

# Product Catalog

**PHASE ADDER™**

Convert Single Phase  
to Three Phase Power

*"Have Three Phase Power Within One Hour"*

**Rotary Phase Convertors**

EYLANDER ELECTRIC INC.



To Order Call: 1-800-932-8986

## **BEFORE YOU CALL THERE ARE TEN THINGS TO KNOW FOR SIZING A PHASE CONVERTER**

### **THEY ARE:**

**What is the available single phase voltage?**

**How many amps of single phase is available?**

**What is the nameplate voltage(s) on the motors?**

**What kind of machine is the motor(s) driving?  
(compressor, refrigeration, lathe, welder, etc.)**

**How is the work done on each machine?  
(Such as on a metal shear, is it hydraulic or flywheel?)**

**What is the total horsepower of all the motors to be run at the same time?**

**What is the total horsepower of all the motors that start at the same time?**

**Are the motors Import or Domestic in origin?**

**What is the age(s) of the motors.**

**Are there any computers on the machine(s)?**

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# PHASE SPLITTER SOLID STATE OR 'STATIC' PHASE CONVERTERS

## NOT RECOMMENDED TO BE USED ON MOTORS BUILT AFTER 1995\*

A static phase converter is one that externally changes a three phase motor to a capacitor-start, capacitor-run single phase motor; running at approximately the same amperage as a single phase motor of the same horsepower.

The single phase amp draw of a three phase motor on our Phase Splitter is 1 1/2 times the three phase nameplate amps. Since the motor will only produce 80 percent continuous duty, the overload heaters should not exceed 125 percent of the full load three phase amps of the motor to which it is connected if the heaters and magnetic starter are installed ahead of the Phase Splitter.

Example      5 hp, three phase, 240 volt motor draw 15 amps

Multiply the amperage by 125 percent 18.75 amps

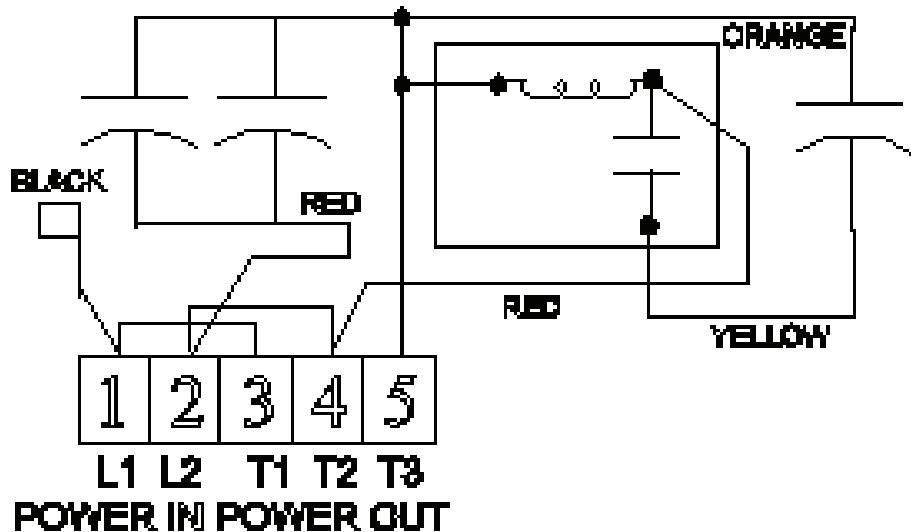
Result   Use 18.75 amp heaters in the motor starter, ahead of the static phase splitter.

You can also install the Splitter itself ahead of the magnetic starter and motor. In this case you would size your heaters to match the 3-phase FLA of the motor since the overload protection device would be "sensing" on the 3-phase side of the converter rather than only through 2 poles on the single phase side.



\*PLEASE NOTE: All general use motors manufactured after October of 1997 and some motors before, are EPAct rated according to the Energy Policy Act of 1992 for efficiency standards mandated by the U.S. Government. With these load motors, it is not recommended to run them on a static phase converter. They should be run on a rotary converter. Unfortunately, it is not clear on the nameplate of the motor whether it is EPAct rated. If you think the motor is manufactured after 1995, then we recommend a rotary converter.

## TYPICAL WIRING DIAGRAMS AND GENERAL INFORMATION FOR PHASE SPLITTER ‘S’ Models



**BOX DIMENSIONS VARY. STARTING SIZE IS 8X8X4 AND GO UP TO 12X18X6 FOR LARGER UNITS.**

All Eylander Electric Phase Converters are



UL Listed.

CAT #	AMPS IN	AMPS OUT
S-1/2	3	2
S-3/4	4.2	2.8
S-1	6	3.6
S-1 1/2	8	5.2
S-2	11	6.8
S-3	18	9.6
S-5	30	15.2
S-7 1/2	42	22
S-10	53	28

**LIGHT HP DUTY:** is intended for motors that run idle empty until the load is applied. This includes RADIAL ARM SAWS, CUT OFF SAWS, LIGHT DUTY LATHES, etc.



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# PHASE SPLITTER SOLID STATE OR 'STATIC' PHASE CONVERTERS

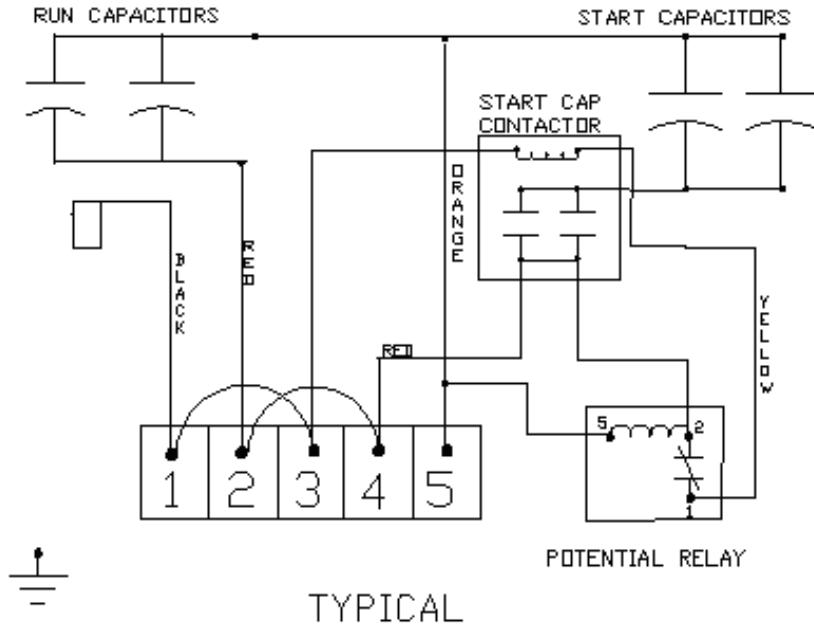
## NOT RECOMMENDED TO BE USED ON MOTORS BUILT AFTER 1995\*

For Air Compressors, Heat Pumps and Refrigeration Equipment, they work very well if the pulley size on the motor of the compressors is reduced by 25% to get satisfactory long life out of the motor. THESE PHASE SPLITTERS ARE NOT INTENDED TO TAKE THE PLACE OF THE PHASE ADDER ROTARY PHASE CONVERTERS. THEY ARE NOT TO BE USED ON DEEP WELL PUMPS, TWO SPEED MOTORS, HYDRAULIC PRESS UNITS, HARD STARTING LATHES, MACHINERY THAT REQUIRES INSTANT REVERSE OR ANY OTHER THREE-PHASE EQUIPMENT THAT REQUIRES A HEAVY STARTING, HEAVY DUTY RUNNING LOAD. See our listing of the 'PHASE ADDER' rotary converters. They are the best on the market when you size them according to our directions.



\*PLEASE NOTE: All general use motors manufactured after October of 1997 and some motors before, are EPAct rated according to the Energy Policy Act of 1992 for efficiency standards mandated by the U.S. Government. With these load motors, it is not recommended to run them on a static phase converter. They should be run on a rotary converter. Unfortunately, it is not clear on the nameplate of the motor whether it is EPAct rated. If you think the motor is manufactured after 1995, then we recommend a rotary converter.

## TYPICAL WIRING DIAGRAMS AND GENERAL INFORMATION FOR PHASE SPLITTER 'SPD' Models



**BOX DIMENSIONS VARY. STARTING SIZE IS 8X8X4 AND GO UP TO 12X18X6 FOR LARGER UNITS.**

All Eylander Electric Phase Converters are



UL Listed.

**USED FOR COMPRESSORS AND ABOVE GROUND PUMPS.**

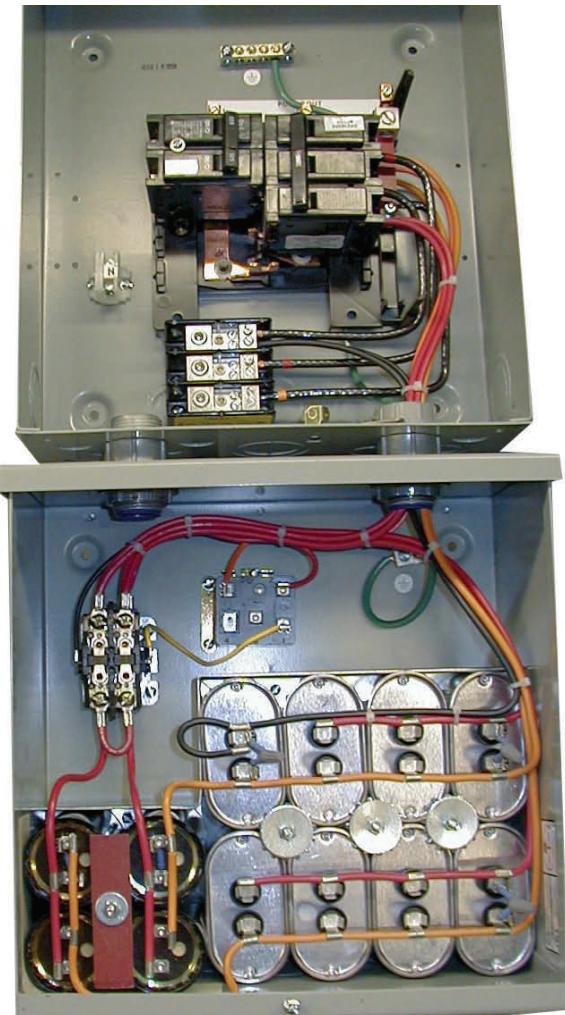
CAT #	AMPS IN	AMPS OUT
SPD-2	20	6.8
SPD-3	20	9.6
SPD-5	40	15.2
SPD-7 1/2	60	22
SPD-10	70	28
SPD-15	100	42
SPD-20	100	54
SPD-25	130	68
SPD-30	150	80



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# PHASE SPLITTER SOLID STATE OR 'STATIC' PHASE CONVERTERS

## NOT RECOMMENDED TO BE USED ON MOTORS BUILT AFTER 1995\*



These units are the same as the 'S' style but with overload protection built in.

A static phase converter is one that externally changes a three phase motor to a capacitor-start, capacitor-run single phase motor; running at approximately the same amperage as a single phase motor of the same horsepower.

The single phase amp draw of a three phase motor on our Phase Splitter is 1 1/2 times the three phase nameplate amps. Since the motor will only produce 80 percent continuous duty, the overload heaters should not exceed 125 percent of the full load three phase amps of the motor to which it is connected if the heaters and magnetic starter are installed ahead of the Phase Splitter.

Example      5 hp, three phase, 240 volt motor draw 15 amps

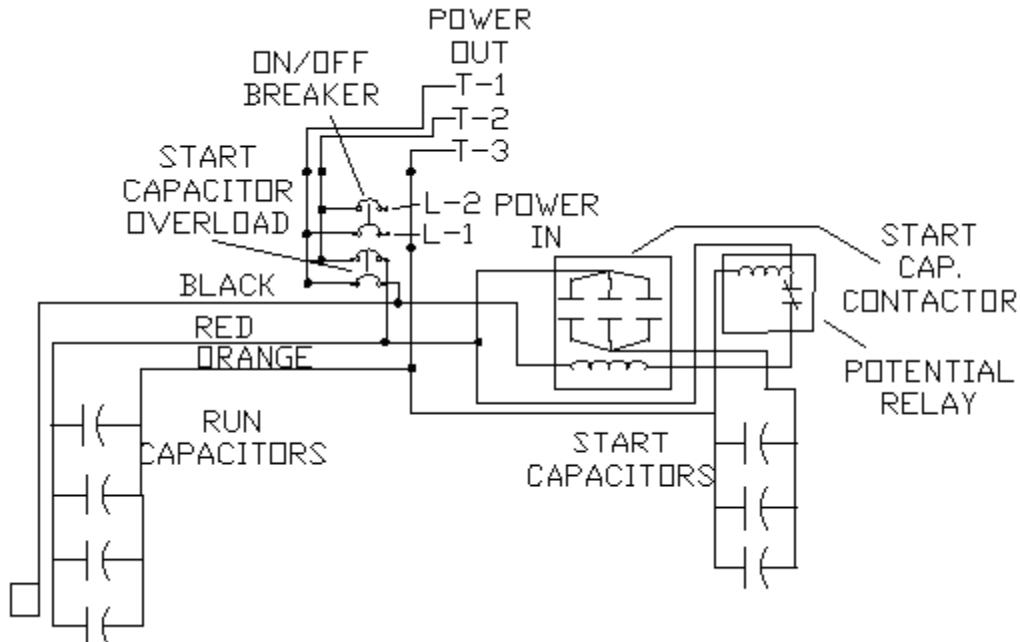
Multiply the amperage by 125 percent 18.75 amps

Result      Use 18.75 amp heaters in the motor starter, ahead of the static phase splitter.

You can also install the Splitter itself ahead of the magnetic starter and motor. In this case you would size your heaters to match the 3-phase FLA of the motor since the overload protection device would be "sensing" on the 3-phase side of the converter rather than only through 2 poles on the single phase side.

\*PLEASE NOTE: All general use motors manufactured after October of 1997 and some motors before, are EPAct rated according to the Energy Policy Act of 1992 for efficiency standards mandated by the U.S. Government. With these load motors, it is not recommended to run them on a static phase converter. They should be run on a rotary converter. Unfortunately, it is not clear on the nameplate of the motor whether it is EPAct rated. If you think the motor is manufactured after 1995, then we recommend a rotary converter.

## TYPICAL WIRING DIAGRAMS AND GENERAL INFORMATION FOR PHASE SPLITTER ‘SB’ Models



**BOX DIMENSIONS VARY. STARTING SIZE IS 16X24X4 AND GO UP TO 16X32X6 FOR LARGER UNITS.**

All Eylander Electric Phase Converters are



UL Listed.

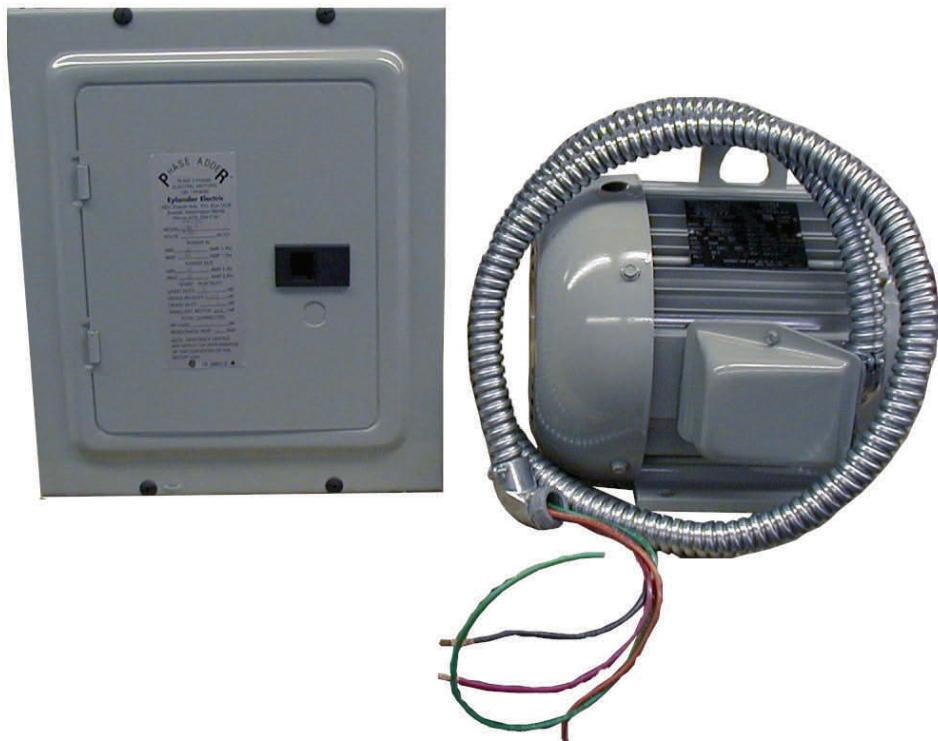
	CAT #	AMPS IN	AMPS OUT
	SB-1 1/2	15	5.2
	SB-2	15	6.8
	SB-3	20	9.6
	SB-5	40	15.2
<b>LIGHT HP DUTY:</b> is intended for motors that run idle until the load is applied. This includes RADIAL ARM SAWS, CUT OFF SAWS, LIGHT DUTY LATHES, etc.	SB-7 1/2	60	22
	SB-10	100	28
	SB-15	100	42
	SB-20	100	54



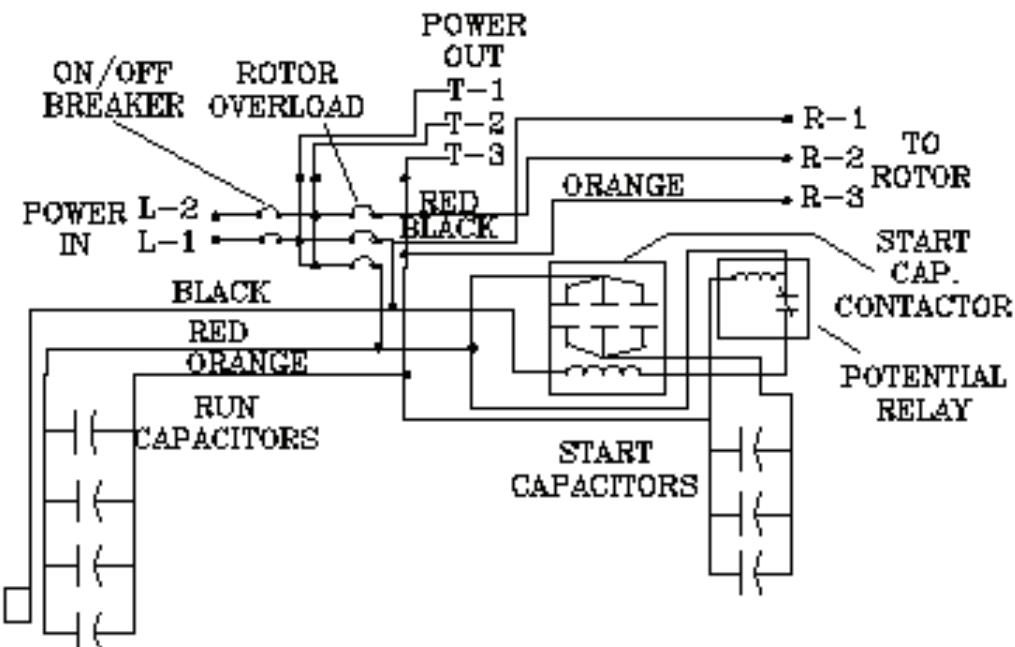
To Order Call: 1-800-932-8986

# PHASE ADDER ROTARY PHASE CONVERTERS

A versatile Phase converter. Our rotary Phase Converters have been tested and designed to fit your needs. Once unpacked and setup instructions have been read, it is possible to have three phase power in an hour. 'RS' Models are the basic model. They are intended for use with one-load-only applications. Your situation may require you to install an external disconnect.



## TYPICAL WIRING DIAGRAMS AND GENERAL INFORMATION FOR PHASE ADDER **'RS'** Models



**BOX DIMENSIONS VARY. STARTING SIZE IS 16X16X4 AND GO UP TO 16X38X6 FOR LARGER UNITS.**

All Eylander Electric Phase Converters are:



**UL Listed.**

**Max Amps are based upon a light duty start and light duty run motor.**

CAT #	MAX AMPS IN	MAX AMPS OUT
RS-3	40	20
RS-5	50	30
RS-7 1/2	60	40
RS-10	100	60
RS-15	125	60
RS-20	125	60
RS-25	125	80

*Example:*

**RS25=80 Amps max, light duty**

**80 X .75 = 60 Amps max, regular duty**

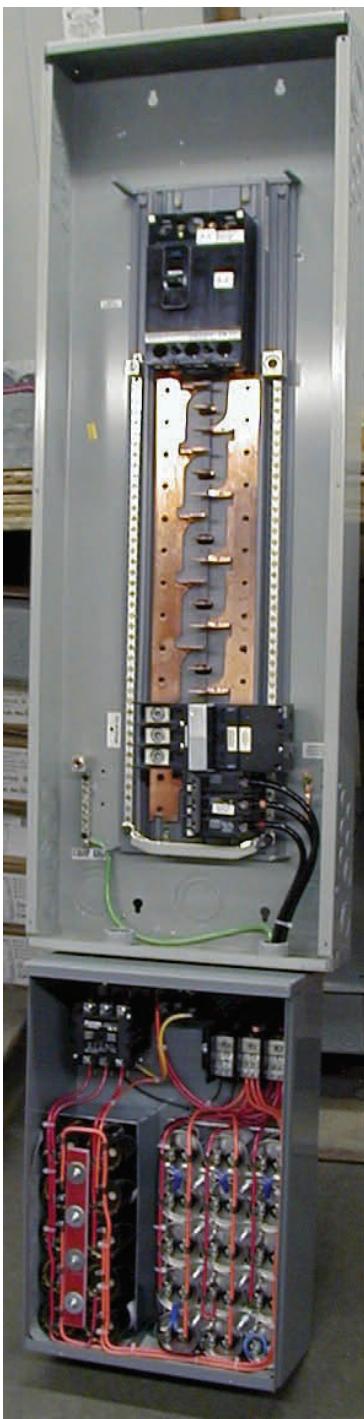
**60 X .75 = 45 Amps max, heavy duty**

Based upon those numbers a 7 1/2 hp HD is the largest motor that can be ran.

To Order Call: 1-800-932-8986

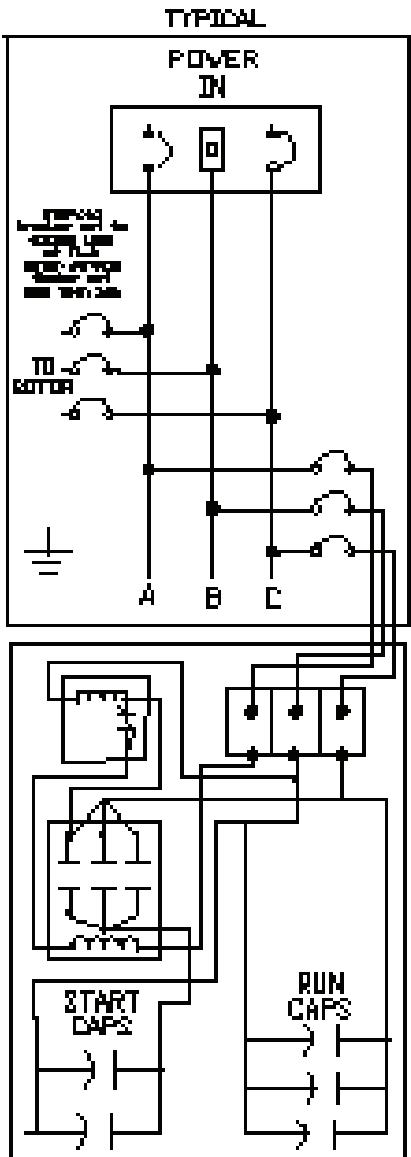


# PHASE ADDER ROTARY PHASE CONVERTERS



The most versatile of all Phase Converters. Our rotary Phase Converters have been tested and designed to fit your needs. Once unpacked and setup instructions have been read, it is possible to have three phase power in an hour. 'RSB' Models are the upgrade from the 'RS' model. They are intended for use with multiple-load applications. These units are Service Entrance rated. As you can see they come with a load center, so once up and running it can be treated as a three phase panel.

## TYPICAL WIRING DIAGRAMS AND GENERAL INFORMATION FOR PHASE ADDER 'RSB' Models



**BOX DIMENSIONS VARY. STARTING SIZE IS 16X24X4 AND GO UP TO 16X60X8 FOR LARGER UNITS.**

All Eylander Electric Phase Converters are:



**UL Listed.**

CAT #	MAX AMPS IN	MAX AMPS OUT
RSB518-60-3/5	60	30
RSB-718-60-3/5	60	40
RSB-1018-100-5/7	100	60
RSB-1518-125-5/7	125	60
RSB-2018-125-5/7	125	60
RSB-2518-125/200-6/8	125/200	60/80
RSB-3018-200-8/10	200	100
RSB-4018-200-10	200	100
RSB-5018-225-10	225	125

Max Amps are based upon a light duty start and light duty run motor.

To figure in a regular duty motor multiply by .75.

To figure in a heavy duty motor multiply by .75 a second time.

*Example:*

**RSB25=80 Amps max, light duty**

**80 X .75 = 60 Amps max, regular duty**

**60 X .75 = 45 Amps max, heavy duty**

Based upon those numbers a 7 1/2 hp HD is the largest motor that can be ran.

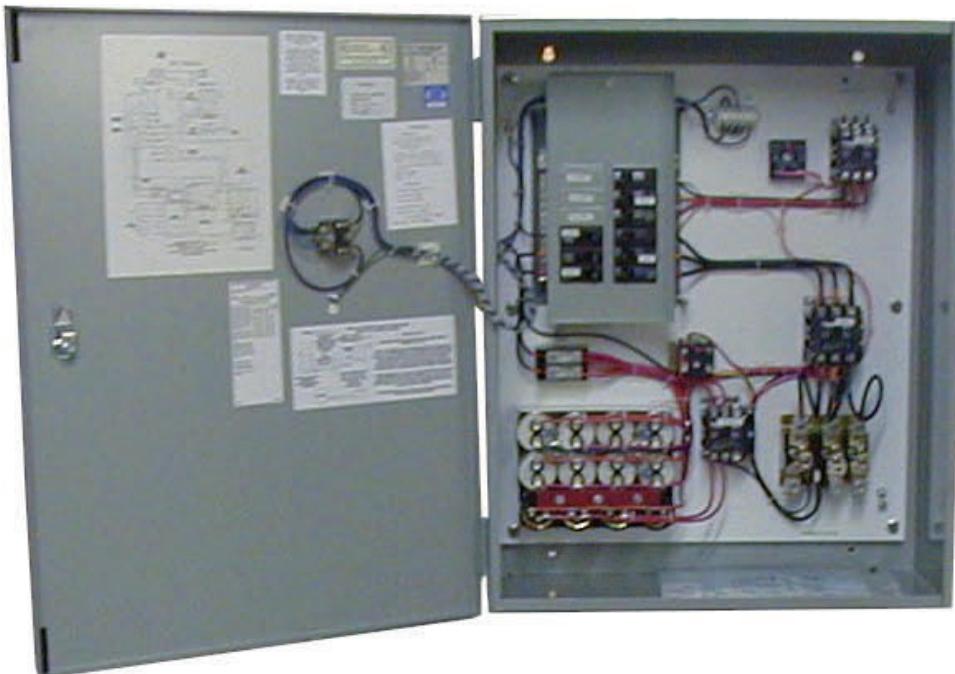
To Order Call: 1-800-932-8986



# PHASE ADDER ROTARY PHASE CONVERTERS

The fully automatic Phase Converters. Our rotary Phase Converters have been tested and designed to fit your needs. Once unpacked and setup instructions have been read, it is possible to have three phase power in an hour. 'RC' Models are the upgrade from the 'RS' model. They are intended for use with one-load applications.

These units work best with elevators and pumps, or places that manually turning the unit on, would be difficult.



These units can be built to supply power to a 50hp Heavy Duty motors. Plus can be built to supply 480v loads.

Soft Start Models are also available.



## TYPICAL WIRING DIAGRAMS AND GENERAL INFORMATION FOR PHASE ADDER 'RC' Models

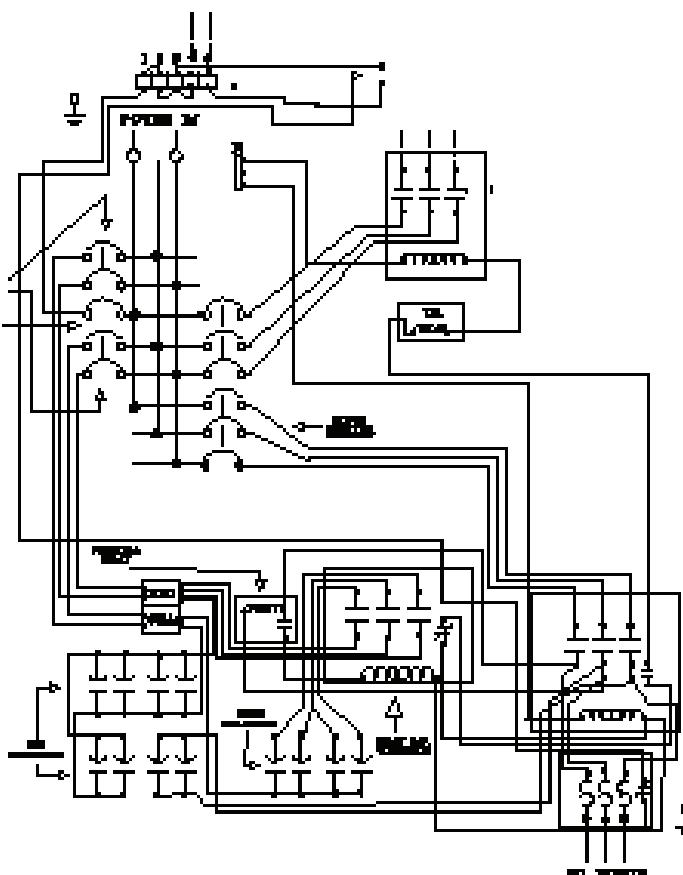
**BOX DIMENSIONS VARY.  
STARTING SIZE IS 24X24X6  
AND GO UP TO 60X60X12 FOR  
LARGER UNITS.**

**All Eylander Electric Phase  
Converters are:**



**UL Listed.**

CAT #	MAX AMPS IN	MAX AMPS OUT
RC-518	50	30
RC-718	60	40
RC-1018	100	60
RC-1518	125	60
RC-2018	200	60
RC-2518	200	80
RC-3018	225	100
RC-4018	225	100
RC-5018	225	125
RC-6018	225	150



**Max Amps are based upon a light duty start and light duty run motor.  
To figure in a regular duty motor multiply by .75.  
To figure in a heavy duty motor multiply by .75 a second time.**

*Example:*

**RC25=80 Amps max, light duty  
80 X .75 = 60 Amps max, regular  
duty**

**60 X .75 = 45 Amps max, heavy  
duty**

Based upon those numbers a 7 1/2 hp HD is the largest motor that can be ran.

EYLANDER ELECTRIC INC.

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