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(1) **EC Type Examination Certificate**

(2) **Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres  
– Directive 94/9/EC**

(3) **EC Type Examination Certificate Number**

**EPS 11 ATEX 1 333 X**

(4) **Equipment:** GIA 0420 WK - ex, GIA 0420 WKT - ex, GIA 0420 VO - ex, GIA 0420 VOT - ex,  
GIA 010 WK - ex, GIA 010 WKT - ex, GIA 010 VO - ex, GIA 010 VOT - ex,  
GIA 0420 N - ex, GIA 010 N - ex

(5) **Manufacturer:** Greisinger electronic GmbH

(6) **Address:** Hans-Sachs-Straße 26, 93128 Regenstauf, GERMANY

(7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) Bureau Veritas Consumer Products Services Germany GmbH, Notified Body No. 2004 in accordance with Article 9 of the Council Directive 94/9/EC of March 23<sup>rd</sup> 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 of the Directive. The examination and test results are recorded in the confidential report 09TH0409

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2009

EN 60079-11:2007

(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 schedule to this certificate.

(11) This EC Type Examination Certificate relates only to the design and the construction of the specified equipment in accordance with Directive 94/9/EC. Further requirements of this Directive apply to the manufacture and supply of this equipment.

(12) The marking of the equipment shall include the following:



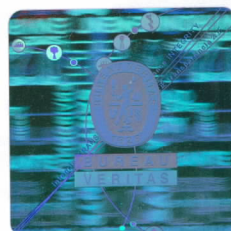
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Certification department of explosion protection

Türkheim, June 17, 2011



A. Hänchen







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(13)

## Annexe

(14) **EC Type Examination Certificate EPS 11 ATEX 1 333 x**

(15) Description of equipment:

The device GIA 0420 ... - ex is an indicator for the electrical standard current signal 4 – 20 mA without auxiliary power supply. The device GIA 010... - ex is an electric indicator for the electrical standard voltage signal 0 – 10 V. Both variants have an optional switching output for the connection of suitable relays or signalling devices. The device is manufactured in various versions:

VOT	GIA 0420 VOT - ex	Two-wire circuit 4-20 mA, case with adapter for an angle plug for easy connection in between. Push-button accessible from outside
	GIA 010 VOT - ex	Three-wire circuit 0-10 V, case and push-button as GIA 0420 VOT - ex.
VO	GIA 0420 VO - ex	Two-wire circuit 4-20 mA, case as GIA 0420 VOT - ex, push-button inside
	GIA 010 VO - ex	Three-wire circuit 0-10 V, case as GIA 0420 VOT - ex, push-button inside
WKT	GIA 0420 WKT - ex	Two-wire circuit 4-20 mA, case with cable tail, push-button accessible from outside
	GIA 010 WKT - ex	Three-wire circuit 0-10 V. case and push-button as GIA 0420 WKT - ex
WK	GIA 0420 WK - ex	Two-wire circuit 4-20 mA, case as GIA 0420 WKT - ex, push-button inside
	GIA 010 WK - ex	Three-wire circuit 0-10 V, case as GIA 0420 WKT - ex, push-button inside
N	GIA 0420 N - ex	Two-wire circuit 4-20 mA, case for installation in switching cabinets, connection via screw and plug terminals
	GIA 010 N - ex	Three-wire circuit 0-10 V, case and connection as GIA 0420 N - ex





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Electrical data:

The device may be connected to approved intrinsically safe circuits with the following maximum values:

GIA 0420 ... - ex	GIA 010 ... - ex
$U_i = 28 \text{ V DC}$	$U_i = 28 \text{ VDC}$
$I_i = 100 \text{ mA}$	$I_i = 100 \text{ mA}$
$P_i = 1,2 \text{ W}$	$P_i = 0,95 \text{ W}$
Inner Kap.: $C_i < 13 \text{ nF}$	Inner Kap.: $C_i < 26 \text{ nF}$
Inner Ind.: $L_i \sim 0 \mu\text{H}$	Inner Ind.: $L_i \sim 0 \mu\text{H}$
$U_i, I_i, P_i$ also apply to the circuit output with $C_i < 4,5 \text{ nF}, L_i \sim 0 \mu\text{H}$	

(16) Test report: 09TH0409

(17) Special conditions for safe use:

For all variants:

1. For units with optional output switch, the output switch and the switching device must be supplied from the same intrinsically safe circuit as the indicator GIA.
2. Only approved intrinsically safe switching devices may be used which correspond to the specified maximum values of the circuit. The total capacitance and inductance of the devices GIA ... and the switching devices, including the values, may not exceed the allowable for the intrinsically safe circuit totals. If concentrated inductances and capacitances exist, the manufacturer must be consulted for permission.
3. Modifications or repairs of the device may not be performed by the customer. For maintenance or repair the device must be sent to the manufacturer.

Especially for the variants VO, VOT and WK, WKT:

1. The opening of the device is only permitted outside the hazardous area.
2. The setting of the inner keys (VO, WK) may be performed only by trained personnel.
3. The devices VO, VOT meet the requirements of intrinsic safety only after angle plugs, which are appropriate to the required IP protection degree, are connected. The devices shall be installed in places that are protected against external damage.
4. The devices back side (VO, VOT, WK, WKT) may not be cleaned with a cloth or other means, which can generate an electrostatic charge.

Especially for the variant N:

1. The device GIA... N – ex meet the requirements of intrinsic safety only after it is built in an appropriate device, which conforms with the necessary IP protection degree.



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(18) Essential health and safety requirements:

Met by standards.



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