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MT-PSU-R7-3P-208VAC-12KW-200VDC-BP-CR-WC-Z

12 kW Bipolar Current-Regulated AC to DC Power Supply, 208V AC 3-Phase Input, 200V DC Output, 60A, Water Cooled — ER 083 Replacement

Product ID: 342261

Please see last page for supporting documentation for this product (certificates, CAD files & drawings, IES files, wiring diagrams, etc).



Image: MT-PSU-R7-3P-208VAC-12KW-200VDC-BP-CR-WC-Z

Larson Electronics LLC manufactures a wide variety of products, including custom built to spec designs. The pictures displayed for this unit are a general representation of form factor for the product line and may not accurately represent this exact configuration in every detail due to custom builds and changes between similar products in our standard catalog. The specifics for this configuration are listed in the specification table and supporting documentation (CAD files, Dimensional Drawing, Name Plate Diagram, Wiring Diagram, etc.). This means that specific details (receptacles, plugs, wires, connections, mounting brackets, external finishes, etc.) may not be accurately represented in images vs specifications. Please review specifications and do not order based solely on images.

MT-PSU-R7-3P-208VAC-12KW-200VDC-BP-CR-WC-Z AC to DC Power Supply

Unit Type: Bipolar Current-Regulated AC to DC Power Supply

Application: Compatible Replacement for Existing Commercial ER 083 Power Supply Unit (200V, 60A, 12kW, End of Life)

Input: 208V AC, 3-Phase

Output: 200V DC

Output Power: 12 kW

Output Current: 60 A

Topology: Bipolar, Current-Regulated, Zero-Crossing Continuity

Cooling: Water Cooled

Features of Every Assembly

Zero-Crossing Continuity Design (No Current Reversal Switches)

Water-Cooled Construction

Bipolar Output

Advanced Performance Specifications (Optional, Subject to Engineering Confirmation)

Long-Term Current Drift: <50 ppm over 8 hrs (constant temperature)

Temperature Coefficient: <5 ppm per °C

Control Interface: Serial or Ethernet

Set-Field Conversion Resolution: Better than 18 bits

Analog Signal Digitization: Better than 24 bits

Dimensions & Shipping

Shipping

Overall Dimensions: 48"W × 36"D × 60"H (estimated)
Approximate Weight: 850 lbs (estimated)
Shipping Dimensions: TBD
Shipping Weight: TBD

Shipped on pallet or skid
Crated shipment available upon request
Final shipping configuration subject to approved design

Special Orders – Special Requirements
Contact us for special requirements
Toll Free: 1-800-369-6671
Intl: 1-903-270-1187
Fax: 1-903-765-7664
E-mail: sales@larsonelectronics.com

Customer Compliance
Final arrangements, sizes, ratings, settings, configuration, and installation details will be finalized during detailed engineering review and customer approval prior to release for manufacture.

Larson Electronics manufactures a wide variety of custom power distribution systems. The pictures displayed for this unit are a general representation of form factor and may not accurately represent this exact configuration in every detail due to being custom builds. The specifics for this configuration are listed in the specification table and applicable drawings.

Made in the USA

The MT-PSU-R7-3P-208VAC-12KW-200VDC-BP-CR-WC-Z from Larson Electronics is a bipolar, current-regulated AC to DC power supply intended to drive a commercial H-frame electromagnet for precision magnetic field applications. This unit is intended as a compatible replacement for the requesting laboratory's existing commercial ER 083 power supply unit (200V, 60A, 12kW), which has reached end of life.

The unit converts 208V AC, 3-phase input power to a regulated 200V DC output, delivering up to 60A (12kW) to the electromagnet. The design utilizes zero-crossing continuity, eliminating the need for current reversal switches, and features bipolar output capability for field-direction control without physical reconnection.

Cooling: The unit is water cooled, supporting continuous high-power operation with reduced thermal drift.

Advanced Performance Specifications: The requesting laboratory has specified long-term current drift of less than 50 parts per million over 8 hours under constant temperature conditions, and less than 5 ppm per degree Celsius temperature coefficient. Serial or Ethernet control is required, with set-field conversion resolution better than 18 bits and analog signal digitization better than 24 bits. These performance specifications are available as an optional advanced configuration, pending engineering confirmation.

Certification: Certifications and standards compliance to be confirmed during engineering review.

Customer Compliance: The final arrangements, sizes, ratings, settings, configuration, and installation details of this equipment will be established in accordance with detailed engineering review, applicable project documentation, and customer approval prior to manufacture.

Applications: Precision magnetic field generation for materials science research, magnetic thin film and magnetoresistive random access memory (MRAM) measurement applications.

At Larson Electronics, we do more than meet your lighting needs. We also provide replacement, retrofit, and upgrade parts as well as industrial grade power accessories. Our craftsmen can custom build any lighting system and/or accessories to fit the unique demands of your operation. A commitment to honesty, quality, and dependability has made Larson Electronics a leader in the lighting and electronics business since 1973. Contact us today at 800-369-6671 or message sales@larsonelectronics.com for more information about our custom options tailored to meet your specific industry needs.

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Frequently Asked Questions (FAQ)

There are no Faqs

Export Control Classification Number (ECCN): EAR99

Links (Click on the below items to view):

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