

1. GENERAL

The marking of the Valve controller shall include the following:

Ex db IIC T* Gb

Ex tb IIIC T85...T113°C Db

T4: -40°C to +85°C

T5: -40°C to +72°C

T6: -40°C to +57°C

The NDX...2.. Intelligent valve controller is comprised of a base and cover with an approximate internal volume of 450 cm³ and is manufactured from cast aluminium EN AC-43400 and EN AC-42100 with a circular window cemented and additionally secured in the lid. The lid is secured using four M8 x 25mm Captive fasteners. The enclosure is divided with the electronics in the Ex d portion and the pneumatic relay situated outside the Ex d portion. Non-flammable process air is supplied at 8 bar to the equipment through a containment system fitted with both flow limiters and flame arrestors. The enclosure is provided with breathers to maintain the internal pressure below 1.1 times atmospheric pressure. The enclosure meets the requirements for IP66. Power is supplied by a 4-20mA current (maximum 30VDC), either taken from the control signal or as a direct mA control signal, and uses the supply pressure to control valve position by means of regulating the actuator pressure.

Based on the following documentation: IECEx SIR 17.0069X Issue No: 2

2. INSTALLATION INSTRUCTIONS

It is the IA Certificate Holder's responsibility to supply OEM installation instructions with each unit offered for sale as required by IEC/SANS 60079-0, clause 30.

The equipment shall be installed, operated, and maintained in accordance with the manufacturer's instructions and the applicable South African standards and regulations.

3. SPECIAL CONDITIONS FOR SAFE USE *(denoted by "X" after certificate number)*

Lid securing fasteners must be supplied by the product manufacturer and be property class A4-80.

The NDX has a non-conducting coating and may generate an ignition-capable level of electrostatic charge under certain extreme conditions. The user shall ensure that the equipment is not installed in a location where it may be subjected to external conditions (such as high-pressure steam) which might cause a build-up of electrostatic charges on non-conducting surfaces. Additionally, cleaning of the equipment shall only be done with a damp cloth.

Maximum surface temperatures for each ambient temperature are listed below:

Ambient Temperature	Maximum Surface Temperature
-40°C to +85°C	T113°C
-40°C to +72°C	T95°C
-40°C to +57°C	T85°C

4. CONDITIONS OF CERTIFICATION

This approval is granted based on the submitted documentation.

Any modifications or alterations to the equipment will invalidate this IA Certificate.

The Certificate Holder is responsible for maintaining accurate records of the equipment and this IA Certificate.

All production units must be covered by either a QAN (Quality Assurance Notification) or QAR (Quality Assurance Report).

Renewal: This IA certificate may be renewed under a valid Quality Assurance Notification (QAN) or Quality Assurance Report (QAR). Imported apparatus not sold by the IA certificate expiry date must undergo this renewal process. This condition remains the responsibility of the IA Certificate Holder.

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Renewal of this IA certificate is the responsibility of the IA Certificate Holder.

Renewal involves a document review, including:

- Verification of the latest ATEX/IECEx certificate.
- Confirmation of a valid QAN/QAR.

Certificate holders are responsible for submitting these documents.

5. MARKING

The equipment shall bear the manufacturer's original marking plate containing all relevant Ex-certification details (applicable under the ATEX Directive). The following (or similar) information shall be clearly and permanently marked on all units:

IA Certificate Holder : Valmet South Africa (Pty) Ltd
Ex Rating : Ex db IIC T* Gb
Ex tb IIIC T85...T113°C Db
T4: -40°C to +85°C
T5: -40°C to +72°C
T6: -40°C to +57°C
IA Certificate No : S-XPL/17.1337 X

This certification indicates compliance with R10.1 of the Mines Health and Safety Act and/or EMR 9(2) of the Occupational Health and Safety Act, provided that the apparatus is used as relevant in accordance with:

- SANS 10086 and IEC/SANS 61241-14 requirements as applicable;
 - Any conditions mentioned in the above report;
 - Any relevant requirements and codes of practice enforced in terms of the Mine Health and Safety Act or Occupational Health and Safety Act; and
 - Any restrictions and conditions enforced by the Chief Inspector of Mines or the Principal Inspector or the Chief Inspector: Occupational Health and Safety.
- A revision certificate replaces all previous versions of the certificate.
- * - Only covers equipment Imported between the "Issued" and "Expire" dates.
- If and when your QAN (Quality Assurance Notification) or QAR (Quality Assurance Report) Certificate for your equipment manufacturer expires during the valid period of the IA Certification (issued for your equipment) and a new certificate is not submitted, the existing IA Certification will then be cancelled. It is thus the Certificate Holder's responsibility to always submit the updated and valid QAN/QAR certificate(s) to Explolabs (Pty) Ltd

Reviewed by:



CC Lourens

Technical Specialist

EXPLOLABS EXPLOSION PREVENTION SERVICES

This report/certificate shall not be reproduced except in full without the written approval of the company Explolabs (Pty) Ltd shall not be liable for any losses or damages sustained on account of any failure or omission to properly perform our duties in terms of any contract undertaken by us. This disclaimer is immutable and automatically incorporated in any contract undertaken by us; notwithstanding anything to the contrary, save for the express written waiver of our managing director. By marking the equipment in accordance with the documentation/standard, the manufacturer attests on his own responsibility that the equipment has been constructed in accordance with the applicable requirements of the relevant standards and that the routine verifications and tests have been successfully completed and that the product complies with the documentation and standard(s). The contents of electronic reports/certificates cannot be guaranteed. Original certification documents will be kept on file at Explolabs (Pty) Ltd

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