



# OBAC

**Osrodek 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 0064X**

(4) Product: **Radial ventilators type: EBA-...-... 2G**

(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) Osrodek 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/0064.

(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)

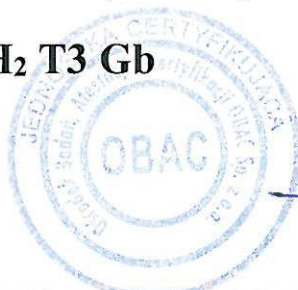
**PN-EN 14986:2017-02**  
(EN 14986:2017)

(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 **31.07.2019** until **30.07.2024** 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:

**Ex II 2G Ex h IIB+H<sub>2</sub> T3 Gb**



**by proxy of Certification  
Body Manager**

**Zbigniew Tarnawski M. Sc.**



# OBAC

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

(13)

## SCHEDULE

(14)

**to the Type Examination Certificate  
no. OBAC 19 ATEX 0064X**

(15) Ex Product description:

Radial ventilators type EBA are driven directly by an engine mounted to the ventilator's structure, located outside of the pressure area, with direct cooling on the engine shaft. The device constitutes an assembly of mechanical and electrical components marked with Ex designation, and of additional electrical elements. Depending on the model, the speed of the ventilator may adjusted through changing the supply frequency.

Name of the ventilator

**EBA-a-bc-d, x, y, z, v**

whereas:

EBA – type of the ventilator

a – number of poles and gears

b – size of the ventilator

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

d – device category (2G or 2D)

x – figure of the ventilator (LG..., RD...)

y – voltage of the ventilator (230 V, 230/400 V, 400 V, 400/690 V, 265/460 V, 460 V)

z – frequency of the ventilator (50 Hz, 60 Hz)

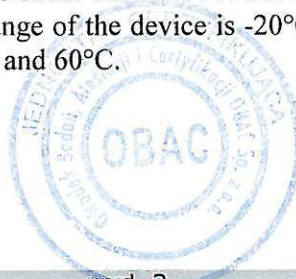
v – inverter control (VFD)

Electrical motors used in ventilators have following certificates: EPT17ATEX2588X; EUM112ATEX0744; OBAC14ATEX0047X; OBAC15ATEX0114X; OBAC16ATEX0118X; KDB15ATEX0082X

(16) **Radial ventilators type: EBA-...-... 2G** meet the requirements for devices with explosion proof design and may be used as a device of group II, category 2G or 3G.

(17) Special conditions for safe operation:

- The ventilator structure should be grounded in its mounting location in order to ensure static electricity outflow.
- Electrical motors of the ventilator shall be protected from the effects of short circuits and overloads in accordance with the requirements of the standard PN-EN 60204-1.
- Acceptable ambient temperature range of the device is -20°C to 40°C, and the medium temperature on the inlet shall be between -20°C and 60°C.





# OBAC

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

(13)

## SCHEDULE

(14)

**to the Type Examination Certificate**  
**no. OBAC 19 ATEX 0064X**

(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 assembly instruction of radial ventilators type EBA-...

II 2G Ex h IIB+H<sub>2</sub> T3 Gb

II 2D Ex h IIIC T125°C Db

II 3G Ex h IIB+H<sub>2</sub> T3 Gc

II 3D Ex h IIIB T125°C Dc

Instruction manual no. EBA-2019-V1 prepared by Venture Industries Sp. z o.o. in force from 17.05.2019.

- Product design documentation directive: 2014/34/UE. Radial ventilators - EBA.

II 2G Ex h IIB+H<sub>2</sub> T3 Gb II 2D Ex h IIIC T125°C Db

Document version: DP/EBA/2019. Prepared by Venture Industries Sp. z o.o. in force form 25.06.2019.





# 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 0064X

(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: **Radial ventilators type: EBA-...**

(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 the introduced changes:

Changes in the centrifugal fans type EBA-... have been specified in the manufacturer's documentation dated 08.01.2021 and include:

- Adding an additional temperature class T4, which applies only when an electric motor of the same class T4 is used.
- Use of a seal ring and enclosure sealing made of: NBR, FPM, FKM, VITON or PTFE
- Extending the ambient temperature range from -50°C to +80°C only when an electric motor allowed for operation in the same temperature range is used.
- Extending the fan type series by fans with a condensate drain from the fan body.
- Adding the possibility of supplying the fan with voltage 440 V and 480 V, depending on the used electric motor.
- Extending the fan type series by using the following certified motors: EPT 17 ATEX 2588X; EUM1 12 ATEX 0744; OBAC 14 ATEX 0047X; OBAC 14 ATEX 0048X; OBAC 15 ATEX 0114X; OBAC 16 ATEX 0118X; KDB 15ATEX0082X; CESI 05 ATEX 110 X /06; CESI 13 ATEX 007 X /01; CESI 13 ATEX 008 X /01; FTZU 13 ATEX 0054; CNEX 17 ATEX 0004 X; PTB 18 ATEX 3005; PTB 18 ATEX 3006; PTB 18 ATEX 3007; PTB 18 ATEX 3008; PTB 18 ATEX 3009; PTB 18 ATEX 3010; PTB 18 ATEX 3011; TÜV IT 15 ATEX 040X.
- Extending the fan type series by fans intended for use in explosive dust atmospheres marked 2D, which without the aforementioned changes are certified by tests type no. OBAC 19 ATEX 0065X.



**Certification Body  
Manager**

**Piotr Tarnawski M. Com.**

Gliwice, 18 January 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 0064X

Fan name: **EBA-a-bc-d, x, y, z, v**

where:

EBA – fan type

a – number of pole pairs and number of poles

b – fan size

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

d – device category (2G or 2D)

x – fan figure (LG..., RD...)

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

z – fan frequency (50 Hz, 60 Hz)

v – inverter control (VFD)

### Rated data:

The rated data of the fans is presented in the manufacturer's documentation specified in the assessment report no. OBAC/21/ATEX/0033.

(8) The result of tests conducted:

Explosion proof design is confirmed in the confidential product assessment report: OBAC/21/ATEX/0033.

The introduced changes meet the requirements for equipment of group II kcategory 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+H<sub>2</sub> T3 Gb

 II 2G Ex h IIB+H<sub>2</sub> T4 Gb

 II 2D Ex h IIIC T125°C Db





# 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 0064X**

(9) Special conditions for use:

- The permissible ambient temperature range is  $-50^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$  or smaller, according to the rated plate of the fan and the electric motor, and the medium temperature range on the fan inlet is  $-20^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$ .
- 2D-category fans shall be equipped with a vibration monitoring system. The vibration sensor shall be connected to the master control system of the fan, compliant with the ignition protection requirements type “b1” in accordance with Section 6 of the PN-EN ISO 80079-37:2016-07 standard (ignition source monitoring system). The operation parameters of the version of the ignition prevention system are specified by the fan’s manufacturer.

(10) Technical documentation:

The technical documentation is specified in the confidential report no. OBAC/21/ATEX0033.

This Annex to the Certificate is applicable in the period from **18.01.2021** to **30.07.2024** 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.





# OBAC

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

(1) **Schedule No.2**  
**to**  
**the certificate No. OBAC 19 ATEX 0064X**

(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: EBA-...**

(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**  
(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 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 EBA 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, 6 February 2024.



# OBAC

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

(1) **Schedule No. 2**  
**to**  
**the certificate No. OBAC 19 ATEX 0064X**

In the design documentation, the scope of the rated power supply frequency was extended to 87Hz. This means increasing the maximum permissible rotational speed for fans, and thus using higher-power motors for a given fan size without affecting the risk of fan ignition, which has been confirmed by tests.

**Rated data:**

The rated data of the fans is presented in the manufacturer's documentation specified in the assessment report no. OBAC/24/ATEX/0014.

- (8) Explosion proof design is confirmed in the confidential product assessment report:  
OBAC/24/ATEX/0014.  
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+H<sub>2</sub> T3 Gb  
 II 2G Ex h IIB+H<sub>2</sub> T4 Gb  
 II 2D Ex h IIIC T125°C Db

- (9) Specific conditions of use:  
– No change compared to certificate no. OBAC 19 ATEX 0064X.
- (10) Technical documentation:  
The technical documentation is specified in the confidential report no. OBAC/24/ATEX/0014.

This Annex to the Certificate is applicable in the period from **06.02.2024** until **30.07.2024** 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.

