



# 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 ITS 16.0026X Issue No: 0 Certificate history:  
Status: Current Page 1 of 3 Issue No. 0 (2016-04-01)  
Date of issue: 2016-04-01

Applicant: R. STAHL Camera Systems GmbH  
Adolf-Grimme-Allee 8  
50829 Köln  
Germany

Electrical Apparatus: Videocamera enclosure model: EC-840S and EC-840S  
Optional accessory:

Type of Protection: Ex db IIC; Ex tb IIIC

Marking: Ex d IIC Tx Gb  
Ex tb IIIC Tx Db IP66/IP68  
 $-60^{\circ}\text{C} \leq T_{\text{amb}} \leq +65^{\circ}\text{C}$  or  $+55^{\circ}\text{C}$  depending on application

Approved for issue on behalf of the IECEx  
Certification Body:

V K Varma

Position:

Certification Officer

Signature:  
(for printed version)

Date:

Vijay K. Varma  
2016-04-01

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:

Intertek Testing & Certification Limited  
ITS House, Cleeve Road,  
Leatherhead,  
Surrey, KT22 7SB  
United Kingdom

Intertek



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Manufacturer: **R. STAHL Camera Systems GmbH**  
Adolf-Grimme-Allee 8  
50829 Köln  
Germany

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 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 : 2011</b> Edition:6.0	Explosive atmospheres - Part 0: General requirements
<b>IEC 60079-1 : 2014-08</b> Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
<b>IEC 60079-31 : 2013</b> Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

*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:

GB/ITS/ExTR16.0029/00

#### Quality Assessment Report:

DE/BVS/QAR12.0012/01



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## Schedule

### EQUIPMENT:

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

The EC series explosion-proof housing has been designed for use with cameras operating in industrial environments in which there may be an explosive atmosphere due to gas, vapours, mists, or air or powder mixtures. The EC housing is made of micro shot peened AISI 316L stainless steel. It is constituted by a cylindrical body closed by one welded front flange and one bolted rear flange. The front flange has toughened glass window or germanium window. The rear flange incorporates the internal slide where the camera must be positioned, it contains also the internal electronics that manages the power supply and the heating devices of the housing. The cables entry is made through one 3/4" NPT threaded hole on the rear flange.

The EC series explosion-proof housing has an IP66/IP68 (2h, 5m) protection degree and its operating temperature is from -60°C to +65°C, or +55°C depending on application.

see details in the CoC Annex.

### CONDITIONS OF CERTIFICATION: YES as shown below:

The max power consumption of the camera installed inside the enclosure and its dimensions are defined in the CoC annex.

The video encoder, if present, is be part of the pcb preinstalled by the manufacturer.

It is required to use cables and cable glands, fittings or other connection element suitable for a minimum temp of +80°C.

Specific guidance noted to contact the original manufacturer for information on the dimensions of the flameproof joints is reported in the user manual.

The rear access cover has to be closed with eight M5x0.8 hexagon socket stainless steel screws (A4 class 70, head per ISO 4762, long 12 mm, yield stress 200 N/mm<sup>2</sup>).

It is not possible to install video camera o component with batteries.

When the enclosure is used with a conduit, the following requirement must be satisfied: The distance from the face of the seal closest to the enclosure (or intended end-use enclosure), and the outside wall of the enclosure (or intended end-use enclosure) shall be as small as practical, but in no case more than the size of the conduit or 50 mm, whichever is the lesser.

Routine test:

Routine test for IEC 60079-1: it is required to make an overpressure at 45bar. The application of the pressure shall be at least 10s.

### Annex

[Annex to CoC\\_Stahl.docx](#)