

### INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.;	IECEx BVS 15.0055X	issue No.:0	Certificate history:
Status:	Current		
Date of Issue:	2015-06-15	Page 1 of 4	
Applicant:	Softing Industrial Au Richard-Reitzner-Allee 85540 Haar Germany		
Electrical Apparatus: Optional accessory:	Linking device type F	G-200 HSE/FF	
Type of Protection:	Equipment protection by intrinsic safety "i", Equipment protection by type of protection "n"		
Marking:	Ex nA IIC T4 Gc or Ex nA [ic] IIC T4 Gc		
Approved for issue on b Certification Body:	ehalf of the IECEx	HCh. Simanski	
Position:		Head of Certification Body	
Signature: (for printed version)		M. C. fuish	
Date:		15.6.2015	-
2. This certificate is not	chedule may only be repro transferable and remains t enticity of this certificate ma	duced in full. he property of the issuing body. ay be verified by visiting the Official I	ECEx Website.
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Certificate issued by:

DEKRA EXAM GmbH Dinnendahlstrasse 9 44809 Bochum Germany





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Manufacturer:

Softing Industrial Automation GmbH

Richard-Reitzner-Allee 6

85540 Haar 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

Explosive atmospheres - Part 0: General requirements

Edition: 6.0

IEC 60079-11: 2011

Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

Edition: 6.0

IEC 60079-15: 2010

Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

Edition: 4

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/ExTR15.0049/00

**Quality Assessment Report:** 

DE/PTB/QAR11.0002/03



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### Schedule

### **EQUIPMENT:**

Equipment and systems covered by this certificate are as follows:

### Subject and Type

Linking Device type FG-200 HSE/FF

### Description

The linking device acts as a gateway between Ethernet-based host systems with protocol HSE and the process bus FF. It is suited for network configuration, device parametrization and the recording of production data. The data circuits are galvanically isolated from each other.

The Fieldbus circuits may operate as intrinsically safe circuits (level of protection Ex ic) or as non-intrinsically safe circuits; details see manual.

### CONDITIONS OF CERTIFICATION: YES as shown below:

The equipment is defined as "instruments and apparatus of low energy" according to clause 13 of IEC 60079-15; thus the requirement stated in sub-clause c) (limiting the transient characteristic to 40% of the rated voltage) has to be adhered to when erecting the equipment.

The equipment has to be installed in a protective enclosure which meets the requirements for resistance to impact and IP54 defined in IEC 60079-0.

For definition of ambient temperature range (dependent on mounting of the device) see manufacturer's' instructions.

Before the first use of the device one marking field (Ex nA IIC T4 Gc or Ex nA [ic] IIC T4 Gc) has to be selected and marked; once the device has operated at non-intrinsically safe fieldbus circuits it may not operate at intrinsically safe fieldbus circuits without reconsideration by the manufacturer.

The ambient temperature range depends on the number and mounting of the devices; see manufacturer's instructions.



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### **EQUIPMENT**(continued):

### **Parameters**

Power supply circuit (terminals 1 - 3 or Rail Power Supply L+ and GND)					
Nominal voltage		DC	1832	V	
Power consumption			<5.6	W	
Max. voltage	$U_m$	DC	40	V	
Redundancy Link circuit (terminals 4,5,6)					
Nominal voltage		DC	up to 32	V	
Max. voltage	$U_m$	DC	40	V	
Ethernet Ports (connectors ETH1, ETH2)					
Nominal voltage		DC	up to 32	V	
Max. voltage	$U_m$	DC	40	V	
Fieldbus circuits (terminals 7,8,9 and 10,1		d 13,14.	,15 and 16,17,18)		
(if operated as non-intrinsically safe circuit Nominal voltage	15)	DC	24/32	V	
(if operated as intrinsically safe circuits,ea	ch chan	iel)			
Voltage	U <sub>i</sub>	DC	32	V	
Current	l <sub>i</sub>		570	mΑ	
Max. sum of voltages of power supply and fieldbus circuits 60 V					

Ambient temperature range, dependent on kind of mounting, -40 °C  $\leq$  T<sub>a</sub>  $\leq$  see Manufacturer's instructions

Horizontal installation position

Minimum distance	Maximum number of fieldbus channels used per device	Maximum voltage	Maximum permissible ambient temperature T <sub>a</sub>
0 mm	4	32 VDC	55 °C
0 mm	2	24 VDC	60 °C
17.5 mm	4	32 VDC	65 °C
17.5 mm	2	24 VDC	70 °C

Vertical installation position

vortion inclandion position						
hetween devices	Maximum number of fieldbus channels used per device	Maximum voltage of fieldbus circuits	Maximum permissible ambient temperature T <sub>a</sub>			
0 mm	4	32 VDC	40 °C			
0 mm	2	24 VDC	50 °C			
17.5 mm	4	32 VDC	55 °C			
17.5 mm	2	24 VDC	60 °C			