

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 (see Appendix)

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, PR452927 dated 07 August 2019, and PR465769 dated 23 September 2024 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product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body.

 Digitally signed by
Richard Zammitt
Location: Ireland
Foxit PDF Editor
Version: 13.1.3

Issue 5, Dublin, dated 24 September 2024

Richard Zammitt, Certification Manager
On behalf of FM Approvals Europe Limited
(Project Id 3057699, PR452927, RR224051, RR228306 and PR465769)

FM Approvals Europe Limited. One Georges Quay Plaza, Dublin, Ireland D02 E440
E-mail: cpr@fmaprovals.com Web: www.fmaprovals.com

F CPR 028 (July 2024)

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



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 eight loop driver cards, inputs/outputs and an integrated 3 A, 4 A or 5 A power supply.

- MX-5100 Base card 1 loop (MX-5101 variants)**
- MX-5200 Base card 1 to 2 loop (MX-5201, MX-5202 variants)**
- MX-5400 Base card 1 to 4 loop (MX-5401, MX-5402, MX-5403, MX-5404 variants)**
- MX-5800 Base card 2 to 8 loop (MX-5802*, MX-5803*, MX-5804*, MX-5805*, MX-5806*, MX-5807*, MX-5808* variants)**

Available configurations **Mx-5a0bcd*** or **Axis-5a0bcd***

- a** = Maximum number of loops (**1,2,4,8**)
- b** = Loops fitted (**1,2, 3, 4, 5, 6, 7, 8**)
- c** = Protocol (**Blank/None** - Apollo, Hochiki, Argus Vega) (**A** - Apollo Core) (**V** - Argus Vega) (**N** - Nittan)
- d** = Enclosure Size (**Blank/None** - default) (**S** - Small, **M** - Medium, **L** - Large, **D** - Deep, **E** - Extended, **R** - Rack)
- *** = Network (**Blank/None** - Standard Network) (**/FT** - Optional Fault Tolerant Network)

CIE Loop Driver Cards

- MXP-502** Apollo, Hochiki, Argus Vega Protocols
- MXP-567** Nittan Protocol
- MXP-568** Apollo Core, Apollo, Hochiki, Argus Vega Protocols
(MXP-568 may be used in lieu of MXP-502)

CIE Routing / Protection Card *(option with requirements EN54-2, 7.9 -7.10)*

- MXP-532** Fire routing protection interface

Compatible Peripherals for all MX-5000 CIE panel ranges

| | | | | | |
|-----------------|----------------|-----------------|------------------|----------------|----------------|
| MX-5010 | MX-5010/FT | MX-5020 | MX-5020/FT | MX-5030 | MX-5030/FT |
| MXP-034 | MXP-034-BXP | MXP-035 | MXP-035-BXP | MXP-501 | MXP-502 |
| MXP-503 | MXP-505 | MXP-506 | MXP-507 | MXP-509 | MXP-510 |
| MXP-510/FT | MXP-510-BX | MXP-510-BX/FT | MXP-511 | MXP-512 | MXP-513-050CRY |
| MXP-513-050CRYG | MXP-513-050RD | MXP-513-050RY | MXP-513-050YL | MXP-513-100RD | MXP-513-100RY |
| MXP-513-100YL | MXP-513-200RY | MXP-513L-050CRY | MXP-513L-050CRYG | MXP-513L-050RD | MXP-513L-050RY |
| MXP-513L-050YL | MXP-513L-100RD | MXP-513L-100RY | MXP-513L-100YL | MXP-513L-200RY | MXP-513M-050RD |
| MXP-513M-050RY | MXP-513M-050YL | MXP-513R-050CRY | MXP-513R-050CRYG | MXP-513R-050RD | MXP-513R-050RY |
| MXP-513R-050YL | MXP-513R-100RD | MXP-513R-100RY | MXP-513R-100YL | MXP-513R-200RY | MXP-514 |
| MXP-515 | MXP-515T | MXP-516 | MXP-517 | MXP-518-001 | MXP-518-002 |
| MXP-519 | MXP-522 | MXP-523 | MXP-532 | MXP-536 | MXP-537 |
| MXP-538 | MXP-539 | MXP-542 | MXP-543 | MXP-544 | MXP-545 |
| MXP-545/FT | MXP-547 | MXP-547-BX | MXP-567 | MXP-568 | MXP-631-MM |
| MXP-631-SM | MXP-635-A | MXP-635-P | Touch-10 | Touch-10/FT | MXP-049 |
| MXP-549 | MXP-050-001 | MXP-050-002 | MXP-550 | MXP-550/D | MXP-051 |
| MXP-051/D | MXP-551 | MXP-551D | MXS-049 | MXS-050 | MXS-051 |

Remote Terminal Network Peripherals

| | |
|------------------|---|
| Touch-10* | Remote touch screen terminal |
| MX-5010* | Remote display terminal, reduced indications |
| MX-5020* | Remote control terminal, reduced indications and control |
| MX-5030* | Remote control terminal, full indications and full control |
| MXP-510*† | BMS Interface, RS232 connection to Building Management PC |
| MXP-545* | PENN Peripheral Expansion Network Node <i>(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)</i> |

* = Network (/FT optional fault-tolerant network)

† = Boxed (BX in enclosure)

Optional Modules

| | |
|-----------------|---|
| MXP-034† | 4-Way Sounder Card <i>(boxed variant with 4amp PSU)</i> |
| MXP-035† | 4-Way Relay Card <i>(boxed variant with 1.5amp PSU)</i> |
| MXP-501 | Battery Temperature Sensor |
| MXP-502 | Loop Driver Card - Apollo, Hochiki, Argus Vega |
| MXP-503 | Network Card – Standard |

PR465769

F CPR 028 (July 2024)

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

Page 3 of 7

| | |
|-------------------------|--|
| MXP-505 | Sounder Active End of Line |
| MXP-506 | Routing Termination Card |
| MXP-507 | 2-Way Relay Card |
| MXP-509 | Network Card - Fault-tolerant |
| MXP-510*† | BMS Graphics Interface |
| MXP-511 | 2-Pos Key-Switch NC Trapped 300LG |
| MXP-512 | Printer Assembly |
| MXP-513-050CRY | 50 Zone column format - extended enc. (Red/Yellow) |
| MXP-513-050CRYG | 50 Zone Column Format - Extended Enclosure (30 x Red/Yellow – 20 Green/Yellow) |
| MXP-513-050RD | 50 Zone Fire (Red) - Medium Enclosure |
| MXP-513-050RY | 25 Zone Fire (Red) + Fault (Yellow) - Medium Enclosure |
| MXP-513-050YL | 50 Zone Fault (Yellow) - Medium Enclosure |
| MXP-513-100RD | 100 Zone Fire (Red) - Extended Enclosure |
| MXP-513-100RY | 50 Zone Fire (Red) + Fault (Yellow) - Extended Enclosure |
| MXP-513-100YL | 100 Zone Fault (Yellow) - Extended Enclosure |
| MXP-513-200RY | 200 Zone - Extended Enclosure (Red/Yellow) |
| MXP-513M-050RD | 50 Zone Fire (Red) - Medium Enclosure |
| MXP-513M-050RY | 25 Zone Fire (Red) + Fault (Yellow) - medium enc |
| MXP-513M-050YL | 50 Zone Fault (Yellow) - medium enc |
| MXP-513L-050CRY | 50 Zone Column Format -(Red/Yellow) |
| MXP-513L-050CRYG | 50 Zone Column Format -(30 x Red/Yellow - 20 Green/Yellow) |
| MXP-513L-050RD | 50 Zone Fire (Red) |
| MXP-513L-050RY | 25 Zone Fire (Red) + Fault (Yellow) |
| MXP-513L-050YL | 50 Zone Fault (Yellow) |
| MXP-513L-100RD | 100 Zone Fire (Red) |
| MXP-513L-100RY | 50 Zone Fire (Red) + Fault (Yellow) |
| MXP-513L-100YL | 100 Zone Fault (Yellow) |
| MXP-513L-200RY | 200 Zone - (Red/Yellow) |
| MXP-513R-050CRY | 4U Programmable LED Card 50 Zone Column Format (Red/Yellow) |
| MXP-513R-050CRYG | 4U Programmable LED Card 50 Zone Column Format (30 x Red/Yellow - 20 x Green/Yellow) |
| MXP-513R-050RD | 4U LED Card -50 Zone Fire (Red) |
| MXP-513R-050RY | 4U LED Card - 50 Zone Fire/FLT (Red/Yellow) |
| MXP-513R-050YL | 4U LED Card - 50 Zone Fault (Yellow) |
| MXP-513R-100RD | 4U LED Card - 100 Zone Fire (Red) |
| MXP-513R-100RY | 4U LED Card - 100 Zone Fire/Fault (Red/Yellow) |
| MXP-513R-100YL | 4U LED Card - 100 Zone Fault (Yellow) |
| MXP-513R-200RY | 4U Programmable LED Card - 200 Zone (Red/Yellow) |
| MXP-514 | MX-5000 Rack AC Filter Card |
| MXP-515 | 3-Pos Key Switch (Un-trapped all positions) |
| MXP-515T | 3-POS Key-Switch Assy (Key-pull in centre Pos only) |
| MXP-516 | 2-Pos Key Switch (Trapped) |
| MXP-517 | 2-Pos Key Switch (Un-trapped) |
| MXP-518-001 | Access Enable Key Switch for 5010/5020 |
| MXP-518-002 | Access Enable Key Switch for 5030 |
| MXP-519 | 2-Pos Key Switch (Momentary - Trapped) |
| MXP-522 | LED Adaptor |
| MXP-523 | LED Interface Module |
| MXP-532 | Routing / Protection Interface |
| MXP-536 | P-BUS 8-way Conventional Zone Card |
| MXP-537 | P-BUS 10-way Switch Input Card |

PR465769

| | |
|-------------------|---|
| MXP-538 | P-BUS 16-Way Switch (Form Factor) Module 16 Switches, 3 Integrated, Programmable LED's per Switch (Red, Yellow, Green) |
| MXP-539 | P-BUS MIMIC Driver Card (16 input + 48 output) 16 Switch inputs & 48 LED Driver Outputs. Supports up to 5 MXP-052 10 Relay Output Modules |
| MXP-542 | 24VDC - 24VDC Convertor / Isolator (for use with MXP-631 Fibre Network Convertors) |
| MXP-543 | Fan Damper |
| MXP-544 | Peripheral 8-Way Relay Card |
| MXP-545* | PENN |
| MXP-547† | ESPA Pager Interface |
| MXP-631-MM | Ad-Net / fibre optic converter multi-mode |
| MXP-631-SM | Ad-Net / fibre optic converter single-mode |
| MXP-635-A | Fibre Optic Convertor - Active |
| MXP-635-P | Fibre Optic Convertor - Passive |
| MXP-567 | Loop Driver Card - Nittan |
| MXP-568 | Loop Driver - Apollo Core Protocol |

* = Network (/FT optional fault-tolerant network)

† = Boxed (BX in enclosure)

Independent Boxed PSE Units

| | |
|--------------------|-------------------------------|
| 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 |
| MXP-549 | 1.5A PSE in 7Ah Enclosure |
| MXP-550 | 3.0A PSE in 17/18Ah enclosure |
| MXP-550/D | 3.0A PSE in 25Ah enclosure |
| MXP-551 | 5.0A PSE in 17/18Ah enclosure |
| MXP-551/D | 5.0A PSE in 38Ah enclosure |

Caged PSE Units

| | |
|----------------|----------|
| MXS-049 | 1.5A PSE |
| MXS-050 | 3A PSE |
| MXS-051 | 5A PSE |

Common Arrangements

The MxPro5 series includes the 5000 Apollo Protocol Series Fire Alarm Control Panels, Base Firmware 60.02.xx.

All 5000 Series models are designed for use with the Apollo (Discovery, Xplorer, XP95 and Series 90) and Hochiki (ESP) analogue addressable fire detection devices connected to the panel through the MXP-502 or MXP-568 loop driver. Apollo and Hochiki conventional fire detection devices may be connected through the MXP-536 Peripheral Zone card for either loop or radial connection. Apollo loops support up to 126 devices, Hochiki loops support up to 127 devices.

PR465769

F CPR 028 (July 2024)

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

MX-5100 Base card 1 loop (MX-5101)
MX-5200 Base card 1 to 2 loop (MX-5201, MX-5202)
MX-5400 Base card 1 to 4 loop (MX-5401, MX-5402, MX-5403, MX-5404)
MX-5800 Base card 2 to 8 loop (MX-5802*, MX-5803*, MX-5804, MX-5805*, MX-5806*, MX-5807*, MX-5808*)

* = Network (/FT optional fault-tolerant network)

All panel models are available in a range of enclosure sizes and with a range of alternative optional features.

The MxPro5 series includes the 5000A Apollo Core Protocol Series Fire Alarm Control Panels, Base Firmware 060.02.xx.

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 conventional fire detection devices may be connected through the MXP-536 Peripheral Zone card for either loop or radial connection. Apollo conventional loops support up to 126 devices. Apollo core loops support up to 254 devices.

MX-5100A Base card 1 loop (MX-5101A)
MX-5200A Base card 1 to 2 loop (MX-5201A, MX-5202A)
MX-5400A Base card 1 to 4 loop (MX-5401A, MX-5402A, MX-5403A, MX5404A)
MX-5800A Base card 2 to 8 loop (MX-5802A*, MX-5803A*, MX-5804A*, MX-5805A*, MX-5806A*, MX-5807A*, MX-5808A*)

* = Network (/FT optional fault-tolerant network)

All panel models are available in a range of enclosure sizes and with a range of alternative optional features.

The MxPro5 series includes the 5000H Hochiki Protocol Series Fire Alarm Control Panels, Base Firmware 060.02.xx.

All 5000H Series models are designed for use with the Hochiki (ESP) fire detection devices (analogue addressable) connected to the panel through the MXP-502 or MXP-568 loop driver. Hochiki conventional fire detection devices may be connected through the MXP-536 Peripheral Zone card for either loop or radial connection. Hochiki loops support up to 127 devices.

MX-5100H Base card 1 loop (MX-5101H)
MX-5200H Base card 1 to 2 loop (MX-5201H, MX-5202H)
MX-5400H Base card 1 to 4 loop (MX-5401H, MX-5402H, MX-5403H, MX5404H)
MX-5800H Base card 2 to 8 loop (MX-5802H*, MX-5803H*, MX-5804H*, MX-5805H*, MX-5806H*, MX-5807H*, MX-5808H*)

* = Network (/FT optional fault-tolerant network)

All panel models are available in a range of enclosure sizes and with a range of alternative optional features.

The MxPro5 series includes the 5000N Nittan Protocol Series Fire Alarm Control Panels, Base Firmware 060.02.xx.

All 5000N Series models are designed for use with the Nittan fire detection devices (analogue addressable) connected to the panel through the MXP-567 loop driver. Nittan conventional fire detection devices may be

connected through the MXP-536 Peripheral Zone card for either loop or radial connection. Nittan loops support up to 254 devices.

- MX-5100N Base card 1 loop** (MX-5101N)
 - MX-5200N Base card 1 to 2 loop** (MX-5201N, MX-5202N)
 - MX-5400N Base card 1 to 4 loop** (MX-5401N, MX-5402N, MX-5403N, MX5404N)
 - MX-5800N Base card 2 to 8 loop** (MX-5802N*, MX-5803N*, MX-5804N*, MX-5805N*, MX-5806N*, MX-5807N*, MX-5808N*)
- * = Network (/FT optional fault-tolerant network)

All panel models are available in a range of enclosure sizes and with a range of alternative optional features.

The MxPro5 series includes the 5000V Argus Vega Protocol Series Fire Alarm Control Panels, Base Firmware 060.02.xx.

All 5000V Series models are designed for use with the Argus Vega fire detection devices (analogue addressable) connected to the panel through the MXP-502 or MXP-568 loop driver. Argus Vega conventional fire detection devices may be connected through the MXP-536 Peripheral Zone card for either loop or radial connection. Argus Vega loops support up to 240 devices.

- MX-5100V Base card 1 loop** (MX-5101V)
 - MX-5200V Base card 1 to 2 loop** (MX-5201V, MX-5202V)
 - MX-5400V Base card 1 to 4 loop** (MX-5401V, MX-5402V, MX-5403V, MX5404V)
 - MX-5800V Base card 2 to 8 loop** (MX-5802V*, MX-5803V*, MX-5804V*, MX-5805V*, MX-5806V*, MX-5807V*, MX-5808V*)
- * = Network (/FT optional fault-tolerant network)

All panel models are available in a range of enclosure sizes and with a range of alternative optional features.

The Axis EN series includes the Advanced AV Protocol Series Fire Alarm Control Panels, Base Firmware 060.02.xx.

All Axis EN Series models are designed for use with the Advanced AV/Axis fire detection devices (analogue addressable) connected to the panel through the MXP-502 or MXP-568 loop driver. Advanced AV/Axis conventional fire detection devices may be connected through the MXP-536 Peripheral Zone card for either loop or radial connection. Advanced AV loops support up to 240 devices.

- Axis-5100 Base card 1 loop** (Axis -5101)
 - Axis -5200 Base card 1 to 2 loop** (Axis -5201, Axis -5202)
 - Axis -5400 Base card 1 to 4 loop** (Axis -5401, Axis -5402, Axis -5403, Axis 5404)
 - Axis -5800 Base card 2 to 8 loop** (Axis -5802*, Axis 5803*, Axis -5804*, Axis -5805*, Axis-5806*, Axis -5807*, Axis -5808*)
- * = Network (/FT optional fault-tolerant network)

All panel models are available in a range of enclosure sizes and with a range of alternative optional features.

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 |