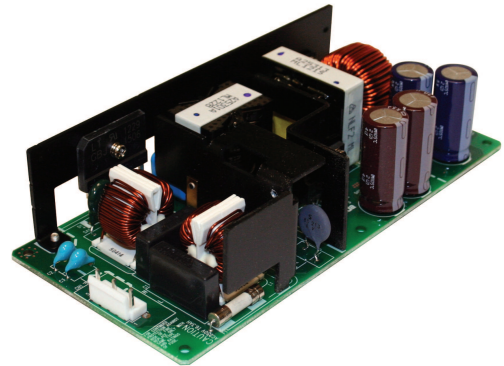


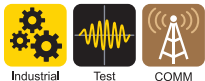
## 300W Single Output, Convection Cooled Power Supplies

### Features

- ◆ Universal Input (85 - 265VAC)
- ◆ Power Factor Corrected
- ◆ Convection cooling
- ◆ Five year warranty
- ◆ Less than 0.5mA earth leakage current



### Key Market Segments & Applications



### Specifications

Model		ZWS300BAF
Input Voltage	V	85-265VAC (47-63Hz), 120-370VDC
Input Current	A	3.5 / 1.8
Inrush Current <sup>(1)(2)</sup>	A	15 / 30
Power Factor	-	0.98 at 100VAC, 0.93 at 200VAC, Meets EN61000-3-2
Leakage Current	mA	0.5mA Max. Typically 0.2mA (100VAC), 0.4mA (230VAC)
Temperature Coefficient	%/°C	<0.02%/°C
Overcurrent Protection <sup>(3)</sup>	-	>116% of rated output current
Overvoltage Protection	V	24V: 28.8-33.6V, 36V: 41.4-48.6V, 48V: 55.2-64.8V
Hold Up Time (Typ) <sup>(1)</sup>	ms	18ms at 100VAC input
Efficiency <sup>(1)</sup>	%	88 / 91%
Remote On/Off	-	Optional, contact factory
Operating Temperature	°C	-10°C to +70°C, derate linearly to 40% load from 45°C to 70°C
Storage Temperature	°C	-30 to +75°C
Humidity (non condensing)	%RH	Operating: 30 - 90%RH, Storage: 10 - 90%RH
Cooling	-	Convection
Withstand Voltage	-	Input to Ground 2kVAC (20mA), Input to Output 3kVAC (20mA), Output to Ground 500VAC (20mA) for 1 min.
Isolation Resistance	-	>100M at 25°C & 70%RH, Output to Ground 500VDC
Vibration (non operating)	-	10 - 55Hz (1 minute sweep), 19.6m/s <sup>2</sup> constant X, Y, Z 1 hour each
Shock	-	< 196.1 m/s <sup>2</sup>
Safety Agency Certifications	-	UL60950-1, CSA60950-1, EN60950-1, EN50178 OV II, CE Mark
Conducted & Radiated EMI	-	EN55011/EN55022-B, FCC Class B, VCCI-B
Immunity	-	EN61000-4-2 (lvl2, 3), -3 (lvl 3), -4 (lvl 3), -5 (lvl 3, 4), -6 (lvl 3), -8 (lvl 4), -11; EN61000-6-2
Weight (Typ)	g	540g
Size (WxHxD)	in (mm)	3.31 x 1.65 x 7.09" (84 x 42 x 180)
Warranty	yrs	Five Years

#### Notes:

(1) 100 / 200VAC Input

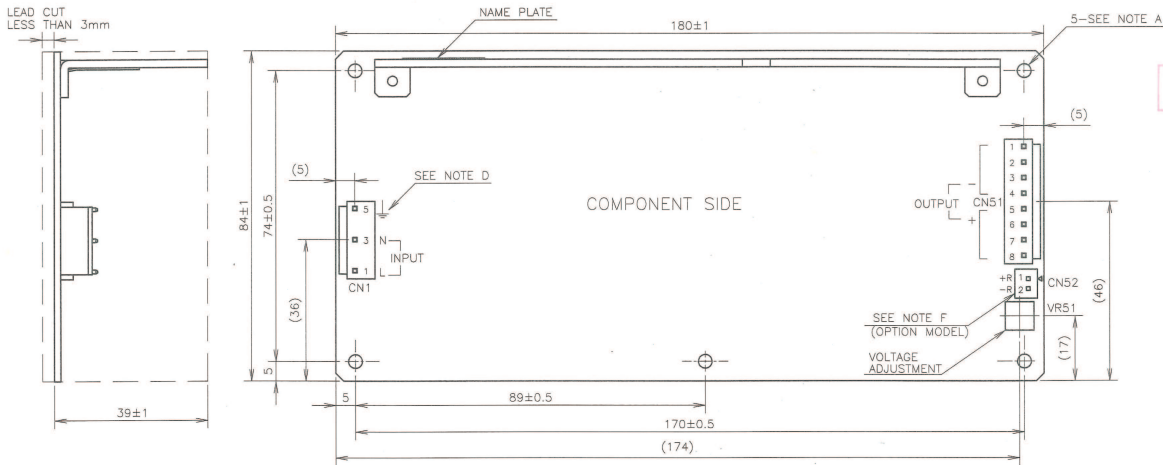
(2) 25°C ambient (cold start)

(3) Avoid prolonged operation in overload

## Model Selector

Model	Output Voltage	Adjustment Range	Max Current	Max Power	Line Reg (mV)	Load Reg (mV)	Ripple & Noise (mV)
ZWS300BAF24	24V	21.6 - 27.5V	12.5A	300W	96	150	150
ZWS300BAF36	36V	32.4 - 39.6V	8.4A	302.4W	144	240	250
ZWS300BAF48	48V	39.5 - 52.8V	6.3A	302.4W	192	240	250

## Outline Drawing



### CONNECTORS USED:

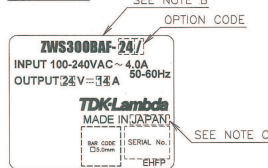
PART DESCRIPTION	PART NAME	MANUFACT.	QTY
PIN HEADER (INPUT SIDE CN1)	B3P5-VH	J.S.T.	1
PIN HEADER (OUTPUT SIDE CN5)	B8P-VH	J.S.T.	1

\*OUTPUT CURRENT OF EACH CONNECTOR PIN MUST BE LESS THAN 5A.

### MATCHING HOUSINGS, PINS & TOOL (NOT INCLUDED WITH THE PRODUCT):

PART DESCRIPTION	PART NAME	MANUFACT.	QTY
SOCKET HOUSING (CN1)	VHR-SN	J.S.T.	1
SOCKET HOUSING (CN5)	VHR-SN	J.S.T.	1
TERMINAL PINS	SVH-21T-P1.1	J.S.T.	11
	BVH-21T-P1.1	J.S.T.	
HAND CRIMPING TOOL	YC-160R	J.S.T.	-

### NAME PLATE



SCALE FOR NAME PLATE : 2/1

### NOTES

- A: 5- $\phi$ 3.5 HOLES ARE FOR CUSTOMER'S CHASSIS MOUNTING HOLES. ALL MUST BE SCREWED IN ORDER TO CONFORM THE VIBRATION SPEC.
- B: MODEL NAME, INPUT VOLTAGE RANGE, NOMINAL OUTPUT VOLTAGE, AND MAXIMUM OUTPUT CURRENT ARE SHOWN HERE IN ACCORDANCE WITH THE SPECIFICATIONS.
- C: COUNTRY OF MANUFACTURE WILL BE SHOWN HERE.
- D:  $\perp$  IS FOR SAFETY GROUND CONNECTION.
- E: TO KEEP THE DISTANCE MORE THAN 4mm BETWEEN PCB EDGE AND CUSTOMER'S CHASSIS.
- F: OPTION MODEL(ZWS300BAF-\*/R)  
 REMOTE ON/OFF CONTROL CONNECTOR (CN52) : B2B-XH-AM (J.S.T.)  
 MATCHING HOUSING : XHP-2 (J.S.T.)  
 MATCHING TERMINAL : BXH-001T-P0.6 (J.S.T.) OR SXH-001T-P0.6 (J.S.T.)  
 HAND CRIMPING TOOL : YC-110R (J.S.T.) OR YRS-110 (J.S.T.)  
 MATCHING HOUSING AND TERMINAL --- NOT INCLUDED WITH THE PRODUCT

## Similar Products

ZWS-B, -BAF, -BP	10W to 240W Single output
HWS	15W to 1800W Single Output, Enclosed
EFE	300W to 400W Single Output, Medical & ITE
CFE400M	300W to 400W Single Output, Medical & ITE

## Options

Suffix	Description
-	JST Connectors
/L	L Bracket
/A	Cover & L Bracket
/R	Remote On/Off
/T	Screw Terminals
/CO2	PCB Coating
Example	ZWS300BAF24/TL

For Additional Information, please visit  
[us.tdk-lambda.com/lp/products/zws-series.htm](http://us.tdk-lambda.com/lp/products/zws-series.htm)

