



EC-type-examination Certificate

(Translation)



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

(3) EC-type-examination Certificate Number:

PTB 97 ATEX 2102

(4) Equipment: Signal isolator SINEAX TI807 type 807-1... and
Signal isolator SIRAX TI807 type 807-6...

(5) Manufacturer: Camille Bauer AG

(6) Address: Aargauerstrasse 7, CH-5610 Wohlen

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

(8) The Physikalisch-Technische Bundesanstalt, notified body No. 0102 in accordance with Article 9 of the Council Directive 94/9/EC 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 confidential report PTB Ex 97-27036.

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

DIN EN 50014:1994-03

DIN EN 50020:1996-04

DIN EN 50014/prA1:1996

(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 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.

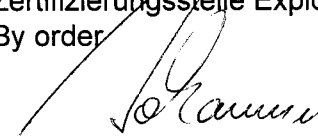
(12) The marking of the equipment shall include the following:

 **II (1) G [EEx ia] IIC resp. II (2) G [EEx ib] IIC**

Zertifizierungsstelle Explosionsschutz

Braunschweig, 29.08.1997

By order


Dr.-Ing. U. Johannsmeyer
Oberregierungsrat



sheet 1/4

Schedule

(13)

(14) **EC-type-examination Certificate No. PTB 97 ATEX 2102**

(15) Description of equipment

The signal isolators are used to electrically isolate a DC-signal of 4...20 mA between a supply unit and a two-wire measuring transducer. Up to three identical channels are installed in one enclosure.

The signal isolator SIRAX TI807 of type 807-6... is only used to be plugged on the associated apparatus rack or on the apparatus rack SIRAX BP 902 of type 902-2... with EC-type-examination certificate PTB 97 ATEX 2113, manufactured by Camille Bauer AG.

The maximum permissible ambient temperature of the signal isolator SINEAX TI807 of type 807-1... is 55 °C.

The maximum permissible ambient temperature of the signal isolator SIRAX TI807 of type 807-6... is 40 °C.

The signal isolators shall be installed outside the explosion hazardous area only.

Electrical data

The indicated terminal clamps refer to the design SINEAX TI807 of type 807-1...

The indicated connections refer to the design SIRAX TI807 of type 807-6...

Input intrinsically safe type 807-12...

Input circuits	type of protection Intrinsic Safety	EEx ib IIB/IIC
(terminal clamps 1, 2	only for connection to an intrinsically safe circuit with the	
resp. 6, 7 resp. 11, 12)	following maximum values per circuit::	

$$U_i = 33 \text{ V}$$

$$I_i = 150 \text{ mA}$$

effective internal inductance $L_i = 24 \mu\text{H}$

the effective internal capacitance is negligibly small.

Output circuits	maximum voltage	$U_m = 253 \text{ V AC}$
(terminal clamps 3, 4	resp.	$U_m = 125 \text{ V DC}$
resp. 8, 9 resp. 13, 14)		

resp.

Schedule to EC-type-examination Certificate No. PTB 97 ATEX 2102

Input intrinsically safe type 807-62...

Input circuits (connections 1, 2 resp. 3, 4 resp. 5, 6) type of protection Intrinsic Safety EEx ib IIB/IIC only for connection to an intrinsically safe circuit with the following maximum values per circuit::

$$\begin{aligned} U_i &= 30 \text{ V} \\ I_i &= 150 \text{ mA} \end{aligned}$$

effective internal inductance $L_i = 24 \mu\text{H}$
the effective internal capacitance is negligibly small.

Output circuits (connections 26, 27 resp. 28, 29 resp. 30, 31) maximum voltage $U_m = 253 \text{ V AC}$
resp. $U_m = 125 \text{ V DC}$

resp.

Output intrinsically safe type 807-16... resp. type 807-66...

Output circuits (terminal clamps 1, 2 resp. 6, 7 resp. 11, 12 resp. connections 1, 2 resp. 3, 4 resp. 5, 6) type of protection Intrinsic Safety EEx ia IIB/IIC resp. EEx ib IIB/IIC (linear output characteristic) maximum values per circuit:

$$\begin{aligned} U_o &= 15,75 \text{ V} \\ I_o &= 100 \text{ mA} \\ P_o &= 400 \text{ mW} \end{aligned}$$

IIC resp. IIB

max. permissible external inductance 4 mH 15 mH
max. permissible external capacitance 478 nF 2880 nF

Input circuits (terminal clamps 3, 4 resp. 8, 9 resp. 13, 14 resp. connections 26, 27 resp. 28, 29 resp. 30, 31) $U_{rat} = 30 \text{ V}; I_{rat} = 20 \text{ mA}$
maximum voltage $U_m = 253 \text{ V AC}$
resp. $U_m = 125 \text{ V DC}$

For both types the output circuit and the input circuit are safely electrically isolated up to a peak value of the nominal voltage of 375 V.

(16) Report PTB Ex 97-27036

Schedule to EC-type-examination Certificate No. PTB 97 ATEX 2102

(17) Special conditions for safe use

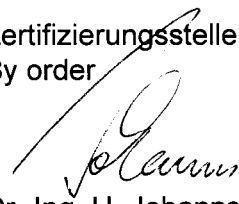
not applicable

(18) Essential Health and Safety Requirements

met by standards

Zertifizierungsstelle Explosionsschutz

By order


Dr.-Ing. U. Johannsmeyer
Oberregierungsrat



Braunschweig, 29.08.1997