



FSK-S30 Series AC-DC Converter

Features

- Encapsulated compact case
- High efficiency
- Universal input
- Board mounting technology
- Built in EMI filter
- 100kHz fixed frequency
- Fixed output voltage
- Thermal shutdown
- Short circuit protection
- Low output ripple and noise
- Isolated output
- 2 year warranty



Model Number	Input Voltage	Output Voltage1	Power Max.	Ripple & Noise Max	Efficiency (Typ.)
FSK-S30-3R3U	AC 85~264V / DC110~340V	3.3V@6.0A	19.8w	80mVp-p	78
FSK-S30-5U	AC 85~264V / DC110~340V	5V@6.0	30w	80mVp-p	80
FSK-S30-12U	AC 85~264V / DC110~340V	12V@2.5A	30w	120mVp-p	83
FSK-S30-15U	AC 85~264V / DC110~340V	15V@2.0A	30w	150mVp-p	83
FSK-S30-24U	AC 85~264V / DC110~340V	24V@1.25A	30w	200mVp-p	86

Electrical specifications

Input	
Voltage	AC85~264 (or DC 110~340V)
Current	0.49A max. @ 110VAC / 0.25 max. @ 220VAC
Frequency	47~440Hz max. (50~60Hz typ.)
Efficiency	80% min.
Inrush current (at cold start)	30A max. @ 110VAC / 60A max. @ 220VAC
Leakage current	0.5mA max. @ 110VAC / 0.75mA max. @ 220VAC
Output	
Voltage tolerance	±2% (single and uncomplimentary dual) ±3% (complementary dual)
Ripple and noise	±1% typ.
Line regulation	±1% typ.
Load regulation	±1% typ.
Dynamic load regulation	±3% typ.
Temperature drift	±1% typ.
Rising time	400ms max.
Holding time	10ms min.
Protection circuit	
Output short circuit protection	Works at over 105% of rating & recovers automatically
Over temperature protection	145°C typ.
Electrically isolated	
Input / output	AC 4.8kV, 1 minute, 10mA / DC 500V, 100MOhms min.
Input / FG	AC 2kV, 1 minute, 10mA / DC 500V, 100MOhms min.
Output / FG	AC 0.5kV, 1 minute, 10mA / DC 500V, 70MOhms min.

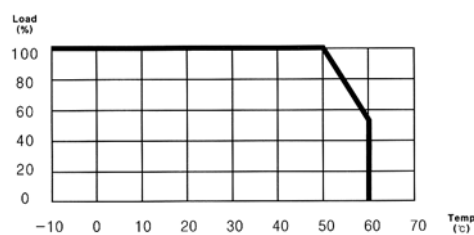
Environmental

Operating temperature range	-10°C~60°C
Storage temperature range	-20°C~70°C
Humidity	20%~90%RH
Vibration	10~55Hz @ 10G 3 minute period
Impact	50G for 11ms, once on each X, Y and Z axis
Cooling method	Natural air
MTBF	3.0 x 10 ⁵ hrs
Safety (single output)	UL (UL60950, CSA C22.2 NO.60950) : E227474 / CE (EN 60950) - through TUV EMC (single output) EN 61204-3 class B / EN 61000-3-2 / EN 61000-3-3 through TUV
Noise	Meets FCC class B

Pin assignments

Single Output	Dual Output
1. FG	1. FG
2. AC(N)	2. AC(N)
3. AC(L)	3. AC(L)
4. No connect	4. No pin
5. No pin	5. Output 1
6. Output1	6. Gnd
7. No pin	7. Output 2
8. GND	8. No pin

Derating curve



Dimensions

