



ZPSA20 Series

2" x 3.5" 20W AC-DC
Power Supplies

ZPSA20 Features and Benefits

Features		Benefits
<ul style="list-style-type: none"> Industry Standard Footprint Up to 82% efficiency Broad Product Range Meets EN61000-4 Immunity 		<ul style="list-style-type: none"> Available to Second Source Less System Heating Optimization of Power Supply to System Greater Reliability

Specifications		
ITEMS	MODEL	ZPSA20
Input Voltage range (1)	-	85 - 264VAC (47 - 440Hz) or 120 - 370VDC
Inrush Current	A	40A max 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)
Temperature Coefficient	-	±0.05%/°C
Voltage Accuracy	-	±1%
Minimum Load	A	None
Load Regulation	-	±1%
Line Regulation	-	±0.5%
Ripple & Noise (2)	mV	1% or 50mV whichever is greater
Short Circuit Protection	-	Continuous - hiccup mode
Oversupply Protection	V	Typically 110-130% of nominal
Hold Up Time (Typ)	ms	12ms at 115VAC input
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		>100ΩM 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	-	IEC/UL/CSA/EN62368-1, 60950-1, CE Mark
Conducted & Radiated EMI	-	EN55022-B, FCC Class B
Immunity	-	EN61000-4-2,-3,-4,-6,-8
Weight (Typ)	g	100g
Size (WxLxH)	mm	88.9 X 50.8 X 20.32 (including underside components)
Warranty	yrs	2

Notes:

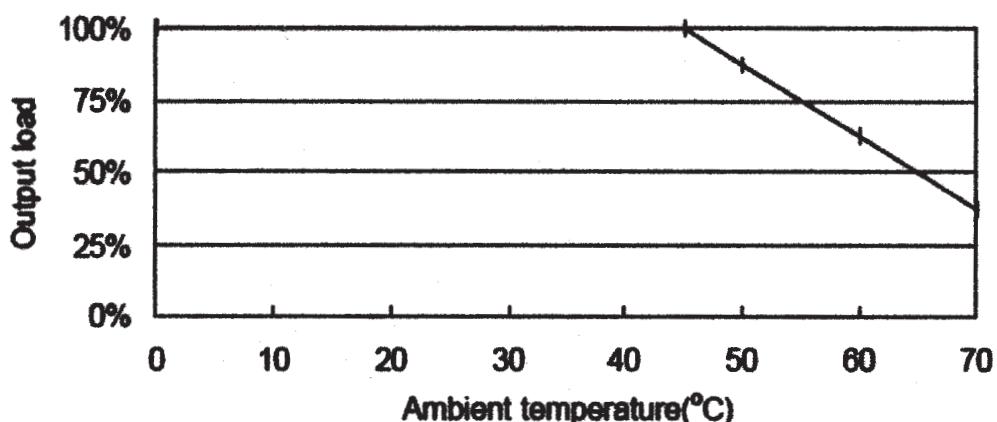
(1) Safety certified for 47 - 63Hz input only

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

Model Selector					
Model		Output Voltage (V)	Maximum Output (A)	Peak Load (A) (1)	Efficiency (2) (typ)%
ZPSA20-3R3	V1	3.3	4.4	6.6	74
ZPSA20-5	V1	5.0	4.4	6.6	77
ZPSA20-9	V1	9.0	2.4	4.0	80
ZPSA20-12	V1	12.0	1.8	2.7	80
ZPSA20-15	V1	15.0	1.4	2.1	80
ZPSA20-24	V1	24	0.9	1.4	82

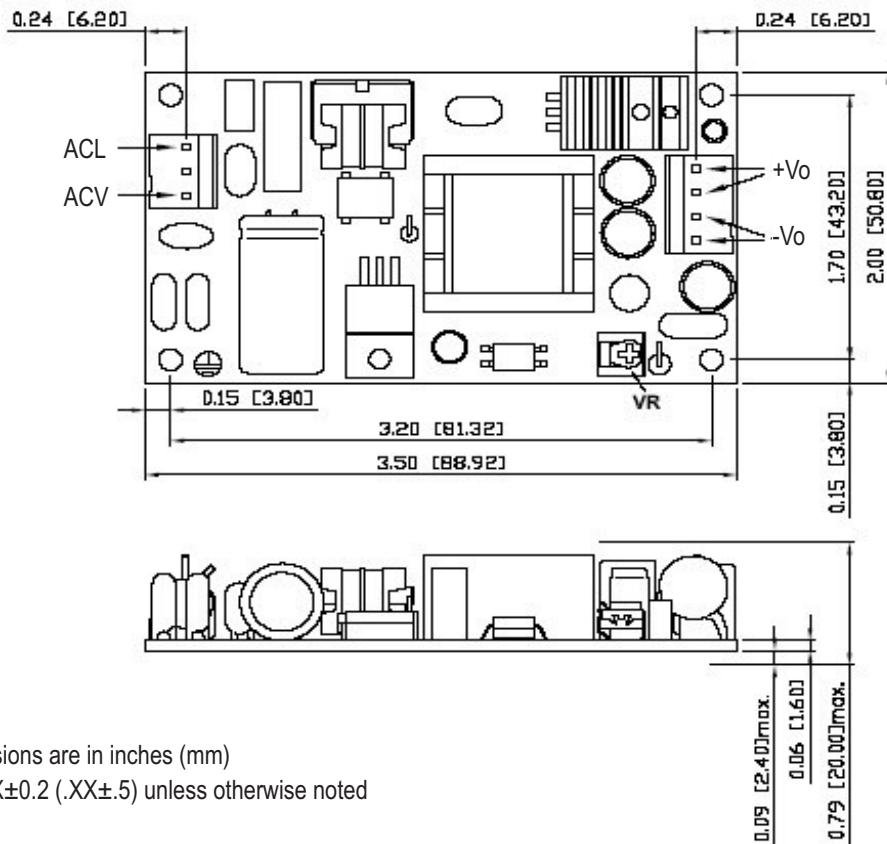
Notes: (1) Average not to exceed max power, <30s, 10% duty cycle (high line 240VAC)
(2) Preliminary Data

Derating Curve ZPSA20 Series



INTERMEDIATE VOLTAGES AVAILABLE
PLEASE CONSULT SALES

Outline Drawing ZPSA20 Series



Note: All Dimensions are in inches (mm)

Tolerances: XX±0.2 (.XX±.5) unless otherwise noted

Options**Suffix**

Add Suffix -P for PCB Mount Pins



TDK-Lambda France SAS
 Tel: +33 1 60 12 71 65
 tlf.fr.powersolutions@tdk.com
www.emea.lambda.tdk.com/fr



Italy Sales Office
 Tel: +39 02 61 29 38 63
 tlf.it.powersolutions@tdk.com
www.emea.lambda.tdk.com/it



Netherlands
 tel.nl.powersolutions@tdk.com
www.emea.lambda.tdk.com/nl



TDK-Lambda Germany GmbH
 Tel: +49 7841 666 0
 tlg.powersolutions@tdk.com
www.emea.lambda.tdk.com/de



Austria Sales Office
 Tel: +43 2256 655 84
 tlg.at.powersolutions@tdk.com
www.emea.lambda.tdk.com/at



Switzerland Sales Office
 Tel: +41 44 850 53 53
 tlg.ch.powersolutions@tdk.com
www.emea.lambda.tdk.com/ch



Nordic Sales Office
 Tel: +45 8853 8086
 tlg.dk.powersolutions@tdk.com
www.emea.lambda.tdk.com/dk



TDK-Lambda UK Ltd.
 Tel: +44 (0) 12 71 85 66 66
 tlu.powersolutions@tdk.com
www.emea.lambda.tdk.com/uk



TDK-Lambda Ltd.
 Tel: +9 723 902 4333
 tli.powersolutions@tdk.com
www.emea.lambda.tdk.com/il-en



TDK-Lambda Americas
 Tel: +1 800-LAMBDA-4 or 1-800-526-2324
 tla.powersolutions@tdk.com
www.us.lambda.tdk.com



TDK Electronics do Brasil Ltda
 Tel: +55 11 3289-9599
 sales.br@tdk-electronics.tdk.com
www.tdk-electronics.tdk.com/en



TDK-Lambda Corporation
 Tel: +81-3-6778-1113
www.jp.lambda.tdk.com



TDK-Lambda (China) Electronics Co. Ltd.
 Tel: +86 21 6485-0777
 tlc.powersolutions@tdk.com
www.lambda.tdk.com.cn



TDK-Lambda Singapore Pte Ltd.
 Tel: +65 6251 7211
 tls.marketing@tdk.com
www.sg.lambda.tdk.com



TDK India Private Limited, Power Supply Division
 Tel: +91 80 4039-0660
 matthew.philip@tdk.com
www.sg.lambda.tdk.com

