



MAC600-UAC(A)-XX(F)

600W SINGLE PHASE AC/DC POWER SUPPLY



- Universal Frequency Range 47 - 63Hz / 360 - 800Hz
- Operates -40°C to +80°C Base Plate
- Ruggedized For MIL-STD-810 Requirements
- MIL-STD-704 and MIL-STD-1399 Compliant
- Meets MIL-STD-461 Requirements
- Over Current and Over Voltage Protection
- Less Than 1U in Height for System Integration
- High Efficiency

DESCRIPTION:

This line of AC/DC power supply is designed to be compact and ruggedized for military applications. The MAC600 series of AC/DC Power Supply provides high output power with a high power factor over an input range of 85–264Vrms. The MAC600 series of power supply can be run in parallel and load share with additional MAC600 units. Many features are incorporated into the MAC series that make it an ideal choice for use in Airborne, Shipboard, or Ground Fixed applications.

GENERAL SPECIFICATIONS					
INPUT VOLTAGE:	85-264Vrms				
PART NUMBER/ FREQUENCY	MAC600-UAC		MAC600-UACA		
FREQUENCY RANGE:	47 - 63Hz		360 - 800Hz		
PART NUMBER/OUTPUT VOLTAGE					
MAC600-UAC(A)-	12	15	24	28	48
OUTPUT VOLTAGE:	12VDC	15VDC	24VDC	28VDC	48VDC
OUTPUT CURRENT:	50A	40A	25A	21.4A	12.5A
OUTPUT POWER:	600 WATTS				
FEATURE SET	STANDARD		WITH PARRALLEL OPTION		
	MAC600-UAC(A)-XX		MAC600-UAC(A)-XXF		
PHYSICAL SIZE (L, W, H):	8.0" X 5.8" X 1.2"				
WEIGHT:	< 3.5 LBS				
MTBF:	CONTACT SALES@PRIME-POWER.COM TO SPECIFY ENVIRONMENT AND TEMPERATURE				

*NOTE: () IN PART NUMBERS SHOW OPTIONAL CHARACTERS.

PHYSICAL CHARACTERISTICS	
MAXIMUM CASE SIZE	8.0" X 5.8" X 1.2"
COOLING METHOD	CONDUCTION
ENCAPSULATION	CONFORMAL COAT
SUPPLY FINISH	YELLOW CHROMATE MIL-C-5541 CLASS 1A
INPUT/OUTPUT TERMINATION	9 PIN MALE DSUB 25 PIN FEMALE DSUB
MOUNTING	THREADED BASE PLATE

WWW.PRIME-POWER.COM

SALES@PRIME-POWER.COM

PRIME POWER INC: (603) 329-4675.
1 OWENS CT.
HAMPSTEAD NH, 03841.



MAC600-UAC(A)-XX(F)

600W SINGLE PHASE AC/DC POWER SUPPLY

ELECTRICAL SPECIFICATIONS					
INPUT VOLTAGE	85-264Vrms, PER MIL-STD-704A AND MIL-STD-1399 (60HZ)				
UNDERVOLTAGE LOCKOUT	30Vrms TYPICAL				
INRUSH CURRENT	10Apk (25Apk, 230V, 400Hz)				
POWER FACTOR	.99				
ISOLATION	IN TO OUT & IN to CASE: 1500Vdc, OUT TO CASE: 500Vdc				
ISOLATION RESISTANCE	100MOHM				
EMI/EMC	DESIGNED TO MEET MIL-STD-461F: CE101, CE102				
OUTPUT VOLTAGE:	12VDC	15VDC	24VDC	28VDC	48VDC
OUTPUT POWER	600 WATTS				
CURRENT LIMIT (MIN-MAX)	55-70A	44-56A	27.5-35A	22.6-28.8A	13.1-16.8A
O.V.P. (MIN-MAX)	13.5-16.5V	16.9-20.6V	27-33V	31.5-38.5V	54-66V
LOAD STEP RECOVERY (TYP) (50% - 75% - 50%)	500mV 150 μs	300mV 750 μs	600mV 400 μs	830mV 460 μs	1600mV 650 μs
LINE/LOAD REGULATION	1% TYP. N.L. TO F.L.				
PARD (RIPPLE/NOISE) DC-20MHZ	1% TYP. OF VOUT				
SHORT CIRCUIT	INDEFINITE, AUTO RECOVERY				
OVER TEMPERATURE	SHUTDOWN: 125°C TYP., AUTO RECOVERY: 10°C HYSTERESIS				
EFFICIENCY	80%				

ENVIRONMENTAL SPECIFICATIONS		
ALTITUDE	MIL-STD-810G	Method 500.5, Procedure 1 & 2
HIGH TEMPERATURE	MIL-STD-810G	Method 501.5, Procedure 1 & 2
LOW TEMPERATURE	MIL-STD-810G	Method 502.5, Procedure 1 & 2
HUMIDITY	MIL-STD-810G	Method 507.5, Procedure 2
FUNGUS	MIL-STD-810G	Method 508.6, Table 508.6-I
SALT FOG	MIL-STD-810G	Method 509.5, Storage
SAND AND DUST	MIL-STD-810G	Method 510.5, Procedure 1 & 2
EXPLOSIVE ATMOSPHERE	MIL-STD-810G	Method 511.5, Procedure 1
ACCELERATION	MIL-STD-810G	Method 513.6, Procedure 2
VIBRATION	MIL-STD-810G	Method 514.6, Procedure 1
SHOCK	MIL-STD-810G	Method 516.6, Procedure 1 & 6

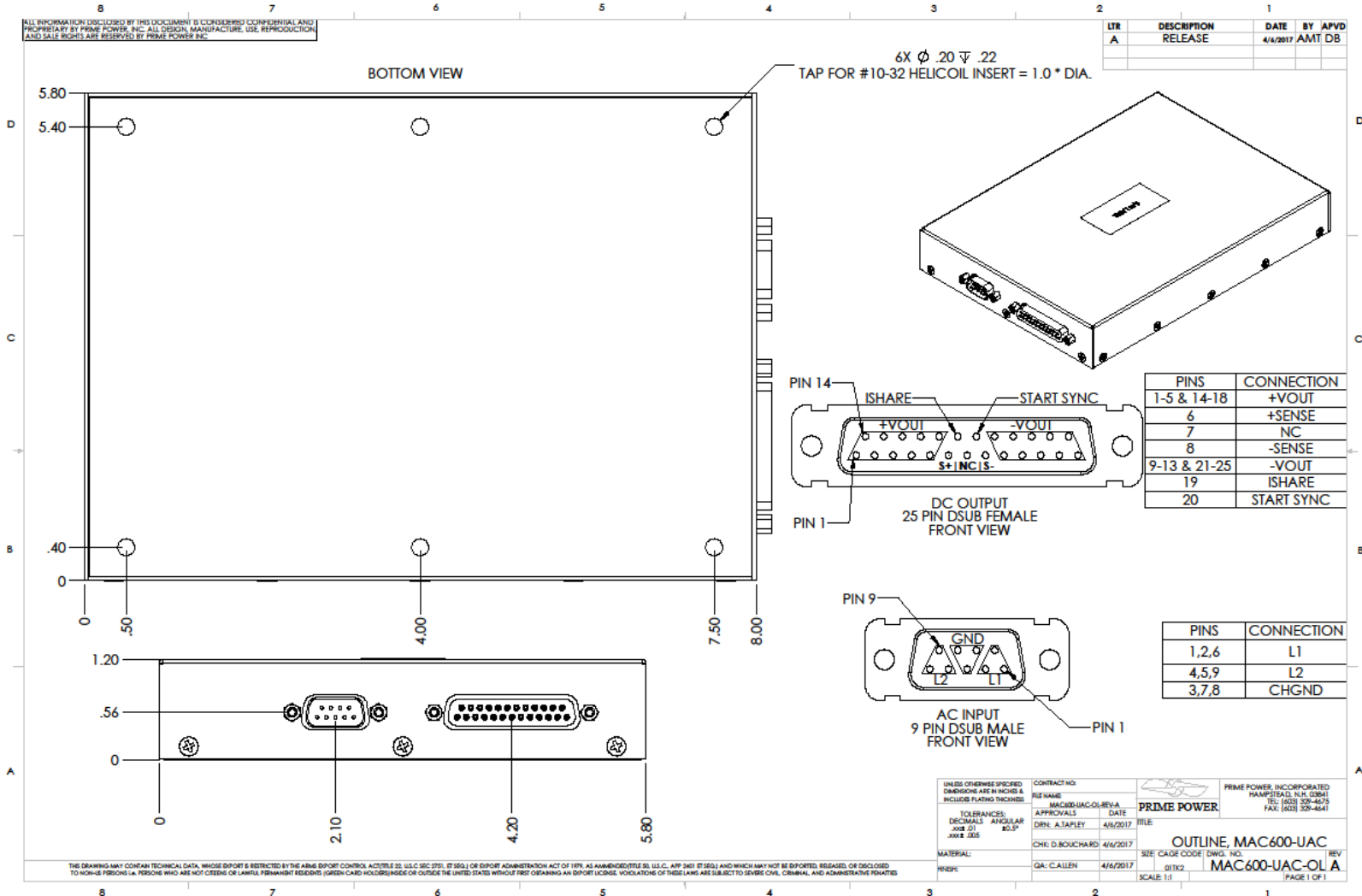
* These are typical tests performed on this or similar products.

TEMPERATURE SPECIFICATIONS	
OPERATING TEMPERATURE (BASEPLATE)	-40°C TO +85°C
STORAGE TEMPERATURE	-55°C TO +125°C
TEMPERATURE COEFFICIENT	.02%/°C



MAC600-UAC(A)-XX(F)

600W SINGLE PHASE AC/DC POWER SUPPLY



WWW.PRIME-POWER.COM

SALES@PRIME-POWER.COM

PRIME POWER INC: (603) 329-4675.
 1 OWENS CT.
 HAMPSTEAD NH, 03841.