



Type Examination Certificate

(1)

(2)

Equipment or Protective Systems Intended for Use
in Potentially Explosive Atmospheres
(Directive 2014/34/EU)

(3) Type Examination Certificate number:

FTZÚ 22 ATEX 0018X

(4) Product:

Intrinsically Safe Barrier Zbc2+

(5) Manufacturer:

COMET SYSTEM, s.r.o.

(6) Address:

Bezručova 2901, 756 61 Rožnov pod Radhoštěm, Czech Republic

(7) This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) The Physical-Technical Testing Institute certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to Directive 2014/34/EU of the European Parliament and of the Council, dated 26.02.2014.

The examination and test results are recorded in confidential Report number:

22/0018 dated 29.06.2022

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018, EN 60079-11:2012

(10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to Specific Conditions of Use specified in the schedule to this certificate.

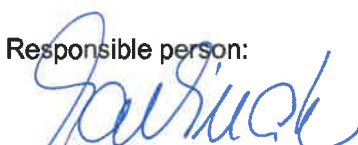
(11) This type examination certificate relates only to the design of the specified product and not to specific items of equipment subsequently manufactured.

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

Ex II (3)G [Ex ic Gc] IIC

This certificate is valid till: **30.06.2027**

Responsible person:


Dipl. Ing. Lukáš Martinák
Head of Certification Body



Date of issue: 30.06.2022

Page: 1/3



**Physical-Technical Testing Institute
Ostrava - Radvanice**

(13) **Schedule**

(14) **Type Examination Certificate No. FTZÚ 22 ATEX 0018X**

(15) Description of Product:

The product Intrinsically Safe Barrier ZbC2+ is used to safely connect intrinsically safe devices located in hazardous areas to devices located outside hazardous areas. The device contains the electronics of two intrinsically safe barriers on one PCB. A screw terminal block is used to connect the interconnecting wires. The entire device is designed for DIN rail mounting and is housed in a plastic non-removable enclosure.

Technical parameters:

Terminals 5-8 (13-16): $U_m = 250 \text{ V}$

Intrinsically safe parameters:

Terminals 1-9,10 (3-11,12): $U_o = 29,4 \text{ V}$, $I_o = 96 \text{ mA}$, $C_o = 120 \text{ nF}$, $L_o = 2 \text{ mH}$ or $C_o = 60 \text{ nF}$, $L_o = 4 \text{ mH}$

Terminals 2-9,10 (4-11,12): $U_i = 29,4 \text{ V}$, $I_i = 96 \text{ mA}$

Ambient temperature: $-20^\circ\text{C} \leq T_a \leq +60^\circ\text{C}$

(16) Report Number: 22/0018

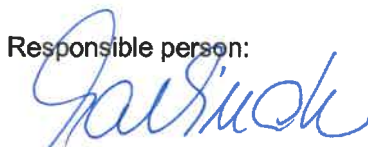
(17) Specific Conditions of Use:

1. Proper earthing of the barrier according to EN 60079-11:2012 is necessary for its proper function.

(18) Essential Health and Safety Requirements:

Compliance with the Essential Health and Safety Requirements is covered by standards mentioned in clause (9) of this certificate.

Responsible person:


Dipl. Ing. Lukáš Martinák
Head of Certification Body



Date of issue: 30.06.2022

Page: 2/3



**Physical-Technical Testing Institute
Ostrava - Radvanice**

(13)

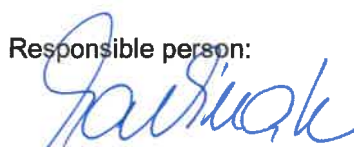
Schedule

(14) **Type Examination Certificate No. FTZÚ 22 ATEX 0018X**

(19) Drawings and Documents:

Number	Sheets	Date	Description
Double intrinsically safe barrier Zbc2+	8	29.06.2022	ATEX description
i-snc-Zbc2-01	2	29.06.2022	User Manual
Routine tests of barriers	2	29.06.2022	Routine verification
s-snc-SNC900-sch-03	1	19.05.2022	Electric scheme
List of materials 3RPo	1	19.05.2022	List of materials
s-snc-QSNC374-pcb-03	1	19.05.2022	Component layout
s-snc-SNC900-pcbs-02	1	29.06.2022	PCB layout
s-snc-SNC900-pcbt-02	1	29.06.2022	PCB layout - vias
s-snc-SNC900-pcbb-02	1	29.06.2022	PCB layout – components

Responsible person:


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Head of Certification Body



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Page: 3/3