

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 or 120-370 VDC, " N " to DC " + " ; " L " to DC " - "				
	Frequency (Hz)				
	47-440 Hz				
	Current (Full load)				
385 mA max. (115 VAC) / 250 mA max. (230 VAC)					
Leakage Current					
< 0.1mA / 264 VAC (Touch Current)					
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 (at 230 VAC)				
	7000uF	5000uF	1500uF	1000uF	470uF
	Minimum Load				
	0%				
	Line Regulation (LL-HL) (typ.)				
±0.5%					
Load Regulation (5-100%) (typ.)					
±1%					
Ripple (Full load)			1% of Vout		
75mV max (Vp-p)					
Noise (Full load)			1% of Vout		
120mV max (Vp-p)					
Efficiency (at 230 VAC)		80%	84%	84%	85%
79%					
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				
	±0.05%/°C				
	Altitude During Operation				
4000m					
Humidity					
up to 95% RH					
MTBF					
>350,000 h @ 25°C (MIL-HDBK-217F)					
Atmospheric Pressure					
70 kPa to 106 kPa					
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 with Fiberglass (flammability to UL 94V-0)				
Weight					
59 g					
Cooling Method					
Free air convection					

ELECTRICAL SPECIFICATIONS

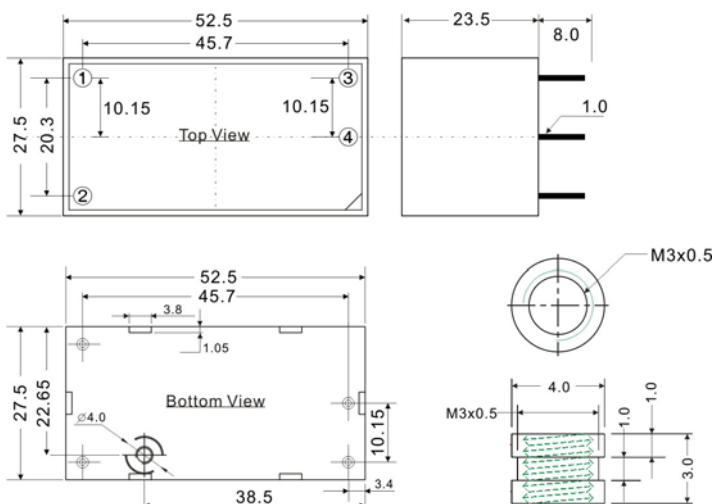
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Model No.	MFC15-5S	MFC15-9S	MFC15-12S	MFC15-15S	MFC15-24S
Safety	Approval cUL/UL 60950-1, ANSI/AAMI ES 60601-1: 2005, 1st Edition and CAN/CSA-C22.2 No. 60601-1:08, 2nd Edition, 2XMOPP (Pending)				
EMC	Conducted and radiated EMI EN55011 (Pending)				
	ESD EN61000-4-2 air ± 8kV , Contact ± 4Kv (Pending)				
	Radiated Immunity EN61000-4-3 10V/m (Pending)				
	Fast Transient EN61000-4-4 ± 2kV (Pending)				
	Surge EN61000-4-5 ±1kV (Pending)				
	Conducted Immunity EN61000-4-6 10Vrms (Pending)				
	PFMF EN61000-4-8 30A/m (Pending)				
	Dips EN61000-4-11 30% 10ms (Pending)				
	Interruption EN61000-4-11 >95% 5000ms (Pending)				

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.
- Please refer to our PDF file "AC-DC Application" on our website: www.archcorp.com.tw

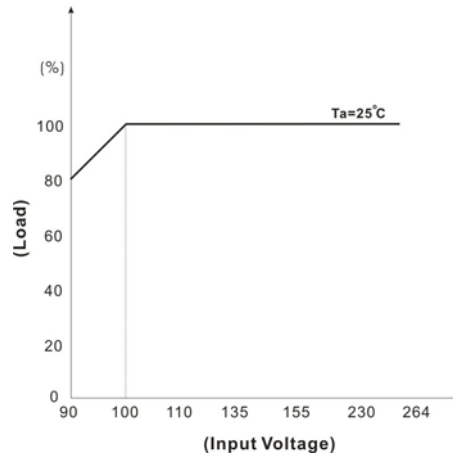
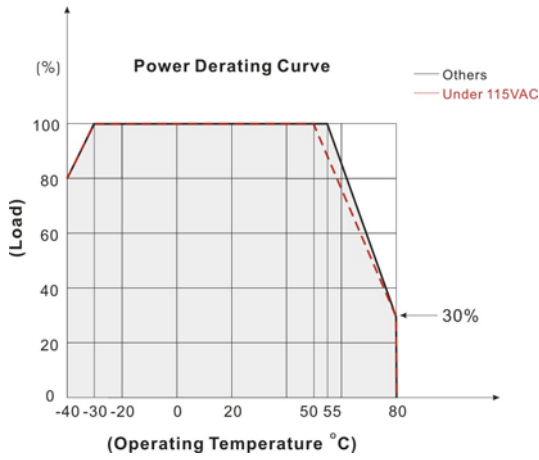
MECHANICAL DIMENSION



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

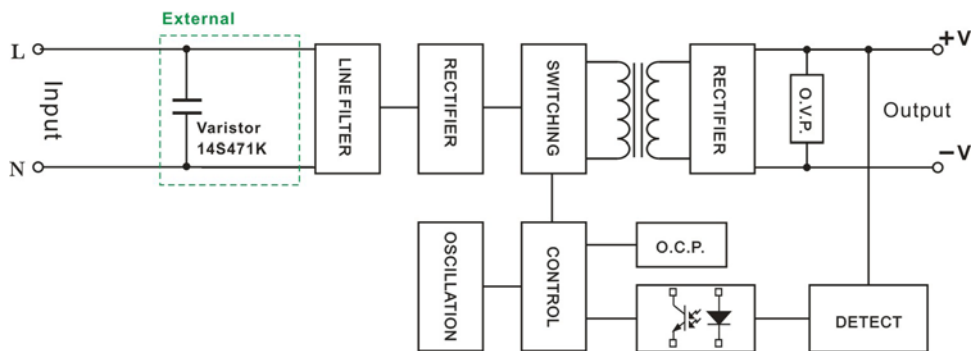
Maximum Torque 1 2 { 1.2 1 } (k g f . c m { N . m })

DERATING



BLOCK DIAGRAM

Single Output

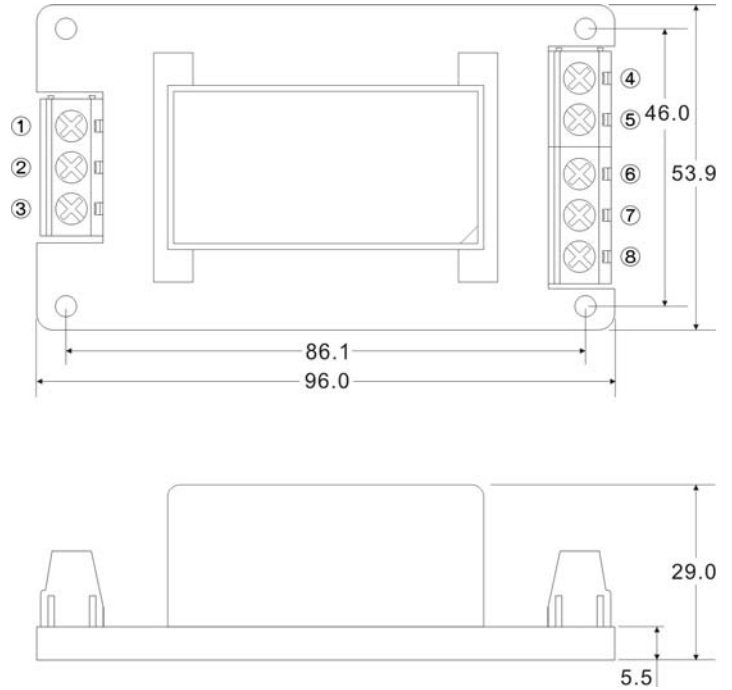


SCREW TERMINAL

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

