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 18.0023X

Issue No: 0

Certificate history:
Issue No. 0 (2018-10-16)

Status: **Current**

Date of Issue: **2018-10-16**

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

Equipment: **ExCam Series T08**
Optional accessory:

Type of Protection: **db tb**

Marking:

Ex db I Mb*

Ex db IIC T6 Gb*

Ex tb IIIC T80°C Db*

* see marking and annex

Approved for issue on behalf of the IECEx Certification Body:

Dipl.-Ing. Klauspeter Graffi

Position:

Head of Certification Body

Signature:
(for printed version)

Date:

Klauspeter Graffi
2018-10-16

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:

TUV Rheinland Industrie Service GmbH
Am Grauen Stein
51105 Cologne
Germany

TÜVRheinland

IECEx Certificate of Conformity

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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 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 : 2017 Edition:7.0	Explosive atmospheres - Part 0: Equipment - General requirements
IEC 60079-1 : 2014-06 Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-11 : 2011 Edition:6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-18 : 2014 Edition:4.0	Explosive atmospheres – Part 18: Equipment protection by encapsulation "m"
IEC 60079-28 : 2015 Edition:2	Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation
IEC 60079-31 : 2013 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:

DE/TUR/ExTR18.0023/00

Quality Assessment Report:

DE/BVS/QAR14.0006/04

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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The ExCam Series is an electrical device that is protected by a pressure-resistant (Ex-d) enclosure.

The flameproof housings not only make the device flameproof but also robust for a variety of industries and applications.

Within the pressure-resistant enclosure, various camera modules and lenses, reflecting different technical specifications, are installed.

Accessory components such as PTC heating elements, fans, NIR LEDs, lighting devices, mechanical components, and clamps are optional. Furthermore, the ExCam Series can be used in combination with other IECEx device certified modules such as HF-barriers, cable glands, media-converter, or certified lighting devices ([op is]).

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. When installing the ExCam, the requirements of IEC 60079-14 must be applied.
2. For Group I and T08-VA2.x.x.BOR5 models, the enclosure is only suitable with a low risk of mechanical hazard.
3. All used cable glands and plugs have to be certified.

Annex:

IECEx_TUR_18.0023_X_00_Attachment .pdf

Attachment to Certificate
IECEx TUR 18.0023X
Revision 0

Attachment to Certificate IECEx TUR 18.0023X

Device: **ExCam Series**
Type: **T08...** (details refer to technical data section)

Manufacturer: **SAMCON Prozessleittechnik GmbH**

Address: **Schillerstraße 17**
35102 Lohra- Altenvers, Germany

General product information:

The ExCam Series is a pressure-resistant (Ex-d) electrical device... (See main certificate)

The marking of the equipment shall include the following:

Ex db IIC T6 Gb*
Ex tb IIIC T80°C Db*
Ex db I Mb*

* Optional and additional type of protection markings for all types:

The mining certification can be cancelled if required. **
The explosion group can be downgraded if required. **
The ambient temperature range can be downgraded if required. **
The temperature class/value (gas/dust) can be downgraded if required. **

ix Gx/Dx = for models with [ix Gx/Dx] intrinsically safe circuits. **
op is Gx/Dx = for models with [op is Gx/Dx] FOC connectors or illuminators. **
op pr Gx/Dx = for models with [op pr Gx/Dx] FOC Connectors. **
mb = for models with HF Barrier. **

Technical data

Supply Voltage:

Model:	**Supply Voltage:**
T08-VA...:	60V DC / 240V (50/60 Hz) AC
T08-TNXCD...:	60V DC / 240V (50/60 Hz) AC

Maximum Input Power:

...for T6 Temperature Class (T_{sur} < 85°C)

	$T_{amb\ max}$						
Model:	**40°C**	**50°C**	**60°C**	**70°C**			
T08-VA1.1...	17,4 W	13,0 W	8,7 W	4,3 W			
T08-VA1.2...	18,2 W	13,6 W	9,1 W	4,5 W			
T08-VA2.0...	18,2 W	13,6 W	9,1 W	4,5 W			
T08-VA2.1...	22,2 W	16,7 W	11,1 W	5,6 W			
T08-VA2.2...	25,0 W	18,8 W	12,5 W	6,3 W			
T08-VA2.3...	28,6 W	21,4 W	14,3 W	7,1 W			
T08-VA4.3...	57,1 W	42,9 W	28,6 W	14,3 W			
TNXCD	57,1 W	42,9 W	28,6 W	*n.a.*			

...for T5 Temperature Class (T_{sur} < 100°C)

	$T_{amb\ max}$						
Model:	**40°C**	**50°C**	**60°C**	**70°C**	**80°C**	**85°C**	
T08-VA1.1	23,9 W	19,6 W	15,2 W	10,9 W	6,5 W	4,3 W	
T08-VA1.2...	25,0 W	20,6 W	15,9 W	11,4 W	6,8 W	4,5 W	
T08-VA2.0...	25,0 W	20,6 W	15,9 W	11,4 W	6,8 W	4,5 W	
T08-VA2.1...	30,6 W	25,0 W	19,4 W	13,9 W	8,3 W	5,6 W	
T08-VA2.2...	34,4 W	28,1 W	21,9 W	15,6 W	9,4 W	6,3 W	
T08-VA2.3...	39,3 W	32,1 W	25,0 W	17,9 W	10,7 W	7,1 W	
T08-VA4.3...	78,6 W	64,3 W	50,0 W	35,7 W	21,4 W	14,3 W	
TNXCD	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*	

...for T4 Temperature Class (T_{sur} < 135°C)

	$T_{amb\ max}$						
Model:	**50°C**	**70°C**	**90°C**	**100°C**	**110°C**	**120°C**	
T08-VA1.1	34,8 W	26,1 W	17,4 W	13,0 W	8,7 W	4,3 W	
T08-VA1.2...	36,4 W	27,3 W	18,2 W	13,6 W	9,1 W	4,5 W	
T08-VA2.0...	36,4 W	27,3 W	18,2 W	13,6 W	9,1 W	4,5 W	
T08-VA2.1...	44,4 W	33,3 W	22,2 W	16,7 W	11,1 W	5,6 W	
T08-VA2.2...	50,0 W	37,5 W	25,0 W	16,7 W	12,5 W	6,3 W	
T08-VA2.3...	57,1 W	42,9 W	28,6 W	21,4 W	14,3 W	7,1 W	
T08-VA4.3...	114,3 W	85,7 W	57,1 W	42,9 W	28,6 W	14,3 W	
TNXCD	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*	

...for T3 Temperature Class (T_{sur} < 200°C- 40K)

	$T_{amb\ max}$						
Model:	**50°C**	**70°C**	**90°C**	**110°C**	**130°C**	**140°C**	**150°**
T08-VA1.1	47,8 W	39,1 W	30,4 W	21,7 W	13,0 W	8,7 W	4,3 W
T08-VA1.2	50,0 W	40,9 W	31,8 W	22,7 W	13,6 W	9,1 W	4,5 W
T08-VA2.0	50,0 W	40,9 W	31,8 W	22,7 W	13,6 W	9,1 W	4,5 W
T08-VA2.1	61,1 W	50,0 W	38,9 W	27,8 W	16,7 W	11,1 W	5,6 W
T08-VA2.2	68,8 W	56,3 W	43,8 W	31,3 W	18,8 W	12,5 W	6,3 W
T08-VA2.3	78,6 W	64,3 W	50,0 W	35,7 W	21,4 W	14,3 W	7,1 W
T08-VA4.3	157,1 W	128,6 W	100,0 W	71,4 W	42,9 W	28,6 W	14,3 W
TNXCD	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*

Protection degrees:

Model:	**Protection degree (EN 60529:2014):**
T08-VA...:	**IP68** 3m / 24h (immersion depth and duration)
T08-TNXCD...:	**IP66, IP67 or IP68**

Maximum ambient temperature range:

Model:	**Maximum ambient temperature range**
T08-VA...:	-60°C ≤ T_{amb} ≤ +xxx°C **
T08-TNXCD...:	-50°C ≤ T_{amb} ≤ +xxx°C **

** See power tables above, type plate, model key and installation-/user manual!