



- Universal Input (85 - 265VAC)
- Power Factor Corrected
- Floating Adjustable Fourth Output
- Low Profile <1U High

## ZWQ Series

80W to 170W  
Quad Output Power Supplies

### Key Market Segments & Applications

- Factory Automation
- Test & Measurement
- Light Industrial Equipment

### ZWQ Features and Benefits

#### Features

- Low Profile
- Adjustable Main and Fourth Output
- Power Factor Corrected
- Floating Fourth Output

#### Benefits

- Fits in 1U Enclosures
- System Optimization
- Supports Global Use
- Can be used as Positive or Negative Output

### Specifications

Items	Models		ZWQ80 -5222	ZWQ80 -5223	ZWQ80 -5224	ZWQ80 -5225	ZWQ130 -5222	ZWQ130 -5223	ZWQ130 -5224	ZWQ130 -5225
Input Voltage	-	-	85-265VAC (47-63Hz), 120-370VDC							
Input Current	(1)	A	1.6 / 0.8				2.6 / 1.3			
Inrush Current	(1)	A	14/28							
Power Factor	-	-	Meets EN61000-3-2							
Temperature Coefficient	-	-	<0.02%/°C							
Max Output Power (convection)	W	-	80				130			
Max Output Power (forced air)	W	-	104	88.7	104	104	170	149.6	170	170
Overpower Protection	(2)	W	>109	>93	>109	>109	>173	>152	>173	>173
Minimum Load	A	-	V1: 0.9A Conv, 1.4A Forced Air				V1: 1.5A Conv, 2.1A Forced Air			
Output Voltage Accuracy	%	-	±5% for outputs V2 and V3							
Efficiency (Typ)	%	-	72							
Hold Up Time	(1)	ms	20							
Leakage Current	-	-	0.75mA max, 0.2mA (Typ) at 100VAC / 0.44mA(Typ) at 230VAC							
Remote On / Off	-	-	See installation manual (Not available with /A cover option)							
Oper Temp (convection cooled)	-	-	-10°C to 60°C, derate linearly to 50% load from 40°C to 60°C. (3)							
Oper Temp (forced air cooled)	-	-	-10°C to 70°C, derate linearly to 50% load from 50°C to 70°C. (>30cfm airflow) (3)							
Storage Temperature	-	-	-30°C to +85°C							
Humidity (non condensing)	-	-	Operating: 30 - 90% RH; Non-operating 10-95% RH							
Withstand Voltage	-	-	I/P~Gnd 2kVAC (20mA), I/P~O/P 3kVAC (20mA), O/P~Gnd 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/s <sup>2</sup> constant X, Y, Z 1 hour							
Shock	-	-	< 196.1 m/s <sup>2</sup>							
Safety Agency Approvals	-	-	IEC/UL/CSA/EN62368-1, 60950-1, CE Mark							
Conducted & Radiated EMI	-	-	EN55011, EN55022-B, FCC Class B, VCCI-B							
Immunity	-	-	EN61000-4-2,-3,-4,-5,-6,-8,-11							
Weight (Typ)	g	-	550				730			
Size (W x H x D)	mm	-	93.5 x 35 x 210				106 x 35 x 225			
Warranty	yr	-	1							

#### Notes:

- (1) 100/200VAC  
(2) Avoid prolonged operation in overload

- (3) /A version - additional derating - See installation manual

Model Selector									
MODEL	Output	Voltage (V)	Voltage Adjust Range (V)	Convect. (A)	Peak or Forced Air (A)(4)	Max Load Reg (mV)	Max Line Reg (mV)	Ripple Noise (mV)	OVP (V)(5)
ZWQ80-5222	V1	5	5.0-5.25	8.0	10.0	100	20	120	5.7-7.0
	V2	+12/15*	+12/+15	2.0	2.5	300	48	150	16.5-22.5
	V3	-12/15*	-12/-15	2.0	2.5	300	48	150	16.5-22.5
	V4	12	11.4-12.6	3.0	4.0	300	48	150	13.8-16.2
ZWQ80-5223	V1	5	5.0-5.25	8.0	10.0	100	20	120	5.7-7.0
	V2	+12/15*	+12/+15	2.0	2.5	300	48	150	16.5-22.5
	V3	-12/15*	-12/-15	2.0	2.5	300	48	150	16.5-22.5
	V4	3.3	2.0-3.63	7.0	9.0	100	20	120	3.79-4.95
ZWQ80-5224	V1	5	5.0-5.25	8.0	10.0	100	20	120	5.7-7.0
	V2	+12/15*	+12/+15	2.0	2.5	300	48	150	16.5-22.5
	V3	-12/15*	-12/-15	2.0	2.5	300	48	150	16.5-22.5
	V4	24	22.8-25.2	1.5	2.0	400	96	200	27.6-32.4
ZWQ80-5225	V1	5	5.0-5.25	8.0	10.0	100	20	120	5.7-7.0
	V2	+12/15*	+12/+15	2.0	2.5	300	48	150	16.5-22.5
	V3	-12/15*	-12/-15	2.0	2.5	300	48	150	16.5-22.5
	V4	5	2.0-5.25	7.0	9.0	100	20	120	5.7-7.0
ZWQ130-5222	V1	5	5.0-5.25	15.0	19.0	100	20	120	5.7-7.0
	V2	+12/15*	+12/+15	4.0	5.0	300	48	150	16.5-22.5
	V3	-12/15*	-12/-15	4.0	5.0	300	48	150	16.5-22.5
	V4	12	11.4-12.6	4.0	5.0	300	48	150	11.4-12.6
ZWQ130-5223	V1	5	5.0-5.25	15.0	19.0	100	20	120	5.7-7.0
	V2	+12/15*	+12/+15	4.0	5.0	300	48	150	16.5-22.5
	V3	-12/15*	-12/-15	4.0	5.0	300	48	150	16.5-22.5
	V4	3.3	2.0-3.63	10.0	12.0	100	20	120	3.79-4.95
ZWQ130-5224	V1	5	5.0-5.25	15.0	19.0	100	20	120	5.7-7.0
	V2	+12/15*	+12/+15	4.0	5.0	300	48	150	16.5-22.5
	V3	-12/15*	-12/-15	4.0	5.0	300	48	150	16.5-22.5
	V4	24	22.8-25.2	2.0	2.5	400	96	200	27.6-32.4
ZWQ130-5225	V1	5	5.0-5.25	15.0	19.0	100	20	120	5.7-7.0
	V2	+12/15*	+12/+15	4.0	5.0	300	48	150	16.5-22.5
	V3	-12/15*	-12/-15	4.0	5.0	300	48	150	16.5-22.5
	V4	5	2.0-5.25	10.0	12.0	100	20	120	5.7-7.0

\* User selectable via connector on PCB. Outputs are floating from V1 & V4

**Notes:**

- (4) Peak current draw must not exceed 10s duration, duty cycle 35%.
- (5) OVP on any output will shut down all outputs. Recycle AC input to reset.

Options	
Suffix	Description
blank	No cover or L Bracket
/L	L Bracket
/A	Cover and L Bracket





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