MINERVA® Marine

MX Virtual Multi-Sensor Detectors

Features:

- Over 20 fire detection modes
- Tyco MX FASTLOGIC Expert algorithms
- MX HPO detection Algorithms
- Up to 250 detectors per loop
- Remote detector verification & temperature read out
- Programmable alarm LED with 360° viewing angle
- Optional detector locking pin
- Variety of sounder and relay detector bases
- Address flag stays with the base
- Approved by all major classification societies for use on vessels
- Lower cost system design and installation as one detection type can be used throughout the vessel
- Lower cost of ownership as no radioactive source disposal costs together with less spares holding
- Enhanced safety in accomodation areas by using the unique Carbon Monoxide (CO) detectors
- Major cable saving options using loop powered ancillaries
- Allows easier decision making by operator because of remote temperature and smoke density read-out

MX Virtual Multi-Sensor Detectors

The 800 Series are addressable multi-sensor fire, smoke and heat detectors, which can be implemented as several MX VIRTUAL detectors by the MX detection panel. The 800 Series are designed and approved to EN54. The 800 Series of MX VIRTUAL detectors provide the latest fire detection technology in an attractive cost effective package.

General

The 800 Series detectors are supplied in an extremely robust and reliable fully sealed construction, which has undergone stringent environmental type testing. All electrical contacts are moulded into the plastic to eliminate any movement.

The detectors are constructed from hardwearing Fire Resistant FR110 Bayblend. The multi-sensor detectors are environmentally friendly. They use no radioactive parts and can be returned to the factory for recycling at the end of their life.
All 800 Series detectors are supplied with integral dust covers as part of the packaging. Dust covers are retained throughout installation and removed at commissioning time.

Installation & Service Features

The 800 Series MX VIRTUAL detectors include a host of installation and service features which are provided to reduce installation and service costs and reduce repair times.

- Standard bases with multiple mounting options speed and simplify installation
- Unique 'park' position for commissioning and service procedures
- Detector Addressing programmed from the MX SERVICE Tool or MX Panel
- Address flag – fixed to the base to prevent mix ups during service
- Compatible with Tyco 600 and 900 Series bases – for easy upgrade
- Panel Auto-Config and Self learn functions – supported by the detectors
- Full range of remote installation and service tools
- Dirty Detector Read-out can be viewed on the MX SERVICE tool or panel

Detection Modes

All 800 Series detectors communicate to the MX detection panel using the fast reliable MX DIGITAL loop protocol. This allows each detector to operate in one or two of several detection modes, thus allowing it to be easily optimised to the risk.
To meet detection applications with multiple risks the 811PH and 811CH detectors allow two detection modes to operate simultaneously.

Virtual Detectors

The use of virtual detection means that installations can change the detection mode without any physical change, taking place. Not only can the detection be changed at the time of installation and commissioning but also during the life of the vessel as vessel usage changes.
Some MX detection panels even allow the detection mode to be changed at different times of the day or automatically as occupancy and activity in the space changes.
As well as providing great flexibility, using only two detector models means whole life costs are reduced by reducing manufacturing, stocking and service stocks. This also reduces the number of times detectors have to be changed during the life of the installation.

811PH Multi-Sensor Smoke and Heat Detectors

The 811PH is a state-of-the-art smoke and heat detector which allows a full set of detection modes to be implemented in the MX detection panel to suit most smoke and heat detection applications.
The 811PH incorporates a unique "mousehole" design optical chamber with an unrivalled signal to noise ratio providing high resilience to dust and dirt which means reduced service costs. In addition a unique chamber cover actually draws slow moving smoke into the chamber to provide a more responsive detector.
The 811PH provides all the features of MX VIRTUAL detectors including self verification, temperature and smoke level indication and unrivalled service functions.

Technical Specification

Dimensions:	109dia x 43H mm
Operating Temp:	-20° to +70°C
Storage Temp:	-40° to +80°C
Relative Humidity:	95% (non condensing)
Standards:	EN54 pt 5 EN54 pt 7

811CH Multi-Sensor Carbon Monoxide and Heat Detectors

The 811CH is a state-of-the-art carbon monoxide and heat detector which allows a full set of detection modes to be implemented in the MX detection panel to suit most fire and heat detection applications. The 811CH is particularly well suited to accomodation areas, storage areas and applications where smoke detector positioning is difficult or where smoke detectors are prone to false alarm. The integration of heat detection into the 811CH allows the detector to operate in a wide variety of applications where combined risks mean that CO detection alone would be insufficient.

The 811CH incorporates a reliable electro-chemical CO detection cell and high specification low thermal mass thermistor for accurate temperature detection. The 811CH provides all the features of MX VIRTUAL detectors including self verification, temperature and CO level indication and unrivalled service functions.

Technical Specification

Dimensions:	109dia x 43H mm
Operating Temp:	0° to +55°C
Storage Temp:	-20° to +55°C
Relative Humidity:	95% (non condensing)
Standards:	EN54 pt 5 EN54 pt 7

811H Heat Detectors

The 811H is a flexible cost-effective addressable heat detector with all the features of MX VIRTUAL detectors. The 811H returns the temperature to the MX detection panel which allows various detection modes to be implemented. The 811H uses a high quality thermistor with very low thermal mass. This allows the detectors to provide fast accurate temperature detection as well as heat detection.

Technical Specification

Dimensions:	109dia x 43H mm
Operating temp:	-25 to +70°C
Storage temp:	-40 to +80°C
Standards:	EN54:pt.5

5B 5" Universal Base

This is the most common base designed to fix directly to the accomodation ceiling panel or deckhead mountings. This base allows a detector to be plugged in directly or a functional base to be plugged in between the base and detector.

Features

. Variety of Fixing Options
. Remote LED Connections
. Anti-Tamper Facility
. Park position and address flag holder
. Integral breakout locking key

801RB Functional Relay Base

The 801RB provides dual relay contacts for signalling external devices on MX addressable systems. A very low operating current even when the relay is energised enables the relay base to be used without any additional power. The dual contacts are under the control of a programmable output, through the powerful cause and effect software.

Features

. Dual pole 24V DC relay contacts (60VA)
. Status indication LED
. Very low power consumption (<20µA except startup)

MKII Sounder Base

A new low current range of sounder bases for use with the MX Fire Alarm Control Panel.

Features

- Manufactured to EN54 part 3
- Integral sounder and detector base
- Volume and tone adjustable after installation
- Low Power Synchronisation
- Do not require use of a standard base (maybe installed directly onto a standard deckhead mouting)
- Fully programmable

801RIL Remote Indication LED

All detector bases have the ability to drive a remote LED in the event that the installed position of the detector is not easily visible. The 801RIL is compatible with all 800 Series detectors.

Features

. UK Single gang mounting
. High intensity red LED

800HL Indication Lamp

The 800HL remote indicator lamp provides a larger indicator for use in place of the RIL when longer distances are involved. Typically used to indicate the source of an alarm in vessels with long alleyways eg. passenger vessels.