# PHASE-A-MATIC

### STATIC PHASE CONVERTER

Designed especially for running three-phase 220V Machine Tools and Motors from single-phase 220V power.

PHASE-A-MATIC™ can provide inexpensive 3-phase power for Home Workshops and Industrial use.

- **IMMEDIATE DELIVERY FROM STOCK**
- NO MORE CHANGING MOTORS OR SWITCH GEAR
- SIMPLE HOOK UP TAKES JUST MINUTES
- RELIABILITY HAS PROVEN EXCEPTIONALLY GOOD
- GUARANTEED 12 MONTHS AGAINST MANUFACTURING DEFECTS

Uses include: Lathes, Mills, Grinders, Drills, Saws, Metal working and Woodworking equipment, Printing Machines and Equipment, Sewing Machines, Garbage Disposals, Food Processing Equipment, Meat Grinders, Dough Mixers, Food Blenders, Elevator Belts, and numerous other uses.

#### METHOD 1 Reduced HP method

Using the PHASE-A-MATIC™ static converter alone will produce approximately **2/3 normal HP.\*** This method is inexpensive, the most popular, provides excellent results on most machine tools and for numerous other uses. Motor speed is not changed. Most 2-speed motors, power feeds, coolant pumps, etc. will operate. Motor will instant reverse. There is nothing to change. All switch gear will work normally.

\*Refers to wye-wound motors; delta-wound motors will run at 50% rated HP. Delta-wound motors are rarely made in the United States, but are occasionally found on some imported equipment, and particularly on German and Italian machines.

#### METHOD 2 Full or close to full HP method

Make your own type of ROTARY CONVERTER using the PHASE-A-MATIC™ static converter in conjunction with a three-phase motor used as an idler motor can produce full or close to full HP. When running unloaded, the windings of the motor function as a rotary transformer or generator while consuming very little extra power. The idler motor needs to be a minimum of 50% larger than the largest motor that you want to run to accommodate the higher starting current. A good quality, 3600 RPM three-phase wye-wound 220V motor is the best choice. 1800 RPM motors can be used on applications not heavily loaded. Used three-phase motors are inexpensive and readily available. For further information, see Instruction Sheet, Form No. SIS, or our web site at http://www.phase-amatic.com/StaticInstallation.htm. Also, see note below:

#### NOTE:

PHASE-A-MATIC™ Rotary Phase Converter FULL POWER units are available in stock from 1 HP up to 500 HP or more. Ask for PHASE-A-MATIC™ Rotary Phase Converter brochure.

# RUNS THREE-PHASE MOTORS FROM SINGLE-PHASE POWER AT 2/3 RATED HP\*



U.S. PATENT NO. 3673480

#### NOT FOR USE IN WET OR DAMP LOCATIONS.

The PHASE-A-MATIC™ static converter has been developed, tested and thoroughly proven over a 50 year period, demonstrating exceptionally high reliability and long life.

3-phase motors, when used with the PHASE-A-MATIC<sup>TM</sup> static converter, have a distinct advantage over single-phase motors. Current draw on starting is approximately 6 times less. This enables the use of high HP motors where previously not thought possible. There is no interference to TV, etc.

If you would like to become a Phase-A-Matic  $^{\text{\tiny{TM}}}$  dealer, call (661) 947-8485

PHASE-A-MATIC, INC.

39360 3<sup>rd</sup> St. E., Suite 301 Palmdale, Ca. 93550-3255 Toll Free 800-962-6976 Local: 661-947-8485 FAX 661-947-8764 Email: info@phase-a-matic.com

www.phase-a-matic.com

#### www.phase-a-matic.com

## STATIC PHASE CONVERTER

#### IMPORTANT: HOW TO ORDER

**CAUTION!** Do not order a larger size PHASE-A-MATIC™ Regular or Heavy Duty series Static Phase Converter thinking it will give you more HP. Refrigeration compressors, pumps, blowers, resistive loads, CNC equipment, electronic speed controls, and three-phase transformers must use Method No. 2, or use our PHASE-A-MATIC™ Rotary Phase Converter.

REGULAR DUTY series			
MODEL NO.	HP RANGE	APPROX. WT.	
PAM-100	1/3 to 3/4	3 LBS.	
PAM-200	3/4 to 1-1/2	3 LBS.	
PAM-300	1 to 3	3 LBS.	
PAM-600	3 to 5	3 LBS.	
PAM-900	4 to 8	3 LBS.	

HEAVY DUTY "HD" series			
MODEL NO.	HP RANGE	APPROX. WT.	
PAM-100HD	1/3 to 3/4	3 LBS.	
PAM-200HD	3/4 to 1-1/2	3 LBS.	
PAM-300HD	1 to 3	3 LBS.	
PAM-600HD	3 to 5	4 LBS.	
PAM-900HD	4 to 8	4 LBS.	
PAM-1200HD	8 to 12	5 LBS.	
PAM-1800HDES	12 to 18	21 LBS.	
PAM-3600HDES	20 to 30	30 LBS.	
PAM-5000HDES	30 to 50	40 LBS.	
PAM-7500HDES	50 to 75	50 LBS.	

F.O.B. Palmdale, Ca. California buyers add sales tax.

The PHASE-A-MATIC™ Static Phase Converter HP range is determined by the maximum or minimum starting current applied to it at any one time.

Do not add the HP of the power feed, coolant pump, etc. These rely on the generator effect of the main motor.

The only time you would add the HP of two or more motors together would be if they always started at exactly the same time.

2-speed motors are dual HP. Select the PHASE-A-MATIC™ Static Phase Converter with maximum and minimum HP rating to fall within or very close to the maximum and minimum HP of the motor. Example: 2 HP 3600 RPM motor is 1 HP at 1800 RPM.

For 440V operation, consult factory for advice.

#### When to use HEAVY DUTY series:

- Lathes above 3 HP not fitted with a clutch.
- Air compressors: the motor pulley diameter must also be reduced by 1/3, or a 50% larger motor can be fitted.
- Long heavy starting cycles, frequent starting, frequent instant reversing, or unattended motors or equipment.
- If jogging is required, or if there is a good chance of the motor being stalled during use.