

OBAC

Ośrodek Badań, Atestacji i Certyfikacji Sp. z o.o.
44-121 Gliwice, ul. Łabędzka 21

(1) TYPE EXAMINATION CERTIFICATE

(Translation)

(2) Equipment, components and protective systems intended for use in potentially explosive atmospheres. Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014.

(3) Type examination certificate No: **OBAC 19 ATEX 0322X**

(4) Product: **Centrifugal fan type: EMT-...-... 2G/2D...**

(5) Manufacturer: **Venture Industries Sp. z o.o.**

(6) Address: **ul. Mokra 27, 05-092 Łomianki-Kiełpin**

(7) This equipment, component or protective system and any of its approved version is specified in this certificate and in documents listed in p. 19.

(8) Ośrodek Badań Atestacji i Certyfikacji OBAC Sp. z o.o. (The Institute for Research and Certification „OBAC” Ltd) certifies that this equipment, component or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment, component or protective systems intended for use in potentially explosive atmospheres given in Annex II to the European Council Directive 2014/34/EU.

The examination and test results are recorded in the confidential report No. OBAC/19/ATEX/0322.

(9) Compliance with the Safety Requirements has been assured by conformity with:

PN-EN ISO 80079-36:2016-07
(EN ISO 80079-36:2016)

PN-EN ISO 80079-37:2016-07
(EN ISO 80079-37:2016)

PN-EN 14986:2017-02
(EN 14986:2017)

(10) If the sign „X” is placed after the certificate number, it indicates that the product concerned is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This certificate is valid from **20.12.2019** until **19.12.2024** and relates only to the design, assessment and tests of the specified equipment according to the Directive 2014/34/EU. The certificate does not apply to further requirements of the Directive relating to the manufacture and placing on the market of this equipment.

(12) The marking of the equipment, component or protective system must include the following:



II 2G

Ex h IIB+H₂ T3 Gb



II 2G

Ex h IIB+H₂ T4 Gb



II 2D

Ex h IIIC T125°C Db



**by proxy of Certification
Body Manager**

Zbigniew Tarnawski M. Sc.

Gliwice, 20 December 2019.

Druk nr OBAC/PO-6/F3

wyd. 2

Strona 1 z 3



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44-121 Gliwice, ul. Łabędzka 21

(13)

SCHEDULE

(14)

**to the Type Examination Certificate
no. OBAC 19 ATEX 0322X**

(15) Ex Product description:

Centrifugal fans type EMT are driven directly by a motor installed to the fan structure, located outside of the pressure area, with direct cooling on the motor shaft. The device constitutes a set of mechanical and electrical components with Ex designation, as well as of additional electrical elements. Depending on the model, the revolution speed of the fan is adjusted by changing the voltage frequency.

Marking:

EMT-a-bc d, x, y, z, v

whereas:

EMT – fan type

a – number of poles and gears

b – fan size (03, 25, 50, 70, 90, 160, 200, 290)

c – number of phases (S - single-phase, T – tri-phase)

d – device category (2G or 2D)

x – fan figure (LG..., RD...)

y – fan voltage (230V, 230/400V, 400V, 440V, 480V, 400/690V, 265/460V, 460V)

z – fan frequency (50 Hz, 60 Hz)

v – inverter control (VFD)

The fans use electric motors with a temperature class adapted to the temperature class of the fan that have the following certificates:

EPT 17 ATEX 2588 X;

OBAC 14 ATEX 0048X;

KDB 15ATEX0082X;

CESI 13 ATEX 007 X /01;

PTB 18 ATEX 3005;

PTB 18 ATEX 3008;

PTB 18 ATEX 3011;

EUM1 12 ATEX 0744;

OBAC 15 ATEX 0114X;

CESI 05 ATEX 110 X /06;

FTZU 13 ATEX 0054;

PTB 18 ATEX 3006;

PTB 18 ATEX 3009;

OBAC 14 ATEX 0047X;

OBAC 16 ATEX 0118X;

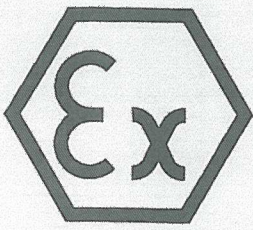
CESI 13 ATEX 008 X /01;

CNEX 17 ATEX 0004 X;

PTB 18 ATEX 3007;

PTB 18 ATEX 3010;





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(13)

SCHEDULE

(14)

**to the Type Examination Certificate
no. OBAC 19 ATEX 0322X**

Rated data:

Rated data of fans are presented in the manufacturer's documentation, referred to in item 19.

(16) **Centrifugal fan type: EMT-...-... 2G/2D...** meet the requirements for devices with explosion proof design and may be used as a device of group II, category 2G or 2D.

(17) Special conditions for safe operation:


- The fan structure in the installation point should be grounded in order to ensure outflow of static charges.
- Electrical motors of the fan should be protected from short-circuits and overloads in accordance with the requirements of the standard PN-EN 60204-1.
- Permissible ambient temperature range of the device and of the medium on the fan intake is -20°C to +60°C or smaller, in accordance with the rating plate and temperature class of the used electrical motor.
- Fans of 2D category have to be equipped with a vibration monitoring system.
- The control system or the part of it that will be connected to the vibration monitoring system should comply with the "b1" combustion protection requirements in accordance with Section 6 of the standard PN-EN ISO 80079-37:2016-07 concerning the combustion sources monitoring system. The use parameters of the combustion protection system are specified by the manufacturer of the fan.


(18) The compliance with Safety Requirements has been assured by compliance with standards shown in p.9 of this certificate.

(19) List of agreed documentation:

- Use and installation manual of centrifugal fans type EMT-...

 II 2G Ex h IIB+H2 T3 Gb


 II 2G Ex h IIB+H2 T4 Gb


 II 2D Ex h IIIC T125°C Db

Instruction no. EMT-2019-V1 prepared by Venture Industries Sp. z o.o. shall prevail from 25.10.2019.

- Project documentation, directive: 2014/34/EU. Centrifugal fans - EMT.

 II 2G Ex h IIB+H2 T3 Gb

 II 2G Ex h IIB+H2 T4 Gb

 II 2D Ex h IIIC T125°C Db

Document version: DP/EMT/2019 prepared by Venture Industries Sp. z o.o. shall prevail from 25.10.2019.





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44-121 Gliwice, ul. Łabędzka 21

(1) **Schedule No.1**
to
the certificate No. OBAC 19 ATEX 0322X

(2) Equipment, components or protective systems intended for use in potentially explosive atmospheres. Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014.

(3) Product: **Centrifugal fan type: EMT-....-... 2G/2D...**

(4) Manufacturer: **Venture Industries Sp. z o.o.**

(5) Address: **ul. Mokra 27, 05-092 Łomianki-Kiełpin**

(6) Compliance with the Safety Requirements has been assured by conformity with:

PN-EN ISO 80079-36:2016-07
(EN ISO 80079-36:2016)

PN-EN ISO 80079-37:2016-07
(EN ISO 80079-37:2016)

PN-EN 14986:2017-02
(EN 14986:2017)

(7) Description of changes:

The modification consists in extending the version of radial fans of the EMT type with a version equipped with an inductive speed sensor of the NG5002 type with certificates No. PTB 01 ATEX 2191 and BSV 04 ATEX E 153.

Fan designation: **EMT-a-bc d, w, x, y, z, v**

where:

EMT – fan type

a – number of poles and gears

b – fan size (03, 25, 50, 70, 90, 160, 200, 290)

c – number of phases (S - single-phase, T - three-phase)

d – device category (2G or 2D)

w – version with a rotation sensor (RS) or without the sensor (no RS designation)

x – fan figure (LG..., RD...)

y – fan voltage (230V, 230/400V, 400V, 440V, 480V, 400/690V, 265/460V, 460V)

z – fan frequency (50Hz, 60Hz)

v – inverter control (VFD)

The fans may be equipped with electric motors of a temperature class suitable for the fan temperature class, as well as with new type motors of a different efficiency class, which are certified according to the certificate No. OBAC 19 ATEX 0322X and, additionally, motors certified according to the certificate No.: TÜV IT 14 ATEX 050 X; EPT 19 ATEX 3409 X.



Head of Certification Body

Piotr Tarnawski M. Com.

Gliwice, 25 October 2021.



OBAC

Ośrodek Badań, Atestacji i Certyfikacji Sp. z o.o.
44-121 Gliwice, ul. Łabędzka 21

(1) **Schedule No.1**
to
the certificate No. OBAC 19 ATEX 0322X

Rated data:




The rated data of the fans is presented in the manufacturer's documentation specified in the assessment report no. OBAC/21/ATEX/0486.

(8) The result of tests conducted:

Explosion proof design is confirmed in the confidential product assessment report: OBAC/21/ATEX/0486.

The introduced changes meet the requirements for equipment of group II category 2G or 2D.

The explosion-proof product feature, depending on the used electric motor and gas explosion atmosphere, may be as follows:

-  **II 2G Ex h IIB+H₂ T3 Gb**
-  **II 2G Ex h IIB+H₂ T4 Gb**
-  **II 2D Ex h IIC T125°C Db**

(9) Special conditions for use:

- No change compared to certificate no. OBAC 19 ATEX 0322X.

(10) Technical documentation:

The technical documentation is specified in the confidential report no. OBAC/21/ATEX/0486.

This Annex to the Certificate is applicable in the period from **25.10.2021** until **19.12.2024** and concerns solely the specimen of the product having identical characteristics (parameters) to the specimen supplied for the assessment and compliant with the requirements specified in item 6 hereof.





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44-121 Gliwice, ul. Łabędzka 21

(1)

Schedule No. 2

to

the certificate No. OBAC 19 ATEX 0322X

(2) Equipment, products and protective systems intended for use in Potentially Explosive Atmospheres. Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014.

(3) Product: **Centrifugal fan type: EMT-....-... 2G/2D...**

(4) Manufacturer: **Venture Industries Sp. z o.o.**

(5) Address: **ul. Mokra 27, 05-092 Łomianki-Kiełpin**

(6) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

PN-EN ISO 80079-36:2016-07 PN-EN ISO 80079-37:2016-07 PN-EN 14986:2017-02
(EN ISO 80079-36:2016) (EN ISO 80079-37:2016) (EN 14986:2017)

(7) Description of changes:

The change concerns extension of the number of types of electric motors used in fans and the update of their certificates, resulting from the introduction of the requirements of Commission Regulation (EU) 2019/1781 of October 1, 2019. The Ex marking of these motors does not change or is updated, and the new motors differ only in their efficiency class. Motors with the current IE1 efficiency class can still be used in fans. Changing to a motor with a different efficiency class takes place without interfering with the fan's structure and does not affect the risk of fan ignition.

In the EMT series of fans, electric motors with a temperature class adapted to the temperature class of the fans are approved for use, and have the following certificates:

JSHP 23 ATEX 0005X	OBAC 14 ATEX 0047X	CESI 03 ATEX 280X	CNEX 17 ATEX 0004X
KDB 21 ATEX 0030X	OBAC 14 ATEX 0048X	CESI 05 ATEX 110X	BVS 14 ATEX E 082
KDB 21 ATEX 0035X	OBAC 15 ATEX 0114X	LCIE 19 ATEX 3027X	PTB 12 ATEX 3018
KDB 21 ATEX 0024X	OBAC 16 ATEX 0118X	LCIE 19 ATEX 3028X	FTZU 15 ATEX 0083
KDB 21 ATEX 0016X	TÜV IT 14 ATEX 050X	LCIE 19 ATEX 3029X	DMT 01 ATEX E 014X
KDB 20 ATEX 0042X	TUV IT 14 ATEX 065X	LCIE 19 ATEX 3030X	INERIS 17 ATEX 0001X
KDB 21 ATEX 0013X	CESI 13 ATEX 008X	LCIE 19 ATEX 3031X	INERIS 22 ATEX 0025X
EPT 17 ATEX 2588X	CESI 13 ATEX 007X	DEMKO 20 ATEX 2248X	EESF 23 ATEX 005X
EPT 19 ATEX 3409X			



Head of Certification Body

Piotr Tarnawski M. Com.

Gliwice, 23 January 2024.



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(1) **Schedule No. 2**
to
the certificate No. OBAC 19 ATEX 0322X

The possibility of using additional cover, shaft and housing seals in EMT fans has been extended. The size of the seals used between grounded metal elements does not affect the risk of ignition due to electrostatics and does not change the minimum distances in the fan.




Rated data:

The rated data of the fans is presented in the manufacturer's documentation specified in the assessment report no. OBAC/23/ATEX/0512/2.

- (8) Explosion proof design is confirmed in the confidential product assessment report:
OBAC/23/ATEX/0512/2.

The introduced changes meet the requirements for equipment of group II category 2G or 2D.

The explosion-proof product marking, depending on the used electric motor and gas or dust explosion atmosphere, may be as follows:

-  **II 2G Ex h IIB+H₂ T3 Gb**
-  **II 2G Ex h IIB+H₂ T4 Gb**
-  **II 2D Ex h IIC T125°C Db**

- (9) Specific conditions of use:
– No change compared to certificate no. OBAC 19 ATEX 0322X.
- (10) Technical documentation:
The technical documentation is specified in the confidential report no: OBAC/23/ATEX/0512/2.

This Annex to the Certificate is applicable in the period from **23.01.2024** until **19.12.2024** and concerns solely the specimen of the product having identical characteristics (parameters) to the specimen supplied for the assessment and compliant with the requirements specified in item 6 hereof.

