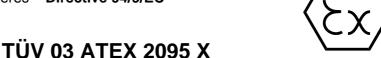


(1) CONFORMITY STATEMENT

(Translation)

- (2) Equipment and protective systems intended for use in potential explosive Atmospheres **Directive 94/9/EC**
- (3) Test Certificate number



(4) Equipment: Pressurized enclosure system type F840

(5) Manufacturer: Gönnheimer Elektronic GmbH

(6) Address: Dr.-Julius-Leberstr. 2

D- 67433 Neustadt an der Weinstraße

- (7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- (8) The TÜV NORD CERT GmbH & Co. KG, TÜV CERT-Zertifizierungsstelle, notified body No. 0032 in accordance with Article 9 of the Council Directive 94/9/EC of March 1994, certifies that 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 potentially explosive atmospheres, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report No. Nr.03YEX550515

(9) Compliance with to essential Health and Safety Requirements has been assured by compliance with:

EN 50021: 1999 EN 60079-14: 1997 IEC 60079-2: 2001

IEC 60079-14: 1996

- (10) If the sign "X" is places 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:



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TÜV CERT-Zertifizierungsstelle
Am TÜV 1
D-30519 Hannover
Tel: 0511 986-1470

Tel.: 0511 986-1470 Fax: 0511 986-2555

TÜV NORD CERT

Hannover, 15.05.2003

Der Leiter

(14) Conformity Statement No. TÜV 03 ATEX 2095 X

(15) Description of equipment

The pressurized enclosure system type F840 serves to build up an explosion proofed electrical apparatus with ex- protection type (simplified) pressurized enclosure "P"(EN 50 021) respectively "pz" (IEC 60079–2)

The pressurized enclosure system type F840 contents of a control electronic with pressure sensor, function keys, display and relays build in a metallic housing as well as an output valve with spark lattice.

Input valve and solenoid valve are no parts of the pressurized enclosure system type F840.

The pressurized enclosure system type F840 is suitable for

- Pre- purging of the housing
- Monitoring of internal pressure of the enclosure and
- alarming with programmable alarm signals with 2 potential free relay contacts, if predetermined pressure limits are exceeded.

The pressurized enclosure system type F840 is intended for use in hazardous area for apparatus category 3.

The maximum ambient temperature depends on temperature class:

Temperature class	Maximum ambient temperature
T6	40°C
T5	60°C

Electrical details

Mains (Terminals 7/8, 9/10)	$U_n = 230 \text{ V AC}$ $U_n = 115 \text{ V AC}$ $U_n = 24 \text{ V DC}$		840.0) resp. 840.2) resp. 840.6)
Relay contacts(Terminals 1, 2; 3, 4)	or max. switch power: 3		6 A (AC1) 1,2A (AC15) 4A (ohm resistive load)
Output for solenoid valve (Terminals 5, 6)	Maximum voltage as	mains (T	erminals 7/8, 9/10)

(16) The test documentation is listed in test report Nr. 03YEX550515

(17) Special conditions

- 1. Regard the appropriate sections of EN 60 079-14, Chapter 13 and the user's manual of the manufacturer for install and operation of the (simplified) pressurized electrical apparatus and the control unit.
- 2. A pre- purging of the pressurized enclosure is not necessary, if its sure, that the atmosphere inside of the enclosure and the appropriate pipes is below 25% of the lower explosive limit (LEL) (EN 60079 14 chapter 13.4).
- 3. The bypass switch can only be used, if no danger of an appearance of an explosive atmosphere exists
- 4. The solenoid valve must be suitable for using in hazardous area, where electrical apparatus according category 3 are required. (certificate of manufacturer or conformity statement is needed). A suitable fuse for the solenoid valve can be mounted inside control device FS840 (fuse holder in the front plate).
- 5. Using the keys is only permitted for entering parameters of the pressurized enclosure system for service and maintenance.
- 6. All wires have to be fixed

(18) Basic Health and Safety Requirements

No additional

1. Amendment to

Conformity Statement No. TÜV 03 ATEX 2095 X



Of company Gönnheimer Elektronic GmbH

Dr. Julius Leberstr. 2

D- 67433 Neustadt an der Weinstraße

The pressurized enclosure system type F840 can be used to build up a explosions proof apparatus in the protection type "pD" according to

EN 61241-4 respectively IEC61241-4

The prepuring of the housing is void; in accordance with the o. g. standards before connection of the current supply a cleaning of the housing is necessary.

The connection of a spuelventils is void.

The marking shall include the following:

II 3 D EEx [nD 22] IP54 T70°C

All remaining data remain unchanged.

- (16) The test documentation is listed in test report Nr. 04YEX551619
- (17) Special conditions

The special conditions are extended as follows on use of the pressurized enclosure system type F840 for the protection type "pD":

"Before switching on of the current supply, a cleaning of the housing of penetrated dust is to be accomplished if required"

(19) Basic Health and Safety Requirements

No additional

TÜV NORD CERT GmbH & Co. KG TÜV CERT-Zertifizierungsstelle Am TÜV 1 D-30519 Hannover

Tel.: 0511 986-1470 Fax: 0511 986-2555 Hannover, 20.10.2004

Der Leiter



2. Amendment

to Conformity Certificate Nr. TÜV 03 ATEX 2095 X

Equipment: Pressurized enclosure system type F840;

control units type FS840.x.x($x \neq 9$) FS830.x.x ($x \neq 9$)

FS830.9.9

Manufacturer: Gönnheimer Elektronic GmbH

Address: Dr.-Julius Leber-Str.2

D-67433 Neuststadt/Weinstraße Germany

Order number: 8000396325 Date: 13.06.2012

Changes:

The pressurized enclosure system type F840 can also be manufactured according to the examination protocol, listed in the associated examination certificate.

The changes are related to

- internal build up (PCB, relays) of the control unit FS840.x.x ($x \neq 9$),
- 2 new types of control units FS830.x.x ($x \neq 9$) and FS830.9.9
- the special conditions and
- the marking

In the future the marking is

II 3 G Ex nA nC ic [pz] IIC T6/T5 Gc (FS830/840.x.x; $x \neq 9$)

II 3 G Ex nA [pz] IIC T6/T5 Gc (FS830.9.9)

II 3 D Ex tc ic [p] IIIC/IIIB T85 °C Dc (FS830/840.x.x)

The control unit type FS830.9.9 is suitable for

- Monitoring of the internal pressure of housings and
- The output of programmable alarm signals within 2 signal circuits (optical coupler) at under- or overshoot of programmed limit set points

The control unit type FS830.x.x ($x \neq 9$) is suitable for

- Pre purging of housings
- Monitoring of the internal pressure of housings and
- The output of programmable alarm signal within 2 potential free relays contacts at under- or overshoot of programmed limit set points

The maximum ambient temperatures are according to the following table

Marking	Maximum ambient temperature
II 3 G, T6	40 °C
II 3 G, T5	60°C
II 3 D	60°C



Electrical Details

Type FS840.x.x

Un = 24 V DC (type FS 840.6)

Alarm relays max. max. switching voltage: 250 V AC, 5 A (AC1) (terminals 1, 2; 3, 4) 1,2A (AC15)

or

max. switching voltage 30V DC, 4A (resistive load)

Terminals for the solenoid valve voltage according the mains tension on (terminals 5, 6) the terminals 7/8, 9/10;

Type FS830.x.x (excluding FS830.9.9)

Un = 24 V DC (type FS 830.6)

Alarm relays max. max. switching voltage: 250 V AC, 5 A (AC1) (terminals 1, 2; 3, 4) 1,2A (AC15)

or

max. switching voltage: 30V DC, 4A (resistive load)

Terminals for the solenoid valve

(terminals 5, 6)

voltage according the mains on

the terminals 7/8, 9/10;

Ground terminal

to connect to the potential equalization point

(terminals 11, 12, 13)

Type FS 830.9.9

Mains voltageUn = 5 V DC

(terminals 20, 21)

Alarm relays max. max. switching current: 20 mA

(terminals 22, 23, 24, 25)

All further specifications remain unchanged.

The devices of this amendment fulfills the requirements of

EN 60079-0:2009 EN 60079-11:2012 EN 60079-15:2010

EN 60079-31:2009

(16) The test documents are listed in report No. 12 203 083880



(17) Special conditions for safe area

- 1. For the construction and operation of pressurized electrical devices and the control unit the related paragraphs of EN 60079-14, chapter 13 and the manual of the manufacturer has to be observed.
- 2. Engage the bypass mode only, if it is ensured, that no explosive atmosphere exists in the environment.
- 3. The solenoid valve must be suitable for use in explosion endangered areas, within category 3 devices and it must be suitable for the specific implementation area conditions (declaration of the manufacturer or certificate of notified body). An adequate solenoid valve fuse should be inserted into the control unit type FS 840.x.x respectively FS 830.x.x $(x \neq 9)$.
- 4. FS830.9.9: the mains terminals must be protected against transient overshoot of 140% based on 85V spike voltage. The electrical connections on the terminals 20 ..25 should be mechanical strengthened to unload the solder connections.
- 5. FS830.9.9: If the pre purging phase is disabled, the operator must make sure that the housing does not contain an explosive atmosphere (below 25% of the lower explosive limit)
- 6. FS840.x.x: All electrical lines should be installed statically.
- 7. FS830.x.x: the control unit and the pressurized housing should be tested together. Especially the housing protection class IP54 at "II 3 G"- applications and IP6X at IIIC respectively IP 5X at IIIB on "II 3 D"- applications are required.
 - The PA- connection to the housing of the control units should be made.
- 8. The temperature class / surface temperature and the appropriate device group of the pressurized enclosure system F840 must include the Ex- proof data of the solenoid valve.
- (18) Essential health and safety requirements
 No additional

TÜV NORD CERT GmbH, Langemarckstraße 20, 45141 Essen, akkreditiert durch die Zentralstelle der Länder für Sicherheitstechnik (ZLS), Ident. Nr. 0044, Rechtsnachfolger der TÜV NORD CERT GmbH & Co. KG Ident. Nr. 0032

Der Leiter der benannten Stelle

Schwed

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