

Design Elements

▶ As one of the world's leading suppliers of Aviation Ground Support Equipment (GSE), BGSE Group, LLC offers a B-Power 400Hz ground power unit for all military and commercial applications. The BGSE Group B-Power series is the worlds most advanced aircraft power technology. From the input contactor to the output contactor every stage of this converter/rectifier is monitored and controlled with high speed micro processors to ensure exceptional performance even with input power fluctuations and output load demand changes. This product exceeds MIL-STD-704F, and is UL listed. With a Power Factor (PF) of 1.0 it can power all modern aviation jets and is robust because it also meets military demand requirements.



Capacity

- ▶ BG-030-400-V/H 30KVA/30kW
- ▶ BG-045-400-V/H 45KVA/45kW
- ▶ BG-090-400-V/H 90KVA/90kW
- ▶ BG-120-400-V/H 120KVA/120kW
- ▶ BG-140-400-V/H 140KVA/140kW
- ▶ BG-180-400-V/H 180KVA/180kW
- ▶ BG-200-400-V/H 200KVA/200kW

Maximum Input Current

Input Volts	Current	Input Volts	Current
90 KVA/kW		180 KVA/kW	
380 Volts	126 Amps	380 Volts	252 Amps
400 Volts	120 Amps	400 Volts	240 Amps
415 Volts	116 Amps	415 Volts	232 Amps
480 Volts	98 Amps	480 Volts	196 Amps

Input

- ▶ AC Power: 380-480 Volt, 3 phase, 50/60Hz, at -15% to + 10% of normal voltage rating. Unit is phase rotation independent.
- ▶ Starting current: Starting inrush current not to exceed 100% current required when operating at rated output.
- ▶ Power Factor: From 25% to 100% rated load, input factor is greater than 0.95.
- ▶ Input Current Distortion: 5% or less input current distortion.
- ▶ Efficiency: Greater than 92% at any load above 50% of rated load.

Output Voltage

- ▶ Voltage Drift: Less than 1 % at constant load
- ▶ Voltage Regulation: Less than 1%
- ▶ Output Voltage Transient per MIL-STD-704F

Dimensions

30-90 KVA/kW vertical

Width	24 Inches (605 mm)
Height	63 Inches (1601 mm)
Depth	27 Inches (670 mm)

120-180 KVA/kW vertical

Width	65 Inches (1657 mm)
Height	44 Inches (1104 mm)
Depth	32 Inches (813 mm)

30-90 KVA/kW horizontal

Width	62 Inches (1562 mm)
Height	26 Inches (670 mm)
Depth	28 Inches (715 mm)

120-180 KVA/kW horizontal

Width	63 Inches (1600 mm)
Height	24 Inches (600 mm)
Depth	55 Inches (1398 mm)



Weight

90 KVA/kW

1190 LBS (540 kg)

180 KVA/kW

2238 LBS (1015 kg)

Housing

- ▶ NEMA 4 (IP54) RAL 7035 - phosphatized, primed and powder sprayed

Environmental Conditions

- ▶ Capable of normal operations from -40°F to +131°F (-40°C to +55°C)

Noise

- ▶ <68 dB(A)

Maintenance

- ▶ No Preventative maintenance required. Mean Time To Repair (MTTR) 30 minutes at module level.

Overload Limit

- ▶ 460-490 ADC for 4 seconds (short circuit capability)
- ▶ 150% for 15 seconds
- ▶ 200% for 5 seconds
- ▶ 250% for 0.25 seconds
- ▶ 300% for 6 seconds (optional)

Controls and Indicators

- ▶ LIQUID CRYSTAL DISPLAY - 4 lines
- ▶ Plain Language Fault Display - display of current operating data, voltage, current frequency, power, voltage adjustment, DC Bus Voltage Adjustment, hour Meter, 28VDC interlock Output, Input Voltage Phase A, B and C, Output Voltage, Output Current, Output kW, Event and fault history and more.
- ▶ Buttons For: On/Off, Arrow Up/Down, Hand Key, Reset, Horn Off
- ▶ LEDs For: Input, Rectifier, Inverter, Output, Alarm/Reset, Horn

Options

- ▶ 28VDC 600AM P
- ▶ 270VDC 72kW, 26g amps Mobile Trailer Communication ready package remote station controls