(1) EU-TYPE EXAMINATION CERTIFICATE

(2) Equipment and Protective Systems intended for use in Potentially Explosive Atmosphere - **Directive 2014/34/EU**

(3) EU-Type Examination Certificate Number

TÜV 18 ATEX 8218 X Issue: 02

(4) Equipment: **ExCam Series T08**

(5) Manufacturer: **SAMCON Prozessleittechnik GmbH**
(6) Address: **Schillerstraße 17,**
D-35102 Lohra-Altenvers

(7) This product and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) The TÜV Rheinland Zertifizierungsstelle für Explosionsschutz of TÜV Rheinland Industrie Service GmbH, Notified Body No. 0035 in accordance with Article 21 of the Council Directive 2014/34/EU of 26th February 2014, certifies this product which has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmosphere, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report 557/Ex8218.02/18

(9) Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to:

EN IEC 60079-0:2018	**EN 60079-1: 2014**	**EN 60079-11: 2012**
EN 60079-18: 2015	**EN 60079-28: 2015**	**EN 60079-31: 2014**

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EU-Type Examination Certificate relates only to the design and specification for construction of the equipment or protective system. It does not cover the process for actual manufacture or supply of the equipment or protective system, for which further requirements of the directive are applicable.

(12) The marking of the equipment shall include the following:

Ex II 2G Ex db IIC T6 Gb*
Ex II 2D Ex tb IIIC T80°C Db IP68*
Ex I M2 Ex db I Mb*

*Optional/Additional marking: see (15) Description

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz Cologne, 2021-11-11

Dipl.-Ing. Christian Mehrhoff

ATEX Notified body • TÜV Rheinland Industrie Service GmbH • 0035

This EU-Type Examination Certificate without signature and stamp shall not be valid.
This EU-Type Examination Certificate may be circulated only without alteration. Extracts or alterations are subject to approval by the
TÜV Rheinland Industrie Service GmbH TÜV Rheinland Group Am Grauen Stein 51105 Köln
Tel: +49 (0) 221 806-0 Fax. + 49 (0) 221 806 114

DAkkS Deutsche Akkreditierungsstelle D-ZE-11052-03-00

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(13) Annex

(14) # EU Type Examination Certificate

TÜV 18 ATEX 8218 X Issue: 00

(15) Description of equipment

15.1 Equipment and type:

ExCam Series T08

15.2 Description

General product information:
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 ATEX/IECEx device certified modules such as HF-barriers, cable glands, media-converter, or certified lighting devices ([op is]).

Ex Marking:

The marking of the equipment shall include the following:

(Ex) II 2G Ex db IIC T6 Gb* **(Ex) I M2 Ex db I Mb***

(Ex) II 2D Ex tb IIIC T80°C Db IP68*

* 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. **

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

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!

(16) Test-Report No. 557/Ex8218.00/18

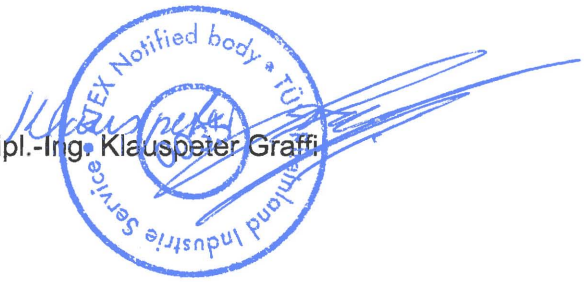
(17) Special Conditions for safe use

1. When installing the ExCam, the requirements of EN/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.

(18) Basic Safety and Health Requirements

Covered by aforementioned standard

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz — Cologne, 2018-10-30



Dipl.-Ing. Klauspeter Graffi

Maximum Input Power:

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

	$T_{amb\ max}$					
Model:	**40°C**	**50°C**	**60°C**	**70°C**		
T08-VA0.1...	10,5 W	7,9 W	5,3 W	2,6 W		
T08-VA0.4...	13,8 W	10,3 W	6,9 W	3,4 W		
T08-VA4.1K.PS1...	55,9 W	42,9 W	28,6 W	14,3 W		
T08-VA4.1K.BOR...	57,1 W	42,9 W	28,6 W	14,3 W		
T08-VA4.3.K1.PS1...	79,2 W	60,0 W	40,0 W	20,0 W		

...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-VA0.1...	13,4 W	11,8 W	9,2 W	6,6 W	3,9 W	2,6 W
T08-VA0.4...	14,2 W	12,7 W	11,2 W	8,6 W	5,2 W	3,4 W
T08-VA4.1K.PS1...	55,9 W	50,0 W	44,1 W	35,7 W	21,4 W	14,3 W
T08-VA4.1K.BOR...	60,0 W	55,0 W	50,0 W	35,7 W	21,4 W	14,3 W
T08-VA4.3.K1.Px1...	79,2 W	70,8 W	62,5 W	50,0 W	30,0 W	20,0 W

...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-VA0.1...	12,0 W	9,2 W	6,3 W	4,9 W	3,5 W	2,1 W
T08-VA0.4...	12,7 W	9,7 W	6,7 W	5,2 W	3,7 W	2,2 W
T08-VA4.1K.PS1...	47,1 W	38,2 W	26,5 W	20,6 W	14,7 W	8,8 W
T08-VA4.1K.BOR...	55,0 W	45,0 W	35,0 W	30,0 W	25,0 W	14,3 W
T08-VA4.3.K1.PS1...	70,8 W	54,2 W	37,5 W	29,2 W	20,8 W	12,5 W

Protection degrees:

Model:	**Protection degree (EN 60529:2014):**
T08-VA...:	**IP68** 8m / 0.5h (immersion depth and duration)

Maximum ambient temperature range:

Model:	**Maximum ambient temperature range**
T08-VA0.1.K1.GER...:	-30°C ≤ T_{amb} ≤ +xxx°C **
T08-VA0.x.K1.BOR...:	-60°C ≤ T_{amb} ≤ +xxx°C **
T08-VA2.x.x.BOR5... (Mining 4J):	-30°C ≤ T_{amb} ≤ +xxx°C **
T08-VA4.x.BOR...	-60°C ≤ T_{amb} ≤ +xxx°C **
T08-VA4.x.PS1...	-50°C ≤ T_{amb} ≤ +xxx°C **

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

(16) Test-Report No. 557/Ex8218.01/18

(17) Special Conditions for safe use

1. When installing the ExCam, the requirements of EN/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.
4. The housing combinations T07-VA0.x.K1.GER and T07-VA4.x.PS1 may not be used in mining (ATEX group 1) or in areas with high mechanical hazards (ATEX group 2)

(18) Basic Safety and Health Requirements

Covered by aforementioned standard

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz Cologne, 2020-08-06

ATEX Notified body 0035 Rheinland Industrie Service

Dipl.-Ing. Klauspeter Graffi

Annex

(14) **EU Type Examination Certificate**

TÜV 18 ATEX 8218 X Issue: 02

(15) Description of equipment

15.1 Equipment and type:

ExCam Series T08

15.2 Description

General product information:
Adding the Model T08-VA0.4.K1.GER

Ex Marking:

See certificate ANNEX 00

The following modification is valid for ANNEX 02

ExCam Series T08-VA0.4.K1.GER...

Technical Data:

Supply Voltage:

unchanged

Maximum Input Power:

unchanged

Protection degrees:

unchanged

Maximum ambient temperature range:

Model:	Maximum ambient temperature range
T08-VA0.4.K1.GER...:	-20°C ≤ T_{amb} ≤ +xxx°C **

** See power table's issue 00 and 01, type plate, model key and installation-/user manual!

(16) Test-Report No. 557/Ex8218.02/18

(17) Special Conditions for safe use

unchanged

(18) Basic Safety and Health Requirements

Covered by aforementioned standard

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz Cologne, 2021-11-11

Dipl.-Ing. Christian Mehrhoff