

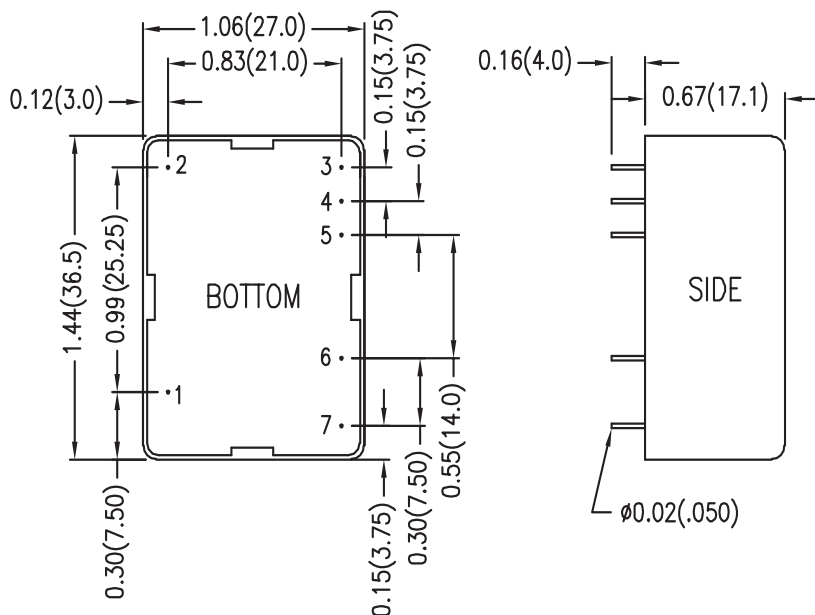


- Efficiency up to 77%
- Universal Input Range 85-264 VAC
- Single and Dual Output
- 3000VAC Isolation
- Short Circuit Protection
- Over Load & Over Voltage Protection
- MTBF > 300,000 Hours
- UL60950 Approved
- RoHS Compliant



4 Watt AC/DC Module Single & Dual Output Series

Model Number	Voltage Output (VDC)	Current			Efficiency @ Max Load (%, Typ)	Capacitive Load Max
		Input 115VAC, 60Hz		Output Max (mA)		
		@ No Load (mA)	@ Max Load (mA)			
PK4J85S3	3.3	10	82	1200	70	1200 μ F
PK4J85S5	5	10	82	800	72	800 μ F
PK4J85S9	9	10	77	444	75	440 μ F
PK4J85S12	12	10	76	333	76	330 μ F
PK4J85S15	15	10	76	267	76	260 μ F
PK4J85S24	24	10	76	167	77	160 μ F
PK4J85D53	+5 +3.3	10	72	600 150	72	5600 μ F 4700 μ F
PK4J85D125	+12 +5	10	72	250 120	75	330 μ F 4700 μ F
PK4J85D12	\pm 12	10	76	\pm 166	77	330 μ F (each output)
PK4J85D15	\pm 15	10	76	\pm 133	77	260 μ F (each output)



Pin Connections (NC) Not Connected			
Pin	Single	Dual	D53/D125
1		NC	
2		NC	
3	+Vout	+Vout	+Vout1
4	-Vout	Common	Common
5	NP	-Vout	+Vout2
6		AC(N) - AC Neutral	
7		AC(L) - AC LINE	



See Model Selection Table for Model Specific Parameters

Input Parameters		Min	Typ	Max	Units
Input Voltage Range		85		264	VAC
		120		370	VDC
Input Frequency		47		440	Hz
Switching Frequency			130		kHz
Inrush Current (Cold Start at 25°C)	115VAC			15	A
	230VAC			25	A
Output Parameters		Min	Typ	Max	Units
Output Voltage Accuracy Single & Dual Models D53 and D125 Models			±1.0 ±2.0	±2.0 ±5.0	%
Load Regulation I _o = Min. to Max. 3.3V Output Model 5-24V Output Model D53 and D125 Vo1 D53 and D125 Vo2			±1.0 ±0.5 ±0.5 ±2.5	±1.5 ±1.0 ±1.0 ±5.0	%
Line Regulation V _{in} =Min. to Max. Single & Dual Models D53 and D125 Models Vo1 D53 and D125 Models Vo2			±0.5 ±0.5 ±1.0	±1.0 ±1.0 ±3.0	%
Ripple & Noise (20MHz) 3.3 & 5 VDC Output Models Other Output Models			100 0.8	150 1.0	mV P-P %V _{PP} of V _o
Minimum Load Single & Dual Models D53 and D125 Models			0 25		%I _{nom}
Over Voltage Protection Zener diode clamp			120		% of V _o
Temperature Coefficient			±0.01	±0.02	% / °C
Overshoot				5	% V _{out}
Current Limitation Foldback, Auto-recovery (longterm overload condition may cause damage)		105			% I _{nom}
Short Circuit Protection		Hiccup mode, indefinite (automatic recovery)			

Input Fuse Selection Table	
External Fuse (Recommended)	1.0A Slow-Blow Type

External fusing should be used for system protection due to a catastrophic failure. See ConTech website for Fusing Application Notes to determine the correct fuse.

General Specifications		Min	Typ	Max	Units
Isolation Voltage, 60 seconds		3000			VAC
Isolation Resistance 500VDC		100			Mohms
Hold-up Time (115VAC, 60Hz)			20		ms
Operating Temperature (Ambient)		-25		+60	°C
Storage Temperature		-40		+85	°C
Over Temperature Protection		at 90°C (automatic recovery at 67°C)			
Power Derating		+50°C to +60°C		0.3W/°C	
Humidity				95	%
MTBF MIL-HDBK-217F @25°C, Ground Benign		330			K Hours
Cooling		Free-Air Convection			
Case Size		1.44 x 1.06 x 0.67 inches 36.5 x 27.0 x 17.1 mm			
Case Material		Plastic Resin + Fiberglass (UL94V-0)			
Weight		26g			
Agency Approvals		UL60950 Approved			

Notes:

- Specifications typical at T_a=+25°C, 115VAC, 60Hz input voltage, rated output current unless otherwise noted.
- ConTech power converters require a minimum output loading to maintain specified regulation. Operation under no-load conditions will not damage these modules; however, they may not meet all specifications listed.
- The series has a limitation of a maximum connected capacitance at the output. The power module may be operated in current limiting mode during start-up, affecting the ramp-up and the startup time.
- Ripple & Noise measurement bandwidth is 0-20MHz.
- Long term short circuit operation may cause damage to the unit.
- Water washability - ConTech AC/DC converters are designed to withstand most solder/wash processes. Careful attention should be used when assessing the applicability in your specific manufacturing process. Converters are not hermetically sealed.
- See ConTech website for Definition of Terms, Application Notes, and Test Setups and Parameters. www.ConTech-us.com/appnotes.html.
- Specifications subject to change without notice.
- See ConTech website www.ConTech-us.com/pdf/rohs.pdf for RoHS Statement.

