



EC-TYPE EXAMINATION CERTIFICATE

Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 94/9/EC

B EC-Type Examination Certificate Number :

BAS00ATEX1241

4 Equipment or Protective System: 600T EN SERIES PROFIBUS PRESSURE

TRANSMITTERS

- 5 Manufacturer: ABB INSTRUMENTATION SpA
- 6 Address: Via Statale 113, 22016 Lenno (Como), Italy
- 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.
- The Electrical Equipment Certification Service, notified body number 600 in accordance with Article 9 of the 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 Report No

99(C)1004/1 dated 22 March 2001

9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 50014: 1997 + Amds 1 & 2 EN 50020: 1994 EN 50284: 1999 EN 50281-1-1: 1998 except in respect of those requirements listed at item 18 of the Schedule.

- 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.
- This EC-TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified equipment or protective system. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment or protective system.
- 12 The marking of the equipment or protective system shall include the following:-
 - **⟨E⟩** II 1 GD T70°C

EEx ia IIB T4 (-40°C \leq T₄ \leq 60°C)

This certificate may only be reproduced in its entirety and without any change, schedule included.

File No: EECS 0619/02/010

This certificate is granted subject to the general conditions of the Electrical Equipment Certification Service. It does not necessarily indicate that the apparatus may be used in particular industries or circumstances.



Electrical Equipment Certification Service
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EECS POUTPMENT

I M CLEARE DIRECTOR 29 March 2001



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Schedule

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Description of Equipment or Protective System

600T EN Series Profibus Pressure Transmitters are designed to measure a process pressure (differential, gauge and absolute) and transmit this information a a current modulated digital signal at 31.25Kbit/sec transmission speed. 31.25Kbit/sec transmission speed.

The apparatus comprises two inductive sensors, three printed circuit boards and an optional integral 🛪 LCD display all housed within a robust enclosure made from steel and partly from metal containing 6% magnesium. The enclosure may be fitted with an extension piece which houses a glass window to view the display.

External electrical connections are made via one of two tapped holes and the installation of the external connections and plugging of the unused entry must be carried out using the appropriate EEx e or EEx n metal cable gland and metal blanking plug Component Certified by an EU Approved Certification Body.

Electrical connections to external apparatus are made via the field terminals

The model numbers in the 600T EN Series has the following variations:
6bcEe

b: may be 1, 2 or 3 - signifies performance (accuracy)
c: may be 1, 2 or 4 - type of transducer
e: may be A, D or G - type of pressure

Input Parameters

U_i = 15V (from a source with a current limiting resistance of 115Ω minimum)
P_i = 1.95W
C_i = 2.4nF
L_i = 0

Report Nos

99(C)1004/1 dated 22 March 2001
99(C)1003 dated 3 July 2000

Special Conditions For Safe Use

None

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18. **Essential Health and Safety Requirements**

3				Schedule					
4	EC-TYPE EXAMINATION CERTIFICATE N° BAS00ATEX1241 Essential Health and Safety Requirements								
8.									
]	ESSENTIAL	HEALTH &	E SAFETY	REQUIREMENTS not	ot covered by standards listed in Section 9				
Clause	Subject			Compliance					
1.1.3	Changes in characteristics of materials and combinations therec		eof	eof Report No 99(C)1004 Clause 5.1.1.3					
1.2.2	Components for incorporation or replacement				Report No 99(C)1004 Clause 5.1.2.2				
1.2.4	 	Dust deposits				Report No 99(C)1003			
1.2.5		Additional means of protection				Report No 99(C)1004 Clause 5.1.2.5			
1.2.7		Protection against other hazards			_	Report No 99(C)1004 Clause 5.1.2.7			
1.4.2	Withstandi	Withstanding attack by aggressive substances				Report No 99(C)1004 Clause 5.1.4.2			
9	DRAWING	7 S				,			
Numb		Sheet	Issue	Date	Des	cription			
**1H5	-15-00720	1 of 5	01			eral assembly and housing details			
**1H5	-15-00720	la	Orig			active Pressure Sensor - Diff Type			
**1H5	-15-00727	1	Orig			active Pressure Sensor - Gauge Type			
**1H5	-15-00720	1b	Orig	1 June 2000	O,	ring sealing details			
*1H5	-15-00721	1	Orig	June 16 1994	Prin	nary inductive transducer - Gauge; GA			
*1H5	-15-00721	2	1	15 July 1998	Prin	nary inductive transducer electronics			
*1H5	-15-00724	1	Orig	30 November 1998	Prin	nary capacitive transducer - Gauge, GA			
*1H5	-15-00724	2	Orig	30 November 1998	Prin	nary capacitive transducer electronics			
*1H5	-15-00722	1	1	20.03.96	Prin	nary inductive transducer - Diff; GA			
*1H5	-15-00722	2	2	15 July 1998	Prin	nary inductive electronics			
*AP0	408EX	1	-	15 July 1998	Part	s list - Primary Electronics: I/ GaugeTx			
*AN0	291EX	1	-	15 July 1998	Part	s list - Primary Electronics: I/ High Static Tx			
***1H5-	-15-00720	2	7	20 Dec 00	Circuit Primary Electronics				
***1H5-	15-04766	1	Orig	20 December 2000	Circ	ruit uP Board			
***AN (0600/1	1	Orig	20 December 2000	Part	list uP Board			
***1H5-	15-04766	2	Orig	20 December 2000	PCE	3 uP Board			
1H5-	-15-04766	5	Orig	20 December 2000	Circ	cuit PS Board - Profibus			
AN (0606/1	1 & 2	Orig	20 December 2000	Part	s list PS Board - Profibus			
1H5-	-15-04766	6	Orig	20 December 2000	PS I	Board - Profibus			
1H5-	-15-04768		Orig	8 November 2000	Lab	el - Profibus			
** The	se drawings	are common	n to BAS99	ATEX1180 and BASE ATEX1180. ATEX1180/1	EEF.	A Certificate No Ex 94C2189			
	1.:	ia mare au1		4		out any change, schedule included.			

19 **DRAWINGS**

Number	Sheet	Issue	Date	Description
**1H5-15-00720	1 of 5	01	23.5.00	General assembly and housing details
**1H5-15-00720	la	Orig	1 June 00	Inductive Pressure Sensor - Diff Type
**1H5-15-00727	1	Orig	17.04.00	Inductive Pressure Sensor - Gauge Type
**1H5-15-00720	1b	Orig	1 June 2000	'O' ring sealing details
*1H5-15-00721	1	Orig	June 16 1994	Primary inductive transducer - Gauge; GA
*1H5-15-00721	2	1	15 July 1998	Primary inductive transducer electronics
*1H5-15-00724	1	Orig	30 November 1998	Primary capacitive transducer - Gauge; GA
*1H5-15-00724	2	Orig	30 November 1998	Primary capacitive transducer electronics
*1H5-15-00722	1	1	20.03.96	Primary inductive transducer - Diff; GA
*1H5-15-00722	2	2	15 July 1998	Primary inductive electronics
*AP0408EX	1	-	15 July 1998	Parts list - Primary Electronics: I/ GaugeTx
*AN0291EX	1	-	15 July 1998	Parts list - Primary Electronics: I/ High Static Tx
***1H5-15-00720	2	7	20 Dec 00	Circuit Primary Electronics
***1H5-15-04766	1	Orig	20 December 2000	Circuit uP Board
***AN 0600/1	1	Orig	20 December 2000	Part list uP Board
***1H5-15-04766	2	Orig	20 December 2000	PCB uP Board
1H5-15-04766	5	Orig	20 December 2000	Circuit PS Board - Profibus
AN 0606/1	1 & 2	Orig	20 December 2000	Parts list PS Board - Profibus
1H5-15-04766	6	Orig	20 December 2000	PS Board - Profibus
1H5-15-04768		Orig	8 November 2000	Label - Profibus

- * These drawings are common to BAS99ATEX1180 and BASEEFA Certificate No Ex 94C2189
- ** These drawings are common to BAS99ATEX1180.

^{***} These drawings are common to BAS99ATEX1180/1