

## 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
- Screw Terminal For Optional
- 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.

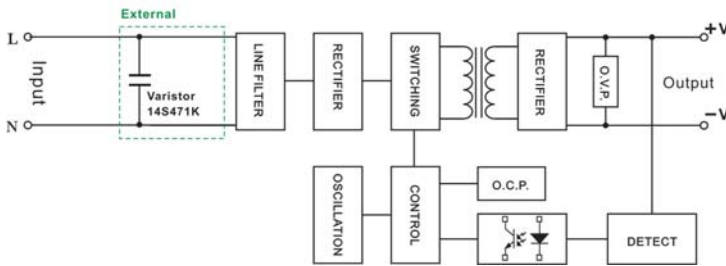
Model No.	AFC-3.3S	AFC-5S	AFC-12S	AFC-15S	AFC-24S
Max Output Wattage (W)	8.25W	10W	10W	10W	10W
Input	Voltage				
	90-264 VAC or 120-370 VDC				
	Frequency (Hz)				
	47-440 Hz				
	Current (Full load)				
	220 mA max. (115 VAC) / 150 mA max. (230 VAC)				
Output	Inrush Current (<2ms)				
	10 A max. (115 VAC) / 20 A max. (230 VAC)				
	Leakage Current				
	0.25 mA max.				
	External Fuse (recommend)				
	2 A slow blow type				
Output	Voltage (V.DC.)				
	3.3V				
	Voltage Accuracy				
	±2%				
	Current (mA) max				
	2500				
	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				
	Ripple				
	<0.2% Vout +40mV max (Vp-p)				
	Noise				
	<0.5% Vout +50mV max (Vp-p)				
	Efficiency				
	74%				
Isolation	Hold-up Time				
	15 ms min.				
	Over Power Protection				
Isolation	Hiccup technique, auto-recovery				
	Over Voltage Protection				
	Zener diode clamp				
Environment	Short Circuit Protection				
	Hiccup mode, indefinite (automatic recovery)				
	Input-Output (V.AC)				
	3000V				
	Operating Temperature				
Physical	-25°C...+70°C (with derating)				
	Storage Temperature				
	-40°C...+85°C				
	Temperature Coefficient				
	±0.02%/°C				
Genera	Humidity				
	20-85% RH				
	MTBF				
	>330,000 h @ 25°C (MIL-HDBK-217F)				
Safety	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 with Fiberglass (flammability to UL 94V-0)				
EMC	Weight				
	51 g				
EMC	Cooling Method				
	Free air convection				
EMC	Vibration				
	10-55 Hz 0.5 mm width/ 1 minute cycle				
EMC	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**

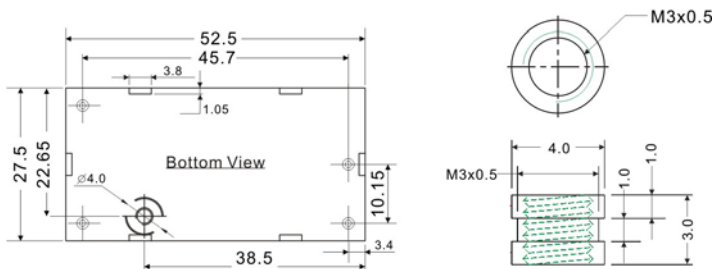
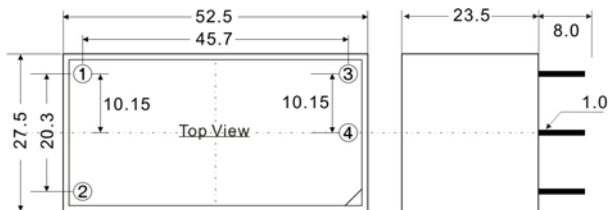
1. Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.
2. It's recommended to add Varistor 14S471K at L / N input side in parallel.
3. Please refer to our PDF file "AC-DC Application" on our website: www.archcorp.com.tw

**BLOCK DIAGRAM**

Single Output



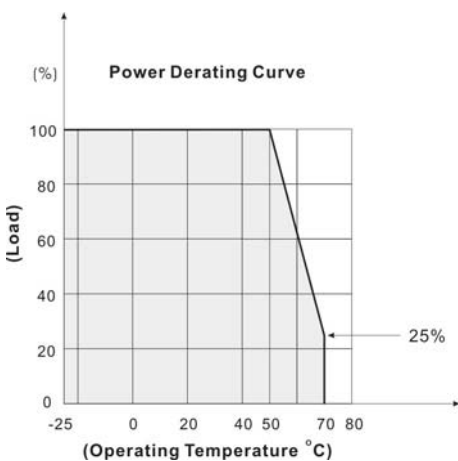
**MECHANICAL DIMENSION ( Top View )**



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

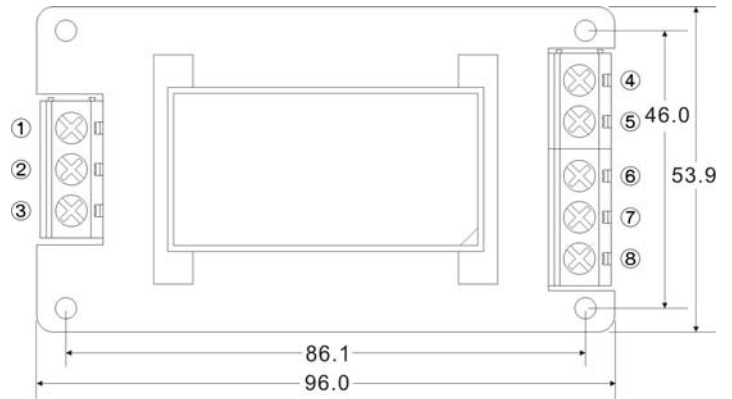
Maximum Torque 1.2 { 1.2 1 } ( k g f . c m { N.m } )

**DERATING**



**SCREW TERMINAL**
**AFC-A2**


PIN#	Single
1	NO CONNECT
2	AC IN (N)
3	AC IN (L)
4	NO CONNECT
5	+DC OUT
6	-DC OUT
7	NO CONNECT
8	NO CONNECT


**AFC-A5**


PIN#	Single
1	NO CONNECT
2	AC IN (N)
3	AC IN (L)
4	NO CONNECT
5	+DC OUT
6	-DC OUT
7	NO CONNECT
8	NO CONNECT

