



# 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 BVS 05.0005** Issue No.: **0**

Status: **Current**

Date of Issue: **2005-04-19** Page **1** of **3**

Applicant: **GeCma Components GmbH**  
Heisenbergstr. 26 - 40  
50169 Kerpen  
Germany

Electrical Apparatus: **Transmission unit type Challenger TCV2i**  
Optional accessory:

Type of Protection: **Intrinsic Safety**

Marking: **[Ex ib] IIC**

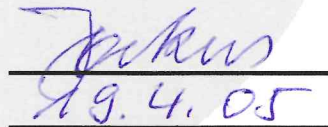
Approved for issue on behalf of the IECEx  
Certification Body:

Dr. R. Jockers

Position:

Head of Certification Body

Signature:  
(for printed version)

  
19.4.05

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:

**EXAM BBG Prüf- und Zertifizier  
GmbH**

Fachstelle für Sicherheit elektrischer Betriebsmittel – BVS  
Dinnendahlstrasse 9  
44809 Bochum  
Germany





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Manufacturer: **GeCma Components GmbH**  
Heisenbergstr. 26 - 40  
50169 Kerpen  
Germany

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 manufacture'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:

<b>IEC 60079-0 : 2004</b> Edition: 4.0	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
<b>IEC 60079-11 : 1999</b> Edition: 4	Electrical apparatus for explosive gas atmospheres - Part 11: Intrinsic safety 'i'

*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*

IECEx ATR:  
**DE/BVS/05/2044**

File Reference:  
**A 20040601**



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## Schedule

### EQUIPMENT:

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

#### Description

The transmission unit Challenger TCV2i is a unit for transmission of video and data signals e.g. video, mouse and keyboard from a non-IS circuit into an IS circuit.

The unit is designed for use outside the hazardous area with intrinsically safe circuits leading into the hazardous area.

#### Parameters

- |   |  |    |    |               |         |
|---|--|----|----|---------------|---------|
| 1 | Non intrinsically safe circuits at the connectors $\pm 12$ V,<br>PS2-Terminals keyboard and mouse, RS485 and VGA input/output                  | Um | AC | 250           | V       |
|   | max. voltage   |    |    |               |         |
| 2 | Connector ST10: IS circuits for the connection of a receiving unit, e.g. a monitor or keyboard<br>For each circuit (each cable pair 1 up to 4) |    |    |               |         |
|   | Voltage  | Uo |    | 5.5           | V       |
|   | Current  | Io |    | 105           | mA      |
|   | max. external capacitance  | Ci |    | 10            | $\mu$ F |
|   | max. external inductance   | Li |    | 2             | mH      |
| 3 | Ambient temperature range  | Ta |    | -10 up to +60 | °C      |

CONDITIONS OF CERTIFICATION: NO

Annexe: