

APR 63-5 Voltage Regulator



Overview

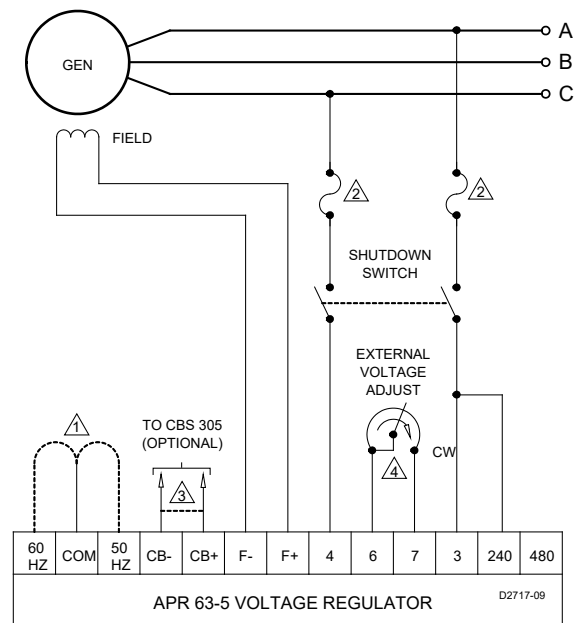
A top performing voltage regulator in a cost effective package. Basler Electric's APR series voltage regulators provide reliable operation in harsh environments and a wide variety of applications.

Features

- Frequency compensated
- Overexcitation shutdown
- Solid-state voltage buildup
- Moisture-resistant potted assembly
- Mechanically rugged
- Remote voltage adjust rheostat supplied
- Small size, reliable, low cost
- Built-in Electromagnetic Interference (EMI) filter
- Fast response time
- Applicable to 50 or 60 Hz systems
- Complete accessory line available

Benefits

- Rugged potted design for ultimate reliability in extreme environmental applications.
- Compact, cost effective design allows for easy integration.
- Functions like volts per hertz limiting, Overexcitation Shutdown, and provisions for external voltage adjustments make the APR line easy to integrate into most applications.
- Capable of directly sensing up to 480 Vac, eliminating the need for expensive step-down transformers.



- ⚠ Jumper for 60 Hz or 50 Hz.
- ⚠ Use 5 A, 250 V, fast-blowing, high-interrupting capacity fuses.
- ⚠ Remove jumper if CBS 305 is used.
- ⚠ If external voltage adjust is not used, jumper terminals 6 and 7.

Figure 1 - APR 63-5 Connection Diagram for a Typical Application

Specifications

Input Power (1-phase)

Range: 190 to 277 Vac, $\pm 10\%$
 Frequency: 50/60 Hz
 Burden: 650 VA maximum

Output Power

Continuous Rating: 63 Vdc, 5 Adc, 315 W
 One-Minute Forcing: 105 Vdc, 8.5 Adc, 893 W
 Field Resistance: 12.6 to 100 Ω

Sensing Input (1-phase)

240 Vac Input: 190 to 250 Vac, $\pm 10\%$
 480 Vac Input: 380 to 480 Vac, $\pm 10\%$
 Burden: 5 VA

Voltage Adjustment

240 Vac Input: 170 to 264 Vac
 480 Vac Input: 340 to 528 Vac

Voltage Buildup

Buildup is automatic from generator residual voltage as low as 6 Vac.

EMI Suppression

Internal EMI filtering

Overexcitation Shutdown

Output power is removed instantaneously if field voltage exceeds 135 Vdc, ± 5 Vdc.

Output power is removed after a time delay that is inversely proportional to the voltage magnitude when the field voltage exceeds 100 Vdc, ± 5 Vdc.

Agency/Certifications

CSA certified, UL recognized

Environmental

Operating Temp: -40°C to 60°C (-40°F to 140°F)
 Storage Temp: -40°C to 85°C (-40°F to 185°F)
 Shock: 15 G in three perpendicular planes
 Vibration:
 5 to 26 Hz: 1.2 G
 27 to 53 Hz: 0.036" double amplitude
 54 to 1,000 Hz: 5 G

Physical

Weight: 1.0 lb (0.45 kg)
 Dimensions (WxHxD):
 3.16" x 5.66" x 1.68"
 (80 mm x 144 mm x 43 mm)

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

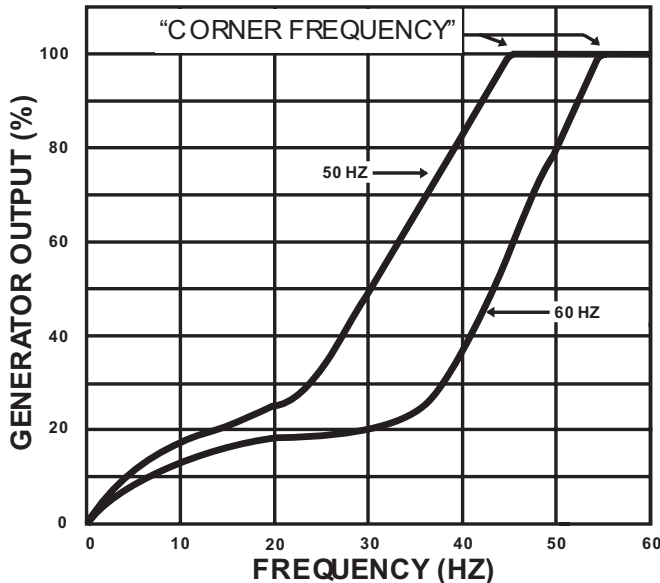


Figure 2 - APR 63-5 Frequency Compensation

Related Products

BE1-FLEX Protection, Automation and Control System

Designed to be configurable for nearly any Power System Application.

ES Series Protection Relays

Provide a wide variety of cost-saving options to simplify industrial application protection.

DGC-2020ES Digital Genset Controller

The total system solution for emergency and standalone generator set applications.

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.

MVC Manual Voltage Controllers

Provides backup manual source for excitation in the event of AVR failure.

Accessories

Power Isolation Transformer

Used to provide electrical isolation and to match voltages from the generator to the regulator. Order BE18674.

CBS 212A Series Current Boost System

The CBS boosts the field current during short circuit or large motor starting conditions.