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, PR45928 dated 30 July 2020, PR465769 dated 23 September 2024 and PR471227 dated 16 May 2025 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product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body.

Richard Zammitt
Dublin, Ireland
2024.4.1

Issue 6, Dublin, dated 20 May 2025

Richard Zammitt, Certification Manager
On behalf of FM Approvals Europe Limited

(Project Id 3057699, PR452927,PR45928, RR224051, RR228306, PR465769 and PR471227)

APPENDIX TO CERTIFICATE OF CONSTANCY OF PERFORMANCE

2809 – CPR - E0011

Full Product Description

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

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

SC-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)**

All Axis-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.

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

All SC-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.

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

*Available configurations **Mx**-5**a**0**bcd*** **or** **Axis**-5**a**0**bcd****

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/Axis Protocols
MXP-567	Nittan Protocol
MXP-568	Apollo Core, Apollo, Hochiki, Argus Vega/Axis 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 *(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)*

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

⁺ = Boxed (**BX** in enclosure)

Optional Modules

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

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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
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, Apollo, Hochiki, Argus Vega/Axis Protocols

***** = 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 60.03.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.

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 060.03.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 060.03.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 060.03.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 060.03.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/Axis Protocol Series Fire Alarm Control Panels, Base Firmware 060.03.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/Axis 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.

The SC-5000A Series includes the Apollo Protocol Series Fire Alarm Control Panels, Base Firmware 060.03.xx.

All SC-5000A Series models are designed for use with the Apollo (Discovery, Xplorer, XP95 and Series 90) 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.

SC-5100 Base Card 1 loop (SC-5101A)
SC-5200 Base Card 1 to 2 loop (SC-5201A, SC-5202A)
SC-5400 Base Card 1 to 4 loop (SC-5401A, SC-5402A, SC-5403A, SC-5404A)
SC-5800 Base Card 2 to 8 loop (SC-5802A*, SC-5803A*, SC-5804A, SC-5805A*, SC-5806A*, SC-5807A*, SC-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 SC-5000V Series includes the Argus Vega Protocol Series Fire Alarm Control Panels, Base Firmware 060.03.xx.

All SC-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.

SC-5100V Base Card 1 loop (SC-5101V)
SC-5200V Base Card 1 to 2 loop (SC-5201V, MX-5202V)
SC-5400V Base Card 1 to 4 loop (SC-5401V, SC-5402V, SC-5403V, SC-5404V)
SC-5800V Base Card 2 to 8 loop (SC-5802V*, SC-5803V*, SC-5804V*, SC-5805V*, SC-5806V*, SC-5807V*, SC-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 SC-5000H Series includes the Hochiki (ESP) Protocol Series Fire Alarm Control Panels, Base Firmware 060.03.xx.

All SC-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.

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

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