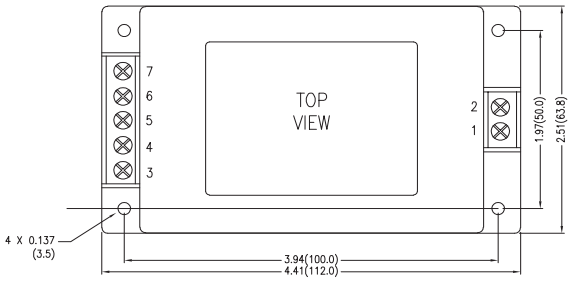
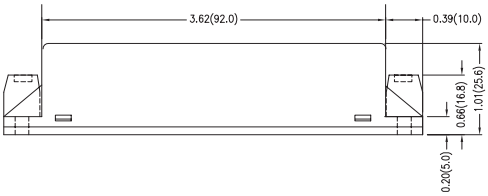
30 Watt AC/DC Chassis Module: Single Output Series

- Efficiency up to 80%
- Universal Input Range 85-265 VAC
- Single Output Modules
- 3000VAC Isolation
- Short Circuit Protection
- Over Voltage Protection
- MTBF > 250,000 Hours
- UL60950 Approved
- RoHS Compliant

Model Number	Voltage	Current				Efficiency	Capacitive Load
	Output	Input 115VAC, 60Hz		Output			
	(VDC)	@ No Load (mA)	@ Max Load (mA)	Max (mA)	Peak (mA)	@ Max Load (%, Typ)	Max
PM30J85S12	12	60	543	2500	-----	88	1200 µF
PM30J85S24	24	60	543	1250	-----	88	560 µF

Pin Connections (NC) Not Connected	
Pin	**Single**
1	AC(N) - AC Neutral
2	AC(L) - AC Line
3	+Vout
4	NC
5	-Vout
6	NC
7	NC



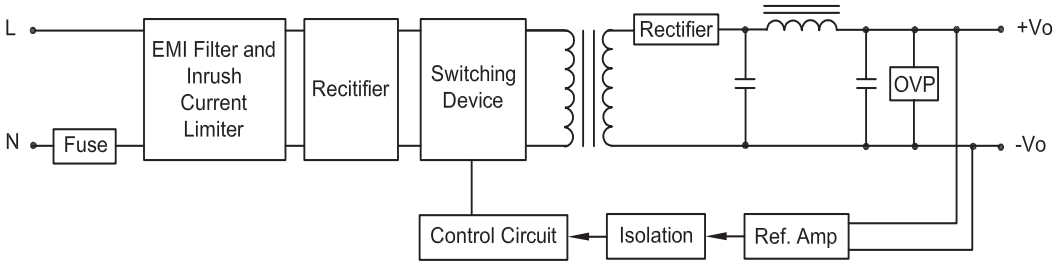


Dimensions are inches (mm) unless noted

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

Block Diagrams

Single Output

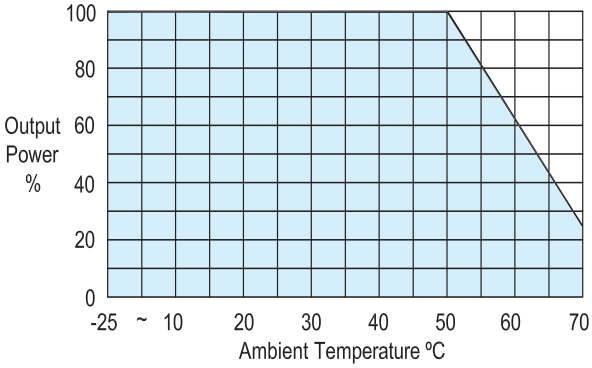


See Model Selection Table for Model Specific Parameters

Input Parameters		Min	Typ	Max	Units
Input Voltage Range		85		265	VAC
		90		370	VDC
Input Frequency		47		440	Hz
Switching Frequency		65	100		kHz
InrushCurrent (Cold Start at 25ºC)	115VAC			30	A
	230VAC			60	A
Output Parameters		**Min**	**Typ**	**Max**	**Units**
Output Voltage Accuracy			±1.0	±2.0	%
Load Regulation Iout = Min. to Max.				±1.0	%
Line Regulation Vin=Min. to Max.				±0.5	%
Ripple & Noise (20MHz) Other Output Models				1.0	of Vo
Over Voltage Protection Zener diode clamp			125		% of Vo
Temperature Coefficient			±0.02		% / ºC
Overshoot				5	%
Current Limitation 85VAC Hiccup Technique, auto recovery		110			%
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)		-10		+71	ºC
Storage Temperature		-40		+85	ºC
Humidity				95	%
MTBF MIL-HDBK-217F @25ºC, Ground Benign		250			K Hours
Cooling		Free-Air Convection			
Case Size		4.41 x 2.51 x 1.01 inches 112.0 x 63.8 x 25.6 mm			
Case Material		Plastic Resin + Fiberglass (UL94V-0)			
Weight		191g			
Agency Approvals		UL60950 Approved			

Notes:

1. Specifications typical at Ta=+25ºC, 115VAC, 60Hz input voltage, rated output current unless otherwise noted.
2. 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.
3. 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.
4. Ripple & Noise measurement bandwidth is 0-20MHz.
5. Cross Regulation - Measured output Io = 20% to 100% of rated load. Other outputs are set at 50% of rated load.
6. Peak current can not be drawn from all outputs at the same time.
7. Floating (or isolated) output of a power supply that is not connected to any other output.
8. Long term short circuit operation may cause damage to the unit.
9. 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.
10. See ConTech website for Definition of Terms, Application Notes, and Test Setups and Parameters. www.ConTech-us.com/appnotes.html
11. Specifications subject to change without notice.
12. 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 90ºC.

Input Fuse Selection Table	
Built In Fuse	6A - 250VAC
External Fuse (Recommended)	1.5A 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.