



DET NORSKE VERITAS

EC-TYPE EXAMINATION CERTIFICATE

- [2] EQUIPMENT OR PROTECTIVE SYSTEM INTENDED FOR USE IN POTENTIALLY EXPLOSIVE ATMOSPHERES DIRECTIVE 94/9/EC
- [3] EC-Type Examination Certificate Number: **DNV 13 ATEX 2918X**
- [4] Equipment or Protective System: **FAP600 and FAP610 Pressure Transmitter**
- [5] Applicant: **TEMPRESS A/S**
- [6] Address: **Nordlandsvej 64-66 ,Dk-8240 Risskov Denmark**
- [7] This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- [8] DNV, notified body number 0575 in accordance with Article 9 of Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system 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 confidential reports listed in section 14.
- [9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 60079-0: 2009 ,EN 60079-11:2007 and EN 60079-26:2007
- [10] If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system 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 or protected system. If applicable, further requirements of this Directive apply to the manufacturer and supply of this equipment or protective system.
- [12] The marking of the equipment or protective system shall include the following:

 II 1 G Ex ia IIC T4 Ga -20 °C ≤ Ta ≤ +80 °C Ga

Oslo, 2014.08.15
for Det Norske Veritas AS


Bjørn Spongsveen
Certification Manager



Notice: This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.

The digitally signed and electronically distributed document is the original and valid certificate. Ref.: www.dnv.com/digitalsignatures

If any person suffers loss or damage which is proved to have been caused by any negligent act or omission of Det Norske Veritas, then Det Norske Veritas shall pay compensation to such person for his proved direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question, provided that the maximum compensation shall never exceed USD 300.000. In this provision "Det Norske Veritas" shall mean the Foundation Det Norske Veritas as well as all its subsidiaries, directors, officers, employees, agents and any other acting on behalf of Det Norske Veritas.



[13]

Schedule

[14] EC-TYPE EXAMINATION CERTIFICATE No.: DNV 13 ATEX 2918X

Certificate History

Revision	Description	Report no.	Issue date
0	Original certificate	Z0437129	2014.08.06

[15] Description of Equipment or Protective System

The FAP600 and FAP610 series pressure transmitters are based on a ceramic capacitor sensing element. Output is 4-20 mA current loops. The intrinsic safety circuits are installed in titanium or stainless steel housing and circuit is completely encapsulated. Each type of circuit boards has the same main parts; only the circuit connecting the sensor and sensors are different. The pressure transmitter is enclosed in different sorts of "connectors". The electrical connection of FAP 610 is used with Hersman connector which is made of plastic. The pressure transmitter must be powered by a safety barrier installed in a safety place.

Type Identification

Product Series	Produce Model	Interface And Installation Mode
FAP600 Series	FAP600-00-A	Direct Input Type (316L)
	FAP600-00-B	Direct Input Type (Titanium Grade II)
	FAP600-01-A	G1/2 Thread Interface (316L) Input Type
	FAP600-01-B	G1/2 Thread Interface (Titanium Grade II) Input Type
	FAP600-02-A	M20×1.5 Thread Interface (316L) Input Type
	FAP600-02-B	M20×1.5 Thread Interface (Titanium Grade II) Input Type
FAP610 Series	FAP610-00-A	G1/4 Thread Interface (316L)
	FAP610-00-B	G1/4 Thread Interface (Titanium Grade II)
	FAP610-01-A	G1/2 Thread Interface (316L)
	FAP610-01-B	G1/2 Thread Interface (Titanium Grade II)
	FAP610-02-A	M20×1.5 Thread Interface (316L)
	FAP610-02-B	M20×1.5 Thread Interface (Titanium Grade II)

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Electrical Data

Power supply: 10-28VDC, Output Type: 4-20mA

Intrinsically safe parameters: $U_i=28VDC$, $I_i=93mA$, $P_i=0.6W$, $C_i=2nF$, $L_i=0mH$

Degrees of protection (IP Code): IP 68 (FAP600)/IP 65 (FAP610)

[16] **Project No.:** PRJC-437129-2013-PRC-CHN

Descriptive Documents

Number	Title	Rev.	Date
FAP610-00-A	Assembly Drawing	-	2013/07/05
FAP610-01-A	Assembly Drawing	-	2013/07/05
FAP610-02-A	Assembly Drawing	-	2013/07/05
FAP610-00-B	Assembly Drawing	-	2013/07/05
FAP610-01-B	Assembly Drawing	-	2013/07/05
FAP610-02-B	Assembly Drawing	-	2013/07/05
FAP600-00-A	Assembly Drawing	-	2013/07/05
FAP600-01-A	Assembly Drawing	-	2013/07/05
FAP600-02-A	Assembly Drawing	-	2013/07/05
FAP600-00-B	Assembly Drawing	-	2013/07/05
FAP600-01-B	Assembly Drawing	-	2013/07/05
FAP600-02-B	Assembly Drawing	-	2013/07/05
FAP600-1	FAP600-1 Pressure transmitter board Layout of PCB	-	2013/06/24
FAP610-1	FAP610-1 Pressure transmitter board Layout of PCB	-	2013/06/24
FAP600-1.1	FAP600-1 Pressure transmitter board Wiring drawing	-	2013/08/09
FAP610-1.1	FAP610-1 Pressure transmitter board Wiring drawing	-	2013/08/09
FAP600-JL	Connection diagram	-	2013/08/09
FAP610-JL	Connection diagram	-	2013/08/09
FAP600610-DL	Schematic drawing	2.00	2014/06/06
FAP600	Nameplate drawing	-	2013/08/09
FAP610	Nameplate drawing	-	2013/08/09
FAP610-1.01	Print board		2013/06/24
FAP600-1.01	Print board		2013/06/24
UC2	UC2 Sensor		2013/07/05
FAP600-CQ	Material List (2 sheets)	2.00	2014/06/06
FAP600-CQ	Material List (2 sheets)	2.00	2014/06/06
FAP600/610-SS	Pressure Transmitter Instruction	1.00	2014/06/06

[17] **Special Conditions for Safe Use**

1. Titanium enclosures and cannot be installed in zone 0 unless mounted in an outer enclosure according to EN 60079-0 paragraph 8.1.2.
2. The pressure transmitters must be installed and used according to instruction.

[18] **Essential Health and Safety Requirements**

See part 9 of this certificate
END OF CERTIFICATE

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