

[1]

EU-TYPE EXAMINATION CERTIFICATE

[2] Product Intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

[3] EU-Type Examination Certificate Number: DNV 21 ATEX 81471 Issue 0

[4] Product: Pressure or temperature transmitters HART series HMX, HWX, HIX, AX

[5] Manufacturer: Gefran S.p.A.

[6] Address: Via Sebina, 74
25050 Provaglio d'Iseo (BS) - Italy

[7] This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] DNV Product Assurance AS, notified body number 2460, in accordance with Article 17 and Article 21 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products 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 item 16.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with: EN IEC 60079-0:2018, EN 60079-11:2012, EN 60079-26:2015

Where additional criteria beyond those given here have been used, they are listed at item 18 in the Schedule.

- [10] If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.
- [11] This EU-TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.
- [12] The marking of the product shall include the following:

II 1 G Ex ia IIC T6, T5 or T4 Ga
II 1 D Ex ia IIIC T₂₀₀85°C, T₂₀₀100°C or T₂₀₀110°C Da

Date of issue: 2021-09-02



Ståle Sandstad
For DNV Product Assurance AS
The Certificate has been digitally signed.
See www.dnv.com/digitalsignatures for info





[13] Schedule

[14] **EU-Type Examination Certificate No**: DNV 21 ATEX 81471 Issue 0

[15] **Description of Product**

HART transmitters series HMX, HWX, HIX, AX are available as Melt pressure or temperature transmitters.

The Melt pressure transmitters type are coded as follow:

- Oil-filled series HWX
- Mercury-filled series HMX
- Fluid free IMPACT series HIX

The temperature transmittes (AX) are coded as follow:

- Transmitters with RTD
- Transmitters with TC

These equipment are suitable to measure the pressure or temperature in different industrial applications, plastic processing and other industrial process control systems in hazardous area.

Type Identification

Melt pressure transmitters HMX0 – HMX1 – HMX2 – HMX3 – HMX4 Melt pressure transmitters HIX0 – HIX1 – HIX2 Temperature transmitters AXC – AXR

Intrinsic safety electrical data

Ui: 30 V Ii: 100 mA Pi: 750 mW Ci: 10 nF Li: 17 µH

The parameters of Ci and Li, include Cc and Lc values, in case of the permanently connected cable, calculated for a length of 15 m (Lc \leq 1 μ H/m and Cc \leq 100 pF/m).

The HART transmitters shall be supplied by associated apparatus having galvanic insulation, certified according to EN IEC 60079-0 and EN 60079-11, with the electrical data reported in this clause.

Ambient temperature

-20°C to +60°C for T6/ $T_{200}85$ °C -20°C to +75°C for T5/ $T_{200}100$ °C -20°C to +85°C for T4/ $T_{200}110$ °C

Degrees of protection (IP Code)

IP65 according to EN 60529:1991 + EC:1993 + A1:2000 + A2:2013 + EC:2016 + A2/EC:2019

Routine tests

None.



[16] Report No.: SC242949-20210722-DA-I-GBR

Project No.: PRJ-242949-2021-PA-ITA

[17] Specific Conditions of Use

None

[18] Essential Health and Safety Requirements

Met by compliance with the requirements mentioned in item 9.

[19] Drawings and documents

Number	Title	Rev.	Date
ST066	Technical note	3	2021/05/14
80527B_Safety note_AX	AX Safety note		2021/04
80528C_Safety note_HIX	Safety note	0	2021/04
80532C_Safety note_HMX-HWX Safety note		0	2021/04
DOC891 (Melt HIX)	Declaration of conformity	0	2020/04
DOC905 (Melt HWX≤500bar)	Declaration of conformity		2020/04
DOC917 (HMX FS min 500bar)	Declaration of conformity		2020/04
DOCxxx (AXC-AXR)	Declaration of conformity	0	2020/04
SME445R2	Electric diagram	2	2020/04/16
SME456R3	Electric diagram	3	2020/04/16
SME457R2	Electric diagram	1	2014/02/28
CSE445R1	Circuit diagram	1	2020/04/15
DME445R2	Bill of materials	2	2020/04/15
DME456R3	Bill of materials	3	2020/04/15
DME457R2	Bill of materials	2	2014/02/17
SN1675R1	Drawing Magnetic pen "Impact"	1	2008/09/19
SN1898R0	Drawing assembly transmitter HIX0	0	2013/09/09
SN1899R0	Drawing assembly transmitter HIX1	0	2013/09/09
SN1900R0	Drawing assembly transmitter HIX2	0	2013/09/09
SN1901R0	Drawing assembly transmitter HMX0	0	2013/09/09
SN1902R0	Drawing assembly transmitter HMX1	0	2013/09/09
SN1903R0	Drawing assembly transmitter HMX2	0	2013/09/09
SN1904R0	Drawing assembly transmitter HMX3	0	2013/09/09
SN1905R0	Drawing assembly transmitter HMX4	0	2013/09/09
SN1906R0	Drawing assembly transmitter AXC2	0	2013/09/09
SN1907R0	Drawing assembly transmitter AXC6M	0	2013/09/09
SN1908R0	Drawing assembly transmitter AXR2	0	2013/09/09
SN1909R0	Drawing assembly transmitter	0	2013/09/09



Number	Title	Rev.	Date
	AXR6M		
SN1910R0	Drawing assembly transmitter AXRM	0	2013/09/09
SN1911R0	Drawing application MELT ATEX	0	2013/09/09
SN1912R0	Drawing application IMPACT ATEX	0	2013/09/09
SN1913R0	Drawing connction ATEX HART	0	2013/09/09
SN1914R0	Drawing application AXR	0	2013/09/09
SN1915R0	Drawing application AXC	0	2013/09/09
SN1924R1	Drawing pen support	1	2013/03/10
SN1931R0	Drawing female connector	0	2013/09/09
ST066DS	Datasheet materials and cable	0	2013/11/19
SN2316R1	Drawing ATEX label (TAR276)	1	2021/02/18
SN2396R1	Drawing ATEX label (TAR729)	1	2020/04/28

[20] Certificate History

Issue	Description	Issue date	Report no.
-	Original issue (DNV 13 ATEX 3894), now replaced	2014-04-30	Z0492663-20140228-
			DA-I-RII
0	Re-issue. Standard update to EN IEC 60079-	2021-09-02	SC242949-20210722-
	0:2018 and EN 60079-26:2015		DA-I-GBR

END OF CERTIFICATE