The Electronic Manual Voltage Control MVC-300 is a solid-state device enclosed by a wrap-around metal chassis. The MVC-300 is for mounting through a panel with controls accessible from the front of the panel or can be mounted behind the panel. A terminal strip located on the rear of the device facilitates installation. A manual voltage adjust potentiometer and a manual-off-auto switch are provided on the front face of the unit. For use of a user-supplied external manual adjust potentiometer or for adjust by a motor operated control (MOC), order MVC-301. The MVC-300 and MVC-301 are designed to operate with Basler voltage regulators powered from 120 or 240 volt AC sources up to 320 Hz. The adjustable output of the MVC-300 supplies power to 32, 63 or 125 volt fields at 7 amps.

APPLICATION:
The Electronic Manual Voltage Control MVC-300 allows a generator’s output voltage to be controlled manually by a potentiometer or automatically by a voltage regulator. It is used as a back-up system for the automatic voltage regulator. The unit can be mounted on a control panel in ground vehicles, stationary equipment or shipboard locations.

FEATURES:
• Designed to operate with all Basler voltage regulators rated at 7 amperes continuous and below
• Completely solid state
• 120-240 Vac operation
• Multiple field output ratings
• Automatic voltage build-up circuit
• Small and light for easy panel or door mounting
• CSA approved/UL recognized
• Available from stock

ADDITIONAL INFORMATION
INSTRUCTION MANUAL
Request Publication 9121000993
### MVC-300 RATINGS

#### TABLE 1.

<table>
<thead>
<tr>
<th>Voltage Regulator Model</th>
<th>Voltage Regulator Rating</th>
<th>MVC Input Voltage</th>
<th>Voltage Selection Terminal</th>
</tr>
</thead>
<tbody>
<tr>
<td>KR7FF, KR7FFM, SR8A, SR8F</td>
<td>125V @ 7A or less</td>
<td>240 Vac</td>
<td>125</td>
</tr>
<tr>
<td>SR4A, SR4F, KR4FF, KR4FFM</td>
<td>63V @ 7A or less</td>
<td>120 Vac</td>
<td>63</td>
</tr>
<tr>
<td>XR2001</td>
<td>63V @ 7A or less</td>
<td>240 Vac</td>
<td>63</td>
</tr>
<tr>
<td>KR2FF, KR2FFM</td>
<td>32V @ 7A or less</td>
<td>120 Vac</td>
<td>32</td>
</tr>
<tr>
<td>APR63-5</td>
<td>63V @ 5A or less</td>
<td>240 Vac</td>
<td>63</td>
</tr>
<tr>
<td>APR125-5</td>
<td>125V @ 5A or less</td>
<td>240 Vac</td>
<td>125</td>
</tr>
</tbody>
</table>

#### INPUT RATING:

<table>
<thead>
<tr>
<th>Input Voltage</th>
<th>Output Adjustment Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>120 Vac</td>
<td>1 to 32 Vdc or 1 to 63 Vdc</td>
</tr>
<tr>
<td>240 Vac</td>
<td>1 to 63 Vdc or 1 to 125 Vdc</td>
</tr>
</tbody>
</table>

**NOTE:** Input frequency rated up to 320 Hz.

### SPECIFICATIONS:

**WATTS DISSIPATED:** 30 Watts maximum.

**MINIMUM RESIDUAL VOLTAGE FOR BUILD-UP:** 6 Vac.

**AMBIENT OPERATING TEMPERATURE:**
-40°F (-40°C) to +158°F (+70°C).

**STORAGE TEMPERATURE:**
-85°F (-65°C) to +212°F (+100°C).

**SHOCK:** Withstands up to 15 Gs in each of three mutually perpendicular axes.

**VIBRATION:** Withstands 5 to 29 Hz @ 1.5 Gs; 29 to 52 Hz @ 0.036" double amplitude; 52 to 500 Hz @ 5 Gs.

**WEIGHT:** 3 lbs. (1.360 Kg) Net, 5 lbs. (2.26 Kg) Shipping

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**FIGURE 1:** Typical Interconnection Diagram

**FIGURE 2 - Outline drawing**

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All dimensions in inches, millimeters in parentheses.