

KEY FEATURES

- Switching Power Module for PCB Mountable
- Fully Encapsulated Plastic Case
- Universal Input Range 90-264VAC, 47-440 Hz
- Regulated Output and Low Ripple and Low Noise
- Isolation Class II
- Small Size: 2.07 x 1.08 x 0.93 Inches
- CE, CB, UL Approval
- 3-Year Product Warranty


ELECTRICAL SPECIFICATIONS

All specifications valid at normal input voltage, full load and +25°C after warm-up time unless otherwise stated.

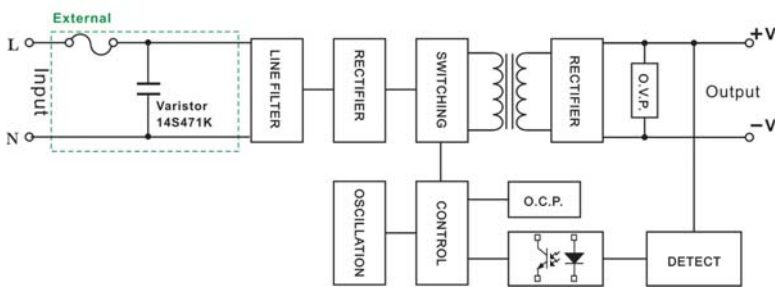
Model No.	AFC-3.3S-E1	AFC-5S-E1	AFC-12S-E1	AFC-15S-E1	AFC-24S-E1
Max Output Wattage (W)	8.25W	10W	10W	10W	10W
Input	Voltage				
	90-264 VAC or 120-370 VDC				
	Frequency (Hz)				
	47-440 Hz				
	Current (Full load)				
	220 mA max. (115 VAC) / 150 mA max. (230 VAC)				
Output	Inrush Current (<2ms)				
	23 A max. (115 VAC) / 46 A max. (230 VAC)				
	Leakage Current				
	0.25 mA max.				
	External Fuse (mandatory)				
	2 A slow blow type				
Output	Voltage (V.DC.)				
	3.3V	5V	12V	15V	24V
	Voltage Accuracy				
	±2%				
	Current (mA) max				
	2500	2000	833	667	417
	Line Regulation (LL-HL) (typ.)				
	±0.3%.				
	Load Regulation (5-100%) (typ.)				
	±0.5%.				
Protection	Minimum Load				
	0%				
	Maximum Capacitive Load (at 230VAC)				
	75000 uF	40000 uF	8500 uF	3500 uF	1200 uF
	Ripple				
	<0.2% Vout +40mV max (Vp-p)				
	Noise				
	<0.5% Vout +50mV max (Vp-p)				
	Efficiency				
	74%	79%	82%	78%	80%
Protection	Hold-up Time				
	15 ms min.				
	Over Power Protection				
Hiccup technique, auto-recovery					
Isolation	Over Voltage Protection				
	Zener diode clamp				
	Short Circuit Protection				
Hiccup mode, indefinite (automatic recovery)					
Environment	Input-Output (V.AC)				
	3000V				
	Operating Temperature				
	-40°C...+70°C (with derating)				
	Storage Temperature				
-40°C...+85°C					
Physical	Temperature Coefficient				
	±0.02%/°C				
	Humidity				
	20-85% RH				
Physical	MTBF				
	>450,000 h @ 25°C (MIL-HDBK-217F)				
	Dimension (L x W x H)				
	2.07 x 1.08 x 0.93 Inches (52.5 x 27.5 x 23.5 mm) Tolerance ±0.5 mm				
Physical	Case Material				
	Plastic resin (flammability to UL 94V-0)				
	Weight				
51 g					
Physical	Cooling Method				
	Free air convection				
General	Vibration				
	10-55 Hz 0.5 mm width/ 1 minute cycle				
Safety	Shock				
	20 G (3 directions each 3 times.)				
EMC	Agency Approvals				
	UL/cUL, CE, CB				
EMC	EMI (Conducted & Radiated Emission)				
	EN 55022 class B				
EMC	EMS (Noise Immunity)				
	EN 55024				

NOTE

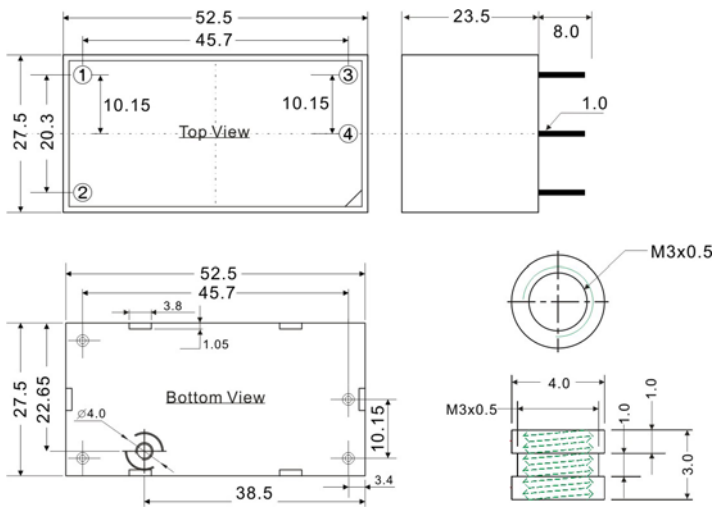
1. Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.
2. It's recommended to add Varistor 14S471K at L / N input side in parallel.
3. Please refer to our PDF file "AC-DC Application" on our website: www.archcorp.com.tw

BLOCK DIAGRAM

Single Output



MECHANICAL DIMENSION (Top View)



PIN#	Single
1	AC IN (N)
2	AC IN (L)
3	+DC OUT
4	-DC OUT

Maximum Torque 1.2 { 1.2 1 } (k g f . c m { N.m })

DERATING

