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CERTIFICATE OF CONSTANCY OF PERFORMANCE

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

No. 0370-CPR-3615

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

MODEL: 2X-F1

Placed on the market under the name of:

CARRIER FIRE & SECURITY B.V.

KELVINSTRAAT, 7
6003 DH WEERT (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 standards:

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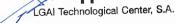
under system 1 for the performance set out in this certificate are applied and that the factory production control conducted by the manufacturer is assessed to ensure the constancy of performance of the construction product.

This certificate was first issued on 31st October 2019 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product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body. As of 1st June 2023, this and all previous modifications are confirmed.

The monitoring assessment will be done before 31st July 2024

Bellaterra, 1st June 2023

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LGAI Technological Center, S.A.

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

ENAC
CERTIFICACIÓN
ISO 17065
Nº12 / C-PR054

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

CE

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Annexes according to **EN 54-2:1997, EN 54-2:1997/AC:1999, EN 54-2:1996/A1:2006**

FIRE DETECTION AND FIRE ALARM SYSTEMS. 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
Output to fire alarm devices (option with requirements)	7.8	PASS
Output to fire alarm routing equipment	7.9.1	PASS[1]
Alarm confirmation input from fire alarm routing equipment	7.9.2	PASS[1]
Output to fire protection equipment - Type A,B and C	7.10	PASS[1]
Delays to outputs (option with requirements)	7.11	PASS
Dependencies on more than one alarm signal (Type A, B and C)	7.12	PASS
Alarm counter	7.13	PASS
Fault warning condition (see also annex F)	8.	PASS
Fault signals from points (option with requirements)	8.3	PASS
Total loss of the power supply (option with requirements)	8.4	PASS
Output to fault warning routing equipment	8.9	PASS
Disabled condition	9.	PASS
Disablement of addressable points (option with requirements)	9.5	PASS
Test condition (option with requirements)	10.	PASS
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

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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 54-21:2006**

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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

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Certification includes the following devices:

2X-F1 Intelligent Analogue Addressable Fire Panel with user interface - 1 loop

2X-F1-S Intelligent Analogue Addressable Fire Panel with user interface - 1 loop small cabinet

2X-F1-SC Intelligent Analogue Addressable Fire Panel with user interface with fire brigade controls - 1 loop (Scandinavia)

2X-F1-SC-S Intelligent Analogue Addressable Fire Panel with user interface with fire brigade controls - 1 loop small cabinet (Scandinavia)

2X-F1-FB2 Intelligent Analogue Addressable Fire Panel with user interface with fire brigade controls - 1 loop

2X-F1-FB2-S Intelligent Analogue Addressable Fire Panel with user interface with fire brigade controls - 1 loop small cabinet

2X-F1-SCFB Intelligent Analogue Addressable Fire Panel with user interface with SS3654 fire brigade controls - 1 loop (Scandinavia)

2X-F1-SCFB-S Intelligent Analogue Addressable Fire Panel with user interface with SS3654 fire brigade controls - 1 loop small cabinet (Scandinavia)

2X-E1 Intelligent Analogue Addressable Fire and Evacuation Panel with user interface with fire brigade controls - 1 loop

2X-E1-S Intelligent Analogue Addressable Fire and Evacuation Panel with user interface with fire brigade controls - 1 loop small cabinet

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Available with the following language kit options: -01 Dutch (NL) The Netherlands, -02 French (FR), -03 English (UK) United Kingdom and Ireland, -04 German (DE) -05 Norwegian, -06 Swedish, -07 Danish (DK), -08 English (AU) Australia, -09 Spanish, -10 Italian, -11 Dutch (BE) Belgium, -12 Irish, -13 German (AU) (Austria), -14 Greek, -15 Arabic, -17 English (US) United States of America, -18 Polish, -19 Turkish, -20 Czech Republic, -21 Portuguese, -22 Hungarian, -23 Danish (IC) Iceland, -24 Slovakian, -25 Russian, -27 Lithuanian, -28 Finnish, -29 German (SW) Switzerland, -30 Estonian,-31 Latvian, -32 French (BE) Belgium, -33 French (SW) Switzerland, -34 Italian (SW) Switzerland, -36 French (Int) International, -40 Bulgarian, -41 Belarusian, -43 Ukrainian, -44 Serbian, -45 Romanian (RO), -46 German (Int) International, -48 Croatian, -49 Macedonian, -50 Slovenian, -51 Hebrew, -71 Catalan, -80 Chinese, -99 English (Int) International English

Incorporating the following units:

2010-2F1-MB Main control board

2X-UI User interface control board (for 2X-F1, 2X-F1-S)

2X-UI-SC User interface control board (for 2X-F1-SC, 2X-F1-SC-S)

2X-UI-FB2 User interface control board (for 2X-F1-FB2, 2X-F1-FB2-S)

2X-UI-SCFB User interface control board (2X-F1-SCFB and 2X-F1-SCFB-S)

2X-UI-E (for 2X-E1 and 2X-E1-S)

2010-2-PS-40 4A Power Supply

And as optional modules:

2X-ZI-20 (20 Zone) (Large cabinet variant only)

2X-ZI-40 (40 Zone) (Large cabinet variant only)

2X-ZI-24-S (24 Zone) (Small cabinet variant only) (for 2X-F1-S, 2X-E1-S and 2X-F1-FB2-S)

2010-2-NB Network card

2X-LB Loop Board (Large cabinet variant only)

2010-2-232-KIT Interface board for external printer

2010-SK Scandinavian key and lock assembly (for 2X-F1-SC, 2X-F1-SC-S, 2X-F1-SCFB and 2X-F1-SCFB-S)

2010-2-PS-C2 UK mains cable for large cabinet

2010-2-PS-C2-S UK mains cable for small cabinet

2010-2-PIB Peripheral Interface Board (Germany) (for 2X-F1-FB2)

2010-2-PIB-8O Peripheral Interface Board 8 outputs (Large cabinet variant only)

2010-2-PIB-8I Peripheral Interface Board 8 inputs (Large cabinet variant only)

2010-2-PIB-8I8O Peripheral Interface Board 8 outputs and 8 inputs (Large cabinet variant only)

ADP-N3E-U IFAM interface card (master) (for 2X-F1-FB2)

ADP-N3S interface card (slave) (for 2X-F1-FB2)

2010-2-DACT with ATS7310 (GSM module)

2010-FS-EOL Fault Supervision End of Line unit

2X-D-TP Translucent door option for large cabinet* (for 2X-F1)

2X-D-TP-S Translucent door option for small cabinet* (for 2X-F1-S)

2X-D-FB2-TP Translucent door option for large cabinet* (for 2X-F1-FB2)

2X-D-FB2-TP-S Translucent door option for small cabinet* (for 2X-F1-FB2-S)

2X-D-E-TP Translucent door option for large cabinet* (for 2X-E1)

2X-D-E-TP-S Translucent door option for small cabinet* (for 2X-E1-S)

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Ancillaries:

2X-FR Intelligent Analogue Addressable Fire Panel Repeater

2X-FR-S Intelligent Analogue Addressable Fire Panel Repeater small cabinet

2X-FR-SC Intelligent Analogue Addressable Fire Panel Repeater with fire brigade controls (Scandinavia)

2X-FR-SC-S Intelligent Analogue Addressable Fire Panel Repeater with fire brigade controls small cabinet (Scandinavia)

2X-FR-FB2 Intelligent Analogue Addressable Fire Panel Repeater with fire brigade controls

2X-FR-FB2-S Intelligent Analogue Addressable Fire Panel Repeater with fire brigade controls small cabinet

2X-FR-SCFB Intelligent Analogue Addressable Fire Panel Repeater with SS3654 fire brigade controls (Scandinavia)

2X -FR-SCFB-S Intelligent Analogue Addressable Fire Panel Repeater with SS3654 fire brigade controls small cabinet (Scandinavia)

2X-ER Intelligent Analogue Addressable Fire and Evacuation Panel Repeater with fire brigade controls

2X-ER-S Intelligent Analogue Addressable Fire and Evacuation Panel Repeater with fire brigade controls small cabinet

Above ancillary repeater units are certified with the following options with requirements from EN 54-2:

7.13 Alarm counter

8.4 Total loss of the power supply

8.9 Output to fault warning routing equipment

9.5 Disablement of addressable points (available on 2X-ER and 2X-ER-S variants only)

10 Test condition (available on 2X-ER and 2X-ER-S variants only)

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Incorporating the following units:

2010-2FR-MB Main control board

2X-UI User interface control board (for 2X-FR and 2X-FR-S)

2X-UI-SC User interface control board (for 2X-FR-SC, 2X-FR-SC-S)

2X-UI-FB2 User interface control board (for 2X-FR-FB2, 2X-FR-FB2-S)

2X-UI-SCFB User interface control board (for 2X-FR-SCFB and 2X-FR-SCFB-S)

2X-UI-E User interface control board (for 2X-ER and 2X-ER-S)

2010-2-PS-40 4A Power Supply

And as optional modules:

2X-ZI-20 (20 Zone) (Large cabinet variant only)

2X-ZI-40 (40 Zone) (Large cabinet variant only)

2X-ZI-24-S (24 Zone) (Small cabinet variant only) (except for 2X-FR-SCFB-S)

2010-2-NB Network card

2X-LB Loop Board (Large cabinet variant only)

2010-2-232-KIT Interface board for external printer

2010-SK Scandinavian key and lock assembly (for 2X-FR-SC, 2X-FR-SC-S, 2X-FR-SCFB and 2X-FR-SCFB-S)

2010-2-PS-C2 UK mains cable for large cabinet

2010-2-PS-C2-S UK mains cable for small cabinet

2010-2-PIB Peripheral Interface Board (Germany) (for 2X-FR-SC, 2X-FR-SC-S and 2X-FR-FB2)

2010-2-PIB-8O Peripheral Interface Board 8 outputs (Large cabinet variant only)

2010-2-PIB-8I Peripheral Interface Board 8 inputs (Large cabinet variant only)

2010-2-PIB-8I8O Peripheral Interface Board 8 outputs and 8 inputs (Large cabinet variant only)

ADP-N3E-U IFAM interface card (master) (for 2X-FR-FB2)

ADP-N3S interface card (slave) (for 2X-FR-FB2)

2010-2-DACT with ATS7310 (GSM module) (except for 2X-FR-SCFB and 2X-FR-SCFB-S)

2X-D-TP Translucent door option for large cabinet* (for 2X-FR)

2X-D-TP-S Translucent door option for small cabinet* (for 2X-FR-S)

2X-D-FB2-TP Translucent door option for large cabinet* (for 2X-FR-FB2)

2X-D-FB2-TP-S Translucent door option for small cabinet* (for 2X-FR-FB2-S)

2X-D-E-TP Translucent door option for large cabinet* (for 2X-ER)

2X-D-E-TP-S Translucent door option for small cabinet* (for 2X-ER-S)

2010-FS-EOL Fault Supervision End of Line unit

(*) Note: The translucent doors do not meet EN54-2 access level 1 requirements. To meet EN54-2 requirements with the door fitted the following is also required:

- *A Zone indicator board to display the zones in alarm (to meet requirements of EN54-2 part 7.3)*

- *A MCP (without program delay) fitted beside the panel to allow overriding of delays (to meet requirements of EN54-2 part 7.11)*