



# ETA-USA

HIGH QUALITY SWITCHING POWER SUPPLIES

AC/DC SWITCHING POWER SUPPLY  
SINGLE CHANNEL OUTPUT  
500 WATTS  
UNIVERSAL INPUT

## ZMP500-SX-F-W-D SERIES

### General Description



### Features

1. Current sharing ("-D"), up to 4 units can be paralleled within 10% accuracy at full load
2. Short circuit protection
3. Over load protection
4. Over voltage protection
5. Remote inhibit function

### Options

Comes with either top fan (denoted by suffix "-T") or end fan (denoted by "-S")

### Application

Broad needs

### Input

**Input Voltage Range:** AC90~264V

**Frequency:** 50/60 Hz

**Frequency Range:** 47~63 Hz

**Phase:** Single

**Inrush Current:**\*1, \*4 <17.5A peak@115VAC;  
<35A peak@230VAC cold start at 25 degrees C

**Input Current:** 6A max at 115VAC





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Output Characteristic	Unit	Models						
		ZMP500-12SX-F-W-D	ZMP500-24SX-F-W-D	ZMP500-30SX-F-W-D	ZMP500-36SX-F-W-D	ZMP500-48SX-F-W-D	ZMP500-54SX-F-W-D	ZMP500-57SX-F-W-D
Output Voltage	Vdc	12	24	30	36	48	54	57
Output Current	A	30	15	12	10	7.5	6.67	6.32
Max Output Current	A	41.67	20.84	16.67	13.89	10.42	9.26	8.78
Ripple & Noise(max)	mVpp	120	240	300	360	480	540	570
Hold up time	mS	20 mS at 360W load, 115VAC input						
<b>Regulation</b>								
O/P Regulation [max]	mV	±5% at 25°C with input and output adjusted to factory settings						

<b>Efficiency *1</b>	<b>%</b>	<b>At AC100V 83%</b> <b>At AC 200V 86%</b>
<b>Power Factor *1</b>		<b>&gt;0.9 @ 115VAC / 230VAC</b>

Environmental Specification	
Operating Temperature*3	0 to +50 °C Derating 2.5% / °C from 50°C to 70°C
Temperature coefficient	±0.04% / °C
Operating Humidity	5~95% RH non condensing
Isolation Voltage	Input-Output 5656 VDC Input-Ground 2121 VDC Output Ground 707 VDC
Cooling	Forced air cooling
Leakage current	<300µA @ 264VAC
MTBF	>100,000 hours
Environmental Agencies	
Safety	UL60601-1, CSA-C22.2 No. 601.1M9 , TUV EN60601-1, CB IEC60601-1
EMI Safety	EN60601-2, FCC Part 18 Class B, EN55011 Class B, CE
Function/Protection	
Over current Protection	110% to 150% max rating. Auto recovery
Over voltage Protection	110 to 130% of output. Latching type AC recycle
Remote Sense	Not Available
Remote Control	Not Available
Series Operation	Available
Parallel Operation	Available, up to 4
Standby	5V/1A standby output, 12V/1A for fan
Mechanical	
Dimension [mm]	203.2L x 118.5W x 38.5H



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Conditions:

- \*1 Rated input and Rated output
- \*2 at Output current quick change 25% to 75%
- \*3 At 100% load (convection cooling)
- \*4 Cold start at 25 °C Ambient temp.



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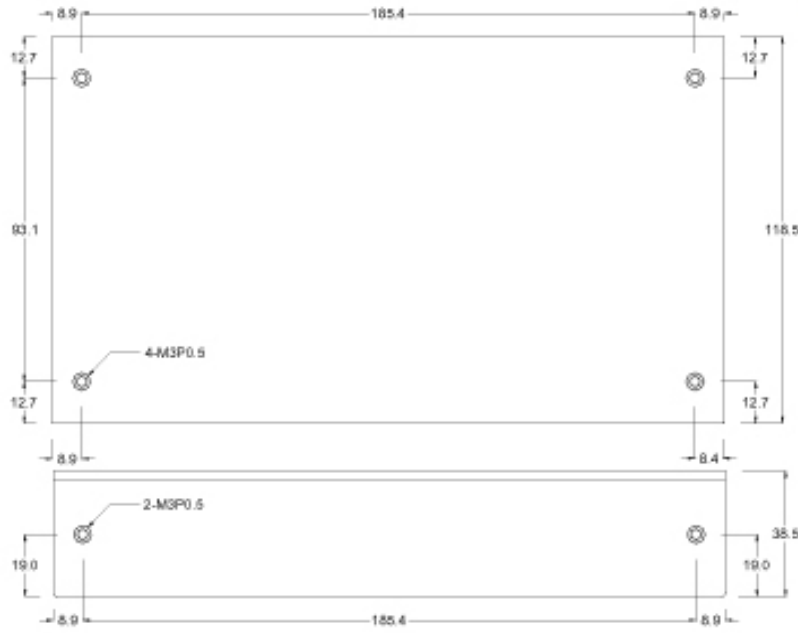
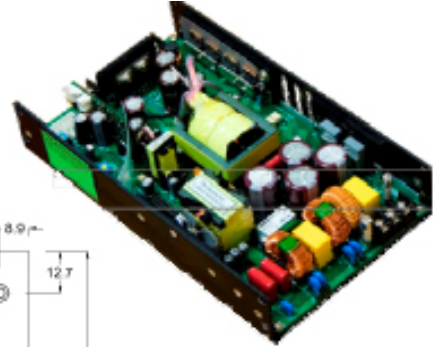
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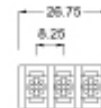
### Mechanical Drawings

#### ZMP500-SX-F-W-D

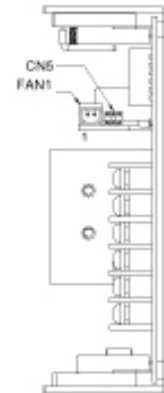
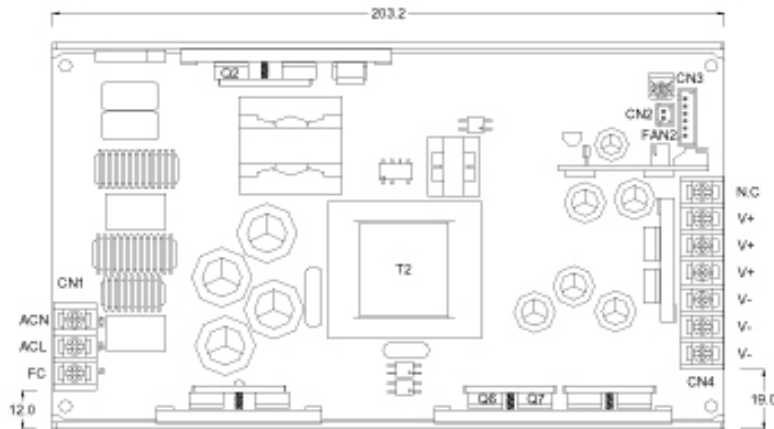
Option : U, U-Channel



CN4

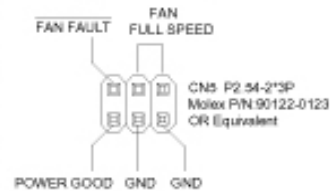


CN1



CN3 P2 5-6P (OPTION) Molex P/N 48152-0610 OR Equivalent	PIN1	Current Sense
	PIN2	Inhibit
	PIN3	GND
	PIN4	5Vsb
	PIN5	-Sensor
	PIN6	+Sensor

CN2 P2 5-2P Molex P/N 48152-0210 OR Equivalent	PIN1	5Vsb
	PIN2	GND
FAN1 P2 5-2P Molex P/N 48153-0210 OR Equivalent	PIN1	12V FAN +
	PIN2	12V FAN -
FAN2 P2 5-2P (With speed control) Molex P/N 48152-0210 OR Equivalent	PIN1	FAN +
	PIN2	FAN -



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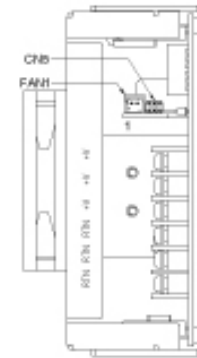
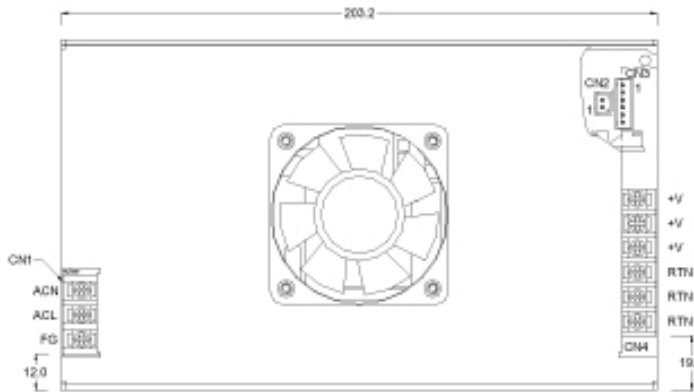
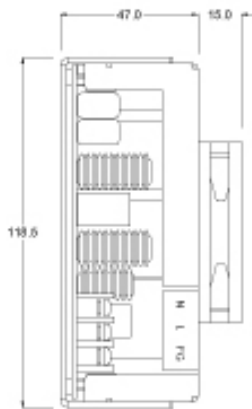
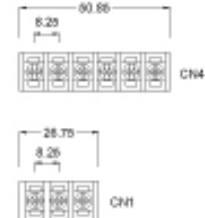
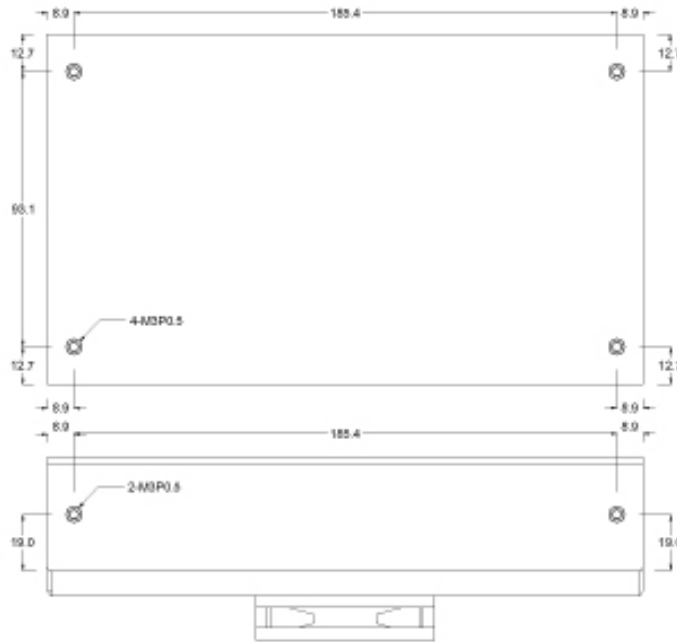
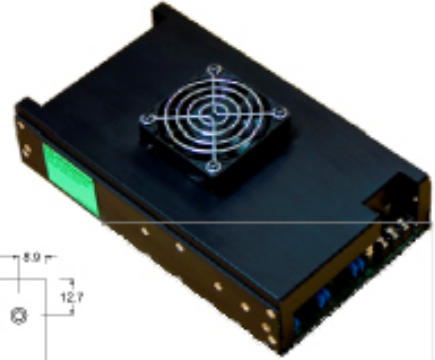


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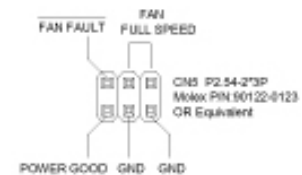
## Top fan (“-T”)

Option : T, Fan on top



CN3: P2.5-6P (OPTION) Molex P/N:48152-0210 OR Equivalent	PIN1	Current Sense
	PIN2	Inhibit
	PIN3	GND
	PIN4	5Vsb
	PIN5	-Sensor
	PIN6	+Sensor

CN2: P2.5-2P Molex P/N:48152-0210 OR Equivalent	PIN1	5Vsb
	PIN2	GND
FAN1: P2.5-2P Molex P/N:48153-0210 OR Equivalent	PIN1	12V FAN +
	PIN2	12V FAN -



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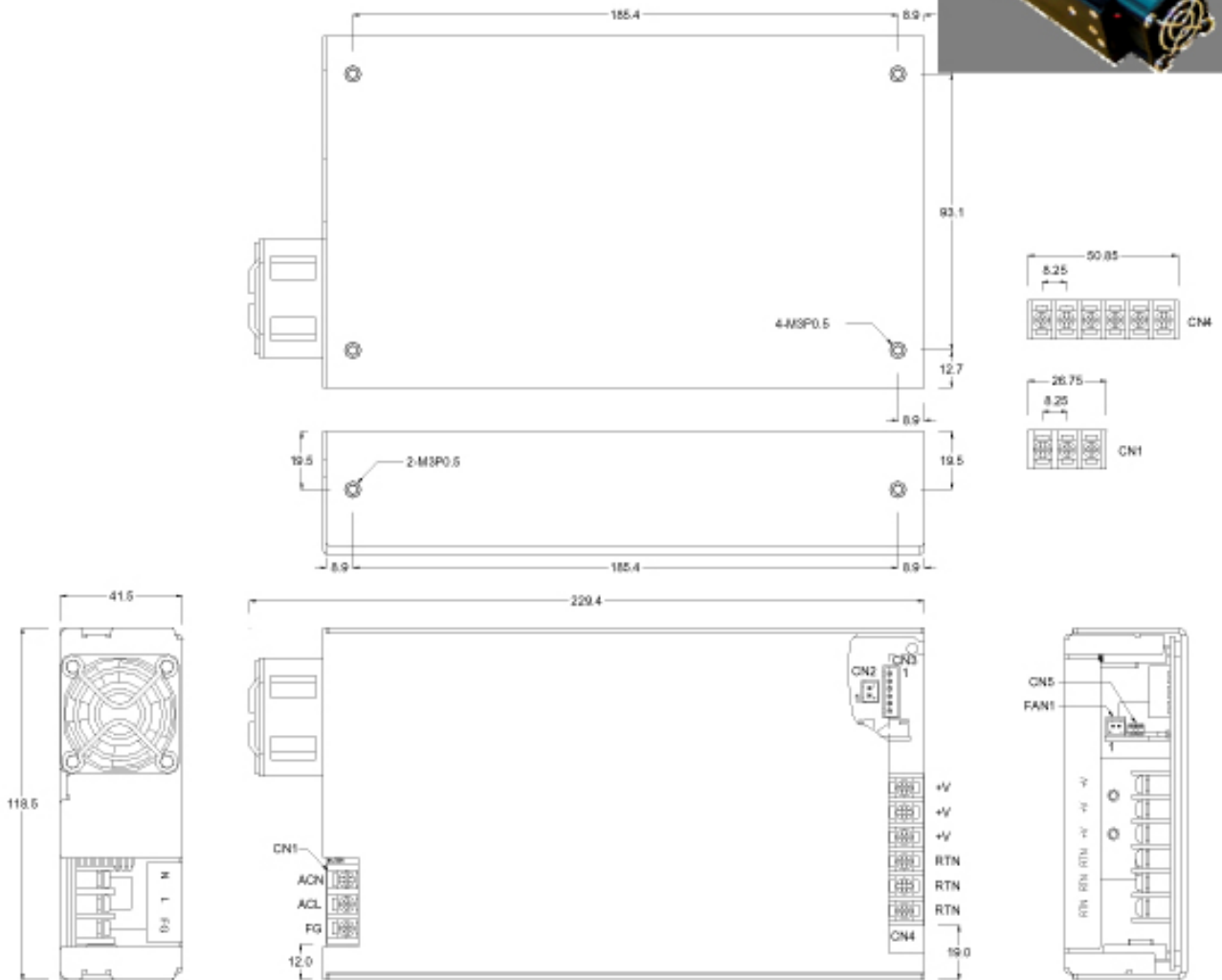
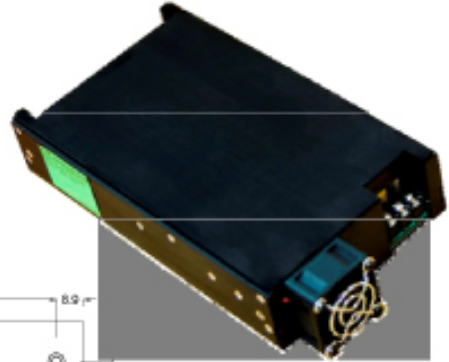


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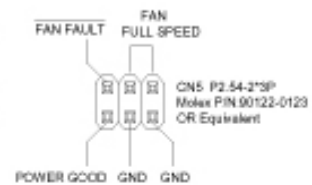
### End fan (“-S”)

Option : S, End Fan



CN3 P2.5-6P (OPTION) Molex PIN-45152-0210 OR Equivalent	PIN1	Current Sense
	PIN2	Inhibit
	PIN3	GND
	PIN4	5Vsb
	PIN5	-Sensor
	PIN6	+Sensor

CN2 P2.5-2P Molex PIN-45152-0210 OR Equivalent	PIN1	5Vsb
	PIN2	GND
FAN1 P2.5-2P Molex PIN-45153-0210 OR Equivalent	PIN1	12V FAN +
	PIN2	12V FAN -



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