

## KEY FEATURES

- Switching Power Module for PCB Mountable
- Fully Encapsulated Plastic Case
- Universal Input Range 90-305VAC
- High Efficiency up to 89%
- Isolation Class II
- <0.3W No Load Input Power
- Very Small 1.77" x 2.52" x 0.92" Package
- Screw Terminal For Optional
- CE, CB and UL Approval
- 3-Year Product Warranty



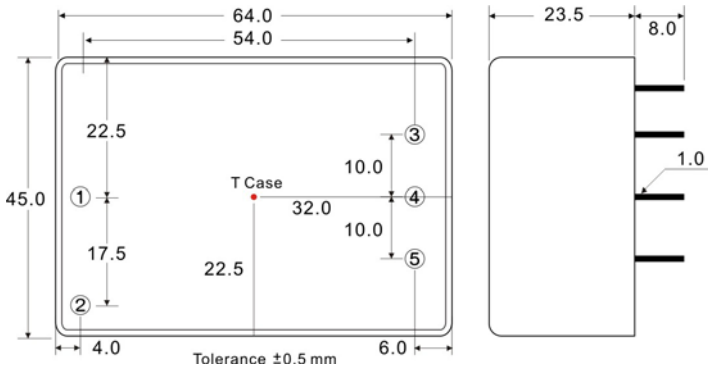
## ELECTRICAL SPECIFICATIONS

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

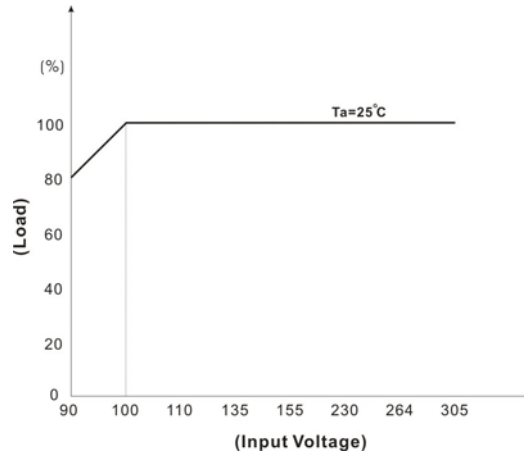
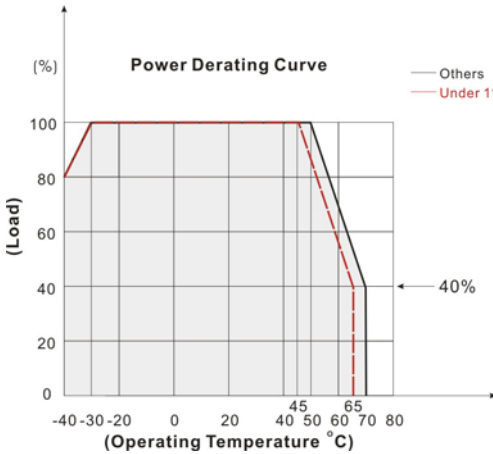
Model No. ( Single Output )	ATC30-3.3S	ATC30-5S	ATC30-12S	ATC30-15S	ATC30-24S	
Max Output Wattage (W)	16.5W	25W	30W	30W	30W	
Input	Voltage (Note1)		90-305 VAC or 120-430 VDC			
	Frequency (Hz)		47-63 Hz			
	Current (Full load)		600 mA max. (115 VAC) / 400 mA max. (230 VAC)			
	Inrush Current (<2ms)		30 A max. (115 VAC) / 60 A max. (230 VAC)			
	Leakage Current		0.25 mA max.			
	No Load Input Power (<240 VAC)		<0.3W			
	External Fuse (mandatory)		3.15 A slow blow type			
Output	Voltage (V.DC.)	3.3V	5V	12V	15V	24V
	Voltage Accuracy	±2%				
	Current (mA) max	5000	5000	2500	2000	1250
	Line Regulation (LL-HL) (typ.)	±0.5%				
	Load Regulation (10-100%) (typ.)	±1.5%	±1%			
	Maximum Capacitive Load	6800 uF	6800 uF	1600 uF	1200 uF	470 uF
	Ripple & Noise (max.) (Note2)	100mVp-p	100mVp-p	150mVp-p	150mVp-p	240mVp-p
	Efficiency (at 230 VAC)	80%	84%	89%	87%	86%
Hold-up Time	10 ms min.					
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				
	Input-FG (V.AC)	1500V				
	Output-FG (V.AC)	500V				
Environment	Operating Temperature	-40°C...+70°C (with derating)				
	Storage Temperature	-40°C...+85°C				
	Max Case Operating Temperature	Under 115 VAC 78°C , others 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)	2.52 x 1.77 x 0.92 Inches ( 64.0 x 45.0 x 23.5 mm ) Tolerance ±0.5 mm				
	Case Material	Plastic resin with Fiberglass (flammability to UL 94V-0)				
	Weight	130 g				
	Cooling Method	Free air convection				
Safety	Agency Approvals	CE, UL/cUL, CB				
EMC	EMI (Conducted & Radiated Emission)	EN 55022 class B				
	EMS (Noise Immunity)	EN 55024				

**NOTE**

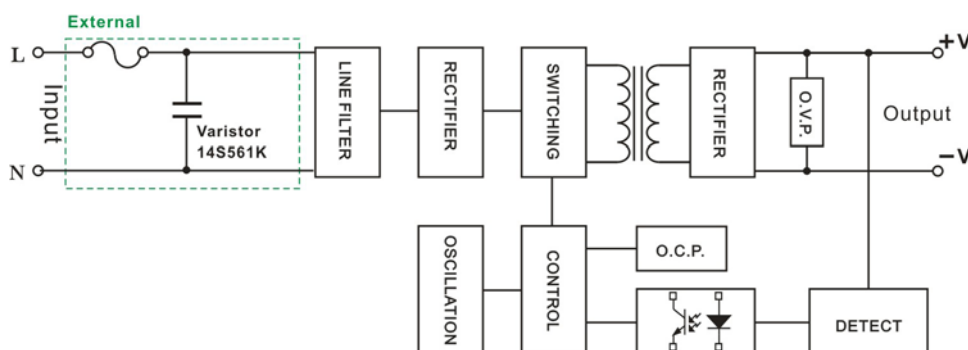
1. Please check the derating curve for more details.
2. Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.
3. It's necessary to add Varistor 14S561K at L / N input side in parallel.
4. Please refer to our PDF file "AC-DC Application" on our website: [www.archcorp.com.tw](http://www.archcorp.com.tw)

**MECHANICAL DIMENSION ( Top View )**


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

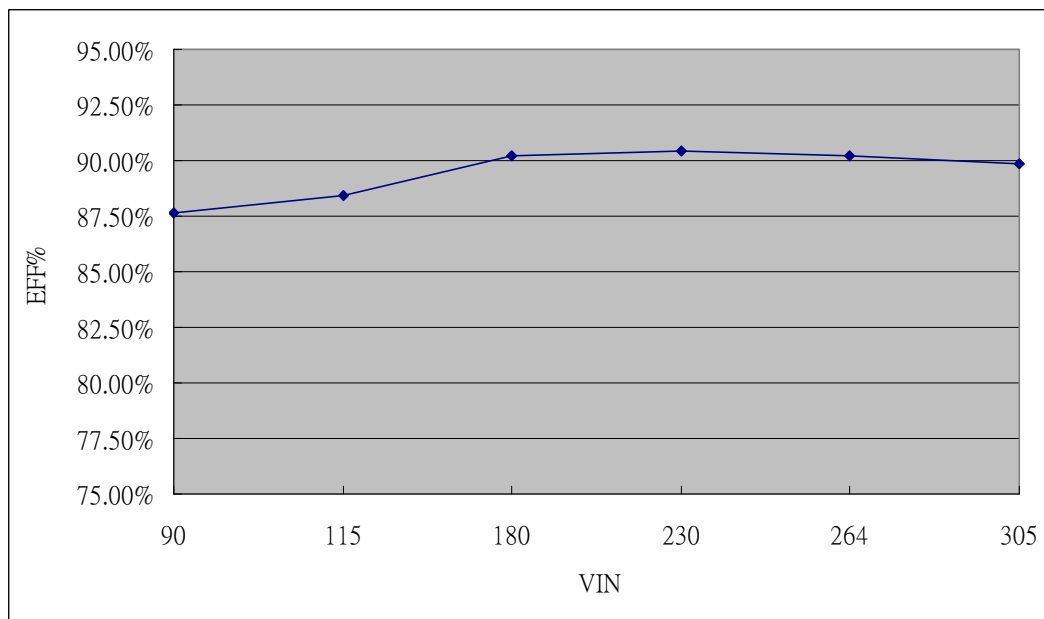
**DERATING**

**BLOCK DIAGRAM**

Single Output

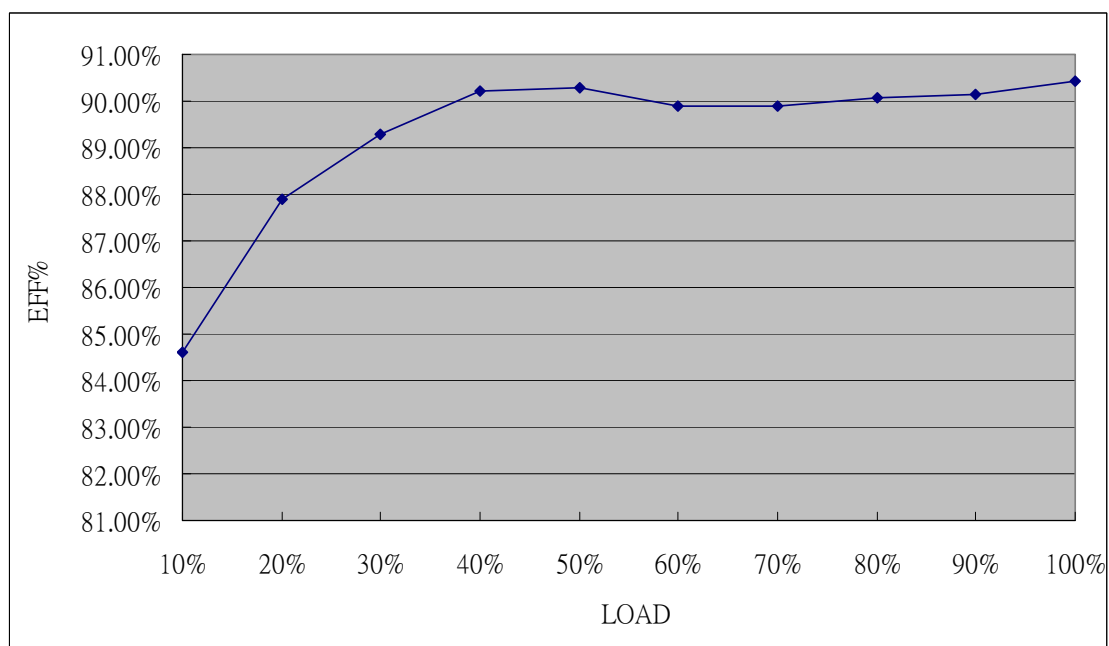


**EFFICIENCY VERSUS LOAD**
**ATC30-12S**
**VIN VS Efficiency**

Input Voltage (V)	90	115	180	230	264	305
Efficiency (%)	87.6	88.4	90.2	90.4	90.2	89.9

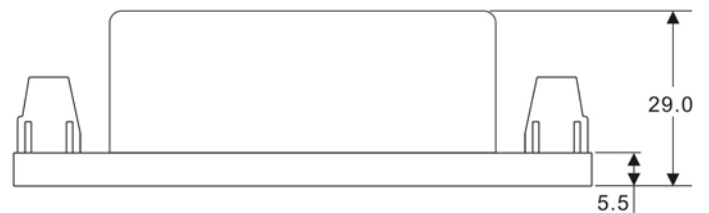
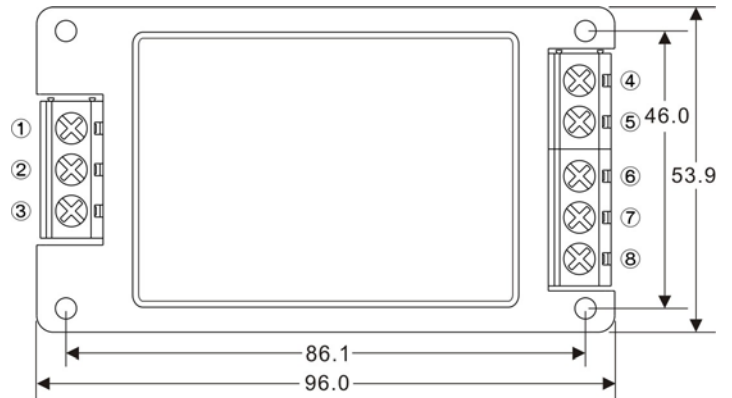

**LOAD VS Efficiency**

Load (%)	10	20	30	40	50	60	70	80	90	100
230V (%)	84.6	87.9	89.3	90.2	90.3	89.9	89.9	90.1	90.1	90.4



**SCREW TERMINAL**
**ATC30-A2**


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


**ATC30-A5**


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

