Single Output, 3.3W to 50W Power Supplies

Features

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

Key Market Segments & Applications

Industrial Test COMM Broadcast

RoHS

Specifications

Model		ZWS5 ZWS10	ZWS15 ZWS30	ZWS50
AC Input Voltage range	-	85-265VAC (47-440Hz)		
DC Input Voltage range	-	110 - 330VDC		
Inrush Current (100/200VAC) (1)	A	15 / 30		
Temperature Coefficient	-	<0.02%/ºC		
Overcurrent Protection (2)	-	~125%		
Overvoltage Protection	V	~140% diode clamp		~115 - 130%, manual reset
Hold Up Time (Typ) @ 100VAC	ms	17		
Remote Sense	-	None		
Operating Temperature	°C	(open frame) -10ºC~+60ºC, derate linearly to 70% load from 50ºC~60ºC		
Operating Temperature	°C	(with cover) Additional derating applies, please consult Installation Manual		
Storage Temperature	°C	-30 to +85ºC		
Humidity (non condensing)	-	10 - 95% RH		
Cooling	-	Convection		
Withstand Voltage	-	Input to Ground 2kVAC (20mA), Input to Output 3kVAC (20mA), Output to Ground 500VAC (100mA) 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^2 constant X, Y, Z 1 hour		
Shock	-	< 196.1 m/s^2		
Safety Agency Approvals	-	UL60950-1, CSA60950-1, EN60950-1, CE Mark		
Conducted & Radiated	EM	EN55022-B, FCC Class B, VCCI-B		
Recommended EMI Filter	-	RSEL-20R5W	RSEL-2001W RSEL-2002W	RSEL-2002W
Weight (Typ)	g	120/120	140/270	370
Size (WxHxD)	mm	See Outline Drawings		
Warranty	yrs	2 years		

Notes:
(1) 25°C ambient (cold start)
(2) Avoid prolonged operartion in overload

2 Output Module Codes

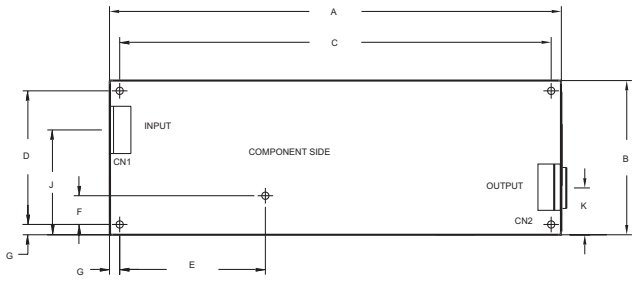
Model	Voltage	Adjust Range	Max Curr. A	Peak Curr. A	Load Reg mV	Line Reg mV	Ripple Noise mV	Eff. %
ZWS5-3	3.3V	2.97-3.63	1	1.2	40	20	120	62
ZWS10-3	3.3V	2.97-3.63	2	2.4	40	20	120	62
ZWS15-3	3.3V	2.97-3.63	3	3.6	40	20	120	63
ZWS30-3	3.3V	2.97-3.63	6	7.2	40	20	120	70
ZWS50-3	3.3V	2.97-3.63	10	12	40	20	120	73
ZWS5-5	5V	4.5-5.5	1	1.2	40	20	120	67
ZWS10-5	5V	4.5-5.5	2	2.4	40	20	120	70
ZWS15-5	5V	4.5-5.5	3	3.6	40	20	120	71
ZWS30-5	5V	4.5-5.5	6	7.2	40	20	120	75
ZWS50-5	5V	4.5-5.5	10	12	40	20	120	77
ZWS5-12	12V	10.8-13.2	0.42	0.51	96	48	150	68
ZWS10-12	12V	10.8-13.2	0.85	1.02	96	48	150	70
ZWS15-12	12V	10.8-13.2	1.25	1.5	96	48	150	71
ZWS30-12	12V	10.8-13.2	2.5	3	96	48	150	77
ZWS50-12	12V	10.8-13.2	4.3	5.16	96	48	150	80
ZWS5-15	15V	13.5-16.5	0.34	0.41	120	60	150	68
ZWS10-15	15V	13.5-16.5	0.7	0.84	120	60	150	71
ZWS15-15	15V	13.5-16.5	1	1.2	120	60	150	71
ZWS30-15	15V	13.5-16.5	2	2.4	120	60	150	77
ZWS50-15	15V	13.5-16.5	3.5	4.2	120	60	150	81
ZWS5-24	24V	21.6-26.4	0.22	0.27	150	96	200	70
ZWS10-24	24V	21.6-26.4	0.45	0.54	150	96	200	71
ZWS15-24	24V	21.6-26.4	0.65	0.78	150	96	200	71
ZWS30-24	24V	21.6-26.4	1.3	1.56	150	96	200	78
ZWS50-24	24V	21.6-26.4	2.1	2.52	150	96	200	82
ZWS30-36	36V	32.4-39.6	0.9	1.08	240	144	300	78
ZWS50-36	36V	32.4-39.6	1.4	1.68	240	144	300	82
ZWS30-48	48V	43.2-52.8	0.7	0.84	300	192	400	78
ZWS50-48	48V	43.2-52.8	1.1	1.32	300	192	400	82

Note for Peak Current: For 10s maximum, 35% duty cycle, average power not to exceed maximum ratings.

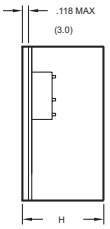
Options

Suffix	Description
-	Molex Terminals
/A	Cover option
/J	JST Connectors*
/JA	JST Connectors & Cover
Note:	* Recommended for new designs

ZWS Outline Drawing



ZWS5-150 OUTLINE DRAWING



DIMENSIONS:

MODEL	A	B	C	D	E	F	G	H	J	K	L
ZWS5	3.86 (98.0)	1.77 (44.9)	3.580 (90.9)	1.500 (38.1)	-	-	.14 (3.5)	.83 (21.0)	1.05 (26.6)	.54 (13.7)	-
ZWS10	4.14 (105.1)	1.97 (50.0)	3.860 (98.0)	1.690 (42.9)	-	-	.14 (3.5)	.83 (21.0)	.99 (25.1)	.67 (18.4)	-
ZWS15	4.93 (125.2)	1.97 (50.0)	4.650 (118.1)	1.690 (42.9)	-	-	.14 (3.5)	.83 (21.0)	1.04 (25.0)	.57 (14.4)	-
ZWS30	5.24 (133.0)	2.17 (55.1)	4.850 (123.1)	1.770 (45.0)	-	-	.20 (5.0)	1.02 (25.9)	.20 (31.0)	1.16 (40.2)	-
ZWS50	7.68 (195.0)	2.17 (55.1)	7.290 (185.1)	1.770 (45.0)	-	-	.20 (5.0)	1.02 (25.9)	1.32 (33.5)	.72 (18.2)	-

Other Industrial Products

ZWS-AF	50W to 150W Active PFC
ZWD/ZWQ	100W to 440W Single & multiple output
SC	30W to 120W Single, dual, & triple output
HWS	15W to 1800W Single output enclosed

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