

MVFD

MODBUS VENTILATION FAN CONTROLLER



Key Features

- Three programmable relay outputs for fan speed operation
- 4-20 mA analog output for fan speed control
- Communicates on RS-485 Modbus network
- Can be located up to 4,000 feet from MVE controller
- Just set the Modbus ID and let the MVE panel control the fans
- 2-year warranty

Easily located on the Modbus network near fan controls

The MVFD controller allows the vehicle emissions gas detection system to control the exhaust fans. Since the MVFD can be located anywhere on the Modbus network, it simplifies installation and eliminates the need for additional control wiring runs.

The MVFD has three relay outputs for ventilation system control. At a predetermined low alarm setpoint, the MVE control panel instructs the MVFD to activate ventilation at medium speed. If the high alarm setpoint is reached, the MVFD activates high speed ventilation. The 4-20 mA analog output can be used to control the speed of the fan.

Once installed, the OLED display and pushbuttons allow the user to set the unique Modbus address. All other functions are handled by the MVE control panel. Setting up the MVFD involves simply setting the Modbus address.

Applications

- Warehouses
- Underground Storage
- Parking Garages
- Ventilation Ducts
- Air Quality Monitoring
- Vehicle Maint Buildings

Benefits

- Simple Operation
- Control-wiring savings

Eliminate long control wiring cable runs. Easily install anywhere on the MVE's Modbus RS-485 network and control exhaust fan with analog or relay outputs.

Ordering Information

The **MVFD** is delivered ready to install. Use the model numbers below to order.

Order #: [MVFD](#) (VFD fan controller)



Related equipment

Modbus controller 255 device capacity



DuoSense CO/NO₂ detector



DuoSense CO/NO₂ detector with safety cage and support column mount plate



SPECIFICATIONS

Due to ongoing research and product improvement, specifications are subject to change

Input Power Requirements:
24 VDC, 135 mA

Output Signal:
Linear 4-20 mA (max input impedance: 350 Ohms)

Communications:
RS-485 Modbus RTU, 9600 baud rate

Dimensions:
7.4" high x 8.5" wide x 4.3" deep

Weight:
3 lbs

Enclosure:
Polycarbonate NEMA X, IP 65, with neoprene gasket. Hinged lid with screw-lock hinges. For non-classified areas

Temperature Range:
-40°F to +122°F (-40°C to +50°C)

Humidity Range:
0-95% RH condensing (100% intermittent), with proper conduit seals

Relay Outputs:
SPDT, Form C dry contacts
8A @ 24 VDC or 10 A @ 120 VAC

(3) Programmable Relays
Programmable to trigger upon any event for any group of sensors

Terminal Block Plugs: (Field Wiring)
12-26 AWG, torque 4.4 in-lbs

Warranty:
2 years