

## KEY FEATURES

- Switching Power Module for PCB Mountable
- Fully Encapsulated Plastic Case
- Universal Input Range 90-264VAC
- Regulated Output and Low Ripple and Noise
- <0.15W No Load Input Power
- Isolation Class II
- CE, CB, UL, cUL 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. ( Single Output )	MTC30-5S	MTC30-12S	MTC30-15S	MTC30-24S
Max Output Wattage (W)	25W	30W	30W	30W
Input	Voltage (Note 1) 90-264 VAC or 120-370 VDC			
	Frequency (Hz) 47-440 Hz			
	Current (Full load) 650 mA max. (115 VAC) / 400 mA max. (230 VAC)			
	Inrush current (<2ms, Cold Start) 30 A max. (115 VAC) / 60 A max. (230 VAC)			
	Leakage Current < 0.1mA / 264 VAC (Touch Current)			
	No Load Input Power (<240 VAC) <0.15W			
	External Fuse (recommend) 3.15 A slow blow type			
Output	5V	12V	15V	24V
	Voltage Accuracy ±2%			
	5000	2500	2000	1250
	Line Regulation (LL-HL) (typ.) ±0.5%			
	Load Regulation (10-100%) (typ.) ±1%			
	6800uF	1600uF	1200uF	470uF
	100mVp-p	150mVp-p	150mVp-p	240mVp-p
	84%	89%	86%	86%
Protection	Hold-up Time 10 ms min.			
	Over Power Protection Hiccup technique, auto-recovery			
	Over Voltage Protection Zener diode clamp			
Isolation	Short Circuit Protection Hiccup mode, indefinite (automatic recovery)			
	Input-Output (V.AC) 4000V			
Environment	Operating Temperature -40°C...+80°C (with derating)			
	Storage Temperature -40°C...+90°C			
	Max Case Operating Temperature 84°C			
	Temperature Coefficient ±0.05%/°C			
	Altitude During Operation 5000m			
	Humidity up to 95% RH			
	MTBF >250,000 h @ 25°C (MIL-HDBK-217F)			
	Atmospheric Pressure 70 kPa to 106 kPa			
Physical	Dimension (L x W x H) 2.52 x 1.8 x 0.93 Inches ( 64.1 x 45.6 x 23.5 mm ) Tolerance ±0.5 mm			
	Case Material Plastic resin (flammability to UL 94V-0)			
	Weight 135 g			
	Cooling Method Free air convection			

## ELECTRICAL SPECIFICATIONS

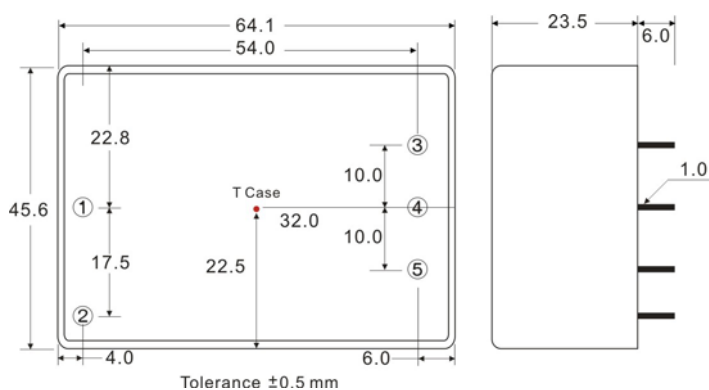
All specifications valid at normal input voltage, full load and +25°C after warm-up time unless otherwise stated.

Model No. ( Single Output )	MTC30-5S	MTC30-12S	MTC30-15S	MTC30-24S
Safety	Approval cUL / UL Standard: UL 60950-1, CAN/CSA C22.2 No. 60950-1-07 ANSI/AAMI ES60601-1 (2005 + C1:09 + A2:10), CAN/CSA-C22.2 No. 60601-1 (2008), 2 x MOPP CB Standard: IEC 60950-1:2005 (2nd Edition) + Am 1:2009 + Am 2:2013 IEC 60601-1:2005 (3rd Edition) + CORR. 1 (2006) + CORR. 2 (2007) + AM1 (2012) or IEC 60601-1 (2012 reprint), 2 x MOPP			
EMC	Conducted and radiated EMI	EN55011 class B (Radiation Class A for MTC30 A2 Series)		
	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

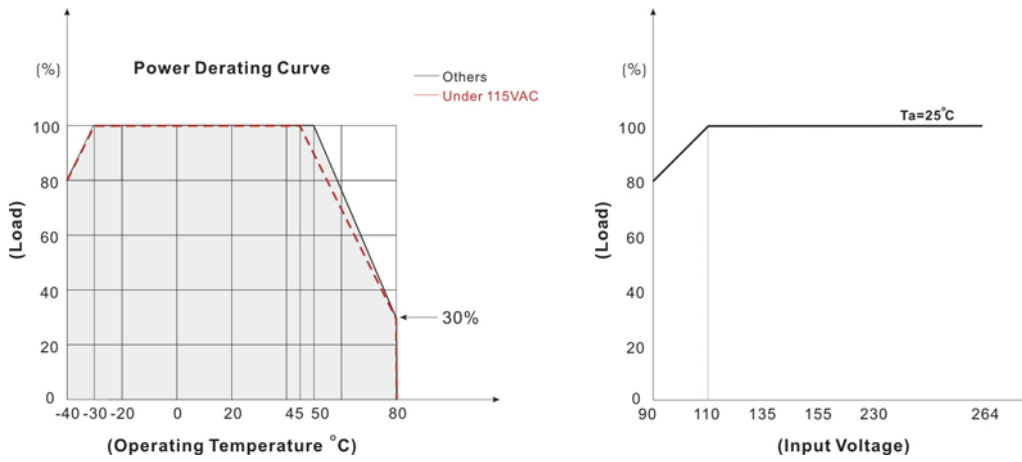
- This product is not designed for use in critical life support systems, equipment used in hazardous environment, nuclear control systems or other such applications which necessitate specific safety and regulatory standards other the ones listed in this datasheet.**
- Ripple & Noise are measured at 20MHz 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.
- Please refer to our PDF file "AC-DC Application" on our website: [www.archcorp.com.tw](http://www.archcorp.com.tw)

## MECHANICAL DIMENSION ( Top View )



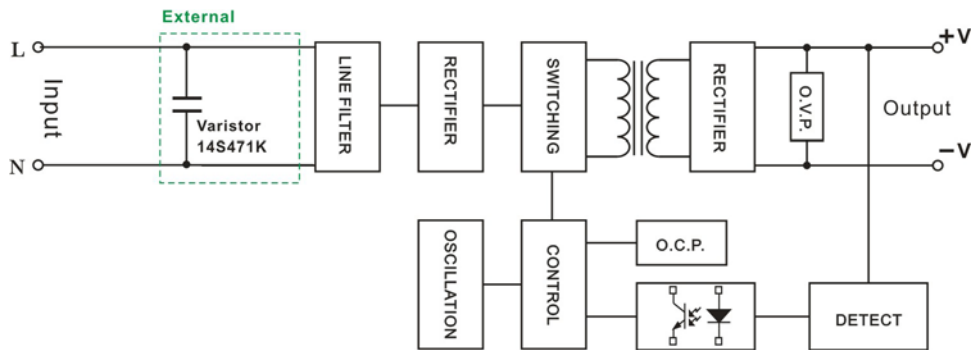
PIN#	Single
1	AC IN (N)
2	AC IN (L)
3	-DC OUT
4	NO PIN
5	+DC OUT

**DERATING**



**BLOCK DIAGRAM**

Single Output



## SCREW TERMINAL

## MTC30-A2



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

