



# 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)

### EX COMPONENT CERTIFICATE

Certificate No.: **IECEX PTB 09.0038U**

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Certificate history:

Status: **Current**

Issue No: 3

Issue 2 (2020-06-17)

Issue 1 (2014-08-19)

Issue 0 (2009-11-13)

Date of Issue: 2021-03-24

Applicant: **nVent Thermal Belgium N.V**  
Research Park Haasrode - Zone 2  
Romelse Straat 14  
B-3001 Leuven  
**Belgium**

Ex Component: Trace Heating Termination System Type E-100-E

*This component is NOT intended to be used alone and requires additional consideration when incorporated into other equipment or systems for use in explosive atmospheres (refer to IEC 60079-0).*

Type of Protection: **Increased safety 'eb', Protection by enclosure 'tb'**

Marking: **Ex eb IIC Gb**

**Ex tb IIIC Db**

Approved for issue on behalf of the IECEx  
Certification Body:

**Dr.-Ing Detlev Markus**

Position:

**Head of Department "Explosion Protection in Energy Technology"**

Signature:  
(for printed version)

Date:

25.03.21

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](http://www.iecex.com) or use of this QR Code.



Certificate issued by:

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





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Certificate No.: **IECEX PTB 09.0038U**

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Date of issue: **2021-03-24**

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Manufacturer: **nVent Thermal Belgium N.V**  
Research Park Haasrode - Zone 2  
Romeinse Straat 14  
B-3001 Leuven  
**Belgium**

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 60079-31:2013** Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"  
Edition:2

**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/EXTR09.0044/03](#)

Quality Assessment Report:

[GB/BAS/QAR07.0053/08](#)



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Date of issue: **2021-03-24**

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**Ex Component(s) covered by this certificate is described below:**

## General product information:

The E-100-E end seal is a cold applied end seal termination to quickly and safely terminate nVent parallel heating cables. The E-100-E is providing safe, and water and dust tight termination for the heating cables in potentially explosive atmospheres. The E-100-E end seal consists out of a molded pipe stand equipped with a sealing grommet and a strain relief. The pipe stand is mounted directly onto the heated surface and is guiding the heating cable way from the pipe, guided through the pipe stand where the end of the heating cable can be terminated.

## Technical data

Max. number of heating cables	1	
Max. rated voltage*	Heating cable type	
	BTV1, QTVR1, XTV1, KTV1, HTV1	120 V
	BTV2, QTVR2, XTV2, KTV2, HTV2	277 V
	VPL1	120 V
	VPL2	230 / 254 V
	VPL4 + FHPC	480 V

\* depending on fuse protection or max. permissible rated current and max. permissible temperature of the surface to be heated; see data sheets or operating instructions of the manufacturer.

## Notes for manufacturing

1. The manufacturer's operating instructions must be observed.
2. The temperature accepted as a maximum for the surface to be heated (tube temperature) shall be determined on the basis of the specific performance category, the max. admissible operating temperature of the parallel strip heaters, the voltage rating and the max. admissible current carrying capacity.

## SCHEDULE OF LIMITATIONS:

Alternative strip heaters must not be used, unless the manufacturer's approval has been obtained.



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Date of issue: **2021-03-24**

issue No: 3

**DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)**  
Inclusion of the use of the self-regulating parallel type trace heater HTV



# IECEX Test Report Summary

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

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ExTR Ref. No.: **DE/PTB/ExTR09.0044/03** Page 1 of 1

ExTR Free Ref. No.: **PEX1202000034** Status: **Issued**

Details of change: **Inclusion of the use of the self-regulating parallel type trace heater HTV** Date of issue: **2021-03-24**

List of Standards Covered: **IEC 60079-0:2017 Edition:7.0, IEC 60079-31:2013 Edition:2, IEC 60079-7:2017 Edition:5.1**

Issuing ExTL: **PTB - Physikalisch-Technische Bundesanstalt (PTB)**

Endorsing ExCB: **PTB - Physikalisch-Technische Bundesanstalt (PTB)**

Manufacturer: **nVent Thermal Belgium N.V**  
**Research Park Haasrode - Zone 2**  
**Romeinse Straat 14**  
**B-3001 Leuven**

Location of Manufacturer: **Belgium**

Ex Protection: **Ex eb IIC Gb**  
**Ex tb IIIC Db**

Ratings:

Equipment: **Trace Heating Termination System**

Model Reference: **Type E-100-E**

Related IECEx Certificates:  
**IECEX PTB 09.0038U Issue 3**

Comments: