

ZWS Series

Single Output Low Cost,
Worldwide Use

- Universal Input (85 - 265VAC)
- Input Transient Protected
- 2 Year Warranty
- High Quality Design
- Peak Power Capability

Key Market Segments & Applications

Factory Automation	Process Control, NC-Machining, Automotive, Packaging Equipment, Materials Handling, Chemical Processing, Robots
Test & Measurement	Burn-in & Test, Automated Test, Instrumentation, Measurement, Detection
Light Industrial	Gaming, Vending, Printers

ZWS Features and Benefits

Features

- Input Transient Protected
- 2 Year Warranty
- Peak Power Capability

Benefits

- Withstands Harsh Environments
- Lower Cost of Ownership
- Can Drive High current Start Up Devices

Specifications

MODELS		ZWS5 ZWS10	ZWS15 ZWS30	ZWS50
ITEMS				
AC Input Voltage range	-	85-265VAC (47-440Hz)		
DC Input Voltage range	-	110 - 330VDC		
Inrush Current (100/200VAC) (1)	A	15 / 30		
Power Factor (Passive)	-	None		
Temperature Coefficient	-	<0.02%/°C		
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	-	(open frame) -10°C~+60°C, derate linearly to 70% load from 50°C~60°C		
Operating Temperature	-	(with cover)Additional derating applies, please consult Installation Manual		
Storage Temperature	-	-30 to +85°C		
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	-	>100MΩ at 25°C & 70%RH, Output to Ground 500VDC		
Vibration (non operating)	-	10 - 55Hz (1 minute sweep), 19.6m/s² constant X, Y, Z 1 hour		
Shock	-	< 196.1 m/s²		
Safety Agency Approvals	-	UL/CSA60950-1, EN60950-1, CE Mark		
Conducted & Radiated	EM	EN55022-B, FCC Class B, VCCI-B		
Weight (Typ)	g	120/120	140/270	370
Size (WxHxD)	mm	See table		
Warranty	yrs	2		

Notes:

(1) 25°C ambient (cold start) (2) Avoid prolonged operation in overload

Model Selector

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.

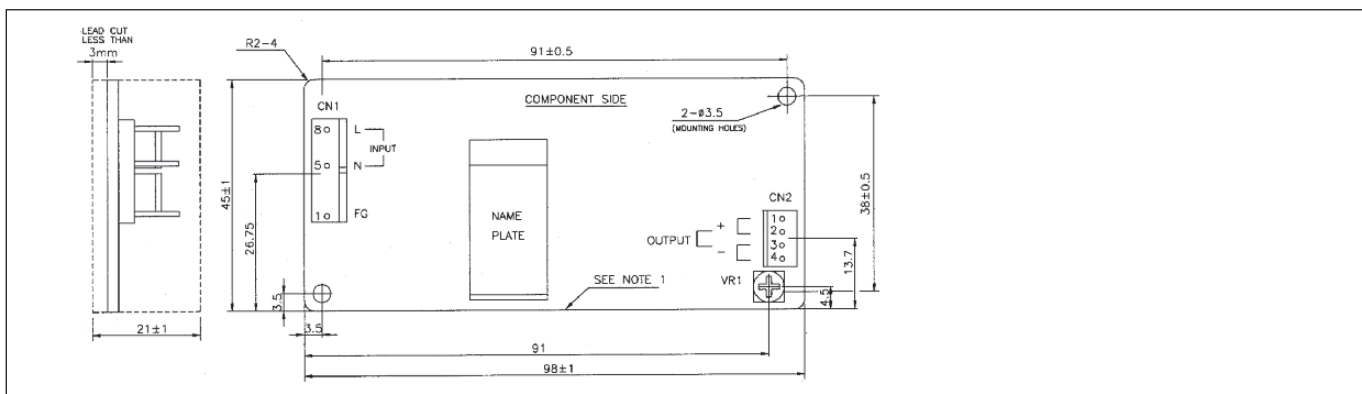
Options

Suffix	Description
Blank	Molex Terminals
/A	Cover option
/J	JST Connectors
/JA	JST Connectors & Cover

Dimension Table (mm)

	Width (W)	Height (H)	Depth (D)
ZWS5	45	21	98
ZWS10	50	21	105
ZWS15	50	21	125
ZWS30	55	26	133
ZWS50	55	26	195

Outline Drawing ZWS5 Series



LEAD CUT LESS THAN 3mm

21±1

50±1

25

3.5

3.5

118±0.5

R2-4

8 5 10

L INPUT

N

FG

CN1

NAME PLATE

COMPONENT SIDE

4-φ3.5 (MOUNTING HOLES)

OUTPUT

VR1

CN2

15 20 30 40

10.5

14.5

43±0.5

111.5

125±1

SEE NOTE 1

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