



### IECEX Ex TEST REPORT COVER

ExTR Reference Number..... : DE/BVS/ExTR13.0006/00  
 ExTR Free Reference Number ..... : DE/BVS/13/2006 A20120543  
 Compiled by + signature (ExTL)..... : Dipl.-Ing. Ralf Leiendecker *Ralf Leiendecker*  
 Reviewed by + signature (ExTL).... : Dipl.-Ing. Ute Hauke *Ute Hauke*  
 Approved by + signature (ExCB).... : Dr.-Ing. Michael Wittler *M. Wittler*  
 Date of issue ..... : 2013-01-08

Ex Certification Body (ExCB)..... : DEKRA EXAM GmbH  
 Address..... : Dinnendahlstr. 9  
 44809 Bochum, Germany

Ex Testing Laboratory (ExTL)..... : DEKRA EXAM GmbH  
 Address..... : Dinnendahlstr. 9  
 44809 Bochum, Germany

Applicant's name..... : holthausen elektronik GmbH  
 Address..... : Wevelinghoven 38, 41334 Nettetal Germany

Standards..... : IEC 60079-0:2007 Ed.5  
 IEC 60079-1:2007 Ed.6  
 IEC 60079-31:2008 Ed.1  
 Test procedure ..... : IECEx Scheme  
 Test Report Form No..... : ExTR Cover\_BVS  
 TRF Originator..... : DEKRA EXAM GmbH

IECEX Test Report National Differences attached :  (Yes/ No)

**Instructions for Intended Use of Cover Sheet:**  
 This document is to be compiled and reviewed by the ExTL, with the ExCB giving the final approval, or compiled by the ExCB without the involvement of the ExTL. It is to serve as the sole cover for an ExTR package, which may be comprised of a single ExTR document or multiple ExTR documents. This ExTR Cover is to be completed and attached to the completed ExTR package.

**Copyright © 2006 International Electrotechnical Commission Scheme for Certification to Standards Relating to Equipment for use in Explosive Atmospheres (IECEX), Geneva, Switzerland. All rights reserved.**

This publication may be reproduced in whole or in part for non-commercial purposes as long as the IECEx is acknowledged as copyright owner and source of the material. IECEx takes no responsibility for and will not assume liability for damages resulting from the reader's interpretation of the reproduced material due to its placement and context.

Test item description .....	Vibration monitor
Trademark .....	ESW <sup>®</sup>
Model/type reference.....	ESW <sup>®</sup> -small-Ex....
Manufacturer .....	holthausen elektronik GmbH
Address .....	Wevelinghoven 38, 41334 Nettetal, Germany
Code (e.g. Ex _ II_ T_).....	Ex d IIC T4 up to T6 Gb Ex tb IIIC T80°C up to T115°C Db
Rating .....	The temperature classes and the ambient temperatures are allocated by the size of the enclosure and the power loss and further determined in the instruction manual.  rated voltage: DC 24 V maximum voltage: DC 30 V rated power: 2.5 W current of analogue output up to 20 mA Voltage of potential-free switch contact up to 30V Current of potential-free switch contact up to 1A

Copy of Marking Plate Example

 **holthausen**  
elektronik GmbH  
wevelinghoven 38 | D-41334 nettetal  
www.esw.eu

TYPE : ESW<sup>®</sup>-small-Ex ...

: -40°C ≤ T<sub>amb</sub> ≤ +60°C



: II2G Ex d IIC T6 Gb

: II2D Ex tb IIIC T80°C Db

Ser. Nr.:

ATEX Zul. Nr.: BVS 08 ATEX E 088 X  0035

IECEx Zul. Nr.: IECEx BVS 13.0006 X

**Particulars: test item vs. test requirements**

Classification of installation and use ..... : portable / stationary / hand-held

Ingress protection ..... : IP68

Rated ambient temperature range (°C)..... : -40 °C ... +60 °C

**General remarks:**

The vibration monitor had been tested according to the European Directive RL 94/9/EG (ATEX).

Basis for the tests were as well IEC 60079-0:2007, IEC60079-1:2007 and IEC 60079-31:2008 (BVS 08 ATEX E 088 X bases on Test Report BVS 08.2118 EG).

**General product information:****Subject and Type**

Vibration monitor type ESW<sup>®</sup>-small-Ex....

**Description**

The vibration monitor type ESW<sup>®</sup>-small-Ex... is manufactured to meet the requirements of the type of protection Flameproof Enclosure 'd'. It is intended to protect machines against non-permissible vibration and for the use in atmospheres where combustible gases or dusts are present.

**Routine verifications and tests**

The routine test as specified in 16.1.1 of IEC 60079-1:2007 may be omitted as the overpressure test according to 15.1.3.1 of said standard was carried out successfully with a pressure of four times the reference pressure.

**Special conditions for safe use**

The dimensions of the flameproof joints are in parts other than the relevant minimum or maximum values of IEC 60079-1:2007. For information on the dimensions of the flameproof joints contact the manufacturer.

The enclosure has to be integrated into the potential equalisation of the machine to be monitored; this can be done either via the fastenings or via the connecting terminal.

The free cable end of the vibration monitor has to be connected either in an enclosure in one the types of protection stated in sec. 1 of IEC60079-0:2007 or outside the explosive atmosphere.

In applications in Zone 21 it must be ensured when installing the connection cable that electrostatic charging cannot lead to ignitable discharges.

Manufacturer's Documents			
Title:	Drawing No.:	Rev. Level or Date: (yyyy.mm.dd)	sign: (yyyy.mm.dd)
Ex relevant extract from Operation Instructions ( 7 pages) **	Document: Esw_small_ex_hd_auszug.doc	21.11.2012	21.11.2012
Description ( 2 pages) **	Document: Small_ex_beschreibung_2012.doc	14.06.2012	14.06.2012
Technical Data (1 page) **	Document: hol660_small_ex_2241_comp_001_td_d_2012.doc	14.06.2012	14.06.2012
Power temperature relations of ESW small Ex (4 pages) **	Document: Leistungs-Temperatur-Abhängigkeit_2012.xls	14.06.2012	14.06.2012
Drawing *	SMG1A	1	11.10.2006
Drawing *	SMG1B	2	20.07.2007
Drawing *	SMG2A	1	11.10.2006
Drawing *	SMG2B	2	20.07.2007
Drawing *	SMG2C	2	20.07.2007
Drawing *	SMG3A	1	11.10.2006
Drawing *	SMG3B	2	20.07.2007
Drawing *	SMG3C	2	20.07.2007
Drawing *	SMG4A	1	11.10.2006
Drawing *	SMG4B	2	20.07.2007
Drawing *	SMG4C	2	20.07.2007
Drawing *	SMD1	1	11.10.2006
Drawing *	SMD2	1	11.10.2006
Drawing *	SMD3	1	11.10.2006
Drawing *	Small_ex_aufkleber	10.10.2006	11.10.2006
Part list *	ESW-small-EX-mechanische Bauteile	10.10.2006	11.10.2006

\* = These documents are stated in the BVS test report BVS PP 06.2125 EG

\*\* = These documents are stated in the BVS test report BVS PP 08.2118 EG