

July 2024

Vol 1 20NH

# PHOENIX

Phase Converters

# GP20NH

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**Single Phase 460 Volts to Three  
Phase 460 Volts**



**460 VOLTS**

**800-417-6568**

[www.phoenixphaseconverters.com](http://www.phoenixphaseconverters.com)

# DATASHEET

## GP20NH

Power Supply		Three Phase Electrical Specs		Loads Examples	
INPUT VOLTAGE	420-480V	VOLTAGE OUTPUT	420-480V	CNC Machine Spindle HP	10 HP
UTILITY SERVICE MIN.	15 KVA / 100 AMPS	MAX INDUCTIVE AMPS	54	Compressor Motor HP	7.5 HP
MOTOR LOAD TYPE BREAKER	40-100 AMP	MAX RESISTIVE AMPS	28	Total Combined HP of motors	20 HP
SINGLE PHASE WIRE SIZE	4 COPPER to 50 feet	IDLER MOTOR WIRE SIZE	4 COPPER	Manual Lathe	10 HP
Dimensions and Weight Electrical Panel		Dimensions and Weight Idler / Generator Motor		IDLER MOTOR	PANEL ENCLOSURE
Weight 30 LBS	Dimensions 18x12x6.05	Weight 370 LBS	Dimensions 25.2x14.1x14	TEFC Cast Iron	Nema 4 Indoor / Outdoor

### Standard Features

- Auto-restart from blackouts or power loss
- Voltage Monitor Display
- TEFC (Totally Enclosed Fan Cooled) Generator
- Heavy-duty cast iron generator frame
- NEMA 4 enclosure, heavy hinged door, with Lock-Out locks and keys.
- Powder coated for rust protection.
- Precision Balanced Voltage

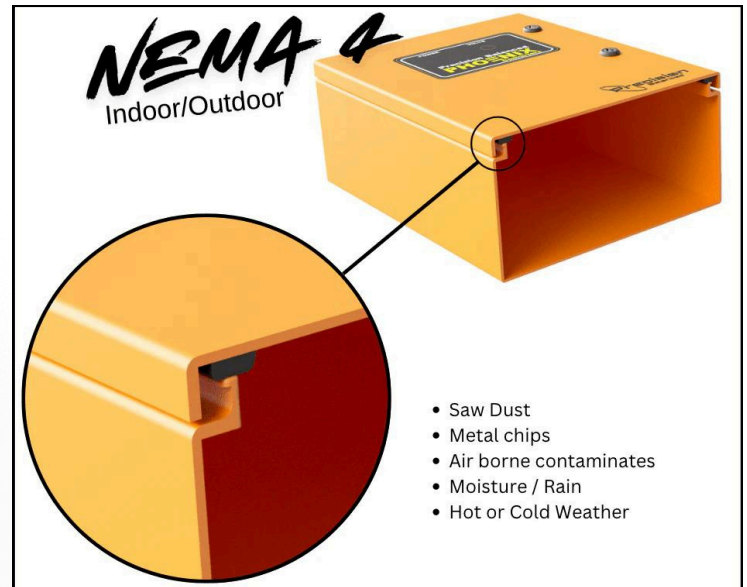
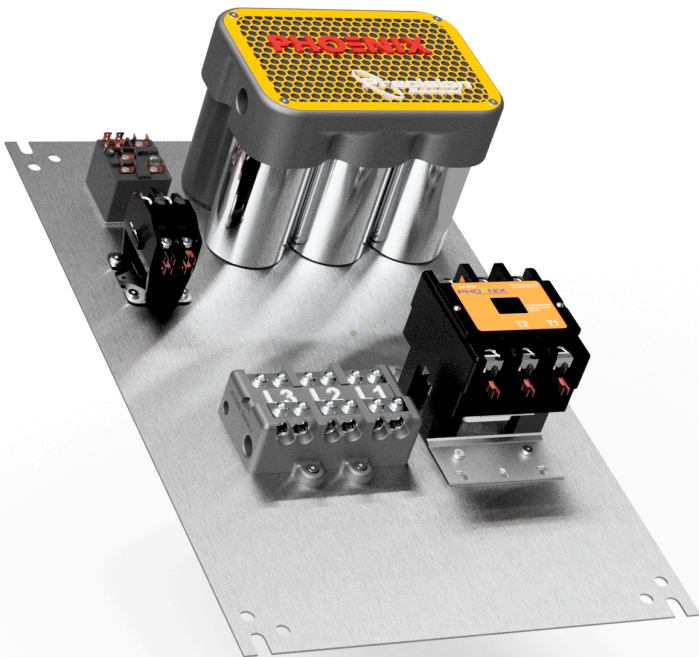
### Optional Features

- 208 or 230 Volts Output (includes transformer)
- PL Model Start and Stop Button with Built-in Mag starter
- AutoStart and Stop with Load Detection
- Digital GPX (wifi, cloud controls, timer, energy monitor)
- Wireless Remote ON/OFF
- AutoLink built in Load Starter and Protection or add another converter
- EX Model, Include pre-install expansion to increase the size of your phase converter

# 460 VOLTS

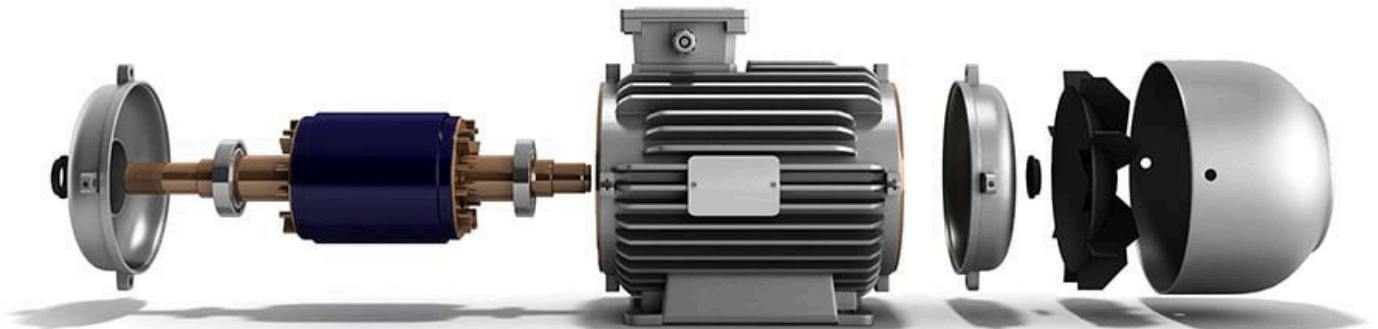
# Control Panel

At Phoenix Phase Converters we use the best components that last a lifetime. The GP20NH - 20 HP rotary phase converter is sealed from any outside environment and is made to be used in a metal shop, woodshop, and outdoors. In addition, the phase converter is designed to be utilized in cold or hot weather. An intuitive standard voltage meter display to monitor your generated phase. The rotary phase converter is engineered with a NEMA 4 enclosure to ensure it is durable in a variety of commercial environments.



# Generator/Idler

Standard Feature TEFC (Totally Enclosed Fan Cooled) Generator and Cast Iron Frame.  
Our Highly Reliable Motors: At Phoenix Phase Converters we use the best components that last a lifetime. The 20 HP rotary phase converter - GP20NH single phase to three phase converter features a totally enclosed fan cooled and cast iron frame motor. It is sealed from any outside environment and is made to be used in a metal shop, woodshop, and outdoors. The phase converter is designed to be utilized in cold or hot weather. Watch the video below to learn more.



More on what make TEFC different then ODP

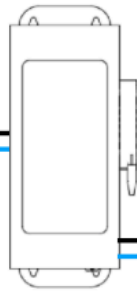
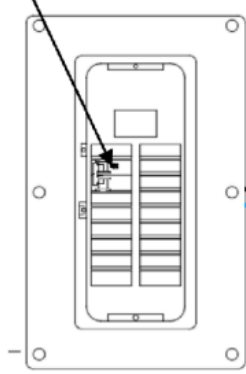
# 460 VOLTS

# Wiring Diagram

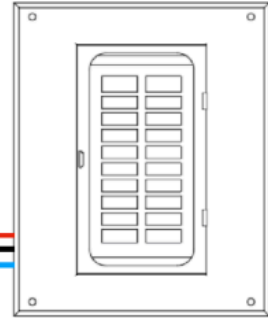
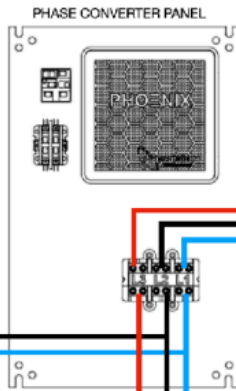
## NL AND NH MODELS

MUST BE INSTALLED BY A INDUSTRIAL LICENSED ELECTRICIAN

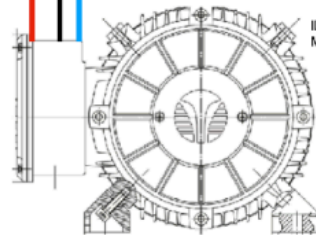
Motor Load Breaker should be size  
Twice the full load amps of your  
equipment



DISCONNECT  
SHOULD BE USED  
IF YOUR RUN IS  
OVER 50 FEET



LOAD CENTER,  
3PH BREAKER  
PANEL, OR  
EQUIPMENT



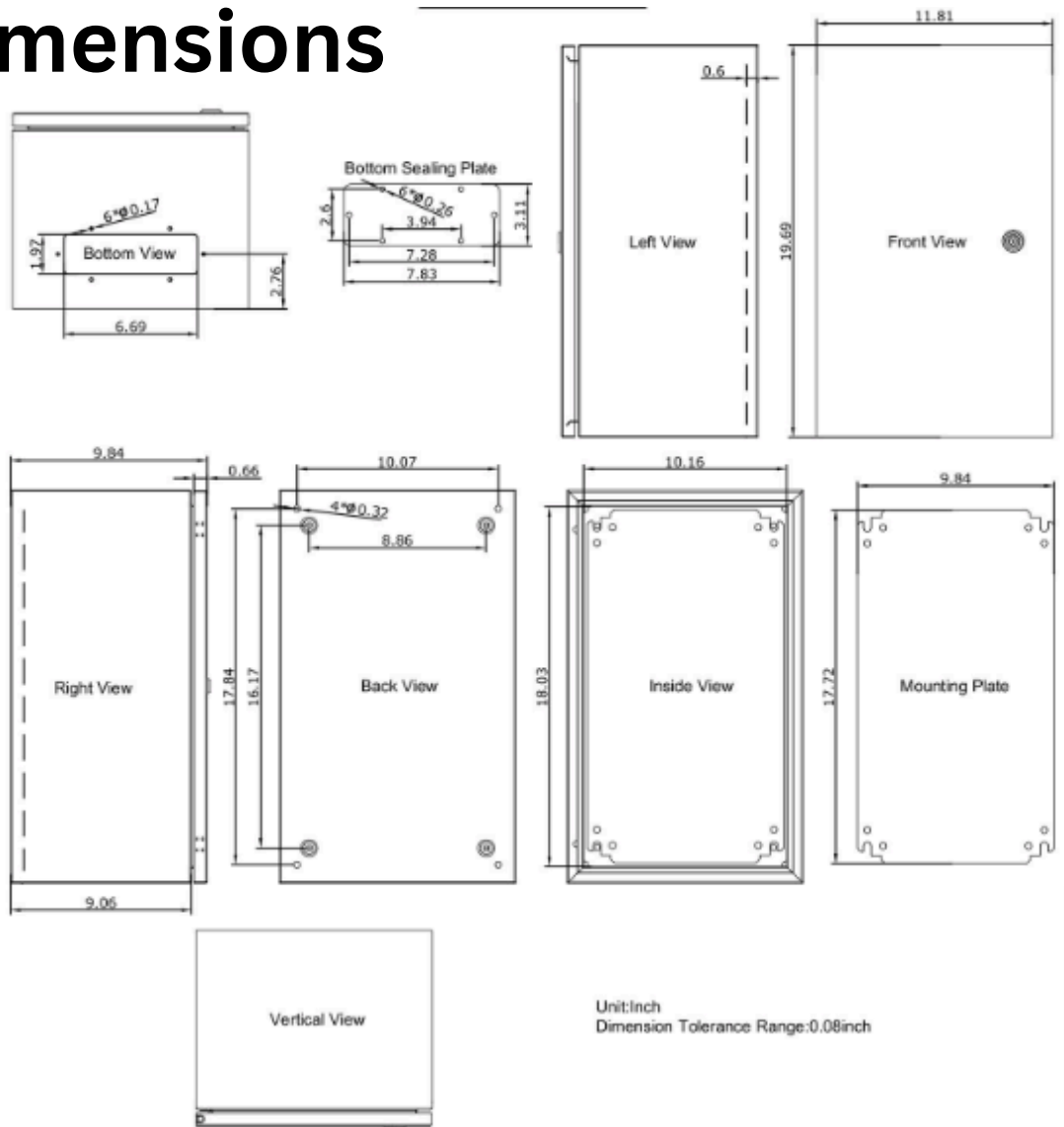
IDLER/GENERATOR  
MOTOR

420V Connection for NL and PL Models (low voltage)

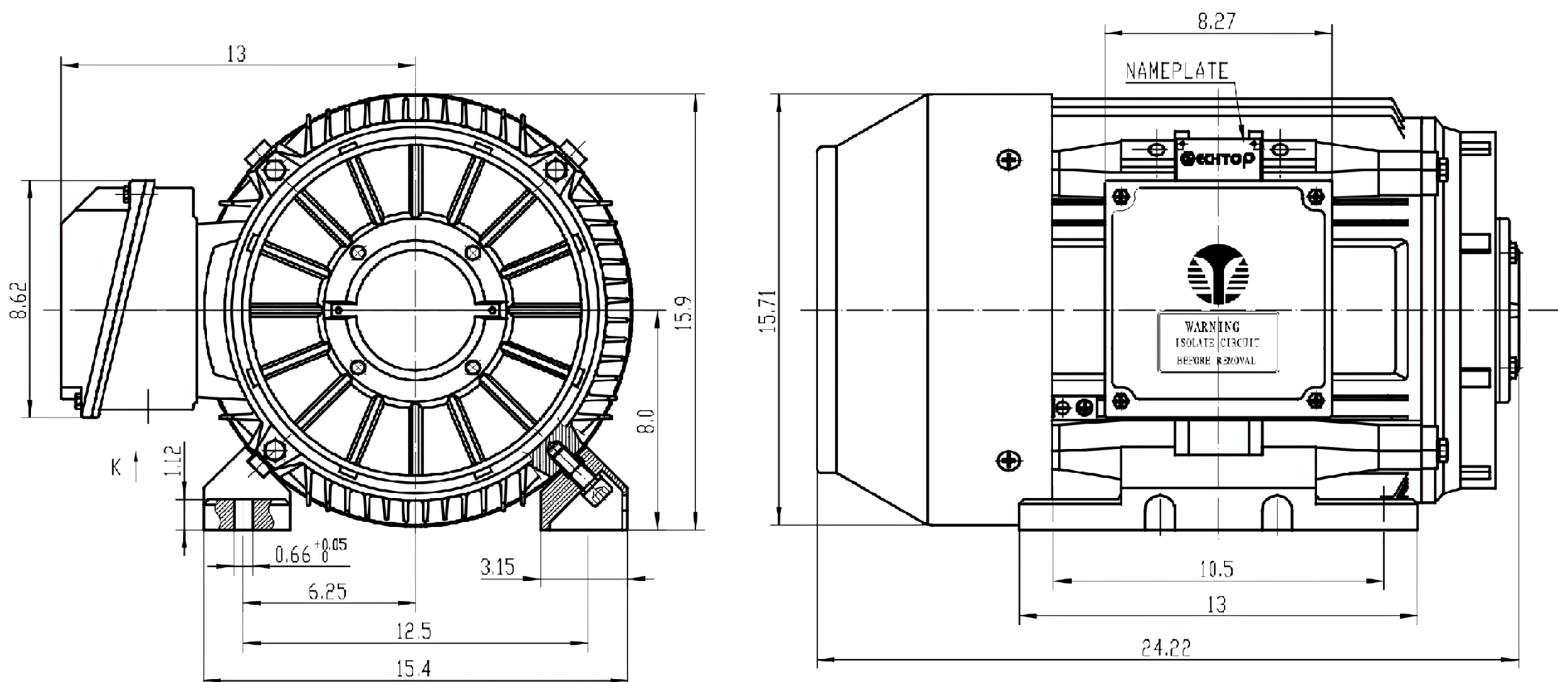
480V Connection for NH and PH Models (high voltage)



# Panel Dimensions



# Idler Motor Dimensions



# 460 VOLTS

## WARRANTY

### Phase Converter Control Panel Warranty

All Phoenix Phase Converters Rotary Phase Converter Control Panels are backed by a lifetime warranty, protecting against defects in materials and craftsmanship. Please note that DIY panels are excluded from this warranty; refer to the DIY panel manual for further details. If any component is found to be defective within the warranty period, Phoenix Phase Converters will either repair or replace it (at our discretion) at no cost. Warranty services for the control panel must be conducted exclusively at a Phoenix Phase Converters authorized facility.

**LIFETIME  
WARRANTY**

### Electric Motor/Idler Warranty

The Electric Motor/Idler is covered by a three-year warranty provided by North American Electric Motors or Techtop. Additionally, the rotor has a lifetime warranty for the original owner, covering defects in materials and workmanship. Any necessary repairs or replacements for the North American Electric Motors or Techtop Idler must be carried out by a North American Electric Motors or Techtop Authorized Service Center and require prior written consent from Phoenix Phase Converters. Before any replacement is approved, the warranty inspection report and generator's specification tags must be presented.

**90 DAYS  
RETURN POLICY**

## RETURN POLICY

At Phoenix Phase Converters, we strive to ensure your complete satisfaction with our products. If for any reason you need to return a product, please review our return policy below:

### Return Eligibility:

- Only sealed, unopened packages are eligible for return.
- Returns must be initiated within 90 days from the date of purchase.

### Return Process:

#### 1. Initiate a Return:

- Contact our customer service team to obtain a Return Authorization (RA) number. Returns without an RA number will not be accepted.

#### 2. Prepare the Package:

- Ensure the product is in its original, unopened packaging. Include all accessories, manuals, and documentation that came with the product.
- Clearly mark the RA number on the outside of the return package.

#### 3. Shipping:

- Ship the product to the address provided by our customer service team. You are responsible for the cost of shipping the product back to us.

### Refund Details:

- Once we receive and inspect the returned product, a refund will be processed to your original method of payment.
- The refund amount will be the original purchase price minus the cost of shipping to and from your location. Shipping costs will be deducted based on what it cost us to ship the product to you.

### Important Notes:

- Products that are opened, used, or not in their original packaging are not eligible for return.
- Refunds will be processed within 10-15 business days after we receive the returned product.

If you have any questions or need assistance with a return, please contact our customer service team at [1 \(888\) 379-3481](tel:18883793481).

### Transformer Return Policy

Please note that transformers purchased from Phoenix Phase Converters are non-returnable under any circumstances except for defects. Defective transformers will be addressed according to our warranty policy. If you believe your transformer is defective, please contact our customer service team for assistance.

