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 BVS 11.0033 issue No.:0	Certificate history:
Status:	**Current**	
Date of Issue:	**2011-05-26**	Page 1 of 5

Applicant: **FHF Funke + Huster Fernsig GmbH**
Gewerbeallee 15-19
45478 Mülheim a. d. Ruhr
Germany

Electrical Apparatus: **Ruggedized ExII telephone**
Optional accessory:

Type of Protection: **Equipment protection by intrinsic safety "i", Construction, test and marking of type of protection encapsulation 'm' electrical apparatus, Equipment protection by increased safety "e", Protection by enclosures "tD", Protection by intrinsic safety 'iD'**

Marking: **Ex emb [ib] IIC T6/T5**
Ex tD [ibD] A21 IP66 T80°C/T100°C

Approved for issue on behalf of the IECEx Certification Body: H.-Ch. Simanski

Position: Head of Certification Body

Signature:
(for printed version)

Date: 26/5/11

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.

Certificate issued by:

DEKRA EXAM GmbH
Dinnendahlstrasse 9
44809 Bochum
Germany

DEKRA
DEKRA EXAM GmbH

IECEx Certificate of Conformity

Certificate No.: IECEx BVS 11.0033

Date of Issue: **2011-05-26** Issue No.: **0**

Manufacturer: **FHF Funke + Huster Fernsig GmbH**
Gewerbeallee 15-19
45478 Mülheim a. d. Ruhr
Germany

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 : 2004 Edition: 4.0	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
IEC 60079-11 : 2006 Edition: 5	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-18 : 2004 Edition: 2.0	Electrical apparatus for explosive gas atmospheres - Part 18: Construction, test and marking of type of protection encapsulation 'm' electrical apparatus
IEC 60079-7 : 2006-07 Edition: 4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
IEC 61241-0 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements
IEC 61241-1 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosures "tD"
IEC 61241-11 : 2005 Edition: 1	Electrical apparatus for use in the pressence of combustible dusts - Part 11: Protection by intrinsic safety 'iD'

*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/BVS/ExTR11.0058/00

Quality Assessment Report:

DE/BVS/QAR07.0004/03

IECEx Certificate of Conformity

Certificate No.: IECEx BVS 11.0033

Date of Issue: **2011-05-26** Issue No.: **0**

Schedule

EQUIPMENT:
Equipment and systems covered by this certificate are as follows:

Description

The Ruggedized ExII telephone type ExResistTel is suitable for use in areas endangered by an explosive atmosphere. The vertical mounting is permitted.

The handset, the keyboard and the display are designed in type of protection intrinsic safety "i".

The electrical connection of the Ruggedized ExII telephone type ExResistTel is realised by terminals in type of protection increased safety "e".

The ambient temperature range is -25 °C up to +40 °C respectively +60 °C. Depending on the upper ambient temperature the temperature class and the surface temperature will change.

A breathing and draining device is part of the Ruggedized ExII telephone type ExResistTel.

CONDITIONS OF CERTIFICATION: NO

IECEx Certificate of Conformity

Certificate No.: IECEx BVS 11.0033

Date of Issue: **2011-05-26** Issue No.: **0**

EQUIPMENT(continued):

Parameters

Non intrinsically safe circuits

Phone line (Terminal La / Lb No.: 13 - 14)

Maximum voltage (calling)	Um (calling)	AC	90	V
Permitted frequency range			16 up to 54	Hz
or				
Maximum voltage (calling)	Um (calling)	AC	150	V
Permitted frequency range			15 up to 68	Hz
or				
Maximum rated voltage	Um (supply voltage)	DC	66	V
Maximum rated current			100	mA
or				
Maximum rated voltage	Um (supply voltage)	DC	56.5	V
Maximum rated current			110	mA
Maximum short circuit current IK			35	A

Additional external alarm: only for connection to passive load (Terminal W1 / W No.: 15 - 16)

Maximum voltage (calling)	Um (calling)	AC	90	V
Permitted frequency range			16 up to 54	Hz
or				
Maximum voltage (calling)	Um (calling)	AC	150	V
Permitted frequency range			15 up to 68	Hz
or				
Maximum rated voltage	Um (supply voltage)	DC	66	V
or				
Maximum rated voltage	Um (supply voltage)	DC	56.5	V

IECEx Certificate of Conformity

Certificate No.: IECEx BVS 11.0033

Date of Issue: **2011-05-26** Issue No.: **0**

Additional information:

Intrinsically safe circuits

Headset (Microphone) (Terminal KGM No.: 5 - 6)

Maximum output voltage	Uo	17	V
Maximum output current	Io	90	mA
Maximum output power	Po	80	mW
Maximum external capacitance	Co	375	nF
Maximum external inductance	Lo	1.2	mH

Headset (Speaker) (Terminal KGH No.: 7 - 8)

Maximum output voltage	Uo	17	V
Maximum output current	Io	90	mA
Maximum output power	Po	190	mW
Maximum external capacitance	Co	375	nF
Maximum external inductance	Lo	1.2	mH

Headset (Signalling) (Terminal KGS No.: 9 - 10)

Maximum output voltage	Uo	17	V
Maximum output current	Io	8	mA
Maximum output power	Po	33	mW
Maximum external capacitance	Co	375	nF
Maximum external inductance	Lo	100	mH

External speaker (Terminal LSP No.: 11 - 12)

Maximum output voltage	Uo	6.6	V
Maximum output current	Io	250	mA
Maximum output power	Po	370	mW
Maximum external capacitance	Co	22	µF
Maximum external inductance	Lo	0.3	mH

Ambient temperature range

Temperature class T6	-25 °C up to +40 °C
Temperature class T5	-25 °C up to +60 °C

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 BVS 11.0033 issue No.:1	Certificate history: Issue No. 1 (2013-4-9) Issue No. 0 (2011-5-26)
Status:	**Current**	
Date of Issue:	**2013-04-09**	Page 1 of 6
Applicant:	**FHF Funke + Huster Fernsig GmbH** Gewerbeallee 15-19 45478 Mülheim a. d. Ruhr **Germany**	
Electrical Apparatus: *Optional accessory:*	**Ruggedized ExII telephone**	
Type of Protection:	**Equipment protection by intrinsic safety "i", Equipment protection by encapsulation "m", Equipment dust ignition protection by enclosure 't', Equipment protection by increased safety "e"**	
Marking:	Ex e mb [ib] IIC T6/T5 Gb Ex tb [ib] IIIC T80°C/T100°C Db	
Approved for issue on behalf of the IECEx Certification Body:	Dr. F. Eickhoff	
Position:	Deputy Head of Certification Body	
Signature: *(for printed version)*		
Date:	2013-04-09	

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.

Certificate issued by:

DEKRA EXAM GmbH
Dinnendahlstrasse 9
44809 Bochum
Germany

DEKRA EXAM GmbH

IECEx Certificate of Conformity

Certificate No.: IECEx BVS 11.0033

Date of Issue: **2013-04-09** Issue No.: **1**

Manufacturer: **FHF Funke + Huster Fernsig GmbH**
Gewerbeallee 15-19
45478 Mülheim a. d. Ruhr
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 60079-11 : 2011 Edition: 6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-18 : 2009 Edition: 3	Explosive atmospheres Part 18: Equipment protection by encapsulation "m"
IEC 60079-31 : 2008 Edition: 1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'
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/BVS/ExTR11.0058/01

Quality Assessment Report:

DE/BVS/QAR07.0004/06

IECEx Certificate of Conformity

Certificate No.: IECEx BVS 11.0033

Date of Issue: **2013-04-09** Issue No.: **1**

Schedule

EQUIPMENT:
Equipment and systems covered by this certificate are as follows:

Subject and type

Ruggedized ExII telephone type ExResistTel

Description

The Ruggedized ExII telephone type ExResistTel is suitable for use in areas endangered by an explosive atmosphere. The vertical mounting is permitted.

The handset, the keyboard and the display are designed in type of protection intrinsic safety "i".

The electrical connection of the Ruggedized ExII telephone type ExResistTel is realised by terminals in type of protection increased safety "e".

The ambient temperature range is -25 °C up to +40 °C respectively +60 °C. Depending on the upper ambient temperature the temperature class and the surface temperature will change.

A breathing and draining device is part of the Ruggedized ExII telephone type ExResistTel.

CONDITIONS OF CERTIFICATION: NO

IECEx Certificate of Conformity

Certificate No.: IECEx BVS 11.0033

Date of Issue: **2013-04-09** Issue No.: **1**

EQUIPMENT(continued):

Parameters

Non intrinsically safe circuits				
Phone line (Terminal La / Lb No.: 13 - 14)				
Maximum voltage (calling)	U_m (calling)	AC	90	V
Permitted frequency range			16 up to 54	Hz
or				
Maximum voltage (calling)	U_m (calling)	AC	150	V
Permitted frequency range			15 up to 68	Hz
or				
Maximum rated voltage	U_m (supply voltage)	DC	66	V
Maximum rated current			100	mA
or				
Maximum rated voltage	U_m (supply voltage)	DC	56.5	V
Maximum rated current			110	mA
Maximum short circuit current I_K	35	A		
Additional external alarm: only for connection to passive load (Terminal W1 / W No.: 15 - 16)				
Maximum voltage (calling)	U_m (calling)	AC	90	V
Permitted frequency range			16 up to 54	Hz
or				
Maximum voltage (calling)	U_m (calling)	AC	150	V
Permitted frequency range			15 up to 68	Hz
or				
Maximum rated voltage	U_m (supply voltage)	DC	66	V
or				
Maximum rated voltage	U_m (supply voltage)	DC	56.5	V

IECEx Certificate of Conformity

Certificate No.: IECEx BVS 11.0033

Date of Issue: **2013-04-09** Issue No.: **1**

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

The reason for this supplement is the updating to the current standards.

IECEx Certificate of Conformity

Certificate No.: IECEx BVS 11.0033

Date of Issue: **2013-04-09** Issue No.: 1

Additional information:

Parameters continued

Intrinsically safe circuits			
Headset (Microphone) (Terminal KGM No.: 5 - 6)			
Maximum output voltage	U_o	17	V
Maximum output current	I_o	90	mA
Maximum output power	P_o	80	mW
Maximum external capacitance	C_o	375	nF
Maximum external inductance	L_o	1.2	mH
Headset (Speaker) (Terminal KGH No.: 7 - 8)			
Maximum output voltage	U_o	17	V
Maximum output current	I_o	110	mA
Maximum output power	P_o	190	mW
Maximum external capacitance	Co	375	nF
Maximum external inductance	L_o	1.2	mH
Headset (Signalling) (Terminal KGS No.: 9 - 10)			
Maximum output voltage	U_o	17	V
Maximum output current	I_o	8	mA
Maximum output power	P_o	33	mW
Maximum external capacitance	C_o	375	nF
Maximum external inductance	L_o	100	mH
External speaker (Terminal LSP No.: 11 - 12)			
Maximum output voltage	U_o	6.6	V
Maximum output current	I_o	250	mA
Maximum output power	P_o	370	mW
Maximum external capacitance	C_o	22	µF
Maximum external inductance	L_o	0.3	mH
Ambient temperature range			
Temperature class T6		-25 °C up to +40 °C	
Temperature class T5		-25 °C up to +60 °C	

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 BVS 11.0033 issue No.:2	Certificate history: Issue No. 2 (2015-7-29) Issue No. 1 (2013-4-9) Issue No. 0 (2011-5-26)
Status:	**Current**	
Date of Issue:	**2015-07-29**	Page 1 of 6

Applicant: **FHF Funke + Huster Fernsig GmbH**
Gewerbeallee 15-19
45478 Mülheim an der Ruhr
Germany

Electrical Apparatus: **Ruggedized ExII telephone type ExResistTel**
Optional accessory:

Type of Protection: **Equipment protection by intrinsic safety "i", Equipment protection by encapsulation "m", Equipment dust ignition protection by enclosure "t", Equipment protection by increased safety "e"**

Marking: Ex e mb [ib] IIC T6/T5 Gb
Ex tb [ib] IIIC T80°C/T100°C Db
See general product information for Details

Approved for issue on behalf of the IECEx Certification Body: H.-Ch. Simanski

Position: Head of Certification Body

Signature: (for printed version)

Date: 29.7.2015

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.

Certificate issued by:

DEKRA EXAM GmbH
Dinnendahlstrasse 9
44809 Bochum
Germany

DEKRA EXAM GmbH

IECEx Certificate of Conformity

Certificate No.: IECEx BVS 11.0033

Date of Issue: **2015-07-29** Issue No.: **2**

Manufacturer: **FHF Funke + Huster Fernsig GmbH**
Gewerbeallee 15-19
45478 Mülheim an der Ruhr
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 60079-11 : 2011 Edition: 6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-18 : 2014 Edition: 4.0	Explosive atmospheres – Part 18: Equipment protection by encapsulation "m"
IEC 60079-31 : 2013 Edition: 2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
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/BVS/ExTR11.0058/02

Quality Assessment Report:

DE/BVS/QAR07.0004/08

IECEx Certificate of Conformity

Certificate No.: IECEx BVS 11.0033

Date of Issue: **2015-07-29** Issue No.: **2**

Schedule

EQUIPMENT:
Equipment and systems covered by this certificate are as follows:

General product information:

Ruggedized ExII telephone type ExResistTel

Description

The Ruggedized ExII telephone type ExResistTel is suitable for use in areas endangered by an explosive atmosphere.
The vertical mounting is permitted.
The handset, the keyboard and the display are designed in type of protection intrinsic safety "i".
The electrical connection of the Ruggedized ExII telephone type ExResistTel is realised by terminals in type of protection increased safety "e".
The ambient temperature range is -25 °C up to +40 °C respectively +60 °C. Depending on the upper ambient temperature, the temperature class and the surface temperature will change.
A breathing and draining device is part of the Ruggedized ExII telephone type ExResistTel.

CONDITIONS OF CERTIFICATION: NO

IECEx Certificate of Conformity

Certificate No.: IECEx BVS 11.0033

Date of Issue: **2015-07-29** Issue No.: **2**

EQUIPMENT(continued):

Parameters

Non intrinsically safe circuits

Phone line (Terminal La / Lb No.: 13 - 14)				
Maximum voltage (calling)	U_m(calling)	AC	90	V
Permitted frequency range		16 up to	54	Hz
or				
Maximum voltage (calling)	U_m(calling)	AC	150	V
Permitted frequency range		15 up to	68	Hz
or				
Maximum rated voltage	U_m(supply voltage)	DC	66	V
Maximum rated current			100	mA
or				
Maximum rated voltage	U_m(supply voltage)	DC	56.5	V
Maximum rated current			110	mA
Maximum short circuit current I_K			35	A
Additional external alarm: only for connection to passiv load (Terminal W1 / W No.: 15 - 16)				
Maximum voltage (calling)	U_m(calling)	AC	90	V
Permitted frequency range		16 up to	54	Hz
or				
Maximum voltage (calling)	U_m(calling)	AC	150	V
Permitted frequency range		15 up to	68	Hz
or				
Maximum rated voltage	U_m(supply voltage)	DC	66	V
or				
Maximum rated voltage	U_m(supply voltage)	DC	56.5	V

IECEx Certificate of Conformity

Certificate No.: IECEx BVS 11.0033

Date of Issue: **2015-07-29** Issue No.: **2**

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

Previous interface for interconnection of external loudspeaker waived.
The device is mechanically and electrically unchanged.

IECEx Certificate of Conformity

Certificate No.: IECEx BVS 11.0033

Date of Issue: **2015-07-29** Issue No.: **2**

Additional information:

Intrinsically safe circuits

Headset (Microphone) (Terminal KGM No.: 5 - 6)

Maximum output voltage	U_o	17	V
Maximum output current	I_o	90	mA
Maximum output power	P_o	80	mW
Maximum external capacitance	C_o	375	nF
Maximum external inductance	L_o	1.2	mH

Headset (Speaker) (Terminal KGH No.: 7 - 8)

Maximum output voltage	U_o	17	V
Maximum output current	I_o	110	mA
Maximum output power	P_o	190	mW
Maximum external capacitance	C_o	375	nF
Maximum external inductance	L_o	1.2	mH

Headset (Signaling) (Terminal KGS No.: 9 - 10)

Maximum output voltage	U_o	17	V
Maximum output current	I_o	8	mA
Maximum output power	P_o	33	mW
Maximum external capacitance	C_o	375	nF
Maximum external inductance	L_o	100	mH

Ambient temperature range

Temperature class T6	-25 °C up to +40 °C
Temperature class T5	-25 °C up to +60 °C

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 BVS 11.0033

Issue No: 3

Certificate history:
Issue No. 3 (2018-10-01)
Issue No. 2 (2015-07-29)
Issue No. 1 (2013-04-09)
Issue No. 0 (2011-05-26)

Status: **Current**

Page 1 of 6

Date of Issue: **2018-10-01**

Applicant: **FHF Funke + Huster Fernsig GmbH**
Gewerbeallee 15-19
45478 Mülheim an der Ruhr
Germany

Equipment: **Ruggedized ExII telephone type ExResistTel**

Optional accessory:

Type of Protection: **Equipment protection by intrinsic safety "i", Equipment protection by encapsulation "m", Equipment dust ignition protection by enclosure "t", Equipment protection by increased safety "e"**

Marking:

Ex eb mb [ib] IIC T6/T5 Gb
Ex tb [ib] IIIC T80°C/T100°C Db

Approved for issue on behalf of the IECEx Certification Body: Jörg Koch

Position: Head of Certification Body

Signature:
(for printed version)

Date: 1.10.18

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.

Certificate issued by:

DEKRA EXAM GmbH
Dinnendahlstrasse 9
44809 Bochum
Germany

DEKRA
On the safe side.

IECEx Certificate of Conformity

Certificate No:	IECEx BVS 11.0033	Issue No: 3
Date of Issue:	**2018-10-01**	Page 2 of 6
Manufacturer:	**FHF Funke + Huster Fernsig GmbH** Gewerbeallee 15-19 45478 Mülheim an der Ruhr **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 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 : 2017 Edition:7.0	Explosive atmospheres - Part 0: Equipment - General requirements
IEC 60079-11 : 2011 Edition:6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-18 : 2017 Edition:4.1	Explosive atmospheres - Part 18: Protection by encapsulation "m"
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
IEC 60079-7 : 2017 Edition:5.1	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/BVS/ExTR11.0058/03

Quality Assessment Report:

DE/BVS/QAR07.0004/11

IECEx Certificate of Conformity

Certificate No:	IECEx BVS 11.0033	Issue No: 3
Date of Issue:	**2018-10-01**	Page 3 of 6

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

General product information

Subject and Type

Ruggedized ExII telephone type ExResistTel

Description

The Ruggedized ExII telephone type ExResistTel is suitable for use in areas endangered by an explosive atmosphere. The vertical mounting is permitted.
The handset, the keyboard and the display are designed in type of protection Intrinsic Safety "i".
The electrical connection of the Ruggedized ExII telephone type ExResistTel is realised by terminals in type of protection increased safety "e".
The ambient temperature range is -25 °C up to +40 °C respectively +60 °C. Depending on the upper ambient temperature, the temperature class and the surface temperature will change.
A breathing and draining device is part of the Ruggedized ExII telephone type ExResistTel.
An interface for interconnection of external loudspeaker is no longer provided.
Cable glands made of metal can also be used as an option.
Optionally, the cabinet can be provided with an antistatic varnish, whereby the surface resistance $R \leq 10^9$ Ohm is guaranteed.

Listing of all components used referring to older standards
See Annex

SPECIFIC CONDITIONS OF USE: NO

IECEx Certificate of Conformity

Certificate No: IECEx BVS 11.0033 Issue No: 3

Date of Issue: **2018-10-01** Page 4 of 6

EQUIPMENT (continued):

Parameters
Non-intrinsically safe circuits

Phone line (Terminal La / Lb No.: 13 - 14)

Maximum voltage (calling)	U_m (calling)	AC	90	V
Permitted frequency range		16 up to	54	Hz
or				
Maximum voltage (calling)	U_m (calling)	AC	150	V
Permitted frequency range		15 up to	68	Hz
or				
Maximum rated voltage	U_m (supply voltage)	DC	66	V
Maximum rated current			100	mA
or				
Maximum rated voltage	U_m (supply voltage)	DC	56.5	V
Maximum rated current			110	mA
Maximum short circuit current I_K			35	A

Additional external alarm: only for connection to passiv load (Terminal W1 / W No.: 15 - 16)

Maximum voltage (calling)	U_m (calling)	AC	90	V
Permitted frequency range		16 up to	54	Hz
or				
Maximum voltage (calling)	U_m (calling)	AC	150	V
Permitted frequency range		15 up to	68	Hz
or				
Maximum rated voltage	U_m (supply voltage)	DC	66	V
or				
Maximum rated voltage	U_m (supply voltage)	DC	56.5	V

IECEx Certificate of Conformity

Certificate No: IECEx BVS 11.0033 Issue No: 3

Date of Issue: **2018-10-01** Page 5 of 6

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

Updating to the current version of standards.

IECEx Certificate of Conformity

Certificate No: IECEx BVS 11.0033 Issue No: 3

Date of Issue: **2018-10-01** Page 6 of 6

Additional information:

Intrinsically safe circuits

Headset (Microphone) (Terminal KGM No.: 5 - 6)

Maximum output voltage	U_o	17	V
Maximum output current	I_o	90	mA
Maximum output power	P_o	80	mW
Maximum external capacitance	C_o	375	nF
Maximum external inductance	L_o	1.2	mH

Headset (Speaker) (Terminal KGH No.: 7 - 8)

Maximum output voltage	U_o	17	V
Maximum output current	I_o	110	mA
Maximum output power	P_o	190	mW
Maximum external capacitance	C_o	375	nF
Maximum external inductance	L_o	1.2	mH

Headset (Signaling) (Terminal KGS No.: 9 - 10)

Maximum output voltage	U_o	17	V
Maximum output current	I_o	8	mA
Maximum output power	P_o	33	mW
Maximum external capacitance	C_o	375	nF
Maximum external inductance	L_o	100	mH

Ambient temperature range

Temperature class T6	-25 °C up to +40 °C
Temperature class T5	-25 °C up to +60 °C

Annex:

BVS_11_0033_FHFFernsig_Annex_issue3.pdf