Operate THREE phase machinery From your SINGLE phase power supply



With a POLYPHAZ converter

Rotary phase converters

Features

- High efficiency design
- No harmonics
- Floating or slip pole rotaries R/15>
- VolTrak, FaulTrak standard R/15>
- Thermal overload protection all models
- Operates multiple three phase loads
- 3 Year Warranty
- Vermin Proof, sealed cabinets & forced cooling

Benefits

- Cost saving in having three phase power installed.
- No requirement to modify existing three phase equipment.
- No high speed capacitor switching =No harmonics = Lower running costs
- Single phase supply tariff from supply utility





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Description

The POLYPHAZ converter represents a cost effective solution to operate three phase equipment from your single phase power supply. For more than ten 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



Remote application requiring a balanced power supply

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 rotary converters from model R/15 > .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 FaulTrak system in our converters from models R/15 > as standard equipment. Eliminates the guesswork when something goes wrong.



FaulTrak text display & user access

Features

- Monitors operational status of converter
- 8 Protection & control functions
- Diagnosis & Maintenance tools
- Supply voltage monitoring
- Tells the operator what the fault is
- Displays output loading in %
- Hour run meter

PERFORMANCE BY DESIGN

VERMIN PROOF

Designed to keep vermin out

Don't think it's important?, We learnt the lesson a long time ago; mice 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 <u>required positive earth</u> but ease of 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.



Simple component replacement



Thermal overload protection ALL models

PERFORMANCE BY DESIGN

FIELD SERVICEABLE

Down time important? Integrated controllers make life easier for the manufacture but YOU only have ONE option when the controller fails..Take it back to the manufacturer. The POLYPHAZ converter incorporates, capacitor switching - power supply- microprocessor separately making field service a reality.



SITE CONDITION ADAPTABLE

We DONT 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 and in some case program variations, all possible with the Voltrak system.

FAULT TEXT DISPLAY

Know what's happened & Know what's gone wrong.



APPLICATIONS

Pumping Dairy farms Refrigeration & A/C Wineries Machine tools



















Irrigation Equipment



A/C Units





Hardware Technical Specification

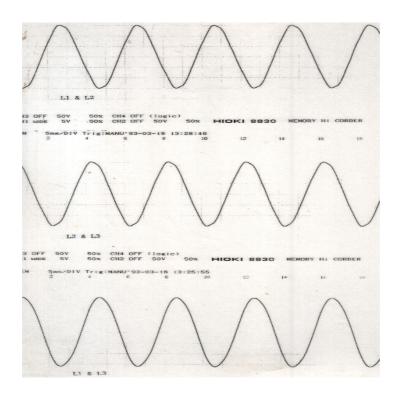
| Feature | EPZ | PZ | R15>R37 | R75 |
|-------------------|-----|--------------|--------------|-----|
| BI-metal | ✓ | ✓ | ✓ | ✓ |
| Thermal | | | | |
| overload rotary | | | | |
| protection | | | | |
| 2 wire control | ✓ | ✓ | ✓ | ✓ |
| Stop/Start | ✓ | \checkmark | ✓ | ✓ |
| buttons | | | | |
| FaulTrak | | | \checkmark | ✓ |
| 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 | | | R37 | ✓ |
| overvoltage | | | | |
| protection | | | | |
| Auto start/stop | | ✓ | ✓ | ✓ |
| option possible | | | | |
| Single wire multi | | ✓ | \checkmark | ✓ |
| motor control | | | | |
| possible | | | | |
| NeuTrak option | | \checkmark | \checkmark | ✓ |
| 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 | | \checkmark | ✓ | ✓ | |
| lockout * | | | | | |
| Start overtime | | \checkmark | ✓ | ✓ | |
| 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

w ww.polyphaz.com