



# **INPUT**

- State of the art semiconductor technology (IGBT) Rectifier
- Power Factor Correction (PF=1)
- Up to 90% efficiency
- Low input harmonics (<1.5% THDi), to comply with the strictest regulations @ any load.

28VD0



1200 A Peak load to 600 A continuous – 2400 A Peak load.

### OUTPUT

- 800Hz DC-DC Converter
- Galvanic Isolation.

Sinepower ensures high quality, efficient and secure electrical power supplies.



### **NORMS AND STANDARDS**

- **AVIATON** ISO 6858 Aircraft ground support electric supplies
  - SAE ARP 5015 Ground equipment 400 Hz gound power performance requirement
- MILITAR MIL-STD-704 Aircraft electric power characteristics
  - **EMC** EN61000-6-4 Electromagnectic compatibility -Generic emission standard
    - EN61000-6-2 Generic immunity standard

- **SAFETY** IEC 60529 Degrees of protection provided by enclosures (IP Code)
  - IEC 62477-1 Safety requirements for power electronic converter systems and equipment

- **ENVIRONMENTAL** Dry heat test (steady state) IEC 60068-2-2 subclause 5.3
  - Damp heat test IEC 60068-2-78 subclause 6
  - Vibration test IEC 60068-2-6 subclause 6
  - Salt mist test IEC 60068-2-52 subclause 6
  - Dust and sand test Test Lc1 of IEC 60068-2-68



### **EFFICIENCY**

- Up to 90% efficiency
- Green Standby Function losses: 20 W
- No load losses: < 0.5 kW.



# **TECHNOLOGY**

- Enclosure Protection class up to Ip55
- Enclousre with C5-M coating
- · Over/under voltage at output:
  - Under voltage <20V (4 sec)
  - Over voltage >34V (4 sec)
  - Short Circuit <5V at current limit (4 sec)
- · Overload capability designed for:
  - Power stage 150% Continuous
  - Magnetics 120% Continuous
- · Overload protections set at:
  - 1200A 5 seconds
  - 2400A 5 seconds
- Over temperature protection.

# **SPECIFICATIONS**

### **INPUT**

- 4 Wire | 3 Wire Optional
- 3 phase 400V/415V AC  $\mid$   $\pm 10\%$ \*
- **50/60Hz** | ± 10%
- Input current harmonics | <2% @ Full Load

### **OUTPUT**

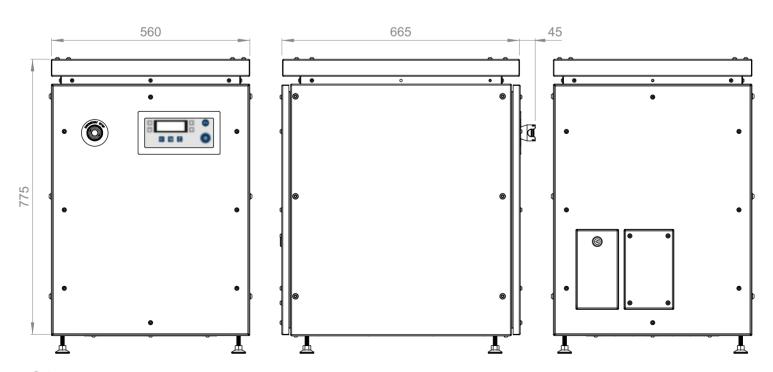
- Output 28.5VDC | ±1%\*
- Continuous current capability (at 28.5VDC) | 300A/600A\*
- Maximum Current Limit (at 28VDC) | 1200/2400A for up to 5sec
- Current Limit adjusting steps (from 600A)  $\mid \pm 0.5\%$
- Voltage regulation up to 600A | 1%
- Ripple | <0.5%
- Dynamic Recovery to 90% VDC | <40ms
- Voltage Compensation | 0-4V up to 600A (remote feedback)
- Galvanic Isolation | 800Hz Transformer
- IGBT + DIODE Rectifier
- \* Other voltages and frequencies available on request
- \* Other Electronic Overload limits available on request

### **ENVIRONMENTAL CONDITIONS**

- Coolant temperature (max) | Forced air up to 40°C
- Ambient temperature (min/max) | -40°C to +40°C
- Relative humidity (min/max) | 0% to 90% without condensation
- Pollution degree | 2
- OVC (Overvoltage Category) | 3
- Altitude | Up to 2000m



# **TECHNICAL DRAWING**



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