



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 IBE 14.0028 Issue No: 1 Certificate history:
Status: **Current** Page 1 of 4 Issue No. 1 (2016-12-20)
Date of Issue: **2016-12-20** Issue No. 0 (2014-05-26)

Applicant: **BARTEC GmbH**
Max-Eyth-Straße 16
97980 Bad Mergentheim
Germany

Equipment: **Control station type A7-3***-****/******
Optional accessory:

Type of Protection: **different**

Marking:
Ex dc ec nA nC mc op is op pr op sh q ia/ib/ic [ic] IIA, IIB, IIC T6, T5, T4 Gc
Ex dc ec nA nC mc op is op pr op sh q ia/ib/ic [ib Gb] IIA, IIB, IIC T6, T5, T4 Gc
Ex dc ec nA nC mc op is op pr op sh q ia/ib/ic [ia Ga] IIA, IIB, IIC T6, T5, T4 Gc

Ex tc op is op sh [ic] IIIA, IIIB, IIIC, T80 °C, T100 °C Dc
Ex tc op is op sh [ib Db] IIIA, IIIB, IIIC, T80 °C, T100 °C Dc
Ex tc op is op sh [ia Da] IIIA, IIIB, IIIC, T80 °C, T100 °C Dc

Approved for issue on behalf of the IECEx
Certification Body:

Prof. Dr. Tammo Redeker

Position:

Head of Certification Body

Signature:
(for printed version)

Date:

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:

IBExU Institut für Sicherheitstechnik GmbH
Certification Body
Fuchsmühlenweg 7
09599 Freiberg
Germany



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Manufacturer: **BARTEC GmbH**
MAx-Eyth-Straße 16
97980 Bad Mergentheim
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 60079-11 : 2011 Edition:6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-15 : 2010 Edition:4	Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
IEC 60079-18 : 2009 Edition:3	Explosive atmospheres Part 18: Equipment protection by encapsulation "m"
IEC 60079-28 : 2006-08 Edition:1	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 : 2007-03 Edition:3	Explosive atmospheres - Part 5: Equipment protection by powder filling "q"
IEC 60079-7 : 2006-07 Edition:4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

*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/IBE/ExTR14.0025/00](#) [DE/IBE/ExTR14.0025/01](#)

Quality Assessment Report:

[DE/TUN/QAR06.0017/08](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The control stations are available for use in zone 2 (type A7-31**_****/****) or with protection by enclosure for use in zone 22 (type A7-3S**_****/****). The are available either as one enclosure or several connected enclosures. Depending on the specification and number of equipment, various enclosure types and sizes are available. The control station will be equipped according to the individual requirements with switches, signal lamps, rail-mounted terminals, fuses, bus modules etc. In the control station, protected by enclosure, industrial serial products can be installed, too.

The components are mounted either on DIN rails or installed in the front lid.

Further details see annex

The assessment of conformity with actual standards was executed for the complete system. The used components may be certified to older editions of standards.

It is the manufacturer's responsibility to confirm the complying of requirements of current standards.

CONDITIONS OF CERTIFICATION: NO



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

The control station complies with the requirements of the current standards.

Annex:

[Annex2IBE14.0028_01.pdf](#)



General product information:

Control Station

Type A7-3*-****/******

The combination type A7-31**-****/**** consists of one or a number of enclosures which are made from polyester resin, stainless steel or aluminum and are designed to type of protection Increased Safety "e". The enclosures are to accommodate measuring, control and switchgear, as well as terminals for intrinsically safe and non-intrinsically safe circuits, and may, if required, be fitted with actuator elements, indicator lights, and inspection windows. The connection elements for intrinsically safe circuits will be identified, e.g. by a light-blue Color. Connection is made by means of Explosion-proof cable entries. The empty enclosures as well as all the internally and externally fitted elements are tested and certified with separate examination certificates.

The combination type A7-3S**-****/**** consists of one or a number of enclosures which are made from polyester resin, stainless steel or aluminum and are designed to type of protection Protection by Enclosure "t". It may be fitted with actuator elements, indicator lights, and inspection windows. Connection is made by means of explosion-proof cable entries. The empty enclosures as well as all the externally fitted elements are tested and certified with separate examination certificates.

Type Code:

Type No.	07	-	3	*	*	*	-	*	*	*	*	/				
Character No.	A		B	C	D	E		F	G	H	I		J	K	L	M				

Character	Character for:	Variant:	Description
A	Basic program	07	Basic program STVT
B	Type of device	3	MSR Control Station
C	Ex-B	1 S	Gas Dust
D, E	Enclosure type/material	See separate listing of "enclosure type/material"	
F, G, H, I	Enclosure size	See separate listing of "enclosure size"	
J, K, L, M	Characters without effect on explosion protection	-	-

Variety of enclosure types/material				
No.	Description	Ex	Material	IECEX Certificate
01	Empty enclosure	Exe	Al	IECEX PTB11.0032U
02	Empty enclosure	Exi	Al	IECEX PTB11.0032U
03	Empty enclosure	Exe	Polyester black	IECEX PTB09.0008U
:				
05	Empty enclosure	Exi	Polyester black	IECEX PTB 09.0008U
06	Empty enclosure	Exe	Polyester grey	IECEX PTB 09.0008U
07	Empty enclosure	Exi	Polyester grey	IECEX PTB 09.0008U
08	Empty enclosure with flange and cover	Exe	Polyester graphite black	IECEX PTB08.0003U ROSE company



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Variety of enclosure types/material				
:				
09	Empty cabinet with door	Exe	Polyester black	IECEX PTB 10.0011U Rittal company
10	Empty cabinet with door	Exi	Polyester black	IECEX PTB 10.0011U Rittal company
11	Empty enclosure with cover	Exe	V2A	IECEX PTB 09.0033U Rittal company
12	Empty enclosure with cover	Exi	V2A	IECEX PTB 09.0033U Rittal company
13	Empty cabinet with door	Exe	V2A	IECEX PTB 09.0035U Rittal company
14	Empty cabinet with doot	Exi	V2A	IECEX PTB 09.0035U Rittal company
:				
30	Empty enclosure with flange and cover	Exe	V2A	IECEX IBE 09.0016U
31	Empty enclosure with flange and cover	Exi	V2A	IECEX IBE 09.0016U
32	Empty enclosure with flange and cover	Exe	V4A	IECEX IBE 09.0016U
33	Empty enclosure with flange and cover	Exi	V4A	IECEX IBE 09.0016U
34	Empty cabinet with flange and cover with door	Exe	V2A	IECEX IBE 09.0016U
35	Empty cabinet with flange and cover	Exi	V2A	IECEX IBE 09.0016U
36	Empty cabinet with flange and cover	Exe	V4A	IECEX IBE 09.0016U
37	Empty cabinet with flange and cover	Exi	V4A	IECEX IBE 09.0016U
:				
46	Empty enclosure with door	Exe		IECEX BKI 08.0001U C.CrouseHinds company
47	Empty enclosure with door	Exi		IECEX BKI 08.0001U C.CrouseHinds company
48	Empty enclosure with door	Exe		IECEX BKI 08.0010 C.CrouseHinds company
49	Empty enclosure with door	Exi		IECEX BKI 08.0010 C.CrouseHinds company
:				
88	Empty enclosure	Exe	Polyester graphite grey	IECEX PTB06.0044U Stahl company
89	Empty enclosure	Exi	Polyester graphite grey	IECEX PTB06.0044U Stahl company
:				
92	Empty enclosure with flange and cover	Exe	V4A TNCN	IECEXDNV 09.0005U Bartec Technor
93	Empty enclosure with flange and cover	Exi	V4A TNCN	IECEXDNV 09.0005U Bartec Technor
94	Empty cabinet with flange and cover	Exe	V4A TNCN	IECEXDNV 09.0005U Bartec Technor
95	Empty cabinet with flange and cover	Exi	V4A TNCN	IECEXDNV 09.0005U Bartec Technor
96	Empty enclosure with cover	Exe	V4A Cubo X	IECEX DNV 11.0005U Ensto Finland Oy
97	Empty cabinet with door	Exe	V4A Cubo X	IECEX DNV 11.0005U Ensto Finland Oy
98	Empty enclosure with cover	Exe	V4A ESX	IECEX INE 13.0102U FEAM IECEX INE13.0101U



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Variety of enclosure types/material			
			NUOVA ASP
99	Empty cabinet with door	Exi V4A ESX	IECEX INE 13.0102U FEAM IECEX INE13.0101U NUOVA ASP

Variety of enclosure sizes							
Aluminium enclosure		Polyester enclosure		Stainless steel enclosure			
Key number	in mm	Key number	in mm	Key number	in mm	Key number	in mm
0706	75x80x57	0805	80x75x55	1006	100x100x60	3022	300x400x210
1206	125x80x57	0807	80x75x75	2006	200x100x60	4216	400x400x160
1706	175x80x57	1105	110x75x55	1210	120x100x90	4020	400x400x200
2506	250x80x57	1107	110x75x75	1506	150x150x60	4021	400x400x210
1208	122x120x80	1605	160x75x55	1508	150x150x80	5016	500x400x160
1209	122x120x90	1607	160x75x75	1510	150x150x100	6016	600x400x160
2208	220x120x80	1905	190x75x55	1515	150x150x100	3516	350x500x160
2209	220x120x90	1907	190x75x75	2510	250x150x100	3520	350x500x200
3608	360x120x80	2305	230x75x55	3008	300x150x80	4221	400x500x210
1609	160x160x90	2307	230x75x75	3510	350x150x100	3822	380x600x210
2609	260x160x90	1209	122x120x90	4008	400x150x80	4120	400x600x200
3609	360x160x90	1212	122x120x120	2008	200x200x80	4121	400x600x210
5609	560x160x90	2209	220x120x90	2010	200x200x100	6021	600x600x210
1709	179x179x90	1609	160x160x90	2012	200x200x120	5516	550x740x160
2011	200x230x110	1612	160x160x120	2014	200x200x150	5520	550x740x200
2018	200x230x180	2609	260x160x90	3108	300x200x80	5776	570x760x200
2811	280x230x110	2713	270x170x136	3010	300x200x100	6121	600x760x210
3311	330x230x110	2813	270x270x136	3112	300x200x120	7620	760x760x200
3318	330x230x180	2913	541x270x136	4010	400x200x100	9521	950x760x200
4011	400x230x110	3609	360x160x90	4013	400x200x120	7627	760x760x270
6011	600x230x110	5609	560x160x90	4215	400x200x150	9527	950x760x270
2911	298x248x110	3415	340.5x170x150	4015	400x200x160	7630	760x760x300
4111	400x310x110	3419	340.5x170x190	6112	600x200x120	5820	500x800x200
4118	400x310x180	2013	200x250x120	2616	260x260x160	6030	600x800x300
6111	600x310x110	2512	255x250x120	2620	260x260x200	8030	800x800x300
6118	600x310x180	2516	255x250x160	2827	280x280x150	6416	640x860x160
4211	421x328,5x110	4012	400x250x120	2828	280x280x200	6420	640x860x200
		4016	400x250x160	2015	200x300x155	7416	740x980x160
		6012	600x250x120	3012	300x300x120	7420	740x980x200
		2015	200x300x150	1530	300x300x150	1020	1000x1000x200
		5030	500x300x300	3016	300x300x160	8130	800x1000x300
		3515	340.5x340.5x150	3121	300x300x210	6025	600x1100x250
		3519	340.5x340.5x190	3815	380x300x155	1240	1000x1200x400
		6815	681.5x340.5x150	4113	400x300x150	1027	1000x1500x270
		6819	681.5x340.5x190	4115	400x300x160	1527	1500x1500x270
		2515	250x350x150	2716	260x380x160	1550	1000x1500x500
		3020	300x400x200	2720	260x380x200	1966	600x1960x600
		4020	400x400x200	3021	300x380x210	1968	800x1960x600
		4112	400x405x120	3837	380x380x150	1915	1500x1960x600
		4116	400x405x160	3816	380x380x160		
		4120	400x600x200	3838	380x380x200		
		6020	600x600x200	3821	380x380x210		
		6030	600x800x300	6022	600x380x210		
		8130	800x1000x300	3839	380x380x270		

Further enclosure sizes in the intermediate range are possible



Electrical parameters:

Rated isolation voltage:	up to 1000 V
Rated operating voltage:	up to 1000 V
Rated current:	max. 160 A
Utilization category:	depends on the built in components
Nominal conductor area:	max. 120 mm ²
Maximum ambient temperature range:	-55 °C to +80 °C -55 °C to +75 °C with enclosure insert
Temperature class:	T6, T5, T4, T3 resp. T80°C, T100°C, T130°C
Type of protection according to IEC 60529:	minimum IP54 (Gas) minimum IP6x (Dust)

Rated values are maximum values, the actual electrical values are determined by mounted electrical apparatus. Within these limiting values complying with the appropriate standards the manufacturer specifies the final limiting values dependent on power supply, specifications, operating mode, utilization category, etc.

The actual ambient temperature range is based on the temperature range permitted for the components used.

The composition of the protection symbol is based on the types of protection of components actually used:

Ex dc ec nA nC mc op is op pr op sh q ia/ib/ic [ic] IIA, IIB, IIC T6, T5, T4 Gc
Ex dc ec nA nC mc op is op pr op sh q ia/ib/ic [ib Gb] IIA, IIB, IIC T6, T5, T4 Gc
Ex dc ec nA nC mc op is op pr op sh q ia/ib/ic [ia Ga] IIA, IIB, IIC T6, T5, T4 Gc

Ex tc op is op sh [ic] IIIA, IIIB, IIIC, T80 °C, T100 °C Dc
Ex tc op is op sh [ib Db] IIIA, IIIB, IIIC, T80 °C, T100 °C Dc
Ex tc op is op sh [ia Da] IIIA, IIIB, IIIC, T80 °C, T100 °C Dc

Components used may be approved and certified according to the requirements of EPL Ga or Gb or Da or Db.

Notes for installation and use

Installation of equipment designed to type of protection Intrinsic Safety "i" has to proceed in such a way that the clearance and creepage distances between intrinsically safe and non-intrinsically safe circuits mentioned in IEC 60079-14 are met.