



## TOWABLE PWRKART® GROUND POWER UNIT

# UFC SERIES 400Hz

### 20, 30, OR 45kVA

The PwrKart Series provides 115/200VAC, 400Hz with an option to provide 28VDC or 270VDC. The converters are designed to provide aircraft ground power in support of hangar and ramp aircraft maintenance activities and on flight lines. These 400Hz Ground Power Units (GPUs) range from 20kVA to 90kVA. These units are also available in push, fixed and bridge-mounted configurations.

#### STANDARD FEATURES

- IP55
- CERTIFIED TO UL 1012 AND CSA
- 3 PHASE, 380-480VAC INPUT
- INDOOR/OUTDOOR USE (HANGAR/RAMP)
- 10% AUTOMATIC LINE DROP COMPENSATION
- AUTOMATIC INPUT LINE MONITORING
- ADVANCED INTEGRATED DISPLAY (AID™) CONSOLE
- 8000 EVENT LOG / DIAGNOSTICS
- TCP/IP/ETHERNET INTERFACE (MODBUS)
- INTERNAL COMMUNICATION PORTS - USB, RJ45 (ETHERNET), RS485 (MODBUS), AND RS232
- EXTERNAL COMMUNICATION PORTS - USB
- EMERGENCY POWER "OFF" SWITCH
- 18 INCH HAZARD AREA CLEARANCE
- I/O VOLTAGE, CURRENT, AND FREQUENCY MONITORING
- ELAPSED TIME METER ACCESS
- SLEEP MODE
- FRONT PANEL VOLTAGE ADJUST
- FRONT PANEL SUMMARY FAULT INDICATORS
- INPUT AND OUTPUT CABLE RACKS
- PNEUMATIC RAMP TIRES
- SINGLE INPUT CONNECTOR
- INPUT HIGH VOLTAGE TRANSIENT PROTECTION
- 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 (PLUG READY)
- AC OUTPUT POWER CABLE WITH PLUG (SPECIFY REQUIRED LENGTH)
- OUTPUT UNIVERSAL AIRCRAFT SAFETY INTERLOCK CIRCUIT DISCONNECT (SINGLE OUTPUT ONLY)
- ≤ 5% INPUT CURRENT DISTORTION AT MAX LOAD
- 15% AUTOMATIC LINE DROP COMPENSATION
- FRONT EXTERNAL COMMUNICATION PORT - ETHERNET
- SECOND 28VDC OUTPUT OR 270VDC
- 300% OVERLOAD FOR 6 SECONDS OR 425% OVERLOAD FOR 1 SECOND\* (SPECIFY)
- NO BREAK POWER TRANSFER COMPATIBLE
- BENCH TOP VOLTAGE ADJUST
- CUSTOM PAINT AND DECALS (STANDARD COLOR - WHITE)
- CE MARK CERTIFIED
- GROUND FAULT MONITOR
- LOCKABLE FRONT DOOR
- NEUTRAL INTERRUPT PROTECTION
- UNIVERSAL SAFETY INTERLOCK

\*IAW MIL-STD-704F AND ISO 6858:2017

#### SPECIFICATIONS / STANDARDS (MEETS OR EXCEEDS)

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

\*\*DEFINED BASIS OF CE MARK CERTIFICATION

This product was manufactured in a plant whose quality management system is registered to ISO 9001:2015.



Unitron Power Systems • 10925 Miller Rd • Dallas, TX 75238  
Sales: +1-800-527-1279 • Service: +1-214-343-7597 • Fax: +1-214-341-2099  
info@UnitronLP.com • www.UnitronLP.com

AC INPUT

INPUT CURRENT DISTORTION	≤ 5%, TYPICALLY 3%
VOLTAGE	380-480V, +10%, -15%, 3Ø, 3 OR 4 WIRE PLUS GROUND (ALTERNATIVE VOLTAGES AVAILABLE)
FREQUENCY	45 - 65 Hz ±10%
PHASE ROTATION	ANY
PROTECTION	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

ENVIRONMENTAL

ACOUSTICAL NOISE	<65 dBA MAXIMUM AT 5 FEET (1.5M)
TEMPERATURE RANGE	-40°C TO +55°C, NON-CONDENSING
ENCLOSURE	NEMA 250 - TYPE 3SX
RELATIVE HUMIDITY	10 - 95%, NON-CONDENSING
INGRESS OF WATER	TYPE 3SX, IP55

ENERGY FACTORS

EFFICIENCY	94% TYPICAL AT FULL LOAD, 92% TYPICAL AT HALF LOAD; (VARIES DEPENDING ON CONFIGURATION AND RATING)
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AC OUTPUT

POWER RATING	20, 30, OR 45 kVA (SPECIFY)
POWER FACTOR RANGE	0.5 LAGGING TO 0.8 LEADING
OVERLOAD	100% CONTINUOUS 110% FOR 60 MIN 125% FOR 10 MIN 150% FOR 2 MIN 200% FOR 20 SEC
VOLTAGE*	115/200 VOLTS, 3Ø, 4 WIRE, GROUNDED NEUTRAL
VOLTAGE ADJUST*	± 15%
CREST FACTOR	1.414 ± 3%
VOLTAGE REGULATION	± 1.0% UNDER ALL CONDITIONS OF LINE, BALANCED LOADS AND TEMPERATURE
VOLTAGE TRANSIENT	IAW MIL-STD-704F
FREQUENCY REGULATION	400HZ ± 0.01% UNDER ALL CONDITIONS OF LINE, LOAD AND TEMPERATURE
FREQUENCY TRANSIENTS	NONE
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 COMPENSATION (ALDC)	10%

NOTE  
\*ALSO AVAILABLE 120/208 VAC, ADJUSTABLE ± 10%

(ECP-2)  
External  
Communication  
Port

Operating  
Procedures  
Placard

50 IN  
[1270 MM]

FRONT VIEW

52 IN  
[1321 MM]

79 IN  
[2007 MM]

SIDE VIEW

**WEIGHT**  
\*WEIGHT VARIES WITH OPTIONS\*

20kVA	1,341LBS (608KG)
30kVA	1,373LBS (623KG)
45kVA	1,408LBS (639KG)

**COOLING**  
FORCED CONVECTION