

Physikalisch-Technische Bundesanstalt -  
Physico-Technical Federal Board

PARTIAL CERTIFICATE PTB  
Nr.Ex- 82/1107 U

This Certificate is valid for the  
System of Automatic Excess Pressure Enclosure EEx p type F 800  
of Messrs. Hessler Electronic GmbH  
D-6731 Lindenberg/Pf.

Both engineering design and the various admissible motifs of this  
electric equipment are laid down in the annex  
to this Partial Certificate.

The Physikalisch-Technische Bundesanstalt - Physico Technical  
Federal Board - as the testing authority as per item 14 of the  
Regulations of the Council of the European Communities of 18.  
December 1975 (76/117/EEC) herewith confirms the conformity of  
this electric equipment with the harmonized European standards

EN 50 016-1977 / VDE 0171 part 3/5, 78 Excess Pressure  
Enclosure "p" sections 5, 6 and  
Annex A 2b

The automatic excess pressure enclosure will be marked by the  
following designation

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The manufacturer will be held responsible for each component  
marked as above to coincide in its engineering design with the  
test documents mentioned in this Certificate. He will also be  
responsible for its having passed all component tests required.

This Partial Certificate is no certificate on conformity or  
control; it will only serve as a base for issuing the complete  
test certificates.

The system of automatic excess pressure enclosure serves as an auxiliary device necessary for producing, monitoring and safely maintaining excess pressure with excess pressure enclosed electric equipment.

By order

Braunschweig, 29.12.1982

signature

(Dipl.-Ing. Löper)

Physikalisch-Technische Bundesanstalt -  
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A N N E X

to Partial Certificate PTB No. Ex-82/1107 U

Engineering design

System of automatic excess pressure enclosure comprising:

- a) control device optional  
type FS 810 (PTB No. Ex-8212214) for installation  
outside the range subject to explosion hazards  
  
type FS 811 (PTB Ivo. Ex-82/2216) for installation  
inside the range subject to explosion hazards with  
switching circuits of ignition protective design intrinsic  
safety "i" for connection to over pressure indicator type DW  
812
- b) overpressure indicator type Dw 812  
with pressure switch(es) and flow indicator(s) for connection  
to control device  
to be installed at the excess pressure enclosed casing
- c) solenoid valve (acc. to separate Test Certificate) for  
preparing the ignition protective gas

If necessary the pressure indicator type DW 812 may be  
supplemented by a spark-condensing chamber as per EN 50 016 of annex  
2b.

The system of automatic excess pressure enclosure is available for

- a) excess pressure enclosure with permanent rinsing by ignition  
protective gas
- b) excess pressure enclosure with compensation for leakage losses

Test documents

1. Description (4 pages)

Drawing no. DW 812.900.4 (13 pages)	)
DW 812.600.4	)
DW 812.600.4 (parts list)	)
DW 812.400.4	)
DW 812.401.4	) signed on
DW 812.402.4	) 18.11.1982
DW 812.403.4	)
DW 812.500.4	)
DW 812.601.4	)
DW 812.601.4 (parts list)	)
DW 812.404.4	)
DW 812.405.4	)
DW 812.407.4	)

DW 812.408.4	)
DW 812.602.4	)
DW 812.602.4 (parts list)	)signed on
DW 812.409.4	)18.11.1982
DW 812.410.4	)
DW 812.411.4	)
DW 812.412.4	)
DW 812.501.4	)

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### 1. ADDENDUM

to Partial Certificate PTB No. EX-82/1107 U

of Messrs. Hessler Elektronik GmbH  
D-6731 Lindenberg/Pf.

Modifications and/or supplements:

1. Modification of the function of the control device type  
FS 810 / FS 811 acc. to drawing No. FS.810.101.3
2. The diaphragm aperture of the pressure indicator type DW 812 can  
be varied within the range of  $\varnothing$  2 ... 25 mm.

Supplement to the notes:

6. Leading off the ignition protective gas may enä in the range of  
explosion hazards (äirectly at the pres sure indicator). Due to  
the cesign of the pressure indicator, no spark or no  
ignitable particle can escape anci quick penetration into the  
surrouncing atmosphere is efficiently prevented.

#### Test documents

Drawing no. FS.810.101.3	)
FS 810.200.4	)
FS 810.301.4	)signed on
FS 810.301.4 (parts list) (2 p.)	)21.10.1983
DW 812.405.4	)

By order

signature

(Dipl.-Ing.Löper)

Braunschweig, 21.12.1983

Physikalisch-Technische Bundesanstalt -  
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## 2. ADDENDUM

to Partial Certificate PTB no. Ex-82/1107 U

of Messrs. Hessler Elektronik GmbH  
D-6734 Lindenberg/Pf.

### Modifications and supplements

1. Modification of the company's name to read  
Gönnheimer Elektronik GmbH  
D-6734 Lambrecht/Pf.
  
2. Amendment and extension of the engineering design
  - a) control device optional  
  
type FS 810 (PTB no. Ex-82/2114) for installation  
outside the range subject to explosion hazards  
  
type FS 811 (PTB no. Ex-82/2116) for installation  
inside the range subject to explosion hazards  
  
type FS 821 (PTB no. Ex-88.B.2022) for installation  
inside the range subject to explosion hazards
  
  - b) control panel type BT 813 ... 815  
for connection to control device with circuits of ignition  
protective design intrinsic safety "i"

### Supplement to the notes

7. For designs with "bridging switch", the user will be, duly informed as follows:  
  
Putting the electric equipment "bridging switch" into operation calls for permission of the shop manager or of his deputy. Permission will be granted only after making sure that there exists no explosive atmosphere or when all protective measures against all explosion hazards have been taken ("permit to fire").

### Test document

Certificate of Conformity PTB no. Ex-88.B 2022

By order

Braunschweig, 19.09.88

Signature

Dipl.-Ing. Löper