

# EU TYPE-EXAMINATION CERTIFICATE

1. EU type-examination Certificate (Module B)
2. Equipment or Protective System intended for use in potentially explosive atmospheres (Directive 2014/34/EU)



3. EU type examination certificate Nr **ITS09ATEX26418X R.1**

4. **Product:** Optical Smoke Detector EVC-PY-IS

5. **Manufacturer:** Nittan Europe Ltd

**Applicant:** Nittan Europe Ltd

6. **Address:** Old Woking, Surrey, GU22 9LQ

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7. This product and any acceptable variation thereto are specified in the schedule to this certificate and therein referred to.

8. INTERTEK ITALIA S.p.A., Notified Body n° 2575 in accordance with article 17 of the Directive 2014/34/EU of the European Parliament and Council of the 26 February 2014, certifies that the equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective system intended for use in potentially explosive atmosphere, given in Annex II of the Directive.

The examination and tests results are recorded in confidential technical evaluation Intertek Report Nr. G105215661 dated 14<sup>th</sup> November 2023, Intertek Report Nr. Ref No. G101798991 dated September 2014, Intertek Ref No. 11055344 dated June 2013 and Intertek Report Ref 09040506 Issue 1 dated June 2010.

9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN IEC 60079-0:2018 and EN 60079-11:2012 except in respect of those requirements referred to at item 16 of the Schedule.

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

11. This EU-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

12. The marking of the product shall include the following:



II 1 G Ex ia IIC T4 Ga  
-20°C ≤ Ta ≤ +50°C

**Certificate issue date**

28<sup>th</sup> February 2024

**Mark Newman**

Certification Officer  
Intertek Italia S.p.A. (NB 2575)



PDR N° 277B

Membro degli Accordi di Mutuo  
Riconoscimento EA, IAF e ILAC

Signatory of EA, IAF and ILAC  
Mutual Recognition Agreements



This Certificate is for the exclusive use of Intertek's client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Certificate. Only the Client is authorized to permit copying or distribution of this Certificate and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek.

**Intertek Italia S.p.A.** Via Miglioli, 2/A - 20063 Cernusco sul Naviglio, Milano - Italy

LFT-EMEA-IT-ATEX-OP-23a (8 March 2022)



## SCHEDULE

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### 13. DESCRIPTION OF THE EQUIPMENT OR PROTECTIVE SYSTEM

The EVC-PY-IS Intrinsically Safe Optical Smoke Detector is a low profile photoelectric smoke detector designed for use in conventional fire detection system.

The EVC-PY-IS Intrinsically Safe Optical Smoke Detector comprises a printed circuit board (PCB) containing electronic components including a photoelectric sensor housed in a plastic enclosure with minimum rating of IP20. The Optical Smoke Detector may only be fitted to the mounting base Type UB – 4 – IS, or alternatively Type EV-SPB-IS, which contains a PCB with terminal blocks. The enclosure provides a Degree of Protection of at least IP20.

Connections to external circuits are made to the terminals located in the mounting base. Intrinsic safety is assured by limitation of voltage, current and power, limitation of capacitance, infallible current limiting resistors and infallible segregation.

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The maximum intrinsically safe input parameters at terminals 1 and 2 are as follows:

$U_i = 28 \text{ V}$   
 $I_i = 93 \text{ mA}$   
 $P_i = 0.65 \text{ W}$

The equivalent parameters are:

$C_i = 0$   
 $L_i = 0$   
 $C_o = 83 \text{ nF}$   
 $L_o = 3.5 \text{ mH}$   
 $L_o / R_o = 46 \mu\text{H} / \Omega$

CE Marking shall be accompanied by the identification number of the Notified Body responsible for surveillance of production.

### 14. DRAWINGS AND DOCUMENTS

TITLE	DOCUMENT Nr	LEVEL	DATE
EVC-PY-IS Assembly	102217	1	21/10/09
External Appearance	102274	1	21/05/10
*COVER LOGO EVC-PY-IS	102209	3	01/04/21
EV-SPB-IS Base Appearance	102280	1	25/05/10
*EVC-PY-IS Label	102160	9	15/11/21
EV-SPB-IS Base Label	102279	1	25/05/10
Schematic	102224	1	13/11/09
PCB Artwork Details	102225, shts 1 to 7	2	26/05/10
*SA01/EVC-PY-IS (4 SHEETS)	EVC-PY-IS-01	4	11/01/2023



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TITLE	DOCUMENT Nr	LEVEL	DATE
UB-4-IS Specification Sheet	102233	2	11/06/10
UB-4-IS Label	102232	1	23/11/09
EV-SPB-IS Base Parts List	F03N82029	1	28/05/10
NS-ADAPT-IS Circuit Diagram	069947	1	20/06/96
NS-ADAPT PCB Details	095025, shts 1 to 6	1	20/06/96
*EVC-PY-IS CONSILIUM LABEL	102342	8	01/12/21
*Instruction manual	NISM/EVC-PY-IS/07	7	29/08/2023

Drawings marked with an \* are new or revised

Copies of the above listed documents are kept at Intertek Italia S.p.A. archive.

### 15. SPECIFIC CONDITIONS OF USE

- Users shall be provided with instructions to minimize risk from electrostatic discharge.

### 16. ESSENTIAL HEALTH AND SAFETY REQUIREMENTS

The relevant Essential Health and Safety Requirements have been identified and assessed in Intertek Report Nr. G105215661 dated 14<sup>th</sup> November 2023.

### 17. ROUTINE (FACTORY) TESTS

None.

### 18. DETAIL OF CERTIFICATE CHANGES

#### R.0 (27<sup>th</sup> February 2020):

- Initial issue by NB2575 following transfer from NB0359.

#### R.1 (28<sup>th</sup> February 2024):

- Update ATEX and UKEX certification to the latest standard EN IEC 60079-0:2018.
- Update to the certification documentation.
- Replacement of signal diodes D1 – D6 and D13.
- Addition of alternative components for Zener diodes Z1, Z4 – Z12.
- Changes to other components which do not affect level of protection of the equipment.
- Removal of EN 60079-26 standard from scope of certification.