

One Georges Quay Plaza, Dublin. Ireland. D02 E440

Email: cpr@fmapprovals.com Web: www.fmapprovals.com

## CERTIFICATE OF CONSTANCY OF PERFORMANCE

2809 - CPR - E0011

In compliance with Regulation (EU) No 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

#### Mx-5000 Series

Scope of Certificate: Mx-5000 series Control and Indicating Equipment & Integrated Power Supply for fire detection and fire alarm systems for buildings

placed on the market under the name or trade mark of

#### **Advanced Electronics Ltd**

The Bridges, Balliol Business Park, Longbenton, North Tyneside NE12 8EW United Kingdom

and produced in the manufacturing plant

### **Advanced Electronics Ltd**

The Bridges, Balliol Business Park, Longbenton, North Tyneside NE12 8EW United Kingdom

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

EN 54-2:1997 + AC:1999 + A1:2006 — Fire detection and fire alarm systems – Part 2: Control and Indicating Equipment

EN 54-4:1997 + AC:1999 + A1:2002 + A2:2006 - Fire detection and fire alarm systems - Part 4: Power supply equipment

under system 1 for the performances set out in this certificate (see approval report 3057699 dated 26 November, 2018 and PR452927 dated 07 August 2019 for detail) are applied and that the factory production control conducted by the manufacturer is assessed to ensure the

# constancy of performance of the construction products

This certificate was first issued on 19th December 2018 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product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body.

Issue 4, Dublin, dated 12th August 2020

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Damien Mc Ardle Certification Manager On behalf of FM Approvals Europe Limited (*Project Id 3057699, PR452927, RR224051*)

This certificate remains the property of FM Approvals and has been issued in accordance with FM Approvals CPR Certification Scheme.



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### APPENDIX TO CERTIFICATE OF CONSTANCY OF PERFORMANCE

### 2809 - CPR - E011

## **Full Product Description**

Mx-5000 Series control and indicating equipment have several common features used with varied fire detection devices.

All Mx-5000 Series CIEs include:

One or more Base Card(s) with control circuitry for up to four loop driver cards, inputs / outputs and integral 3 A or 5 A power supply

Mx-5400 Base card 1-4 loop

Mx-5100 Base card 1 loop

Mx-5200 Base card 2 loop

A display card driving a white backlit 240 x 64 Graphical display

Mx-5000 display

Loop driver card(s) (One to four loop driver cards depending on model of

base card)

Mxp-502 AP/HO/A Loop driver

Mxp-567 Nittan Loop driver

Mxp-568 Apollo Core Loop Driver

The Mxp-568 loop driver may be used in lieu of the Mxp-502

loop driver.

#### Independent Power supply units compatible with the Mx-5000 series are:

| Mxp-549:     | 1.5A PSE in 7Ah enclosure     |
|--------------|-------------------------------|
| Mxp-550 :    | 3.0A PSE in 17/18Ah enclosure |
| Mxp-550D:    | 3.0A PSE in 25Ah enclosure    |
| Mxp-551:     | 5.0A PSE in 17/18Ah enclosure |
| Mxp-551D:    | 5.0A PSE in 38Ah enclosure    |
| Mxp-049:     | 1.5A PSE in 7Ah enclosure     |
| Mxp-050-001: | 3.0A PSE in 7Ah enclosure     |
| Mxp-050-002: | 3.0A PSE in 17Ah enclosure    |
| Mxp-051:     | 5.0A PSE in 17Ah enclosure    |
| Mxp-051/D:   | 5.0A PSE in 38Ah enclosure    |

#### Other Common optional modules for all Mx-5000 CIE models include:

| Mxp-501 | Battery Temperature Sensor   |
|---------|--|
| Mxp-503 | Standard network interface   |
| Mxp-505 | Sounder Active EOL, alternate EOL terminator supporting EN54-13 monitoring of the sounder circuit.   |
| Mxp-506 | Routing / Protection Termination Interface, provides a standardized interface to be mounted in the routing / protection equipment, providing volt-free relay outputs and inputs. |
| Mxp-507 | 2-Way Relay Card, provides 2 configurable Relay Outputs (2 x FORM C)   |
| Mxp-509 | Fault tolerant network interface card  |
| Mxp-512 | Printer, integral thermal, provides 40 column, configurable  |

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|-----------------------------|-------------|--|
| mber of the FM Global Group | Mvn_513_vvv | LED indicator modules  |

| Mxp-514 | AC Filter card required if two or more power supplies are to be installed  |
|---------|--|
| Mun FOR |  |
| Mxp-528 | Modem Interface, for remote diagnostics  |
| Mxp-532 | Fire/fault routing equipment interface   |
| Mxp-536 | Peripheral Zone card   |
| Mxp-537 | Peripheral Input Card, provides monitoring of up to 10, volt free, switch inputs that can be individually configured to operate in monitored or unmonitored mode               |
| Mxp-538 | 16-Way Switch / 48 LED Card, 16 Configurable Switches, Push<br>Button, Switch Input, 48 Configurable LED Indicators, arranged in<br>groups of 3 connects to the peripheral bus |
| Mxp-539 | 16-Way Input 48-Way Output Card, 16 Configurable Inputs, Push  |

Button, Switch Input, 48 Configurable Outputs

Mxp-540-xx LED Indicator, 32 Red, 32 Yellow or 16 Red/16 Yellow

Mxp-544 Peripheral 8-Way Relay Card, provides 8 configurable Relay Outputs

(2 x FORM C, 6 x FORM A)

Mxp-547<sup>†</sup> Pager Interface, RS232 ESPA.4.4.4 communication to ancillary

paging systems

†May be followed by -BX

#### Common Network Peripherals

| Mx-5010*             | Remote Display Terminal, reduced indications only                   |
|----------------------|---|
| Mx-5020*             | Remote Control Terminal, reduced indications, with control          |
| Mx-5030*             | Remote Control Terminal, full indication and full control           |
| Mxp-545*             | Peripheral Expansion Network Node, may be mounted in Advanced       |
| ·                    | enclosures along with Mx-5000 display and/or, LED indicators and/or |
|                      | other common input/output option modules. LED indicators may be     |
|                      | connected by Mxp-522/Mxp-523 adaptors. Typically used for           |
|                      | graphical indication panels.  |
| Mxp-510 <sup>†</sup> | BMS Interface, RS232 connection to Building Management PC           |
| Мхр-554 <sup>†</sup> | LAN Gateway, TCP/IP connection to internet/intranet for status and  |
|                      | email alerts and remote diagnostics/control                         |
|                      |   |
|                      | *May be followed by /FT   |
|                      | †May be followed by /FT, -BX or -BX/FT                              |
|                      |   |

#### Common arrangements:

The MxPro 5 series includes the 5000 Series Fire Alarm Control Panels, Base Firmware 053-34. All panel models are available in a range of enclosure sizes and with a range of alternative optional features.

The 5100 is a Single Loop, Analogue Addressable Fire Alarm Control Panel. The 5200 is a Two Loop, Analogue Addressable Fire Alarm Control Panel. The 5400 is a Multiple Loop, Analogue Addressable Fire Alarm Control Panel with provision for up to four loops.

The 5800\* is a Multiple Loop, Analogue Addressable Fire Alarm Control Panel with provision for up to eight loops.

\*May be followed by /FT

All 5000 Series models are designed for use with the Apollo (Discovery, Xplorer, XP95 and Series 90) and Hochiki (ESP) fire detection devices (analogue addressable) connected to the panel through the Mxp-502 loop driver. Apollo and Hochiki fire detection devices (conventional) may be

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connected through the Mxp-536 Peripheral Zone card for either loop or radial connection.

The MxPro 5 series includes the 5000A Series Fire Alarm Control Panels, Base Firmware 053-34. All panel models are available in a range of enclosure sizes and with a range of alternative optional features.

The 5100A is a Single Loop, Analogue Addressable Fire Alarm Control Panel.

The 5200A is a Two Loop, Analogue Addressable Fire Alarm Control Panel.

The 5400A is a Multiple Loop, Analogue Addressable Fire Alarm Control Panel with provision for up to four loops.

The 5800A\* is a Multiple Loop, Analogue Addressable Fire Alarm Control Panel with provision for up to eight loops.

\*May be followed by /FT

All 5000A Series models are designed for use with the Apollo (Discovery, Xplorer, XP95 and Series 90) and Apollo Core (Soteria) fire detection devices (analogue addressable) connected to the panel through the Mxp-568 loop driver. Apollo fire detection devices (conventional) may be connected through the Mxp-536 Peripheral Zone card for either loop or radial connection. Apollo loops support up to 126 devices. Apollo core loops support up to 254 devices.

The MxPro 5 series includes the 5000H Series Fire Alarm Control Panels, Base Firmware 053-34. All panel models are available in a range of enclosure sizes and with a range of alternative optional features.

The 5100H is a Single Loop, Analogue Addressable Fire Alarm Control Panel.

The 5200H is a Two Loop, Analogue Addressable Fire Alarm Control Panel. The 5400H is a Multiple Loop, Analogue Addressable Fire Alarm Control Panel with provision for up to four loops.

The 5800H\* is a Multiple Loop, Analogue Addressable Fire Alarm Control Panel with provision for up to eight loops.

\*May be followed by /FT

All 5000 Series models are designed for use with the Hochiki (ESP) fire detection devices (analogue addressable) connected to the panel through the Mxp-502 loop driver. Hochiki fire detection devices (conventional) may be connected through the Mxp-536 Peripheral Zone card for either loop or radial connection. Hochiki loops support up to 127 devices.

The MxPro 5 series also includes the 5000V Series Fire Alarm Control Panels, Base Firmware 053-34. All panel models are available in a range of enclosure sizes and with a range of alternative optional features.

The 5100V is a Single Loop, Analogue Addressable Fire Alarm Control Panel.

The 5200V is a Two Loop, Analogue Addressable Fire Alarm Control Panel. The 5400V is a Multiple Loop, Analogue Addressable Fire Alarm Control Panel with provision for up to four loops.

The 5800V\* is a Multiple Loop, Analogue Addressable Fire Alarm Control Panel with provision for up to eight loops.

\*May be followed by /FT

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All 5000V models are designed for use with the Advanced (AV)/Argus fire detection devices (analogue addressable) connected to the panel through the Mxp-502 loop driver. Advanced (AV) fire detection devices (conventional) may be connected through the Mxp-536 Peripheral Zone card for either loop or radial connection. Advanced Loops support up to 240 devices.

The MxPro 5 series also includes the 5000N Series Fire Alarm Control Panels, Base Firmware 053-34. All panel models are available in a range of enclosure sizes and with a range of alternative optional features.

The 5100N is a Single Loop, Analogue Addressable Fire Alarm Control Panel

The 5200N is a Two Loop, Analogue Addressable Fire Alarm Control Panel.

The 5400N is a Multiple Loop, Analogue Addressable Fire Alarm Control Panel with provision for up to four loops.

The 5800N\* is a Multiple Loop, Analogue Addressable Fire Alarm Control Panel with provision for up to eight loops.

\*May be followed by /FT

All 5000N models are designed for use with the Nittan fire detection devices (analogue addressable) connected to the panel through the Mxp-567 loop driver. Nittan fire detection devices (conventional) may be connected through the Mxp-536 Peripheral Zone card for either loop or radial connection. Nittan loops support up to 254 devices.

The AxisEN series covers the use and operation of the Axis-5000 Series Fire Alarm Control Panels, Base Firmware 053-34. All panel models are available in a range of enclosure sizes and with a range of alternative optional features.

The Axis-5100 is a Single Loop, Analogue Addressable Fire Alarm Control

The Axis-5200 is a Two Loop, Analogue Addressable Fire Alarm Control

The Axis-5400 is a Multiple Loop, Analogue Addressable Fire Alarm Control Panel with provision for up to four loops.

The Axis-5800\* is a Multiple Loop, Analogue Addressable Fire Alarm Control Panel with provision for up to eight loops.

\*May be followed by /FT

All Axis-5000 models are designed for use with the Advanced (AV)/Axis fire detection devices (analogue addressable) connected to the panel through the Mxp-502 loop driver. Advanced (AV)/Axis fire detection devices (conventional) may be connected through the Mxp-536 Peripheral Zone card for either loop or radial connection. Advanced loops support 240 devices.

#### **INITIAL TYPE TEST RESULTS BY NOTIFIED BODY:**

| Classification & applicable standard      | Assigned rating                    |
|---|------------------------------------|
| EN54-2:1997 + AC:1999 + A1:2006           | Meets all requirements of Annex ZA |
| EN54-4:1997 + AC:1999 + A1:2002 + A2:2006 | Meets all requirements of Annex ZA |

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