B-Power270VDC Ground Power System



For Military F 35 JSF and F 22 Raptor Aircraft



TECHNICAL SPECIFICATIONS

DESIGN ELEMENTS

As one of the world's leading suppliers of Aviation Ground Support' Equipment (GSE), BGSE Group, LLC offers a B-Power 270VDC ground power unit for the F 35 Joint Strike Fighter and F 22 Raptor. 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, is ETL listed and meets Lockheed Martins (The OEM) latest version of their F 35 JSF aircraft interface specification.

CAPACITY

72 kW (continuous)

MAXIMUM INPUT CURRENT

INPUT VOLTS CURRENT

 380 Volts
 126 Amps

 400 Volts
 120 Amps

 415 Volts
 116 Amps

 480 Volts
 98 Amps

DIMENSIONS

 Width
 24 Inches (605 mm)

 Height
 63 Inches (1601 mm)

 Depth
 27 Inches (670 mm)

WEIGHT

1190 LBS (540 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.

INPUT

- AC Power: 380-480 Volt, 3 phase, 50/60Hertz, 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.

BGSE Group, LLC

14034 Clarendon Pointe Court Huntersville, NC 28078, USA (704) 488-0084 sales@bgsegroup.com www.bgsegroup.com



OUTPUT VOLTAGE

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

<u>OVERLOAD LIMIT</u>

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

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

