

# FIRE SAFETY CERTIFICATION

## PRODUCT APPROVAL

No. **APF-1503**

**LGAI TECHNOLOGICAL CENTER S.A. (APPLUS)**, according to the requirements of the SPC-102 Ed. 8, certifies the performances stated in the technical annex following the reference standard for:



<b>Product model</b>	F300/2 hours - RADIAL JET FAN ARMO-JR 50 60 Hz
<b>Company</b>	<b>BAHÇIVAN HAVALANDIRMA SİSTEMLERİ VE ELEKTRİK MOTORLARI SAN. VE TIC. A.Ş</b> ÖMERLİ MAH. HADIMKÖY CD. No: 147 34555 ARNAVUTKÖY, İSTANBUL, TÜRKİYE
<b>Manufactured</b>	<b>BAHÇIVAN HAVALANDIRMA SİSTEMLERİ VE ELEKTRİK MOTORLARI SAN. VE TIC. A.Ş</b> ÖMERLİ MAH. HADIMKÖY CD. No: 147 34555 ARNAVUTKÖY, İSTANBUL, TÜRKİYE
<b>Standard Reference</b>	EN 12101-3:2015 "Smoke and heat control systems. Part 3: Specification for powered smoke and heat control ventilators (fans)".
<b>Product Details and Test Report</b>	Please check at the technical annex file reports nº 19/17774-215 M1 and 20/23860-2428



**Renovation** of the initial certificate issued on 21<sup>th</sup> June 2019

**Valid until 30<sup>th</sup> June 2025**

Bellaterra, 26<sup>th</sup> July 2024

 LGAI Technological Center, S.A. <b>Xavier Ruiz Peña</b> Product Conformity B. U., Managing Director	
You can check the validity of this certificate on our website: <a href="http://www.appluslaboratories.com/certified_products">www.appluslaboratories.com/certified_products</a>	

This document is not valid without its technical annex, whose number coincides with the number of certificate.

## APF-1503

Annex according to **EN 12101-3:2015**

### **SMOKE AND HEAT CONTROL SYSTEMS. PART 3: SPECIFICATION FOR POWERED SMOKE AND HEAT CONTROL VENTILATORS (FANS)**

#### **CERTIFIED PERFORMANCES**

Essential characteristics	Clauses in this European Standard	Mandated level(s) or class(es)
<b>Response delay</b> - Opening under wind load within a given time; - Opening under snow load within a given time.	4.1.1	NA
		NA
<b>Operational reliability</b> - Application categories; - Motor rating.	4.2.2	<ul style="list-style-type: none"> <li>• Thermally uninsulated</li> <li>• Dual use</li> <li>• Direct/Converter Feed</li> <li>• Installation inside and outside of the smoke reservoir</li> </ul>
	4.2.3	NPD
<b>Effectiveness of smoke/hot gas extraction:</b> - Gas flow and pressure maintenance during smoke and heat extraction test.	4.3.2	[-20, +50] %
<b>Resistance to fire</b>	4.4	F <sub>300</sub> (60)
<b>Ability to open under environmental conditions</b> - Opening under wind load within a given time; - Opening under snow load within a given time.	4.5	NA
		NA
<b>Durability of operational reliability</b>	4.6	NPD

PASS; NPD = No Performance Determined; NA = Not Applicable

## APF-1503

### PRODUCT

#### 1.- Application:

- Fan tested inside the furnace.
- F300 fan. Tested during 120 minutes.
- Dual purpose ventilator.
- Vertical inlet and horizontal outlet air flow direction.
- Motor: "90L-08/04" by WEG: Converter feed.
- Motor: "W22" by WEG: Direct feed.

#### 2.- Characteristics:

- Motor: "90L-08/04" by WEG:
  - Rated Voltage: 400V ( $\pm 10\%$ ).
  - Motor size: 90L.
  - Frequency 60 Hz.
  - Power from 0.4/1.6 kW.
  - 4 poles.
- Motor: "W22" by WEG:
  - Rated Voltage: 440V ( $\pm 10\%$ ).
  - Motor size: 90S.
  - Frequency 50 Hz.
  - Power from 0.3/1.2 kW.
  - 4/8 poles.

#### 3.- Accessories:

- Motor: "90L-08/04" by WEG:
  - The impeller is coupled directly with the electric motor.
  - The external motor box is plugged to the electric net by means of high temperature resistant cable model SILICABLE NVA5 of OMERIN.
- Motor: "W22" by WEG:
  - Direct driven fixing between motor and fan.
  - The grease used in C3 bearings motor is "MOBIL POLYREX EM".
  - Terminal box with reference "M25-M32-M40-M50" ÖZ-ER Elektrik.
  - Terminal block with reference "MIM5 MOTOR KLEMENSI" by Megisan Elektrik.
  - The connection between the terminal box and the electrical net is made using high temperature cable with reference "Silicable® MV-VS" of Omerin.
  - One protection grille with reference "TEL KAFES-JR050" by BVN, placed at the inlet of the fan.