LED Industrial Test Comm Broadcast

50W to 300W Single Output Power Supplies, Low Cost & High Reliability Worldwide Use

Features	Benefits
• 10 Year e-cap Lifetime	• Better Field Reliability
• 5 Year Warranty	• Lower Cost of Ownership
• Convection Cooling	• Easier Use

Specification

MODEL		ZWS50-BAF	ZWS75-BAF	ZWS100-BAF	ZWS150-BAF	ZWS300-BAF
ITEMS						
AC Input Voltage range	-	85 - 265VAC (47-63Hz)				
DC Input Voltage range	-	120 - 370VDC				
Input Current (typical) (1)	A	3V model: 0.45/0.25 others: 0.65/0.35	3V model: 0.7/0.35 others: 0.95/0.5	3V model: 0.9/0.45 others:1.3/0.65	3V model: 1.3/0.65 others: 1.9/0.95	12 & 15V models: 3.7/1.9. others:3.6/1/8
Inrush Current - cold start (1)	A	15/28	14/28	28	14/28	15/ 30
PFHC	-	All models with Active Power Factor Correction - Designed to meet EN/IEC61000-3-2				
Power Factor (1)	-	3V model: 0.96/0.85 others: 0.97/0.91	3V model: 0.96/0.85 others: 0.97/0.91	3V model: 0.96/0.89 others:0.98/0.93		0.97/0.93
Temperature Coefficient	-	<0.02%/ °C				
Hold Up time (Typ) (1)	ms	20ms				18ms (typ) at 100Vac & full Load (20ms at 100Vac & 80% load)
Leakage Current (3)	mA	0.2 / 0.4 max.				
Remote On/Off	-	Option (see table next page)				
Cooling	-	All models are convection cooling				
Operating Temperature (2) (Convection)	-	-10°C to +70°C, derate linearly to 50% load from 50°C to 70°C				-10° to +70°C, derate linearly to 40% load from 45° to 70°C (from 40°C for 12 & 15V models)
Operating Temperature (2) (Forced Air)		Refer to output derating specifications				
E-cap lifetime (5)	-	Up to 10 years; 45°C ambient, 100% full load, 24 hours				
Storage Temperature	°C	-30°C to +75°C				
Humidity (non condensing)	-	Operating: 30 - 90% RH, Storage: 10 - 90% RH				
Withstand Voltage	-	I/P to Gnd 2kVAC (10mA), I/P to O/P: 3kVAC (10mA), O/P to Gnd: 500VAC (20mA) for 1mn				
Isolation Resistance	Ω	>100MΩ at 25°C & 70%RH, Output to Gnd: 500VDC				
Vibration (non operating)	-	10 - 55Hz (1 minute sweep), 19.6m/s^2 constant X, Y, Z 1 hour each				
Shock	-	<196.1 m/s				
Safety agency Certifications	-	UL60950-1, CSA60950-1, EN60950-1, EN50178 (OV II), CE Mark				
Conducted & Radiated EMI	-	EN55011 / EN55022-B, FCC-B, VCCI-B				
Immunity	-	IEC61000-6-2 ; IEC61000-4-2, -3, -4, -5, -6, -8, -11				
Weight (Typ)	g	165	230	290	390	540
Size (W x H x D) (4)	mm	50 x 26 x 132	50 x 33 x 150	62 x 33 x 155	75 x 37 x 160	84 x 42 x 180
Warranty	yrs	5				

Notes:

(1) 100 / 200VAC Input, nominal output voltage and max. output power
(2) Refer to Thermal Specifications & Application Notes
(3) 100 / 230VAC input
(4) Refer to Outline Drawing
(5) Refer to Reliability Data

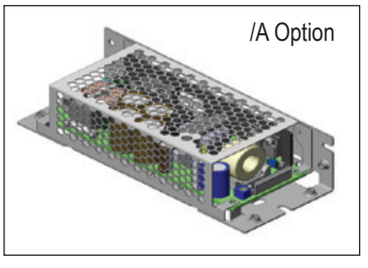
Model Selector

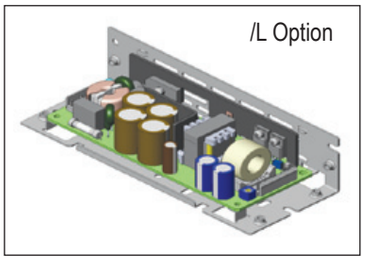
Model	Output Voltage (V)	Output Adjust Range (V)	Max. Current (A)	Max. Output Power (W)	Efficiency at 200VAC (%)	Max. Ripple and Noise (mv pk-pk)	Load Reg. (mV)	Line Reg. (mV)	OCP (A)	OVP (V)
ZWS50BAF-3	3.3	2.97-3.63	10	33.0	78	160	40	20	>10.5	3.79-4.95
ZWS50BAF-5	5	4.5-5.5	10	50.0	84	160	40	20	>10.5	5.75-7.0
ZWS50BAF-12	12	10.8-13.2	4.3	51.6	85	180	96	48	>4.51	13.8-16.2
ZWS50BAF-15	15	13.5-16.5	3.5	52.5	86	180	120	60	>3.67	17.3-20.3
ZWS50BAF-24	24	21.6-26.4	2.1	50.4	87	180	150	96	>2.2	27.6-32.4
ZWS50BAF-48	48	39.5-52.8	1.1	52.8	86	240	240	192	>1.15	55.2-64.8
ZWS75BAF-3	3.3	2.97-3.63	15	49.5	78	160	40	20	>15.7	3.79-4.95
ZWS75BAF-5	5	4.5-5.5	15	75.0	84	160	40	20	>15.7	5.75-7.0
ZWS75BAF-12	12	10.8-13.2	6.3	75.6	85	180	96	48	>6.61	13.8-16.2
ZWS75BAF-15	15	13.5-16.5	5	75.0	86	180	120	60	>5.25	17.3-20.3
ZWS75BAF-24	24	21.6-26.4	3.2	76.8	87	180	150	96	>3.36	27.6-32.4
ZWS75BAF-48	48	39.5-52.8	1.6	76.8	88	240	240	192	>1.68	55.2-64.8
ZWS100BAF-3	3.3	2.97-3.63	20	66.0	84	160	40	20	>21.0	3.79-4.95
ZWS100BAF-5	5	4.5-5.5	20	100.0	86	160	40	20	>21.0	5.75-7.0
ZWS100BAF-12	12	10.8-13.2	8.5	102.0	88	180	96	48	>8.93	13.8-16.2
ZWS100BAF-15	15	13.5-16.5	6.7	100.5	88	180	120	60	>7.04	17.3-20.3
ZWS100BAF-24	24	21.6-26.4	4.3	103.2	89	180	150	96	>4.52	27.6-32.4
ZWS100BAF-48	48	39.5-52.8	2.1	100.8	90	240	240	192	>2.21	55.2-64.8
ZWS150BAF-3	3.3	2.97-3.63	30	99	84	160	40	20	>31.5	3.79-4.95
ZWS150BAF-5	5	4.5-5.5	30	150	87	60	40	20	>31.5	5.75-7
ZWS150BAF-12	12	10.8-13.2	12.5	150	88	180	96	48	>13.13	13.8-16.2
ZWS150BAF-15	15	13.5-16.5	10	150	89	180	120	60	>10.5	17.3-20.3
ZWS150BAF-24	24	21.6-26.4	6.3	151.2	90	180	150	96	>6.62	27.6-32.4
ZWS150BAF-48	48	39.5-52.8	3.2	153.6	91	240	240	192	>3.36	55.2-64.8
ZWS300BAF-12	12	9.6-13.2	25.0(1)	300(1)	89	180	100	48	>26.25	13.8-16.2
ZWS300BAF-15	15	13.5-16.5	20.0(1)	300(1)	89	180	120	60	>23.1	17.3-20.3
ZWS300BAF-24	24	21.6-27.5	12.5(1)	300(1)	91	180	150	96	>14.7	28.8-33.6
ZWS300BAF-36	36	32.4-39.6	8.4(1)	302.4(1)	91	300	240	144	>9.87	41.4-48.6
ZWS300BAF-48	48	39.5-52.8	6.3(1)	302.4(1)	91	300	240	192	>7.35	55.2-64.8

Notes: (1) Values given for Convection Cooling: refer to detailed Specifications & Application Notes for 0.7m/s & 1.4m/s Forced Air

Option Description

	Suffix
L-Plate and Cover	/A
L-Plate	/L
Conformally coated PCB	/CO2
Fixed Output Voltage	/FV
Remote on/off	/R
Terminal Block	/T
Terminal Block with L-Plate	/TL
Terminal Block with L-Plate & Cover	/TA





ZWS-BAF Option Matrix

Power	/A	/L	/CO2	/FV available for 12 24 & 48V models	/R	/T	/TL	/TA
50W	✓	✓	✓	✓				
75W	✓	✓	✓	✓				
100W	✓	✓	✓	✓	✓			
150W	✓	✓	✓	✓	✓			
300W	✓	✓	✓		✓	✓	✓	✓

Note: Contact Sales for availability of /TL option