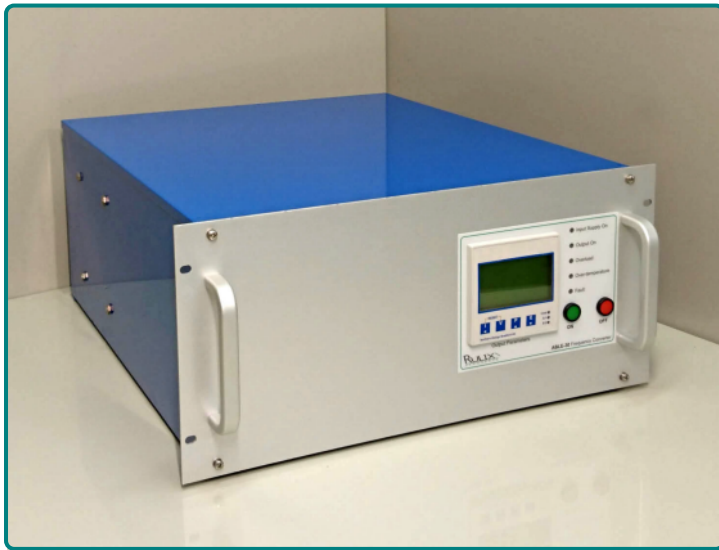


19" Rack Mount 400Hz Static Frequency & Phase Converters: 1 phase to 3 phase

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:

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 require no vertical air flow (ventilation at rear only), meaning that other equipment may be stacked immediately above and below.

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:

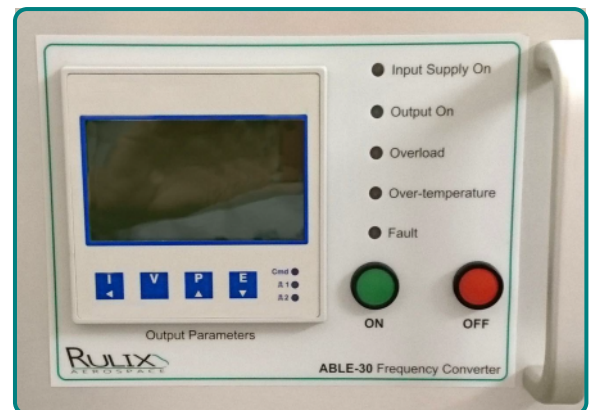
ABLE-30 series machines are suitable for static installations within plant rooms, hangars, workshops and laboratories. They should be installed within a standard 19" cabinet, which should have adequate cooling arrangements (normally forced). ABLE-30 units may be used in continuous duty applications.

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 equipment is supplied with a 2-year warranty.



The LCD readout provides extensive information

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

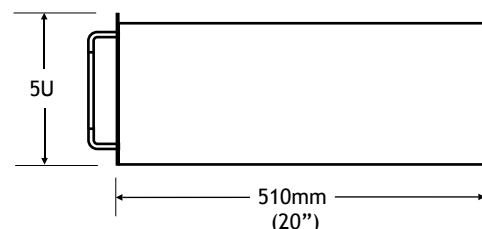
DIMENSIONS:

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 power converters benefit from more than 35 years of manufacturing experience and cover a wide range of solid-state converters for aerospace, naval, industrial and military applications.