

This dual output towable PwrKart® unit provides 400Hz (AC) and 28VDC (DC) output power simultaneous with either 425 or 600 amps continuous DC power from a single GPU. This power unit is designed to service the largest commercial and military aircraft on the market today. The dual outputs provided can be single source controlled, be individually voltage regulated and line drop compensated.

### STANDARD FEATURES

IP55

3 PHASE, 380-480VAC INPUT

<5% INPUT CURRENT DISTORTION AT MAX LOAD

INDOOR / OUTDOOR (HANGAR / RAMP) USE

AUTOMATIC INPUT LINE MONITORING

ADVANCED INTEGRATED DISPLAY (AID™) CONSOLE

8000 EVENT LOG / DIAGNOSTICS

INTERNAL COMMUNICATION PORTS - USB, RJ45 (ETHERNET), RS485 (MODBUS), AND RS232

EXTERNAL COMMUNICATION PORT - USB

15% AUTOMATIC LINE DROP COMPENSATION

EMERGENCY POWER "OFF" SWITCH

I/O VOLTAGE. CURRENT, AND FREQUENCY MONITORING

ELAPSED TIME METER ACCESS

FRONT PANEL VOLTAGE ADJUST

TOUCH SCREEN FRONT PANEL

18 INCH HAZARD AREA CLEARANCE

SLEEP MODE (IF ENABLED)

FRONT PANEL SUMMARY FAULT INDICATORS

INPUT AND OUTPUT CABLE RACKS

INPUT HIGH VOLTAGE TRANSIENT PROTECTION

SINGLE INPUT CONNECTION

Multi-Language Display (English, French, German, Italian, Spanish, Others Available - Specify)

# **OPTIONS AVAILABLE**

ALTERNATE INPUT VOLTAGE AVAILABLE (SPECIFY)

VARIOUS CONVENIENCE OUTLETS (SPECIFY VOLTAGE AND FREQUENCY

50 or 100 Foot Input Power Cable (Pigtail, Specify Required Length)

AC OUTPUT POWER CABLES WITH PLUGS (AVAILABLE IN 30 OR 60 FT LENGTHS)

DC OUTPUT POWER CABLES WITH PLUGS (AVAILABLE IN 20, 30, 40, 60 FT LENGTHS)

**OUTPUT SAFETY DISCONNECT** 

300% OVERLOAD FOR 6 SECONDS

EXTERNAL COMMUNICATION PORT - ETHERNET

CUSTOM PAINT AND DECALS (STANDARD COLOR - WHITE)

GROUND FAULT MONITOR

INDIVIDUAL OUTPUT VOLTAGE REGULATION / ALDC

CE MARK CERTIFIED

No Break Power Transfer Compatible (400Hz Output)

**NEUTRAL INTERRUPT PROTECTION** 

UNIVERSAL AIRCRAFT SAFETY INTERLOCK (SINGLE OR DUAL)

### SPECIFICATIONS / STANDARDS

NFPA 70 (NEC 500)	DFS-400	ISO 6858
EN 60079-10	SAE ARP 5015	ISO 1540
EN 61000-6-2 AND -4**	UFGS 26 35 43	ISO 461-1/2
MIL-STD-1472	MIL-STD-704	2006/95/EC**

<sup>\*\*</sup>DEFINED BASIS OF CE MARK CERTIFICATION

### **AC INPUT**

INPUT CURRENT DISTORTION

≤ 5%, TYPICALLY 3%

VOLTAGE

380-480V, +10%, -15%, 3Ø,
3 or 4 Wire Plus Ground (Specify)

FREQUENCY

50 - 60 Hz ±10%

PHASE ROTATION

OVER/UNDER VOLTAGE, LOSS OF PHASE,

Over/under voltage, loss of Phase, Over Current, Short Circuit. Voltage Transient Protection IAW IEEE C62.41.1, Location CAT. B/C

INRUSH CURRENT

NO GREATER THAN 100%

OF FULL LOAD CURRENT

## **AC OUTPUT**

POWER RATING

120, 150, OF 180 KVA (SPECIFY)

POWER FACTOR RANGE

0.5 LAGGING TO 0.8 LEADING

OVERLOAD

100% CONTINUOUS; 110% FOR 60 MIN; 125% FOR 10 MIN; 200% FOR 20 SEC

Voltage\* 115/200 Volts, 3Ø, 4 Wire, Grounded Neutral

VOLTAGE REGULATION ±1.0% UNDER ALL CONDITIONS OF LINE,
BALANCED LOADS AND TEMPERATURE

IAW MIL-STD-704F

None

Frequency Regulation 400Hz ±0.01% Under All Conditions

of Line, Load and Temperature

Frequency Transients

VOLTAGE TRANSIENT

Phase Angle Regulation ±1° for Balanced Loads ±2° for Unbalanced Loads

Harmonic Distortion 2.0% Maximum

PROTECTION OVERLOAD, SHORT CIRCUIT, OVER/UNDER

VOLTAGE. AND SAFETY DISCONNECT

AUTOMATIC LINE DROP

## **28VDC OUTPUT**

#### MODEL 420

FULL LOAD RATING OVERLOAD

(10% DUTY CYCLE)

425 AMPS CONTINUOUS,
600 AMPS FOR 1 HOUR,
1,000 AMPS FOR 1 MINUTE

MODEL 620

FULL LOAD RATING OVERLOAD 600 AMPS CONTINUOUS, (10% DUTY CYCLE) 1,000 AMPS FOR 1 MINUTE

MODEL 420/620

ENGINE START CAPACITY
ADJUSTABLE UP TO
(10% DUTY CYCLE)
1,600 AMPS FOR 35 SECONDS OR
2,000 AMPS FOR 30 SECONDS

VOLTAGE 28 VDC, 2 WIRE, GROUNDED

VOLTAGE ADJUST 28 VDC ± 10%

VOLTAGE REGULATION ± 0.5%

CURRENT LIMIT ADJUST 150A TO FULL RATED CURRENT PROTECTION OVERLOAD, SHORT CIRCUIT, OVER

Voltage, and Safety Disconnect

AUTOMATIC LINE DROP COMPENSATION (ALDC)

## **ENVIRONMENTAL**

ACOUSTICAL NOISE

TEMPERATURE RANGE

-40°C TO +55°C, NON-CONDENSING

ENCLOSURE

NEMA 250 - Type 3SX

CORROSION RESISTANT

RELATIVE HUMIDITY

10 - 95%, NON-CONDENSING

Type 3SX. IP55

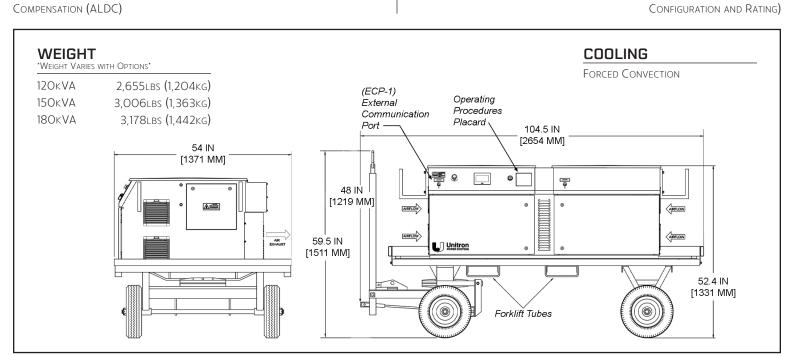
#### **ENERGY FACTORS**

EFFICIENCY 94% TYPICAL AT FULL LOAD,

92 % Typical at Half Load; (Varies Depending on Configuration and Rating)

<65 dBA Maximum at 5 Feet (1.5m)

10%



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE