


EX

Translation

Type Examination Certificate

- (1) Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC
- (2) No. of EC-Type Examination Certificate: **BVS 12 ATEX E 147 X**
- (3) Equipment: **Gas analyser type GM32-Ex**
- (4) Manufacturer: **SICK AG**
- (5) Address: **Nimburger Straße 11, 79278 Reute, Germany**
- (6) The design and construction of this equipment and any acceptable variation thereto are specified in the appendix to this type examination certificate.
- (7) The certification body of DEKRA EXAM GmbH certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design of Category 3 equipment intended for use in potentially explosive atmospheres, given in Annex II to the Directive. The examination and test results are recorded in the test and assessment report BVS PP 13.2087 EG.
- (8) The Essential Health and Safety Requirements are assured by compliance with:
 - EN 60079-0:2009 General requirements**
 - EN 60079-2:2007 Pressurisation 'p'**
 - EN 60079-28:2007 Optical Radiation**
- (9) 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 appendix to this certificate.
- (10) This Type Examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.
- (11) The marking of the equipment shall include the following:

 **II 3G Ex pz [op is] IIC T3 Gc**

DEKRA EXAM GmbH
Bochum, dated 3rd May 2013

Signed: Simanski

Certification body

Signed: Dr. Eickhoff

Special services unit



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- (13) Appendix to
- (14) **Type Examination Certificate
BVS 12 ATEX E 147 X**
- (15) 15.1 Subject and type

Gas analyser type GM32-Ex

15.2 Description

The gas analyser type GM32-Ex is used for the continual measurement of gas concentrations in industrial plants. The gas is measured in the duct where the gas flows through applying the principle of differential optical absorption spectroscopy (DOAS). The gas analyser can be configured in two measuring variations: a) the gas concentration is measured across the entire duct cross section (GM32-Ex Cross Duct); or b) the gas is only measured in a defined measuring distance in a measuring probe inside the duct (GM32-Ex GMP open measuring probe).

The gas analyser type GM32-Ex is designed for the type of protection Pressurisation. The monitoring of the overpressure and the pre-purging process is provided by the control unit FS840, TÜV 03 ATEX 2095X.

15.3 Parameters

15.3.1 Electrical parameters

Rated voltage	100-230 V AC, 50/60 Hz
Power input	max. 260 W

15.3.2 Pneumatic parameters

Free volume inside	40 l
Min. pre-purge volume	500 l
Min. overpressure	0.8 mbar
Max. overpressure	18 mbar

- (16) Test and assessment report
BVS PP 13.2087 EG, as of 03.05.2013

- (17) Special conditions for safe use
A measuring function with regard to explosion protection is not subject of the type examination.

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 EXAM GmbH
44809 Bochum, 16.07.2013
BVS-Ld/Ar E 2752/13

Certification body

Special services unit