



# IECEX Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.:	<b>IECEX EESF 22.0047X</b>	Page 1 of 3	<a href="#">Certificate history:</a>
Status:	<b>Current</b>	Issue No: 0	
Date of Issue:	2023-09-18		
Applicant:	<b>Sintrol Oy</b> Ruosilantie 15 FI-00390 Helsinki <b>Finland</b>		
Equipment:	<b>Dust Detectors S101 Ex and S103 Ex</b>		
Optional accessory:	n/a		
Type of Protection:	<b>Dust Tight "tc"</b>		
Marking:	Ex tc IIIC T80 °C Dc -30 °C ≤ Tamb +60 °C		

Approved for issue on behalf of the IECEx  
Certification Body:

**Jenni Hirvelä**

Position:

**Senior Expert**

Signature:  
(for printed version)

Date:  
(for printed version)

2023-09-18

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Certificate issued by:

**Eurofins Electric & Electronics Finland Oy**  
Kivimiehentie 4  
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**Finland**





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Manufacturer: **Sintrol Oy**  
Ruosilantie 15  
FI-00390 Helsinki  
**Finland**

Manufacturing  
locations: **Sintrol Oy**  
Ruosilantie 15  
FI-00390 Helsinki  
**Finland**

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEX Quality system requirements. This certificate is granted subject to the conditions as set out in IECEX Scheme Rules, IECEX 02 and Operational Documents as amended

#### STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

[IEC 60079-0:2017](#) Explosive atmospheres - Part 0: Equipment - General requirements  
Edition:7.0

[IEC 60079-31:2022](#) Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t"  
Edition:3.0

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

#### TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

[FI/EESF/ExTR22.0048/00](#)

Quality Assessment Report:

[FI/EESF/QAR19.0013/02](#)



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## **EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

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:

$U_N = 24 \text{ V}_{DC} (\pm 10\%)$

$P_N = 1 \text{ W}$

## **SPECIFIC CONDITIONS OF USE: YES as shown below:**

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