

Translation

(1) **EU-Type Examination Certificate**

TÜV NORD

- (2) Equipment and protective systems intended for use in potentially explosive atmospheres, **Directive 2014/34/EU**



- (3) **Certificate Number** **TÜV 17 ATEX 171969 X** **issue:** 00
- (4) for the product: Hand-held gas detector and meter EX-TEC® PM5
type PM400/500/550/580
- (5) of the manufacturer: Hermann Sewerin GmbH
- (6) Address: Robert-Bosch-Str. 3
33334 Gütersloh
- Order number: 8000454692
- Date of issue: 2017-12-04

- (7) The design of this product and any acceptable variation thereto are specified in the schedule to this EU-Type Examination Certificate and the documents therein referred to.
- (8) The TÜV NORD CERT GmbH, Notified Body No. 0044, in accordance with Article 17 of the Directive 2014/34/EU of the European Parliament and the Council of 26 February 2014, 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 the Directive.
The examination and test results are recorded in the confidential ATEX Assessment Report No. 17 203 210964.
- (9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 60079-0:2012+A11:2013 EN 60079-1:2014 EN 60079-7:2015
EN 60079-11:2012
except in respect of those requirements listed at item 18 of the schedule.
- (10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions for Use specified in the schedule to this certificate.
- (11) This EU-Type Examination Certificate relates only to the design, and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.
- (12) The marking of the product shall include the following:



I M1 Ex ia da I Ma
II2G Ex ia db eb IIC T4 Gb
II2G Ex ia db IIC T4 Gb

TÜV NORD CERT GmbH, Langemarckstraße 20, 45141 Essen, notified by the central office of the countries for safety engineering (ZLS), Ident. Nr. 0044, legal successor of the TÜV NORD CERT GmbH & Co. KG Ident. Nr. 0032

The head of the notified body


Meyer

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(13) SCHEDULE

(14) EU-Type Examination Certificate No. 17 ATEX 171969 X issue 00

(15) Description of product

The battery operated "Hand-held gas detector and meter EX-TEC® PM5" is used for monitoring and measurement of flammable gases, e. g. methane CH₄, measuring range ppm (Building), % LEL (warning) and Vol% (measuring).

Furthermore, the above-mentioned apparatus can optionally be equipped with sensors to detect e. g. CO₂, O₂, CO and / or H₂S.

The infrared sensor used is selective for hydrocarbons such as methane and carbon dioxide. Thus, the infrared sensor is suitable for the LEL / MAK measurement (% LEL (Warning)) and Vol% (measuring), as well as for the analysis of C_xH_y / CO₂ gas mixtures. See also the operating instructions.

The built-in pump delivers the measuring gas to the sensors.

The sensors of the "Hand-held gas detector and meter EX-TEC® PM5" are designed in the type of protection "Flameproof enclosures" da resp. db.

The permissible ambient temperature range is -20 °C ... +40 °C.

Ex- Marking	Type and production number					
	PM 400 No. 050 0x yyyyyy	PM 500 No. 050 1x yyyyyy	PM 550 No. 050 2x yyyyyy	PM 580 No. 050 3x yyyyyy	Battery holder PM05-B0300	Battery pack PM05-B0400
I M1 Ex ia da I Ma	X					X
II2G Ex ia db eb IIC T4 Gb	X	X	X	X	X	
II2G Ex ia db IIC T4 Gb	X	X	X	X		X

Electrical Data

Voltage supply 3 primary or secondary cells, size „AA“, type LR6 or type HR6 in the battery holder
(Marking: II2G Ex ia db eb IIC T4 Gb)
or
via battery pack of the manufacturer
(Marking: I M1 Ex ia da I Ma or II2G Ex ia db IIC T4 Gb)

Regarding the permissible cells and further safety hints, the manual of the manufacturer has to be observed.

Schedule to EU-Type Examination Certificate No. TÜV 17 ATEX 171969 X issue 00

(16) Drawings and documents are listed in the ATEX Assessment Report No. 17 203 171969

(17) Specific Conditions for Use

1. Charging is only permitted outside of the explosion hazardous area.
2. Change of the batteries / battery pack is only permitted outside of the explosion hazardous area.
3. Only permissible batteries / permissible battery pack according to the manufacturer's operating instructions are allowed to be used. Further hints regarding the permissible batteries have to be observed.
4. The USB port is only permitted to be used outside of the explosion hazardous area.
5. For applications in mining areas: The apparatus was only submitted to tests corresponding to the low risk of mechanical danger. High risks of mechanical danger have to be avoided.
6. The device must not be stored or operated in explosive environments, if there is a chance of strong electrostatic charge occurring.

(18) Essential Health and Safety Requirements

no additional ones

- End of Certificate -