

# FIRE SAFETY CERTIFICATION

## PRODUCT APPROVAL

No. **APF-1553**

**LGAi TECHNOLOGICAL CENTER S.A. (APPLUS)**, according to the requirements of the SPC-102 Ed. 5, certifies the performances stated in the technical annex following the reference standard for:



<b>Product range</b>	RE-2AS / RE-2ASBC
<b>Company</b>	<b>Ravel Electronics Pvt Ltd.</b> 150-A, Electronics Industrial Estate, Perungudi, Chennai-600096, India
<b>Manufactured</b>	<b>22/32307695</b>
<b>Standard Reference</b>	EN 54-4:1997; EN 54-4:1997/AC:1999; EN 54-4:1997/A1:2002; EN 54-4:1997/A2:2006: "Fire detection and fire alarm systems. Part 4: Power supply equipment". EN 54-16:2008: "Fire detection and fire alarm systems. Part 16: Voice alarm control and indicating equipment".
<b>Product Details and Test Report</b>	Please check at the technical annex



**Renovation / Modification** of the initial certificate issued on 27<sup>th</sup> September 2019

**Valid until 31<sup>st</sup> January 2024**

Bellaterra, 4<sup>th</sup> November 2022

 <b>Applus<sup>+</sup></b> 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-1553

Annexes according to **EN 54-4:1997, EN 54-4:1997/AC:1999, EN 54-4:1997/A1:2002, EN 54-4:1997/A2:2006**

### FIRE DETECTION AND FIRE ALARM SYSTEMS. PART 4: POWER SUPPLY EQUIPMENT.

Essential characteristics	Clauses in this European Standard	Mandated level(s) or class(es)
General requirements	4.	PASS
Functions	5.	PASS
Materials, design and manufacture	6.	PASS
Documentation	7.	PASS
Marking	8.	PASS
Cold (operational)	9.5	PASS
Damp Heat, steady state (operational)	9.6	PASS
Impact (operational)	9.7	PASS
Vibration, sinusoidal (operational)	9.8	PASS
Electrostatic discharges (operational)	9.9	PASS
Damp heat, steady state (endurance)	9.14	PASS
Vibration, sinusoidal (endurance)	9.15	PASS

PASS; NPD = No Performance Determined, NA = Not Apply

Annexes according to **EN 54-16:2008**

### FIRE DETECTION AND FIRE ALARM SYSTEMS. PART 16: VOICE ALARM CONTROL AND INDICATING EQUIPMENT

Essential characteristics	Clauses in this European Standard	Mandated level(s) or class(es)
General Requirements	4	PASS
General Requirements For Indications	5	PASS
The Quiescent Condition	6	PASS
Reception and processing of fire signals	7.1	PASS
Indication of the voice alarm condition	7.2	PASS
Audible warning (option with requirements)	7.3	PASS
Delays to entering the voice alarm condition (option with requirements)	7.4	NA
Phased evacuation (option with requirements)	7.5	PASS
Silencing of the voice alarm condition	7.6	PASS
Reset of the voice alarm condition	7.7	PASS
Output to fire alarm devices (option with requirements)	7.8	PASS
Voice alarm condition output (option with requirements)	7.9	PASS
Fault Warning Conditions	8	PASS

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Essential characteristics	Clauses in this European Standard	Mandated level(s) or class(es)
Disabled Condition	9	NA
Voice Alarm Manual Control	10	PASS
Interface to External Control Device(s)	11	PASS
Emergency Microphone(s)	12	NA
Design Requirements	13	PASS
Additional Design Requirements for Software Controlled VACIE	14	PASS
Marking	15	PASS
Output Power	16.4	PASS
Signal-to-noise Ratio	16.5	PASS
Frequency Response of VACIE Without Microphone(s)	16.6	PASS
Frequency Response of VACIE With Microphone(s)	16.7	NA
Cold (operational)	16.8	PASS
Damp heat, steady state (operational)	16.9	PASS
Damp heat, steady state (endurance)	16.10	PASS
Impact (operational)	16.11	PASS
Vibration, sinusoidal (operational)	16.12	PASS
Vibration, sinusoidal (endurance)	16.13	PASS
Supply voltage variation (operational)	16.14	PASS
Electromagnetic Compatibility (EMC), Immunity tests (operational)	16.15	PASS

PASS; NPD = No Performance Determined, NA = Not Apply

Other technical data	
Voltage	100-240 Vac
Frequency	50-60 Hz
AC Power Consumption	500 W
Analog audio inputs	3
Power amplifier Channels	2 amplifiers class D up to 500W at 100V/70V
Line finisher RE-2AS EOL	End of line device for speaker lines
Internal Ethernet card RE-2AS CM1	Communications card
Voice Alarm Panels RE-2AS RVAP	Up to 8 remote devices in ACSI bus
Multipaging Microphones RE-2AS MP8Z	Up to 8 remote devices in ACSI bus