



MOBILE PWRKART® GROUND POWER UNIT

UFC SERIES COMBINATION AC/DC

20, 30, OR 45kVA AND 28VDC

The PwrKart Series includes lightweight 115/200VAC, 400Hz, 28VDC mobile converters for aircraft ground power applications in the hangar or ramp area. The dual output AC/DC GPU provides simultaneous AC and either 425 or 600 amps continuous DC power from a single GPU. Power ratings of the converter is limited to the nominal rating of the 400Hz output. Because a single unit can do the work of two, Unitron's AC/DC PwrKart reduces operating and maintenance costs, and eases ramp congestion.

STANDARD FEATURES

- IP55
- CERTIFIED TO UL 1012 AND CSA
- 3 PHASE, 50 - 60Hz, 380 - 480VAC INPUT
- ≤5% INPUT CURRENT DISTORTION AT MAX LOAD
- 15% AUTOMATIC LINE DROP COMPENSATION
- INDOOR/OUTDOOR USE (HANGAR/RAMP)
- 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 PORT - USB
- EMERGENCY POWER "OFF" SWITCH
- 18-INCH HAZARD AREA CLEARANCE
- VOLTAGE, CURRENT, AND FREQUENCY MONITORING
- ELAPSED TIME METER ACCESS
- SLEEP MODE
- FRONT PANEL VOLTAGE ADJUST
- FRONT PANEL SUMMARY FAULT INDICATORS
- INPUT AND OUTPUT CABLE HANDLE
- INPUT HIGH VOLTAGE TRANSIENT PROTECTION
- MULTI-LANGUAGE DISPLAY (ENGLISH, FRENCH, GERMAN, ITALIAN, SPANISH, OTHERS AVAILABLE - SPECIFY)

OPTIONS AVAILABLE

- ALTERNATE 3Ø INPUT VOLTAGE RANGE AVAILABLE - 208-240 OR 600VAC INPUT
- VARIOUS CONVENIENCE OUTLETS (SPECIFY VOLTAGE AND FREQUENCY)
- 50 OR 100 FOOT INPUT POWER CABLE (PIGTAIL, SPECIFY REQUIRED LENGTH)
- AC AND/OR DC OUTPUT POWER CABLE WITH PLUG (SPECIFY REQUIRED LENGTH)
- OUTPUT UNIVERSAL AIRCRAFT SAFETY INTERLOCK CIRCUIT DISCONNECT (SINGLE OUTPUT ONLY)
- EXTERNAL COMMUNICATION PORT - ETHERNET
- BENCH TOP VOLTAGE ADJUST
- NO BREAK POWER TRANSFER COMPATIBLE
- CUSTOM PAINT AND DECALS (STANDARD COLOR - WHITE)
- CE MARK CERTIFIED
- GROUND FAULT MONITOR
- LOCKABLE FRONT DOOR
- PNEUMATIC RAMP TIRES
- ALTERNATE MOUNTING CONFIGURATIONS AVAILABLE
- NEUTRAL INTERRUPT PROTECTION
- UNIVERSAL SAFETY INTERLOCK

SPECIFICATIONS / STANDARDS (MEETS OR EXCEEDS)

NFPA 70 (NEC 500)	UFGS 26 35 43	DFS-400
EN 60079-10	ISO 6858	SAE ARP 5015
MIL-STD-1472	ISO 1540	
MIL-STD-704F	ISO 461-1/2	

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



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AC INPUT

VOLTAGE*	380-480V, ±10%, 3Ø, 3 WIRE PLUS GROUND (ALTERNATIVE VOLTAGES AVAILABLE)
FREQUENCY	50 - 60 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

DC OUTPUT

MODEL 420

FULL LOAD RATING OVERLOAD (10% DUTY CYCLE)	425 AMPS CONTINUOUS 600 AMPS FOR 1 HOUR 1000 AMPS FOR 1 MINUTE
ENGINE START CAPACITY (10% DUTY CYCLE)	ADJUSTABLE UP TO 1600A FOR 30 SEC OR 2000A FOR 10 SEC

MODEL 620

FULL LOAD RATING OVERLOAD (10% DUTY CYCLE)	600 AMPS CONTINUOUS 1000 AMPS FOR 1 MINUTE
ENGINE START CAPACITY (10% DUTY CYCLE)	ADJUSTABLE UP TO 2000A FOR 30 SEC

VOLTAGE	28VDC, 2 WIRE, GROUNDED NEGATIVE
VOLTAGE REGULATION	
• CONTINUOUS RATED LOAD AND ±10% INPUT VOLTAGE	±0.5%
• NO LOAD TO RATED LOAD WITH NOMINAL INPUT VOLTAGE	±0.5%
• OVERLOAD WITH NOMINAL INPUT VOLTAGE	SEE START MODE CURVES
VOLTAGE ADJUST	28VDC ±10%
CURRENT LIMIT ADJUST	150A TO FULL RATED CURRENT
PROTECTION	OVERLOAD, SHORT CIRCUIT, OVER VOLTAGE, AND SAFETY DISCONNECT
AUTOMATIC LINE DROP COMPENSATION (ALDC)	10%

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 (45KVA) 300% FOR 20 SEC (30KVA) 450% FOR 20 SEC (20KVA)
CREST FACTOR	1.414 ± 3%
VOLTAGE	115/200 VOLTS, 3Ø, 4 WIRE, GROUNDED NEUTRAL
VOLTAGE ADJUST	±15%
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)	15%

ENVIRONMENTAL

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

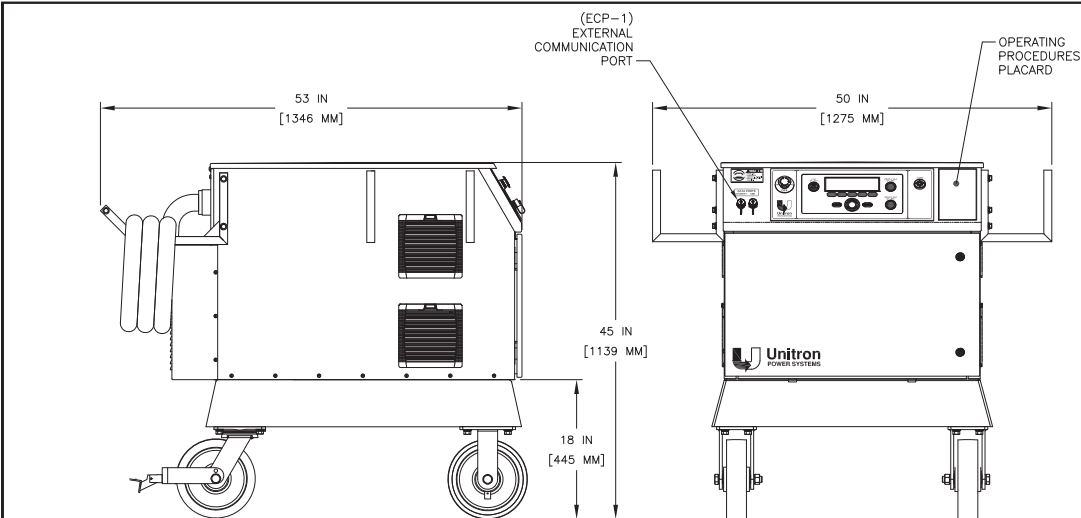
COOLING

FORCED CONVECTION

WEIGHT

WEIGHT VARIES WITH OPTIONS

20kVA	683LBS (310KG)
30kVA	740LBS (336KG)
45kVA	827LBS (375KG)



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

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