

(13) **SCHEDULE**

(14) **EC-Type Examination Certificate No. TÜV 98 ATEX 1357**

(15) Description of component

The Protective Relays type KR-163/A/Ex... are used as signal amplifiers for a galvanically safe separation of intrinsically safe and non-intrinsically safe circuits.

The maximum permissible ambient temperature is 60 °C.

Electrical data

Supply circuits..... U = 240 V a.c., $U_m = 264$ V a.c.
 (Terminals A1 and A2) U = 230 V a.c., $U_m = 253$ V a.c. resp.
 U = 127 V a.c., $U_m = 140$ V a.c. resp.
 U = 115 V a.c., $U_m = 127$ V a.c. resp.
 U = 48 V a.c., $U_m = 53$ V a.c. resp.
 U = 42 V a.c., $U_m = 46$ V a.c. resp.
 U = 24 V a.c., $U_m = 37$ V a.c.
 f = 48 to 62 Hz

Input circuit in type of protection intrinsic safety EEx ia IIC/IIB
 (Terminals E1 and E0) resp. EEx ib IIC/IIB

Maximum values: $U_o = 12.6$ V
 $I_o = 16.1$ mA
 $P_o = 51$ mW

Characteristic line: linear

The effective internal inductance and capacitance are negligibly small.

EEx ia resp. EEx ib	IIC	IIB
Maximum permissible external inductance	120 mH	480 mH
Maximum permissible external capacitance	1.15 µF	7.4 µF

Output circuit a.c. voltage d.c. voltage
 (Terminals 11, 12 and 14) U = 250 V U = 150 V
 I = 5 A I = 8 A
 S = 100 VA P = 50 W

The intrinsically safe input circuit is galvanically safe separated from the non-intrinsically safe circuits up to a peak crest value of the voltage of 375 V.

(16) Test documents are listed in the test report No. 98/PX16880.

Schedule EC-Type Examination Certificate No. TÜV 98 ATEX 1357

(17) Special conditions for safe use

none

(18) Essential Health and Safety Requirements

no additional ones

Translation

1. SUPPLEMENT

to Certificate No.

TÜV 98 ATEX 1357

Equipment:

Protective Relays type KR-163/A/Ex....

Manufacturer:

E.L.B.-Füllstandsgeräte Bundschuh GmbH + Co.

Address:

An der Hartbrücke 6
64625 Bensheim
Germany

Order number:

8000347976

Date of issue:

2009-06-07

Amendments:

A new type is added which is suitable for a different supply voltage. The additional type may be manufactured and operated according to the test documents listed in the test report. The standards used for assessment had also been updated, the marking changes accordingly.

All other details remain unchanged, the electrical data are supplemented as follows:

Electrical data

Supply circuit..... U = 24 V d.c., U_m = 26.4 V d.c.
(Connections A1 and A2)

The equipment incl. of this supplement meets the requirements of these standards:

EN 60079-0:2006

EN 60079-11:2007

EN 60079-26:2007

The marking changes as follows:

 II (1) G [Ex ia] IIC

(16) The test documents are listed in the test report No. 09 203 347976.

(17) Special conditions for safe use

none

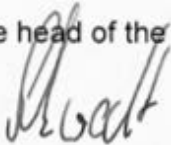
1. Supplement to Certificate No. TÜV 98 ATEX 1357

(18) Essential Health and Safety Requirements

no additional ones

TÜV NORD CERT GmbH, Langemarckstraße 20, 45141 Essen, accredited by the central office of the countries for safety engineering (ZLS), Ident. Nr. 0044, legal successor of the TÜV NORD CERT GmbH & Co. KG Ident. Nr. 0032

The head of the certification body

A handwritten signature in black ink, appearing to read "Schwedt".

Schwedt

Hanover office, Am TÜV 1, 30519 Hanover, Tel.: +49 (0) 511 986-1455, Fax: +49 (0) 511 986-1590

Translation
2. SUPPLEMENT

to Certificate No. TÜV 98 ATEX 1357

Equipment: Protective Relays type KR-163/A/Ex....

Manufacturer: E.L.B. Füllstandsgeräte Bundschuh GmbH & Co. KG

Address: An der Hartbrücke 6
64625 Bensheim
Germany

Order number: 8000406487

Date of issue: 2012-02-15

Amendments:

In the future the Protective Relays type KR-163/A/Ex.... may also be manufactured and operated according to the test documents listed in the test report.

The equipment was evaluated according to the newest standards.

All other data apply unchanged for this supplement.

The device will then be labeled as follows:

 II (1) G [Ex ia Ga] IIC

The equipment incl. of this supplement meets the requirements of these standards:

EN 60079-0:2009

EN 60079-11:2012

EN 60079-26:2007

(16) Test documents are listed in the test report No. 12 203 099323.

(17) Special conditions for safe use

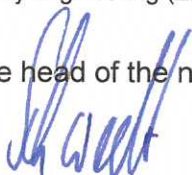
none

(18) Essential Health and Safety Requirements

no additional ones

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The head of the notified body



Schwedt

Hanover office, Am TÜV 1, 30519 Hannover, Fon +49 (0)511 986 1455, Fax +49 (0)511 986 1590