

- 90 - 150W Convection Cooled Ratings
- 1U High
- ATX SFX 12V Compatible
- Power Factor Corrected
- Peak Power Ratings
- No Minimum Loading Required

## Key Market Segments & Applications

Industrial & Rack Mount  
PC Applications

## ZWX Series

180W to 300W  
Industrial ATX Power Supplies

### ZWX Features and Benefits

#### Features

- Convection Cooled Ratings
- Low Profile
- Industrial Grade
- No minimum loading

#### Benefits

- No Forced Air or Fan Needed
- Fits into 1U High Enclosures
- Greater Reliability & Field Life
- Easier to Use

### Specifications

MODELS			ZWX180	ZWX240	ZWX300
ITEMS					
Input Voltage		V	85-265VAC (47-63Hz)		
Input Current	(1)(2)	A	1.9 / 1.0	2.6 / 1.3	3.2 / 1.6
Inrush Current	(2)	A	14 / 28 Cold start 25°C ambient		
Power Factor		-	Meets EN61000-3-2		
Leakage Current		mA	< 0.75		
Overcurrent Protection	(3)	-	>1.05% of forced air current rating (5s delay and manual reset on V1, 2 & 3)		
Overvoltage Protection	(4)	V	+3.3V: 3.76 - 4.3V, +5V: 5.74 - 7V, +12V: 13.4 - 15.6V		
Hold Up Time (Typ)	(1)	ms	20ms at 100VAC		
Efficiency	(1)(2)	%	81 / 84		
Remote On/Off		-	High: Unit off, Low: Unit On (enabled). Meets SFX12V		
DC Good PWR_OK		-	High: Power supply is good. Meets SFX12V		
Remote Sense		-	+3.3V Only		
Output Voltage Setpoint Accuracy		-	±5% (all outputs)		
Output Voltage Adjustment		-	None		
Line Regulation		mV	3.3V: 20mV, 5V: 48mV, +12V: 48mV, -12V: 20mV, +5Vsb: 20mV		
Load Regulation		mV	3.3V: 100mV, 5V: 300mV, +12V: 300mV, -12V: 100mV, +5Vsb: 100mV		
Ripple & Noise		mV	3.3V: 120mV, 5V: 150mV, +12V: 150mV, -12V: 120mV, +5Vsb: 120mV		
Operating Temperature		°C	-10 to +70, derate linearly to 20% load from 50 to 70		
Storage Temperature		°C	-30 to +85°C		
Humidity (non condensing)		%RH	Operating: 30 - 90, Non operating: 10 - 95		
Cooling		-	Convection or forced air cooled (30CFM, 0.85m3/min)		
Withstand Voltage		-	I/P to Gnd 2kVAC (20mA), I/P to O/P 3kVAC (20mA), O/P to Gnd 500VAC (100mA) for 1 min.		
Isolation Resistance		-	>100Ω at 25°C & 70%RH, Output to Ground 500VDC		
Vibration (non operating)		-	10 - 55Hz (1 minute sweep), 19.6m/s2 constant X, Y, Z 1 hour		
Shock (non operating)		m/s <sup>2</sup>	< 392		
Safety Agency Approvals		-	UL60950-1, CSA60950-1, EN60950-1, EN50178 (OV II), CE Mark		
Conducted & Radiated EMI		-	EN55011/EN55022-B, FCC Class B, VCCI-B		
Immunity		-	EN61000-4-2, -3, -4, -5, -6, -8, -11		
Weight (Typ)		g	500	650	800
Size (WxHxD)		mm	94 X 36 X 210	106 X 36 X 225	118 X 36 X 250
Warranty		yrs	3 Years		

Model Selector		Output Voltage	Max Curr. (Convection)	Max Power (Convection)	Max Curr (Forced Air)	Max Power (Forced Air)	Peak Curr. (4) (Forced Air)	Peak Power (4) (Forced Air)
<b>ZWX180</b>	V1	+3.3V	6A(5)		8.4A(5)		12A(5)	
	V2	+5V	5A(5)		7A(5)		10A(5)	
	V3	+12V	6A	90W	9A	153W	13A	180W
	V4	-12V	0.2A		0.3A		0.3A	
	V5	+5V (sb)	1.4A		2A		2A	
<b>ZWX240</b>	V1	+3.3V	7A		9.8A		14A	
	V2	+5V	6A		8.4A		12A	
	V3	+12V	8A	120W	11.2A	204W	16A	240W
	V4	-12V	0.2A		0.3A		0.3A	
	V5	+5V (sb)	1.4A		2A		2A	
<b>ZWX300</b>	V1	+3.3V	10A		14A		20A	
	V2	+5V	6A		8.4A		12A	
	V3-1	+12V	4A(6)	150W	5.6A	255W	8A(7)	300W
	V3-2	+12V	8A(6)		11.2A		16A(7)	
	V4	-12V	0.2A		0.4A		0.4A	
	V5	+5V (sb)	1.4A		2A		2A	

Suffix	Description
Blank	Open frame
/L1	L Bracket - input on the left side (rear mounting side facing away)
/L2	L Bracket - input on the right side (rear mounting side facing away)
/A1	L Bracket & Cover - input on the left side (rear mounting side facing away)
/A2	L Bracket & Cover - input on the right side (rear mounting side facing away)

**NOTES: Specification Table Page 1**

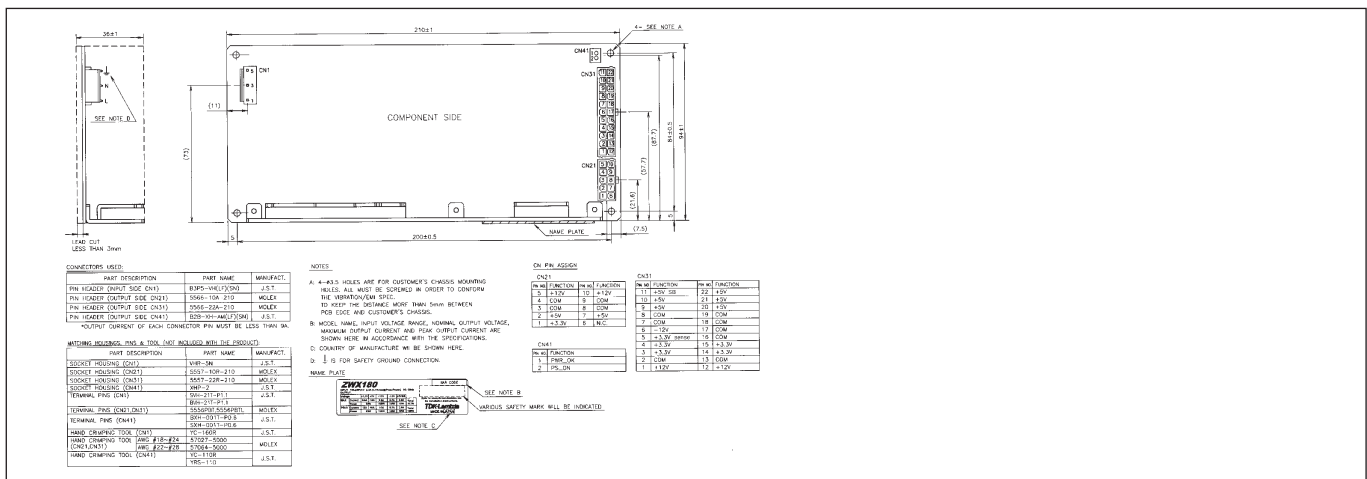
- With output loading of:  
 ZWX180: V1=6.5A, V2=6.5A, V3=7.7A, V4=0.2A, V5=1A  
 ZWX240: V1=8.9A, V2=7.7A, V3=10.2A, V4=0.3A, V5=2A  
 ZWX300: V1=12A, V2=7A, V3-1=5A, V3-2=9.4A, V4=0.2A, V5=1A
- 100/200VAC
- Avoid prolonged operation in overload
- <5s operation at peak load

Connector	Harness	ZWX180	ZWX240	ZWX300
CN1	HA-2-IN	Y	Y	Y
CN21	ZWX-HA-04	Y	Y	Y
CN21(S-ATA)	ZWX-HA-02	Y	Y	Y
CN31/CN41	ZWX-HA-01	Y	Y	Y
CN51	ZWX-HA-03	-	-	Y

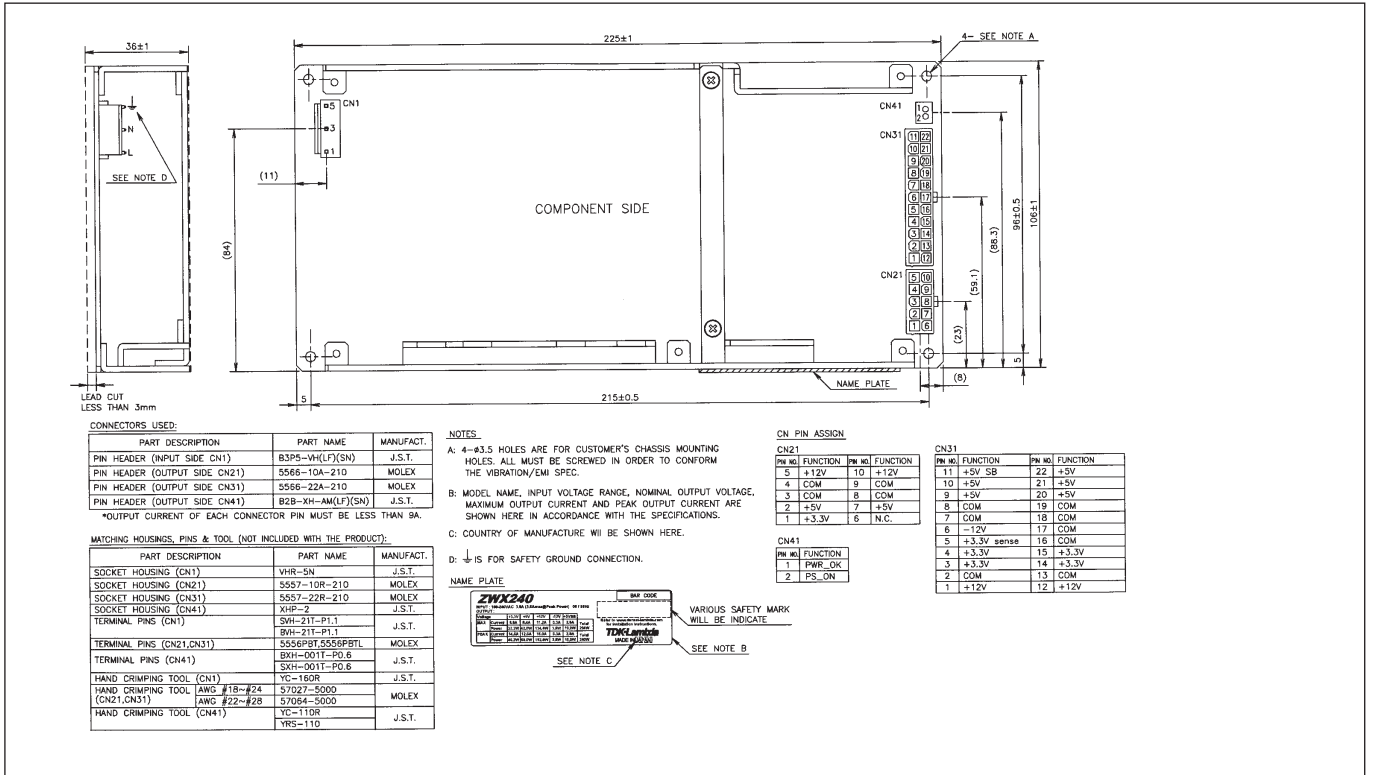
**Output Ratings Table above**

- Maximum combined power of V1 & V2: 32W convection, 54W forced air, 63W peak
- V3-1 & V3-2 combined current limited to 10.9A (131W)
- V3-1 & V3-2 combined current limited to 22A (264W)

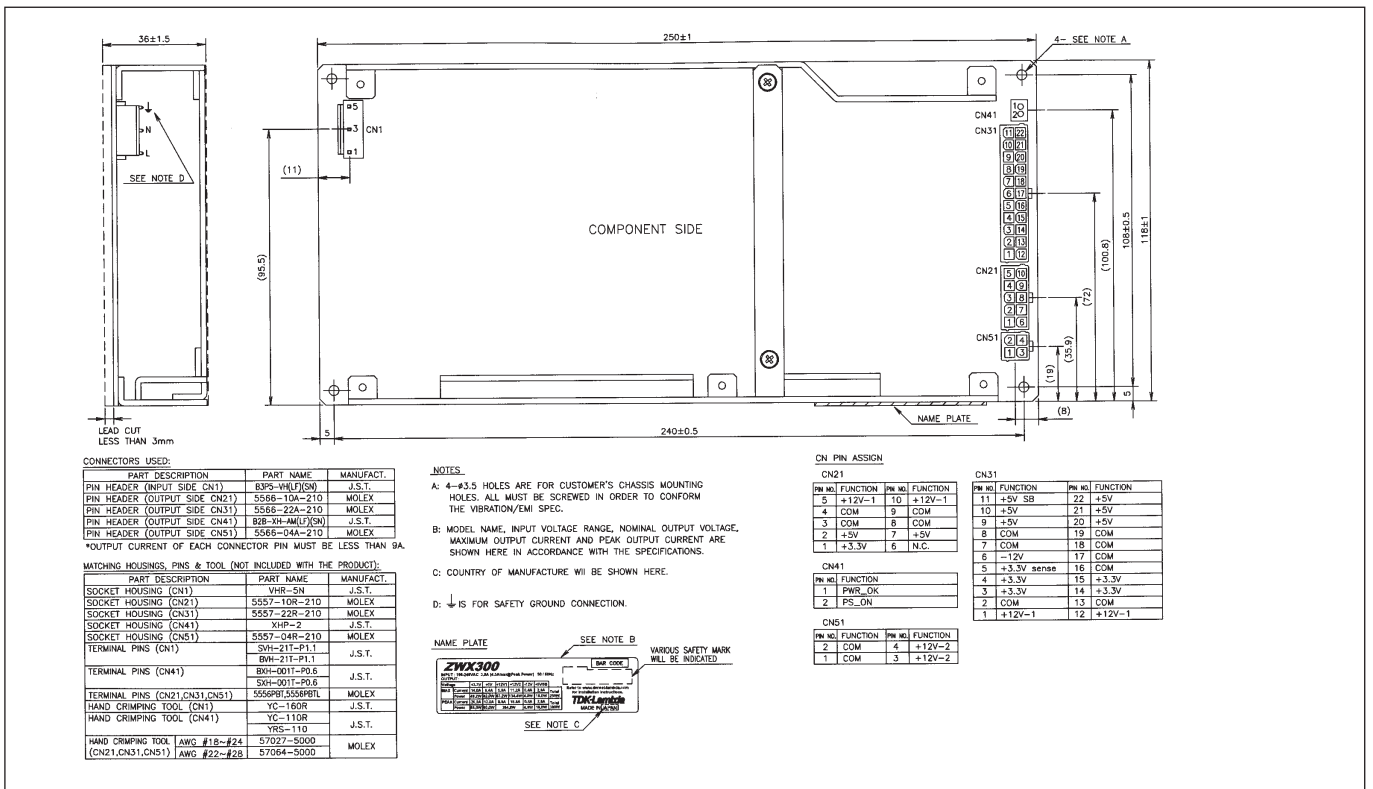
**Outline Drawing ZWX180 Series**



## Outline Drawing ZWX240 Series



## Outline Drawing ZWX300 Series



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