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 13 ATEX E 116 X**

(4) Equipment: **Oil Mist Sensor with SOG type SiSe/OC ** EX**

(5) Manufacturer: **motcom GmbH**

(6) Address: **Kurt-Schumacher-Straße 28-30, 66130 Saarbrücken, Germany**

(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 13.2211 EG.

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

EN 60079-0:2012 General requirements
EN 60079-11:2012 Intrinsic Safety "i"

(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 (2)G [Ex ia Gb] IIA (Electronic Monitor)
II 2G Ex ia IIA T4 Gb (Sensor)

DEKRA EXAM GmbH
Bochum, dated 2013-11-08

Signed: Simanski
Certification body

Signed: Dr. Wittler
Special services unit

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(13) Appendix to

(14) **EC-Type Examination Certificate**
BVS 13 ATEX E 116 X

(15) 15.1 Subject and type

Oil Mist Sensor with SOG (Splash Oil Guard)	type SiSe/OC ** EX
Models	type SiSe/OC 20 EX
	type SiSe/OC 16 EX
	type SiSe/OC 14 EX

15.2 Description

The Oil Mist Sensor type SiSe/OC ** EX consists of an associated apparatus (electronic monitor) and an intrinsically safe component (sensor) which form a mechanical unit after installation

The oil mist sensor is mounted in the enclosure wall of machines separating areas requiring EPL Gb (apparatus category 2G) equipment from non-hazardous areas.

The cylindrical enclosure of the electronic monitor is made of light metal and contains printed circuit boards with electronic components.

Two plugs are mounted in the sidewall of the electronic monitor; they provide the connection to the non-intrinsically safe circuits (supply and RS485 data interfaces) and to the electronic monitor of a further oil mist sensor.

The cylindrical sensor enclosure is made of stainless steel and contains an optical measuring probe and a temperature sensor. Except for the optical measuring probe, all electronic components are embedded in casting compound

The enclosures of both the sensor and the electronic monitor are mechanically joined by means of a tube. The multi-wire connection of the intrinsically safe circuits of the sensor is led through the tube and connected to the printed circuit board LPT2 of the electronic monitor.

15.3 Parameters

15.3.1 Non-intrinsically safe circuits

15.3.1.1 Supply circuit

Rated voltage	DC 24 V
	U_m = DC 30 V

15.3.1.2 RS 485 data interfaces

Rated voltage	DC 24 V
	U_m = DC 30 V

15.3.2 Intrinsically safe circuits

15.3.2.1 Input/output circuits
N/A; intrinsically safe circuits are only located inside the apparatus

15.3.2.2 Optical radiation

Wavelength			880	nm
Optical power of LED	P_o	≤	12	mW
Radiating power of LED		≤	0.6	mW/mm^2

15.3.3 Ambient temperature range

Electronic monitor	$0\ °C \leq T_a \leq +65\ °C$
Optical measuring probe ot the sensor	$0\ °C \leq T_a \leq +90\ °C$

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(16) Test and assessment report
BVS PP 13.2211 EG as of 08.11.2013

(17) Special conditions for safe use

17.1 The oil mist sensor has to be mounted in such a way that the electronic monitor lies outside the potentially explosive area, and the sensor itself lies within an area meeting EPL Gb (apparatus category 2) requirements.

17.2 For non-intrinsically safe circuits (supply and RS485 data interfaces) U_m DC 30 V applies.

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, 2013-11-08
BVS-Scha/Sch A 20131011

Certification body

Special services unit

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