

CERTIFICATE OF CONSTANCY OF PERFORMANCE

LGAI Technological Center, S.A. (APPLUS)
Notified Body Nr. 0370

No. **0370-CPR-6471**

In compliance with Regulation (EU) Nr.305/2011 of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR), this certificate applies to the construction product:

FIRE DETECTION AND FIRE ALARM SYSTEM:

- CONTROL AND INDICATING EQUIPMENT
- POWER SUPPLY EQUIPMENT
- ALARM TRANSMISSION AND FAULT WARNING ROUTING EQUIPMENT

MODEL: **2X-A Small cabinet control panels with up to 4 A output, with Aritech and Apollo protocols**

Placed on the market under the name of:

CARRIER FIRE & SECURITY B.V.

KELVINSTRAAT, 7
6003 DH WEERT (THE NETHERLANDS)

And produced in the manufacturing plant:

CARRIER MANUFACTURING POLAND SPÓŁKA Z O. O.

UL. KOLEJOWA, 24, 39-100 ROPCZYCE (POLAND)

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standard:

**EN 54-2:1997, EN 54-2:1997/AC:1999, EN 54-2:1997/A1:2006; EN 54-4:1997, EN 54-4:1997/AC:1999,
EN 54-4:1997/A1:2002, EN 54-4:1997/A2:2006; EN 54-21:2006**

under system 1 for the performance set out in this certificate are applied and that the factory production control conducted by the manufacturer is assessed to ensure the constancy of performance of the construction product.

This certificate was first issued on 30th September 2022 and will remain valid as long as neither the harmonised standard, the construction product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body.

The monitoring assessment will be done before 31st July 2023

Bellaterra, 30th September 2022




LGAI Technological Center, S.A.

Xavier Ruiz Peña
Managing Director, Product Conformity B.U.



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

You can check the validity of this certificate on our website: www.appluslaboratories.com/certified_products

The manufacturer, after the completion of the conformity assessment procedures and the declaration of performance, may affix the CE Marking under his responsibility



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Annex according to **EN 54-2:1997, EN 54-2:1997/AC:1999, EN 54-2:1997/A1:2006**

FIRE DETECTION AND FIRE ALARM SYSTEM. PART 2: 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 |
| The fire alarm condition | 7. | PASS |
| Reception and processing of fire signals (see also annex C) | 7.1 | PASS |
| Output of the fire alarm condition | 7.7 | PASS |
| Output to fire alarm devices (option with requirements) | 7.8 | PASS ¹ |
| Output to fire alarm routing equipment (option with requirements) | 7.9.1 | PASS ² |
| Alarm confirmation input from fire alarm routing equipment (option with requirements) | 7.9.2 | PASS ² |
| Outputs to fire protection equipment (options with requirements) | 7.10 | PASS ³ |
| Outputs to fire protection equipment (options with requirements) - Output type A | 7.10.1 | PASS ³ |
| Outputs to fire protection equipment (options with requirements) - Output type B | 7.10.2 | PASS ³ |
| Outputs to fire protection equipment (options with requirements) - Output type C | 7.10.3 | PASS ³ |
| Fault monitoring of fire protection equipment (option with requirements) | 7.10.4 | PASS ³ |
| Delays to outputs (option with requirements) | 7.11 | PASS ⁴ |
| Dependencies on more than one alarm signal. Type A (options with requirement) | 7.12.1 | PASS ⁴ |
| Dependencies on more than one alarm signal. Type B (option with requirements) | 7.12.2 | PASS ⁴ |
| Dependencies on more than one alarm signal. Type C (options with requirement) | 7.12.3 | PASS ⁴ |
| Alarm counter (option with requirements) | 7.13 | PASS |
| Fault warning condition (see also annex F) | 8. | PASS |
| Fault signals from points (option with requirements) | 8.3 | NA |
| Total loss of the power supply (option with requirements) | 8.4 | PASS |
| Output to fault warning routing Equipment (option with requirements) | 8.9 | PASS |
| Disabled condition | 9. | PASS |

¹ Excluding repeaters and control panels operating in EN 54-2 Evacuation mode or NBN mode.

² Excluding repeaters, control panels without fire routing, and control panels with fire routing operating in NBN mode.

³ Excluding repeaters and control panels without fire protection controls.

⁴ Excluding repeaters.

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| ESSENTIAL CHARACTERISTICS | CLAUSES IN THIS EUROPEAN STANDARD | MANDATED LEVEL(S) OR CLASS(ES) |
|---|-----------------------------------|--------------------------------|
| Disablement of addressable points (option with requirements) | 9.5 | PASS ⁴ |
| Test condition (option with requirements) | 10. | PASS ⁴ |
| Standardized input/output interface (option with requirements –see also annex G) | 11. | NA |
| Design requirements | 12. | PASS |
| Additional design requirements for software controlled control and indicating equipment | 13. | PASS |
| Marking | 14. | PASS |
| Cold (operational) | 15.4 | PASS |
| Damp heat, steady state (operational) | 15.5 | PASS |
| Impact (operational) | 15.6 | PASS |
| Vibration, sinusoidal (operational) | 15.7 | PASS |
| Electromagnetic Compatibility (EMC) | 15.8 | PASS |
| Supply voltage variation (operational) | 15.13 | PASS |
| Damp heat, steady state (endurance) | 15.14 | PASS |
| Vibration, sinusoidal (endurance) | 15.15 | PASS |

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

Annex 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 SYSTEM. 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

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Annexes according to **EN 54-21:2006**

FIRE DETECTION AND FIRE ALARM SYSTEMS. PART 21: ALARM TRANSMISSION AND FAULT WARNING ROUTING EQUIPMENT

| ESSENTIAL CHARACTERISTICS | CLAUSES IN THIS EUROPEAN STANDARD | MANDATED LEVEL(S) OR CLASS(ES) |
|--|-----------------------------------|--------------------------------|
| General requirements | 4. | PASS |
| Functional requirements | 5. | PASS |
| Design requirements | 7. | PASS |
| Marking | 8. | PASS |
| Power supply | 9. | PASS |
| Cold (operational) | 10.4 | PASS |
| Damp heat, steady state (operational) | 10.5 | PASS |
| Impact | 10.6 | PASS |
| Vibration, sinusoidal (operational) | 10.7 | PASS |
| Electromagnetic (EMC) immunity tests (operational) | 10.8 | PASS |
| Supply voltage variation | 10.9 | PASS |
| Damp heat, steady state (endurance) | 10.10 | PASS |
| Vibration, sinusoidal (endurance) | 10.11 | PASS |

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

The control and Indicating Equipment 2X-A Small cabinet series also includes:

| | |
|--------------------------|---|
| Main Board: | 2010-2MB-HP (1 Loop) 2010-2MB-HP (2 Loop) 2010-2MB-HP |
| Communication Boards: | 2010-2-NB Network Printed Circuit Board 2010-2-DACT Comm transmitter (applies only when the alarm transmission and fault warning routing equipment is installed) |
| PSU: | ELC-MPSU7-24100, 7.2Ah batteries |
| Zone indicator: | 2010-2A-ZI-24-S |
| RS232 Kit: | 2010-2-232-KIT |
| Translucent door: | 2010-2A-D-TPS.101 Transparent front cover – Small |
| Fault Supervision Board: | 2010FS |

And the following variants:

| | |
|---------------|--|
| 2X-AE1-S | One-loop addressable fire and evacuation alarm control panel |
| 2X-AF1-S | One-loop addressable fire alarm control panel |
| 2X-AF1-FB-S | One-loop addressable fire alarm control panel with fire routing and fire protection controls |
| 2X-AF1-SCFB-S | One-loop addressable SS 3654 fire alarm control panel with fire routing and fire protection controls [1] |
| 2X-AE2-S | Two-loop addressable fire and evacuation alarm control panel |
| 2X-AF2-S | Two-loop addressable fire alarm control panel |
| 2X-AF2-FB-S | Two-loop addressable fire alarm control panel with fire routing and fire protection controls |
| 2X-AF2-SCFB-S | Two-loop addressable SS 3654 fire alarm control panel with fire routing and fire protection controls [1] |
| 2X-AER-S | Addressable fire and evacuation alarm repeater panel |
| 2X-AFR-S | Addressable fire alarm repeater panel |
| 2X-AFR-FB-S | Addressable fire alarm repeater panel with fire routing and fire protection controls |
| 2X-AFR-SCFB-S | Addressable SS 3654 fire alarm repeater panel with fire routing and fire protection controls [1] |

[1] Includes a fireman's key.