ZPSA20 Series

14-22W, 2 x 3.5" AC-DC Power Supplies

Features

- ◆ Wide Range AC Input
- ◆ Low profile, Industry Standard Footprint
- Global Safety Agency Compliance
- ◆ Class B conducted EMI

Key Market Segments & Applications











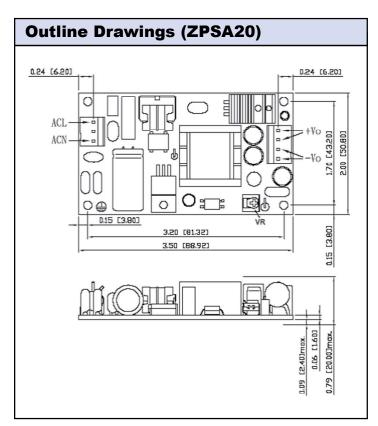


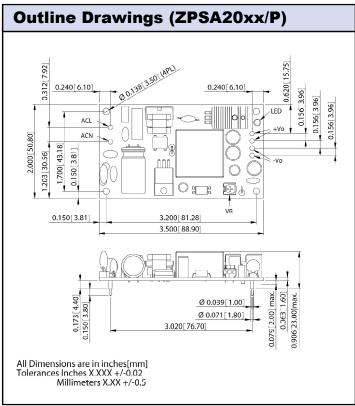
| Specifications | | | | | |
|-----------------------------|-----|--|--|--|--|
| Model | | ZPSA20 | | | |
| Input Voltage range (1) | - | 85 - 264VAC (47 - 63Hz) or 120 - 370VDC* | | | |
| Inrush Current | Α | 40A maximum at 240VAC input, 25°C ambient cold start | | | |
| Input Current (115/230VAC) | Α | 0.4 / 0.25 | | | |
| Leakage Current | mA | 0.6mA maximum (264VAC, 60Hz) | | | |
| Hold Up Time (Typ) | ms | 12ms at 115VAC input | | | |
| Temperature Coefficient | - | ±0.05%/°C | | | |
| Voltage Accuracy | - | ±1% | | | |
| Adjustment Range | - | None | | | |
| Minimum Load | Α | None | | | |
| Load Regulation | - | ±1% (10 - 100% load change) | | | |
| Line Regulation | - | ±0.5% (100 - 240VAC line change) | | | |
| Ripple & Noise (2) | mV | 1% or 50mV whichever is greater | | | |
| Short Circuit Protection | - | Continuous - hiccup mode | | | |
| Overvoltage Protection | V | 110 - 130% of nominal (Zener clamp) | | | |
| Efficiency | % | 82% typical | | | |
| LED Indicator | - | Green LED = OK | | | |
| Operating Temperature | °C | 0 to +70°C derate linearly to 37.5% load from 45 to 70°C | | | |
| Storage Temperature | °C | -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 | - | >100M at 25C & 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 Certification | - | UL60950-1, CSA60950-1 (cUL), EN60950-1, CE Mark | | | |
| Conducted & Radiated EMI | - | EN55022-B, FCC Class B | | | |
| Immunity | - | EN61000-4-2, -3, -4, -5, -6, -8 | | | |
| Weight (Typ) | g | 100g | | | |
| Size (WxLxH) | mm | 2 x 3.5 x 0.79 (including underside components) | | | |
| Warranty | yrs | Two Years | | | |

^{*}Safety certified for AC input only.

Notes:

- (1) Safety certified for 47 63Hz input only
- (2) Measured with 0.1uF ceramic & 10uF electrolytic at 20MHz BW





| Model Selector | | | | | | |
|----------------|------------|-----------------------|---------------------|---------------------|--|--|
| Model | Output (V) | Maximum Output (A) | Peak Load(A) (3) | Output Power (W) | | |
| ZPSA20-3R3 | 3.3 | 4.4 | 6.0 | 14.5 | | |
| ZPSA20-5 | 5 | 4.4 | 6.6 | 22 | | |
| ZPSA20-9 | 9 | 2.45 | 4.0 | 22 | | |
| ZPSA20-12 | 12 | 1.8 | 2.7 | 22 | | |
| ZPSA20-15 | 15 | 1.4 | 2.1 | 21 | | |
| ZPSA20-24 | 24 | 0.92 | 1.4 | 22 | | |

(3) Average not to exceed max power, <30s, 10% duty cycle (220-240VAC).

| Options | |
|---------|------------------|
| Suffix | Description |
| Blank | Molex connectors |
| /P | PCB mount pins |

| Other Industrial Products | | | | |
|---------------------------|--|--|--|--|
| KPSA | 5 - 15W pcb mount | | | |
| KM | 15 - 40W pcb mount medical | | | |
| ZPSA/ZPD/ZPT | 40 - 60W, single, dual and triple output | | | |
| ZWS | 5 - 240W single output | | | |

For Additional Information, please visit us.tdk-lambda.com/lp/products/zpsa-series.htm

