

AMP

Owners Manual



American Rotary
PHASE CONVERTERS

American Rotary
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DANGER: HIGH VOLTAGE
Risk of Electric Shock.
Electric shock could result in death or injury.
Please wait 30 minutes before servicing.

This manual is to serve the purpose of providing recommendations for proper performance but is not to supersede or replace local or national electric codes.

WARNING! READ BEFORE STARTING CONVERTER!

If this phase converter does not start in less than 2 seconds, TURN IT OFF!

-All loads INCLUDING TRANSFORMERS must be DISCONNECTED before starting the phase converter each time. This includes small control transformers that run controls inside your equipment. Failing to meet this condition accounts for 99% of starting problems and can result in damage to the starting capacitors.

-This converter is quiet. If it does not sound quiet and smooth, TURN IT OFF!

-Before connecting load, verify proper function of the phase converter. This will ensure the protection of the phase converter and your equipment.

PRODUCT RETURN POLICY

This policy covers the return of GENTEC/American Rotary products (excluding warranty returns, which are covered by a separate policy). Under this policy, original Purchaser may return product to GENTEC LLC with its **PRIOR APPROVAL***, for credit under the following terms and conditions:

Product MUST BE in its original UNOPENED, UNMARKED carton.

Any product whose carton has been opened (seal broken), installed, or has been marked on in any way is not considered suitable for resale, and will not be accepted for credit.

The unit must have been purchased within thirty (30) days of the date it is received by GENTEC/American Rotary. Customers must return the product to the GENTEC/American Rotary warehouse, freight prepaid. The product carton should be packed in the same condition as it was shipped, with adequate protection from damage. Upon receipt, the product will be inspected, tested, and evaluated. If the package is found not to be in "as-new" resalable condition, the customer will be notified, and will be offered the option of having the product returned to them, freight collect.

Valid returns will be credited the original purchase price minus a restocking charge of 25%. In addition, the price of any replacement parts will be subtracted. **Custom products are not returnable.**

OVERVIEW

Congratulations and welcome to the American Rotary Family! Your American Rotary Mobile Phase Converter (AMP) has been manufactured and shipped plug and play ready for your convenience. Key features and accessories about your converter are listed below.

KEY FEATURES AND CONSIDERATIONS

- The American Rotary AMP uses a contactor to interrupt the power from passing through from the single phase utility to the three phase output until power is turned on at the on/off switch of the converter. This is not intended to substitute for a disconnect of power from your main utility and if service is required you **MUST** disconnect any single phase power going to the rotary phase converter (RPC). This should be done by disconnecting the RPC from its source of power.
- Best warranty in the industry. Limited Lifetime. (see page 3 for more information).
- Designed to run any type of load, including but not limited to resistive, inductive, motor, and/or combination load types.
- Balanced voltages for voltage sensitive equipment.
- Zero duty cycle. Designed to run 24/7/365 days a year if needed.
- Digital Relay and Microsmart Controller.
- Current limiting soft starting induction generator manufactured by BALDOR MOTORS.
- Push button magnetic starter for easy start and stop of the rotary phase converter.
- Warning light – You will notice a small red led light located in the front of your AMP rotary phase converter. This light should never be illuminated for more than five seconds. If you see this light illuminated for more than five seconds, please turn the unit off and contact American Rotary at 888-743-6832.

American Rotary Advantage



AMP Panels Only

All American Rotary AMP Control panels are warranted against defects in material and workmanship for a lifetime. The American Rotary Baldor Idler/Generator is covered by Baldor's two year warranty. The rotor is warranted for lifetime against defects in material and workmanship to the original owner. Warranty is from the date of purchase by the original owner and is non-transferrable. American Rotary will repair or replace (at our option), at no charge, any part(s) found to be faulty during the warranty period specified. The control panel warranty repairs must be performed by/at American Rotary's facility. Baldor Idler repairs or replacements must be performed by/at American Rotary's facility, or at a Baldor Authorized Service Center. Baldor Idler repairs or replacements must also be pre-authorized in writing by American Rotary.

Obligations of the Original Owner

1. Product Registration Required within 30 days of original purchase
2. The original Bill of Sale must be present in order to obtain "in-warranty" service
3. Transportation of control panels to American Rotary is the responsibility of the original purchaser. Return transportation is provided by American Rotary when the control panel is "in-warranty"
4. American Rotary will not accept Baldor Idler returns or repairs sent to American Rotary. All Baldor issues are handled by Baldor Authorized Service Centers.

Exclusions of the Warranty

This warranty does not cover any of the following: accident, misuse, fire, flood, and other acts of God, acts of terrorism, nor any contingencies beyond the control of American Rotary, including water damage, incorrect line voltage, improper installation, installation where this unit will not meet local electrical codes, missing or altered serial numbers, and service performed by an unauthorized facility. American Rotary's liability for any damages caused in association with the use of American Rotary's equipment shall be limited to the repair or replacement only of the American Rotary's equipment. No person, agent, distributor, dealer, or company is authorized to modify, alter, or change the design of this merchandise without express written approval of American Rotary.

Liability Limitation: In no event shall American Rotary be liable or responsible for consequential, incidental or special damages resulting from or related in any manner to any American Rotary product, third party installation(s), manufactured or distributed, or parts thereof. A licensed electrician must perform all installations. Not all American Rotary phase converters are UL listed, this is an option the customer must specify and additional charges will apply. American Rotary is not responsible for meeting, complying with or insuring installation inspections. American Rotary does not accept returns on units that have been installed or energized.

INTRODUCTION

American Rotary specializes in converting single phase electrical power to three phase electrical power. The three-phase output is delta configured. Most machinery requires a delta three phase voltage and this third line voltage to ground should not affect operation. If a piece of equipment requires wye voltage and a neutral connection, the output of the phase converter must be run through a delta-wye transformer to create the neutral. The phase converter must be started before the transformer is connected electrically. This is done with a safety disconnect switch. *American Rotary can provide these transformers and disconnect switches if needed by calling 888-743-6832.*

INSTALLATION

Your AMP phase converter from American Rotary has been designed to be completely plug and play for your convenience. The AMP has come equipped with the necessary components for easy connection and set-up (installed features may vary).

STEP ONE:

To connect to your single phase power supply, use the provided Nema 6-50P single phase plug (Customer requires a 208v-240v Nema 6-50R three prong single phase female receptacle).

STEP TWO:

Connect the three phase load using the pre-installed three phase receptacle. If you do not have a male connector plug for this, you can purchase them at American Rotary by calling 888-743-6832.

STEP THREE: Turn on the AMP rotary converter by pressing the green START button located on the front of your converter. This is a magnetic starter intended to start the rotary phase converter. It is not designed or intended to be able to start your load. *If you do not have a motor starter for the intended load, one can be purchased through American Rotary by calling 888-743-6832.* To turn off the converter, use the red button labeled STOP also located on the front of the panel. See STARTING AND STOPPING on page 5 for more information.

STEP FOUR: Place your pre-installed breaker to the on or up position. This breaker is located above the installed receptacle.

STEP FIVE: Turn on the power to your load and enjoy having quality three phase power at your fingertips.

STARTING & STOPPING

American Rotary AMP phase converters are started with a push button switch. To start the unit, momentarily press the green **START** button. Momentarily press the red **STOP** button to stop it. As with most electrical equipment, frequent starts and stops are harder on the rotary phase converter than steady operation. The rotary phase converter is extremely low cost to operate at idle (with no three-phase load).

LUBRICATION

American Rotary phase converter idler/generator comes with pre-packed bearings using the lubricant specifically designed for this idler. Polyrex EM high temperature bearing grease or equivalent polyurea lubricant is recommended for the Baldor Idlers and can be purchased through American Rotary. **DO NOT use Lithium based lubricants.** These may cause premature bearing failure and will void any warranty.

To gain access to the grease fittings, remove the top cover and the back panel. The grease fittings are located on each side of the idler on the endbells. For larger size converters with less clearance around the idler, just remove the plastic plugs on the sides of the enclosure to gain access to the fittings.



Be careful not to force too much grease into the bearings that the excess finds its way into the windings of the idler. If the idler has grease fittings located on the end bells of the idler, use the following rule of thumb for scheduled maintenance:

For less frequent use, grease the idler every six months. For more frequent use, grease the idler every three months. When adding grease, one or two pumps for each fitting should be enough.

Technical Questions/Troubleshooting

At American Rotary we take great pride in our craftsmanship and we are confident that you will not have any issues with your converter. However, if you do have an issue, we want to hear about it. Many answers to your questions can be found on the American Rotary website at www.americanrotary.com. If you have more advanced questions or need troubleshooting assistance, please email our technical team at tech@americanrotary.com and you will receive a response within 24 hours or by the next business day. Thank you for your business and thank you for buying American Made!