



Jetpower® IIIS 30-90kVA 400Hz Ground Power Unit

A solution to reduce operating costs

One JBT: Driving for customer success!



Jetpower® IIS Technical Specifications



Design Elements

As one of the world's leading suppliers of solid state frequency converters for the past 30 years, JBT AeroTech, Jetway Systems®, now offers a redesigned Jetpower® IIS 400Hz unit for hangar applications available in sizes of 25 kVA to 90 kVA. This unit features easy, single person mobility in an aircraft hangar or apron environment. The Jetpower® IIS incorporates the industry leading reliability and diagnostic capabilities of other Jetpower® products. As an option, a 12 step input can be included. Today's ground power needs are vast and complex therefore the Jetpower® IIS has been designed to withstand extreme outdoor and indoor environments.

Maximum Input Current

Input Volts	30 kVA	45 kVA	60 kVA	75 kVA	90 kVA
480 V.	33 Amps	50 Amps	66 Amps	83 Amps	100 Amps
240 V.	66 Amps	100 Amps	132 Amps	166 Amps	200 Amps

Dimensions

	30-45 kVA	60-90 kVA
Width	36 in (914 mm)	40 in (1016 mm)
Height	36 in (914 mm)	36 in (914 mm)
Depth	36 in (914 mm)	40 in (1016 mm)

Weight (approximate)

30-45 kVA	60-90 kVA
1,000 lbs. (454 kg)	1,200 lbs. (545 kg)

Housing

NEMA 4 (IP44) aluminium enclosure painted with blue polyurethane paint and epoxy primer. Custom colors are available.

Environmental Conditions

Capable of normal operation from -40°C to +55°C (-40°F to +131°F).

Noise

Not greater than 65 dBA at 1.5 m height, 1 m distance.

Maintenance

No preventative maintenance required. Mean Time To Repair (MTTR) 30 minutes at module level. Reduced part count and increased circuit and component protection enhance reliability.

Output Voltage, Frequency, and Phase

- Voltage Drift: Less than 1% at constant load (ambient temperature change 55°C in 8 hours)
- Voltage Regulation: Better than 1%
- Total Harmonic Distortion: Less than 3% (line-to-line/line-to-neutral) Individual harmonics less than 2%
- DC Content: Less than 100 mV.
- Voltage modulation: Less than 0.5% as measured from the peak of one waveform to the peak of another adjacent waveform under steady rated load conditions
- Transient Performance: Output voltage recovery less than 50ms at 100% load change
- Voltage Operating Range: +/- 10% of rated voltage
- Output Frequency Regulation: 400 Hz +/- 0.1%
- Phase Displacement: 120° +/- 1.5°

Input

- AC Power: 208, 240, or 380/415/480 Volt, 3 phase, 50/60 Hertz, at -15% to +10% of nominal voltage rating. Unit is phase rotation independent
- Starting Current: Starting inrush not to exceed 100% current required when operating at rated output
- Power Factor: From 25% to 100% rated load, input power factor is greater than 0.95
- 10% or 5% input current distortion from the mains with optional 12-step rectifier
- Efficiency: Greater than 92% at any load above 50% of rated load

Cart (Optional)

- Foam filled pneumatic tires
- Side locking brake
- Places Jetpower® IIS greater than 18 inches above the ground

Overloads and System Protection

- Overload Capacity: 125% for 10 minutes, 150% for 30 seconds, 200% for 10 seconds
- Protection: Input & Output Over or Under Voltage, Output Overload, Loss of E/F, E/F Over Voltage, Bus Discharge Fault, Heat Sink Over Temperature, Output Frequency Fault, and IGBT Fault

Internal Controls and Indicators

- Auto/Manual Switch–Voltage Control
- Start/Stop Control
- Line Drop Compensation
- DC Bus Voltage Adjustment
- LCD Display Contrast Adjustment
- Voltage Adjustment (+/- 10%)
- Hour Meter (99,999 hrs.)

External Front Panel Lights

- 28 Volt E/F Interlock Bypass Switch
- Solid Red–Internal or External Fault
- Solid Yellow–Input Power Applied
- Solid Green–400 Hz Power Present

LCD Display Plain English Indicators

- Input Voltage Phase A
- Input Voltage Phase B
- Input Voltage Phase C
- Input Voltage Average (3 Phase Avg.)
- Input Current (3 Phase Avg.)
- Output Voltage Phase A
- Output Voltage Phase B
- Output Voltage Phase C
- Output Voltage Average (3 Phase Avg.)
- Phase A Output Current
- Phase B Output Current
- Phase C Output Current
- Output Current Average (3 Phase Avg.)
- Output kVA (total)
- Accumulated Kilowatt hours
- Output Frequency
- +5 VDC
- +15 VDC
- +24 VDC
- Event History, 490 events [(start/stop) and (fault/reset)]

All current operating readings and event history are available on optional RS232, RS485 Data Port.



Dubai, U.A.E. 971-50-655-6490
United Kingdom 44-20-8587-0666
Hong Kong 852-3966-1360

This information is provided for reference only and should not be used as technical specification data. This information is subject to change without notice. Please contact a JBT AeroTech sales office for formal technical information.

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