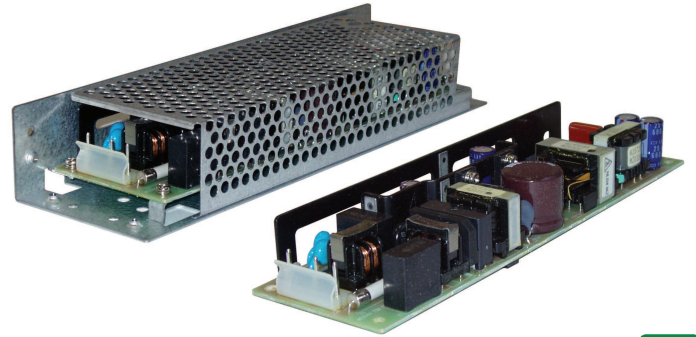


50W to 150W Single Output Low Cost, Worldwide Use

Features

- ◆ Universal Input (85 - 265VAC)
- ◆ Power factor Corrected
- ◆ Input transient protected
- ◆ 2 year warranty
- ◆ High quality design
- ◆ Peak Power capability



Key Market Segments & Applications



| Specifications | | ZWS50AF | ZWS75AF | ZWS100AF | ZWS150AF |
|----------------------------|-----|--|---------------|---------------|---------------|
| AC Input Voltage range | VAC | 85-265VAC (47-63Hz) | | | |
| DC Input Voltage range | VDC | 120-370VDC | | | |
| Input Current (Typ) (1) | A | 0.8/0.4 | 1.2/0.6 | 1.4/0.7 | 2.0/1.0 |
| Inrush Current | A | 14/28 25°C Ambient, Cold Start | | | |
| Power Factor (1) | - | Meets EN61000-3-2 (0.99/0.95) | | | |
| Maximum Ripple and Noise | mV | 3.3 & 5V: 120mV; 12 to 24V: 150mV; 36 & 48V: 200mV | | | |
| Temperature Coefficient | - | <0.02%/°C | | | |
| Overcurrent Protection (4) | - | >105% of Peak Current Capability | | | |
| Hold Up Time (Typ) (1) | ms | 20ms | | | |
| Leakage Current | - | 0.5mA max 0.1mA (Typ) at 100VAC 0.16mA (Typ) at 230VAC | | | |
| Remote On / Off | - | See installation manual (Not available with /A cover option) | | | |
| Operating Temperature | - | Convection cooling - See table on page 2 0.7m/s air -10°C to +70°C, derate linearly to 70% load from 60°C to 70°C (2) | | | |
| Storage Temperature | - | -30° to +85°C | | | |
| Humidity (non condensing) | - | Operating: 30 - 90% RH, storage 10-95% RH | | | |
| Withstand Voltage | - | I/P~Grnd 2kVAC (20mA), I/P~O/P 3kVAC (20mA), O/P~Grnd 500VAC (100mA) for 1 min. | | | |
| Isolation Resistance | - | >100M at 25C & 70%RH, Output to Ground 500VDC | | | |
| Vibration (non operating) | - | 10 - 55Hz (1 minute sweep), 19.6m/s ² constant X, Y, Z 1 hour | | | |
| Shock | - | < 196.1 m/s ² | | | |
| Safety Agency Approvals | - | UL60950-1, CSA60950-1, EN60950-1, EN50178, CE Mark | | | |
| Conducted & Radiated EMI | - | designed to meet EN55011, EN55022-B, FCC Class B, VCCI-B | | | |
| Immunity | - | designed to meet EN61000-4-2,-3,-4,-5,-6,-8,-11 | | | |
| Weight (Typ) | g | 210 | 290 | 380 | 500 |
| Size (W x H x D) | mm | 55 x 26 x 195 | 55 x 32 x 222 | 62 x 35 x 222 | 75 x 40 x 222 |
| Warranty | yrs | Two Years | | | |

Notes:

- (1) 100/200VAC
- (2) ZWS150AF -10 to 60°C, derate linearly to 70% load from 50°C to 60°C
- (3) The peak current draw must not exceed a 10 second duration with a duty cycle of 35%
- (4) Constant current limit with automatic recovery. Do not operate in a over-load or shorted output condition for more than 30 seconds.
- (5) An overvoltage condition on the output will shut down the power supply. The power supply must be re-set by cycling the AC input.

For New Designs, See ZWSBAF Series

| Model Selector | | | | | | | | | | |
|----------------|---------|-------------------------|---------------|---------------------------------|----------------------|------------------------------------|----------|-------------------|-------------------|----------------------|
| Model | Voltage | Output Adjust Range (V) | Max Curr. (A) | Max Peak Curr. (A) ³ | Max Output Power (W) | Peak Output Power ³ (W) | Eff. (%) | Max Load Reg.(mV) | Max Line Reg.(mV) | OVP (V) ⁵ |
| ZWS75AF3 | 3.3V | 2.85-3.63 | 15.0 | - | 49.5 | - | 67 | 40 | 20 | 3.79-4.95 |
| ZWS100AF3 | 3.3V | 2.85-3.63 | 20.0 | - | 66.0 | - | 69 | 40 | 20 | 3.79-4.95 |
| ZWS150AF3 | 3.3V | 2.97-3.63 | 30.0 | - | 99.0 | - | 74 | 40 | 20 | 3.79-4.95 |
| ZWS50AF5 | 5V | 4.5-5.5 | 10.0 | - | 50.0 | - | 75 | 40 | 20 | 5.75-7.0 |
| ZWS75AF5 | 5V | 4.5-5.5 | 15.0 | - | 75.0 | - | 75 | 40 | 20 | 5.75-7.0 |
| ZWS100AF5 | 5V | 4.5-5.5 | 20.0 | - | 100.0 | - | 75 | 40 | 20 | 5.75-7.0 |
| ZWS150AF5 | 5V | 4.5-5.5 | 30.0 | - | 150.0 | - | 77 | 40 | 20 | 5.75-7.0 |
| ZWS50AF12 | 12V | 10.8-13.2 | 4.3 | 5.2 | 51.6 | 62.4 | 78 | 96 | 48 | 13.8-16.2 |
| ZWS75AF12 | 12V | 10.8-13.2 | 6.3 | 7.5 | 75.6 | 90.0 | 78 | 96 | 48 | 13.8-16.2 |
| ZWS100AF12 | 12V | 10.8-13.2 | 8.5 | 10.0 | 102.0 | 120.0 | 79 | 96 | 48 | 13.8-16.2 |
| ZWS150AF12 | 12V | 10.8-13.2 | 12.5 | 15.0 | 150.0 | 180.0 | 79 | 96 | 48 | 13.8-16.2 |
| ZWS50AF15 | 15V | 13.5-16.5 | 3.5 | 4.2 | 52.5 | 63.0 | 79 | 120 | 60 | 17.3-20.3 |
| ZWS75AF15 | 15V | 13.5-16.5 | 5.0 | 6.0 | 75.0 | 90.0 | 79 | 120 | 60 | 17.3-20.3 |
| ZWS100AF15 | 15V | 13.5-16.5 | 6.7 | 8.0 | 100.5 | 120.0 | 79 | 120 | 60 | 17.3-20.3 |
| ZWS150AF15 | 15V | 13.5-16.5 | 10.0 | 12.0 | 150.0 | 180.0 | 81 | 120 | 60 | 17.3-20.3 |
| ZWS50AF24 | 24V | 21.6-26.4 | 2.1 | 2.6 | 50.4 | 62.4 | 81 | 150 | 96 | 27.6-32.4 |
| ZWS75AF24 | 24V | 21.6-26.4 | 3.2 | 3.8 | 76.8 | 91.2 | 82 | 150 | 96 | 27.6-32.4 |
| ZWS100AF24 | 24V | 21.6-26.4 | 4.3 | 5.0 | 103.2 | 120.0 | 81 | 150 | 96 | 27.6-32.4 |
| ZWS150AF24 | 24V | 21.6-26.4 | 6.3 | 7.5 | 151.2 | 180.0 | 82 | 150 | 96 | 27.6-32.4 |
| ZWS75AF36 | 36V | 32.4-39.6 | 2.1 | 2.5 | 75.6 | 90.0 | 82 | 200 | 144 | 41.4-48.6 |
| ZWS100AF36 | 36V | 32.4-39.6 | 2.8 | 3.4 | 100.8 | 122.4 | 82 | 200 | 144 | 41.4-48.6 |
| ZWS150AF36 | 36V | 32.4-39.6 | 4.2 | 5.0 | 151.2 | 180.0 | 82 | 200 | 144 | 41.4-48.6 |
| ZWS75AF48 | 48V | 43.2-52.8 | 1.6 | 1.9 | 76.8 | 91.2 | 82 | 240 | 192 | 55.2-64.8 |
| ZWS100AF48 | 48V | 43.2-52.8 | 2.1 | 2.5 | 100.8 | 120.0 | 82 | 240 | 192 | 55.2-64.8 |
| ZWS150AF48 | 48V | 43.2-52.8 | 3.2 | 3.8 | 153.6 | 182.4 | 82 | 240 | 192 | 55.2-64.8 |

| Other Industrial Products | |
|---------------------------|---------------------------------------|
| VSB/VSC | 5W-150W Single output 115VAC input |
| SC | 30W-120W Single, dual & triple output |
| HWS | 15W-1500W Single output |
| ZWSPAF | 150W-480W Peak power, single output |
| ZWD, ZWQ | 100W-440W Dual and quad output |

| Derating - Convection Cooling | | | | | |
|-------------------------------|------|------|------|------|------|
| Model | 40°C | 45°C | 50°C | 55°C | 60°C |
| ZWS50AF | 100% | 100% | 100% | 85% | 70% |
| ZWS75AF | 100% | 100% | 100% | 85% | 70% |
| ZWS100AF | 100% | 100% | 100% | 80% | 60% |
| ZWS150AF | 100% | 87% | 75% | 62% | 50% |

| Options | |
|-------------------------------|---------------------------------|
| Suffix | Description |
| - | Molex Input & Output Connectors |
| /A | With cover & L Bracket |
| /J | JST Input & Output Connectors* |
| /JA | JST Connectors & Cover |
| * Recommended for new designs | |

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



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Switching Power Supplies](#) category:

Click to view products by [TDK-Lambda](#) manufacturer:

Other Similar products are found below :

[70841011](#) [73-551-0005](#) [AAD600S-4-OP](#) [R22095](#) [HWS50A-5/RA](#) [KD0204](#) [9021](#) [S-15F-12](#) [LDIN100150](#) [LPM000-BBAR-01](#) [LPX17S-C](#)
[EVS57-10R6/R](#) [FDC40-24S12](#) [FRV7000G](#) [22929](#) [CQM1IA121](#) [40370121900](#) [VI-PU22-EXX](#) [40370121910](#) [LDIN5075](#) [432703037161](#)
[WRB01X-U](#) [LPX140-C](#) [08-30466-1040G](#) [09-160CFG](#) [70841004](#) [70841025](#) [VPX3000-CBL-DC](#) [LPM000-BBAR-05](#) [LPM000-BBAR-08](#)
[LPM124-OUTA1-48](#) [LPM000-BBAR-07](#) [LPM109-OUTA1-10](#) [LPM616-CHAS](#) [08-30466-1055G](#) [08-30466-2175G](#) [DMB-EWG](#) [TVQF-](#)
[1219-18S](#) [6504-226-2101](#) [CQM1IPS01](#) [XPFM201A+](#) [MAP80-4000G](#) [LFP300F-24-TY](#) [SMP21-L20-DC24V-5A](#) [VI-MUL-ES](#) [08-30466-](#)
[0065G](#) [CME240P-24](#) [VI-RU031-EWWX](#) [08-30466-0028G](#) [S82Y-TS01](#)