



# 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.: **IECEx IBE 20.0045** Page 1 of 3 [Certificate history:](#)  
Status: **Current** Issue No: 0  
Date of Issue: 2021-02-23  
Applicant: **Istec International B.V.**  
Meer en Duin 8  
2163 HA Lisse  
**Netherlands**  
Equipment: **Overspeed Protection System SpeedSys 200 and SpeedSys300**  
Optional accessory:  
Type of Protection: **intrinsic safety**  
Marking: [Ex ia Ga] IIC  
[Ex ia Da] IIIC

Approved for issue on behalf of the IECEx  
Certification Body:

**Kai Willamowski**

Position:

**Head of department Certification Body**

Signature:  
(for printed version)

Date:

*[Handwritten Signature]*  
23.02.2021

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Certificate issued by:

**IBExU Institut für Sicherheitstechnik GmbH**  
Fuchsmühlenweg 7  
09599 Freiberg  
Germany





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Manufacturer: **Istec International B.V.**  
Meer en Duin 8  
2163 HA Lisse  
**Netherlands**

Additional  
manufacturing  
locations:

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 60079-11:2011** Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"  
Edition:6.0

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:

[DE/IBE/ExTR20.0050/00](#)

Quality Assessment Report:

[NL/KIWA/QAR20.0002/00](#)



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## **EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

The Overspeed Protection System type SpeedSys 200 and SpeedSys300 serves as associated equipment for the galvanically isolated supply of a speed sensor and for recording its pulses. The device also features a variety of digital and analog in- and outputs, to connect to further equipment. With regard to the intrinsically safe circuit section, both types are of identical design. The interface unit is installed in the safe area. Electrical data see Annex

**SPECIFIC CONDITIONS OF USE: NO**

## **Annex:**

[ExTR20.0050-AnnexCoC-IB2030191\\_ah.pdf](#)



# IECEX Certificate of Conformity - Annex



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Power supply circuit 1 and 2  
(terminals A17-A18, A21-A22)

Rated voltage	$U_N$	18...36 V DC
Current consumption	$I_N$	<315 mA
Max. voltage	$U_m$	250 V

Non-intrinsically safe current output circuit  
(terminals A13-A14)

Rated voltage	$U_N$	20 V DC
Rated current	$I_N$	<63 mA
Max. voltage	$U_m$	125 V

Non-intrinsically safe relay circuits  
(terminals B13-B14, B15-B16, B17-B18, B19-B20, B21-B22, B23-B24)

Switching voltage	$U_N$	30 V DC
Switching current	$I_N$	2 A
Switching power	$P$	60 W
Max. voltage	$U_m$	220 V

Non-intrinsically safe USB circuit

Rated voltage	$U_N$	5 V DC
Rated current	$I_N$	<63 mA
Max. voltage	$U_m$	125 V

Non-intrinsically safe RS 485 circuit  
(terminals C17-C18-C19)

Rated voltage	$U_N$	6 V DC
Rated current	$I_N$	<63 mA
Max. voltage	$U_m$	125 V

Non-intrinsically safe digital outputs  
(terminals A15-A16, C13-C14, C15-C16)

Rated voltage	$U_N$	24 V DC
Rated current	$I_N$	<100 mA
Max. voltage	$U_m$	125 V

2-wire voltage sensor circuit in ignition protection type intrinsic safety Ex ia IIC  
(terminals B01-B02)

$U_o$	22.69 V
$I_o$	0.7 mA
$P_o$	3 mW
$L_o$	100 mH
$C_o$	110 nF

3-wire voltage sensor circuit in ignition protection type intrinsic safety Ex ia IIC  
(terminals B05-B06-B07)

$U_o$	22.69 V
$I_o$	69.5 mA
$P_o$	394 mW
$L_o$	0.5 mH
$C_o$	110 nF

Current-loop sensor circuit in ignition protection type intrinsic safety Ex ia IIC  
(terminals B09-B10)

$U_o$	22.69 V
$I_o$	57.9 mA
$P_o$	689 mW
$L_o$	0.23 mH
$C_o$	47 nF

Characteristic trapezoidal  $R_i$  832  $\Omega$