

# AVC63-4, AVC63-4D, Voltage Regulator









#### **F**EATURES

- Integrated circuitry for compact size, simplicity, high reliability
- Extremely rugged
- Exciter field current 4 A continuous, 7 A forcing
- Regulation accuracy better than ± 1.0% no-load to full-load
- Fast response
- Frequency compensation
- Overexcitation shutdown
- Electromagnetic Interference (EMI) suppression

#### BENEFITS

- Voltage regulation performance is constant over the entire operating temperature range without derating or degradation.
- Potted design allows installation in harsh environments.
- Reduce or eliminate expensive service calls because of the reliable, rugged construction.
- Volts-per-hertz limiting, overexcitation shutdown, and provisions for external voltage adjustments make the AVC line a good fit for most applications. It's the "universal" regulator that reduces inventory to one device on the shelf.
- Small size for easy installation in virtually any generator terminal box.
- Eliminate settings errors with simple adjustments.

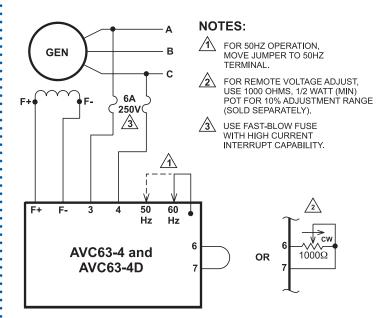


Figure 1 - AVC63-4/4D Connection Diagram for a Typical Application

## Input Power (1-Phase)

Range: 190 to 240 Vac,  $\pm 10\%$ Frequency:  $50/60 \text{ Hz}, \pm 10\%$ 

Burden: 500 VA

# **Output Power**

Max Continuous: 63 Vdc at 4 Adc (252 W) One-Minute Forcing: 100 Vdc at 7 Adc (700 W)

with 240 Vac power input

## Sensing Input (1-Phase)

(Common with input power)

Range: 190 to 240 Vac. ±10% Frequency: 50/60 Hz, ±10%

**Voltage Adjustment** 

171 to 264 Vac Range:

## **Regulation Accuracy**

Better than  $\pm 1\%$ , no-load to full-load

#### **SPECIFICATIONS**

#### **Response Time**

<1.5 cycles for  $\pm5\%$  change in sensing voltage

#### **EMI Suppression**

Internal EMI filtering

## **Overexcitation Shutdown**

Field voltage shuts down after time delay if exciter field voltage exceeds 100 Vdc, ±5%

#### **Voltage Buildup**

Automatic voltage buildup occurs for residual generator voltages as low as 6 Vac.

#### **Power Dissipation**

8 W maximum

## Agency/Certifications

CSA certified, UL recognized, EAC certified

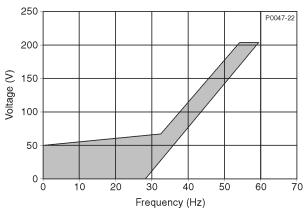


Figure 2 - AVC63-4/4D Frequency Compensation Characteristic 60 Hz

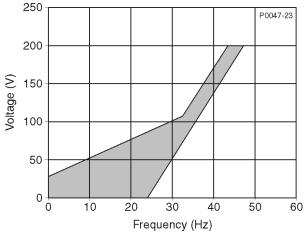


Figure 3 - AVC63-4/4D Frequency Compensation Characteristic 50 Hz

## **Environmental**

Operating Temp: -40°C to 60°C (-40°F to 140°F) Storage Temp: -65°C to 85°C (-85°F to 185°F) Shock: 20 G in three perpendicular planes

Vibration:

2 to 27 Hz:

1.3 G

0.036" double amplitude 27 to 52 Hz:

52 to 1000 Hz:

#### **Physical**

Weight: 8 oz (220 g)

Dimensions (WxHxD):

3.97" x 2.69" x 2.20"

(100.8 mm x 68.3 mm x 55.9 mm)

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

## RELATED PRODUCTS

- AVC63 Series Voltage Regulators provide the performance and functionality that revolutionized the modern analog voltage regulator market.
  - AVC63-12
  - AVC63-4A
  - AVC63-7, AVC63-7F
- BE1-11g Generator Protection System
  - Offers a complete generator protection system.
- BE3 Series Industrial Relays
  - Provides industrial application protection related to Auto Transfer, Distribution, Generators, Motors, Process Control, and Transformers.
- DECS-100 Digital Excitation Control System
  - Provides precise voltage regulation and exceptional system response, while providing valuable protection of the generator and excitation system.
- 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.

## Accessories

- · Remote Adjustment Rheostat
  - 1000 ohm, 2 W rheostat with locking slotted shaft, Basler Electric P/N 17727



