AD2360C Series

Very Low Cost, 360W DIN Rail Mount Dual Output AC/DC Power Supplies



New Industrial Supplies!!

Key Features:

- 360W Output Power
- DIN Rail Mountable
- Universal AC Input
- Dual Outputs
- UL 508 Compliant
- EN60950 Compliant
- Cond./Rad. EMI Class B
- >100 kH MTBF
- ***LOW COST!***

RoHS Compliant

Models available from 20W! Call today for details

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USA

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Electrical Specifications

Specifications typical @ +25°C, nominal input voltage & rated output current, unless otherwise noted. Specifications subject to change without notice.

Input

Parameter	Conditions	Min.	Typ.	Max.	Units
Input Voltage Range	Universal	100		240	VAC
		127		370	VDC
Input Frequency		47		63	Hz
Inrush Current, Cold Start	110 VAC		22		A
	220 VAC		44		A
Leakage Current	264 VAC			1.8	mA

Output

Parameter	Conditions	Min.	Typ.	Max.	Units
Output Voltage Accuracy			±0.5		%
Output Voltage Adjustment Range	Primary Output Only		±10.0		%
Line Regulation	Vin = Min to Max		±1.0		%
Load Regulation (Note 1)	Iout = 20% to 100%		±1.0		%
Hold Time	110 VAC, Full Load		10		mSec
	220 VAC, Full Load		20		
Ripple & Noise (20 MHz) (Note 2)	See Model Selection Guide				
Output Power Protection	Power Limit	130		160	%
Transient Recovery Time (Note 3)	50% Load Change		2		mS
Transient Response Deviation			5		%
Temperature Coefficient			±0.04	±0.05	%/°C
Output Short Circuit	Continuous With Autorecovery				

General

Parameter	Conditions	Min.	Typ.	Max.	Units
Isolation Voltage	Input - Output	3,000			VAC
	Input - FG (Frame Ground)	2,000			
	Output - FG (Frame Ground)	500			
Isolation Resistance (Note 4)	500 VDC	100			MΩ
Switching Frequency	Fixed		130		kHz

Environmental

Parameter	Conditions	Min.	Typ.	Max.	Units
Operating Temperature Range	Ambient	-20	+25	+50	°C
Storage Temperature Range		-20		+85	°C
Cooling	Free Air Convection				
Humidity	RH, Non-condensing			95	%
Vibration	10 Hz ~ 2 kHz; 2G 10 min./1 Cycle; X, Y, Z axis each 1 hour				

Physical

Case Size	4.76 x 4.33 x 3.94 Inches (121.0 x 110.0 x 100.0 mm)
Case Material	Aluminum (Base) and Steel (Cover)
Connection	Screw Terminal

Reliability Specifications

Parameter	Conditions	Min.	Typ.	Max.	Units
MTBF	MIL HDBK 217F, 25°C, Gnd Benign	100			kHours
Safety Standards	UL 1950, EN 60950, IEC 60950				
EMI Compliance	Compliance to EN55011, EN55022 (CISPR22) Class B				
EMS Immunity Compliance	EN6100-4-2,3,4,5,6,8,11 Level 3				

Model Selection Guide

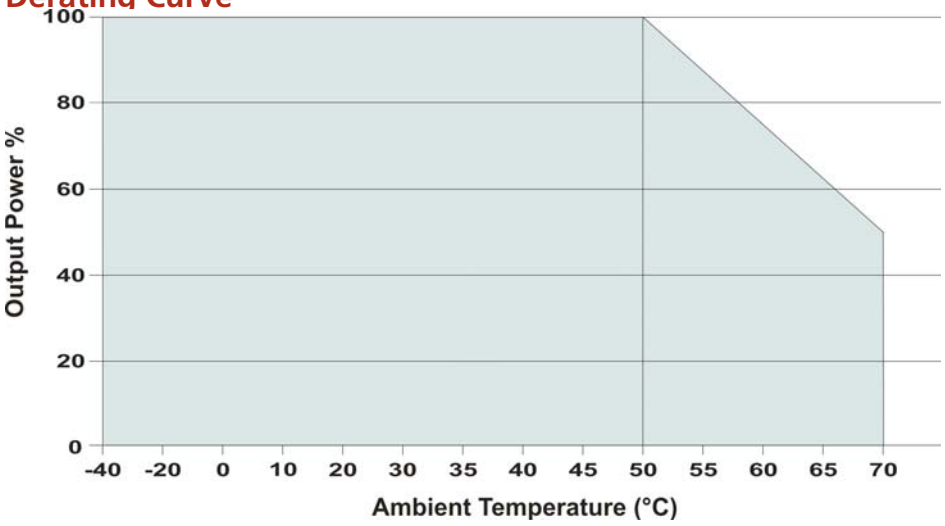
Model Number	Rated Power (W)	Input			Output			Overvoltage Protection (VDC)	Ripple & Noise (mV p-p)	Efficiency (%, Typ)
		Voltage (VAC)	Current (A)		Voltage (VDC)	Current (A) Max)	Current (A) Range			
		Universal Range	115 VAC	230 VAC						
AD23601C	360	100 - 240	1.0	0.5	+12 (V_1)	28.0	0 ~ 28.0	14 ~ 16	100	78
					+5 (V_2)	3.0	0 ~ 3.0	N/A	50	
AD23602C	360	100 - 240	1.0	0.5	+24 (V_1)	14.0	0 ~ 14.0	27 ~ 30	150	80
					+5 (V_2)	3.0	0 ~ 3.0	N/A	50	
AD23603C	360	100 - 240	1.0	0.5	48 (V_1)	7.0	0 ~ 7.0	52 ~ 56	250	80
					+5 (V_2)	3.0	0 ~ 3.0	N/A	50	

Notes:

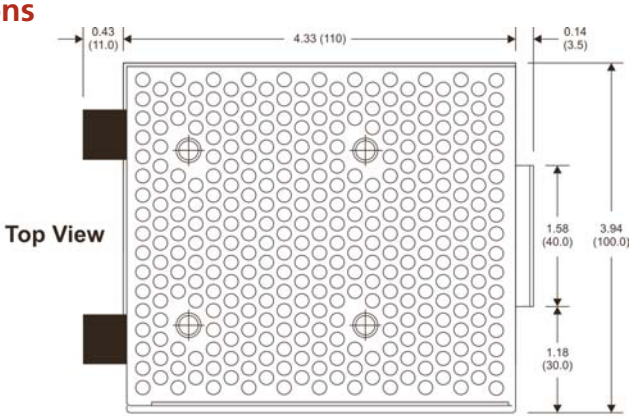
1. Load regulation is specified for a load change of 20% to 100%. For models AD23601C, load regulation for V1 (12V) is ±2%
2. Ripple & noise is measured using equipment with 20 Mhz of bandwidth with the unit under test operating at rated load and a 110 VAC input. Connection to the unit is made with a 0.1 μF / 630V metalized capacitor & a 47 μF electrolytic capacitor connected in parallel.
3. Transient recovery is measured to within a 1% error band for a load step change of 50% to 100%.
4. Isolation resistance is given for Input/Output and Input/FG. For Output/FG., it is 50 MΩ
5. Overload protection is power limiting. The unit recovers automatically when the fault is removed.
6. Over voltage protection is a shut down type. The unit recovers automatically when the fault is removed.
7. To mount the unit to the DIN rail, tilt the unit rearwards from the top, fitting the mount over the top of the rail. Press back on the bottom front of the unit until it locks in place on the rail. To remove the unit from the rail, pull the removal clip at the bottom rear of the unit downward with a screw driver. With the clip down, lift up on the unit from the bottom front until it clears the rail. Before installation or removal all wiring should be disconnected and the main power to the system shut off.
8. When wiring the supply, all lines should be as thick and short as possible. AWG 14 wire is recommended for the A**D2360C** series.
9. The units should be mounted so they are vertically orientated. Air flow (if provided) would optimally flow from the bottom to the top of the unit.
10. It is recommended that a fuse be used on the input of a power supply for protection. For the **AD2360C** series a 250VAC 5.0A is recommended.

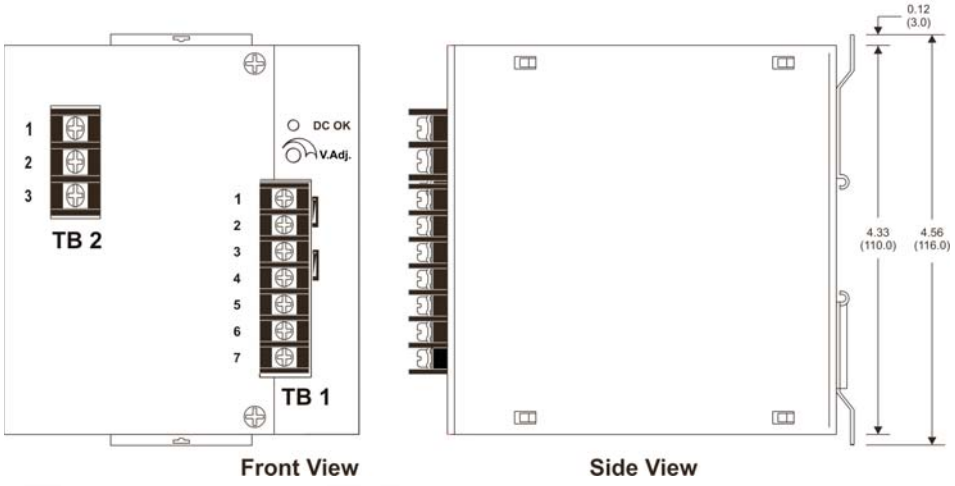
Units with the optional "FT" outputs may be easily connected for "Fault Tolerant operation. Contact the factory for details

Derating Curve



Mechanical Dimensions





Connections TB 1

Pin	Function
1	FT (Optional)
2	FT (Optional)
3	+V_2 (5V) Output
4	Output Common
5	Output Common
6	+V_1 Output
7	+V_1 Output

Connections TB 2

Pin	Function
1	AC Input - Live
2	AC Input - Neutral
3	Frame Ground (FG

Notes:

- All dimensions are typical in inches (mm)
- Tolerance x.xx = ±0.01 (±0.25)

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