MODEL AL-50-CR-H/A AC CONSTANT CURRENT POWER AMPLIFIERS

Constant current sources/amplifiers provide steady output current despite of variations in loads and input power lines. Usage of these constant sources includes generating magnetic fields, testing and qualifying products such as circuit breakers, relays, transformers, watt-hour meters, etc.

The model AL-50-CR-H/A constant current power amplifiers take a sine wave input signal and amplifier it into an adjustable constant output current. The output current is proportional to the amplitude of the input signal. The frequency response of the standard model is from 47 Hz to 2K Hz. Higher frequency ranges can be ordered as a purchase option. The standard output ranges of this model are listed below. Custom output range(s) can be specified at no additional cost.

Specifications of model AL-50-CR-H/A Constant Current Power Amplifiers

Output:
- Output Power: 50 watts continuous
- Output Current: 0 – 10 A rms. @ 5 V compliance voltage
- Input Power: 0 – 25 A rms. @ 2 V compliance voltage
- Input Signal: 0 – 1 V rms.
- Frequency Response: 47 Hz – 2K Hz (unless otherwise specified)
- Current Regulation: 1% load regulation or better; 0.1% line regulation or better
- Output Distortion: 1% T.H.D.
- Hum and Noise: -65dB below full output
- Output Terminals: Panduit copper lugs on back panel (They can be put on the front if requested.)
- Thermal Protection: Auto-reset thermostat prevents heat damage
- Fault Protection: Input line circuit breaker

Input Power:
- Power Efficiency: 45% max.
- Input Power: 120 V AC 60 Hz (Default); 230 V AC 60 Hz (at request)
- Input Line Current Req.: 2 A @ 120 V AC (or 1 A @ 230 V AC)

Other Specifications:
- Dimensions: 5.25"H X 19"W X 16"D
- Weight: 30 lbs
- Cooling Method: Air force fan on back panel
- Operating Temp Range: 20 to 140 deg F
- Storage Temp Range: -20 to 170 deg F

Purchase Options (at additional cost):
1. Purchase Option 108: Higher Frequency Range (than 2K Hz)
   - Add “-F1/f2Hz” suffix to model number, e.g. AL-50-CR-H/A-F5K/20KHz.