



1 EU-TYPE EXAMINATION CERTIFICATE

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

3 Certificate Number: **Sira 17ATEX1283X** Issue: **0**

4 Equipment: **NDX...2. Valve controller**

5 Applicant: **Metso Flow Control Oy**

6 Address: Vanha Porvoontie 229
01380 Vantaa
Finland

7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 Sira Certification Service, notified body number 0518 in accordance with Articles 17 and 21 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN 60079-0: 2012 (+A11:2013) EN 60079-1: 2014 EN 60079-31:2014

The above list of documents may detail standards that do not appear on the UKAS Scope of Accreditation, but have been added through Sira's flexible scope of accreditation, which is available on request.

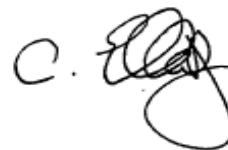
10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to Specific Conditions of Use identified in the schedule to this certificate.

11 This EU-Type Examination Certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.

12 The marking of the equipment shall include the following:



II 2GD
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



Project Number 70110414

C Ellaby
Deputy Certification Manager

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SCHEDULE

EU-TYPE EXAMINATION CERTIFICATE

Sira 17ATEX1283X
Issue 0

13 DESCRIPTION OF EQUIPMENT

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.

14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated Sira Reports and Certificate History

Issue	Date	Report number	Comment
0	18 September 2017	R70110414A	The release of the prime certificate.

15 SPECIFIC CONDITIONS OF USE (denoted by X after the certificate number)

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

15.2 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.

15.3 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

16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

17 CONDITIONS OF MANUFACTURE

17.1 The use of this certificate is subject to the Regulations Applicable to Holders of Sira Certificates.

17.2 Holders of EU-Type Examination Certificates are required to comply with the conformity to type requirements defined in Article 13 of Directive 2014/34/EU.

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Certificate Annexe

Certificate Number: Sira 17ATEX1283X
Equipment: NDX...2. Valve controller
Applicant: Metso Flow Control Oy



Issue 0

Drawing	Sheets	Rev.	Date(Sira stamp)	Title
F78964	1 to 3	C	14 Aug 17	Valve Controller NDX A5
F75249	1 of 1	0.3	14 Aug 17	Flame Arrester NDX 11x9
F75251	1 of 1	0.3	14 Aug 17	Flame arrestor NDX 6x6
F78434	1 of 1	0	14 Aug 17	M8x25 Captive NDX A5 Cover Screw
F78976	1 of 1	B.1	14 Aug 17	Cover Assembly Main Cover Gluing Instructions NDX A5
F78774	1 of 1	B	14 Aug 17	Type Coding NDX Approval
F78763	1 of 1	D	15 Aug 17	Identification Plate NDX_T_E_ Sira Approval Konekilpi
F78765	1 of 1	B	15 Aug 17	Identification Plate NDX_T General Information Sira

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