



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 TUR 14.0026X Issue No: 0 Certificate history:
Issue No. 0 (2014-07-29)

Status: Current Page 1 of 3

Date of Issue: 2014-07-29

Applicant: SAMCON Prozessleittechnik GmbH
Schillerstraße 17
D-35102 Lohra-Altenvers
Germany

Electrical Apparatus: ExCam Series T08
Optional accessory:

Type of Protection: Ex d and Ex t

Marking:
Ex d I Mb,
Ex d IIC T6 Gb, Ex d IIC T5 Gb,
Ex d IIB T6 Gb, Ex d IIB T5 Gb,
Ex tb IIIC T80°C Db, Ex tb IIIC T95°C Db

Approved for issue on behalf of the IECEx
Certification Body:

Heinz Farke

Position:

Deputy Head of ExCB

Signature:
(for printed version)

Date:

2014-07-29

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:

TUV Rheinland Industrie Service GmbH
Am Grauen Stein
51105 Cologne
Germany





IECEX Certificate of Conformity

Certificate No: IECEx TUR 14.0026X Issue No: 0
Date of Issue: 2014-07-29 Page 2 of 3
Manufacturer: SAMCON Prozessleittechnik GmbH
Schillerstraße 17
D-35102 Lohra-Altenvers
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:

IEC 60079-0 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2007-04 Edition:6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-28 : 2006-08 Edition:1	Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation
IEC 60079-31 : 2008 Edition:1	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:

[DE/TUR/ExTR14.0026/00](#)

Quality Assessment Report:

[DE/BVS/QAR14.0006/00](#)



IECEx Certificate of Conformity

Certificate No: IECEx TUR 14.0026X

Issue No: 0

Date of Issue: 2014-07-29

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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The ExCam Series Type 08 is an electrical device. It is certified according to ATEX and IECEx as a pressure-resistant camera system to be used in gas and dust explosive area as well as in mines susceptible to firedamp. At the front side, the camera systems dispose of a flange with a sight glass, on the rear side it is equipped with a flange which allows introducing ex-certified cable and cable glands or sealing plugs. The cameras are certified to be used in ex-zones 1, 2, 21, 22 including the explosion groups IIC and IIIC and group I resp. Mb. The Ex-d housings are available in different steel qualities due to which the housing's resistance towards extreme environmental conditions (sea water corrosion, high acid environments etc.) is additionally extended.

Within the pressure-resistant enclosure, various camera modules and lenses reflecting different technical specifications. Accessory components such as PTC heating elements, miniature fans, NIR LED, lighting devices, mechanical components and clamps made of aluminum are optional. Criteria for selecting the camera module are, for example, trans-mission technology (digital or analog), control functions (IR cut filter, iris, focus), light sensitivity, angle of view, object distance, resolution, optical zoom range, frame rate, or transmission delay. Thermal imaging applications are possible as well.

CONDITIONS OF CERTIFICATION: YES as shown below:

1. The connecting cable needs a minimum length of 1 meter. The connecting cable has to be laid shielded.
2. External heat and/ or cooling sources have to be taken into account during the setting up. The permissible temperature range has to be observed.
3. When using the ExCam in the mining sector with a "high" risk of mechanical danger, it is mandatory to protect the glass parts of the device.
4. The housing of the ExCam® series must be earthed via the PA connection.
5. The heating has to be fused externally.
6. In case of repair of the flamepath forming parts see manufacturers information.
7. All used Cable glands and plugs have to be certified.



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Certificate No.: **IECEX TUR 14.0026X** issue No.: **1** Certificate history:
Issue No. 1 (2015-3-31)
Issue No. 0 (2014-7-29)

Status: **Current**

Date of Issue: **2015-03-31** Page 1 of 5

Applicant: **SAMCON Prozessleittechnik GmbH**
Schillerstraße 17
D-35102 Lohra-Altenvers
Germany

Electrical Apparatus: **ExCam Series T08**
Optional accessory:

Type of Protection: **Ex d and Ex t**

Marking: **Ex d I Mb,
Ex d IIC T6 Gb, Ex d IIC T5 Gb,
Ex d IIB T6 Gb, Ex d IIB T5 Gb,
Ex tb IIIC T80°C Db
Ex tb IIIC T95°C Db**

Approved for issue on behalf of the IECEx Certification Body: **Dipl.-Ing. Klauspeter Graffi**

Position: **Head of Certification Body**

Signature: *Klauspeter Graffi*
(for printed version)

Date: **2015-03-31**

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TUV Rheinland Industrie Service GmbH
Am Grauen Stein
51105 Cologne
Germany





IECEx Certificate of Conformity

Certificate No.: IECEx TUR 14.0026X
Date of Issue: 2015-03-31 Issue No.: 1
Page 2 of 5

Manufacturer: **SAMCON Prozessleittechnik GmbH**
Schillerstraße 17
D-35102 Lohra-Altenvers
Germany

Additional Manufacturing location
(s):

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Test Report:

[DE/TUR/ExTR14.0026/00](#)

[DE/TUR/ExTR14.0026/01](#)

Quality Assessment Report:

[DE/BVS/QAR14.0006/00](#)



IECEx Certificate of Conformity

Certificate No.: IECEx TUR 14.0026X

Date of Issue: 2015-03-31

Issue No.: 1

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Schedule

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

The assembly of the certified empty enclosure TNXCD manufacturer BARTEC added for Gas and Dust. Type T08 VA1.1 and VA 2.1 are now included.

Ambient temperature:

T08-VAx.x.x.x

-60 °C ... +75 °C (T_{Amb})

T08-TNXCD (for Gas Ex)

-50 °C ... +60 °C (T_{Amb})

T08-TNXCD (for Dust Ex) -20 °C ... +60 °C (T_{Amb})

Type: T08- VA...:T08-	T6 (85°C – 5K)				T5 (100°C – 15K)				
	T_{AMB}								
	40°C	50°C	60°C	70°C	40°C	50°C	60°C	70°C	75°C
VA2.1.x.x	22,2 W	16,7 W	11,1 W	5,6 W	25,0 W	19,4 W	13,9 W	8,3 W	5,6 W
VA2.1.x.x* (coated)	25,0 W	18,8 W	12,5 W	6,3 W	28,1 W	21,9 W	15,6 W	9,4 W	6,3 W
VA2.2.x.x	25,0 W	18,8 W	12,5 W	6,3 W	28,1 W	21,9 W	15,6 W	9,4 W	6,3 W
VA2.2.x.x* (coated)	26,7 W	20,0 W	13,3 W	6,7 W	30,0 W	23,3 W	16,7 W	10,0 W	6,7 W



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Additional information:

Type: T08 -	T6 (85°C – 5K)				
	T _{AMB}				
	40°C	45°C	50°C	55°C	60°C
TNXCD	57,1 W	50,0 W	42,9 W	35,7 W	28,6 W

Type: T08- VA...:T08-	T6 (85°C – 5K)				T5 (100°C – 15K)				
	T _{AMB}								
	40°C	50°C	60°C	70°C	40°C	50°C	60°C	70°C	75°C
VA1.1.xx	17,4 W	13,0 W	8,7 W	4,3 W	19,6 W	15,2 W	10,9 W	6,5 W	4,3 W
VA1.1.xx* (coated)	19,0 W	14,3 W	9,5 W	4,8 W	21,4 W	16,7 W	11,9 W	7,1 W	4,8 W
VA1.2.xx	18,2 W	13,6 W	9,1 W	4,5 W	20,5 W	15,9 W	11,4 W	6,8 W	4,5 W
VA1.2.xx* (coated)	21,1 W	15,8 W	10,5 W	5,3 W	23,7 W	18,4 W	13,2 W	7,9 W	5,3 W