IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres

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

Certificate No.: **IECEx TUN 10.0030X**

Page 1 of 4

Certificate history:
Issue 2 (2016-11-30)
Issue 1 (2012-09-14)
Issue 0 (2010-11-24)

Status: **Current**

Issue No: 3

Date of Issue: 2023-07-12

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, Protection by increased safety e**

Marking: Ex ec nC [pzc] IIC T4 Gc

Ex ec nC [pzc] IIC T6 Gc

Ex tc [pzc] IIIB T135 °C

Ex tc [pzc] IIIB T85 °C

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

Position: **Deputy Head of the IECEx Certification Body**

Signature: (for printed version)

Date: (for printed version)

TÜVNORD
Digital unterschrieben von Meyer Andreas
Datum: 2023.07.12 17:00:26 +02'00'

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 www.iecex.com or use of this QR Code.

Certificate issued by:

TÜV NORD CERT GmbH
Hanover Office
Am TÜV 1, 30519 Hannover
Germany

TÜV NORD

IECEx Certificate of Conformity

Certificate No.: **IECEx TUN 10.0030X** Page 2 of 4

Date of issue: 2023-07-12 Issue No: 3

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

Manufacturing 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 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-15:2017 Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
Edition:5.0

IEC 60079-2:2014-07 Explosive atmospheres - Part 2: Equipment protection by pressurized enclosure "p"
Edition:6

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

IEC 60079-7:2017 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

This Certificate **does not** indicate compliance with 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 Reports:

DE/TUN/ExTR10.0032/00 DE/TUN/ExTR10.0032/01 DE/TUN/ExTR10.0032/02
DE/TUN/ExTR10.0032/03

Quality Assessment Report:

DE/TUN/QAR06.0017/14

IECEx Certificate of Conformity

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 / * *** or type 17-51P3-1***/****.

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, EPL Gc 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.

IECEx Certificate of Conformity

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
The marking has been changed because of the new standards.

The current specifications for relays K2 and K3 have been adjusted as follows:

From 5 A to 0.5 A for Ta = +40 °C and T6

From 0.5 A to 5 A for Ta = +60 °C and T4

The changed values of current are not critical.

Annex:

Attachment to ExTR DE_TUN_ExTR10.0032_03_.pdf

TÜV NORD CERT GmbH
Hanover Office
Am TÜV 1
30519 Hannover
Germany

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/**** or type 17-51P3-1***/****.
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, EPL Gc 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 rsp. T85 °C
-20 °C to +60 °C	T4 rsp. T135 °C

Permissible temperature range of the protective gas:	0 °C to +40 °C
Permissible ambient temperature range: (pressure controller)	-20 °C to +70 °C

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)

TÜV NORD CERT GmbH
Hanover Office
Am TÜV 1
30519 Hannover
Germany

For -20 °C ≤ Ta ≤ +40 °C

Relay K2..... U_n = 253 V a.c., I ≤ 0.5 A,
(Terminals 4, 5) cos φ = 0.7

Relay K3..... U_n = 253 V a.c., I ≤ 0.5 A,
(Terminals 1, 2, 3) cos φ = 0.7

For -20 °C ≤ Ta ≤ +60 °C

Relay K2..... U_n = 253 V a.c., I ≤ 5 A,
(Terminals 4, 5) cos φ = 0.7

Relay K3..... U_n = 253 V a.c., I ≤ 5 A,
(Terminals 1, 2, 3) cos φ = 0.7

For all devices

Relay K1..... U_n = 253 V a.c., I ≤ 0.5 A,
(Terminals 5, 6) cos φ = 0.7

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

Used certified components:

Component	Manufacturer	Certificate Number	Marking Code
Bezel for measuring and indicating devices, type 8603/**	R. STAHL Schaltgeräte GmbH	IECEx_PTB_06.0083U_002 PTB 00 ATEX 3106 U	Ex eb IIC Gb Ex tb IIIC Db II 2 G Ex eb IIC Gb III 2 D Ex tb IIIC Db
Polyester housing type 07-5184-****/**** and 07-5185-****/****	BARTEC-Varnost d.o.o.	IECEx_PTB_09.0008U_007 PTB 08 ATEX 1062 U	Ex eb IIC Gb Ex tb IIIC Db II 2 G Ex eb IIC Gb III 2 D Ex tb IIIC Db
Modular PCB terminal blocks type 236-***/***-***/999-950, 255-***/***-***/999-950, 256***/***-***/999-950 and 257-***/***-***/999-950	WAGO Kontakttechnik GmbH & Co. KG	IECEx_PTB_06.0042U_003 PTB06ATEX1061U	Ex eb IIC Gb Ex eb I Mb II 2 G Ex eb IIC Gb I M 2 Ex eb I Mb