



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

TYPE EXAMINATION CERTIFICATE (1)

- (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, Issue 2

(4) Product:

Radial fans type EBA-...

(5) Manufacturer:

Venture Industries Sp. z o.o.

(6) Address:

ul. Mokra 27, 05-092 Łomianki-Kiełpin

- (7) This equipment, product or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- (8) Ośrodek Badań, Atestacji i Certyfikacji OBAC Sp. z o.o. (The Institute for Research and Certification "OBAC") 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 and the list of agreed technical documentation are recorded in the confidential Report no. OBAC/24/ATEX/0298.

(9) 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)

- (10) If the sign "X" is placed after the certificate number, it indicates that the product concerned is subject to specific conditions of use specified in the schedule to this certificate.
- (11) This certificate is valid from 31.07.2024 until 30.07.2029 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 h IIB+H₂ T3 Gb

II 2G Ex h IIB+H₂ T4 Gb

II 2D Ex h IIIC T125°C DE OBAC

Head of Certification Body

Piotr Tarnawski M. Com.

Gliwice, 31st July 2024. Druk nr OBAC/PO-6/F3

wyd. 2

Strona 1 z 3





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, Issue 2

(15) Ex product description:

Radial fans type EBA are driven directly by a motor mounted to the fan's structure, located outside of the pressure area, with direct cooling on the motor 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 fan may adjusted through changing the supply frequency.

In the EBA-type fan series, electric motors with a temperature class adapted to the temperature class of fans, holding the following certificates, are approved for use:

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			

Marking:

 $EBA - \dots$ type centrifugal fans

have the designation EBA-a-bc-d, x, y, z, v where the individual letters indicate:

EBA – fan type

a – number of motor poles and number of speeds

b – fan size

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

d – device category (2G, 2D, 2GD)

x – figure of the fan (LG..., RD...)

y - voltage of the fan (up to 690V)

z – supply frequency

v – inverter control (VFD)

Rated data:

The rating data of the fans are presented in the manual No. EBA-2019-V1 and the design documentation DP/EBA/2019 of 08.01.2021 along with Annex D of 20.12.2023.





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, Issue 2

(16) Report:

- OBAC/24/ATEX/0298.

(17) Specific conditions of use:

- The fan structure should be grounded in its mounting location in order to ensure static electricity outflow.
- The fan's electric motors must be protected against short-circuits and overloads in accordance with the requirements of EN 60204-1.
- The permissible ambient temperature range for the unit is -50°C to +80°C or narrower according to the fan nameplate and the temperature class of the electric motor used, and the medium temperature on the inlet shall be between -20°C and +60°C.
- It is mandatory to equip category 2D fans with a vibration monitoring system. The control system or that part of it to which the vibration sensor will be connected must meet the requirements of ignition prevention type "b1" in accordance with chapter 6 of EN ISO 80079-37:2016-07 concerning the ignition source monitoring system. The performance parameters for the implementation of the ignition prevention system are specified by the fan manufacturer.

(18) Essential health and safety requirements:

Met by compliance with the requirements mentioned in item 9.

(19) Certification history:

OBAC 19 ATEX 0064X, of 31st July 2019.	Type-examination certificate valid from 31.07.2019 to 30.07.2024.
Schedule no. 1 to the certificate no. OBAC 19 ATEX 0064X, of 18 th January 2021.	Extension of the fan type-series, concerning changes related to the design, parameters and design for use in dust atmospheres, was included in the documentation of 8 January 2021.
Schedule no. 2 to the certificate no. OBAC 19 ATEX 0064X, of 6 th February 2024.	Extension concerning the number of types of motors used in fans
OBAC 19 ATEX 0064X, Issue 2, of 31 th July 2024.	Extension of validity of certificate No. OBAC 19 ATEX 0064X, along with changes included in the appendices. Certificate valid from 31.07 2024 to 30.07.2029.

OBAC



(1)





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

Schedule No. 1

the certificate No. OBAC 19 ATEX 0064X, Issue 2

(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.

Product:

Radial fans type EBA-...

Manufacturer:

Venture Industries Sp. z o.o.

Address:

ul. Mokra 27, 05-092 Łomianki-Kiełpin

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 14986:2024-09

(EN ISO 80079-36:2016)

(EN ISO 80079-37:2016)

(EN 14986:2024)

Description of changes:

New fan models (EBA 20, EBA 70 and EBA 350) were introduced, as well as variants with a different output (EBA 40, EBA 75 and EBA 600). The 600 model uses a new higher efficiency impeller with a welded structure.

The documentation has been updated to take account of the above configurations and the revision of PN-EN 14986:2024-09. The current documentation also introduces fan equipment that can use motors with the currently required efficiency classes and with a temperature class adapted to that of the fan, as well as having valid certificates confirming the explosion-proof structure's marking:

Ex marking of the fan	Ex marking of an electric motor	
ⓑ II 2G Ex h IIB+H₂ T3 Gb	ⓑ II 2G Ex eb IIC T6T3 Gb;	
EVIT 2G EXTITIB+H ₂ 13 Gb	☑ II 2G Ex db IIC T6T3 Gb;☑ II 2G Ex db eb IIC T6T3 Gb	
© II 2G Ex h IIB+H₂ T4 Gb	☑ II 2G Ex eb IIC T6T4 Gb☑ II 2G Ex db IIC T6T4 Gb	
O 11 20 EX 11 11D+112 14 00	© II 2G Ex db HC 1614 Gb	
ⓑ II 2D Ex h IIIC T125°C Db	ⓑ II 2D Ex tb IIIC T85°CT125°C Db	

Rated data:

The rating data of the fans are presented in the manufacturer's documentation listed in the confidential

OBA

assessment report no. OBAC/25/ATEX/0004

Head of Cetification Body

Piotr Tarnawski M. Com.

Gliwice, 17 March 2025.







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

Schedule No. 1

to

the certificate No. OBAC 19 ATEX 0064X, Issue 2

Marking:

EBA - a - b - cd e x NF y z VFD w

EBA - fan type

a - number of motor poles / rotation speed

2 - 3000 prm

4 - 1500 prm

6 - 1000 prm

b - fan size

 \mathbf{c} - fan power (P[W]/10)

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

e - ATEX category of the fan (2G, 2D, 2GD)

x - outlet position (LG..., RD...)

NF - execution without base

y - fan voltage (up to 690V)

z - fan frequency (50Hz, 60Hz, 87Hz)

VFD - speed regulation with the inverter

w - motor efficiency class

eg. EBA-2-20-012T 2G LG270 230/400V 50Hz VFD IE2

(8) The result of tests conducted:

Explosion proof design is confirmed in the confidential product assessment report: OBAC/25/ATEX/0004.

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 explosive 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 IIIC T125°C Db

(9) Specific conditions of use:

- No changes compared to certificate no. OBAC 19 ATEX 0064X, Issue 2.

(10) Technical documentation:

The technical documentation is specified in the confidential report no. OBAC/25/ATEX/0004.

This Annex to the Certificate is applicable in the period from 17.03.2025 to 30.07.2029 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.

