

## 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 <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     | -   | 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

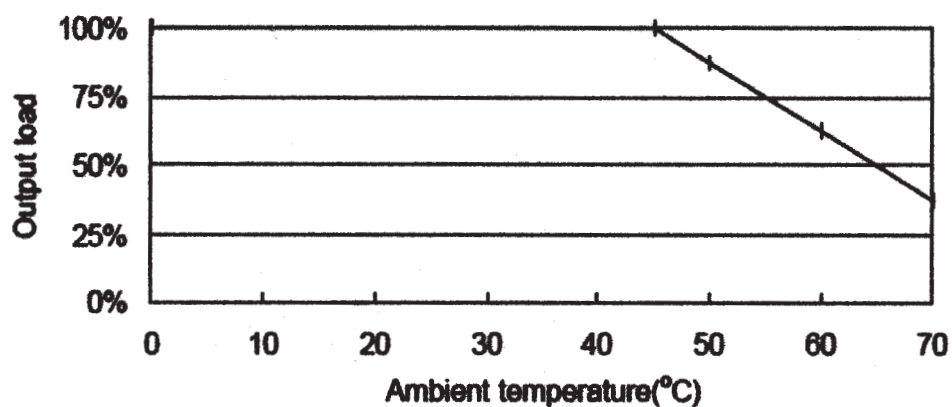


## Model Selector

| 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

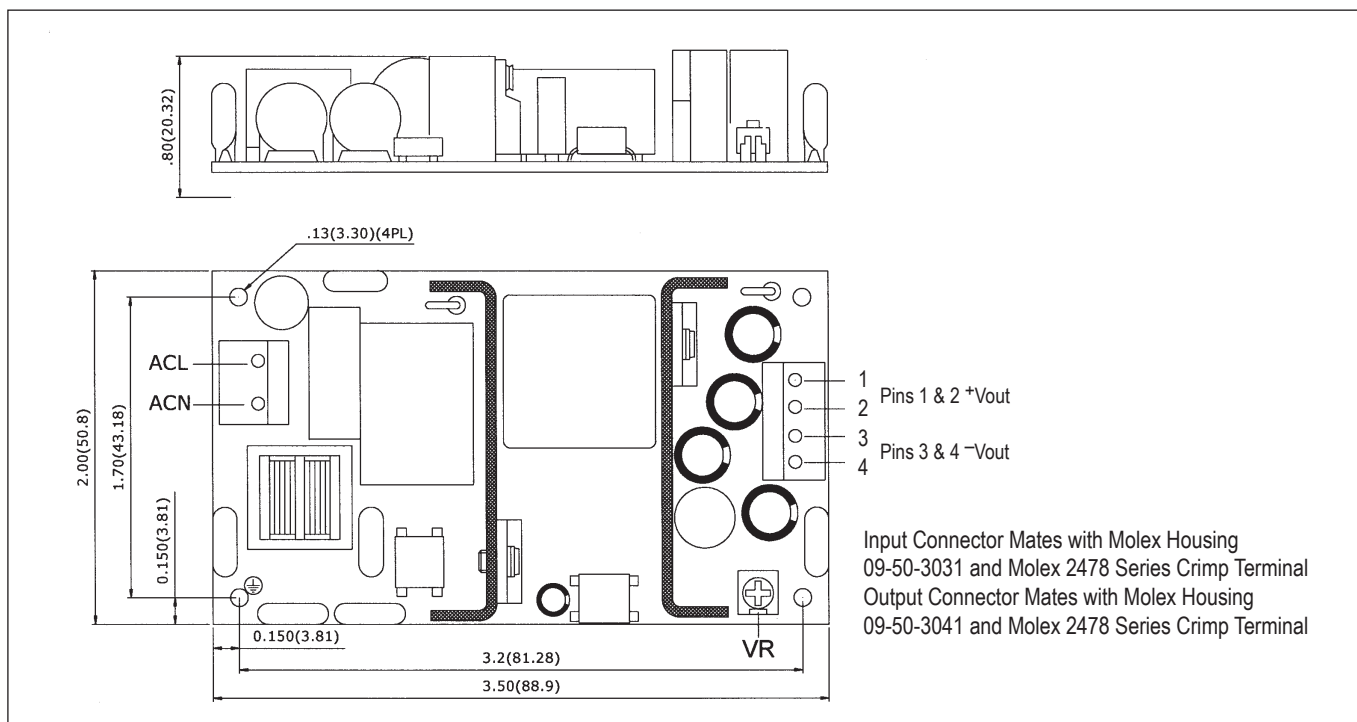


INTERMEDIATE VOLTAGES AVAILABLE  
PLEASE CONSULT SALES

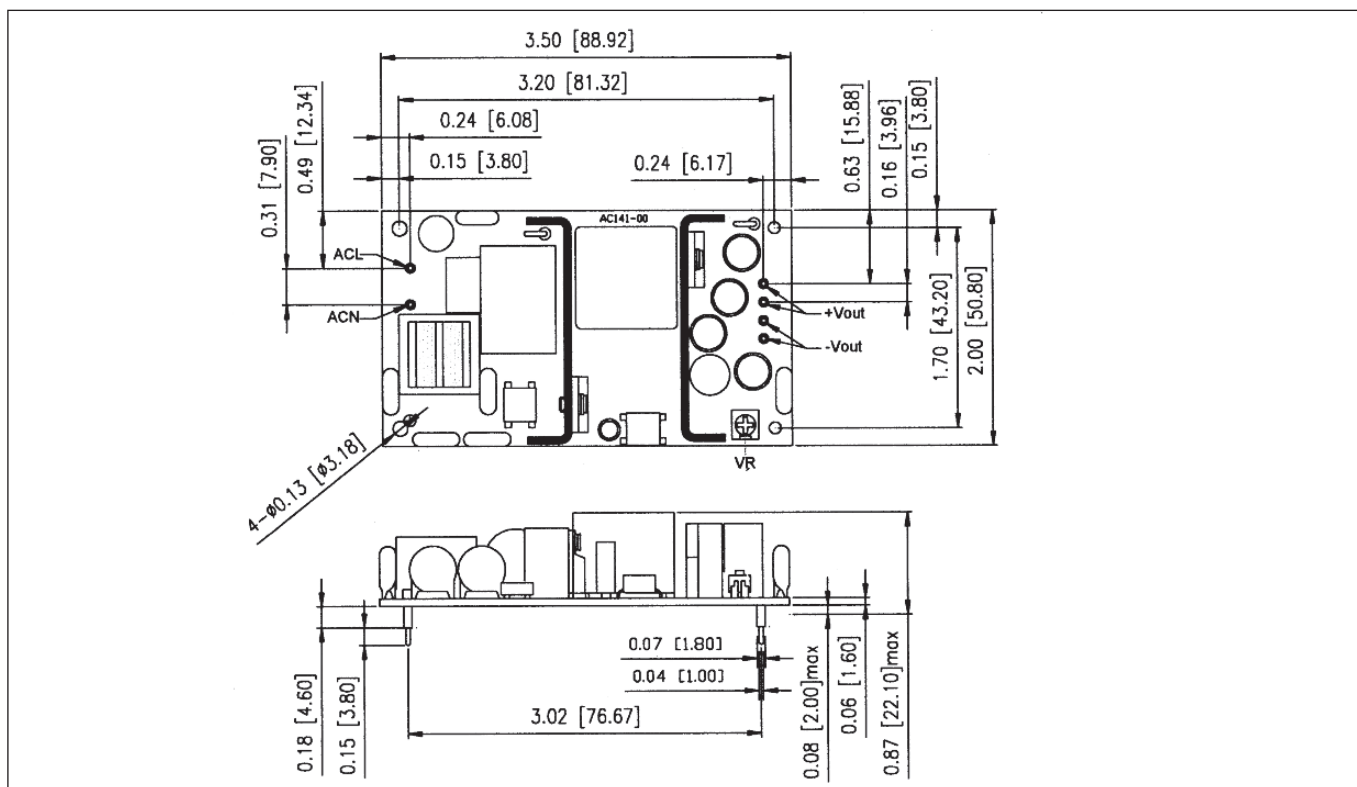
For full data and drawings please visit  
[www.emea.tdk-lambda.com/www/zp](http://www.emea.tdk-lambda.com/www/zp)



## Outline Drawing ZPS20 Series



## Outline Drawing ZPS20-P Series



## Options

## Suffix

Add Suffix -P for PCB Mount Pins



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