

Static Frequency Converters

ABLE-50 Series (High Power 1-Phase Output)



- Plant room/factory/laboratory
- Models from 4 to 30KVA
- 3-Phase Input, 1-Phase Output
- Continuous Duty
- Isolated, Sinusoidal Output
- Digital output display
- Highest Power Density Available
- Low Acoustic Noise

Cost-Effective, Compact and Dependable:

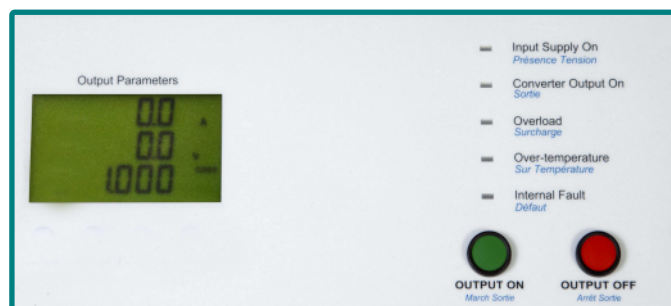
ABLE-50 series static frequency converters offer the most cost-effective and flexible way of providing 400Hz for high power *single phase* applications (for 3-phase outputs see ABLE-60 range). By using the most advanced electronic design, ABLE-50 models are not only remarkably compact for their respective power ratings but also extremely quiet. This means that personnel may work in close proximity to them without the tiring noise normally associated with 400Hz converters.

Output KVA = KW:

ABLE-50 converters deliver equivalent power in KVA and Kw. There is no power factor de-rating assumption as found in some other converters, and ABLE-50 models will deliver full current into both complex loads and simple unity power factor loads.

Simplicity in Operation .

'Two button' operation means minimal Operator training. An emergency stop is also fitted.



The LCD readout provides output voltage, current, power, frequency and hours run.

Very Compact, Easily Manoeuvrable:

Unlike other frequency converters of this power level, which need lifting equipment to manoeuvre them, ABLE-50 units are so compact that they are supplied on castors, with even the largest models being easy to manoeuvre.

Applications:

ABLE-50 series machines are suitable for static installations within plant rooms, maintenance hangars, R&D labs and workshops. They are intended for internal use only. They are normally hard-wired in to a distribution network. They are a cost-effective way of producing a high powered single-phase supply from an incoming 3-phase supply. They are also suitable for use in powering production lines, test and development laboratories and simulators. They may be used in continuous duty.

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.

Technical Specification:

See overleaf.

ABLE-50 - Technical Specifications

INPUT:

- Input Voltage..... 400V or 440VAC +/- 10%, 3-Phase
- 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..... Hard wire or aircraft cables
- Input Protection..... Circuit breaker, rear panel

OUTPUT:

- Output Voltage..... 115V, 1-Phase + N
- Output Waveform..... Pure Sinusoid
- Output Isolation transformer fitted.
- 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

SECURITY:

- Permissible Overload..... 110% @ 10 min, 150% @ 10 s, 200% @ 1s
- Short-circuit proof.
- Output Overvoltage Cutout..... Nominal +10%
- Output Undervoltage Cutout..... Nominal -10%
- 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..... < 50dBA @ 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..... Analogue (output volts & Amps)
- Wheels..... 80mm Steel, Rubber tyres, front brakes
- Lifting Eyes..... Optional - 25mm eye
- Connections..... Hard Wire at rear.

DIMENSIONS:

- 4 to 10KVA..... Height 720 x Width 310 x Depth 650mm
- 15 to 20KVA..... Height 800 x Width 360 x Depth 800mm
- 25 to 30KVA..... Height 960 x Width 420 x Depth 850mm

OPTIONS:

- Other input and output voltages and frequencies
- Secondary 24VDC or 28VDC outputs.

Model Power	ABLE504 4KVA	ABLE506 6KVA	ABLE510 10KVA	ABLE515 15KVA	ABLE520 20KVA	ABLE530 30KVA	ABLE540 40KVA
Weight Kg	35	65	85	110	150	220	contact