




IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	IECEX BVS 10.0094	issue No.:	1	Certificate history: Issue No. 1 (2013-4-19) Issue No. 0 (2010-12-3)
Status:	Current			
Date of Issue:	2013-04-19	Page 1 of 5		
Applicant:	R. STAHL HMI Systems GmbH Im Gewerbegebiet Pesch 14 50767 Cologne Germany			
Electrical Apparatus: <i>Optional accessory:</i>	475 Field Communicator			
Type of Protection:	Equipment protection by intrinsic safety "i", Equipment with equipment protection level (EPL) Ga			
Marking:	Ex ia [ia Ga] [ia Da IIIC] IIC T4 Gb			
<i>Approved for issue on behalf of the IECEx Certification Body:</i>	Dr. F. Eickhoff			
<i>Position:</i>	Deputy Head of Certification Body			
<i>Signature: (for printed version)</i>				
<i>Date:</i>	<u>2013-04-19</u>			

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

DEKRA EXAM GmbH
Dinnendahlstrasse 9
44809 Bochum
Germany

 **DEKRA**
DEKRA EXAM GmbH



IECEx Certificate of Conformity

Certificate No.: IECEx BVS 10.0094

Date of Issue: 2013-04-19

Issue No.: 1

Page 2 of 5

Manufacturer: **R. STAHL HMI Systems GmbH**
Im Gewerbegebiet Pesch 14
50767 Cologne
Germany

Additional Manufacturing location
(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Edition: 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-11 : 2011 Edition: 6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-26 : 2006 Edition: 2	Explosive atmospheres - Part 26: Equipment with equipment protection level (EPL) Ga

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:
[DE/BVS/ExTR10.0129/01](#)

Quality Assessment Report:
[DE/BVS/QAR06.0007/06](#)



IECEx Certificate of Conformity

Certificate No.: IECEx BVS 10.0094

Date of Issue: 2013-04-19

Issue No.: 1

Page 3 of 5

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Description (unchanged)

The 475 Field Communicator is a hand held, battery powered, and portable intrinsically safe apparatus and is used to interact with microprocessor-based measurement and actuation field devices in a process environment.

The electrical components are fixed in a plastic enclosure (surface resistance $\leq 10^9 \Omega$).

The unit supports the HART® and Foundation Fieldbus™ communication protocols.

It can be connected to field devices in hazardous locations to check and configure them by using connectors at the top of the enclosure (F for Fieldbus applications and H for HART applications).

The interfaced fieldbus loop can be installed in zones 0, 1, 2, 20, 21 and 22.

The apparatus is powered by a completely encapsulated battery. For charging of the battery (outside the hazardous area) with a specially designed charger (not part of this examination) there is also a connector at the side of the enclosure.

CONDITIONS OF CERTIFICATION: NO



IECEx Certificate of Conformity

Certificate No.: IECEx BVS 10.0094

Date of Issue: 2013-04-19

Issue No.: 1

Page 4 of 5

EQUIPMENT(continued):

Parameters (unchanged)

1	Battery pack				
	Nominal voltage	DC	7.2	V	
	Capacity		1950	mAh	
2	Battery charger connection (only for use outside the hazardous area)				
	Voltage	Um DC	9.8	V	
3	Connection F				
	Voltage	Uo DC	1.9	V	
	Current	Io	32	μA	
3.1	for the connection of an intrinsically safe Fieldbus circuit				
	Voltage	Ui DC	30	V	
	Current	Ii	380	mA	
	Power	Pi	1.3	W	
	Effective internal capacitance	Ci	negligible		
	Effective internal inductance	Li	negligible		
3.2	for the connection of an intrinsically safe circuit in accordance FISCO model				
	Effective internal capacitance	Ci	negligible		
	Effective internal inductance	Li	negligible		
	for circuits type of protection Ex ia IIC				
	Voltage	Ui DC	17.5	V	
	Current	Ii	215	mA	
	Power	Pi	1.9	W	
	for circuits type of protection Ex ia IIB				
	Voltage	Ui DC	17.5	V	
	Current	Ii	380	mA	
	Power	Pi	5.3	W	
4	Connection H				
	Voltage	Uo DC	1.9	V	
	Current	Io	32	μA	
	for the connection of an intrinsically safe circuit				
	Voltage	Uo DC	1.9	V	
	Current	Io	32	μA	
	for the connection of an intrinsically safe circuit				
	Voltage	Ui DC	30	V	
	Current	Ii	200	mA	
	Power	Pi	1	W	
	Effective internal capacitance	Ci	negligible		
	Effective internal inductance	Li	negligible		
5	Ambient temperature range	Ta	-10 °C up to +50 °C		



IECEX Certificate of Conformity

Certificate No.: IECEX BVS 10.0094

Date of Issue: 2013-04-19

Issue No.: 1

Page 5 of 5

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

The 475 Field Communicator can be modified according to the descriptive documents as mentioned in the pertinent test report. The equipment was assessed in accordance with the current standards.