VESDA VLF MCC VIC-020, VIC-030



The VESDA VLF Multi-function Control Card (MCC) is an interface card for the range of VESDA VLF smoke detectors. An MCC expands the range of input and output communications a VLF detector can perform.

Why use a VLF MCC?

Installing a VLF MCC into a VLF detector provides a cost-effective solution for customers who need enhanced connectivity, fault detection and monitoring, and annunciation of alarms and faults. The principal benefits include:



Improved FACP connectivity

The VLF is fitted with two (2) alarm relays in its standard form. With an extra two (2) relays, the MCC allows reporting of all four (4) alarm levels on dry relay outputs.

Enhanced annunciation

An MPO (Monitored 24 V Powered Output) is available on the VIC-030 version of the card. The MPO provides power to devices such as sirens or strobes, and monitors the line integrity.

Enhanced control and fault detection

With a VLF MCC installed, a VLF has two (2) General Purpose Inputs (GPIs), allowing, for example, one GPI to report on loss of mains power and the other GPI to be used as a reset input.

The VIC-030 version of the card has a self-configuring GPI, depending on the jumper selection for MPO/Relay3.

- If MPO is selected, activation of the GPI will disable the MPO.
- If Relay3 is selected, the GPI will be set to External Fault (e.g. for mains power supply monitoring).

Features

- Provides two additional relays
- Provides an extra GPI with line monitoring
- Quick and simple to install
- Out-of-the-box operation, with minimal configuration required for extra features
- Diagnostic LEDs give visual indication
- of the card's status
- Fully compatible with VESDA VLF smoke detectors
- Selection between 3rd relay or 24 V MPO VIC-030 Only

VESDA VLF MCC

TECHNICAL SPECIFICATIONS



Specifications		
Dimensions (L x W x H)	110 mm (41/3") x 70 mm (2 3/4") x 20 mm (13/16")	
Weight	0.08 kg (0.176 lb)	
Terminals	0.2 - 2.5 mm² (30-12 AWG)	
Electrical Ratings		
Power consumption	1 W from the detector at 24 VDC (less than 42 mA)	
Relay outputs	2 A at 30 VDC	
MPO input power supply	24 VDC (VIC-030 only)	
MPO input current	100 mA more than MPO output load (VIC-030 only)	
MPO output current	1 A (maximum) (VIC-030 only)	
EOL resistor (MPO & GPI)	2.7K Ohm	
Operating Conditions		
Tested to	-10 to 55°C (14 to 131°F)	
Detector ambient temperature	0 to 40°C (32 to 104°F)	
Humidity	5% to 95% (non-condensing)	
Detector Compatibility	Supports VLF-250 and VLF-500	
	Output for Relay 1: ALERT (follows latching configuration of VLF ALERT status) Output for Relay 2: FIRE-2 (follows latching configuration of VLF FIRE-2 status) Input for GPI: FAULT GPI reports status on following conditions: • EOL > No fault • Short > Fault # 115/IFF6 • O/C > Fault # 111/IFF8	
Input/Output Assignments	VIC-030 Output for Relay 1: ALERT (follows latching configuration of VLF ALERT status) Output for Relay 2: FIRE-2 (follows latching configuration of VLF FIRE-2 status) MPO: ALERT (unless disabled) (follows latching configuration of VLF ALERT status) Jumper configuration ● ● ● J9 ● ● J10 GPI for MPO: Disable MPO MPO status is driven as follows: ■ EOL > MPO enabled ■ Short > MPO disabled * ■ O/C > MPO enabled and Fault # 111/IFF8 Output for Relay 3: DISABLED or STANDBY (follows VLF DISABLED or STANDBY status) Jumper configuration ■ ● J9 ■ ● J10 GPI for Relay 3: FAULT GPI reports status on following conditions: ■ EOL > No fault ■ Short > Fault # 115/IFF6 ■ O/C > Fault # 111/IFF8	

Terminal Block Connections

0	GPI+
0	GPI-
0	NO1
Ø	COM1
Ø	NC1
0	N02
0	COM2
0	NC2
0	NO3 / MPO+ *
0	COM3 / MPO - *
9	NC3/OVDC*
9	MPO 24VDC *

^{*} Available only on VIC-030.

Visual Status Indicators

Diagnostic LEDs indicate:

- Power to the MCC
- Power to the MPO (VIC-030 only)
- Relay activated state
- MPO activated state (VIC-030 only)
- MPO power and line fault (VIC-030 only)
- Internal communications status
- GPI state
- GPI line fault

Ordering Information

Ordering Code	Description
VIC-020	VESDA VLF MCC
VIC-030	VESDA VLF MCC with MPO

Includes: control card, interface cable, single screw, field wiring connectors and End of Line (EOL) resistor(s) (one resistor for VIC-020 or two resistors for VIC-030).

^{*} The MPO is disabled if there is a short on the GPI.