

# Operate **THREE** phase machinery From your **SINGLE** phase power supply



With a **POLYPHAZ** converter

## Rotary phase converters

### Features

- High efficiency, 98.5% tested by Water Dept of Western Australia
- No harmonics=No thyistors
- Floating or slip pole rotaries R/15>
- VolTrak, FaulTrak standard R/15>
- **SiteNet** , Ethernet enabled
- Single or multiple three phase loads
- 3 Year Warranty
- Vermin Proof, sealed cabinets & forced cooling

### Benefits

- No input line chokes required, No output line chokes required.
- No requirement to modify equipment.
- Field serviceable, as specified by govt authorities.
- Site condition adaptable via H.M.I panel



C-Tick approved **N10944**

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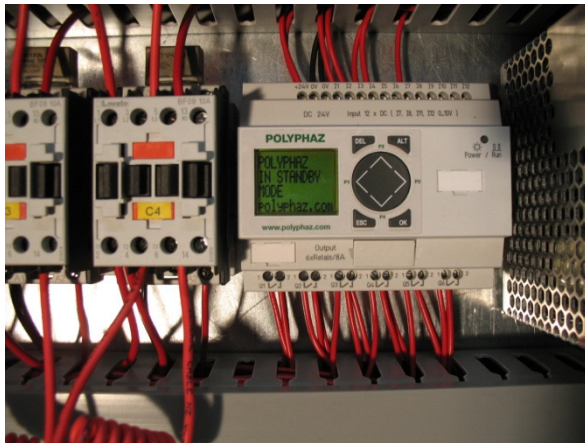
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w w w . p o l y p h a z . c o m

## Description

The **POLYPHAZ** converter represents a cost effective solution to operate three phase equipment from your single phase power supply. For more than fifteen years the **POLYPHAZ** converter has been recognised for its innovative design from both power utilities & equipment manufactures & formed a front line piece of equipment of hundreds of successful rural and remote ventures from woodworking & metalworking businesses to some of the largest dairy farms & wineries throughout Australia & overseas .

## VOLTRAK The second generation Rotary Phase Converter



**VOLTRAK** system

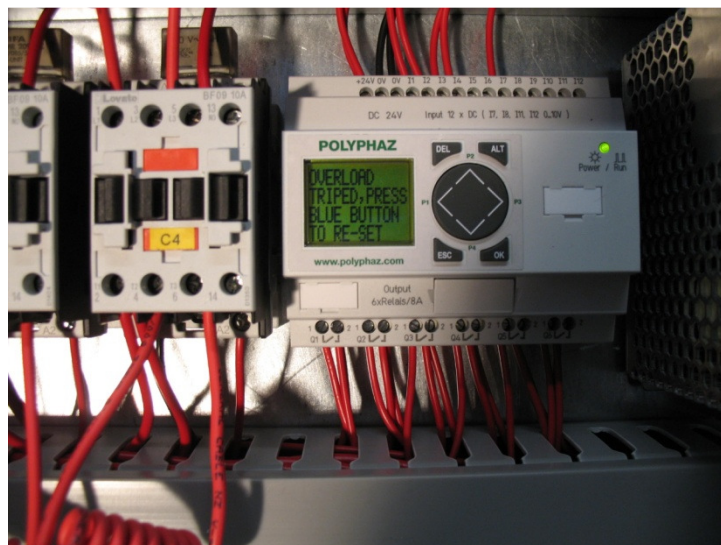


22KW CNC machine tool powered by **POLYPHAZ**

The **VOLTRAK** system represents the second generation in rotary phase converters, available for some time as a option when superior voltage balance or asymmetry was required now fitted as standard on all "P" and "R" series rotary converters .Modern three phase equipment & control systems operate at high efficiency levels & require a balanced supply to achieve this, the **VOLTRAK** system monitors the output supply to maintain a balanced output to meet the demands of modern three phase equipment

## FAULTRAK Text display feature

In most cases our rotary converters are used in some remote areas so we understand that correct installation, maintenance & accurate fault diagnosis all form part of long term trouble free operation. To achieve this we have developed the **FaultTrak** system in our "R" series converters as standard equipment. Eliminates the guesswork when something goes wrong.

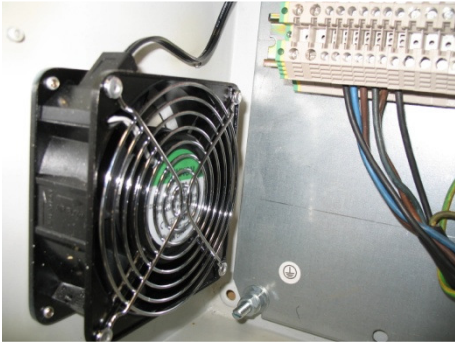


## PERFORMANCE BY DESIGN

### VERMIN PROOF

Designed to keep vermin out

Vermin can do a lot of damage in an electrical control cabinet that's why we used sealed cabinets & forced air cooling



Forced air cooling



sealed cabinets

### EASE OF MAINTENANCE

positively earthed  
& easily replaced

Little things that you may not notice at first but will prove vital down the track, like securely mounted key components, not cable tied but fixed securely to not only provide the required positive earth but ease of replacement.

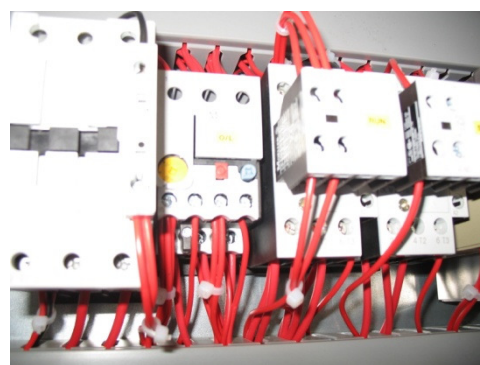


Simple component replacement

### POSITIVE PROTECTION

thermal overloads fitted ALL  
models as required by AS3000

Positive rotary protection can only be achieved by a bi-metal thermal overload.



Thermal overload protection ALL models



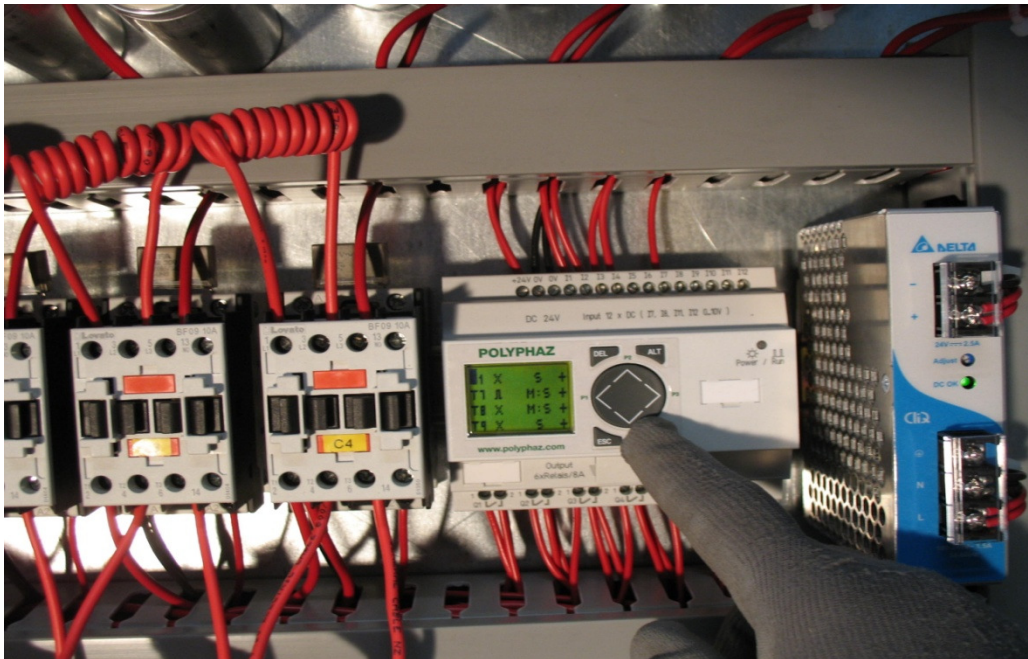
## PERFORMANCE BY DESIGN

### FIELD SERVICEABLE

Integrated controllers make life easier for the manufacturer but you only have ONE option when ONE of the component fails Take it back to the manufacturer.

The **POLYPHAZ** converter incorporates, capacitor switching-power supply-microprocessor-transducer **separately** making field service a reality.

\* As specified by major O.E.Ms and govt authorities.



### SITE CONDITION ADAPTABLE

We **don't** believe in the philosophy of "One size fits all" with regards to controllers, site conditions and field applications can vary and may need to be adapted to suit the application or field conditions at time of installation or years down the track and in some case program variations, all possible with the Voltrak system.

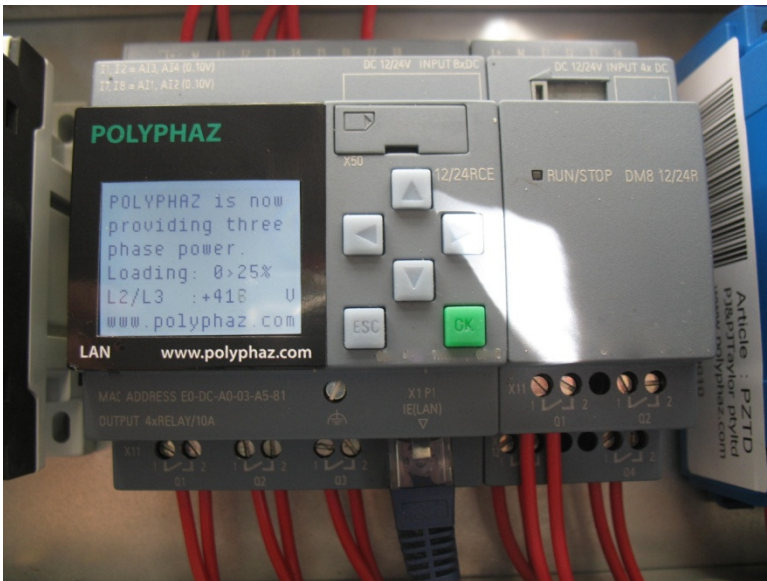
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# PERFORMANCE BY DESIGN

## SiteNet via Ethernet

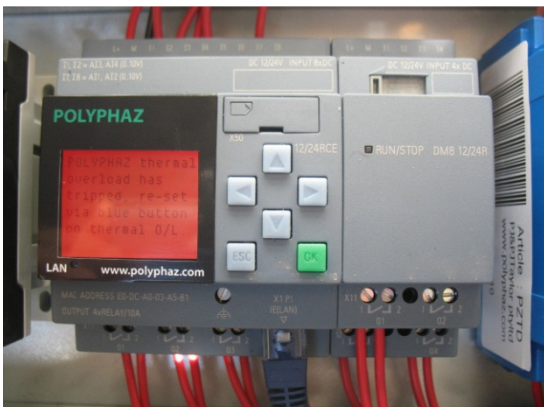
From November 2015 all "R" series converter will use the latest in technology as standard, an Ethernet enabled controller with a new program offering greater performance and better protection. \* Separate data sheet available on request.

"Remote from site" diagnosis, control and monitoring now possible.

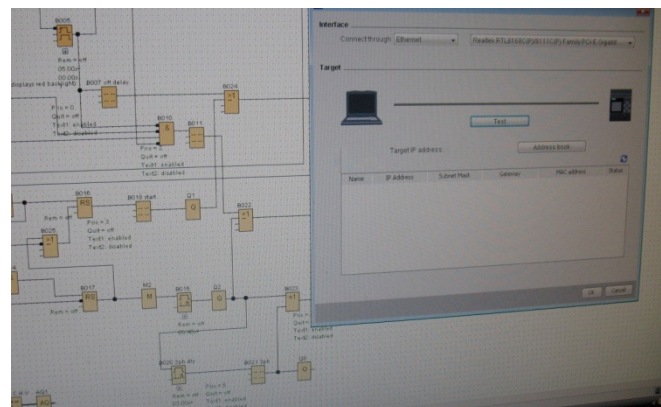


Loading in % and output voltage display

- New 6 line multicolour H.M.I display.
- Ethernet enabled for simple connection via WIFI Bridge GSM, landline.
- Integrated web server for remote diagnosis by iphone, tablet or computer.
- Remote communication via cellular network possible.
- Data logging possible.



thermal overload



remote connection via web server underway



# APPLICATIONS



## Hardware Technical Specification

Feature	EPZ	PZ	R15>R37	R75
BI-metal Thermal overload rotary protection	✓	✓	✓	✓
2 wire control	✓	✓	✓	✓
Stop/Start buttons	✓	✓	✓	✓
FaultTrak Text display			✓	✓
VolTrak 9 stage system +/-6%		✓		
VolTrak 16 stage system +/-6%			✓	✓
Vermin proof	✓	✓	✓	✓
Independent fan forced cooling	✓	✓	✓	✓
Generator protection class supply breaker			✓	✓
Lightning and overvoltage protection			R37	✓
Auto start/stop option possible		✓	✓	✓
Single wire multi motor control possible		✓	✓	✓
NeuTrak option possible		✓	✓	✓
SE .H.M.I user machine interface *				✓

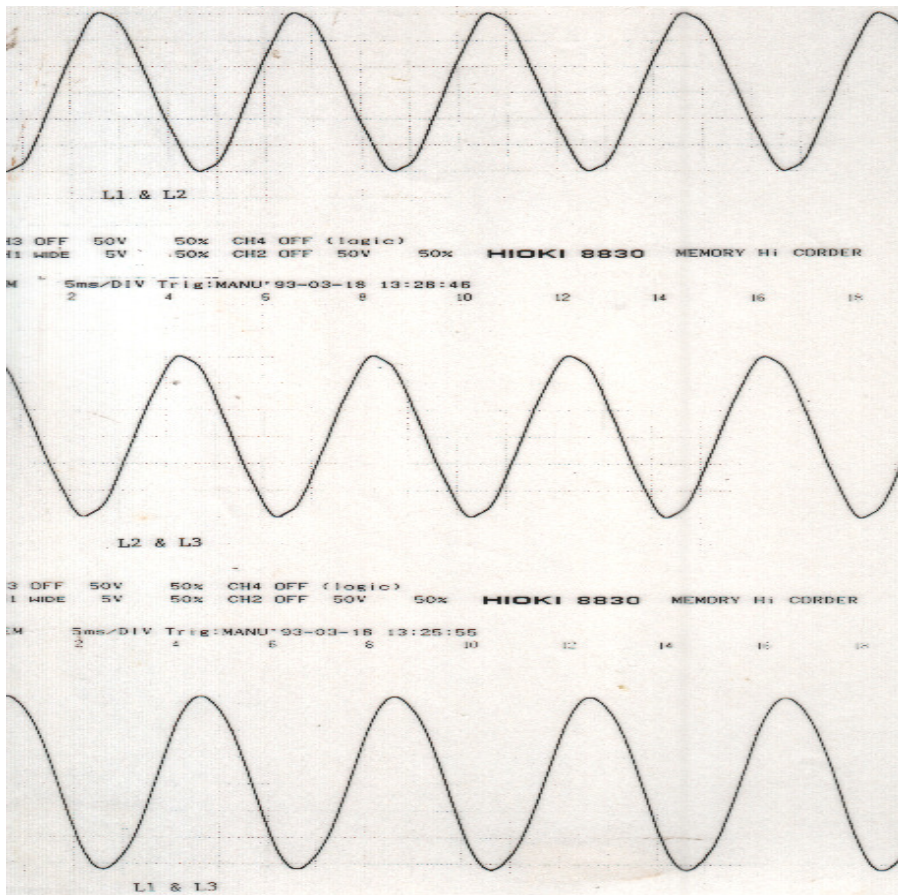
\*Higher specification, covered in separate specification, available on request.

## Software Technical Specification

Feature	EPZ	PZ	R15>37	R75
Input supply voltage monitoring *		✓	✓	✓
Start fail lockout *		✓	✓	✓
Start overtime lockout *		✓	✓	✓
Hour run meter			✓	✓
Remote fault reset possible		✓	✓	✓
Low output/capacitor fail fault *		✓	✓	✓
Off delay start *		✓	✓	✓
Off delay restart *		✓	✓	✓
Off delay due to power failure *		✓	✓	✓
Start fail re-start, 3 shot *		✓	✓	✓
Output % loading via Txt display			✓	✓

\*site/user adjustments possible by H.M.I panel





Sine wave produced by POLYPHAZ rotary converter

