

ABLE-90 Series, High Power 28VDC Ground Power Units (GPU).

28VDC



- Solid State (static) GPUs.
- Single 28VDC Output.
- Engine Start Capability.
- 400A Continuous with 1600A Peak or 600A Continuous with 2000A Peak.
- Semi-Stationary or Hand-pull Cart.
- All-weather Cabinet with Cable Stowage.
- Minimal Maintenance with Low Cost of Ownership.
- Simple Controls & Digital Display.
- Global Input Voltages and Frequencies.
- Compact and Easily Manoeuvrable.

Ultra-Dependable:

New ABLE90 series static GPUs provide the most dependable and cost-effective way of supplying 28VDC all-weather ground power for helicopters, military jets and civil aircraft. A new and very robust and stable design delivers continuous high current 28VDC, with plenty in reserve for repeated engine starts. The 600 amp model can provide a peak current of more than 2000 amps for rapid engine spooling.

Durable, Simple to use:

The heavy steel case is galvanised and then painted for complete all-weather durability. All fasteners are stainless steel and the cabinet has an environmental protection level of IP54 and a maximum ambient operating temperature 45C.

Simple, large On/OFF buttons control the output, easy to see in dim light and with no need to take gloves off. There is a front mounted emergency stop. An input circuit breaker is mounted on the rear of the GPU. In operation ABLE-90 models are near silent.



Clear and simple control panel



The hand-pull cart with extra stowage at the rear.

An illuminated digital panel meter indicates the output voltage and current at all times. Models are available for most global input voltage/frequency combinations, and no input neutral is required.

Cable stowage is available (optionally) on top of the GPU, as well as at the rear of the hand-pull cart model.

Minimal Maintenance with Low Ongoing Cost of Ownership:

The ABLE-90 series models are fully solid-state and require minimal ongoing maintenance. Combine this with a very long design life and the ongoing cost of ownership is amongst the lowest in the industry. As ABLE-90 models are pollution free in operation they qualify for use even in the worlds most pollution conscious airports.

Input and output cables may be ordered in different lengths, according to requirement. Output cables are supplied fitted with a 3-pin aircraft connector.

Technical Data Overleaf:



fallsafe
1985-2015

ABLE 90 - Technical Specifications

INPUT:

- Input Voltage..... 380 to 460VAC , 3-Phase (no neutral)
- Input Frequency..... 50 or 60Hz, +/- 6%
- Input Current Harmonics..... IEC 1000-3-4
- Input Power Factor..... >0.98
- Rectifier Inrush..... 3 second walk-in, max current < $I_n \times 1.0$
- Input Connections..... 10 metre 4-core cable with market specific connector.
- Input Protection..... Circuit breaker

OUTPUT:

- Output Voltage..... 28.5VDC
- Output Voltage Regulation..... Steady-state: +/-2%
- Ripple 2%
- Ratings: ABLE906 = 600A continuous, 2000A start.
ABLE904 = 400A continuous, 1600A start.

SECURITY:

- Permissible Overload..... As above
- Output Overvoltage Cutout..... 32V
- Output Undervoltage Cutout..... 22V
- Thermal Overload..... Thermal sensors located in rectifier & Transformer.

ENVIRONMENT & EQUIPMENT:

- Ambient Temperature Range..... -10 to 45 deg C
- Humidity..... <90%, non-condensing
- Altitude..... All specifications quoted at < 2000m above sea level
- Acoustic Noise..... < 55dBA @ 1m
- Overall Efficiency..... 85 to 93% model dependant
- EMC..... EN55-022B, EN61000-6-2/4, VDE0875 (optional MIL-STD 461)
- Cabinet..... Zinc plated steel, powder coated RAL 7032 or option
- Cabinet Protection..... IP54
- Meters..... Digital readout for output Amps, Volts
- Wheels..... 200mm Rubber tyres (hand-pull cart)
- Tow bar (hand-pull cart)..... 800mm long with pulling handle.
- Stationary Variant..... Supplied on 460mm high steel frame for permanent mounting.
- Anti-condensation heater fitted by option.



'SFC Combo' 400Hz + 28VDC GPU on all-weather trailer

Failsafe Power Supplied Ltd is an independent UK manufacturer of power converters for the aerospace industry. Established 30 years ago, the company manufactures 28VDC and 400Hz power converters and GPUs, for workshop, hangar, airfield and military use.

All Failsafe equipment is supplied with a 2 year warranty.