1. # TYPE EXAMINATION CERTIFICATE

2. **Equipment or Protective System Intended for use in Potentially explosive atmospheres Directive 2014/34/EU**

3. Type Examination Certificate Number: **EESF 22 ATEX 033X**

4. Product: **Dust Detector**

   Certified types: **S101 Ex and S103 Ex**

5. Manufacturer: **Sintrol Oy**

6. Address: **Ruosilantie 15, 00390 Helsinki, Finland**

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

8. Eurofins Electric & Electronics Finland Oy, Certification Body No. S063 accredited by the Finnish Accreditation Service (FINAS), certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive 2014/34/EU of February 2014.

   The examination and test results are recorded in confidential report No. EUFI29-22003015-T1.

9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

   EN IEC 60079-0:2018 **EN 60079-31:2014**

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

11. This 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 3D Ex tc IIIC T80 °C Dc

-30 °C ≤ Tamb ≤ +60 °C

Espoo, 18.9.2023
Eurofins Electric & Electronics Finland Oy

Jenni Hirvelä
Senior Expert

Kari Koskela
Senior Expert

This document is digitally signed.

13. **Schedule**

14. **Type Examination Certificate EESF 22 ATEX 033X**

15. **Description of Product**

Dust Detectors S101 Ex and S103 Ex are intended to measure the concentration of dust particles inside a pipe or duct for detecting filter leaks or failures in cyclonic separation in various industrial applications. The operating principle is based on inductive electrification technology, where particles interacting with an isolated probe induce a signal that is transmitted to the monitoring system.

Communication interface:

RS-485 / Modbus.

Output signals:

S101 Ex: 2 × adjustable solid-state relays, max. 30 V DC / 200 mA
S103 Ex: Active and isolated 4...20 mA output

Ratings:

U_N = 24 V $_{DC}$ (± 10%)

P_N = 1 W

16. **Report Number**

EUFI29-22003015-T1

17. **Specific Conditions of Use**

1. Allowed ambient temperature range is -30 °C ≤ T_{amb} ≤ +60 °C
2. Allowed maximum process temperature for Dust Detector S101 Ex or S103 Ex is 200 °C
3. The enclosure shall not be subjected to prolific charge generating mechanisms

18. **Essential Health and Safety Requirements**

The Essential Health and Safety Requirements are covered by the standards listed at item 9.

19. **Drawings and Documents**

Drawings and documents are listed in the confidential report.

20. **Certificate History**

Issue	Date	Report No.	Change
-	18.9.2023	EUFI29-22003015-T1	Original release

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