E P ENERGY PETROLEUM INSTITUTE



(1)

EU-Type Examination Certificate

(2) Equipment or Protective Systems Intended for use in Potentially Explosive Atmospheres

Directive 2014/34/EU

- (3) EU Type Examination Certificate Number: IEP 25 ATEX 1703X
- (4) Equipment: ABF and OBF Series Centrifugal Fan
- (5) Manufacturer: HAVART İklimlendirme Limited Şirketi
- (6) Address: Beşevler Mah. Yıldırım Cad. No:336A /1 Nilüfer Bursa / TÜRKİYE
- (7) Production Location: Pamucak OSB Mah. 2. Cad. No:14/1 Pazaryeri Bilecik / TÜRKİYE
- (8) This product any of acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- (9) The IEP Uluslararası Enerji Petrol Gözetim, Sertifikasyon ve Teknik Hizmetler Organizasyonu Tic. Ltd. Şti., notified body number 2284 in accordance with Article 17 of the Directive 2014/34/EU of 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 Report Nr: IEP.Rp.Ex.10-3403 date 15.09.2025.
- (10) Compliance with Essential Health and safety requirements has been assured by compliance with;

EN 14986:2017, EN IEC 60079-0:2018, EN ISO 80079-36:2016

- (11) If the sign "X" is placed after the certificate number, it indicates that the product is subject to specified conditions of safe use specified in the schedule to this certificate.
- (12) 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.
- (13) The marking of the equipment or protective system shall include the following:



II 2G Ex db or eb IIB T4 Gb / II 2G Ex h IIB T4 Gb II 2D Ex tb IIIB T 120°C Db / II 2D Ex h IIIB T 120°C Db

Responsible Person:

Nurettin Terzioglu Head of Certification Body



Date of Issue: 18.09.2025



IEP Uluslararası Enerji Petrol Göz., Sertifikasyon ve Teknik Hiz. Org. Tic. Ltd. Sti. 5746/1 Sok. No:9 K:2 Bornova- IZMIR / TÜRKİYE

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(14) Schedule

(15) Certificate Nr: IEP 25 ATEX 1703X

(16) Description of Equipment:

ABF Low Pressure and OBF Medium Pressure Centrifugal Fans are single inlet. Fans are used for ventilation purposes. These devices are used for IIB gas and IIIB dust group explosive atmospheres. Cylindrical duct casing in S235JR steel, covering impeller (motor protrudes at rear). Rolled flanges at both ends. Dimensions and flange drillings to Explosion-proof execution according to ATEX. The mechanical and electrical parts list for ABF and OBF Centrifugal Fans is dated 08.09.2025. Fans are used as external zone 1 or zone 21 that be used danger area determined in the EN 60079-10-1 and EN 60079-10-2 standard. Information's of assembled working of channel type fans with order related equipment's exist in instruction manual with 16 pages and dated 08.2025.

Technical Parameters:

| Туре | Capacity (m ³ /h) | Motor Power (kW) | Speed | Current (A) |
|------------|------------------------------|------------------|-------------|-------------|
| ABF 250-EX | 1500 ~ 7250h | 0,25 ~ 3,00 | 1360 ~ 2900 | 0,9 ~ 6 |
| ABF 280-EX | 2000 ~ 12000 | 0,55 ~ 5,50 | 1370 ~ 2900 | 1,6 ~ 11 |
| ABF 315-EX | 2700 ~ 17000 | 1,10 ~ 11,0 | 1390 ~ 2930 | 2,6 ~ 19,5 |
| ABF 355-EX | 2300 ~ 24000 | 0,37 ~ 18,5 | 930 ~ 2935 | 1,2 ~ 34 |
| ABF 400-EX | 3500 ~ 15000 | 1,10 ~ 4,00 | 930 ~ 1430 | 2,9 ~ 8,2 |
| ABF 450-EX | 4500 ~ 21000 | 2,20 ~ 7,50 | 950 ~ 1450 | 5,4 ~ 15,4 |
| ABF 500-EX | 7000 ~ 34000 | 4,00 ~ 15,0 | 960 ~ 1460 | 9~29,3 |
| ABF 560-EX | 9000 ~ 48000 | 5,50 ~ 22,0 | 950 ~ 1460 | 12,3 ~ 42,5 |
| OBF 100-EX | 380 ~ 850 | 0,18 | 2820 | 0,55 |
| OBF 140-EX | 480 ~ 1300 | 0,37 | 2800 | 1,1 |
| OBF 160-EX | 600 ~ 1850 | 0,55 | 2780 | 1,3 |
| OBF 180-EX | 1100 ~ 2750 | 1,1 | 2900 | 2,3 |
| OBF 200-EX | 1700 ~ 4250 | 2,2 | 2900 | 4,5 |
| OBF 224-EX | 2500 ~ 6000 | 4 | 2910 | 7,9 |
| OBF 250-EX | 3400 ~ 8500 | 7,5 | 2910 | 13,6 |
| OBF 280-EX | 4300 ~ 10800 | 11 | 2945 | 19,5 |
| OBF 315-EX | 6000 ~ 17000 | 18,5 | 2950 | 32,3 |

Frequency: 50 / 60 Hz, Voltage: $400 \sim 460 \text{ V}$ Ambient Temperature Max ($-20 \sim +40 \text{ °C}$) Air / Gas Transition Max 80 °C

Responsible Person:

Nurettin Terzioglu Head of Certification Body





IEP Uluslararası Enerji Petrol Gözetim, Sertifikasyon ve Teknik Hizmetler Organizasyon Ticaret Limited Sirketi 5746/1 Sok. No:9 K:2 Bornova - IZMIR/TÜRKİYE Tel:+90 232 4311745 (pbx) Fax:+90 232 4311730 E-mail: iep@iep.com.tr Fr:45 This certificate is granted subject to the general conditions of the IEP Energy Petroleum Institute. This certificate may only be reproduced in its entirety and without any change, schedule included. You can check accuracy of this document by www.iep.com.tr



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(17) Certificate Nr: IEP 25 ATEX 1703X

(18) Special conditions for safe use;

The installation and the operation of the centrifugal fans have to confirm the relevant national regulations.

(19) Essential Health and Safety Requirements:

19.1 Are included in standards, which are mentioned in clause (10) of this certificate. The products were approved in accordance with above mentioned standards and manufacturer's instruction.

19.2 At the installation and the operation of the centrifugal fans have to observe the manufacturer's manual 16 pages dated 08.2025.

19.3 (IEP 25 ATEX 1703X) X means: Periodic inspection and maintenance should be done by authorized personnel according to the user manual and related standards. Its assembly and revision must be done by authorized personnel.

(20) List of Documentation:

• Fans user manual : 16 pages, dated 08.2025

Component Lists : Table 1/2/3, dated 08.09.2025

• Risk assessment report : EN 14986:2017 / Annex E (06.09.2025)

Drawings:

| Drawing Nr; | Date; | Drawing Nr; | Date; |
|------------------------|------------|---------------------|------------|
| ABF-315-11-15 | 28.11.2024 | OBF 315 | 18.09.2024 |
| ABF-315-11-TR | 28.11.2024 | OBF 315-18,5 | 12.07.2023 |
| ABF-315-front | 28.11.2024 | OBF 315-160 | 09.01.2024 |
| ABF-315-11-15 support1 | 28.11.2024 | OBF 315-160 base | 09.01.2024 |
| ABF-315-11-15 support2 | 28.11.2024 | OBF 315-160 support | 18.09.2024 |
| ABF 315 | 28.11.2024 | OBF 315 base below | 09.01.2024 |
| ABF-315-11-15 support3 | 28.11.2024 | OBF 315 protection | 09.01.2024 |
| ABF-315-rear | 28.11.2024 | OBF 315-front | 09.01.2024 |

The validity of analysis type certificate, the parts that are used in centrifugal fan is determined in confirmed the list of equipment's table 1/2/3 date 08.09.2025. Installation and maintenance should be done by authorized personnel according to the standard and manual.

MANDICE

Responsible Person:

Nurettin Terzioglu Head of Certification Body Date of Issue : 18.09.2025

