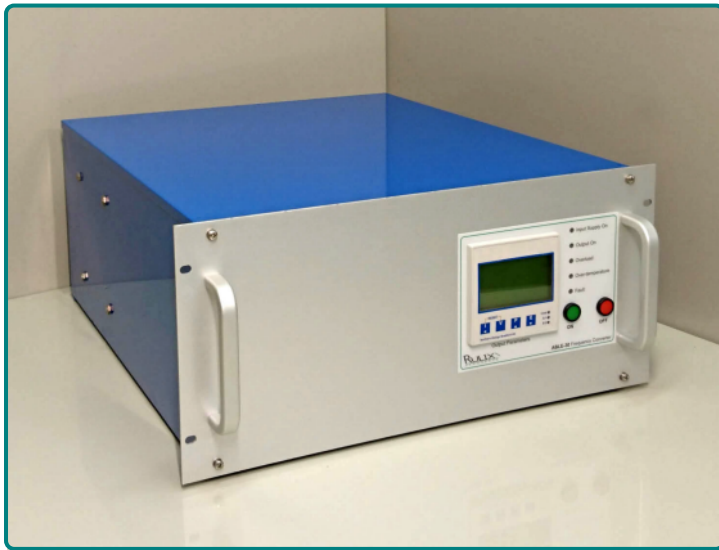


19" Rack Mount 400Hz Static Frequency & Phase Converters: 1 phase to 3 phase

400Hz



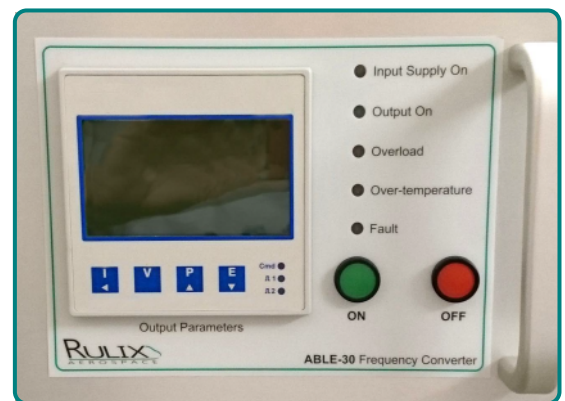
- Models from 1.5 to 4KVA
- Single-Phase Input, 3-Phase Output
- Power factor corrected input (PFC)
- Sinusoidal, Isolated Output
- Comprehensive Digital Output Display
- Low Acoustic Noise
- 2-Year Warranty
- Military Variants Available
- Def-Stan 61-5(4), Stanag 1008

Cost-Effective, Compact and Dependable:

Failsafe ABLE-30 series static frequency converters offer the most cost-effective and flexible way of providing an aircraft quality, 400Hz utility supply for 19" rack-mount installations. ABLE-30 series converters **only require a single-phase input**, but generate a **3-phase**, fully aircraft compatible, 400Hz output. This means that they may be used in workshops and development laboratories where only a domestic type single-phase supply is available.

Compact, 19" Rack Mounting:

Extremely compact electronics allows the ABLE-30 range to be packaged in 19" rack-mountable chassis. Chassis are 510mm deep, and pre-fitted with fixings for telescopic slides.



The LCD readout provides extensive information

Simplicity in Operation

'Two button' operation means minimal Operator training. No special set-up is required.

.....Yet Sophistication in Display:

An easy to read digital display makes all major parameters available for review - these include (for individual phases) output Voltage, Amps, Kw, Kva, Hz and power factor. ABLE-30 models also have facilities for remote On/Off control and remote status indication (via MODBUS RS485 or volt-free contacts).

Variable Output Voltage and Frequency:

All models may be ordered with continuously variable output voltage and frequency. The output voltage is variable by +/-15% about the nominal, and the frequency +/-5% about the nominal (380-420Hz). Control is via front panel knobs

Applications:

ABLE-30 series machines are suitable for static installations within plant rooms, hangars, workshops and laboratories. They should be installed within a standard 19" cabinet, which should have adequate cooling arrangements (normally forced). ABLE-30 units may be used in continuous duty applications.

High MTBF, Low MTTR:

An oversized rectifier and robust IGBT based inverter offer high reliability, while modular construction and a simple lay-out means that access for maintenance and repair is very straight forward.

Warranty:

All Failsafe equipment is supplied with a 2-year warranty.

ABLE-30 - Technical Specifications

INPUT:

- Input Voltage..... 230V 1ph or 208V 2ph, +/- 10% (115V by request)
- Input Frequency..... 50 or 60Hz, +/- 6%
- Input Current Harmonics..... IEC 1000-3-4
- Input Power Factor..... >0.98
- Rectifier Inrush..... 10 second walk-in, max current < In x 1.2
- Input Connections..... 2m lead with Schuko, UK 13A, EN60309 or Hubbell etc
- Input Protection..... Fuse, rear panel

OUTPUT:

- Output Voltage..... 115/200V or 120/208V, 3-Phase + N
- Output Voltage Regulation..... Steady-state: +/-2%, dynamic 0-100% step load: +/-5% recovering to steady-state within 10mS.
- Total Harmonic Distortion..... <3% linear load
- Output Frequency..... 400Hz +/- 0.1%, quartz generated
- Output Phase Angle Accuracy..... 120 deg. +/- 1%
- Permissible Load Power Factor..... -0.6 to 1
- Output is galvanically isolated from input . (the output neutral may be bonded to earth).

SECURITY:

- Permissible Overload..... 110% @ 10 min, 150% @ 5s, 200% @ 1 s
- Output Overvoltage Cutout..... 130V L-N on any one phase
- Output Undervoltage Cutout..... 100V L-N on any one phase
- Thermal Overload..... Thermal sensors located in rectifier, inverter and output transformer.

INTERFACE:

- Optional RS485 or RS422 *MODBUS* high speed communications port allows the output parameters of the converter to be remotely monitored.

ENVIRONMENT & EQUIPMENT:

- Ambient Temperature Range..... -10 to 40 deg C
- Humidity..... <90%, non-condensing
- Altitude..... All specifications quoted at < 2000m above sea level
- Acoustic Noise..... < 50dBA @ 1m
- Overall Efficiency..... 85 to 91% model dependant
- EMC..... Better than EN55-022B
- Cabinet..... Zinc plated steel, powder coated
- Front Panel..... 5U x 19", anodised aluminium
- Cabinet Protection..... IP21
- Meters..... Digital readout for output Amps, Volts (both ph-to-ph and ph-to-neutral), Hz, Kw and power factor for each phase.
- CE marked

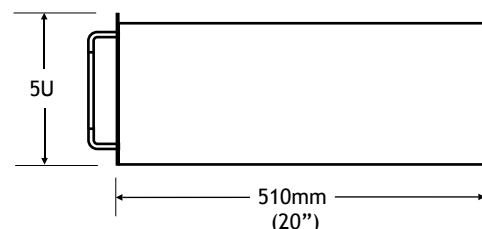
DIMENSIONS:

Up to 4KVA 19" x Height 5U x D510mm (20"), ventilation at rear.

OPTIONS:

- Other input and output voltages and frequencies
- Variable output voltage and frequency
- Remote On/Off and remote status.

Model	301	302	304
Power	1.5KVA	2.5KVA	4KVA
Wt: Kg	22	26	34
lbs	48	57	75



Failsafe (Rulix in some territories) is a specialist UK manufacturer of frequency converters and aircraft GPUs. Established more than 30 years ago, the company manufactures a wide range of solid-state converters for aerospace, naval, industrial and military applications.