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MTPC-HD-RB-PYM-240V-100HP-50HP-N3R

Rotary Phase Converter for 50HP Hard Loads - 240V 1PH to 3PH, 131A Output, 100HP Idler - Pony Motor/N3R

Product ID: 282311

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



Image: MTPC-HD-RB-PYM-240V-100HP-50HP-N3R

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.

MTPC-HD-RB-PYM-240V-100HP-50HP-N3R Rotary Phase Converter

Unit Type: Rotary Phase Converter
Phase Conversion: Single Phase to Three Phase
Kilowatt Rating: 75 KW
Kilo Volt-Amp Rating: 100 KVA
Idle Motor Horse Power: 100 HP
Single Phase Voltage Input: 240V
Minimum Fuse/Circuit Breaker Size: 150
Maximum Fuse/Circuit Breaker Size: 400
Minimum Wire (Input) to Converter: 300 MCM
Minimum Electrical Service Required: 167 KVA
Starting Motor Type: Pony Motor
Idle Amps: -
Service Load Type: Hard motor loads
Three Phase Voltage Output: 240
Maximum Single Motor Load HP: 50 HP
Recommended Combined HP: 50 HP
Optimal Output Amps: 131A
Maximum Output Amps: 231A
Maximum Resistive Amps: 135A
Voltage Balance: 2-5%

Ratings/Approvals

Indoor or Outdoor Use (NEMA 3R)
Built-in Pony Motor Starter
Start/Stop Push Button Switch
Accurate Voltage Balancing
Power Indicator Light
Made in the USA

Minimum Wire to Device Load: 2/0 AWT
Form Factor: Rectangular Enclosure, Cylindrical Idler w/ Four Legs
Color: Natural Gray
Weight: 1600 lbs
Dimensions: 54"-W x 36"-D x 48"-H
Shipping Weight: - lbs
Shipping Dimensions: -

Special Orders - Special Requirements
Contact us for special requirements
Toll Free: 1-800-369-6671
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Made in the USA

The Larson Electronics MTPC-HD-RB-PYM-240V-100HP-50HP-N3R 100 horsepower rotary phase converter is designed to convert single phase power to three phase power for Hard motor loads. This phase converter accepts single-phase 240V input and provides three-phase 240V output. Operators may use this rotary phase converter to power equipment and machines with Hard motor loads up to 50 horsepower and 131 amps that require three phase power in locations where only single phase power is available. Equipped with a pony motor, this NEMA 3R system is secured on a skid mount cart.

Applications: The MTPC-HD-RB-PYM-240V-100HP-50HP-N3R is ideal for applications that utilize Hard motor loads. This includes CNC laser table, CNC lathe, CNC mill, CNC plasma table, CNC router, CNC turning machine, CNC waterjet, cooling fan, exhaust fan, gearhead lathe, industrial fan, laser cutter, laser table, plasma cutter, plasma table, plastic grinder, printing press and any other application that induces a Hard motor load up to a recommended 50 horsepower.

The MTPC-HD-RB-PYM-240V-100HP-50HP-N3R rotary phase converter is suitable for converting single phase 240V on-site power to three phase 240V power for equipment. This 100 HP idler motor phase converter connects to existing 240V/* single phase. After conversion, the phase converter provides three-phase 240V on the output side at 131 continual amps with a maximum of 231 inrush amps. All MTPC series phase converters provide +/- 2-5% voltage balance on the output side, depending on the single phase input power, for maximum efficiency and reduced stress on the motor. This rotary phase converter features a built-in motor starter with a start/stop push button switch for seamless activation. The power distribution blocks are oversized for easy installation in the preferred location.

This unit is equipped with a small pony motor to ease system start up and offers low amp surge. The pony motor is connected to the idler motor using a v-belt. At start up, power is first applied to the pony motor which mechanically helps the idler motor reach the required operating speed. After reaching the required idler motor speed (and with the idler motor running), power is removed from the pony motor.

The MTPC-HD-RB-PYM-240V-100HP-50HP-N3R control panel is housed in a NEMA 3R enclosure, making it suitable for indoor and outdoor environments. This level of protection allows the rotary phase converter to withstand the ingress of solid objects, such as falling dirt. All of Larson Electronics LLC's phase converter control panels are NRTL certified to UL 508A.

The MTPC series of rotary phase converters are designed to operate based on overall load size. This includes operating multiple devices from one rotary phase converter, providing the combined horsepower of all devices being operated simultaneously does not exceed the horsepower rating for the load type. This includes fractional motors up to 50 HP motors, and any combination of motor sizes in between. Instant reversal motors are no problem for the MTPC series phase converters. Each phase converter comes ready to install.

Rotary Sizing: The MTPC-HD-RB-PYM-240V-100HP-50HP-N3R is sized for heavy/hard motor loads up to 50 horsepower. When correctly sized, Larson Electronics phase converters will provide years of trouble free service for your equipment. Larson Electronics offers single phase to three phase static and rotary phase converters for easy,

medium, hard, and very hard motor loads. The motor load is dependent on the devices intended to operate on the phase converter. For additional load types or for additional sizes, please see the below links or call us today.

- Single Phase to Three Phase Rotary Converters for Easy Motor Loads
  - Single Phase to Three Phase Converters for Medium Motor Loads
  - Single Phase to Three Phase Converters for Hard Motor Loads
  - Single Phase to Three Phase Converters for Very Hard Motor Loads

At Larson Electronics, we do more than meet your lighting and power distribution needs. We also provide replacement, retrofit, and upgrade parts as well as industrial grade power accessories. Our craftsmen can custom build any lighting or power distribution 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

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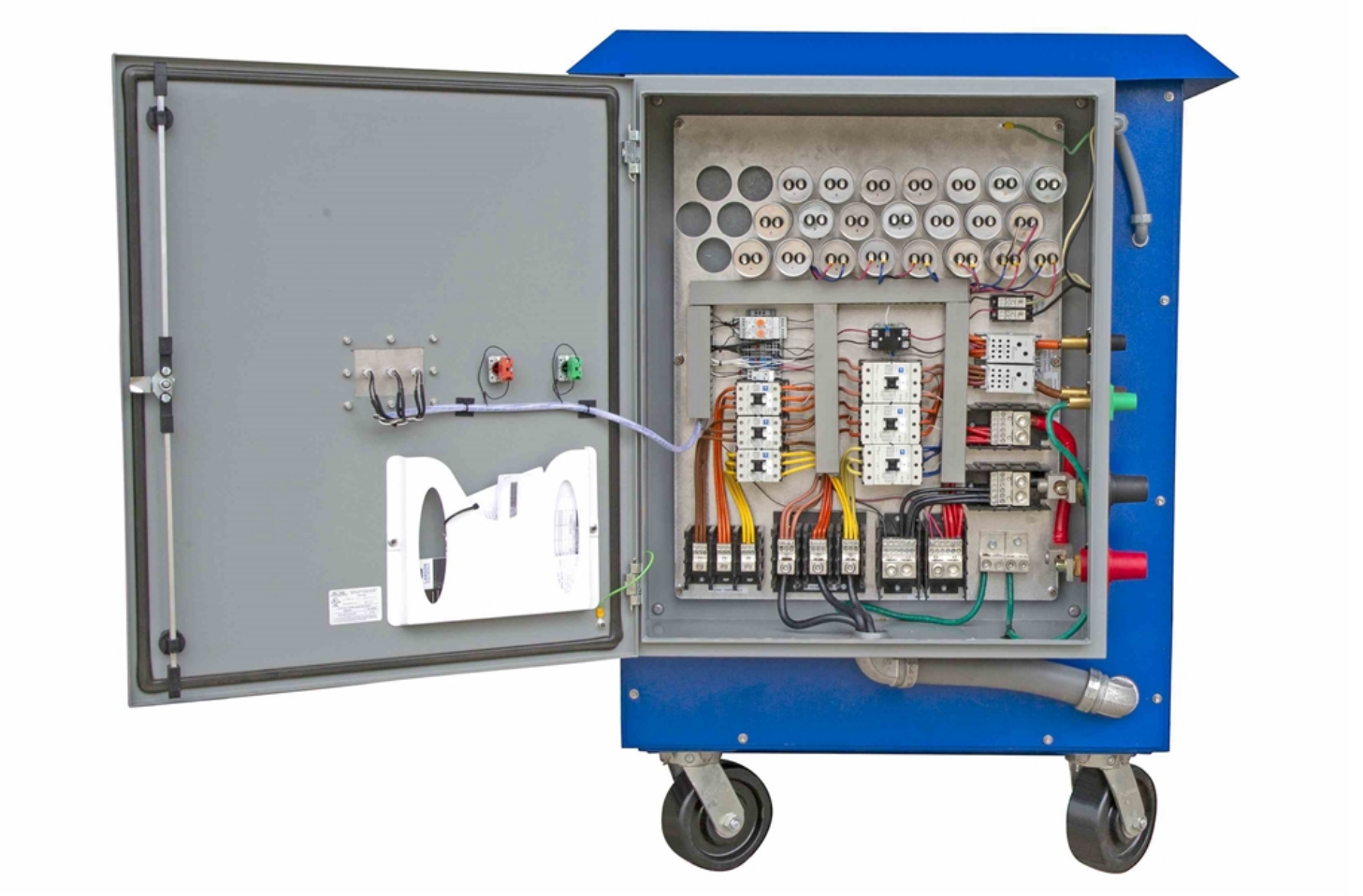


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Links (Click on the below items to view):

- **Catalog Page - Product Series**(https://www.larsonelectronics.com/images/product/CatalogPage/282311.PDF)
- **HigResPic1**(https://www.larsonelectronics.com/images/product/HigResPic1/282311.JPG)
- **HigResPic2**(https://www.larsonelectronics.com/images/product/HigResPic2/282311.JPG)
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- **Video1**(https://www.youtube.com/watch?v=OpGTt_iZfvg)
- **ISO 9001 Certification**(http://larsonelectronics.com/images/pdfdocs/ISO9001.PDF)
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