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

Certificate No.:	**IECEx PTB 18.0044X**	Page 1 of 4	Certificate history:
Status:	**Current**	Issue No: 1	Issue 0 (2019-12-12)
Date of Issue:	2021-06-01		
Applicant:	**Hans Turck GmbH & Co.KG** Witzlebenstraße 7 45472 Mülheim **Germany**		
Equipment:	**Power supply module, type PSM24-3G.1**		
Optional accessory:			
Type of Protection:	**Intrinsic Safety "i", Increased Safety "e", Type of Protection "n"**		
Marking:	Ex ec nC ic [ib Gb] IIC T4 Gc		

Approved for issue on behalf of the IECEx Certification Body: **Dr. F. Lienesch**

Position: **Head of Department "Explosion Protection in Sensor Technology and Instrumentation"**

Signature: (for printed version)

Date: 2.6.21

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 www.iecex.com or use of this QR Code.

Certificate issued by:

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

Physikalisch-Technische Bundesanstalt
Braunschweig und Berlin

IECEx Certificate of Conformity

Certificate No.: **IECEx PTB 18.0044X**

Date of issue: 2021-06-01

Issue No: 1

Manufacturer: **Hans Turck GmbH**
Witzlebenstraße 7
45472 Mülheim an der Ruhr
Germany

Additional manufacturing locations: **Werner Turck GmbH & Co. KG**
Goethestr. 7
58545 Halver
Germany

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

IEC 60079-15:2017 Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
Edition:5.0

IEC 60079-7:2017 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

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/PTB/ExTR18.0043/01

Quality Assessment Report:

DE/PTB/QAR06.0013/06

IECEx Certificate of Conformity

Certificate No.: **IECEx PTB 18.0044X**

Date of issue: 2021-06-01

EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

Refer to attachment to the certificate.

SPECIFIC CONDITIONS OF USE: YES as shown below:
The equipment must only be installed in an environment with a maximum pollution degree of 2.

When used in zone 2:
1) the equipment must be mounted in a separately approved housing according to EN IEC 60079-0 with a degree of protection of at least IP54 according to IEC 60529.
2) with its housing must be installed and operated in areas with pollution degree 2 as defined in IEC 60664-1.

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
Update to the current version of the standards
In the relay enable function block, the electromechanical device for disconnecting the supply circuit has been changed.
Replacement of Zener diodes with an equivalent type.

Annex:

COCA1844-1.pdf

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Certificate No.:	**IECEx PTB 18.0044X**	Page 1 of 3	Certificate history:
Status:	**Current**	Issue No: 0	
Date of Issue:	2019-12-12		
Applicant:	**Hans Turck GmbH & Co.KG** Witzlebenstraße 7 45472 Mülheim **Germany**		
Equipment:	**Power supply module, type PSM24-3G**		
Optional accessory:			
Type of Protection:	**Intrinsic Safety "i", Increased Safety "e", Type of Protection "n"**		
Marking:	Ex ec nC ic IIC T4 Gc		

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Edition:6.0

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Edition:5.0

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

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

Test Report:

DE/PTB/ExTR18.0043/00

Quality Assessment Report:

DE/PTB/QAR06.0013/05

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Date of issue: 2019-12-12

Issue No: 0

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Refer to attachment to the certificate.

SPECIFIC CONDITIONS OF USE: YES as shown below:
Refer to attachment to the certificate.

Annex:

CoCA180044X-00.pdf

Applicant: Hans Turck GmbH & CO KG
Witzlebenstraße 7
45472 Mülheim an der Ruhr
Germany

Electrical Apparatus: Power supply module, type PSM24-3G…

Description of equipment

The power supply module, type PSM24-3G… is an equipment part of the explosion protected remote I/O- system excom® and it is intended for the application in hazardous areas of zone 2.

The equipment is exclusively operated in combination with the module rack of type MTxx-3G.. certified by IECEx PTB 13.0040U for the application in areas of zone 2.

The power supply module, type PSM24-3G… is designed to types of protection Ex ec IIC, Ex nC and Ex ic IIC. As a central unit it supplies the remote I/O-system excom® with defined power. Up to two Gateways and 24 separately certified excom modules may be connected.

Inside the area of zone 2 the power supply module – as all other modules of the remote I/O-system excom® – may be plugged or unplugged during operation.

The permissible range of the ambient temperature is -20°C up to 70°C.

Electrical data

Voltage supply (plug connector J1 pins 1…4 L+, 11…14 L-)	type of protection Ex ec IIC U_B = 19.2 … 32 V DC U_m = 40 V
PA (plug connector J1 pins 21…24)	EMC-relevance, no protective function
System-internal output voltage (plug connector J2 pins 1…4, 7…10)	type of protection Ex ec IIC Operational maximum values: U = 40 V AC f = 307 kHz P ≤ 65 W
External Clock (plug connector J2 pins 13, 14)	type of protection Intrinsic Safety Ex ic IIC system-internal circuit without external connection facilities
Fault signal (plug connector J2 pins 15, 16)	type of protection Intrinsic Safety “i” system-internal circuit without external connection facilities

Physikalisch-Technische Bundesanstalt (PTB)
Bundesallee 100, 38116 Braunschweig, Germany
Postfach 33 45, 38023 Braunschweig, Germany
Telephone +49 531 592-0, Telefax +49 531 592-3605

Special conditions for safe use

1. The equipment shall only be used in an area of at least pollution degree 2, as defined in IEC 60664-1.
2. The power supply shall be installed in an enclosure the provides a minimum degree of protection of IP 54 in accordance with IEC 60079-0.

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