0 and 40°C. For the intended operating conditions, the material used for cementing in the bushing that interconnects the controller and analyzer housing has a thermal stability adequate for the minimum and maximum temperatures, to which it will be subjected, within the ratings of the apparatus

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.