# 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

Certificate No.: IECEx DEK 13.0028X

Issue No: 2

Certificate history:
Issue No. 2 (2018-12-19)
Issue No. 1 (2013-11-25)
Issue No. 0 (2013-05-28)

Status: **Current**



Date of Issue: **2018-12-19**

Applicant: **TechNed Benelux B.V.**
Veersteeg 15
4212 LR Spijk
**The Netherlands**

Equipment: **Terminal boxes and controlstations**

*Optional accessory:*

Type of Protection: **Ex eb and Ex tb (main protection types)**

Marking:

Ex eb IIC T5 or T6 Gb (junction box)
Ex eb [ia Ga] or ib or [ic Gc] IIC T5 or T6 Gb (junction box with (partly) Ex i terminals)
Ex db eb IIB T5 or T6 Gb (control station)
Ex db eb [ia Ga] or ib or [ic Gc] IIB T5 or T6 Gb (controlstation with (partly) Ex i terminals)
Ex tb IIIC T80 °C or T100 °C Db

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

R. Schuller

*Position:*

Certification Manager

*Signature:*
*(for printed version)*

*Date:*

2018-12-19

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.

Certificate issued by:

**DEKRA Certification B.V.**
**Meander 1051,**
**6825 MJ Arnhem**
**The Netherlands**

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|---|---|---|
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| Manufacturer: | **TechNed Benelux B.V.**<br>Veersteeg 15<br>4212 LR Spijk<br>**The Netherlands** | |

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 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**<br>Edition:6.0 | Explosive atmospheres - Part 0: General requirements |
| **IEC 60079-1 : 2014-06**<br>Edition:7.0 | Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d" |
| **IEC 60079-11 : 2011**<br>Edition:6.0 | Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i" |
| **IEC 60079-31 : 2013**<br>Edition:2 | Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t" |
| **IEC 60079-7 : 2017**<br>Edition:5.1 | Explosive atmospheres - Part 7: Equipment protection by increased safety "e" |

*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:

NL/DEK/ExTR13.0027/02

Quality Assessment Report:

NL/DEK/QAR11.0036/04

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**Schedule**

**EQUIPMENT:**

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

Stainless steel (SS316L) junction boxes (Series TB-JB-R or TB-JBP-R) and control stations (Series TB-CS-R), for fixed installation.

The junction boxes are provided with separately certfied Ex e terminal blocks for non-intrinsically safe and/or intrinsically safe circuits. For intrinsically safe circuits, which may be in level of protection "ia", "ib" and/or "ic", the area for the terminals is marked, e.g. by a light blue colour.

The control stations may be equipped with separately certified pilot lights and actuators in the front panel, in type of protection Ex db, Ex eb, Ex mb and/or Ex tb.

Inside the Ex eb / Ex tb enclosure Type TB-JB(P)-R812, and Ex db / Ex tb certified enclosure type EJB D (certificate IECEx INE 13.0024 X) and an Ex db eb tb certified isolator switch type GHG 26100 (certificate IECEx BVS 16.0045) may be mounted.

Ambient temperature range:
- junction boxes: -40 °C to +40 °C (T6 / T80 °C) or +50 °C (T5 / T100 °C).
- control stations: -20 °C to +40 °C (T6 / T80 °C) or +50 °C (T5 / T100 °C).

The electrical data depend on the built-in terminals and equipment and is taken from the applicable certificates and manufacturers' data, but will not exceed the following values:
Rated voltage: max. 690 V (junction box); 500 V (isolator switch)
Rated current: max. 500 A (junction box); 10 A (isolator switch)
Conductor cross section: 1.5 - 240 $mm^2$

Actual electrical data for the intended application is shown on the marking label and in the instructions provided with the junction box or control station.

Degree of ingress protection according to IEC 60529:
- junction box: IP66
- control station: IP65

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

The followingconditions of use apply to the control station, not to the junction box:

1. For details regarding the flameproof joints of the Ex db EJB enclosure contact the manufacturer
2. The control stations provided with control units type ZBW4B... or ZBW5... are only suitable for applications with low risk of mechanical impact
3. The control stations provided with control units type ZBW5AJ..., ZBW5AD..., ZBW5AG..., ZBW4BA, ZBW4BPS... or ZBW5APS have to be protected from ultraviolet light
4. The control stations provided with heads type ZB4BP..., ZB4BH..., ZB4BV... or ZB5AV... are only suitable for applications with low risk of mechanical impact.

The user manual, prepared per serial number, shows the applicable conditions.

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**DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):**

Extension of scope with controlstations
Assessment to new editions of the applicable standards