

**MFC15 SERIES**
**15 Watts**
**KEY FEATURES**

- Switching Power Module for PCB Mountable
- Fully Encapsulated Plastic Case
- Universal Input Range 90-264VAC
- Regulated Output and Low Ripple and Low Noise
- Isolation Class II
- Low Standby <0.1W
- Small Size
- Screw Terminal and Din Rail Kit For Optional
- CE, CB, UL, cUL Approvals
- 3-Year Product Warranty

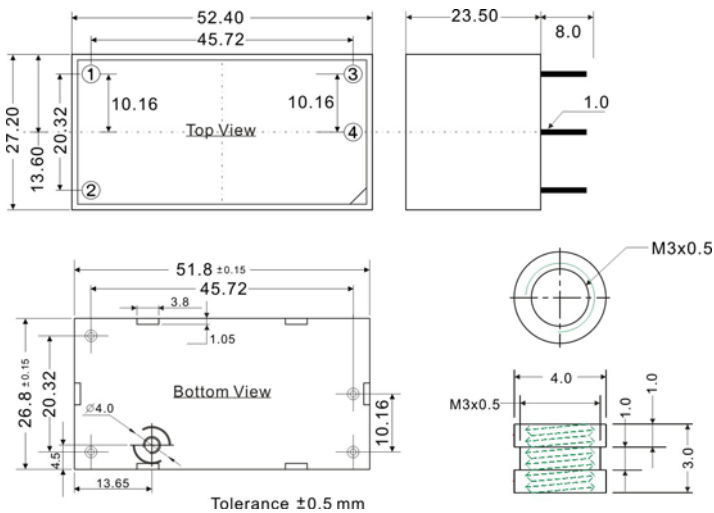

**ELECTRICAL SPECIFICATIONS**

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

Model No.	MFC15-5S	MFC15-9S	MFC15-12S	MFC15-15S	MFC15-24S	
Max Output Wattage (W)	15W					
Input	Voltage	90-264 VAC				
	Frequency (Hz)	47-440 Hz				
	Current (Full load)	385 mA max. (115 VAC) / 250 mA max. (230 VAC)				
	Leakage Current	Touch Current <100uA at 240 VAC				
	Inrush Current (<2ms, Cold Start)	20 A max. (115 VAC) / 40 A max. (230 VAC)				
Output	Voltage (V.DC.)	5V	9V	12V	15V	24V
	Voltage Accuracy	±2%				
	Current (mA) max	3000	1666	1250	1000	625
	Maximum Capacitive Load	7000uF	5000uF	1500uF	1000uF	470uF
	Minimum Load	0%				
	Line Regulation (LL-HL) (typ.)	±0.5%				
	Load Regulation (5-100%) (typ.)	±1%				
	Ripple (Full load)	75mV max (Vp-p)		1% of Vout		
	Noise (Full load)	120mV max (Vp-p)		1% of Vout		
	Efficiency (at 230 VAC)	79%	80%	84%	84%	85%
Hold-up Time(typ)	15 ms (115VAC) / 56ms (230VAC)					
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)	4000V				
Environment	Operating Temperature	-40°C...+80°C (Case Temperature max. +95°C)				
	Storage Temperature	-40°C...+90°C				
	Temperature Coefficient	±0.03%/°C				
	Humidity	95% RH				
	MTBF	>350,000 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	Pending				
	Cooling Method	Free air convection				
Safety	Protection Class II	IEC/EN 60536				
	Approval	IEC/EN 60950-1, 60601-1 3rd, 2XMOPP cUL/UL 60950-1, 60601-1 3rd, 2XMOPP, UL 508 listed				
EMC	Conducted and radiated EMI	EN55011, EN55022				
	ESD	EN61000-4-2 air ± 8kV , Contact ± 4kV				
	Radiated Immunity	EN61000-4-3 10V/m				
	Fast Transient	EN61000-4-4 ± 2kV				
	Surge	EN61000-4-5 ±1kV				
	Conducted Immunity	EN61000-4-6 10Vrms				
	PFMF	EN61000-4-8 30A/m				
	Dips	EN61000-4-11 30% 10ms				
Interruption	EN61000-4-11 >95% 5000ms					

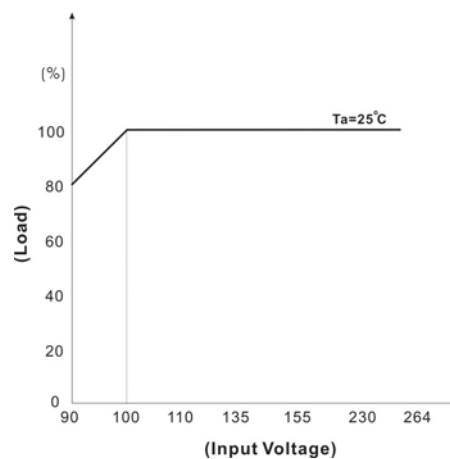
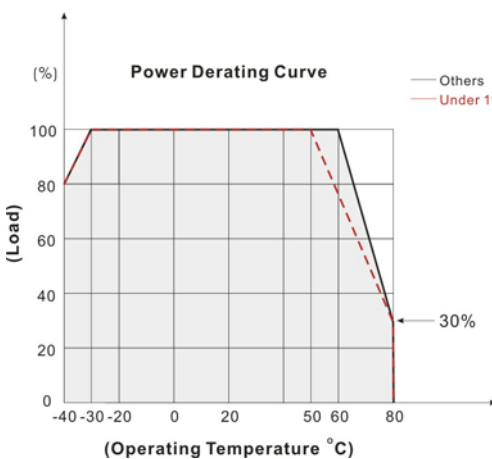
**NOTE**

- This product is not designed for use in critical life support systems, equipment used in hazardous environment, nuclear control systems or other such applications which necessitate specific safety and regulatory standards other the ones listed in this datasheet.**
- Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.
- Safety approvals cover frequency 47-63 Hz.
- That "natural convection" is about 20LFM but is not equal to still air (0 LFM).
- It's recommended to add Varistor 14S471K at L / N input side in parallel.

**MECHANICAL DIMENSION**


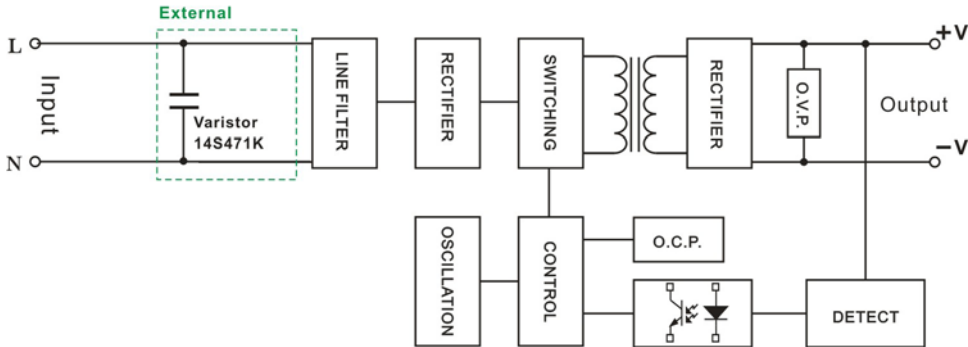
PIN#	Single
1	AC IN (L)
2	AC IN (N)
3	+DC OUT
4	-DC OUT

Maximum Torque 1 2 { 1.2 1 } ( k g f . c m { N.m } )

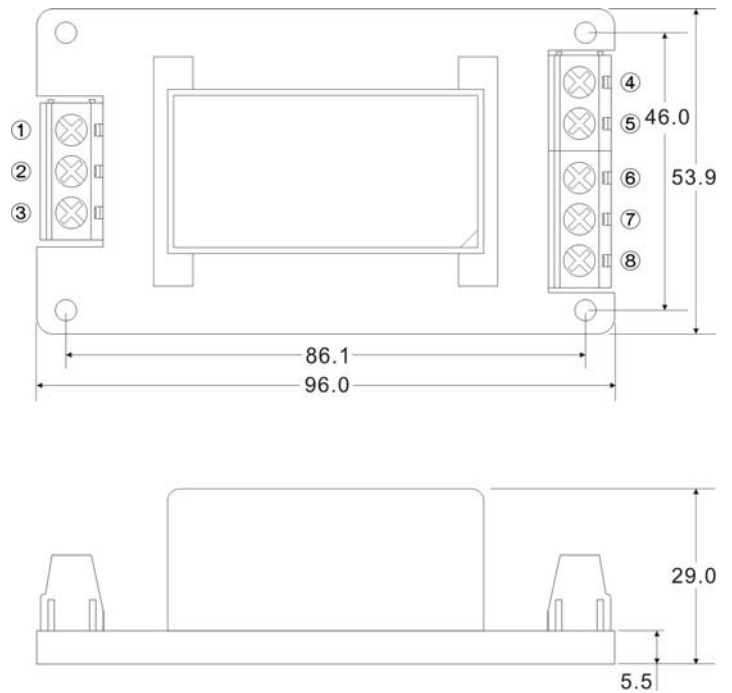
**DERATING**


**BLOCK DIAGRAM**

Single Output


**SCREW TERMINAL**
**MFC15-A2**


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



**Din Rail Kit**

**MFC15-A2-DN**

