

HAL-MTPC-HD-RB-230V-30HP-15HP-N3R

C1D2 Hazloc Rotary Phase Converter, 15HP Hard Load, 230V 1PH to 3PH, 41A Output, 30HP Idler
Product ID: 244961

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



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.

HAL-MTPC-HD-RB-230V-30HP-15HP-N3R Rotary Phase Converter

Unit Type: Rotary Phase Converter
Phase Conversion: Single Phase to Three Phase
Kilowatt Rating: 21.4 KW
Kilo Volt-Amp Rating: 30 KVA
Idle Motor Horse Power: 30 HP
Single Phase Voltage Input: 230V
Minimum Fuse/Circuit Breaker Size: 50
Maximum Fuse/Circuit Breaker Size: 150
Minimum Wire (Input) to Converter: 2 AWG
Minimum Electrical Service Required: 45 KVA
Idle Amps: -
Service Load Type: Hard motor loads
Three Phase Voltage Output: 230
Maximum Single Motor Load HP: 15 HP
Recommended Combined HP: 15 HP
Optimal Output Amps: 41A
Maximum Output Amps: 74A
Maximum Resistive Amps: 42A
Voltage Balance: 2-5%
Minimum Wire to Device Load: 3 AWG
Form Factor: Rectangular Enclosure, Cylindrical Idler w/ Four Legs
Color: Natural Gray
Weight: - lbs
Dimensions: -

Ratings/Approvals

NRTL Certified to United States & Canada Standards
Class I, Division 2, Groups A, B, C, D
Class II, Division 2, Groups F & G
T2B Temperature Rating
Indoor/Outdoor Use (NEMA 3R)
Built-in Motor Starter
Start/Stop Push Button Switch
Accurate Voltage Balancing
Power Indicator Light
Made in the USA

Special Orders - Special Requirements

Contact us for special requirements

Toll Free: 1-800-369-6671

Intl: 1-903-270-1187

Shipping Weight: - lbs

Shipping Dimensions: -

Fax: 1-903-498-3364

E-mail: sales@larsonelectronics.com

Made in the USA

The Larson Electronics HAL-MTPC-HD-RB-230V-30HP-15HP-N3R 30 horsepower hazardous location phase converter is designed to convert single phase power to three phase power for Hard motor load. This phase converter accepts a single-phase 230V input and provides a three-phase 230V output. Operators may use this rotary phase converter to power equipment and machines with Hard motor load up to 15 horsepower and 41 amps that require three phase power in hazardous (classified) location where only single phase power is available and flammable gases, vapors, or dusts stand the potential to exist.

Applications: The HAL-MTPC-HD-RB-230V-30HP-15HP-N3R is ideal for applications that utilize Hard motor load within Class I, Division 2 and Class II, Division 2 hazardous locations. This includes CNC laser table, CNC lathe, 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 15 horsepower.

The HAL-MTPC-HD-RB-230V-30HP-15HP-N3R rotary phase converter is suitable for converting single phase 230V site power to three phase 230V power for equipment. This 30 HP idler motor phase converter connects to existing single phase. After conversion, the phase converter provides three-phase 230V on the output side at 41 continuous amps with a maximum of 74 inrush amps. All MTPC series phase converters provide +/- 2-5% voltage balance on output side, depending on the single phase input power, for maximum efficiency and reduced stress on the motor. The 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.

The HAL-MTPC-HD-RB-230V-30HP-15HP-N3R control panel is housed in a NEMA 3R / NEMA 4X 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 certified to UL 508A. The HAL-MTPC series is specifically designed for C1D2 and C2D2 applications within classified (hazardous) areas.

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 15 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 HAL-MTPC-HD-RB-230V-30HP-15HP-N3R is sized for heavy/hard motor loads up to 15 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 dependant 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.

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.

Frequently Asked Questions (FAQ)









HAL-MTPC-HD-RB-230V-30HP-15HP-N3R

Product ID: 244961

Warranty: 6 Months

Export Control Classification Number (ECCN): EAR99

Links (Click on the below items to view):

- [MSDS \(Material Safety Data Sheet\)](#)
- [Wiring Diagram \(Online\)](#)
- [HigResPic1](#)
- [HigResPic2](#)
- [HigResPic3](#)
- [HigResPic4](#)
- [HigResPic5](#)
- [HigResPic6](#)
- [HigResPic7](#)
- [HigResPic8](#)
- [HigResPic9](#)
- [HigResPic10](#)
- [Video1](#)
- [Video2](#)
- [ISO 9001 Certification](#)
- [Business Certificate](#)
- [Shipping Time Map](#)