

**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



**ELECTRICAL SPECIFICATIONS**

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

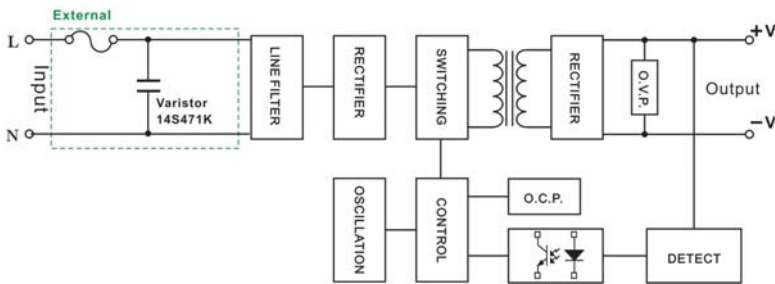
Model No.	AFC-3.3S-E1	AFC-5S-E1	AFC-12S-E1	AFC-15S-E1	AFC-24S-E1
Max Output Wattage (W)	8.25W	10W	10W	10W	10W
Input	Voltage				
	90-264 VAC or 120-370 VDC				
	Frequency (Hz)				
	47-440 Hz				
	Current (Full load)				
	220 mA max. (115 VAC) / 150 mA max. (230 VAC)				
Inrush Current (<2ms)					
23 A 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**

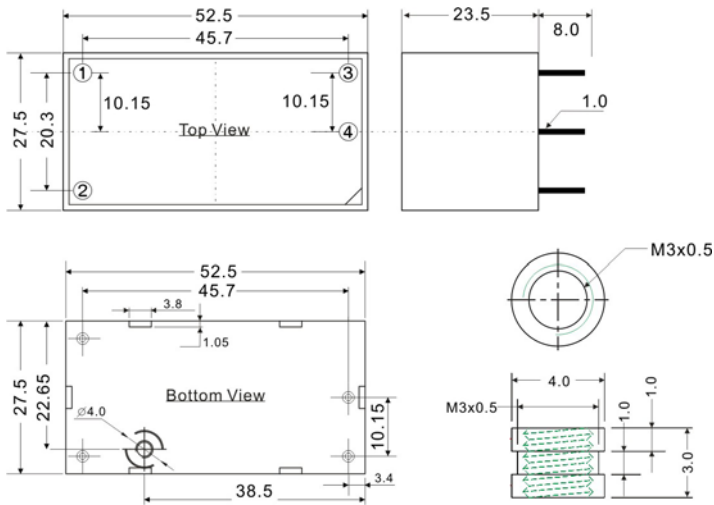
1. Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.
2. It's recommended to add Varistor 14S471K at L / N input side in parallel.
3. Please refer to our PDF file "AC-DC Application" on our website: [www.archcorp.com.tw](http://www.archcorp.com.tw)

**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 12 { 1.2 1 } ( k g f . c m { N.m } )

**DERATING**

