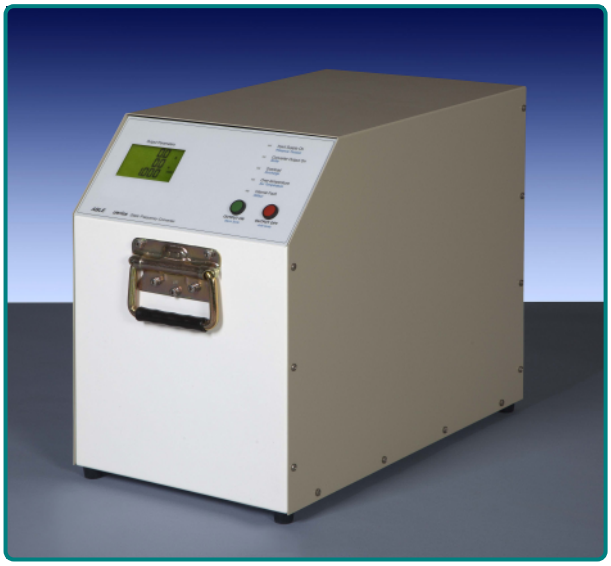
Single Phase Static Frequency Converters
Low Power Range - ABLE-20 Series

400Hz



- Models from 1.5KVA to 7KVA
- Conversion from 50/60Hz to 400Hz.
- Continuous Duty Device
- Single Phase Input, Single Phase Output
- Sinusoidal, Galvanically Isolated Output
- Variable output voltage & frequency option
- Simple Controls With Digital Output Meter
- Very Low Acoustic Noise
- Extremely Compact, With Low Weight

Cost-Effective, Compact and Dependable:
Rulix ABLE-20 series static frequency converters offer the most cost-effective and flexible way of providing dependable and accurate frequency and voltage conversion for low power single phase applications. By using the most advanced electronic design, ABLE-20 models are not only remarkably compact for their respective power ratings but also extremely quiet. This means that personnel may work in close proximity to them without the tiring noise often associated with static frequency converters.

Robust Input Design:
An advanced front-end design ensures a robust input section able to withstand voltage swings and transients without damage. A power factor correction circuits also helps to improve the input power factor.

A digital display shows the output voltage and current.

Simplicity in Operation:
Plug and socket connections and *'Two Button'* operation means minimal Operator training. A digital meter indicates the output voltage and the output current.

Pure, Sinusoidal Output Waveform:
The output waveform is a pure sinusoid with a typical total harmonic distortion figure of less than 2%. Thus *ABLE-20* converters are able to drive even the most difficult and sensitive types of load without difficulty. The output is galvanically isolated from the input, and the output neutral may be bonded to ground or left "floating", as required.

Variable Output Voltage and Frequency Options:
All models may be ordered with a variable output voltage and/or a variable output frequency facility. Control is via front panel knobs, with the output voltage having a range of V_{nom} +/-15% and the output frequency having a range of Hz_{nom} +/- 5%.

Continuous Duty Operation:
All *ABLE* converters are designed for continuous duty applications, and may be left 'On' all the times if required. Generous overload margins take care of loads with high in-rush currents.

Applications:
ABLE-20 series machines are suitable for applications ranging from production-line testing through to research and development laboratories and workshops. Marine variants are also available for both military and commercial naval applications.

High Reliability:
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.

Technical Specification:
See overleaf.

RULIX AEROSPACE

ABLE-20 - Technical Specifications

400Hz

INPUT:

- Input Voltage..... 115V **or** 230V +/-15% 1ph
- Input Frequency..... 50 or 60Hz , +/- 6%
- Input Current Harmonics..... IEC 1000-3-4
- Input Power Factor..... >0.95
- Rectifier Inrush..... 10 second walk-in, max current < In x 1.2
- Input Connections..... IEC or EN60309/2 connectors
- Input Protection..... Circuit breaker, rear panel

OUTPUT:

- Output Voltage..... 115V , single phase
- 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
- 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% @ 10 s, 200% @ 1 s
- Output Overvoltage Cutout..... Nominal voltage +15%
- Output Undervoltage Cutout..... Nominal voltage -15%
- Thermal Overload..... Thermal sensors located in rectifier, inverter and output transformer.

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..... < 45dBA @ 1m
- Overall Efficiency..... 85 to 91% model dependant
- EMC..... Better than EN55-022B
- Cabinet..... Zinc plated steel, powder coated RAL 7032
- Cabinet Protection..... IP31
- Meters..... Digital voltmeter and ammeter for output
- CE marked

CONNECTIONS:

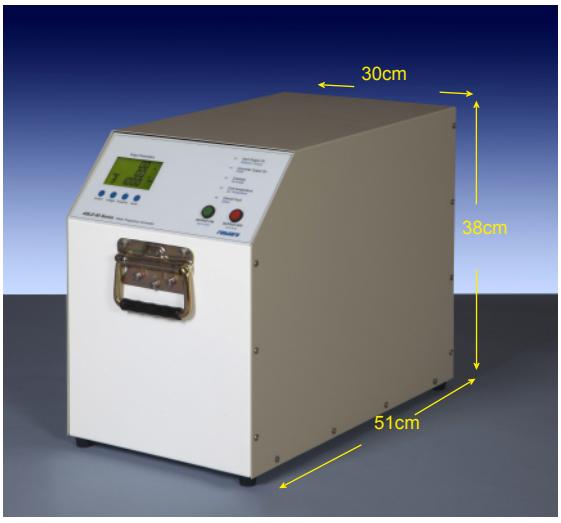
2m input lead, with correct EN30906/2 inlet socket.
Output via Green EN30906/2 or terminals or choice.

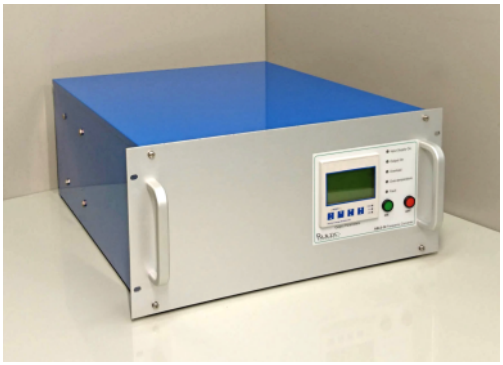
DIMENSIONS:

2 to 5KVA..... H38 W30 D51cm
7KVA H72 W30 D65cm

OPTIONS:

- Other input and output voltages and frequencies
- Military variants
- Marine variants





Also available as 19” Rack-mount

ABLE201 1.5KVA	ABLE202 2KVA	ABLE203 3KVA	ABLE204 4KVA	ABLE205 5KVA	ABLE207 6KVA
18Kg	21Kg	26Kg	40Kg	48Kg	60Kg

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