United Arab Emirates
Ministry of interior
Civil Defense G.H.Q
Fire intentional Lab & House
Of Expertise & Training Center
Approval Committee

دولة الامارات العربية المتحدة
وزارة الداخلية
القيادة العامة للدفاع المدني
لجنة اعتماد المختبرات العالمية
وبيوت الخبرة ومعاهد التدريب

Date: 14/09/2026

CERTIFICATE OF COMPLIANCE

This certificate of compliance validates the following			
TEST REPORT NUMBER 'Assessment Reports' are not acceptable	19-20704-2384 IC-19-20704-2384	**CERTIFICATE NUMBER**	APF - 1692
DATE OF ISSUE	15/01/2020	**DATE OF ISSUE**	14/09/2026
DATE OF EXPIRY	-	**DATE OF EXPIRY**	30/06/2029
Manufacturer details			
NAME OF FACTORY/ MANUFACTURER	BAHÇIVAN Havalandirma Sistemleri Ve Elektrik Motorlari SAN. Ve Tic. A.S	**NAME OF THE BRAND**	BVN
FACTORY ADDRESS / REGION (STREET / TOWN / CITY / COUNTRY)	Ömerli Mah. Hadimköy-Istanbul Cd. No: 147 34555, Arnavutköy, Istanbul (Turkey)	**MODEL / NO**	ARMO-JR 50
WEBSITE	www.bvnair.com	**LOGO ON THE PRODUCT**	BVN VENTILATION SYSTEMS & ELECTRICAL MOTORS
TEL	+90 212 771 48 48	**EMAIL**	info@bvnair.com

Product Details From Test Report		Reference Test Report page NO
DESCRIPTION OF THE PRODUCT (TECHNICAL DETAILS FROM TEST REPORT, SUCH AS ACTUAL FIRE RATINGS/DIMENSIONS/THICKNESS/ SENSITIVITY ETC)	Fans for smoke extraction for indoor use, fan reference "ARMO-JR 50". Motor: "90S-08/04" by WEG: • Rated Voltage: 400V (±10%). • Motor size 90S. • Frequency 50 Hz. • Power 0.3/1.2 kW. • 8/4 poles. The fans were tested with the following accessories and/or elements: • The impeller is coupled directly with the electric motor. • The motor is plugged to electric net by means of high temperature resistant cable model VSH 1200. • Protection grid. • Power terminal. • Frequency converter	6
TEST STANDARD (SUCH AS ASTM/BS EN/ DN ETC)	EN 12101-3:2015 "Smoke and heat control systems. Part 3: Specification for powered smoke and heat control ventilators (Fans)". It provides test and assessment methods of the characteristics and the compliance criteria of the test assessment results for powered smoke and heat control ventilators (fans) intended to be used as part of a powered smoke and heat control ventilation system in construction works.	4, 6
TEST DESCRIPTION	Performance test of a fan for smoke extraction inside a furnace at 400°C. The fan is operated at ambient temperature, at the maximum speed, for a warm up period. Then, the temperature increases up to 400°C and is maintained at 400°C for 120 minutes. After 15 minutes, the ventilator is switched off for 2 minutes then restarted. The fan is shown to be functioning satisfactorily by its continued ability to provide the initial volume or pressure within the defined limits: The volume flow shall not decrease by more than 10 % and not increase by more than 25 %, or the static pressure difference shall not decrease by more than 20 % and not increase by more than 50 % of that measured at the end of the warm up period of the test.	4, 6-7
SPECIFICATION OF TEST SPECIMEN	The sample tested: • "ARMO-JR 50" by Bahçivan with 7 galvanized steel blades. Motor: "90S-08/04" of WEG with the following characteristics: size 90S, 1,2 kW, 1430 rpm, 4 poles, 400 V, 50 Hz.	6-7

<table>
<tr><td>TEST RESULT
(SUCH AS PASSED CRITERIA___/ COMPLIED TO___/ DURATION___/OBSERVATION___/ETC)</td><td>PASSED as per EN 12101-3:2015, classified CLASS F400 in all cases (maintenance of integrity properties during 120 minutes, at least, in a furnace at 400°C).</td><td>8</td></tr>
<tr><td>PRODUCT APPLICATION GUIDELINE (END USE)
(CLEARLY STATE THE END USE WITH SPECIFIC APPLICATION, SUCH AS EXACT FIRE RATING/TO BE INSTALLED IN___/TO BE INSTALLED AT____/TO BE CONNECTED WITH____/TO BE INSTALLED WITH___ ETC ALONG WITH ANY WARNINGS SUCH AS NOT TO BE USED IN___/NOT TO BE INSTALLED AT___/ NOT TO BE INSTALLED WITH___ETC.</td><td>Fans for smoke extraction for indoor use

<table>
<tr><th>Essential characteristics</th><th>Clauses in this European standard</th><th>Mandated level(s) or class(es)</th></tr>
<tr><td rowspan="2">Response delay
- Opening under wind load within a given time;
- Opening under snow load within a given time.</td><td rowspan="2">4.1.1</td><td>NA</td></tr>
<tr><td>NA</td></tr>
<tr><td rowspan="2">Operational reliability
- Application categories;
- Motor rating.</td><td>4.2.2</td><td>• Thermally uninsulated
• Dual use
• Converter Feed
• Installation inside and outside of the smoke reservoir
• Vertical direction of motor shaft.</td></tr>
<tr><td>4.2.3</td><td>F, 80 K</td></tr>
<tr><td>Effectiveness of smoke/hot gas extraction:
- Gas flow and pressure maintenance during smoke and heat extraction test.</td><td>4.3.2</td><td>[-10, +25] % V</td></tr>
<tr><td>Resistance to fire</td><td>4.4</td><td>F400 (120)</td></tr>
<tr><td rowspan="2">Ability to open under environmental conditions
- Opening under wind load within a given time;
- Opening under snow load within a given time.</td><td rowspan="2">4.5</td><td>NA</td></tr>
<tr><td>NA</td></tr>
<tr><td>Durability of operational reliability</td><td>4.6</td><td>F, 80 K</td></tr>
</table>

The correct specification, selection, and installation of the product in accordance with the UAE Fire and Life Safety Code of Practice 2018 are the sole responsibility of the consultant, in coordination with the project owner and contractors.</td><td>-</td></tr>
</table>

Laboratory and Certification body details			
NAME OF CERTIFICATION BODY	Applus- LGAI Technological Center S.A.	**NAME OF TEST FACILITY**	Applus- LGAI Technological Center S.A.
CERTIFICATION BODY ADDRESS / REGION (STREET / TOWN / CITY / COUNTRY)	Campus UAB- Ronda de la Font del Carme s/n E-08193 Bellaterra, Barcelona, SPAIN	**TEST FACILITY ADDRESS / REGION** (STREET / TOWN / CITY / COUNTRY)	Campus UAB- Ronda de la Font del Carme s/n E-08193 Bellaterra, Barcelona, SPAIN
WEBSITE	www.applus.com	**WEBSITE**	www.applus.com
TEL	+34 93 567 20 00	**TEL**	+34 93 567 20 00
EMAIL	info@appluslaboratories.com	**EMAIL**	info@appluslaboratories.com
ACCREDITED BY (NAME OF ACCREDITATION BODY WHICH ISSUED ACCREDITATION TO THE CERTIFICATION BODY, ALONG WITH WEBSITE)	ENAC	**ACCREDITED BY** (NAME OF ACCREDITATION BODY WHICH ISSUED ACCREDITATION TO THE LABORATORY, ALONG WITH WEBSITE)	ENAC
AS PER (STANDARD TO WHICH THE CERTIFICATION BODY IS ACCREDITED TO)	EN ISO/IEC 17065	**AS PER** (STANDARD TO WHICH YOUR ORGANIZATION IS ACCREDITED TO)	EN ISO/IEC 17025
VALIDITY (EXPIRY DATE OF CERTIFICATION BODY ACCREDITATION)	UNLIMITED	**VALIDITY** (EXPIRY DATE OF LABORATORY ACCREDITATION)	UNLIMITED
REFERENCE NUMBER: (CERTIFICATION BODY ACCREDITATION REFERENCE NUMBER TO VERIFY ON THE ACCREDITOR'S WEBSITE)	12/C-PR054	**REFERENCE NUMBER:** (THE LABORATORY ACCREDITATION REFERENCE NUMBER TO VERIFY ON THE ACCREDITOR'S WEBSITE)	Nº 9/LE895
CERTIFICATION MARK	Applus laboratories		

(ENDORSEMENT) TO BE SIGNED BY MANUFACTURER			
NAME OF MANUFACTURER'S SIGNATORY	Kenan Madenci	**SIGNATURE**	
EMAIL / TEL	k.madenci@bvnair.com +90 530 955 15 52	**FACTORY OFFICIAL SEAL**	BVN VENTILATION SYSTEMS & ELECTRICAL MOTORS BAHÇIVAN HAVALANDIRMA SİSTEMLERİ VE ELEKTRİK MOTORLARI SAN. VE TİC. A.Ş. Cihangir Mah. Hadımköy- İstanbul Cad. N.147 Arnavutköy-İSTANBUL Tel: 0212 771 48 48 –Fax:0212 771 48 42
NOTES: I Undertake that all data and information provided are genuine and accurate			

(ENDORSEMENT) TO BE SIGNED BY CERTIFICATION BODY			
NAME OF CERTIFICATION BODY SIGNATORY	Xavier Ruiz Peña	**SIGNATURE**	
EMAIL / TEL	fire.lab@applus.com +34 93 567 20 00	**CERTIFICATION BODY OFFICIAL SEAL**	Applus LGAI Technological Center, S.A.
NOTES: I Undertake that all data and information provided are genuine and accurate			

ATTACHMENTS: COPY OF 'CERTIFICATE OF COMPLIANCE ISSUED BY APPLUS