

### INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No .:	IECEx IBE 14.0028X	Page 1 of 6	Certificate history:	
Status:	Current	Issue No: 2	lssue 1 (2016-12-20) Issue 0 (2014-05-26)	
Date of Issue:	2024-07-29			
Applicant:	BARTEC GmbH Max-Eyth-Straße 16 97980 Bad Mergentheim Germany			
Equipment:	Measuring, Control and Switchgear combination type A7-31**_****/****, A7-3S**_****/**** and A7-3n**_****/****			
Optional accessory:				
Type of Protection:	Increased safety "ec", restricted-breathing "nR" and dust-ignition protection by enclosure "tc" in combination with other types of protection			
Marking:	T6, T5, T4 or T3 Gc Ex db dc eb ec ia ib ic [ib Gb] ma mb mc nR nC T5, T4 or T3 Gc	b] [pyb] [pzc] op is [op is] op pr q 60079-30-1 [600 op is [op is] op pr [pxb] [pyb] q 60079-30-1 [6007 op is [op is Ga] op pr q 60079-30-1 IIA, IIB, IIC T	9-30-1] IIA, IIB, IIC T6,	
	Ex tb tc ia ib ic [ib Gb] ma mb mc op is [op is] op	[pxb] [pyb] [pzc] IIIA, IIIB or IIIC, T80 °C, T100 °C o pr [pxb] [pyb] IIIA, IIIB or IIIC, T80 °C, T100 °C o pr IIIA, IIIB or IIIC, T80 °C, T100 °C or T130 °C	or T130 °C Dc	
	Ex ec nR [ic] [op is] IIA, IIB or IIC T6, T5, T4 or Ex ec nR [ib Gb] [op is] IIA, IIB or IIC T6, T5, T4 Ex ec nR [ia Ga] [op is] IIA, IIB or IIC T6, T5, T4	or T3 Gc		
	-60 °C $\leq$ T <sub>a</sub> $\leq$ +80 °C (max., depends on type)			
	The specific marking is based on the approvals of the used Ex-products.			
Approved for issue or Certification Body:	n behalf of the IECEx	DrIng. Peter Cimalla		
Position:	C	Deputy Head of department Certification Boo	ły	
Signature: (for printed version) Pch. Ch.				
Date: (for printed version) 2024-07-29				
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Certificate issued by: IBExU Institut für Sicherheitstechnik GmbH Fuchsmühlenweg 7 09599 Freiberg Germany				

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Manufacturer:	<b>BARTEC GmbH</b> Max-Eyth-Staße 16 97980 Bad Mergentheim <b>Germany</b>				
Manufacturing locations:	<b>BARTEC GmbH</b> Max-Eyth-Staße 16 97980 Bad Mergentheim <b>Germany</b>	<b>BARTEC F.N. S.R.L.</b> Via M. Pagano, 3 I - 20090 Trezzano sul Naviglio (MI) <b>Italy</b>	<b>FENEX S.r.I.</b> Via Carducci 16, I - 34070 Moraro (GO) <b>Italy</b>		
See following pages for more locations					
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 equipment 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					
IEC 60079-1:2014	C 60079-1:2014 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"				

IEC 60079-0:2017 Edition:7.0	Explosive atmospheres - Part 0: Equipment - General requirements	
IEC 60079-1:2014 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 60079-15:2017 Edition:5.0	Explosive atmospheres - Part 15: Equipment protection by type of protection "n"	
IEC 60079-18:2017 Edition:4.1	Explosive atmospheres - Part 18: Protection by encapsulation "m"	
IEC 60079-2:2014 Edition:6	Explosive atmospheres - Part 2: Equipment protection by pressurized enclosure "p"	
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"	
IEC 60079-5:2015 Edition:4.0	Explosive atmospheres –Part 5: Equipment protection by powder filling "q"	
IEC 60079-7:2017 Edition:5.1	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"	
IEC/IEEE 60079-30-1:2015 Edition:1.0	Explosive atmospheres - Part 30-1: Electrical resistance trace heating - General and testing requirements	
	This Certificate <b>does not</b> indicate compliance with safety and performance requirements	

other than those expressly included in the Standards listed above.

IECEX

**TEST & ASSESSMENT REPORTS:** A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:



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### Test Reports:

DE/IBE/ExTR14.0025/00

DE/IBE/ExTR14.0025/01

Quality Assessment Reports:

DE/TUN/QAR06.0017/14 IT/CES/QAR09.0003/16 NL/DEK/QAR12.0059/08

FR/INE/QAR17.0001/06 IT/CES/QAR12.0006/10 NL/DEK/QAR12.0061/10 DE/IBE/ExTR14.0025/02

GB/EXV/QAR19.0010/04 NL/DEK/QAR11.0034/07 NO/DNV/QAR23.0002/01



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#### EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The explosion-proof Measuring, Control and Switchgear combination is used for the control of electrical apparatus and/or for power EPL Gc or Dc is required.

The enclosures are produced from polyester resin, stainless steel or aluminium. They are carried out in type of protection "Ex e" or "Ex t". They contain measuring-, controlling- and switching devices and can be equipped with actuating elements, indication lights and inspection glasses, if required. The electrical connection is carried out by means of flanges or separately certified cable glands. All built-in and attached Ex-components and Ex equipment are separately certified for the use in areas requiring equipment of EPL Gc or Dc. The built-in components for dustproof control units can be designed in accordance with the industrial standards. Connecting parts for intrinsically safe circuits are separately marked.

For the final assembly of the differently sized enclosures the permissible dissipation power is determined to consider the operating conditions of the individual apparatus/components which are intended to be fitted in/installed on the enclosures. In addition, the temperature class to be marked and the maximum surface temperature must be determined. The respective types of protection are marked following the specifications of the certificates.

The version A7-3n\*\*-\*\*\*\* is carried out as restricted breathing device.

#### Technical data:

Ambient temperature range	-60 °C up to +80 °C (*)
Degree of protection	at least IP54 acc. to IEC 60529 for explosive gas atmospheres at least IP6X acc. to IEC 60529 for explosive dust atmospheres
Rated insulation voltage	max. 1000 V (*)
Rated current	max. 690 A (*)
Rated terminal cross section	max. 400 mm <sup>2</sup> (*)

(\*)The rated values are maximum values. The respective built-in components cause the actual electrical values. The manufacturer specifies the final rated values, within the limits of the maximum values, and depending on the supply conditions, mode of operation, equipment protection level and so on. All circuits must be connected in accordance with IEC 60079-14.

#### SPECIFIC CONDITIONS OF USE: YES as shown below:

- It may be a potential risk of electrostatic discharge from plastic window in the enclosures, refer to the instructions.
- The specific conditions mentioned in the instructions of the used Ex-products have to be observed.



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# **IECEx Certificate** of Conformity

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

- A restricted breathing device has been added and the type designation has been extended. •
- The Measuring, Control and Switchgear combination complies with the requirements of the current standards.
  The list of components has been extended, thus the technical data as well as the marking have been changed.



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Additional manufacturing locations:

### BARTEC NEDERLAND B.V. Boelewerf 25

2987 VD Ridderkerk Netherlands

BARTEC MIDDLE EAST L.C.C PO Box 3685 Al Khobar 31952 Saudi Arabia

#### BARTEC Explosion Proof Appliances (Shanghai) Co. Ltd. New Building 7 No. 188 Xinjung Rind Rd. Caohejing Pujiang Hi-tech park

Caohejing Pujiang Hi-tech parl Minhang District, Shanghai **China** 

### EXTRONICS LIMITED

Unit 1 Dalton Way Midpoint 18 Middlewich Cheshire CW10 0HU **United Kingdom**  BARTEC Pte Ltd

63 Hillview Avenue #07-18 to #07-/23 Lam Soon Industrial Building Singapore 669569 **Singapore** 

### BARTEC AS

Vestre Svanholmen 24 Sandnes 4313 **Norway**