Translation

(1) EC-Type Examination Certificate

(2) Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC

(3) No. of EC-Type Examination Certificate: **BVS 15 ATEX E 057 X**

(4) Equipment: **Ex-detector device type M55-**-Ex**

(5) Manufacturer: **F. H. Papenmeier GmbH & Co. KG**

(6) Address: **Talweg 2, 58239 Schwerte**

(7) The design and construction of this equipment and any acceptable variation thereto are specified in the appendix to this type examination certificate.

(8) The certification body of DEKRA EXAM GmbH, notified body no. 0158 in accordance with Article 9 of the Directive 94/9/EC of the European Parliament and the Council of 23 March 1994, certifies that this equipment 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 the Test and Assessment Report BVS PP 15.2084 EG.

(9) The Essential Health and Safety Requirements are assured by compliance with:

EN 60079-0:2012 + A11:2013	**General requirements**
EN 60079-1:2007	**Flameproof enclosure "d"**
EN 60079-31:2009	**Protection by Enclosure "t"**

(10) 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.

(11) This EC-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.

(12) The marking of the equipment shall include the following:

II 2G Ex d IIC T6 Gb
II 2D Ex tb IIIC T80°C Db

DEKRA EXAM GmbH
Bochum, dated 2015-05-07

Signed: Schumann
Certification body

Signed: Dr. Wittler
Special services unit

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(13) Appendix to

(14) **EC-Type Examination Certificate**
BVS 15 ATEX E 057 X

(15) 15.1 Subject and type

Ex-detector device type M55-**-Ex

Asterisk	Description
1	Detector type 1
	w/o No detector 1
	B Motion detector
2	Detector type 2
	w/o No detector 2
	D Twilight switch

15.2 Description

The Ex-detector device type M55-**-Ex consists of an enclosure, a terminal compartment lid and a flanged ring with cemented window at the detector compartment. All metallic parts are made of stainless steel. The complete device is designed in type of protection Flameproof Enclosure „d" for usage in areas endangered by gas atmosphere and in type of protection Protection by Enclosure „t" for usage in areas endangered by dust atmospheres.

The lid of the terminal compartment and the flanged ring with cemented window are used with O-rings to prevent ingress of water and dust.

The enclosure is divided into two sub-compartments with a separation plate which has got several holes to link both compartments.

The motion detector is based on radar technology.

15.3 Parameters

Electrical parameters

Rated voltage	AC / DC	230 V
	AC / DC	24 V
Rated power		5 W

Thermal parameters

Ambient temperature range	-20 °C ≤ T_{amb} ≤ 40 °C
Temperature class	T6
Maximum surface temperature	T80 °C

Other parameters

Ingress protection	IP65 / IP67

Cable Gland

Type	Certificate	Clamping range
RST Alpha X	IMQ 08 ATEX 021 X	3-12 mm
HSK-Inox-PVDF-Ex-d	KEMA 99 ATEX 6968 X	7-12 mm

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Cable (together with cable glands above)

Type	Cross section	Diameter	Minimum length
Sinotherm 110 H05GG-7	3 × 1.5 mm²	8.6 mm	1 m
Sillflex UR AWG18	5 × 1.0 mm²	10.3 mm	1 m
Ölflex Heat 180 H05SS-F	3 × 1.5 mm²	8.9 mm	1 m
Ölflex Classic 110 Black	3 × 1.5 mm²	10.2 mm	1 m

(16) Test and Assessment Report

BVS PP15.2084 EG as of 2015-05-07

(17) Special conditions for safe use

If the Ex-detector device type M55-**-Ex has got a fixed cable tail, this cable must be protected for operation so that no electrostatic hazard can occur.

The length of the supply line must be 1 m minimum.

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, 2015-05-07
BVS-Kir/Mu A 20140789

Certification body

Special services unit

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