(1) # EU - Type Examination Certificate

(2) Equipment and protective systems intended for use in potentially explosive atmospheres – **Directive 2014/34/EU**

(3) EU - Type Examination Certificate Number

EPS 14 ATEX 1 658 X **Revision 3**

(4) Equipment: Explosion protected electrical sensor, type RedBin-...

(5) Manufacturer: Schischek GmbH

(6) Address: Mühlsteig 45
90579 Langenzenn
Germany

(7) This equipment and any acceptable variation thereto are specified in the annex to this certificate and the documentation therein referred to.

(8) Bureau Veritas Consumer Products Services Germany GmbH, notified body No. 2004 in accordance with Article 21 given in the Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014, certifies that this equipment has been found to comply with the essential health and safety requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II of the Directive. The examination and test results are recorded in the confidential documentation under the reference number 14TH0063_03.

(9) Compliance with the essential health and safety requirements has been assured by compliance with:

EN 60079-0:2012/A11:2013 **EN 60079-11:2012**

EN 60079-15:2010 **EN 60079-31:2014**

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the annex to this certificate.

(11) This EU - Type Examination Certificate relates only to the design and construction of the specified equipment in accordance with Directive 2014/34/EU. Further requirements of this Directive apply to the manufacture of this equipment and its placing on the market. Those requirements are not covered by this certificate.

(12) The marking of the equipment shall include the following:

II 3 (1) G Ex nC [ia Ga] IIC T6...T4 Gc

II 3 (1) D Ex tc [ia Da] IIIC T80°C...T130°C Dc IP66

Certification department of explosion protection

Tuerkheim, 2025-09-23

Ulrich Feike

ZERTIFIZIERUNGSSTELLE BUREAU VERITAS 1828 Bureau Veritas CPS Germany GmbH

(13) # Annex

(14) **EU - Type Examination Certificate EPS 14 ATEX 1 658 X** **Revision 3**

(15) Description of equipment:

The explosion protected electrical sensor, type RedBin-... is used for the measurement of pressures, humidity and/or temperatures and for the conversion of measurements into switching signals. The equipment is intended for the application inside the hazardous area.

The RedBin-..is used stationary in a hazardous area.

The sensor circuits of the RedBin-... can be used in hazardous areas of the category 1G and 1D if the related sensors comply with these requirements.

The Sensors type ExPro-B.. can be used in hazardous areas of the categories 2G and 2D and are available in different technical designs according to the respective application site.

The correlation between the explosion group and the permissible outer reactances can be obtained from the respective table.

For coated housing with a layer thickness of more than 0.2 mm, Ex-marking IIB can be used.

Electrical data:

Supply..... (Terminals 1, 2)	U = 24 VAC/DC ± 20 %, 50...60 Hz U_m = 30 V
Auxiliary contacts..... (Terminals 3...4)	U = 24 VAC/DC ± 20 %, 50...60 Hz U_m = 30 V
Relay contacts..... (Terminals 5...10)	V AC = 250 V / 0.1 A 125 VA / 0.2 A 30 V / 0.5 A resp. V DC = 220 V / 0.1 A 110 V / 0.2 A 30 V / 0.5 A

The relay contacts are safely galvanically separated from the other circuits up to a maximum value of the rated voltage of 375 V.

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Sensor circuits in ignition protection intrinsic safety Ex ia IIC

(RedBin-A.., RedBin-FR) Maximum values:

U_0 = 7.14 V
I_0 = 8 mA
P_0 = 15 mW

	IIC	IIB	IIA
L_0	5 mH	10 mH	20 mH
C_0	1.5 µF	6.7 µF	8.6 µF

C_i = negligible small
L_i = negligible small

Sensor circuits in ignition protection intrinsic safety Ex ia IIC

(RedBin-D..) Maximum values:

U_0 = 7,9 V
I_0 = 6.4 mA
P_0 = 12.7 mW

	IIC	IIB	IIA
L_0	5 mH	10 mH	20 mH
C_0	1.5 µF	6.7 µF	8.6 µF

C_i = negligible small
L_i = negligible small

Sensor circuits NAMUR in ignition protection intrinsic safety Ex ia IIC

(RedBin-N..) Maximum values:

U_0 = 9.6 V
I_0 = 9.7 mA
P_0 = 24 mW

	IIC	IIB	IIA
L_0	5 mH	10 mH	20 mH
C_0	0.84 µF	3.8 µF	4.9 µF

C_i = negligible small
L_i = negligible small

Sensor circuits	in ignition protection intrinsic safety Ex ia IIC
(ExPro-B..)	Maximum values:
	U_i = 9.6 V I_i = 9.7 mA
	C_i = 120 nF L_i = negligible small

The intrinsic safe circuits are safely galvanically separated between each other and from the other non-intrinsic circuits up to a maximum of the rated voltage of 30 V.

Operating conditions:

- Ambient temperature range: -20 °C to +50 °C

- Do not open when hazardous atmosphere is present.

- Do not open when energized.

- Temperature class (group II) and max. surface temperature (group III) depending on used enclosure type (material):

Model	Max. ambient temperature: +40 °C	Max. ambient temperature : +50 °C
RedBin (aluminium enclosure)	T6 (T80 °C)	T6 (T80 °C)
RedBin (stainless steel enclosure)	T5 (T95 °C)	T4 (T130 °C)

(16) Reference number: 14TH0063_03

(17) Special conditions for safe use:

Only for coated enclosure:
- Warning of electrostatic discharge, see operating instructions.

(18) Essential health and safety requirements:

Met by compliance with standards.

Certification department of explosion protection

Tuerkheim, 2025-10-28

Ulrich Feike