

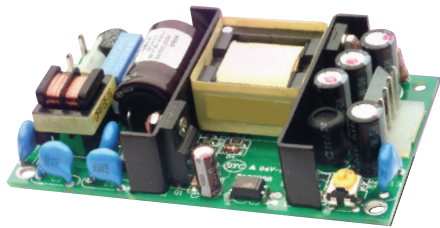
Технические характеристики на источники питания AC/DC серии ZP

По вопросам продаж и поддержки обращайтесь:

Архангельск (8182)63-90-72
Брянск (4832)59-03-52
Вологда (8172)26-41-59
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Киров (8332)68-02-04
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Новосибирск (383)227-86-73
Пенза (8412)22-31-16
Рязань (4912)46-61-64
Саратов (845)249-38-78
Ставрополь (8652)20-65-13
Тула (4872)74-02-29
Уфа (347)229-48-12
Ярославль (4852)69-52-93



ZPS20 Series

2" x 3.5" 20W AC-DC

Power Supplies

- 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

ZPS20 Features and Benefits

Features

- Industry Standard Footprint
- Up to 82% 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

MODEL		ZPS20
ITEMS		
Input Voltage range	-	85 - 264VAC (47 - 440Hz) or 120 - 370VDC
Inrush Current (132/264VAC)	A	20 / 40 (cold start)
Input Current (115/230VAC)	A	0.25 / 0.12
Temperature Coefficient	-	±0.05%/°C
Voltage Accuracy	-	±1%
Minimum Load	A	None
Load Regulation	-	±1%
Line Regulation	-	±0.5%
Ripple & Noise (1)	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	16ms at 115VAC input
Operating Temperature	°C	0 to +70 with derating
Storage Temperature	°C	-20 to +85
Humidity (non condensing)	%RH	10 - 95
Cooling	-	Convection
Withstand Voltage		Input to Ground 1.5kVAC, Input to Output 3kVAC, Output to Ground 500VAC for 1 min.
Isolation Resistance		>100Ω at 25°C & 70%RH, Output to Ground 500VDC
Vibration (non operating)		23.52m/s ² (10 - 55Hz: constant sweep 1 min X, Y, Z for 1 hour)
Shock	-	< 196.1 m/s ² (20G)
Safety Agency Approvals	-	UL60950, CSA60950, EN60950-1 Class II, CE Mark (LVD)
Conducted & Radiated EMI	-	EN55022-B, FCC Class B
Immunity	-	EN61000-4-2,-3,-4,-5,-6,-8
Weight (Typ)	g	100g
Size (WxLxH)	mm	88.9 X 50.8 X 20.32 (including underside components)
Warranty	-	2 Year

Notes:

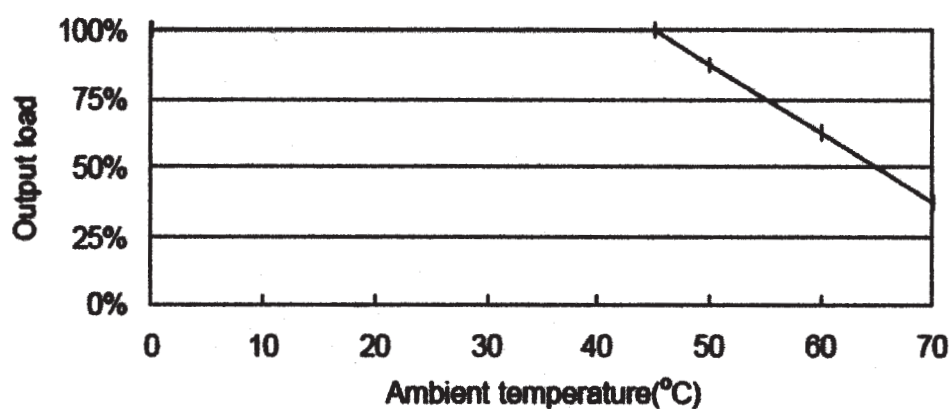
(1) Measured with 0.1uF ceramic & 10uF electrolytic at 20MHz BW

Model Selector

Model		Output Voltage (V)	Maximum Output (A)	Peak Load (A) (2)
ZPS20-3R3	V1	3.3	4.4	6.6
ZPS20-5	V1	5.0	4.4	6.6
ZPS20-9	V1	9.0	2.4	4.0
ZPS20-12	V1	12.0	1.8	2.7
ZPS20-15	V1	15.0	1.4	2.1
ZPS20-24	V1	24	0.9	1.4

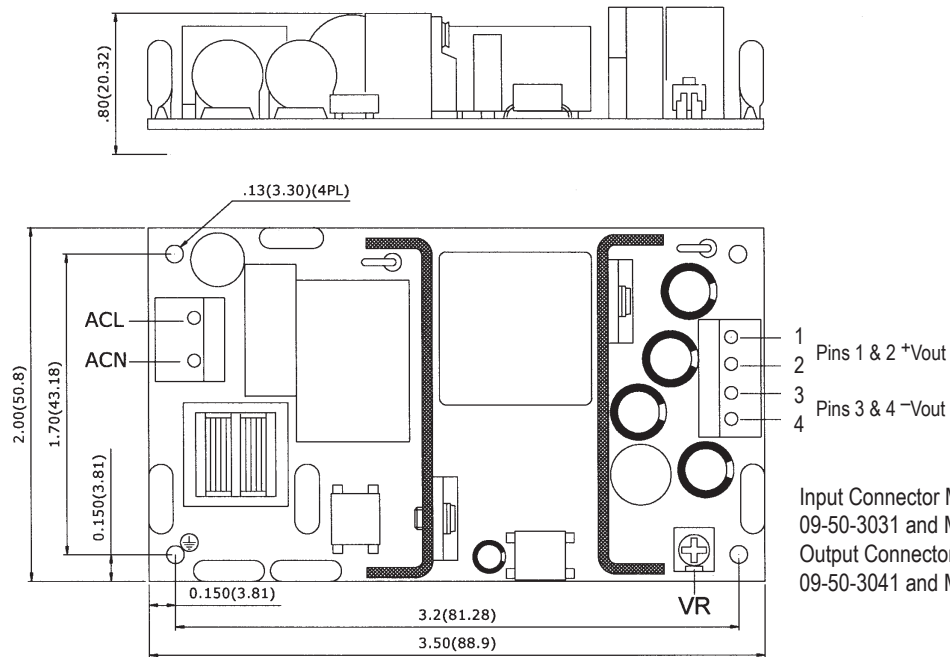
Notes: (2) Average not to exceed max power, <30s, 10% duty cycle

Derating Curve ZPS20 Series

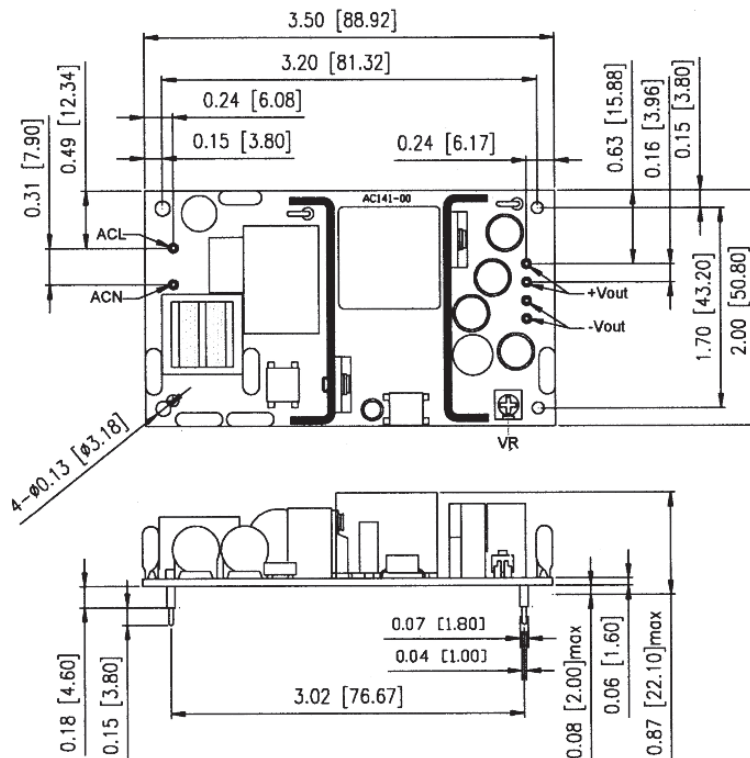


INTERMEDIATE VOLTAGES AVAILABLE
PLEASE CONSULT SALES

Outline Drawing ZPS20 Series



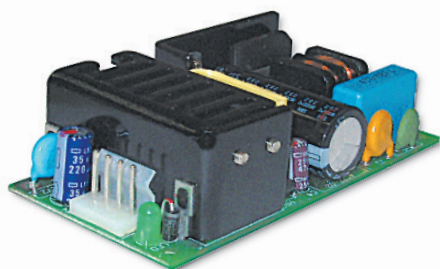
Outline Drawing ZPS20-P Series



Options

Suffix

Add Suffix -P for PCB Mount Pins



ZP40 & 60 Series

2" x 4" 40W to 60W

AC-DC Power Supplies

- 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 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/s² (10 - 55Hz: constant sweep 1 min X, Y, Z for 1 hour)			
Shock		-	< 196.1 m/s² (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/2PT models may require additional external filtering to meet conducted Class B

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

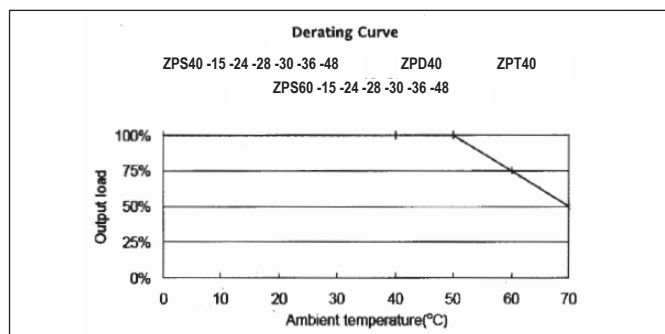
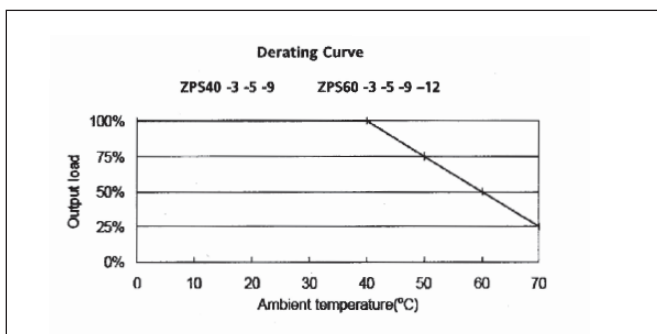
(4) ZPT40-3512N, V1 & V2 100mV

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

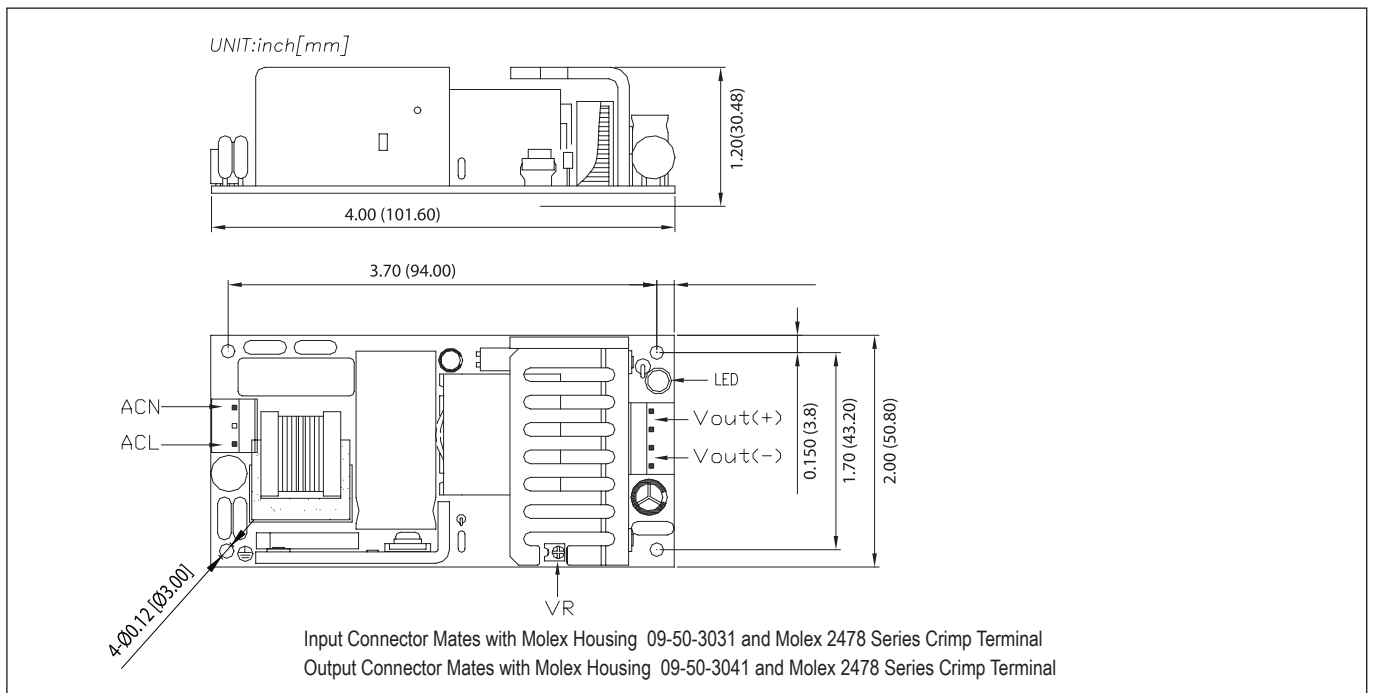
Model Selector							
	Model		Output Voltage (V)	Maximum Output (A)	Peak Load (A) (5)	Output Pwr (W)	Eff.(3) (typ)%
Single Output	ZPS40-3R3	V1	3.3	6.0	7.2	20.0	74
	ZPS60-3R3	V1	3.3	8.0	8.5	26.0	74
	ZPS40-5	V1	5.0	6.0	7.2	30.0	78
	ZPS60-5	V1	5.0	8.0	9.0	40.0	78
	ZPS40-9	V1	9.0	4.45	5.34	40.0	82
	ZPS60-9	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 ⁽⁷⁾	V1	+5.0	3.2	4.0	40.0	77
		V2	+12.0	2.0	2.5		
	ZPD40-524 ⁽⁷⁾	V1	+5.0	3.2	5.0	40.0 (6)	78
		V2	+24.0	1.0	1.5		
Triple Output	ZPT40-5125N ⁽⁷⁾	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 ⁽⁷⁾	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 ⁽⁷⁾	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 ⁽⁷⁾	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 ⁽⁷⁾	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 ⁽⁷⁾	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 ⁽⁷⁾	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

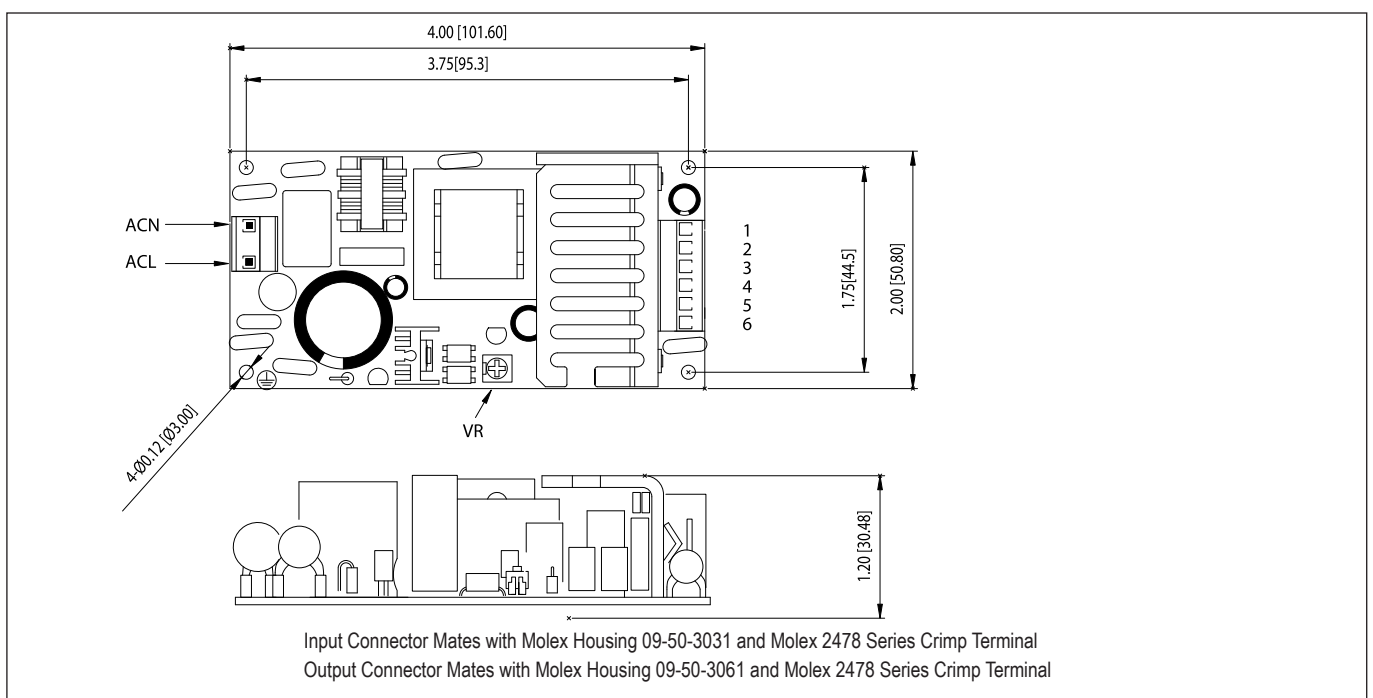
(6) 50 with 30CFM forced air cooling, derate linearly to 35W from 50°C to 70°C



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

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