



# IECEx Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.: IECEx PTB 16.0031U

Issue No: 0

Certificate history:

Issue No. 0 (2016-10-19)

Status: **Current**

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Date of Issue: **2016-10-19**

Applicant: **Hans Turck GmbH & Co KG**  
Witzlebenstrasse 7  
45472 Mülheim  
Germany

Equipment: **Ballast-module subrack**

*Optional accessory:*

Type of Protection: **Increased Safety**

Marking:  
Ex eb IIC or  
Ex eb IIC Gb

*Approved for issue on behalf of the IECEx  
Certification Body:*

Dr.-Ing. F. Lienesch

*Position:*

Head of Department "Explosion Protection in Sensor Technology and  
Instrumentation

*Signature:  
(for printed version)*

*Date:*

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

Physikalisch-Technische Bundesanstalt (PTB)  
Bundesallee 100  
38116 Braunschweig  
Germany





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Manufacturer: **Hans Turck GmbH & Co.KG**  
Witzlebenstrasse 7  
45472 Mülheim  
Germany

Additional Manufacturing location(s):

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 electrical apparatus 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 : 2011** Explosive atmospheres - Part 0: General requirements  
Edition:6.0

**IEC 60079-7 : 2015** Explosive atmospheres – Part 7: Equipment protection by increased safety "e"  
Edition:5.0

*This Certificate **does not** indicate compliance with electrical 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/PTB/ExTR16.0042/00](#)

### Quality Assessment Report:

[DE/PTB/QAR06.0013/04](#)



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## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

Further Information see the attached document.

CONDITIONS OF CERTIFICATION: NO

### Annex:

[IECEx PTB 16\\_0031\\_00\\_DS.pdf](#)



## Data Sheet

Applicant: Hans Turck GmbH & Co.KG  
Witzlebenstraße 7  
45472 Mülheim, Germany

Electrical Apparatus: Ballast-module subrack, type MT-PPS

### Description of equipment

The ballast-module subrack, type MT-PPS is designed to accommodate a maximum of two ballasts type PPSA and provides only the so-called wiring layer for the ballasts.

For application in hazardous areas the ballast module carrier, type MT-PPS shall be mounted into a corresponding separately certified enclosure designed to type of protection Increased Safety "e", since the enclosure is not subject of this approval.

The separately certified enclosure shall be approved for a degree of protection by enclosure of at least IP54.

The thermal measurements were performed separately on the subrack and on the ballast, type PPSA. The thermal effects on the module carrier are composed of the current load of the wires, the contact resistances at the contacts and the temperature according to the actual operating temperature by the ballast, type PPSA. The measurements showed that under rated conditions, both the temperature class T4 at 70°C ambient temperature and the continuous service temperatures of the materials were not exceeded.

The maximum permissible ambient temperature range is: -20°C to + 70°C

The ballast-module subrack type MT-PPS is designed for the following rated data.

### Electrical Data

Supply	type of protection Increased Safety Ex eb IIC
(Terminal L, N, PE)	115 / 230 VAC
Nominal value	230 VAC, 0.44 A
	maximum safety voltage $U_m = 250V$
Nominal power	100 VA
Output voltage	type of protection Increased Safety Ex eb IIC
(Terminal +, -)	max. 32 VDC
Nominal output current	2.7 A
Nominal output power	67 W





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Notes for manufacture, installation and operation

For application in hazardous areas the ballast-module subrack, type MT-PPS shall be installed in a corresponding separately certified enclosure in the type of protection Increased Safety "e" with a minimum degree of protection of IP54. The enclosure is not covered by this approval.

For power supply of the ballast-module subrack, type MT-PPS a main system must be provided which meets the requirements for the maximum safety voltage  $U_m$  to ensure that the intended ballasts, type PPSA are also suitable for the supply of intrinsically safe devices.

The earth connection bolt must be connected to the equipotential bonding conductor PA. The mains-side PE connection is routed to a blind terminal and is not connected to the PA.

Installation into an enclosure shall ensure that the degree of protection of IP30 of the terminal cover is not prevented.

