



APPLICATION

PCTI is a leader in designing, engineering and manufacturing of Aircraft Mobile Carts since their inception back in 1991. PCTI's success in Mobile Carts comes from our reliable and rugged design. Our products are used by the US military in some of the harshest environments and conditions around the world.

PCTI's Ground Power Unit includes 115/200vac, 400hz, 28VDC and 270VDC allowing easy movement between the Hangar and the Ramp area. PCTI's AC/DC power conversion reduces operating and maintenance costs while reducing the equipment down time.

The following specifications are for an output of 600 amps at 28V_{DC}. As the rating goes higher, the weight and size of the unit will increase. In these cases, we recommended an optional tow bar to move the unit. For these larger rated units, check out our towable units.

Please feel free to contact PCTI to discuss these products or Combo AC/DC GPUs.

Standard Specifications

Input

Service:	380V-480V _{AC} ± 10%, 3 Phase, 4 Wire
Frequency:	50/60 Hz
Efficiency:	85% at full load
Power Factor:	0.8 to unity at full load and nominal input

Output

Service:	28VDC adjustable 90% to 110%
Voltage Regulation:	± 1%
Nominal Current:	600Amps adjustable from front panel
Current Range:	0-600A
Current Limit:	adjustable from 0- to 2000A
Current Regulation:	± 1%
Power Factor:	0.8 lead to 0.8 lag. Continuous zero lead to zero lag at full rated output without damage to the unit.

Engine Start Capacity: 600A continuous, 2000A for 30 seconds every 30 minutes for aircraft starting

Overload Capacity: 110% for 30 minutes
125% for 5 minutes
300% for 6 seconds

Front Panel Devices

- Output Analog Voltmeter +2% Accuracy
- Output Analog Ammeter +2% Accuracy
- Hour Meter
- Start/Stop Pushbutton
- Emergency Stop Pushbutton
- On-Off Reset Pushbuttons
- Audible Alarm
- Alarm Silence
- Alarm Reset
- Power On Indicator

Protection

- Output Electronic Shutdown
- Input MOV, Output MOV
- Phase Loss (shutdown)
- Overtemperature (shutdown)
- Overvoltage
- Undervoltage
- Input Circuit Breaker
- Output Contactor

Mechanical/Environmental

- Temperature Range:
 - Ambient: -40°C to 55°C
 - Storage: -40°C to 65°C
- Altitude up to 1000 meters
- Humidity to 98% 40°C, noncondensing
- Enclosure, NEMA 3R, Outdoor, Suitable for hangar/ramp use
- Mounting: mobile with pneumatic tires
- 18" Hazard Clearance
- Dimensions: 50"Hx28"Dx40"D estimated
- Weight: 700 lbs. estimated

Applicable Standards

- MIL-STD-704F (Aircraft Electrical Power Characteristics)
- ANSI
- NEC
- IEEE

Options and Accessories

- 30' Input cable jacketed 3-conductor with ground, pigtailed and plug ready
- 30ft 28VDC output power cable (3 Pole 28V DC Cable Assembly with 2-4/0 cables)
- Ethernet communication port with static IP web interface
- Digital or HMI displays
- Controls in a NEMA 4X enclosure
- Output Circuit Breaker
- Tow Bar
- Pneumatic or rubber tires
- Custom Paint and decals (base color, industrial gray)
- Certification options
 - UL1012
 - CSA certification
 - CE Mark certification

Contact

Power Conversion Technologies Inc.
789 E. Butler Road
Butler, PA 16002

Phone: 724-452-5787
Fax: 724-452-4791
Email: sales@pcti.com
URL: www.pcti.com

Available Power Rating

Power Rating	Model Number
28VDC	DC28-600-430-01

