

AE TECHRON®

Precision Industrial Amplifiers 

APPLICATION

The LVC 5050RLY is a specially modified version of the LVC5050 amplifier. The LVC5050RLY is specifically modified for use in medium power Relay testing environments. Like the larger industry standard 7780RLY, the LVC5050RLY provides accurate, repeatable and reliable power for the most difficult Relay testing.



FEATURES

- > Bi Level TM Power Supply, amplifier optimizes itself for either, high pulse voltage or low voltage high current, dynamically. The LVC 5050 produces less heat, higher long term power, with no added distortion.
- > Output of 98 amperes peak
- > Frequency bandwidth of DC to 10 kHz at full power.
- > Remote switching to standby mode by contact closure
- > External monitoring of voltage and current output
- > Equipped with circuitry to protect the amplifier from input overloads, improper output connection (including shorts and improper loads), excessive temperature, voltage or current.
- > Shipped ready to operate using single-phase, 120-volt AC mains. Also available in 100, 200, 208, 230 and 240 VAC versions.
- > Installs easily into a standard 19 inch rack, or stands alone for bench top operations



INDICATORS AND CONTROLS

- > Front panel LEDs indicate signal presence and output overload
- > A pushbutton power "On/Off" located on the front panel
- > A back panel slide switch to lift signal ground from chassis ground

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- 1) Max current 70Arms/98 Apeak
- 2) Max voltage 120Vrms no load, 90Vrms 2 ohms
- 3) Load constraint 2 ohms + 0 uH (see frequency response)
Designed for resistive loads only,
added inductance limits frequency response.
- 4) Output impedance 60 milliohm + 1 microhenry
- 5) Output offset current <10 mAmp
- 6) Input
 - a) Gain : 10A/ 1V
 - b) Impedance 20.0 kOhm differential,
 - c) Common Mode rejection ratio:
-70dB @ 40Hz to 600Hz
- d) Gain Error

Frequency	short	0.5	1	2
30	0.12%	0.10%	0.04%	-0.06%
50	0.04%	0.00%	-0.10%	-0.16%
100	0.28%	0.18%	0.06%	-0.12%
200	0.22%	0.10%	-0.08%	-0.40%
500	0.20%	-0.22%	-0.82%	-2.16%
1000	0.26%	-1.10%	-2.82%	-7.22%
2000	1.46%	-2.68%	-8.18%	-18.94%
5000	7.30%	-10.10%	-25.76%	-44.86%
10000	4.30%	-22.66%	-40.06%	-58.10%
20000	-20.98%	-39.40%	-51.10%	-65.06%
- 7) Unit to unit phase error: Less than 0.1 degree at 60Hz
- 8) Input to output Phase delay -0.4 degrees at 60Hz
- 9) Residual Noise: (20 Hz to 1000Hz)
Less than 0.8 mAmp, Parallel mono
- 10) Frequency Response DC – 10 kHz @ 0.5 ohms. (10A level, 7.78A @ 10 kHz)

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PHYSICAL CHARACTERISTICS

Chassis: The Amplifier is designed for stand alone, or rack mounted, operation. The Chassis is black steel with a silver finished aluminum front panel. The unit occupies three EIA 19-inch-wide units.

Weight: 81.5 lbs. (37 kg), Shipping 99 lbs. (45 kg)

AC Power: Single phase, 120 volts, 60 Hz, 30 amperes ac service. (Note: 100, 120, 200, 208, 230 or 240 volt, 50-60 Hz models are available Call for specifications.) US models come with 3 blade NEMA TT30P plug.

Cooling: Forced air cooling from the front, through removable filters, to the back.

Dimensions: 19 in. x 16 in. x 5.25 in (48.3 cm x 40.3.0 cm x 13.3 cm)

SUPPORT

When you purchase an AE Techron amplifier, a full complement of technical and factory support personnel join your team.

AE Techron provides:

- > Applications engineering for your technical questions and customized product needs.
- > A one year limited warranty to protect your equipment investment.
- > A fully equipped service center to keep your amplifier operating at original performance requirements.