

Translation

(1) 1st Supplement to the EC-Type Examination Certificate

- (2) Equipment and protective systems intended for use
in potentially explosive atmospheres - Directive 94/9/EC
Supplement in accordance with Annex III no. 6
- (3) No. of EC-Type Examination Certificate: **BVS 10 ATEX E 133 X**
- (4) Equipment: **Process photometer type MCS300P-Ex**
- (5) Manufacturer: **Sick Maihak GmbH**
- (6) Address: **88709 Meersburg, 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 11.2011 EG.
- (9) The Essential Health and Safety Requirements are assured by compliance with:
- EN 60079-0:2009 General requirements**
EN 60079-2:2007 Pressurisation 'p'
- (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 px IIC T3/T4 Gb**

DEKRA EXAM GmbH
Bochum, dated 19th April 2012

Signed: Dr. Eickhoff

Certification body

Signed: Schumann

Special services unit

- (13) Appendix to
- (14) **1st Supplement to the EC-Type Examination Certificate
BVS 10 ATEX E 133 X**
- (15) 15.1 Subject and type

Process photometer type MCS300P-Ex

15.2 Description

The process photometer of type MCS300P-Ex measures IR-active and VIS-active components in gases and liquid concentrations in conjunction with process cuvettes for either gas or liquid (e.g. type PGK.. Ex, BVS 10 ATEX E 087 U).

The process photometer consists of two modules, i.e. the receiver and transmitter, between which the cuvette is located. Receiver and transmitter are interconnected by a tube and manufactured to meet the requirements of the type of protection Pressurisation with a compensating effect for leakage. The monitoring of the overpressure and the pre-purging process is provided by system F 850 S (BVS 06 ATEX E 088) in conjunction with auxiliary devices (proportional valve, interface relay).

For temperature control and monitoring of the heatable process cuvette type PGK.Ex the process photometer is equipped with appropriate monitoring electronics.

The reason for issuing this supplement are slight modifications of the type and the addition of a variant for temperature class T3 with a measuring gas cuvette that can be heated up to 150°C.

15.3 Parameters

15.3.1 Electrical parameters

Supply voltage	115/230	VAC
Power input		
Analyser	max. 230	VA
- with heatable cuvette	max. 805	VA
- with second heatable cuvette	max. 1450	VA

15.3.2 Pneumatic parameters

Free volume	40	dm ³
Min. pre-purge volume	200	dm ³
Min. volume flow	66	dm ³ /min
Min. overpressure	0.8	mbar
Max. overpressure	12	mbar

(16) Test and assessment report

BVS PP 11.2011 EG as of 19.04.2012

(17) Special conditions for safe use

A measuring function with regard to explosion protection is not subject of the type examination.

The setting of the overpressure monitoring device has to comply with the parameters stated in 15.3.2.

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, 16.11.2012
BVS-Wit/Ar E 1909/12



Certification body



Special services unit