(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: 00

(4) Equipment:

ExCam Series T08

Manufacturer:

SAMCON Prozessleittechnik GmbH

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/Ex8218.00/18

(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 60079-0:2012+A11:2013

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) I M2 Ex db I Mb*

(Ex) II 2D Ex tb IIIC T80°C Db IP68*

*Optional/Additional marking: see (15) Description

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

Cologne, 2018-10-30

-lag. Klauspete

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







(13) Annex

TÜV 18 ATEX 8218 X Issue: 00

(15) <u>Description of equipment</u>

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*

(ξx) 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. **

This EU Type Examination Certificate without signature and official stamp shall not be valid. This certificate may be circulated without alteration. Extracts or alterations are subject to approval by: Zertifizierungsstelle of TÜV Rheinland Industrie Service GmbH



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_{SUF} < 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.	

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



...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:	$-50^{\circ}\text{C} \le \text{T}_{amb} \le +xxx^{\circ}\text{C}^{**}$

^{**} 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) <u>Basic Safety and Health Requirements</u>

Covered by aforementioned standard

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

Cologne, 2018-10-30

Dipl.-Ing.

NI COSTION OF THE PROPERTY OF