



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 TUN 10.0030X** issue No.: **2**

Status: **Current**

Certificate history:
Issue No. 2 (2016-11-30)
Issue No. 1 (2012-9-14)
Issue No. 0 (2010-11-24)

Date of Issue: **2016-11-30** Page 1 of 4

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

Equipment: **Control System SILAS, type A7-3741-1**0/******
Optional accessory:

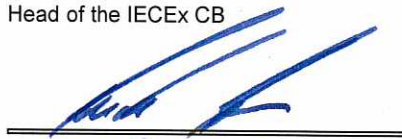
Type of Protection: **Pressurized apparatus p, Electrical apparatus with type of protection n, Protection by enclosures t**

Marking: Ex nA nC [pzc] IIC T4 Gc
Ex nA nC [pzc] IIC T6 Gc
Ex tc [pzc] IIIB T85 °C Dc

Approved for issue on behalf of the IECEx Certification Body: **Andreas Meyer**

Position: **Head of the IECEx CB**

Signature:
(for printed version)


2016-11-30

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:





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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 60079-15 : 2010 Edition: 4	Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
IEC 60079-2 : 2014-07 Edition: 6	Explosive atmospheres - Part 2: Equipment protection by pressurized enclosure "p"
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/TUN/ExTR10.0032/00

DE/TUN/ExTR10.0032/01

DE/TUN/ExTR10.0032/02

Quality Assessment Report:

DE/TUN/QAR06.0017/07



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The control system SILAS is used as a control- and safety device for electrical equipment designed by the method of "Pressurisation with leakage compensation".
The control system consists of a control device type A7-3741-1**0/**** and a pressure controller type 17-51P3-1604/****. A pressurised device which is equipped with the control system has to be assessed as a pressurised apparatus. The pressure controller is only for the assembly with a device according to devices of group II, category 3 and will be protected against mechanical damage and ultraviolet light by installation.

Technical data see attachement.

SPECIFIC CONDITIONS OF USE: YES as shown below:

The device must not be used in the presence of processes which are strongly generating charge.



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

The marking has changed.

There is an additional variant of the lid of the Controller SILAS with viewing glass.

General product information:

The control system SILAS is used as a control- and safety device for electrical equipment designed by the method of "Pressurisation with leakage compensation".
 The control system consists of a control device type A7-3741-1**0/**** and a pressure controller type 17-51P3-1604/****. A pressurised device which is equipped with the control system has to be assessed as a pressurised apparatus. The pressure controller is only for the assembly with a device according to devices of group II, category 3 and will be protected against mechanical damage and ultraviolet light by installation.

Technical data

The maximum permissible ambient temperature for the control system, depending on the temperature class, has to be taken from the following table.

Permissible ambient temperature range	Temperature class
-20 °C to +40 °C	T6
-20 °C to +60 °C	T4

Permissible temperature range of the protective gas: 0 °C to +40 °C

Permissible ambient temperature range: -20 °C to +70 °C
 (pressure controller)

For the control system with the control device type A7-3741-10/1*****

Supply circuit.....Nominal voltage: 230 V a.c.
 (Terminals 7, 8 and 9, 10, 11)

For the control system with the control device type A7-3741-10/2*****

Supply circuit.....Nominal voltage: 115 V a.c.
 (Terminals 7, 8 and 9, 10, 11)

For the control system with the control device type A7-3741-10/4*****

Supply circuit.....Nominal voltage: 24 V d.c.
 (Terminals 7, 8 and 9, 10, 11)

For $-20\text{ °C} \leq T_a \leq +40\text{ °C}$

Relay K2..... $U_n = 253\text{ V a.c.}, I \leq 5\text{ A},$
(Terminals 4, 5) $\cos \varphi = 0.7$

Relay K3..... $U_n = 253\text{ V a.c.}, I \leq 5\text{ A},$
(Terminals 1, 2, 3) $\cos \varphi = 0.7$

For $-20\text{ °C} \leq T_a \leq +60\text{ °C}$

Relay K2..... $U_n = 253\text{ V a.c.}, I \leq 0.5\text{ A},$
(Terminals 4, 5) $\cos \varphi = 0.7$

Relay K3..... $U_n = 253\text{ V a.c.}, I \leq 0.5\text{ A},$
(Terminals 1, 2, 3) $\cos \varphi = 0.7$

For all devices

Relay K1..... $U_n = 253\text{ V a.c.}, I \leq 0.5\text{ A},$
(Terminals 5, 6) $\cos \varphi = 0.7$

PE..... Potential equalisation
(Terminals 12, 13)