VLC-800MX

Generation 6 MX
Detection Range
MX VESDA LaserCOMPACT

Features
- Compatible with MX Addressable Loop on SIMPLEX 4100ESi, VIGILANT MX1 and VIGILANT MX4428 panels
- MX Addressable VESDA detection
- 800m² coverage area
- Three (3) alarm levels
- Wide sensitivity range

Description
The VLC–800MX Addressable LaserCOMPACT smoke detector uses the latest in VESDA sampling technology including a highly efficient laser light source and a dual stage dust filter. The VLC–800MX LaserCOMPACT sensor communicates smoke chamber information to the connected MX Control and Indicating Equipment (CIE). The detector evaluates the smoke sensor information against three programmed thresholds and sends an alarm or pre-alarm condition depending on smoke chamber activity. In addition to smoke chamber information, the VLC–800MX LaserCOMPACT also advises the CIE of fault conditions including: dirty filter, airflow restriction or failure.

Operation
A high-efficiency aspirator continually draws air through a simple pipe network to a central detector. Air entering the sensor housing passes a flow sensor before the sample is passed through a dual–stage dust filter. The majority of air is exhausted from the detector and where required, back vented to the protected area. The first stage of the air filter removes dust and dirt from the air sample before it enters the smoke detection chamber. A second, ultra–fine filter stage provides a clean air supply to be used inside the detection chamber to form clean air barriers which protect the optical surfaces from contamination. The detection chamber uses a stable, highly efficient laser light source and unique sensor configuration to achieve optimum response to a wide range of smoke types. When smoke passes through the detection chamber, it creates light scattering which is detected by very sensitive sensor circuitry.

The smoke level is compared against the alarm sensitivity field programmed into the detector and sent to the CIE.

Specifications
- Loop Voltage: 1
  - 40Vdc
- Quiescent Current: 300µA
- External 24V Supply: 18 to 28Vdc
- Current Consumption: 245mA
- Output Relay: 2A (max.) @ 30Vdc
- Max. VLC-800MX per Loop: 2A @ 30Vdc
- Wire Size (maximum): 125/250
- Ambient Temperature: –10°C to +39°C
- Sampled Air Temperature: –20°C to +60°C
- Relative Humidity: 10% to 95% (non cond.)

Indoor Applications Only
Coverage Area: 800m²
Sampling Pipe Length (max.): 2 x 50m (<15 holes)

Alarm Sensitivity: 0.005 to 20% Obs/m
Ingress Protection: IP30
Dimensions (HWD): 225 x 225 x 85 mm
Weight: 1.9kg
ActivFire Listing: afp-1580
FPANZ Listing: VF/341
Compatible Panels: MX1, MX4428, 4100ESi
Part Number: VLC-800MX

Address Setting
The VLC-800MX is supplied with a default (invalid) address of 255 and must be set to the correct loop address using the 850EMT or 801AP MX Service Tool.

1. Addressable loop voltage provided by MX CIE.
2. Relay current is for a resistive load.
3. MX4428/MX1. Refer to appropriate manual: LTG273 (MXP), LTG360 (MX1-NZ), LTG441 (MX1-Au) for design specifications.
4. VESDA pipe and accessories are ordered separately.
Wiring

The VLC-800MX requires an external 24Vdc power supply. If the on-board relay is required, connect to the NO, C and NC terminals. If an external relay is required, connect to REL+ and REL- terminals.