

PRODUCT DATA SHEET
Introduction

The MDR16 provides remote control of a group of up to 16 ENVIRCO MAC 10[®] ECM-based FFUs including LEDC, IQ, and LAF.

Standard Features
Overall group FFU control capability

- » Controls EC Motor based FFUs from 1% to 100% control range
- » Selectable manual or automation control input
- » Local/front panel (potentiometer) provides manual adjustment
- » Supports manual tuning/adjustment in automation control mode
- » Front panel LED provides visual feedback of FFU indexing percent of speed
- » Provides fall-back lost signal override in automation control mode

Supports 1 of 3 automation control input modes

- » Configurable for 0-10VDC, 2-10VDC, or 4-20mA inputs

Internal jumper configurable control options

- » Spin-up delay runs motor at minimum speed for initial 10 seconds
- » Automatic switch limits output to >1% and <99%
- » Manual Override enables exclusive manual control mode
- » Selectable On/Off Go control signal for three wire motors
- » Select control input modes

Packaged in a mountable steel electrical box with cut-outs for connecting external wiring.

Warranty

Limited 1-year warranty

Ordering Information

Three versions supporting 120V, 240V, or 277V FFU systems.

267691-120 120V AC Supply

267691-240 240V AC Supply

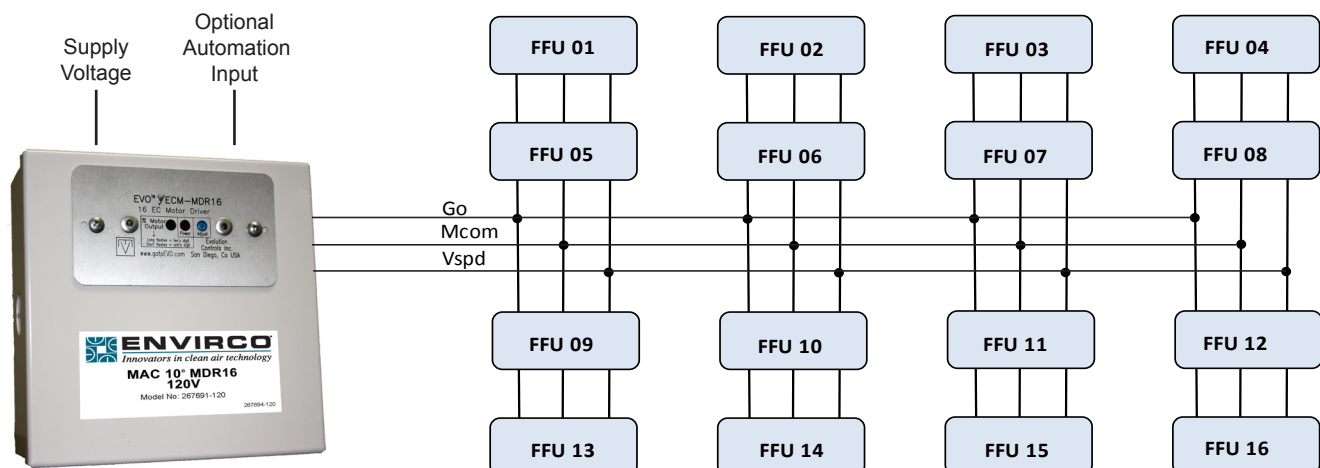
267691-277 277V AC Supply


Applications

- » Clean rooms
- » Pharmaceutical labs
- » Healthcare sites

Advantages

- » Tailored to support ENVIRCO FFUs
- » Consolidates and simplifies overall room control
- » Simple and economical install
- » Provides local control system fall-back if/when there is no automation input
- » Local control mode simplifies setup



PRODUCT DATA SHEET
■ Application

The MDR16 remote mount fan controller is able to control 16 ECM-based FFUs in a manual adjustable mode or is capable of supporting the remote control of 16 ECM-based FFUs using an industry standard automation control input signal (0-10VDC, 2-10VDC, or 4-20mA). In both cases, all of the motors are controlled in unison, eliminating the need to control each motor output one at a time. For applications requiring the MDR16's ability to shut off the FFU motors completely while it is still powered on (i.e. via a zeroed automation control input), then only eight ECM FFUs can be supported with a single MDR16. However, if the user provides a remotely switched AC power feed to the MDR16, then manually switching off that AC feed and MDR will also shut off the FFU motor controls, enabling a single MDR16 to control 16 FFUs in automation control mode.

■ Performance Indicator Signal Lamp Operation

The green lamp continuously indicates the flow index/FFU performance set-point being driven manually by the Front Panel Adjustment and/or the performance being commanded by the automation control input.

Here's how to interpret the single signal lamp output. After a pause, the lamp flashes out the tens digit, then the units digit of a number between 1 and 99. Long flashes represent the tens digit, and short flashes represent the units digit. For example, a flow index of 23 flashes two longs, then three shorts. Two extra-long flashes indicate a flow index of 0. An extra-long flash and ten short flashes indicate a flow index of 100. The lamp flashes the signal that was present when the flash sequence started.

■ Specifications

Power		
<i>Model 267691-120</i>	120VAC 50/60Hz	4W + 0.7W/Motor for two wire motors 4W + 1.4W/Motor for three wire motors
<i>Model 267691-240</i>	240VAC 50/60Hz	4W + 0.7W/Motor for two wire motors 4W + 1.4W/Motor for three wire motors
<i>Model 267691-277</i>	277VAC 50/60Hz	4W + 0.7W/Motor for two wire motors 4W + 1.4W/Motor for three wire motors
Operating Environment	0°F to 140°F at 10-80% RH	
Outputs Go + BSpd	15VDC @ 100mA 80Hz PWM	
Thermal Stability	>0.01%/°F	
Dimensions	White Box with Punch-outs 6.15" x 6.15" x 2.56"	
Internal Connections	250 x 32 mil Quick Connects	
Mounting	via Corner Holes Located on Box Back Plate	