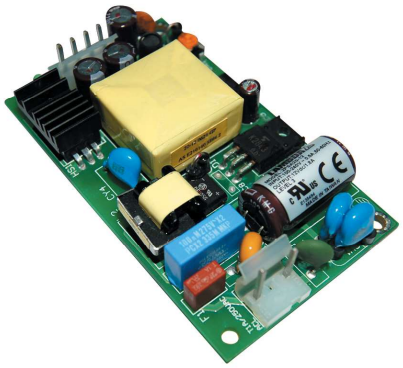
14-22W, 2 x 3.5” AC-DC Power Supplies

Features

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



Key Market Segments & Applications

Industrial Test COMM Broadcast

RoHS

Specifications

Model		ZPSA20
Input Voltage range (1)	-	85 - 264VAC (47 - 63Hz) or 120 - 370VDC*
Inrush Current	A	40A maximum at 240VAC input, 25°C ambient cold start
Input Current (115/230VAC)	A	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	A	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

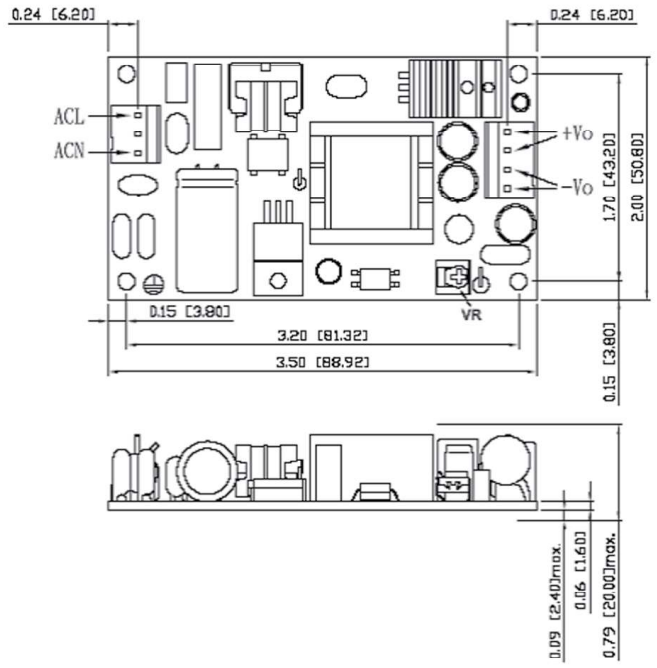
*Safety certified for AC input only.

Notes:

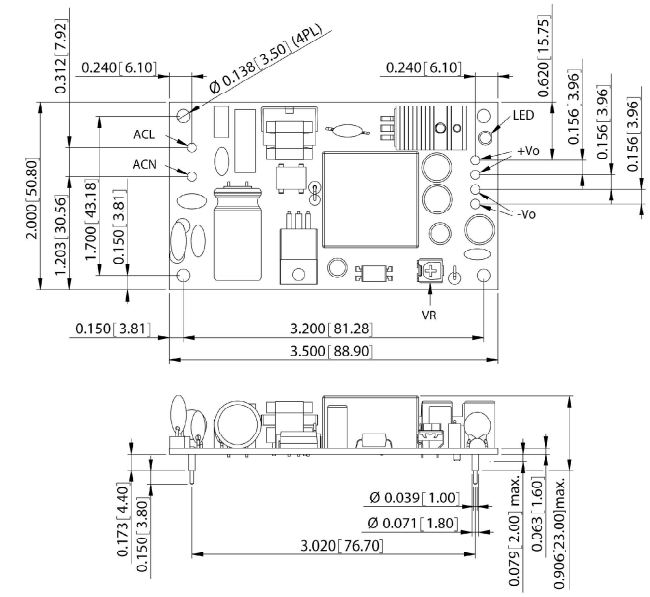
(1) Safety certified for 47 - 63Hz input only

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

Outline Drawings (ZPSA20)



Outline Drawings (ZPSA20xx/P)



All Dimensions are in inches[mm]
Tolerances Inches X.XXX +/-0.02
Millimeters X.XX +/-0.5

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