

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



- Continuous duty, 3-phase, 60Hz 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.
- Remote status & control options.
- Extremely dependable with long design life.
- 8 models.

Setting new standards in 60Hz generation, the *Failsafe ABL-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.

*Failsafe's* latest converter topology provides a robust, high quality 60Hz 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 *ABLE-60 series* includes *8 models* ranging from 4KVA to 40KVA. All share the same comprehensive digital display panel, but with *Failsafe's* trade-mark simplicity of operation.



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

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

A remote control panel is available allowing the converter to be monitored and controlled from up to 200m away. In addition, *ABLE-60* converters are fitted with an RS485 data bus, permitting all the performance parameters of the converter to be observed remotely. And to complete these extensive remote monitoring facilities, *ABLE-60s* also have embedded volt-free contacts for all major status conditions.



Remote Control Panel up to 200 metres away.

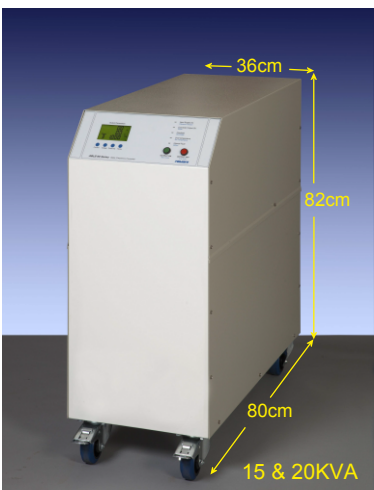
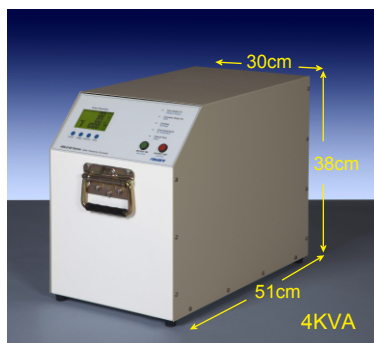
### Applications:

- Industrial equipment development and R&D.
- Production line and proving for export equipment.
- Operation of imported equipment.
- Naval and marine systems.
- Test House.
- Special Applications.
- For external use models, see *ABLE-80*

CE



**Failsafe**  
1984-2013



## Technical Specification:

### Input:

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

### Output:

Voltage:..... 115/200V or 254/440V, 3ph  
 Voltage regulation steady-state:..... +/- 2%  
 Voltage regulation dynamic:..... +/- 5% @ 0-100% step-load.  
 Frequency:..... 60Hz +/- 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%

### 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, 1/2 duplex 1/4 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, 60Hz +/- 10%  
 Special input voltages:..... 220V & 480V (3ph)  
 Special output voltages:..... 67/115V or 265/460V or 277/480V  
 Military EMC standard:..... MIL-STD 461

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

Failsafe Power Supplies Ltd is a specialist UK manufacturer of electronic power converter equipment. Established almost 30 years ago, the company manufactures a wide range of solid-state and rotary power units for industry, military & civil aircraft and naval use.

Authorised Distributor

ABLE604 4KVA	ABLE606 6KVA	ABLE610 10KVA	ABLE615 15KVA	ABLE620 20KVA	ABLE625 25KVA	ABLE630 30KVA	ABLE640 40KVA
49Kg	75Kg	110Kg	130Kg	160Kg	185Kg	225Kg	255Kg

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