



(1) **EU-TYPE EXAMINATION CERTIFICATE**
(Translation)

(2) Component Intended for Use in Potentially Explosive Atmospheres
Directive 2014/34/EU

(3) EU-Type Examination Certificate Number:

PTB 16 ATEX 2025 U

Issue: 0

(4) Product: Ballast-module subrack, type MT-PPS

(5) Manufacturer: Hans Turck GmbH & Co.KG

(6) Address: Witzlebenstraße 7, 45472 Mülheim, Germany

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

(8) The Physikalisch-Technische Bundesanstalt, notified body No. 0102 in accordance with Article 17 of the Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, 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.

The examination and test results are recorded in the confidential test report PTB Ex 16-24041.

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

EN 60079-0:2012+A11:2013 EN 60079-7:2015

(10) The sign "U" placed behind the certificate number indicates that this certificate should not be confounded with certificates issued for equipment or protective systems. This partial certification may be used as a basis for certification of an equipment or protective systems.

(11) This EU-Type Examination Certificate relates only to the design and construction of the specified product in accordance to the Directive 2014/34/EU. 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 2 G Ex eb IIC Gb or Ex eb IIC

Konformitätsbewertungsstelle, Sektor Explosionsschutz

Braunschweig, October 20, 2016

On behalf of PTB

Dr.-Ing. F. Lienesch
Regierungsdirektor



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EU-Type Examination Certificates without signature and official stamp shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by the Physikalisch-Technische Bundesanstalt. In case of dispute, the German text shall prevail.

(13)

SCHEDULE

(14) **EU-Type Examination Certificate Number PTB 16 ATEX 2025 U, Issue: 0**

(15) Description of Product

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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SCHEDULE TO EU-TYPE-EXAMINATION CERTIFICATE PTB 16 ATEX 2025 U, Issue: 0

(16) Test report PTB Ex 16-24041

(17) 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.

(18) Essential health and safety requirements

Met by compliance with the aforementioned standards.

Konformitätsbewertungsstelle, Sektor Explosionsschutz

Braunschweig, October 20, 2016

On behalf of PTB:


Dr.-Ing. F. Lieners
Regierungsdirektor





(1) EC-TYPE-EXAMINATION CERTIFICATE (Translation)

(2) Equipment and Protective Systems Intended for Use in
Potentially Explosive Atmospheres - **Directive 94/9/EC**

(3) EC-type-examination Certificate Number:

PTB 04 ATEX 2091 X



(4) Equipment: Ballast-module subrack, type MT-PPS...

(5) Manufacturer: Hans Turck GmbH & Co. KG

(6) Address: Witzlebenstr. 7, 45472 Mülheim an der Ruhr, Germany

(7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) The Physikalisch-Technische Bundesanstalt, notified body No. 0102 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report PTB Ex 04-24296.

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

EN 50014:1997 + A1 + A2

EN 50017:1998

EN 50019:2000

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EC-type-examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.

(12) The marking of the equipment shall include the following:



II 2 G EEx eq II T4

Zertifizierungsstelle Explosionsschutz

Braunschweig, September 21, 2004

By order:

(signature)

Dr.-Ing. U. Johannsmeyer
Regierungsdirektor

3 pages, correct and complete as regards content

By order:

Dr.-Ing. Johannsmeyer
Direktor und Professor

Braunschweig, July 1, 2005



(13)

SCHEDULE

(14)

EC-TYPE-EXAMINATION CERTIFICATE PTB 04 ATEX 2091 X

(15) Description of equipment

The ballast-module subrack, type MT-PPS... is intended for the application in hazardous areas and it is used to carry max. two ballasts of type PPSA certified under PTB 04 ATEX 2047. These ballasts convert supply voltages of 230 V AC or 115 V AC into input values which are permissible for the power supply unit, type PSD 24Ex according to PTB 00 ATEX 2193.

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

The type of protection of the ballast-module subrack is :  II 2 G EEx eq II T4

Electrical data

External terminals

Supply circuits -input: type of protection Increased Safety EEx e

	MT-PPS...
U _m	250 V
supply voltage (terminals 21 through 32)	≤ 250 V AC
current consumption	≤ 5 A
power consumption	≤ 130 VA
terminals	L 21 & 22
1. power supply unit	N 23 & 24
	PE* 25 & 26
	L 27 & 28
2. power supply unit (redundant)	N 29 & 30
	PE* 31 & 32

**not connected internally in the ballast-module subrack! (ends at the terminal clamps)*

The supply input circuit shall be fused externally by means of a 10 A fuse.

DC-output voltage: type of protection Increased Safety EEx e

	MT- PPS...
DC output voltage U _{Out} (terminals 1 (2), 3 (4) or 7, 9)	≤ 32 V DC
max. output current I _{Out}	≤ 11 A
max. output power P _{Out}	≤ 100 W

(16) Test report PTB Ex 04-24296

(17) Special conditions for safe use

For the application in hazardous areas the ballast-module subrack shall be mounted into a housing which complies with the requirements of EN 50014.

(18) Essential health and safety requirements

met by compliance with the standards mentioned above

Zertifizierungsstelle Explosionsschutz
By order:

Braunschweig, September 21, 2004

(signature)

Dr.-Ing. U. Johannsmeyer
Regierungsdirektor

Wir/ we

HANS TURCK GMBH & CO KG

Witzlebenstr. 7, 45472 Mülheim an der Ruhr, Germany

erklären in alleiniger Verantwortung, dass die Produkte
declare under our sole responsibility that the products

Remote – I/O – System excom®

Vorschalt-Modulträger für PPSA /
Ballast-module subrack for PPSA

Typ / type:

MT-PPS

auf die sich die Erklärung bezieht, den Anforderungen der folgenden EU-Richtlinien durch Einhaltung der
folgenden harmonisierten Normen genügen:

to which this declaration relates are in conformity with the requirements of the following EU-directives by compliance with the following
harmonised standards:

EMV – Richtlinie / EMC Directive	2014 / 30 / EU	26. Feb. 2014
EN 61326-1:2013		

Richtlinie / Directive ATEX	2014 / 34 / EU	26. Feb. 2014
EN 60079-0:2012 +A11:2013	EN 60079-7:2015	

Niederspannungsrichtlinie / Low Voltage Directive	2014 / 35 / EU	26. Feb. 2014
EN 61010-1:2010		

Weitere Normen, Bemerkungen
additional standards, remarks

Die Niederspannungsrichtlinie ist nicht anwendbar bei Betrieb des Produktes im explosionsgefährdeten Bereich. In diesem Fall
sind alle grundlegenden Zielsetzungen im Hinblick auf die Niederspannung von der Richtlinie 2014/34/EU Anhang II Punkt 1.2.7
abgedeckt.

The low voltage directive is not applicable when the product is installed in the hazardous area. In this case all Low Voltage
essential objectives are covered by the Directive 2014/34/EU Annex II 1.2.7.

Zusätzliche Informationen:
Supplementary information:

Angewandtes ATEX-Konformitätsbewertungsverfahren / ATEX - conformity assessment procedure applied:
Modul B + Modul E (enthalten in Modul D) / module B + module E (part of module D)

EU-Baumusterprüfbescheinigung (Modul B) PTB 16 ATEX 2025 U / EC-type examination certificate (module B):

ausgestellt von / issued by: Physikalisch Technische Bundesanstalt, Kenn-Nr. / number 0102,
Bundesallee 100, 38116 Braunschweig, Germany

Zertifizierung des QS-Systems gemäß Modul D durch:
certification of the QS-system in accordance with module D by :

Physikalisch Technische Bundesanstalt, Kenn-Nr. / number 0102,
Bundesallee 100, 38116 Braunschweig, Germany

Mülheim, den 05.01.2017

i.V. U. Vix, CE-Koordinatorin / CE Coordinator

Ort und Datum der Ausstellung /
Place and date of issue

Name, Funktion und Unterschrift des Befugten /
Name, function and signature of authorized person