

ELECTRONIC MANUAL VOLTAGE CONTROL MODULES MVC112 & MVC236

The Basler Electronic Manual Voltage Control Modules, MVC 112 and MVC236, are solid-state devices enclosed in wrap-around metal chassis. The MVC 112 is designed for "through-the-panel" mounting, and the MVC 236 is designed for "behind-the-panel" mounting. Terminal strips are provided to facilitate installation of the unit. The MVC 112 is equipped with an internal potentiometer (which may be disconnected for remote mounting of a user supplied potentiometer) and an internal MANUAL-OFF-AUTO switch. The MVC 236 is supplied with a potentiometer for remote mounting. An AUTO-OFF-MANUAL switch is required for system operation of the MVC 236. Use Basler compatible switch, P/N 9 2043 06 100.

APPLICATION

The Electronic Manual Voltage Controls MVC 112 and MVC 236 allow a generator's output voltage to be controlled manually by a potentiometer or, if in the auto mode, by an automatic voltage regulator. The Electronic Manual Voltage Controls are for use as a back-up system for the voltage regulator. The unit can be mounted on a control panel in ground vehicles, stationary equipment, or shipboard locations. Nulling chassis (P/N 9 2043 04 100) is available as a separate item for manual bumpless transfer from the automatic voltage regulator to the manual voltage control.

FEATURES

- Designed specifically for use with Basler voltage regulators.
- Completely solid-state.
- Multiple input voltage ratings.
- Multiple field output ratings for a wide range of uses.
- Accepts 50 to 400 Hz input power frequency.
- Automatic voltage build-up circuit.
- Rugged construction.

ADDITIONAL INFORMATION

INSTRUCTION MANUAL

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B Basler Electric

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MVC 112 SPECIFICATIONS

INPUT POWER:
90-153 Vac (120 Vac Nominal), 170-305 Vac (240 Vac Nominal), 50-400 Hz, Single-Phase.

OUTPUT POWER:
32 Vdc Nominal, 12 Adc; 40 Vdc (minimum) at maximum potentiometer setting.
63 Vdc Nominal, 12 Adc; 79 Vdc (minimum) at maximum potentiometer setting.
125 Vdc Nominal, 12 Adc; 156 Vdc (minimum) at maximum potentiometer setting.

REGULATION ACCURACY:
2% regulation for a 10% change in input power.
5% regulation for a 30% change in input power.

FIELD RESISTANCE:
2.67 Ω @ 32 Vdc Nominal Output,
5.25 Ω @ 63 Vdc Nominal Output,
10.42 Ω @ 125 Vdc Nominal Output.

DISSIPATED POWER:
35 Watts

MINIMUM RESIDUAL BUILD-UP VOLTAGE:
5% of 120/240 Vac, Nominal Rated Input.

TEMPERATURE STABILITY:
±5% for a 50°C change.

STORAGE TEMPERATURE:
-40°C (-40°F) to +85°C (+165°F).

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

MAXIMUM HUMIDITY:
98% relative humidity.

SHOCK:
Withstands up to 15 Gs in each of three mutually perpendicular axes without any degradation of performance.

VIBRATION:
Withstands up to 2.0 Gs of force over a frequency spectrum of 10 to 500 Hz.

WEIGHT:
12.0 lbs. (5.5 kg.) net,
15.0 lbs. (6.8 kg.) shipping.

DIMENSIONS:
Refer to Figure 3.

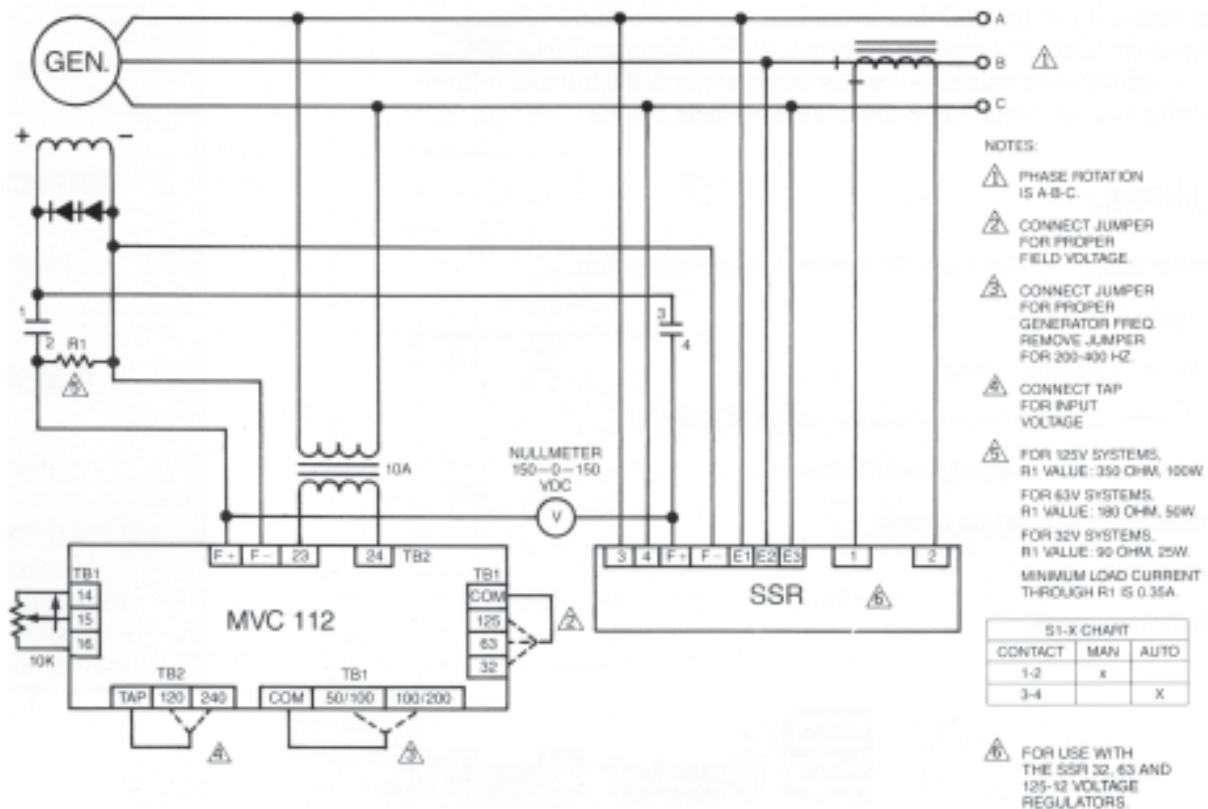


Figure 1 - Typical MVC 112 Interconnection

MVC 236 SPECIFICATIONS

INPUT POWER:

45 - 70 Vac (60 Vac Nominal), 90 - 153 Vac (120 Vac Nominal), 170 - 305 Vac (240 Vac Nominal), 50 - 400 Hz, Single-Phase.

OUTPUT POWER:

32 Vdc Nominal, 36 A&; 40 Vdc (minimum) at maximum potentiometer setting.

63 Vdc Nominal, 36 Adc; 79 Vdc (minimum) at maximum potentiometer setting.

125 Vdc Nominal, 36 Adc; 156 Vdc (minimum) at maximum potentiometer setting.

REGULATION ACCURACY:

2% regulation for a 10% change in input power.

5% regulation for a 30% change in input power.

FIELD RESISTANCE:

0.88 Ω @ 32 Vdc Nominal Output,

1.75 Ω @ 63 Vdc Nominal Output,

3.47 Ω @ 125 Vdc Nominal Output.

DISSIPATED POWER:

85 Watts

MINIMUM RESIDUAL BUILD-UP VOLTAGE:

5% of 120/240 Vac, Nominal Rated Input.

TEMPERATURE STABILITY:

$\pm 5\%$ for a 50°C change.

STORAGE TEMPERATURE:

-40°C (-40°F) to +85°C (+165°F).

OPERATING TEMPERATURE:

-40°C (-40°F) to +70°C (+158°F).

MAXIMUM HUMIDITY:

98% relative humidity.

SHOCK:

Withstands up to 15 Gs in each of three mutually perpendicular axes without any degradation of performance.

VIBRATION:

Withstands up to 2.0 Gs of force over a frequency spectrum of 10 to 500 Hz.

WEIGHT:

15.0 lbs. (6.8 kg.) net,

18.0 lbs. (8.2 kg.) shipping.

DIMENSIONS:

Refer to Figure 4.

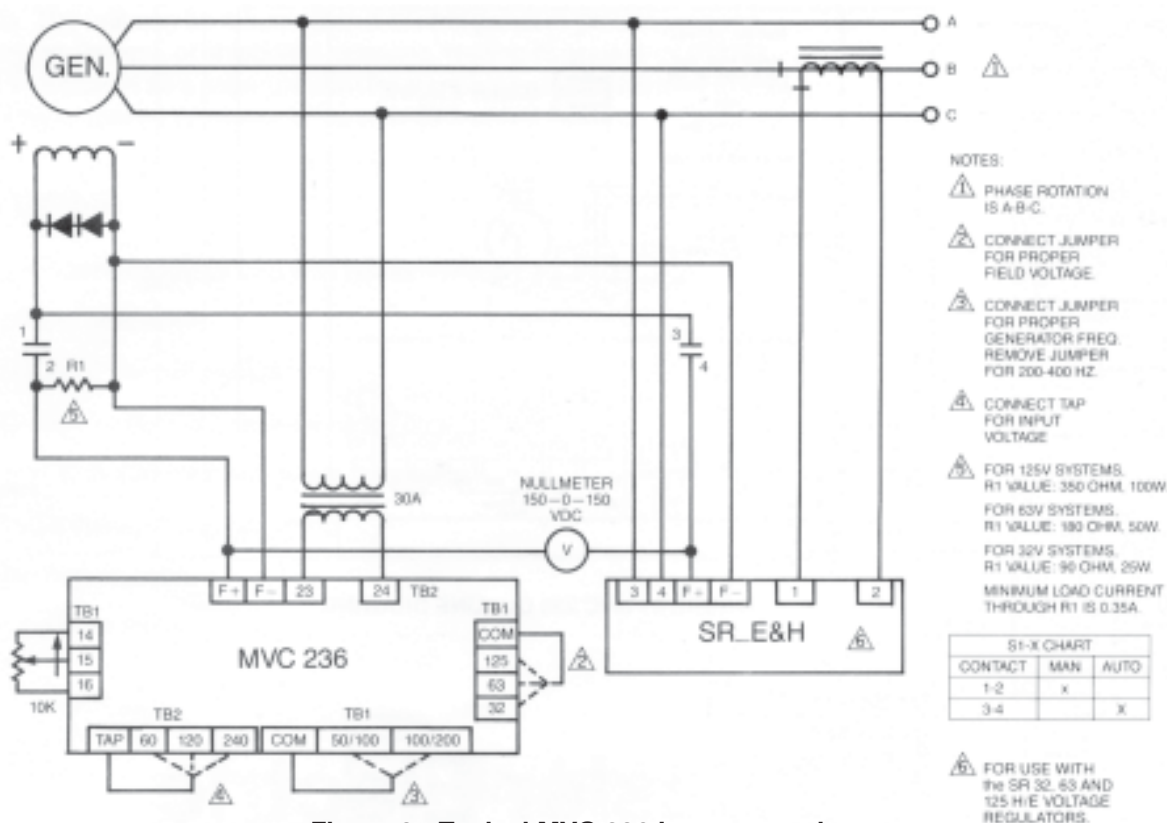


Figure 2 - Typical MVC 236 Interconnection

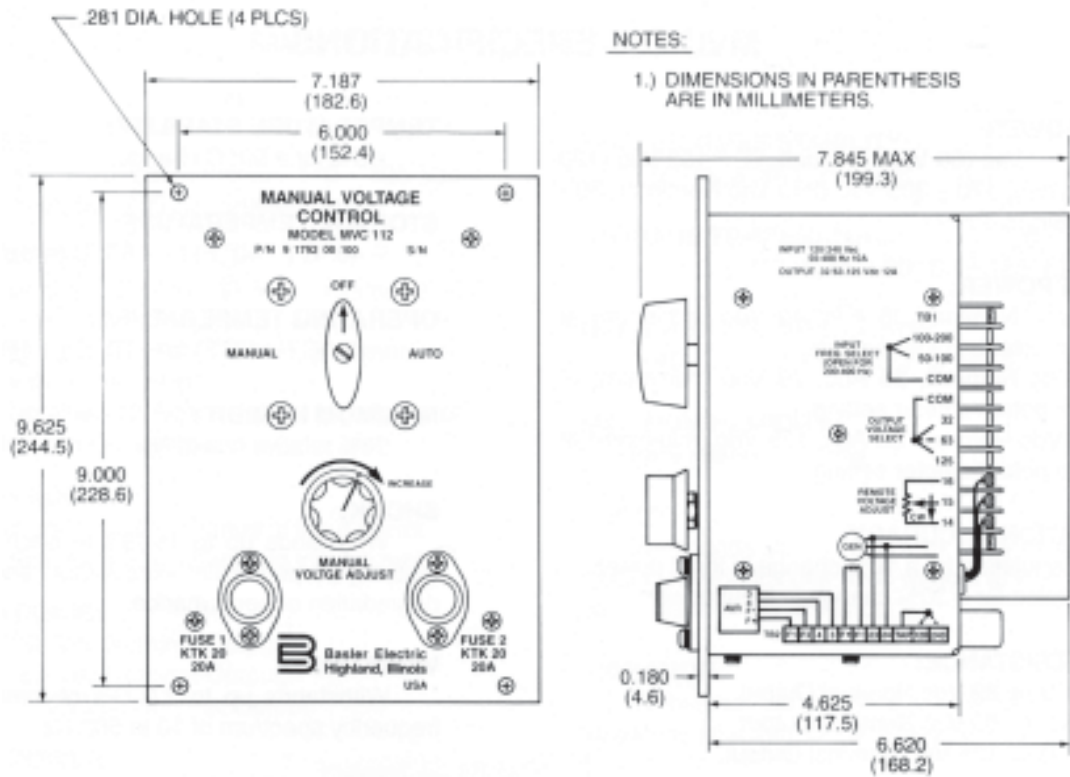


Figure 3 - MVC 112 Outline Drawing

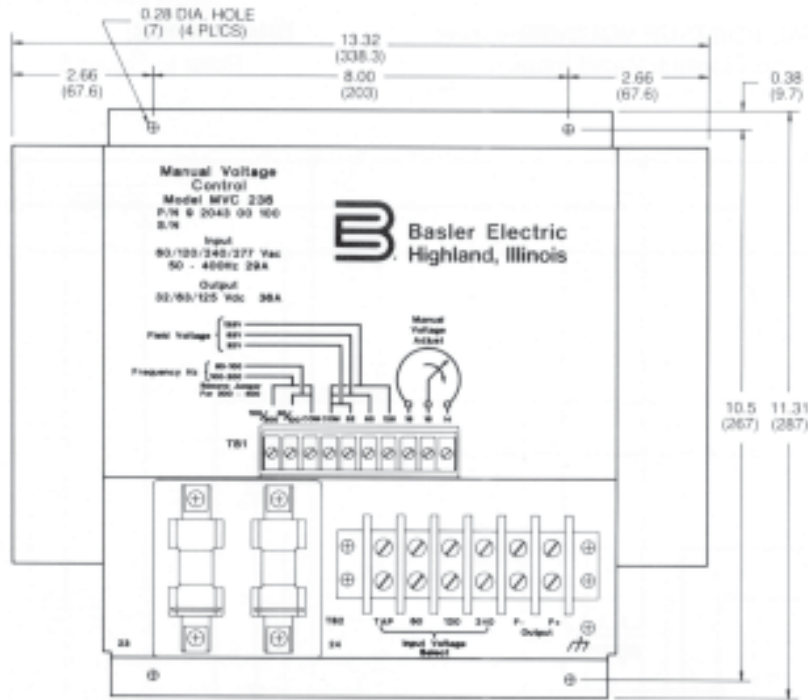


Figure 4 - MVC 236 Outline Drawing

