

## FEATURES:

- Universal Input: 90~264VAC
- High Efficiency Up To 88%
- Protection: Short Circuit/Overload/Overvoltage
- Fully Encapsulated Plastic Case
- Internal Input Filter
- RoHS Compliant
- UL Recognized

Specifications typical at TA=25°C nominal input voltage and rated output current unless otherwise specified

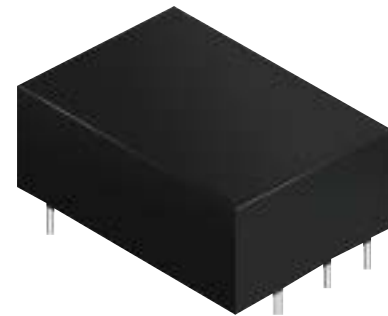
Part Number	Output Wattage	Output Voltage	Output Current	Ripple & Noise	Efficiency
	(W)	(V)	(mA)	(mV) Max (Note)	(% TYP)
AC030-D12	42	±12	±1750	150	80
AC030-S05	40	5	8000	150	75
AC030-S12	42	12	3500	150	84
AC030-S24	42	24	1750	240	86
AC030-S48	48	48	1000	240	88

### Note:

Ripple & noise is measured by using 20 MHz bandwidth, measured with 47uf paralleled with a high-frequency 0.47uf capacitor across each output by full load.



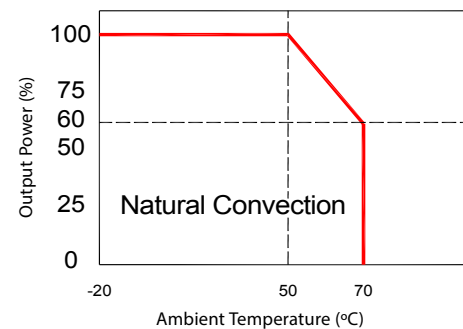
AC-DC Converter  
**AC030 SERIES**  
26~48Watt  
3KV Isolated  
Single & Dual Output  
Module



## Input Specifications

Parameters	Conditions	Min	Typ	Max	Units
Rated Input Voltage	Vo, lo nom	100~240			Vac
Voltage Range	Vo, lo nom	AC in		264	Vac
		DC in	120	370	Vdc
Line Frequency	Vi nom, lo nom	47	50/60	63	Hz
Inrush Current	Io nom	Vi:115VAC		12	A
		Vi:230VAC		20	A
Input Fuse	VDE/UL/CCC FUSE 2.5A/250V (Slow blow)				

## Temperature Derating Graph



## Output Specifications

Parameters	Conditions	Min	Typ	Max	Units
Output Voltage Accuracy	Vi nom, Io nom (Single output)	3.3V...9V Models		±3	%
		10...48V Models		±2	%
Minimum Load	Dual Output			±5	%
	Vi nom	Single Output Models		0	%
Line Regulation	Dual Output Models			20	%
	Io nom, Vi min...Vi max			±1	%
Load Regulation	Io min~	Single Output Models		±2	%
	Io nom	Dual Output Models		±5	%
Transient Recovery Time	Vi nom, Io nom = ← → 0.5 Io nom			1000	us
Protection	Over load	Above 110% rated output power <b>Protection type:</b> Recovers automatically after fault condition is removed			
	Short circuit	Recovers automatically after fault condition is removed			
	Over Voltage (Main Output)	120%-150% rated output Voltage <b>Protection type:</b> Zener diode clamp			

**Note:** Ripple & noise is measured by using 20 MHz bandwidth, measured with a 47uf paralleled with a high-frequency 0.47uf capacitor across each output by full load.

## General Specifications

Parameters	Conditions	Min	Typ	Max	Units
Switching Frequency	Vi nom, Io nom		65		KHz
Isolation Voltage	Input / Output	3KVac/ 5mA/5Secs			
Isolation Resistance	Input / Output, @500 Vdc	100			MΩ
Operation Temperature	Operating at Vi nom, Io nom	-20		+70	°C
Derating	Vi nom, Io nom+51 to 71°C			2	%/°C
Storage Temperature	Non Operational	-40		+85	°C
Relative Humidity	Vi nom, Io nom			95	% RH
Safety Standards	EN 62368-1 approved				
EMI Conduction & Radiation	Compliance to EN55032				
EMS Immunity	Compliance to EN55024				
Dimensions	L88.90x W63.50 x H31.75mm L3.5x W2.5 x H1.25 inches				
Cooling	Free air convection				

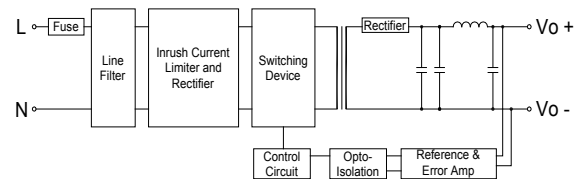
## Part Number

AC030 - S 05  
A B C

A: Series  
B: Single (S) / Dual Output (D)  
C: Output Voltage

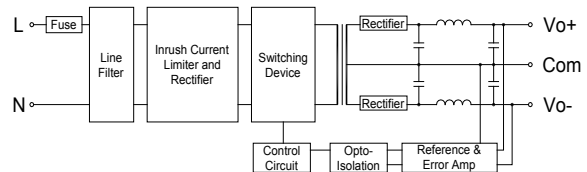
## Circuit Schematic (1)

### Single Output



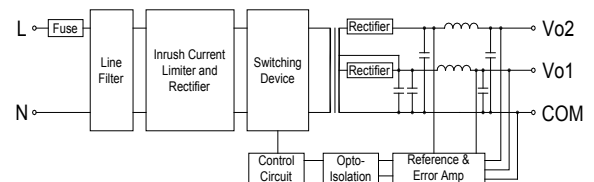
## Circuit Schematic (2)

### Dual Output

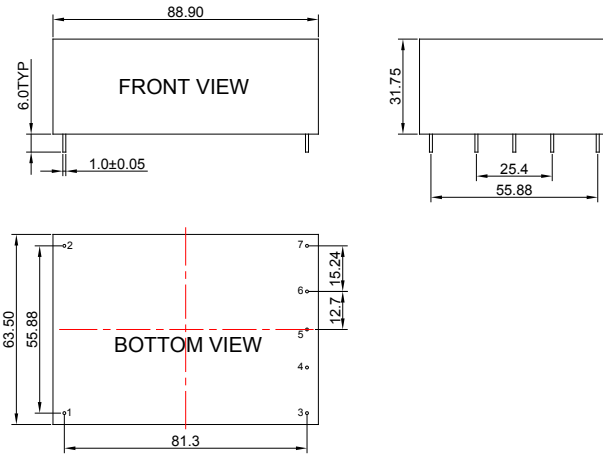


## Circuit Schematic (3)

### Dual Output



**Markings and Dimensions**



PIN	Model		
	Single	Dual	Dual
1	ACN	ACN	ACN
2	ACL	ACL	ACL
3	+Vo	+Vo	+Vo2
4	NO PIN	NO PIN	+Vo1
5	-Vo	Com	Com
6	NO PIN	NO PIN	Com
7	NC	-Vo	NO PIN

Unit : mm Unless otherwise specified, all tolerances are  $\pm 0.50$