

Overview

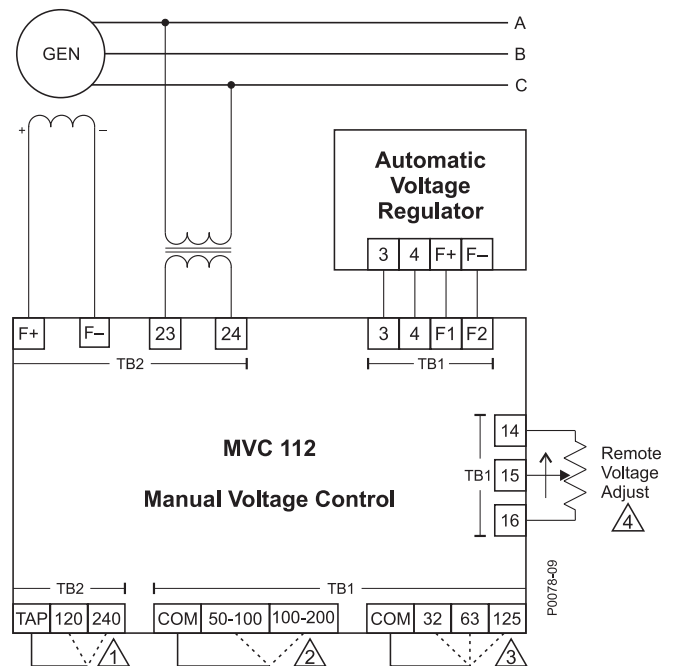
Manual voltage controllers are an integral part of a complete excitation system. These devices are utilized to control excitation in the event of an automatic voltage regulator failure. Basler MVCs can isolate the automatic voltage regulator and manually control the generator's output.

Features

- Powerful 12 A or 36 A output capability (at 50/60 Hz)
- Available with integrated manual/auto switch
- 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

Benefits

- Provides the ability to manually control excitation in the event of a regulator failure or sensing transformer failure. This allows the operator to maintain power to critical and emergency loads until a repair can be made.
- These controllers offer functionality to meet many manual backup applications.
- Rugged field-proven designs that you can rely on in an emergency situation.
- MVC 112 and MVC 236 offer remote control capability so that the operator can be located outside the generator room.



- 1 Position jumper for nominal input voltage of 120 Vac or 240 Vac.
- 2 Position jumper for input power frequency range of 50 to 100 Hz or 100 to 200 Hz. Remove jumper for 200 to 400 Hz frequency range.
- 3 Position jumper for output (field) voltage of 32 Vdc, 63 Vdc, or 125 Vdc.
- 4 Optional 10 k Ω , 2 W potentiometer for remote manual voltage adjustment. When remote potentiometer is used, the wires from the MVC 112's internal potentiometer must be disconnected from terminals TB1-14, 15, and 16.

Figure 1 - MVC 112 Connection Diagram for a Typical Application

Specifications

AC Input Power (Single-Phase)

Nominal Input Voltage:

MVC 112:	120 Vac, 240 Vac
MVC 236:	60 Vac, 120 Vac, or 240 Vac

Frequency: 50 to 400 Hz

Power Dissipation:

MVC 112:	35 W
MVC 236:	85 W

Minimum Residual Buildup Voltage:

MVC 112:	5% of 120/240 Vac nominal
MVC 236:	10% of 60 Vac nominal or 5% of 120/240 Vac nominal

Output Power

MVC 112:

50/60 Hz Input:	12 Adc at 32 Vdc, 63 Vdc, or 125 Vdc
400 Hz Input:	8 Adc at 32 Vdc, 63 Vdc, or 125 Vdc

MVC 236:	32 Vdc at 36 Adc nominal
	63 Vdc at 36 Adc nominal
	125 Vdc at 36 Adc nominal

Minimum Field Resistance:

Nominal Output	MVC 112	MVC 236
32 Vdc	2.67 Ω	0.88 Ω
63 Vdc	5.25 Ω	1.75 Ω
125 Vdc	10.42 Ω	3.47 Ω

Regulation Accuracy

2% for a 10% change in input power, 5% for a 30% change in input power

Temperature Stability

±5% for a 50°C (122°F) temperature change

Environmental

Operating Temp:	-40°C to 70°C (-40°F to 158°F)
Storage Temp:	-40°C to 85°C (-40°F to 185°F)
Humidity:	98% non condensing, maximum

Shock:	15 G in each of 3 perpendicular planes
Vibration:	2 G over a range of 10 to 500 Hz

Physical

Weight:

MVC 112:	12 lb (5.5 kg)
MVC 236:	15 lb (6.8 kg)

Dimensions (W x H x D):

MVC 112:	7.19 x 9.63 x 6.62 inches (behind panel) (183 x 245 x 168 mm)
MVC 236:	13.32 x 11.31 x 4.38 inches (338.3 x 287 x 111 mm)

Agency/Certifications

China RoHS compliant

For complete specifications, download the instruction manual at www.basler.com.

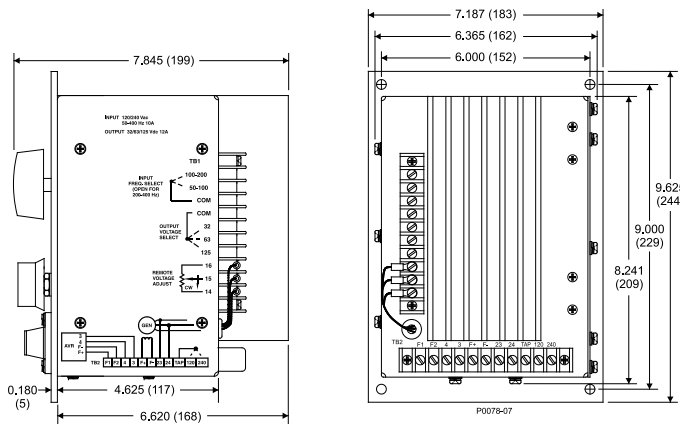
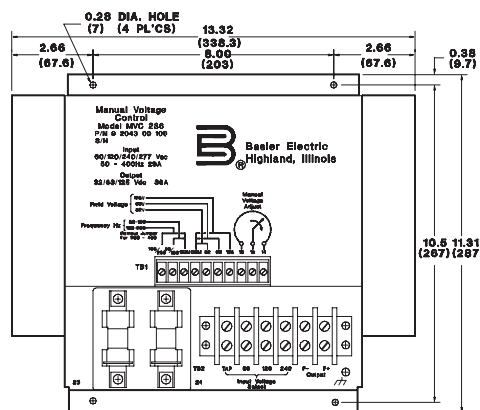


Figure 2 - MVC 112 Dimensions in Inches (Millimeters)



NOTES:
1. UNIT IS 4.375" (111) DEEP.

Figure 3 - MVC 236 Dimensions in Inches (Millimeters)

Related Products

Enjoy proven, dependable, high performance with Basler Electric's AVC line. These extremely rugged and reliable regulators provide the performance and functionality that revolutionized the modern analog voltage regulator market, and they are still unrivaled today.

- [AVC63-12 Voltage Regulator](#)
- [AVC63-4, AVC63-4D Voltage Regulator](#)
- [AVC63-4A Voltage Regulator](#)
- [AVC63-7, AVC63-7F Voltage Regulator](#)

BE1-FLEX Protection, Automation and Control System

Designed to be configurable for nearly any Power System Application.

DECS-150 Digital Excitation Control System

Provides precise voltage regulation and exceptional system response, while providing valuable protection of the generator and excitation system.

DECS-250N Digital Excitation Control System with Negative Forcing

Featuring negative field forcing that provides exceptional system response, precise voltage regulation, and integrated generator protection.

DECS-250 Digital Excitation Control System

Provides precise voltage, var and Power Factor regulation, and exceptional system response, plus generator protection.

DGC-2020 Digital Genset Controller

Provides genset and transfer switch control, metering, protection and programmable logic in a simple, easy to use, reliable, rugged, and cost effective package.

DGC-2020ES Digital Genset Controller

Total system solution for emergency and stand alone generator set applications.

DGC-2020HD Digital Genset Controller

An advanced but rugged, genset control system designed for paralleling and complex load sharing schemes.