



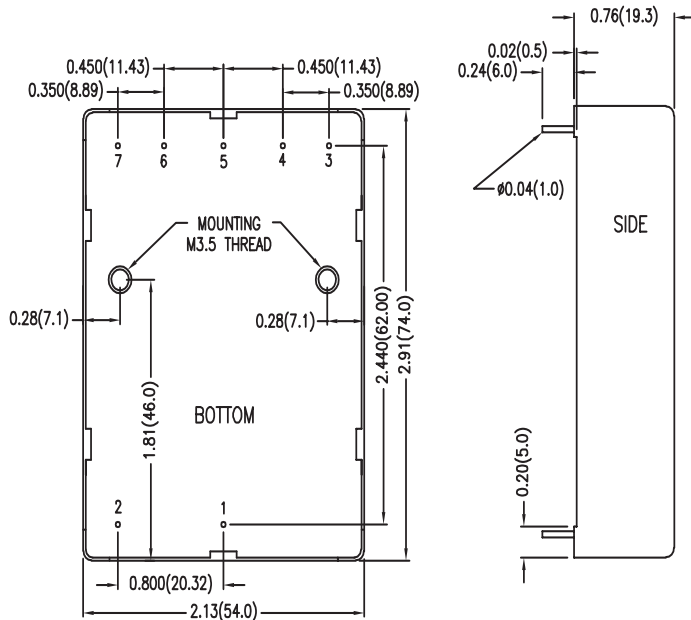
15 Watt AC/DC Module Single, Dual and Triple Output Series

- Efficiency up to 79%
- Universal Input Range 85-265 VAC
- Single, Dual and Triple Output Modules
- 3000VAC Isolation
- Short Circuit Protection
- Over Voltage Protection
- MTBF > 280,000 Hours
- UL60950 Approved
- RoHS Compliant



Model Number	Voltage Output (VDC)	Current				Efficiency @ Max Load (% Typ)	Capacitive Load Max
		Input 115VAC, 60Hz		Output			
		@ No Load (mA)	@ Max Load (mA)	Min (mA)	Max (mA)		
PK15J85S5	5	30	290	300	3000	75	3900 μ F
PK15J85S12	12	30	275	125	1250	79	2200 μ F
PK15J85S15	15	30	275	100	1000	79	2200 μ F
PK15J85S24	24	30	275	63	625	79	1000 μ F
PK15J85S48	48	30	273	30	310	79	680 μ F
PK15J85D12	\pm 12	30	275	\pm 65	\pm 650	79	1500 μ F (each output)
PK15J85D15	\pm 15	30	275	\pm 50	\pm 500	79	1500 μ F (each output)
PK15J85D512	5	30	302	150	1500	72	2000 μ F
	*12			63	625		1500 μ F
PK15J85T512	5	30	290	200	2000	74	2200 μ F
	*12			20	200		1500 μ F
	*-12			-20	-200		1500 μ F
PK15J85T515	5	30	284	200	2000	74	2200 μ F
	*15			15	150		1500 μ F
	*-15			-15	-150		1500 μ F

*Output voltage accuracy 4% max.



Dimensions are inches (mm) unless noted

Tolerance: Inches Millimeters
 X.XX \pm 0.02 X.X \pm 0.5
 X.XXX \pm 0.010 X.XX \pm 0.25
 Pin \pm 0.004 \pm 0.1

Pin Connections (NC) Not Connected				
Pin	Single	Dual (D12, D15)	Dual (D512)	Triple
1	AC(N) - AC Neutral			
2	AC(L) - AC Line			
3	No Pin	No Pin	No Pin	-Vout3
4	-Vout	-Vout	-Vout2	Common
5	No Pin	Common	+Vout2	+Vout2
6	+Vout	+Vout	-Vout1	-Vout1
7	No Pin	No Pin	+Vout1	+Vout1

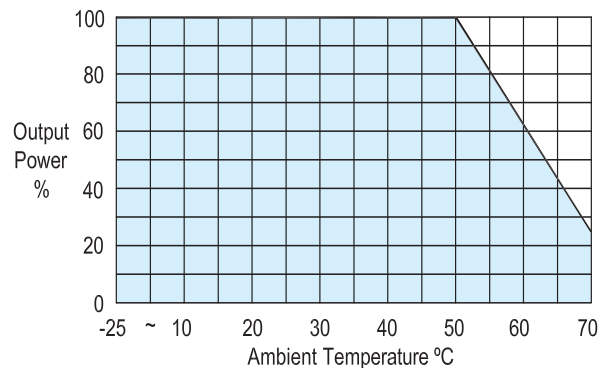


See Model Selection Table for Model Specific Parameters

Input Parameters		Min	Typ	Max	Units
Input Voltage Range		85		265	VAC
		120		370	VDC
Input Frequency		47		440	Hz
Switching Frequency			100		kHz
Inrush Current (Cold Start at 25°C)	115VAC			15	A
	230VAC			30	A
Output Parameters		Min	Typ	Max	Units
Output Voltage Accuracy			±1.0	±2.0	%
Load Regulation I _{out} = Min. to Max.					
Single Output Models			±0.5	±1.0	
Dual / Triple Output Models			±2.5	±5.0	
Line Regulation V _{in} =Min. to Max.			±0.5	±1.0	%
Cross Regulation - Dual Positives / Triple Output (Note 5)	V _{o1}		±1.0		%
	V _{o2}		±2.5		%
	V _{o3}		±2.5		%
Ripple & Noise (20MHz) 3.3 and 5.0VDC Output Models Other Output Models			1.5 0.8	1.8 1.0	%V _{PP} of V _o
Over Voltage Protection Zener diode clamp			120		% of V _o
Temperature Coefficient			±0.01	±0.02	% / °C
Overshoot				5	%
Current Limitation 85VAC Hiccup Technique, auto recovery		105			%
Short Circuit Protection		Hiccup mode, indefinite (automatic recovery)			
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		+71	°C
Storage Temperature		-40		+85	°C
Humidity				95	%
MTBF MIL-HDBK-217F @25°C, Ground Benign		280			K Hours
Cooling		Free-Air Convection			
Case Size		2.91 x 2.13 x 0.76 inches 74.0 x 54.0 x 19.3 mm			
Case Material		Plastic Resin + Fiberglass (UL94V-0)			
Weight		114g			
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.
- Cross Regulation - Measured output I_o = 20% to 100% of rated load. Other outputs are set at 50% of rated load.
- Peak current can not be drawn from all outputs at the same time.
- Floating (or isolated) output of a power supply that is not connected to any other output.
- 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.



Derating Curve

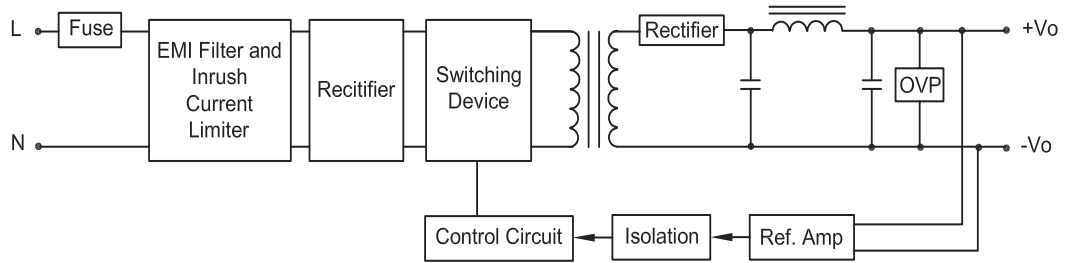
To avoid exceeding the maximum temperature rating of the components inside the power module, the case temperature must be kept below 90°C.

Input Fuse Selection Table	
Built In Fuse	2A - 250VAC
External Fuse (Recommended)	1.5A Slow-Blow Type

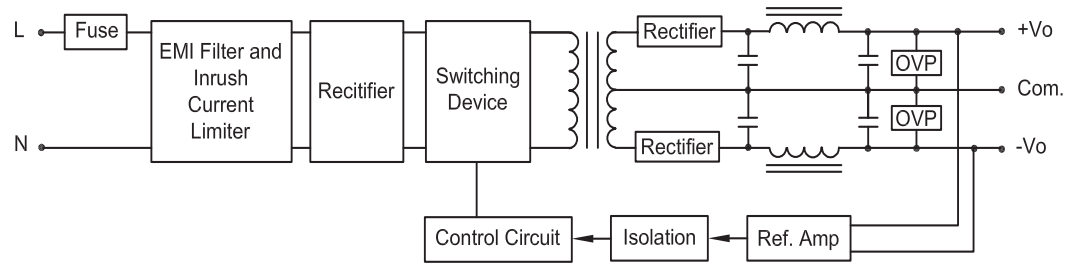
External fusing should be used for system protection due to a catastrophic failure. See Calnex website for Fusing Application Notes to determine the correct fuse.

Block Diagrams

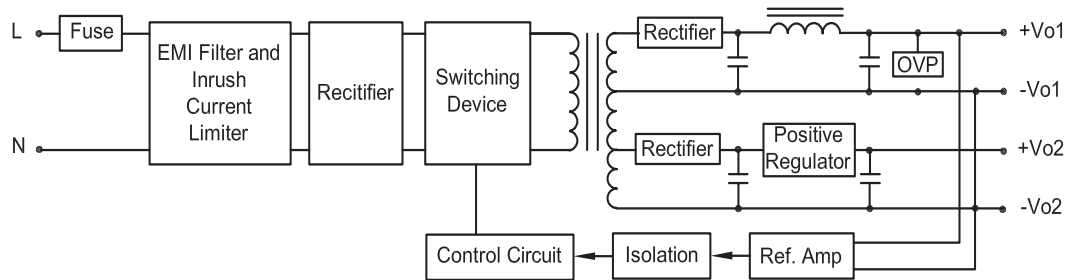
Single Output



Dual Output (D12, D15)



Dual Output (D512)



Triple Output

