



FSK15 Series AC/DC Converters

Key Features

- Encapsulated, compact case
- Industry standard pin out
- Universal input
- HI-POT tested
- Inrush current limiting
- Over-load protection
- Over-temperature protection
- Built-in EMI filter
- Fixed switching frequency
- High efficiency
- 2 year warranty

Model Configurations

Output Power (Max.)	Input Voltage	Output Voltage	Output Current (Min.)	Output Current (Max.)	Efficiency (Typ.)	Line Reg.	Load Reg.	Model Number
9.0W	Universal	3.3V	0A	3.0A	75%	±1.0%	±1.0%	FSK-S15-3R3U
15.0W	Universal	5V	0A	3.0A	75%	±1.0%	±1.0%	FSK-S15-5U
15.6W	Universal	12V	0A	1.3A	78%	±1.0%	±1.0%	FSK-S15-12U
15.0W	Universal	15V	0A	1.0A	78%	±1.0%	±1.0%	FSK-S15-15U
15.6W	Universal	24V	0A	0.65A	78%	±1.0%	±1.0%	FSK-S15-24U





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Input

Parameter	Conditions/Description	Min	Nom	Max	Units
Input voltage	AC input	85		264	VAC
	DC input	110		340	VDC
Line frequency		47		400	Hz
Input current	@110VAC			0.31	Amps
	@220VAC			0.16	Amps
Inrush current (cold start)	@110VAC			30	Amps
	@220VAC			60	Amps
Leakage current	@110VAC			0.5	mA
	@220VAC			0.75	mA

Output

Parameter	Conditions/Description	Min	Nom	Max	Units
Set point accuracy		-2%		+2%	
Line regulation ² (Low line to high line)	Single & dual output models	-1.0%		+1.0%	
Load regulation, static ²	Main output	-1.0%		+1.0%	
	Aux. outputs	-2.0%		+2.0%	
Load regulation, dynamic ²	Main output	-3.0%		+3.0%	
Temperature drift		-1.0%		+1.0%	
Hold-up time		10			ms
Minimum load		0.0			Amps
Ripple & noise	20 MHz bandwidth			1.0%Vout	mVpp

Note 2. To maintain specified regulation, it is required to have a minimum 10% load on the main output, and a 20% load on each auxillary output. Under no load conditions, operations will not damage the devices, but all specified regulation may not be met.

Protection

Parameter	Conditions/Description	Min	Nom	Max	Units
Over-current	Continuous auto recovery ³	105%		135%	
Over-voltage	Internal clamping	115%		140%	
Over-temperature	Thermal shut down			145	°C

Note 3. Continuous operation in a protected state may compromise long-term reliability.

General

Parameter	Conditions/Description	Min	Nom	Max	Units
Efficiency	Typical at full load		75%		
Isolated Dielectric withstand	Input/Output	3K			VAC
	Input/FG	2K			VAC
	Output/FG	0.5K			VAC
Isolated Insulation resistance	Input/Output @ 500VDC	100M			Ohms
	Input/FG	100M			Ohms
	Output/FG	70M			Ohms
Agency standards	Designed to meet UL1950, EN60950, CISPR22, CE, CB, FCC class B				
Case material			Zn		
Material flammability			94 V-0		
MTBF	MIL-HDBK-217F		250k		hours
Operating temperature		-10		+60	°C
Storage temperature		-20		+70	°C
Vibration	10G, 10~55Hz, for 3 minutes	10		55	Hz
Impact	50G on X, Y & Z-axis, for 11ms,				
Humidity	Operating (non-condensing)	20%		90%	RH
Weight				100	grams

Pin assignments

Single Output	
1.	FG
2.	AC(N)
3.	AC(L)
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4.	No pin
5.	+Vout
6.	No pin
7.	-Vout
8.	No pin

Dimensions

All dimensions are in mm.

