

AC02S/D Series

2W AC/DC Power Module



FEATURES

- Small, encapsulated Module for PCB Mounting
- Universal Input 85-264VAC,47-440Hz
- Constant Power Mode
- Regulated Output Voltage 8,14 or 24VDC
- Models with additional 3.3 or 5VDC Output
- Operating Temp.Range -30°C to 70°C
- 3k VAC Isolation, Protection Class II level
- EMI meets EN55022, class B, FCC part15, Class B and EN55014-1
- Safety Approval to UL/cUL/IEC/EN 60950-1 TUV IEC/EN 60335-1
- 3 Years Product Warranty











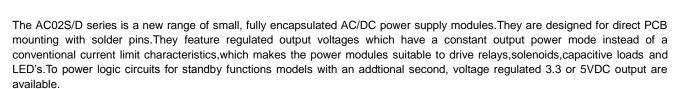












The AC02S/D power supply modules provide a cost-effective new solution for standby power applications in appliances and consumer electronics, equipment, Universal input voltage 85-264VAC and International safety approvals including IEC/EN60335-1 qualifies the product for worldwide markets

Model Selection Guide							
Model	Out	put 1	Output 2		Input Current	Efficiency	
Number	Voltage	Current	Voltage	Current		(typ.)	
		Max.		Max.	@Max. Load	@Max. Load	
	VDC	mA	VDC	mA	mA(typ.)	%	
AC02S0800A	8	250			42	72	
AC02S1400A	14	143			40	74	
AC02S2400A	24	83			39	76	
AC02D0803A ***	8	*	3.3	160	43	69	
AC02D0805A ***	8	*	5	250	43	69	
AC02D1403A ***	14	**	3.3	70	43	70	
AC02D1405A ***	14	**	5	83	43	70	

^{*} lo1+lo2≤250Ma *** The definition of output power (Po) for dual-output modules : $Po=V_{01} \times (I_{01} + I_{02})$ ** lo1+lo2≤143mA

Input Specifications							
Parameter	Model	Min.	Тур.	Max.	Unit		
Input Voltage Range		85		264	VAC		
Input Frequency Range		47		440	Hz		
Input Voltage Range	All Models	120		370	VDC		
No-Load Power Consumption			30		mW		
Input Surge Voltage				308	VAC		



Output Specifications							
Parameter	Cond	itions	Min.	Тур.	Max.	Unit	
Output Valtage Assumes.	Output 1	V _{in} =115VAC, Full			±5.0	%	
Output Voltage Accuracy	Output 2	Load			±2.0	%	
L'as Danidation	Output 1	\/ 05 00 (\) (\) 0		±1.0		%	
Line Regulation	Output 2	V _{in} =85~264VAC		±0.3		%	
Land Danielan	Output 1			±1.0		%	
Load Regulation	Output 2	lo=10% to 100%		±0.5		%	
D: 1 0 N :	0.00 1411 D. 1 141	Output 1		1		V _{P-P}	
Ripple & Noise	0-20 MHz Bandwidth	Output 2		0.1		V _{P-P}	
Short Circuit Protection	Continuous						

General Specifications							
Parameter	Conditions	Min.	Тур.	Max.	Unit		
I/O Isolation Voltage	Input to Output, 60 Seconds	3000			VAC		
Switching Frequency			45		KHz		
MTBF (calculated)	MIL-HDBK-217F@25°C, Ground Benign	500,000			Hours		
	UL/cU	L 60950-1 recognition	on(UL certificate)				
Safety Approvals		IEC/EN 60950-1(CB-scheme)					
	IEC/EN 6033	5-1 recognition(TUV	certificata,CB-sc	heme)			

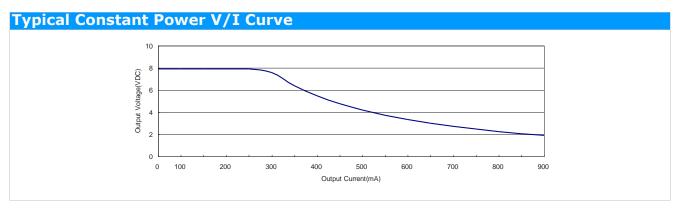
EMC Specifications						
Parameter		Standards & Level	Performance			
EMI	EN5501	4-1, EN55022, FCC part 15	Class B			
	EN55014-2 ,EN55024	1				
	ESD	EN61000-4-2 air ± 8kV , Contact ± 4kV	Α			
EMS	Radiated immunity	EN61000-4-3 10V/m	A			
	Fast transient	EN61000-4-4 ±2kV	Α			
	Surge	EN61000-4-5 ±1kV	Α			
	Conducted immunity	EN61000-4-6 10Vrms	А			
	PFMF	EN61000-4-8 30A/M	А			
	Dips	EN61000-4-11 30% 10ms	А			
	Interruptions	EN61000-4-11 >95% 5000ms	В			

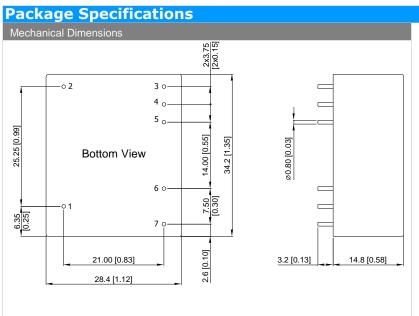
Environmental Specifications					
Parameter	Conditions	Min.	Max.		
Temperature Range (operational)	Ambient	-30°C	+70°C		
Storage Temperature Range		-40°C	+85°C		
Humidity (non condensing)			95 % rel. H		
Cooling	Free-Air convection				

Notes

- 1 All specifications typical at Ta=+25°C, resistive load, 115VAC, 60Hz input voltage and after warm-up time rated output current unless otherwise noted.
- 2 These power modules require a minimum output loading to maintain specified regulation, operation under no-load conditions will not damage the power supplies however they may not meet all listed specifications.
- 3 We recommend to protect the converter by a slow blow fuse in the input supply line.
- 4 Other input and output voltage may be available, please contact factory.
- 5 Specifications are subject to change without notice.







Pin (Pin Connections					
Pin	Single Output	Dual Output				
1	N	NC				
2	N	NC				
3	+Vout	+Vout1				
4	-Vout	Common				
5	NP	+Vout2				
6	AC	AC(N)				
7	AC	AC(L)				

- ►All dimensions in mm (inches)
- ►Tolerance: ±0.5 (±0.01)
- ▶Pin diameter ⇔ 0.8 ±0.1 (0.03±0.004)

Physical Characteristics

Case Size	:	34.2x28.4x14.8mm (1.35x1.12x0.58 inches)
Case Material	:	Plastic resin (flammability to UL 94V-0 rated)
Pin Material	:	Copper Alloy with Gold Plate Over Nickel Subplate
Weight	:	24g



Part Numbering System							
А	С	02	S	08	00	Α	
Product type	Family series	Watt	Number of Outputs	0nput Voltage I	Output Voltage II	Option Code	
AC/DC Power Module	Constant Power Mode	02 - 2W	S - Single	08 - 8V	00 - not applicable	A - PCB Mount	
			D - Dual	14 - 14V	03 - 3V		
				24 - 24V	05 - 5V		

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WARRANTY

Delta offers a three(3) years limited warranty. Complete warranty information is listed on our web site or is available upon request from Delta.

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