



[1] **EU-TYPE EXAMINATION CERTIFICATE**

[2] **Equipment intended for use in potentially explosive atmospheres
Directive 2014/34/EU – Annex III**

[3] Certificate Number: **EPT 19 ATEX 3192 X** issue 1

[4] Equipment: **AT-10* Series
Pressure switches & gauges**

[5] Manufacturer: **Comhas S.r.l.**

[6] Address: **Via Matteotti, 66 - 20092 Cinisello Balsamo (MI) Italia**

[7] This equipment and its accepted variations are specified in the annex to this Certificate.


[8] Eurofins Product Testing Italy S.r.l., Notified Body n. 0477 in accordance with Article 21 of the Directive 2014/34/EU of the European Parliament and of the Council of 26th February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II of the Directive. The examination and test results are recorded in the confidential Report N° EPT.20.REL.01/2013102

[9] Compliance with the essential health and safety requirements is assured through the verification of them and by compliance with the standard:

EN IEC 60079-0:2018; EN 60079-1:2014; EN 60079-31:2014

[10] If the sign "X" is placed after the Certificate number, it indicates that the equipment is subject to the special conditions for safe use specified in the annex to this Certificate.

[11] This EU-TYPE EXAMINATION CERTIFICATE relates only to the design, the exam and the tests of the specified equipment.
Further requirements of the Directive 2014/34/EU apply to the manufacture and supply of this equipment. These requirements are not object of this Certificate.

[12] The equipment shall include the sign  and the following strings:

II 2G Ex db IIC T5, T6 Gb	or	Ambient temperature range	and	Temperature class
		-60 °C ≤ Ta ≤ +50 °C		T6
II 2G Ex db IIC T5, T6 Gb	and	-60 °C ≤ Ta ≤ +60 °C		T5
II 2D Ex tb IIIC T75 °C Db				
Process fluid temperature range (-60 °C ÷ +60 °C)				



Place and date of issue:
Torino, 2020-11-23



Dionisio Bucchieri
Directive Responsible



Paolo Trisoglio
Managing Director



PRD N° 119B
Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC
Signatory of EA, IAF and ILAC Mutual Recognition Agreements

This Certificate has 6 pages and it is reproducible only in its entirety. Conditions of validity are reported below.

[13]

ANNEX

[14]

EU-TYPE EXAMINATION CERTIFICATE N. EPT 19 ATEX 3192 X

issue 1

**[15] Equipment description**

The AT-10* series equipment are electrical devices protected by Ex db or / and Ex tb enclosures, suitable for use in presence of gas and dust explosive atmospheres.

The equipment is composed of a flameproof / dust tight enclosure with different dimensions (eventually with extensions), that contains instruments that may be connected to the external pressure sources (process connection) by two types of breathing devices, LD or STD.

These breathing devices can be installed on the pressure ports that are connected with the internal instrument, or coupled to the internal volume of enclosure, in order to maintain the internal pressure value within the limits of EN 60079-1 standard in presence of failure of containment system.

The instruments installed inside the enclosure are pressure switches, differential pressure switches, gauges and transmitters of series 2000, 1900, 616KD, 616KD-LR, 668B/D, ADPS, BYDS, EDPS, 607D, MS2, DM-2000, DM-2100, MS, 1800, DH3, DHC, 3000MR/MRS, 605, 607 and A3000, manufactured by Dwyer Instruments Inc.

The maximum permitted process fluid pressure, in relation to the breathing devices configuration, is detailed in safety parameters section.

Model Reference

The characteristics of the apparatus are codified according to the following schema:

[a]	[b]	[c]	[d]	[e] or [e ₁]	[f]	[g]	[h]	[i]
■ ■	■ ■ ■ ■	■	■	*	■	■ ■ ■ ■ ■	■ ■	■ ... ■

Number of digits (■)

Instrument identification code installed inside enclosure (* _)

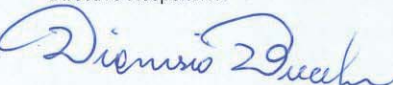
[a] Equipment Type:	AT	: Explosion proof version
[b] Enclosure dimension:	100	: Type GUB-100 enclosure
	101	: Type GUB-101 enclosure
	102	: Type GUB-102 enclosure
[c] Enclosure extension:	N	: Without extension
	P	: Enclosure with extension
[d] Materials	A	: Enclosure manufactured in aluminum alloy
	S	: Enclosure manufactured in stainless steel
[e] Instrument identification code: (With no influences on type of protection)	*	: Instrument code (manufactured by Dwyer Instruments Inc.)
	These instruments types shall not be connected to a process that contains a flammable fluid or explosive atmospheres.	
[e ₁] Instrument identification code: (With influences on type of protection)	-	: 20 ■ ■ - ■ ■ ■ BUNA IC
	-	: 182 ■ - ■ ■ BUNA
[f] Top cover type:	The instruments listed above can be connected to a process that contains a flammable fluid or explosive atmospheres.	
	B	: Blind top cover
	W	: Top cover with cemented glass window



PRD N° 119B

Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC
Signatory of EA, IAF and ILAC Mutual Recognition Agreements

Dionisio Bucchieri
Directive Responsible



Page 2 of 6
2020-11-23

[13]

ANNEX


[14]

EU-TYPE EXAMINATION CERTIFICATE N. EPT 19 ATEX 3192 X

issue 1

**[15] Equipment description***(continue)*

[g] Breathing device:	Identification:	1	: Brass made breathing device.
		2	: Stainless steel made breathing device.
	Configuration:	VS0	: Two identical STD breathing valves installed at measure pressure ports with no additional breathing device, connected to the enclosure internal volume.
		VL0	: Two identical LD breathing valves installed at measure pressure ports with no additional breathing device, connected to the enclosure internal volume.
		VS1	: Two identical STD breathing valves installed at measure pressure ports with an additional breathing device type STD, connected to the enclosure internal volume.
		VS2	: Two identical STD breathing valves installed at measure pressure ports with an additional breathing device type LD, connected to the enclosure internal volume.
		VL1	: Two identical LD breathing valves installed at measure pressure ports, with an additional breathing device type LD, connected to the enclosure internal volume.
The maximum process pressures permitted for these configurations are detailed as safety parameters.			
[h] Cable entry:	12	: ½" NPT ANSI/ASME B1.20.1.	
	34	: ¾" NPT ANSI/ASME B1.20.1.	
	20	: ISO M 20 x 1,5 mm	
	25	: ISO M 25 x 1,5 mm	
[i] Supplementary digits :	...	: Other digits of equipment code with no influences on type of protection.	

**PRD N° 119B**Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC
Signatory of EA, IAF and ILAC Mutual Recognition AgreementsDionisio Bucchieri
Directive Responsible

Page 3 of 6
2020-11-23

[13]

ANNEX

[14]

EU-TYPE EXAMINATION CERTIFICATE N. EPT 19 ATEX 3192 X

issue 1

**[15] Equipment description***(continue)***Safety parameters:**

In the table below are detailed the maximum process pressure values, applicable to a measure ports, in relation to the breathing elements type installed and their configurations:

Breathing device defined configurations	Simplified scheme of breathing devices						Maximum pressure value with:	
	Pressure port 1 breathing device type		Pressure port 2 breathing device type		Enclosure breathing device type		only one pressure port connected	both pressure ports connected
VS0	Pressure port 1 breathing device type	STD	Pressure port 2 breathing device type	STD	Enclosure breathing device type	none	10 kPa	10 kPa
VL0		LD		LD		none	10 kPa	10 kPa
VS1		STD		STD		STD	20 kPa	15 kPa
VS2		STD		STD		LD	40 kPa	20 kPa
VL1		LD		LD		LD	20 kPa	15 kPa

Rated characteristics:

- Supply voltage up to: 240 V;
- Supply current up to: 500 mA;
- Maximum dissipated power: 6 W

Warning label

- "WARNING – DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT"

Routine tests

The equipment having a threaded cover with cemented window (identified by the **W** letter, as indicated in [f] field of the key code), shall be submitted at the batch overpressure routine test, as prescribed at § 16.6 of the EN 60079-1 standard, at the pressure value of **1800 kPa** for at least 10 s, since the devices have passed the type overpressure test, carried out applying static method, at a pressure value equal to **3** times the reference pressure recorded.

The equipment having a blind threaded cover (identified by the **B** letter, as indicated in [f] field of the key code), are **exempted** to the routine overpressure test, since the devices have passed the type overpressure test, carried out applying static method, at a pressure value equal to **4** times the reference pressure recorded.

The instruments listed in the [e₁] field of the key code, that are the only suitable for use with a flammable process fluids, shall be submitted to the routine overpressure test, as prescribed in the § G.4.1 of the EN 60079-1 standard, at a pressure value of **60 kPa**, for at least 2 min.

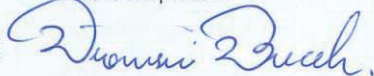
[16] Assessment Report n° EPT.20.REL.01/2013102

This EU-Type Examination Certificate is released after the positive result of the conformity assessment of the Council Directive 2014/34/EU and to harmonized technical standards listed in this certificate performed by the Notified Body Eurofins Product Testing Italy S.r.l., and reported in the Assessment Report above cited.

**PRD N° 119B**

Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC
Signatory of EA, IAF and ILAC Mutual Recognition Agreements

Dionisio Bucchieri
Directive Responsible



Page 4 of 6
2020-11-23

[13]

ANNEX

[14]

EU-TYPE EXAMINATION CERTIFICATE N. EPT 19 ATEX 3192 X

issue 1

[17] **Specific conditions of use**

The flameproof joints are not intended to be repaired.

Potential electrostatic charge risk –See instructions (applicable only when the device is marked for category 2D)

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

Assured by compliance with harmonized standards listed in [9].

[19] **Descriptive documents**

The equipment objects of this Certificate are described by the following scheduled documents; they cannot be modified without the explicit authorization of the Notified Body.

Type of document	Document identification	Rev.	Date
Drawing	AM005 (GUB 101 / GUB 101W)	04	2019/03/29
“	AM006 (GUB 102 / GUB 102W)	04	2019/03/29
“	AM007 (GUB 100 / GUB 100W)	04	2019/03/29
“	AM008 (Extension for GUB 102)	03	2019/03/29
“	AM009 (Flame arrestor 400 - STD)	05	2019/03/28
“	AM050 (Flame arrestor series LD)	07	2019/03/29
“	AM052 (GUB 102 / GUB 102W Steel)	02	2019/03/28
“	AM053 (Extension for GUB 102 Steel)	01	2019/03/28
“	AM054 (Threaded joints for GUB)	00	2019/03/08
“	DM133 (Identification and certification tags)	03	2020/07/27
Safety instructions	Safety note «Pressure and Differential Pressure switches, gauges and transmitters, COMHAS Series AT-10****»	01	2020/07/16
Technical description document	TECHNICAL NOTE AT10****	01	2020/07/21
Manufacturing Procedure	Procedura Sigillatura AT10****	00	2019/03/15

**PRD N° 119B**

Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC
Signatory of EA, IAF and ILAC Mutual Recognition Agreements

Dionisio Bucchieri
Directive Responsible



Page 5 of 6
2020-11-23

[13]

ANNEX

[14]

EU-TYPE EXAMINATION CERTIFICATE N. EPT 19 ATEX 3192 X

issue 1

**[20] Terms and conditions**

The product liability rests with the Manufacturer, his representative or, in the absence of a representative, with the importer, in accordance with the General Product Safety Directive 2001/95/EC.

The following conditions may render this certificate invalid:

- changes in the design or construction of the product;
- changes or amendments to the Directive;
- changes or amendments in the standards which form the basis for documenting compliance with the essential requirements of the 2014/34/EU Directive.

[21] History

Issue 1 Editorial changes (*the key code of product has been modified as required by the manufacturer*).

**PRD N° 119B**

Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC
Signatory of EA, IAF and ILAC Mutual Recognition Agreements


Dionisio Bucchieri
Directive Responsible

End of Certificate

Page 6 of 6
2020-11-23