

Zup-HV Series Specifications

MODEL		ZUP80-2.5	ZUP80-5	ZUP120-1.8	ZUP120-3.6	REV.	
OUTPUT VOLTAGE (*1)	V	0 - 80		0 - 120			
OUTPUT CURRENT (*2)	A	0 - 2.5	0 - 5	0 - 1.8	0 - 3.6		
RATED OUTPUT POWER	W	200	400	216	432		
CONSTANT VOLTAGE	LOAD REGULATION	-				From No load to Full load , constant input voltage at remote sense.	A
	LINE REGULATION	-				0.005%+2mV from 85-132VAC or 170-265VAC , constant load.	
	RMS RIPPLE (5Hz-1MHz Bandwidth)	mV	20		20		
	RIPPLE (pk to pk) (20MHz Bandwidth)	mV	70		80		
	RECOVERY TIME (*4)	mS	0.2		0.2		
	TEMPERATURE COEFFICIENT	-				30ppm/°C from rated voltage following 30-minute warm-up.	
	TEMPERATURE DRIFT	-				0.01%+2mV Change in output over 8-hour interval under constant line, load and ambient temp. following 30-minute warm-up.	
	UP PROGRAMMING RESPONSE TIME (*12)	mS	100		100		
DOWN PROGRAMMING RESPONSE TIME	FULL LOAD	mS		80			
	NO LOAD	mS		1000			
CONSTANT CURRENT	LOAD REGULATION (*9)	-		0.01% + 5mA			
	LINE REGULATION (*10)	-		0.01% + 2mA			
	RMS RIPPLE (5Hz-1MHz Bandwidth)	mA	5		5		
	TEMPERATURE COEFFICIENT	-				100ppm/°C from rated current following 30-minute warm-up.	
	TEMPERATURE DRIFT (*11)	-				0.02% + 50mA	
PROGRAMMING (*3)	VOLTAGE	RESOLUTION	-			Better than 0.028% of rated output voltage.	
		ACCURACY	0.02% + 50mV		0.02% + 80mV		
	CURRENT	RESOLUTION	-				Better than 0.03% of rated output current
		ACCURACY	0.4%+15mA	0.4%+30mA	0.4%+10mA	0.4%+20mA	
OVERVOLTAGE PROTECTION (*5)	V	0 - 88		0 - 132			
HOLD-UP TIME	-						20mS At 100V/200VAC, rated output voltage and output current.
DISPLAY	VOLTAGE	-			3.5 digits accuracy 0.2% ± 2 digits		
	CURRENT	-				3.5 digits , accuracy 0.5% ± 3 digits	
	STATUS	-					CV/CC, Alarm, Fold, Local/Remote, On/Off.
OUTPUT PROTECTIONS	-						Over Voltage, Over Temperature, Foldback
INPUT	INPUT VOLTAGE (*8)	-					85-265Vac Continuous, 47-63Hz
	INPUT CURRENT (*6)	A	2.6/1.3	4.9/2.4	2.9/1.4	5.3/2.6	
	INPUT CURRENT HARMONICS	-					Complies with EN61000-3-2, Class A
	POWER FACTOR (TYP)	-					0.99 at 100/200Vac, 100% load
	EFFICIENCY (*6)	%	78/82	83/87	78/82	82/86	
	INRUSH CURRENT (100/200V)	A	15/30	15	15/30	15	
ENVIRONMENT	OPERATING TEMPERATURE	-					0 to 50°C; 100% Load
	OPERATING HUMIDITY	-					30-90% RH (No dewdrop)
	STORAGE TEMPERATURE	-					-20 to 70°C
	STORAGE HUMIDITY	-					10 - 95% RH (No dewdrop)
MECHANICAL	VIBRATION	-					10-55Hz, Amplitude (sweep 1 min) 2G, X, Y, Z, When mounted with mounting screws.
	SHOCK	-					Less than 20G.
	WEIGHT	Kg	2.9	3.2	2.9	3.2	
	SIZE (WxHxD)	mm	70 x 124 x 350 (Refer to outline Drawing)				
EXTERNAL CONTROL FUNCTIONS	OUTPUT ON/OFF	-					By TTL Signal or Dry Contact (Refer to instruction manual).
	OUTPUT GOOD	-					Open collector (Refer to instruction manual).
	OUTPUT VOLTAGE PROGRAMMING	-					By Voltage (0-4V) or by Resistance (0-4K) (Refer to instruction manual).
	OUTPUT CURRENT PROGRAMMING	-					By Voltage (0-4V) or by Resistance (0-4K) (Refer to instruction manual).
	REMOTE SENSING	-					Possible. Maximum 2V drop on each load wire.
	COMMUNICATION INTERFACE	-					RS232 and RS485 Built-in, IEEE488 Optional.
APPROVALS	SAFETY STANDARDS	-					UL3111-1, EN61010-1
	EMC STANDARDS	-					EN61326-1, IEC 61326-1, FCC part 15 (class A)
CONDUCTED EMI	-					EN55022-B, FCC-B, VCCI-2	
RADIATED EMI	-					EN55022-A, FCC-A, VCCI-1	
SERIES OPERATION	-						Up to 2 units (Refer to instruction manual).
PARALLEL OPERATION	-						Master - Slave method; up to 5 units (Refer to instruction manual).
COOLING	-						Forced air by blower fan (Blower fan is mounted within unit)
WITHSTAND VOLTAGE	-						Input-RS232/485 (SELV): 3kVAC, 1min, Input Ground: 2kVAC, 1min. Input-Output (Hazardous): 2kVAC, 1min, Output-R232/485: 1.6kVAC, 1min.
ISOLATION RESISTANCE	-						More than 100MOhm at 25°C and 70% R.H.

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NOTES:

- *1. Minimum voltage is guaranteed to maximum 0.2% of the rated output voltage.
- *2. Minimum current is guaranteed to maximum 0.4% of the rated output current.
- *3. Given for control of the output via the serial communication or via front panel controls.
- *4. Time for recovery to within ±50mV against current change of 50% to 100%.
- *5. Inverter shut down method, manual reset (OVP will shut down output)
- *6. At 100V/200V and Maximum Output Power.
- *7. At cold start Ta=25°C.

- *8. For cases where conformance to various safety specs. (UL, IEC, etc.) are required, to be described as 100-240VAC (50/60Hz) on name plate.
- *9. For load voltage change equal to the unit voltage rating, constant input voltage.
- *10. From 85~132Vac or 170~265Vac constant load.
- *11. Change in output over 8 hour interval under constant line, load and ambient temperature following 30-minutes warm-up.
- *12. From zero volts to full scale , resistive load and current setting at maximum.

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