

FEATURES :

- Universal Input 90~264VAC
- High Efficiency Up To 88%
- Protection: Short Circuit /Overload/Over Voltage
- Fully Encapsulated Plastic Case
- Internal Input Filter
- 3 Years Warranty
- ROHS Compliant

YUAN DEAN SCIENTIFIC



AC-DC Converter

GA030 SERIES

26~48Watt

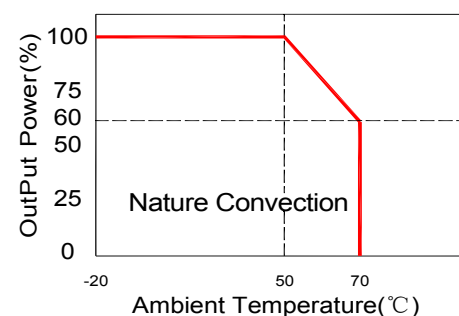
3KV Isolated

Single & Dual Output

Module



Temperature Derating Graph



www.yds.com.tw

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)	(VDC)	(mA)	(mV) max (Note)	(TYP %)
GA030-S03	26.4	3.3	8000	150	72
GA030-S05	40.0	5	8000	150	75
GA030-S06	40.0	6	6650	150	75
GA030-S07	40.0	7	5700	150	80
GA030-S08	40.0	8	5000	150	80
GA030-S09	40.0	9	4400	150	82
GA030-S10	40.0	10	4000	150	82
GA030-S12	42.0	12	3500	150	84
GA030-S13	42.0	13	3200	150	84
GA030-S14	42.0	14	3000	150	84
GA030-S15	42.0	15	2800	150	84
GA030-S16	42.0	16	2625	150	85
GA030-S18	42.0	18	2300	150	85
GA030-S24	42.0	24	1750	240	86
GA030-S27	42.0	27	1550	240	86
GA030-S36	43.2	36	1200	240	86
GA030-S48	48.0	48	1000	240	88
GA030-D05	40.0	±5	±4000	150	75
GA030-D12	42.0	±12	±1750	150	80
GA030-D15	42.0	±15	±1400	150	80
GA030-D24	42.0	±24	±875	240	80
GA030-D0305	26.5	Vo1=+3.3, Vo2=+5	Io1=5000, Io2=2000	150(Vo1) 240(Vo2)	72
GA030-D0512	40.0	Vo1=+5, Vo2=+12	Io1=5000, Io2=1250		75
GA030-D0515	40.0	Vo1=+5, Vo2=+15	Io1=5000, Io2=1000		75
GA030-D0524	40.0	Vo1=+5, Vo2=+24	Io1=5000, Io2=625		78



Input Specifications

Parameters	Conditions	Min	Typ	Max	Units
Rated Input Voltage	Vo, Io nom		100~240		Vac
Voltage Range	Vo, Io nom	AC in	90	264	Vac
		DC in	120	370	Vdc
Line Frequency	Vi nom, Io 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)				

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	%
	Dual Output			±5	%
Minimum Load	Vi nom	Single Output Models	0		%
		Dual Output Models (each output)	20		%
Line Regulation	Io nom, Vi min...Vi max		±1		%
Load Regulation	Io min~ Io nom	Single Output Models		±2	%
		Dual Output Models		±5	%
Transient Recovery time	Vi nom, Io nom = $\longleftrightarrow$ 0.5 Io nom		1000		us
Protection	Over load	Above 110% rated output power Protection type: 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 Protection type: 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
Operating 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	EN60950-1 approved				
EMI Conduction & Radiation	Compliance to EN55022				
EMS Immunity	Compliance to EN55024				
Dimension	L88.90x W63.50 x H31.75mm L3.5x W2.5 x H1.25 inches				
Cooling	Free air convection				

Part Number

GA030 S 03
A B C

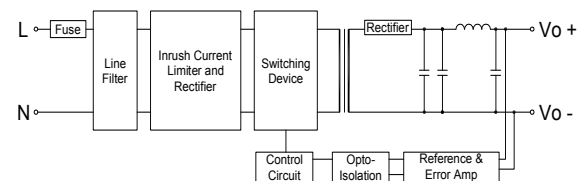
A: Series

B: Single(S) Dual (D)

C: Output Voltage

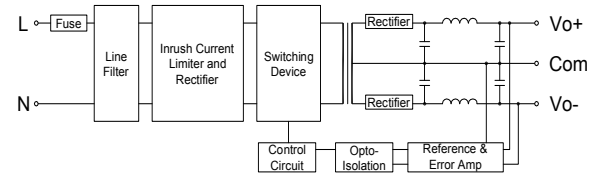
Circuit Schematic(1)

Single Output



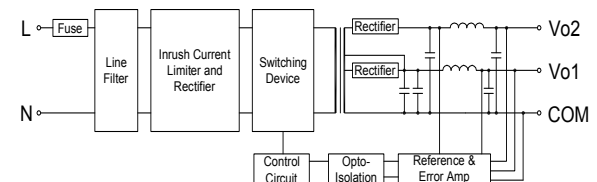
Circuit Schematic(2)

Dual Output

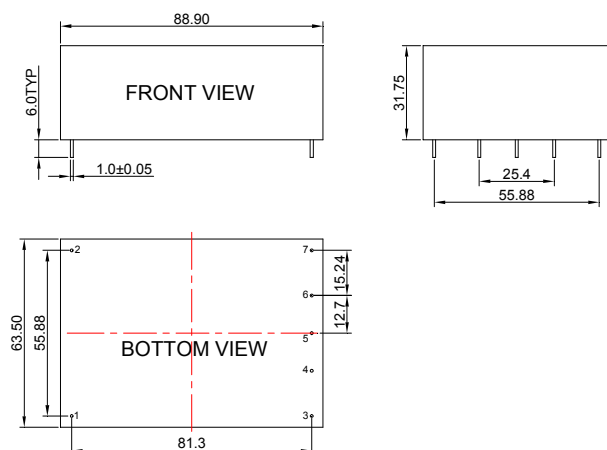


Circuit Schematic(3)

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 ± 0.50