

**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
- High Efficiency Up To 85%
- Small Size as AFC 10Watt and 20Watt Higher Wattage
- Screw Terminal For Optional
- CE, UL Approval
- 2-Years Product Warranty

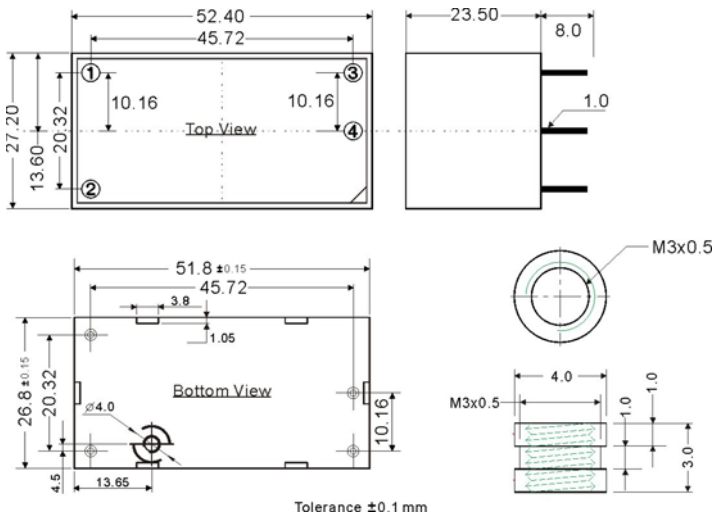

**ELECTRICAL SPECIFICATIONS**

Model No.	AFC20-3.3S	AFC20-5S	AFC20-12S	AFC20-15S	AFC20-24S
Max Output Wattage (W)	11.88W	18W	20W	20W	20W
Input	Voltage				
	90-264 VAC				
	Frequency (Hz)				
	47-440 Hz				
	Current (Full load)				
385 mA max. (115 VAC) / 250 mA max. (230 VAC)					
Inrush Current (<2ms,Cold Start)					
20 A max. (115 VAC) / 40 A max. (230 VAC)					
Leakage Current					
0.75 mA max.					
Output	Voltage (V.DC.)				
	3.3V				
	5V				
	12V				
	15V				
	24V				
	Voltage Accuracy				
	±2%				
	Current (mA) max				
	3600				
	3600				
	1660				
	1330				
833					
Maximum Capacitive Load (at 115VAC)					
3000uF					
2200uF					
1200uF					
1000uF					
800uF					
Maximum Capacitive Load (at 230VAC)					
4500uF					
3500uF					
1800uF					
1500uF					
1200uF					
Minimum Load					
0%					
0%					
2%					
0%					
0%					
Line Regulation (LL-HL) (typ.)					
±0.5%					
Load Regulation (5-100%) (typ.)					
±1%					
Ripple					
75mV max (Vp-p)					
100mV max (Vp-p)					
Noise					
100mV max (Vp-p)					
<0.5% Vout +50mV max (Vp-p)					
Efficiency(at 115VAC)					
74%					
78%					
83%					
85%					
86%					
Hold-up Time(typ)					
12 ms (115VAC) / 56ms (230VAC)					
Switching Frequency					
100k ~ 130k Hz					
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					
95% RH					
MTBF					
>250,000 h @ 25°C (MIL-HDBK-217F)					
Physical	Dimension (L x W x H)				
	2.06 x 1.07 x 0.93 Inches ( 52.4 x 27.2 x 23.5 mm ) Tolerance ±0.5 mm				
	Case Material				
	Plastic resin with Fiberglass (flammability to UL 94V-0)				
Weight					
59g					
Cooling Method					
Free air convection					
Safety	Agency Approvals				
UL/cUL, CE					
EMC	EMI (Conducted & Radiated Emission)				
	EN 55022 class B				
EMS (Noise Immunity)					
EN 55024					

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

Note :1. Ripple &amp; Noise are measured at 20MHz of bandwidth with 0.1uF &amp; 47uF parallel capacitor.

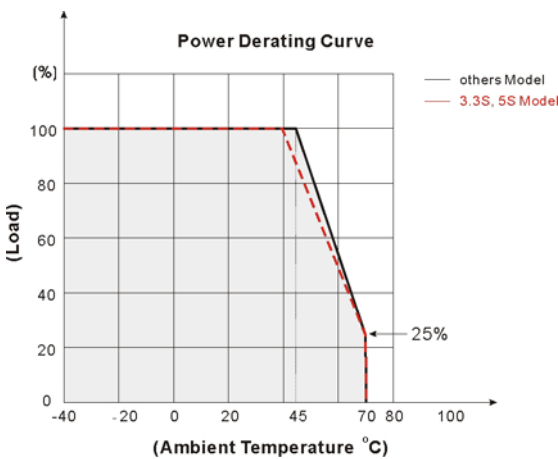
**MECHANICAL DIMENSION**



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

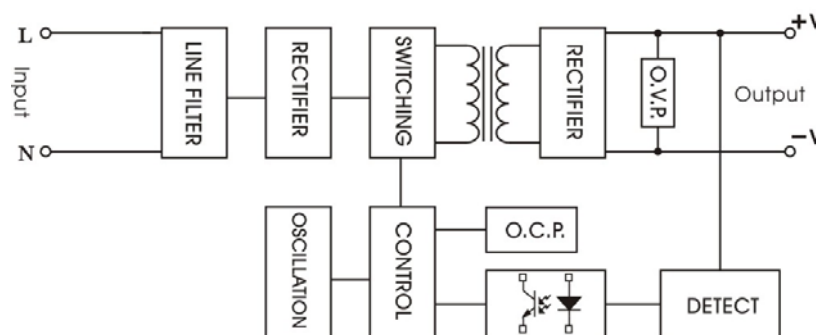
Maximum Torque 1.2 { 1.2 1 } ( k g f . c m { N . m } )

**DERATING**



**BLOCK DIAGRAM**

Single Output

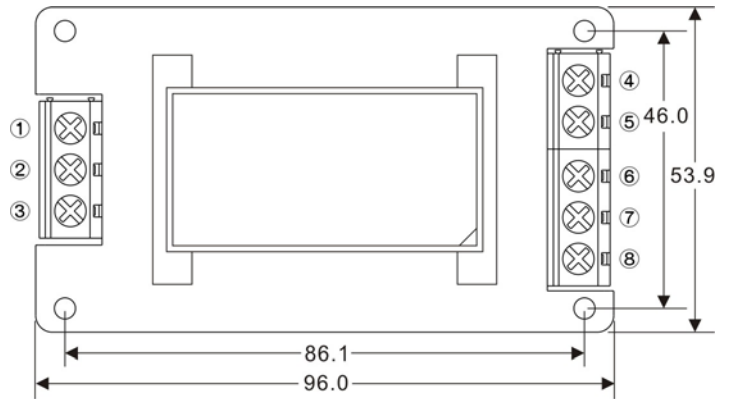


SCREW TERMINAL

AFC20-A2



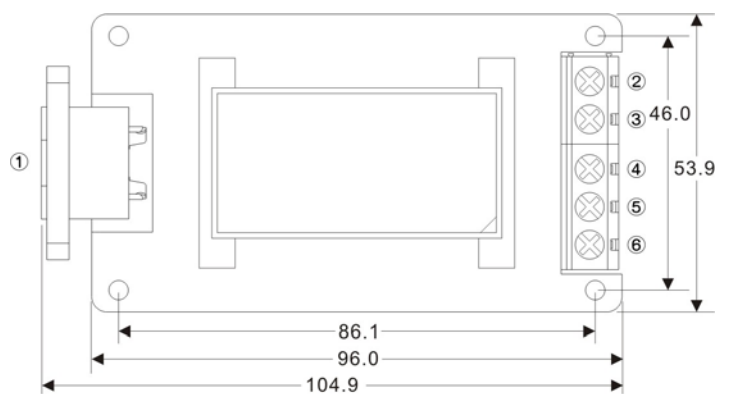
PIN#	Single
1	NO CONNECT
2	AC IN (N)
3	AC IN (L)
4	NO CONNECT
5	+DC OUT
6	-DC OUT
7	NO CONNECT
8	NO CONNECT



AFC20-A3

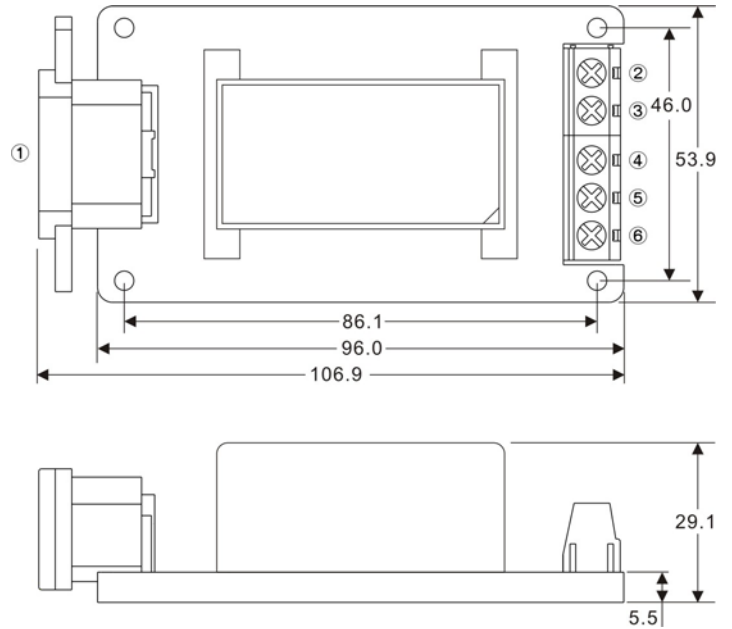


PIN#	Single
1	AC IN
2	NO CONNECT
3	+DC OUT
4	-DC OUT
5	NO CONNECT
6	NO CONNECT

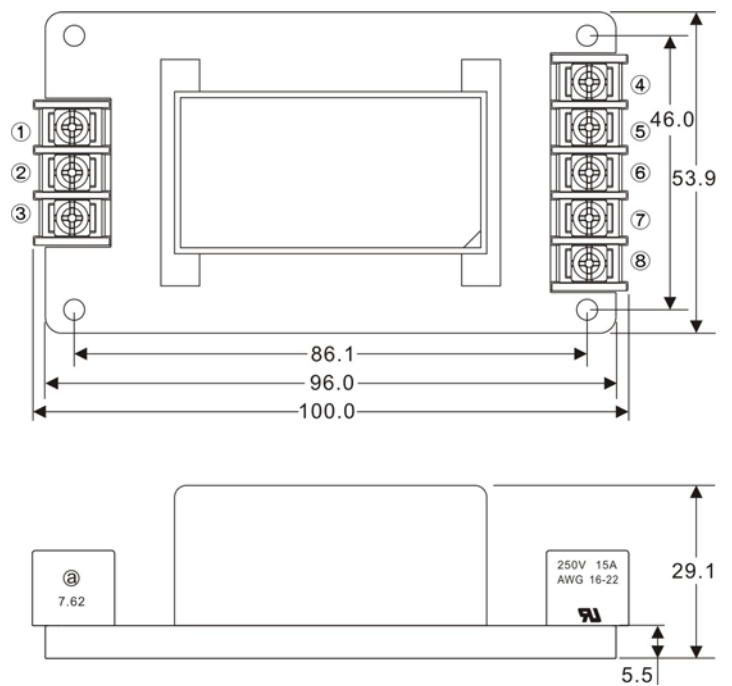


**AFC20-A4**


PIN#	Single
1	AC IN
2	NO CONNECT
3	+DC OUT
4	-DC OUT
5	NO CONNECT
6	NO CONNECT


**AFC20-A5**

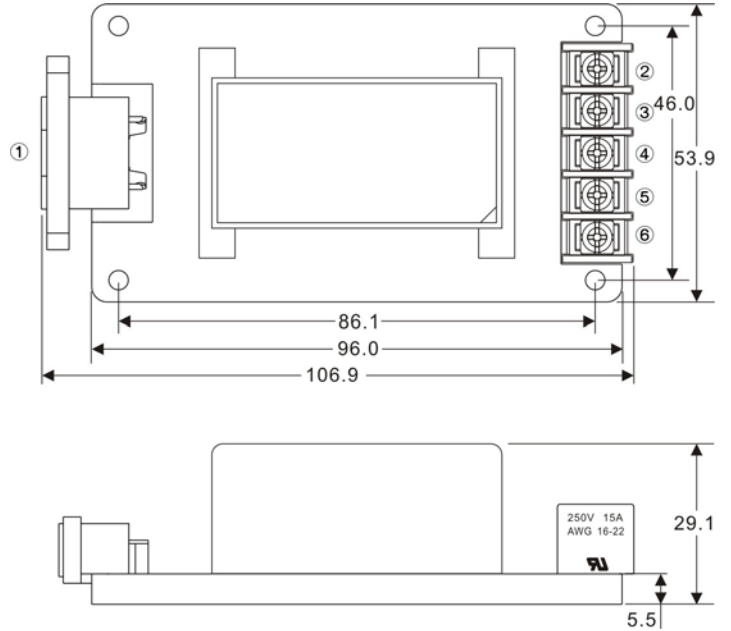

PIN#	Single
1	NO CONNECT
2	AC IN (N)
3	AC IN (L)
4	NO CONNECT
5	+DC OUT
6	-DC OUT
7	NO CONNECT
8	NO CONNECT



**AFC20-A6**



PIN#	Single
1	AC IN
2	NO CONNECT
3	+DC OUT
4	-DC OUT
5	NO CONNECT
6	NO CONNECT



**AFC20-A7**



PIN#	Single
1	AC IN
2	NO CONNECT
3	+DC OUT
4	-DC OUT
5	NO CONNECT
6	NO CONNECT

