



(1) 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 2101

(4) Equipment: Signal isolator SINEAX SI815 type 815-1... and Signal isolator SIRAX SI815 type 815-6...

(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 97-27043.

(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.

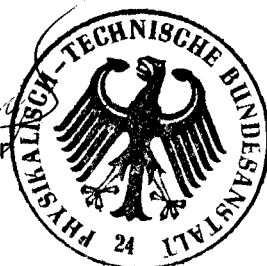
(12) The marking of the equipment shall include the following:

II (1) G [EEx ia] IIC

Zertifizierungsstelle Explosionsschutz
By order

Braunschweig, 04.09.1997

Dr.-Ing. U. Johannsmeyer
Oberregierungsrat



(13)

S c h e d u l e

(14)

EC-type-examination Certificate No. PTB 97 ATEX 2101

(15) Description of equipment

The signal isolator is used to electrically isolate a DC-signal of 4...20 mA between a supply unit and a two-wire measuring transducer. If designed with HART-transmission it is able to transmit a frequency modulated signal (FSK) additionally to the measuring signal according to HART-standard. The signal isolator is constructed in a two-channel design.

The signal isolator SIRAX SI815 of type 815-6... 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 SI815 of type 815-1... is 55 °C.

The maximum permissible ambient temperature of the signal isolator SIRAX SI815 of type 815-6... 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 SI815 of type 815-1...

The indicated connections refer to the design SIRAX SI815 of type 815-6...

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

Output circuits	type of protection Intrinsic Safety	EEx ia IIB/IIC
(terminal clamps 1, 2	resp.	EEx ib IIB/IIC
resp. 6, 7 resp. connections	(linear output characteristic)	
1, 2 resp. 3, 4)		

maximum values:	$U_o = 23,1 \text{ V}$
	$I_o = 100 \text{ mA}$
	$P_o = 580 \text{ mW}$

Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

Schedule to EC-type-examination Certificate No. PTB 97 ATEX 2101

	IIC	resp.	IIB
max. permissible external inductance	4	mH	15 mH
max. permissible external capacitance	140	nF	1020 nF

The output circuits are safely electrically isolated from the input circuits up to a peak value of the nominal voltage of 375 V.

(16) Report PTB Ex 97-27043

(17) Special conditions for safe use

not applicable

(18) Essential Health and Safety Requirements

met by standards

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