



Jetpower® PWM2 400Hz Ground Power System

A solution to reduce operating costs



Jetpower® PWM2 Technical Specifications

Maximum Input Current

Input Volts	45 kVA	90 kVA	140 kVA	180 kVA
380 V.	63 Amps	126 Amps	196 Amps	252 Amps
400 V.	60 Amps	120 Amps	186 Amps	239 Amps
415 V.	58 Amps	116 Amps	179 Amps	232 Amps
480 V.	50 Amps	100 Amps	155 Amps	200 Amps

Dimensions (all point of use units)

Width	60" (1.53 m)
Height	24" (.61 m)
Depth	50" (1.27 m)

Weight (approximate)

45 kVA - 90 kVA	140 kVA - 180 kVA
1,200 lbs. (544 kg)	2,000 lbs. (591 kg)

Housing

Completely sealed with no air transfer from external sources to internal electronic circuits (NEMA 3R or IP23) with an Aluminum case and structural members. Case is fully alodine treated. 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

- Mean Time To Repair (MTTR) 30 minutes at module level. Reduced part count and increased circuit and component protection enhance reliability.

Input

- AC Power: 380-480 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.
- Input Current Distortion: 10% or less input current distortion from the mains with the standard 12 step rectifier system.
- Efficiency: Greater than 91% at any load above 50% of rated load.

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%.
- Balanced Phase Displacement: 120° +/- 1.5° (balanced load).
- Unbalanced Phase Displacement: 120° +/- 4.0° (15% unbalanced load).

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
- 28 Volt E/F Interlock Bypass Switch
- Start/Stop Control
- Remote Voltage Sense Switch
- Line Drop Compensation
- DC Bus Voltage Adjustment
- LCD Display Contrast Adjustment
- Voltage Adjustment (+/- 10%)
- Hour Meter (99,999 hrs.)

External Front Panel Lights

- Solid Red Light-Internal or External Fault
- Solid Yellow-Input Power Applied
- Flashing Yellow-28 Volt in Bypass
- Solid Green-400 Hz Power Present
- Flashing Green-28 Volt not available

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
- Fault/Event History
- Also available with 28 VDC Power.

All current operating readings and event history are available on optional RS2321485 Data Port.