



Physical Technical Testing Institute
Ostrava – Radvanice



EC-Type Examination Certificate

- (1)
(2) **Equipment or Protective Systems Intended for Use
in Potentially Explosive Atmospheres
(Directive 94/9/EC)**

- (3) EC-Type Examination Certificate Number:

FTZÚ 14 ATEX 0175

- (1) Equipment or protective system: **GPRS Communicator type AMRflexS**
(2) Manufacturer: **Metreg Technologies GmbH**
(3) Address: **Tränkeweg 9, 15517 Fürstenwalde, Germany**
(4) This equipment or protective system and any of acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
(5) The Physical Technical Testing Institute, notified body number 1026 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system 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 to the Directive.

The examination and test results are recorded in confidential Report N°:

14/0175 dated 29.09.2014

- (6) Compliance with Essential Health and Safety Requirements has been assured by compliance with:
EN 60079-0:2012, EN 60079-11:2012
(7) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.
(8) This EC-Type Examination Certificate relates only to the design, examination and testing of the specified equipment or protective system in accordance to the directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.
(9) The marking of the equipment or protective system shall include following:

 **II (2)G [Ex ia Gb] IIC**

This EC-Type Examination Certificate is valid till: **30.09.2019**

Responsible person:


Dipl. Ing. Lukáš Martinák
Head of Certification Body



Date of issue: 30.09.2014

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**Physical Technical Testing Institute
Ostrava – Radvanice**

(13) **Schedule**

(14) **EC-Type Examination Certificate N° FTZÚ 14 ATEX 0175**

(15) Description of Equipment or Protective System:

The AMRflexS GPRS Communicator is an automatic reading system designed for remote data transfer from electronic volume correctors (EVC) MECflexS, ELCOR-2 etc. and their alternative types.

The electronics of the equipment is placed in a molded plastic box. The basic part of the device is made by the main board with a GPRS modem. The EVC is connected to the AMRflexS via an RS485 line.

The AMRflexS is also equipped with two intrinsically safe inputs, one intrinsically safe output and one non-intrinsically safe output.

The apparatus is powered from built-in battery or from external power source JBZ-03.

Input/output parameters:

Intrinsically safe binary inputs, blue terminals DI1, DI2, GND, U+:
U_o = 7,8 V; I_o = 10 mA; P_o = 20 mW; C_o = 3 µF; L_o = 80 mH

Intrinsically safe binary output OUT1, blue terminals DO1-, DO1+:
U_i = 15 V; P_i = 1 W; C_i = 150 nF; L_i = 0

Intrinsically safe RS485 communication line, blue terminals D1+, D1-, U1+, GND1:
U_o = 7,8 V; I_o = 151 mA; P_o = 275 mW; ΣC_o = 4 µF; ΣL_o = 500 µH

Non-intrinsically safe output, grey terminals GND2, DO2, U2+: U_m = 250 V

Non-intrinsic safety power supply PWR, gray terminals GND, +: U_m = 7,8V

Ambient temperature: T_a = -25°C to +60°C

(16) Report No.: 14/0175

(17) Special conditions for safe use: none

(18) Essential Health and Safety Requirements:

Essential health and safety requirement of Directive 94/9/EC are covered by the standard mentioned in (9), according which the product was verified and in the manufacturer's instruction for use.

(19) List of Documentation:

<i>Document/Drawings:</i>	<i>Type of doc.:</i>	<i>Rev.:</i>	<i>Date:</i>	<i>Nr. of pages:</i>
KP 077 28 Mod C	01/1	-	10.09.2014	1
KP 077 29 Mod C	01/1	-	10.09.2014	1
Technical description / Manual		Rev. 0	09.2014	32

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