

Translation

Type Examination Certificate

- Gas detectors -

PFG 20 G 002 X

Equipment: GX-3R and GX-3R Pro

Manufacturer: RIKEN KEIKI Co., Ltd

Address: 2-7-6 Azusawa Itabashi-Ku, Tokyo 174-8744, Japan

The certification body of DEKRA Testing and Certification GmbH certifies that this equipment has been found to comply with the requirements of the standards

EN 50104:2019
EN 45544-1:2015
EN 45544-2:2015
EN 50271:2018

with regard to the measuring function for

- oxygen (measurement of oxygen deficiency and enrichment) in the measuring range 0 - 25 % (v/v)
- hydrogen sulphide in the measuring range 0.5 - 30 ppm (sensor ESR-A13i)
- carbon monoxide in the measuring range 3 - 500 ppm
- carbon dioxide in the measuring range 0.05 - 5 % (v/v)
- carbon dioxide in the measuring range 300 - 10000 ppm

and

EN 45544-1:2015
EN 45544-3:2015
EN 50271:2018

with regard to the measuring function for

- hydrogen sulphide in the measuring range 0 - 30 ppm (sensor ESR-A1DP)

On the basis of DIN EN ISO/IEC 17065, this certification includes a type examination. The examination and test results and the design of the equipment are recorded in the test report PFG-Nr. 41300121P.

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.

The manufacturer declares the conformity of the manufactured products with the certified design by marking them with the number of this type examination certificate.

DEKRA Testing and Certification GmbH

Bochum, dated 2021-11-26

Signed: Kilisch

Managing Director

Appendix to

Type Examination Certificate

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Description of the gas detector

The gas detection apparatus type GX-3R and GX-3R Pro are portable equipment for the measurement of flammable gases and vapours mixed with air, of oxygen (measurement of oxygen deficiency and enrichment) and of toxic gases.

Apparatus type GX-3R can be equipped with a catalytic sensor and up to 2 electrochemical sensors. Apparatus type GX-3R Pro can be equipped with a catalytic sensor and up to 2 electrochemical sensors and an infrared sensor or with a catalytic sensor and up to 3 electrochemical sensors. It is not necessary that all sensors are equipped.

A rechargeable Li-Ion-battery pack serves as power supply.

Type of protection

see DEKRA 17ATEX0103 X

Special conditions for use

- If the apparatus with sensor ESR1-A1DP is intended to be used in low flow environments (less than 1 m/s), calibrate the measuring range for hydrogen sulphide with the calibration gas concentration set to 1.2-times the concentration of the test gas.
- Set the parameters "Beep operation" to "LED+BUZZER" and "Beep interval" to 0.5 min or 1 min.
- Enable the User password.

Additional Information

- The measuring function of the equipment for flammable gases according to directive 2014/34/EU is subject of the EU-type examination certificate BVS 20 ATEX G 002 X.
- This type examination certificate covers:
 - apparatus types GX-3R and GX-3R Pro with software versions 06832 (main module GX-3R), 06831 (main module GX-3R Pro) and 06830 (sensor module)
 - the measurement of oxygen (measurement of oxygen deficiency and enrichment) in the measuring range 0 - 25 %(v/v) (indication range 0 - 40 %(v/v)) with the electrochemical sensor ESR-X13P
 - the measurement of hydrogen sulphide in the measuring range 0 - 30 ppm (indication range 0 - 200 ppm) with the electrochemical sensor ESR-A1DP
 - the measurement of hydrogen sulphide in the measuring range 0.5 - 30 ppm (indication range 0 - 200 ppm) with the electrochemical sensor ESR-A13i
 - the measurement of carbon monoxide in the measuring range 3 - 500 ppm (indication range 0 - 2000 ppm) with the electrochemical sensors ESR-A1DP, ESR-A1CP and ESR-A13P

- the measurement of carbon dioxide (GX-3R Pro only) in the measuring range 0.05 - 5 % (v/v) (indication range 0 - 10 % (v/v)) with the infrared sensor IRR-0409 (software version 06833)
- the measurement of carbon dioxide (GX-3R Pro only) in the measuring range 300 - 10000 ppm (indication range 0 - 10000 ppm) with the infrared sensor IRR-0433 (software version 06833)
- use of the following outputs for safety relevant purposes:
 - display
 - visual and audible indicators
- use of the following accessories:
 - battery pack BP-3R for GX-3R (part-no. 4777 9201 70)
 - battery pack BUL-3R for GX-3R Pro (part-no. 4777 9283 40)
 - Calibration adapter "simple type" for GX-3R (part-no. 4777 9394 40)
 - Calibration adapter "simple type" for GX-3R Pro (part-no. 4777 9395 10)
 - Rubber protection cover for GX-3R (part-no. 4777 4161 10)
 - Rubber protection cover for GX-3R Pro (part-no. 4777 4175 00)
 - Alligator clip (part-no. 4777 9203 10)
- The type examination includes the following deviations from the operating conditions required by EN 45544-1 (or EN 50104):
 - extended range of temperature at operation: -20 °C to +50 °C
 - extended range of humidity of the measured gas (short time): 0 % RH to 95 % RH

We confirm the correctness of the translation from the German original.
In the case of arbitration only the German wording shall be valid and binding.

DEKRA Testing and Certification GmbH
Bochum, 2021-11-26


Managing Director