

## 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.

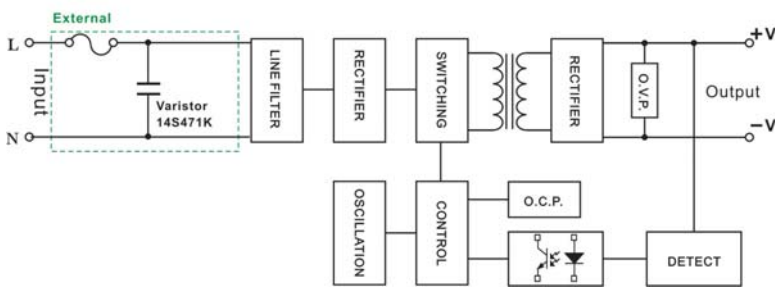
Model No.	AFC-3.3S-E1	AFC-5S-E1	AFC-12S-E1	AFC-15S-E1	AFC-24S-E1	
Max Output Wattage (W)	8.25W	10W	10W	10W	10W	
Input	Voltage					
	90-264 VAC or 120-370 VDC					
	Frequency (Hz)					
	47-440 Hz					
	Current (Full load)					
	220 mA max. (115 VAC) / 150 mA max. (230 VAC)					
Output	Inrush Current (<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%.				
	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%
Hold-up Time	15 ms min.					
Protection	Over Power Protection	Hiccup technique, auto-recovery				
	Over Voltage Protection	Zener diode clamp				
	Short Circuit Protection	Hiccup mode, indefinite (automatic recovery)				
Isolation	Input-Output (V.AC)	3000V				
Environment	Operating Temperature	-40°C...+70°C (with derating)				
	Storage Temperature	-40°C...+85°C				
	Temperature Coefficient	±0.02%/°C				
	Humidity	20-85% RH				
	MTBF	>450,000 h @ 25°C (MIL-HDBK-217F)				
Physical	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				
	Case Material	Plastic resin (flammability to UL 94V-0)				
	Weight	51 g				
	Cooling Method	Free air convection				
Genera	Vibration	10-55 Hz 0.5 mm width/ 1 minute cycle				
	Shock	20 G (3 directions each 3 times.)				
Safety	Agency Approvals	UL/cUL, CE, CB				
EMC	EMI (Conducted & Radiated Emission)	EN 55022 class B				
	EMS (Noise Immunity)	EN 55024				

**NOTE**

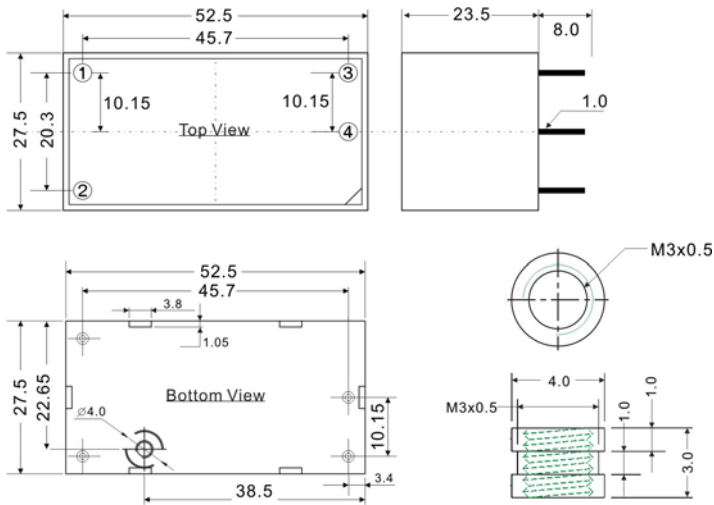
1. Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.
2. It's recommended to add Varistor 14S471K at L / N input side in parallel.
3. Please refer to our PDF file "AC-DC Application" on our website: www.archcorp.com.tw

**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**

