

(1) **Certificate of Conformity**

(2) **PTB Nr. Ex-96.D.2046**

(3) This certificate concerns the electrical operation equipment
Pressurized Enclosure system type F850

(4) of the company
**Gönnheimer Elektronik GmbH
D-Neustadt an der Weinstraße**

(5) The make of this electrical operation equipment as well as the different allowable 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 December 18, 1975 (76/117/EWG) the conformity of this electrical operation equipment with the harmonised European Norms:

Electrical operation equipment for explosion-endangered areas

EN 50 014:1977 + A1 ...A5 (VDE 0170/0171 Teil 1/1.87) General directives
EN 50 019:1977 + A1 ...A5 (VDE 0170/0171 Teil 6/5.92) Increased Safety 'e'
EN 50 020:1977 + A1 ...A5 (VDE 0170/0171 Teil 7/4.92) Intrinsic Safety 'i'
EN 50 028:1987 (VDE 0170/0171 Teil 9/7.88) Moulding 'm'

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 operation equipment is to be marked with the following mark:

EEx em [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 and that the required piece inspections have passed the testing successfully.

(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 February 6 1979 (79/196/EWG).

In behalf

Braunschweig, February 13 1995

Stamp

Dr.-Ing. Johannsmeyer
Oberregierungsrat

Annex to the Conformity Certificate PTB Nr. Ex-96.D.2046

The pressurized enclosure system type f 850 serves as measurement system for pressure and flow.

The maximum ambient temperature is 50°C in temperature class T6 and 65°C in the temperature class T4.

Electrical details

Line voltage 230, 220, 120, 110, 42 or 24 VAC respectively 24 VDC
(Terminal 15,17 and 16,18) Maximum voltage $U_M = 250$ V

Valve fuse..... Related valve fuse
(Terminal 25,26)

Valve terminals..... Voltage like line voltage
(Terminal 21,22 and 23,24)

Proportional valve terminals. Voltage like line voltage
(Terminal 19,20)

Working circuit terminals.....	AC	DC
(Terminal 11,12 and 13,14)	U 250 V	U 30 V
	I 5 A	I 5 A
	P 2000 VA	P 150 W

Intrinsically safe terminals.... Ignition protection class intrinsical safety EEx ib IIC

The maximum values, and the limits of effective internal inductivity and capacity, as well as the terminal denomination are shown in the following table:

Terminal	U_0	I_K	P	L_a	C_a
1,4,9	8,61 V	60 mA	140 mW	10 mH	7 μ F
3	8,61 V	20 mA	140 mW	90 mH	7 μ F
5,6,10	8,61 V	2 mA	140 mW	1000 mH	7 μ F
7,8	8,61 V	10 mA	140 mW	330 mH	7 μ F
2	Negative terminal of the current circuits				

All intrinsically safe current circuits (terminal 1 to 10) are safe galvanically separated up to a nominal voltage of 375 V to every remaining current circuit.

Annex

to the Conformity Certificate PTB Nr. Ex-96.D.2046

Inspection Documents: signed on 01.08.1994

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| 1. Description | (14 pages) |
| 2. Drawing No. | FS850.100.3
FS850.101.3
FS850.301
FS850.311 |
| 3. Part list No. | FS850 printed circuit board 1 (4 pages) |
| 4. Drawing No. | FS850.302 |
| 5. Part list No. | FS850 printed circuit board 2 (1 page) |
| 6. Drawing No. | FS850.303 |
| 7. Part list No. | FS850 printed circuit board 3 (3 pages) |
| 8. Drawing No. | BT 851.100.4
BT851.301 |
| 9. Part list No. | BT851 (1 page)
BT850 (3 pages) |
| 10. Drawing No. | FS850.600
FS850.601
FS850.602
FS850.603
FS850.400
FS850.500
FS850.501
FS850.502
FS850.204
BT851.501 |

in behalf

Stamp

Braunschweig, February 13 1995

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