

Physikalisch-Technische Bundesanstalt

(1) Conformity Certificate

(2) **PTB Nr. Ex-88.B.2022**

(3) This certificate concerns electrical equipment

Control Unit Type FS 821

(4) of the Company Gönzheimer Elektronik GmbH D-6734
Lambrecht

(5) The make of this electrical equipment as well as the different authorized executions are defined in the Annex to this Conformity Certificate.

(6) The Physical-Technical Federal Institution as the Inspecting authority certifies according to Article 14 of the Directive of the Council of the European Communities, dated 18 December 1975 (76/117/EWG) the conformity of this electric equipment with the harmonized European Norms.

EN 50 014:1977 + A1...A4 (VDE 0170/0171 part 1/5.84)
General directives
EN 50 017:1977 + A1 (VDE 0170/0171 part 4/9.80)
Sand/Powder Filling "q" .
EN 50 019:1977 + A1...A2 (VDE 0170/0171 part 6/7.84)
Increased Safety "e"
EN 50 020:1977 + A1 (VDE 0170/0171 part 7/9.80)
Intrinsic Safety "i "

after the equipment of a certain make has been inspected with success. The results of the inspection are defined in a confidential inspection protocol.

(7) The equipment is to be marked with the following:

EEx eq [ib] IIC T6

(8) The manufacturer is responsible to mark each equipment of this make according to this certificate's Annex of the inspection documents so that all is in conformity with the authorized piece inspections.

(9) The electrical equipment may be marked with the here printed mutual distinctive mark according to Annex II of the directive of the Council, dated 6 February 1979 (79/196/EWG).

In behalf

Braunschweig, 11 April 1988

Stamp

Schebsdat Dr.-
engineer Government
Director

Physikalisch-Technische Bundesanstalt

A N N E X

to the Conformity Certificate PTB Nr. Ex-88.B.2022

The Control Unit, Type FS 821 serves for transmission of signals from the intrinsically safe circuit in a non-intrinsically safe working circuit.

Electrical details

supply voltage: $U = 24/42/110/220V$, ca. 4 VA, 48..62 Hz
(terminal 9 and 10) depending upon the execution of the transformer

Control Circuits in ignition protection intrinsically safe EEx ib IIC
(terminal 0..8) highest values: $U = 9,1 V$ $I_m 90 mA$ $P \sim 205 mW$

highest outside inductivity 5 mH highest outside
capacity 5 NF

Working circuits (terminal 11..20): $U 5 250V$ $U 5 60 V 154A$ (50,5A **cos S 0,7 UR**
S 200 ms

The control circuits are galvanically separated from the supply voltage and the working circuits up to a nominal voltage of 375 V.

Inspection Documents:

		signed	on
1. Description (16 sheets)		20.12.1987/26./29.02.1988	
Drawind No.			
FS821.101.3			29.02.1988
FS821.300.4			29.02.1988
FS810.900.4	(6 sheets)		20.12.1987
FS821.902.3			20.12.1987
FS821.400.3			20.12.1987
FS821.401.4			20.12.1987
FS821.402.4			20.12.1987
FS821.403.4			20.12.1987
FS821.404.4			20.12.1987
FS821.500.4			20.12.1987
FS821.501.4			20.12.1987
FS821.600.4			26.02.1988

3. Parts list (3 sheets)

in behalf

Schebsdat Dr.-
engineer. Government
Director

Stamp

Braunschweig, 11 April 1988