Physical-Technical Testing Institute
Ostrava - Radvanice

(1) # Supplementary EU - Type Examination Certificate No. 4

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

(3) EU - Type Examination Certificate number:

FTZÚ 12 ATEX 0092

(4) Product: **Flowmeter type FLOW 33Exia**

(5) Manufacturer: **COMAC CAL s.r.o.**

(6) Address: **Třanovice 239, 739 53 Třanovice, Czech Republic**

(7) This supplementary certificate extends EC - Type Examination Certificate No. FTZÚ 12 ATEX 0092 to apply to products designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

(8) The Physical-Technical Testing Institute, Notified Body number 1026, in accordance with Articles 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26.02.2014, certifies that this product, as modified by this supplementary certificate, 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 the Directive.

(9) In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20.04.2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Supplementary Certificates to such EC-Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20.04.2016.

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

EN IEC 60079-0:2018, EN 60079-11:2012, EN 50303:2000

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) The marking of the product shall include the following:

Ex I M1 Ex ia I Ma
Ex II 1G Ex ia IIC T6 Ga
Ex II 2D Ex ia IIIC T85°C Db

(12) This certificate is valid till: **28.02.2029**

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body

PHYSICAL-TECHNICAL TESTING INSTITUTE FTZÚ Ex

Date of issue: 23.02.2024

Physical-Technical Testing Institute, s.p., Pikartská 1337/7, 716 07 Ostrava - Radvanice, Czech Republic
tel.: +420 595 223 111, +420 604 203 525, e-mail: ftzu@ftzu.cz, www.ftzu.cz

(13) **Schedule**

(14) # Supplementary EU - Type Examination Certificate No. 4 to FTZÚ 12 ATEX 0092

(15) Description of the variation to the Product:

The subject of this supplementary certificate is:

- Modification of certified apparatus.
- Evaluation according to the newest standards.
- Extension of certificate validity.

The subject of this supplementary certificate is extension of certificate validity, evaluation of product according to the newest standards and modification of product marking for using of product in dust explosive atmosphere. The construction and electrical parameters of certified product remain unchanged.

For use of the product in an explosive atmosphere with dust, the equipment protection level (EPL) is changed from level Da to level Db, the product can only be used in zones 21 or 22.

Flowmeter type FLOW 33Exia is designed to measure of flow electrically conductive fluids by electromagnetic induction. The apparatus is designed for fixed installation into pipeline system.

Electronics of apparatus is placed on four PCBs, which are placed into stainless steel enclosure with degree of protection IP65. All electronics parts are casted with compound.

The apparatus is supplied by intrinsically safe power supply and contains two galvanically separated outputs, passive impulse output and passive current loop 4-20 mA or active current loop 0.2-1 mA. Connecting to external apparatuses is done by connector

Intrinsically safe parameters:

Power supply (Pin 1,2):
Ui = 28 V, Pi = 4.832 W, Ci ≈ 0, Li ≈ 0

Output impulse, passive (Pin 3, 4):
Ui = 13.6 V, Ii = 20 mA, Pi = 0.068 W, Ci ≈ 0, Li ≈ 0

Current loop 4-20mA, passive (Pin 5, 6):
Ui = 28 V, Ii = 93 mA, Pi = 0,7 W, Ci ≈ 0, Li ≈ 0

Current loop 0.2-1 mA, active (Pin 5, 6):

Group I
Uo = 25.2 V, Io = 8.8 mA, Po = 0.0552 W, Co = 2,2 µF, Lo = 300 mH

Group IIC, IIIC
Uo = 25.2 V, Io = 8,8 mA, Po = 0.0552 W, Co = 0.06 µF, Lo = 1 mH

Ambient temperature: 0 °C to +44 °C

Degree of protection by enclosure: IP65

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body

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(13) **Schedule**

(14) # Supplementary EU - Type Examination Certificate No. 4 to FTZÚ 12 ATEX 0092

(16) Report Number: 12/0092/4

(17) Specific Conditions of Use:

None.

(18) Essential Health and Safety Requirements:

Compliance with the Essential Health and Safety Requirements is covered by standards mentioned in clause (10) of this supplementary certificate.

(19) Drawings and Documents:

Number	Issue	Sheets	Date	Description
Manual FLOW 33Exia	1.2	32	8.12.2023	Installation and technical conditions
ia_VZG MGD DN150 pas	--	1	08.12.2023	Label pattern DN150
ia_VZG MGD DN150	--	1	08.12.2023	Label pattern DN150
ia_VZG MGD DN80 pas	--	1	08.12.2023	Label pattern DN80
ia_VZG MGD DN80	--	1	08.12.2023	Label pattern DN80

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body

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