**Introduction**
The MDR16 provides remote control of a group of up to 16 ENVIRCO MAC 10<sup>®</sup> 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
**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**

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