



Translation

(1) **EC-Type Examination Certificate**

(2) **- Directive 94/9/EC -**

**Equipment and protective systems intended for use
in potentially explosive atmospheres**

(3) **BVS 09 ATEX E 023**

(4) **Equipment: 475 Field Communicator**

(5) **Manufacturer: EMERSON Process Management Distribution**

(6) **Address: Meridian East, Meridian Business Park, Leicester, LE19 1UX
United Kingdom**

(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 09.2028 EG.

(9) The Essential Health and Safety Requirements are assured by compliance with:
EN 60079-0:2006 General requirements
EN 60079-11:2007 Intrinsic safety 'i'
EN 60079-26:2004 Equipment Group II Category 1G

(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 (1 GD) Ex ia IIC T4**

DEKRA EXAM GmbH

Bochum, dated 11. März 2009

Signed:

Simanski

Certification body

Signed:

Dr. Eickhoff

Special services unit

(13) Appendix to

(14) **EC-Type Examination Certificate**

BVS 09 ATEX E 023

(15) 15.1 Subject and type

475 Field Communicator

15.2 Description

The 475 Field Communicator is a hand held, battery powered, portable intrinsically safe apparatus and 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 $\leq 10^9 \Omega$). For the connection of the intrinsically safe field circuits there are connectors at the top of the enclosure (F for Fieldbus applications and H for HART bus applications). These circuits can be led into areas where Category 1G or 1D equipment is required.

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.

15.3 Parameters

15.3.1	Battery pack				
	Nominal voltage		DC	7.2	V
	Capacity			1950	mAh
15.3.2	Connection F				
	Voltage	U _o	DC	1.9	V
	Current	I _o		32	μA
15.3.2.1	for the connection of an intrinsically safe Fieldbus circuit				
	Voltage	U _i	DC	30	V
	Current	I _i		380	mA
	Power	P _i		1.3	W
	effective internal capacitance	C _i		negligible	
	effective internal inductance	L _i		negligible	
4.2.2	for the connection of an intrinsically safe circuit in accordance with FISCO model				
	effective internal capacitance	C _i		negligible	
	effective internal inductance	L _i		negligible	
	for circuits type of protection Ex ia IIC				
	Voltage	U _i	DC	17.5	V
	Current	I _i		215	mA
	Power	P _i		1.9	W

	for circuits type of protection Ex ia IIB			
	Voltage	U _i	DC	17.5 V
	Current	I _i		380 mA
	Power	P _i		5.3 W
15.3.3	Connection H			
	Voltage	U _o	DC	1.9 V
	Current	I _o		32 μA
	for the connection of an intrinsically safe circuit			
	Voltage	U _i	DC	30 V
	Current	I _i		200 mA
	Power	P _i		1 W
	effective internal capacitance	C _i		negligible
	effective internal inductance	L _i		negligible
15.3.4	Ambient temperature range	T _a		-10 °C up to +50 °C

(16) Test and assessment report

BVS PP 09.2028 EG as of 11.03.2009

(17) Special conditions for safe use

None

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.

44809 Bochum, 11 March 2009
BVS-Schu / Her A 20090189

DEKRA EXAM GmbH



Certification body



Special services unit



1st Supplement

(Supplement in accordance with Directive 94/9/EC Annex III number 6)

to the EC-Type Examination Certificate BVS 09 ATEX E 023

Equipment: 475 Field Communicator
Manufacturer: EMERSON Process Management Distribution Ltd.
Address: Meridian East, Meridian Business Park, Leicester, LE19 1UX,
United Kingdom

Description

The Field Communicator can be modified according to the descriptive documents as mentioned in the pertinent test and assessment report.

The Essential Health and Safety Requirements of the modified equipment are assured by compliance with:

EN 60079-0:2006 General requirements
EN 60079-11:2007 Intrinsic safety 'i'
EN 60079-26:2004 Equipment Group II Category 1G
EN 60079-27:2008 Fieldbus concept FISCO

The marking of the equipment shall include the following:

 II 2 G (1 GD) Ex ia IIC T4

Test and assessment report

BVS PP 09.2028 EG as of 05.06.2009

DEKRA EXAM GmbH

Bochum, dated 05. June 2009

Signed: Hans Christian Simanski

Signed: Dr. Franz Eickhoff

Certification body

Special services unit

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.

44809 Bochum, 05. June 2009
BVS-Schu / Her A 20090446

DEKRA EXAM GmbH

A blue ink signature in cursive script, appearing to read 'Hinsch', positioned above a horizontal line.

Certification body

A blue ink signature in cursive script, appearing to read 'Lindloff', positioned above a horizontal line.

Special services unit