

- Single and Multiple Outputs
- Wide Range AC Input
- Low Profile, Industry Standard Footprint
- Global Safety Agency Compliance
- RoHS Compliant

### Key Market Segments & Applications

- Video/Audio Routers
- Datacom
- Point of Sale
- Test and Measurement
- LED Signs and Lighting

## ZP40 & 60 Series

2" x 4" 40W to 60W  
AC-DC Power Supplies

### ZP40 & 60 Features and Benefits

#### Features

- Industry Standard Footprint
- Up to 88% efficiency
- Broad Product Range
- Meets EN61000-4 Immunity

#### Benefits

- Available to Second Source
- Less System Heating
- Optimization of Power Supply to System
- Greater Reliability

### Specifications

ITEMS	MODEL	ZPS40	ZPS60	ZPD40	ZPT40
Input Voltage range	-	90 - 264VAC (47 - 440Hz) or 120 - 370VDC			
Inrush Current (132/265VAC)	A	25 / 50 (cold start)			
Input Current (115/230VAC)	A	1.6 / 1.0			
Temperature Coefficient	-	±0.05%/°C			
Voltage Accuracy	-	±1%		V1: ±3%, V2: ±4%, V3: ±3%	
Minimum Load	A	None		V1: 0.4A, V2: 0.2A	
Load Regulation (1)	-	±1%		V1: ±3%, V2: ±5%, V3: ±1%	
Line Regulation (2)	-	±0.5%		V1: ±1%, V2: ±2%, V3: ±1%	
Ripple & Noise (3)(4)	mV	1% or 50mV whichever is greater			
Short Circuit Protection	-	Continuous - hiccup mode			
Overvoltage Protection	V	Typically 110-130% of nominal			
Hold Up Time (Typ)	ms	8ms at 115VAC input			
LED Indicator	-	Green LED = OK		None	
Operating Temperature	-	0 to +70°C with derating			
Storage Temperature	-	-20 to +85°C			
Humidity (non condensing)	-	10 - 95% RH			
Cooling	-	Convection			
Withstand Voltage	-	Input to Ground 1.5kVAC, Input to Output 3kVAC, Output to Ground 500VAC for 1 min.			
Isolation Resistance	-	>100MΩ at 25°C & 70%RH, Output to Ground 500VDC			
Vibration (non operating)	-	23.52m/s <sup>2</sup> (10 - 55Hz: constant sweep 1 min X, Y, Z for 1 hour)			
Shock	-	< 196.1 m/s <sup>2</sup> (20G)			
Safety Agency Approvals (6)	-	UL60950-1, CSA60950-1, EN60950-1 Class I, CE Mark (LVD)			
Conducted & Radiated EMI (5)	-	EN55022-B, FCC Class B			
Immunity	-	EN61000-4-2,-3,-4,-5,-6,-8			
Weight (Typ)	g	180g			
Size (WxLxH)	mm	101.6 X 50.8 X 30.48 (including underside components )			
Warranty	yrs	2			

#### Notes:

(1) ZPD, ZPT for a 60% to 100% or 100% to 60% change in load

(2) ZPT40-3512N V2: ±3%, ZPS/ZPD40: 100-240VAC

(5) ZPD/ZPT models may require additional external filtering to meet conducted Class B

(3) Measured with 0.1μF ceramic & 10μF electrolytic at 20MHz BW

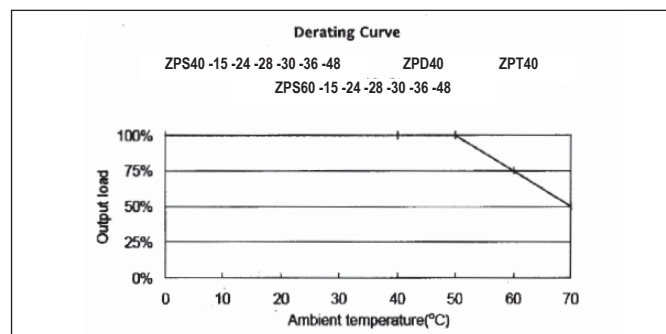
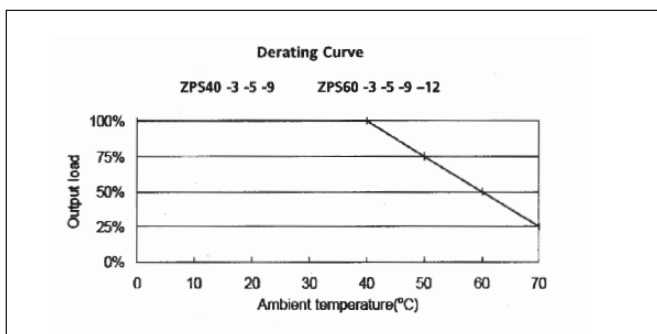
(4) ZPT40-3512N, V1 & V2 100mV

(6) Consult Sales Office for use under DC Input conditions

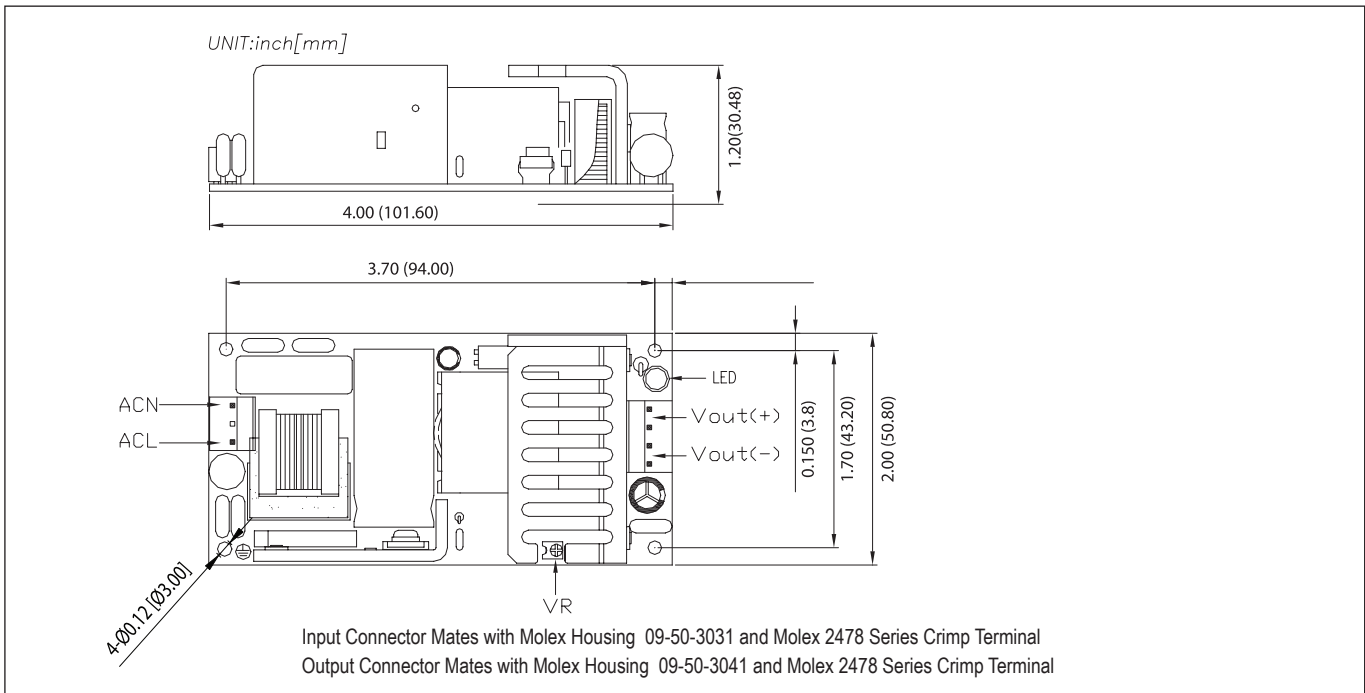
Model Selector							
	Model		Output Voltage (V)	Maximum Output (A)	Peak Load (A) (5)	Output Pwr (W)	Eff.(3) (typ)%
Single Output	ZPS40-3R3	V1	3.3	6.0	7.2	20.0	74
	ZPS60-3R3	V1	3.3	8.0	8.5	26.0	74
	ZPS40-5	V1	5.0	6.0	7.2	30.0	78
	ZPS60-5	V1	5.0	8.0	9.0	40.0	78
	ZPS40-9	V1	9.0	4.45	5.34	40.0	82
	ZPS60-9	V1	9.0	6.67	8.0	60.0	82
	ZPS40-12	V1	12.0	3.34	4.0	40.0	84
	ZPS60-12	V1	12.0	5.0	6.0	60.0	84
	ZPS40-15	V1	15.0	2.67	3.2	40.0	85
	ZPS60-15	V1	15.0	4.0	4.8	60.0	85
	ZPS40-24	V1	24.0	1.67	2.0	40.0	86
	ZPS60-24	V1	24.0	2.5	3.0	60.0	86
	ZPS40-28	V1	28.0	1.43	1.71	40.0	86
	ZPS60-28	V1	28.0	2.14	2.57	60.0	86
	ZPS40-30	V1	30.0	1.33	1.6	40.0	86
	ZPS60-30	V1	30.0	2.0	2.4	60.0	86
	ZPS40-36	V1	36.0	1.11	1.33	40.0	87
	ZPS60-36	V1	36.0	1.67	2.0	60.0	87
	ZPS40-48	V1	48.0	0.834	1.0	40.0	88
	ZPS60-48	V1	48.0	1.25	1.5	60.0	88
Dual	ZPD40-512 <sup>(7)</sup>	V1	+5.0	3.2	4.0	40.0	77
		V2	+12.0	2.0	2.5		
	ZPD40-524 <sup>(7)</sup>	V1	+5.0	3.2	5.0	40.0 (6)	78
		V2	+24.0	1.0	1.5		
Triple Output	ZPT40-5125N <sup>(7)</sup>	V1	+5.0	3.2	5.0	40.5 (6)	75
		V2	+12.0	2.0	2.5		
		V3	-5.0	0.3	0.5		
	ZPT40-51212N <sup>(7)</sup>	V1	+5.0	3.2	5.0	42.6 (6)	75
		V2	+12.0	2.0	2.5		
		V3	-12.0	0.3	0.5		
	ZPT40-51515N <sup>(7)</sup>	V1	+5.0	3.2	4.5	42.0 (6)	75
		V2	+15.0	1.5	2.3		
		V3	-15.0	0.3	0.5		
	ZPT40-52412N <sup>(7)</sup>	V1	+5.0	3.2	5.0	42.6 (6)	75
		V2	+24.0	1.0	1.5		
		V3	-12.0	0.3	0.5		
	ZPT40-5245N <sup>(7)</sup>	V1	+5.0	3.2	5.0	40.5 (6)	75
		V2	+24.0	1.0	1.5		
		V3	-5.0	0.3	0.5		
ZPT40-52412P <sup>(7)</sup>	V1	+5.0	3.2	5.0	42.6 (6)	75	
	V2	+24.0	1.0	1.5			
	V3	+12.0	0.3	0.5			
ZPT40-3512N <sup>(7)</sup>	V1	+3.3	5.0	7.0	30.0	70	
	V2	+5.0	2.0	3.5			
	V3	-12.0	0.3	0.5			

Notes: (5) Average not to exceed max power, <30s, 10% duty cycle  
 (7) Min Load V1: 0.4A, V2: 0.2A

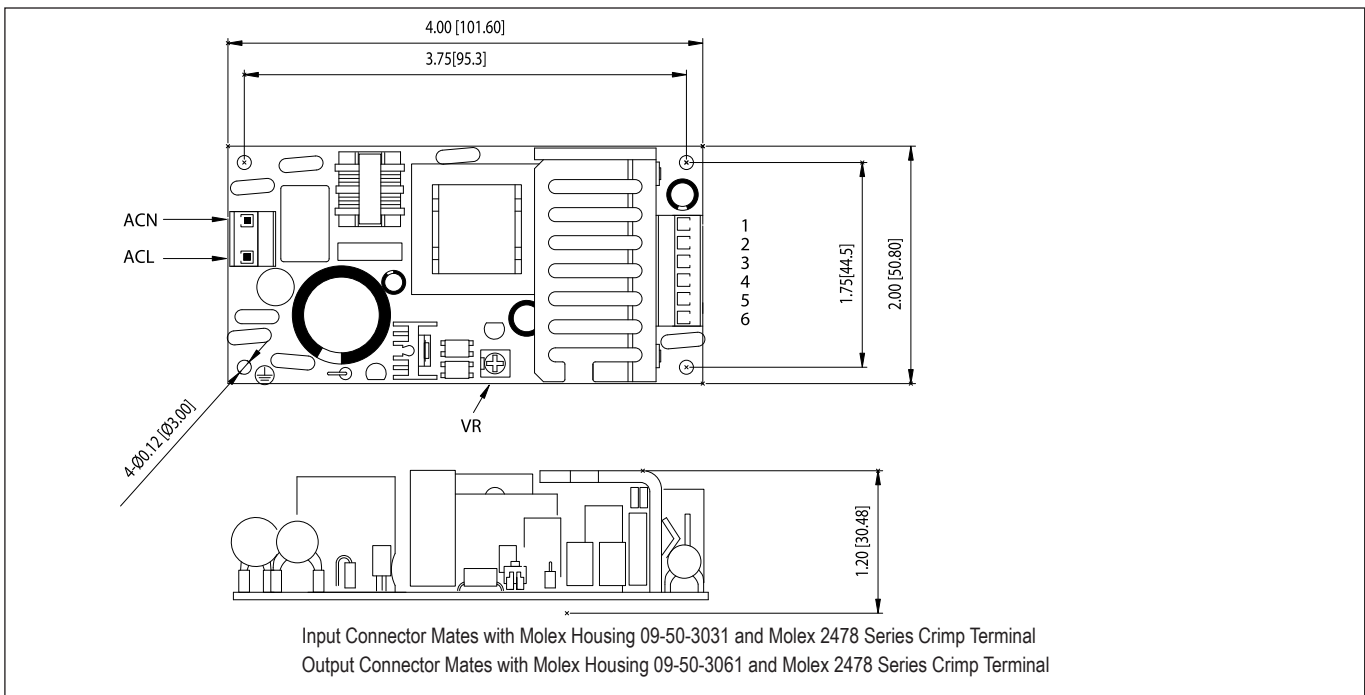
(6) 50 with 30CFM forced air cooling, derate linearly to 35W from 50°C to 70°C



## Outline Drawing ZPS Series



## Outline Drawing ZPD/ZPT Series



Pin Connection (ZPD/ZPT)			
PIN	Function	PIN	Function
1	V2	2	V1
3	V1	4	COM
5	COM	6	V3

**INTERMEDIATE VOLTAGES AVAILABLE  
PLEASE CONSULT SALES**



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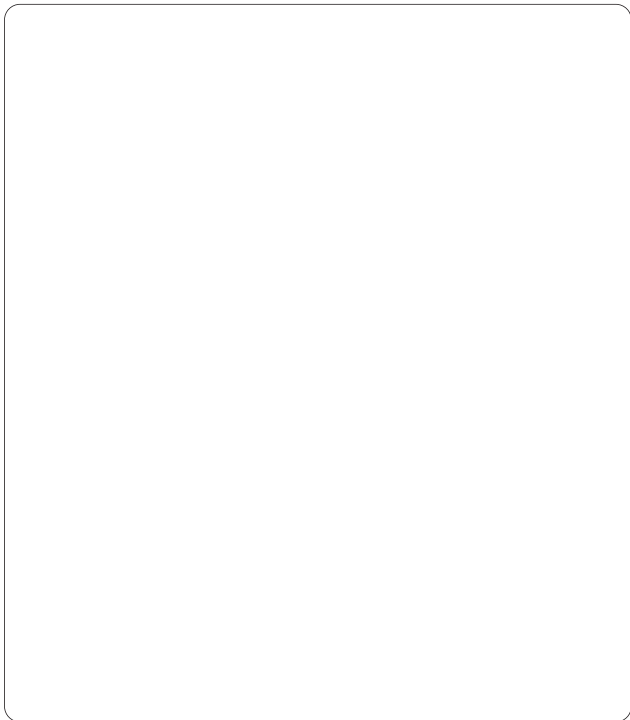
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