400Hz

ABLE-60 Series Static Frequency Converters With Variable Frequency And Voltage Options.

- Continuous duty, 3-phase, 400Hz converters for internal use.
- Ultra compact.
- Very low acoustic noise output.
- Galvanically isolated, sinusoidal, 3-phase output.
- Variable output frequency and voltage options.
- Comprehensive digital display.
- Extremely dependable with long design life.
- Optional 28VDC secondary output.

Setting new standards in 400Hz generation, the *Failsafe ABLE-60 series* frequency converters are ultra compact, near silent in operation and very low maintenance. They have a large easy-to-read digital display panel which displays all output parameters including voltage, current, frequency and power. An extensive options list allows each converter to be customised to specific requirements.

ABLE 60s use our latest converter topology providing a robust, high quality 400Hz output, able to handle even the most non-linear and complex types of load. It is capable of working in *continuous duty* with a long service life and at very high efficiency levels. The new design benefits from extremely low levels of both acoustic and electrical noise.

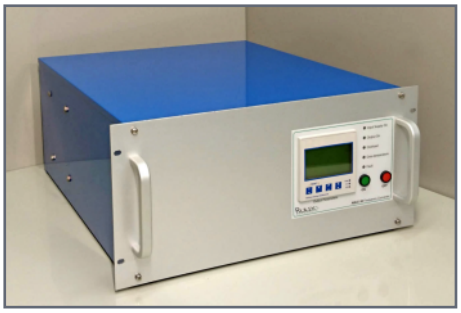
The comprehensive digital display shows output voltage, current, frequency, power and power factor.

The *ABLE-60 series* includes *9 models* ranging from 4KVA to 50KVA. All share the same comprehensive digital display panel, but with *Failsafe's* trade-mark simplicity of operation.

ABLE-60 models may be ordered with variable output voltage and/or frequency. This allows the User to replicate the real 'in the air' aircraft supply quality when testing equipment. Output voltage and frequency are both continuously variable via front panel knobs.

A secondary output of 28VDC may be added, with ratings up to 100 amps available.

As standard all models are supplied with hard-wire connection terminals, but panel mounted connectors of choice (such as IEC60309), or flying leads, may be ordered as an option. All models (bar the 4KVA) are supplied on high quality, non-marking castors with locking brakes.

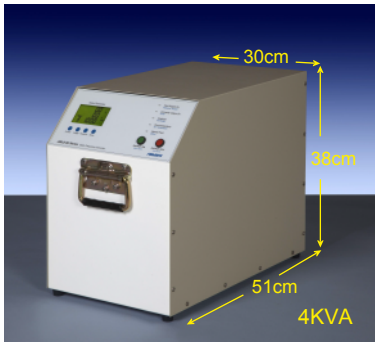


19" rack options - type ABLE30

Applications:

- Avionics/aircraft equipment development and R&D.
- Production line and proving.
- Hangar Plant room.
- Test House.
- Submersibles.
- Special Applications.
- For external GPU see ***ABLE-80***

CE failsafe



Technical Specification:

400Hz

Input:

Voltage:..... 400V or 440V +/-10%, 3ph
Frequency:..... 50Hz or 60Hz +/- 6%
Power factor:..... >0.98 @ full load
Susceptibility:..... EN 61000-4-4, 5

Output:

Voltage:..... 115/200V or 120/208V, 3ph
Voltage regulation steady-state:..... +/- 2%
Voltage regulation dynamic:.....+/- 5% @ 0-100% step-load.
Frequency:.....400Hz +/- 0.1% under all conditions.
THDv:.....Better than 3% @ linear load
Overall quality:..... Better than MIL-STD704E, DFS400
Waveform:..... Pure sinusoid
Phase angle accuracy:..... Better than 1%
Overload capability:..... 110% @ 30 mins, 200% @ 5 secs, 300% @ 1 sec
Permissible load power factor:..... 0.6 leading to 0.6 lagging.
Permissible phase un-balance:..... 70%
Secondary 28VDC output ..... 70 amps continuous (optional).

Protection:

Input supply:..... MCB, phase loss detection, over & under voltage.
Output:..... Over-current, over-temperature, phase loss detection, over & under voltage, short-circuit (any phase).

Display panel:

Parameters displayed:..... Output voltage (ph-ph + ph-N), output current, power, frequency, power factor.
Accuracy:..... Better than class 0.25 IEC 60688
LEDs:..... Input present, Converter healthy, Over-temperature, Overload, General fault.

Environment:

Ambient temperature range:..... -10 to 50 deg C
Electrical noise:..... EN 55022, IEC1000-4
Cabinet protection:..... IP31
Acoustic noise:..... <50dB(A) @ 1m
Construction:..... Mild steel, zinc plated, painted RAL7032 grey & white
Castors or feet:..... 4KVA has rubber feet and lifting handles, others have 80mm castors with front brakes. A/Vs or feet optional.
Cooling:..... Variable speed turbine, air intake in base, exhaust at rear.
CE:..... CE marked

Connectors:

Connector options:.....Hard-wire terminals, EN60309, MIL-STD, or Client choice.

Remote Facilities:

Remote control option:..... Remote control panel, electrically isolated from the converter, self-powered, On/Off + 5 status indications. Operational up to 200m from the converter.
Remote monitoring:..... RS485 2-wire/0V, ½ duplex ¼ unit load, MODBUS RTU 16-bit . CRC 4800 or 9600 baud.
Volt-free contacts (C/O):..... Input supply present, output on/off, over-temperature, overload, fault. Contacts isolated from converter.
Connector type remote:..... 25-way 'D' socket.

Options:

Variable output voltage:.....Via front panel knob, nominal voltage +/- 15%
Variable output frequency:.....Via front panel knob, 400Hz +/- 10%
Special input voltages:..... 220V & 480V (3ph)
Special output voltages:..... 67/115V, 3ph, 400Hz.
Military EMC standard:..... MIL-STD 461

Standards:..... EN61000-6-4, EN62040-1-1, MIL-STD704, CE

Failsafe power converters benefit from more than 35 years of manufacturing experience and cover a wide range of applications in the aerospace, naval, industrial and military sectors.

Authorised Distributor

ABLE604 4KVA	ABLE606 6KVA	ABLE610 10KVA	ABLE615 15KVA	ABLE620 20KVA	ABLE625 25KVA	ABLE630 30KVA	ABLE640 40KVA	ABLE650 50KVA
44Kg	60Kg	85Kg	120Kg	140Kg	165Kg	195Kg	225Kg	255Kg

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