ASTRODYNE

Isolated and Regulated 60 WATT Modular DC/DC Converters

FDC60 series



Unit measures 2.76"W x 3.94"L x 0.75"H

- Wide 2 : 1 Input Range
- High Efficiency
- Regulated Outputs
- 1600V Isolation
- Full EMI Shielding
- PI Input Filter

UL E193009;
TUV R2054535;
CB JPTUV-001393

Model Number	Output Voltage	Output Amps	Input Range
SINGLE OUTPUT			
FDC60-12S33	3.3 VDC	15	9-18 VDC
FDC60-24S33		15	18-36 VDC
FDC60-48S33		15	36-72 VDC
FDC60-12S05	5 VDC	12	9-18 VDC
FDC60-24S05		12	18-36 VDC
FDC60-48S05		12	36-72 VDC
FDC60-12S12	12 VDC	5	9-18 VDC
FDC60-24S12		5	18-36 VDC
FDC60-48S12		5	36-72 VDC
FDC60-12S15	15 VDC	4	9-18 VDC
FDC60-24S15		4	18-36 VDC
FDC60-48S15		4	36-72 VDC
DUAL OUTPUT			
FDC60-12D3305	3.3 / 5 VDC	6 / 6	9-18 VDC
FDC60-24D3305		6 / 6	18-36 VDC
FDC60-48D3305		6 / 6	36-72 VDC
FDC60-12D05	+/-5 VDC	+10 / -2	9-18 VDC
FDC60-24D05		+10 / -2	18-36 VDC
FDC60-48D05		+10 / -2	36-72 VDC
FDC60-12D12	+/-12 VDC	+/-2.5	9-18 VDC
FDC60-24D12		+/-2.5	18-36 VDC

300 Myles Standish Blvd., Taunton, MA 02780
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INPUT SPECIFICATIONS

Input Voltage Ranges:	12 VDC Nominal	9-18 VDC
	24 VDC Nominal	18-36 VDC
	48 VDC Nominal	36-72 VDC
Input Filter	Pi Type	

OUTPUT SPECIFICATIONS

Voltage and Current	See Selection Chart	
Load Regulation (10%-FL)	singles/duals: +/-0.5%	
xxD3305 Models	3.3V output min load=800mA	
Line Regulation	singles/duals: +/-0.5%	
Temperature Coefficient	+/-0.02%/DegC	
Ripple/Noise	1% Pk-Pk of Vout, typ	
Voltage Stability	+/- 2%	
Short Circuit Protection	Continuous, self-recovering	
Overvoltage Protection Threshold:	3.3V Output	3.9Volts
	5V Output	6.2Volts
	12V Output	15Volts
	15V Output	18Volts

GENERAL SPECIFICATIONS

On/Off Control	(Ref to - Input pin)
	Logic “1”/Open=ON
	Logic “0”/GND=OFF
Input-Out Isolation	1600VDC
Isolation Resistance	10000 M Ohms
Efficiency	83%, typ
Switching Frequency	200Khz, typ

ENVIRONMENTAL SPECIFICATIONS

Oper. Temperature	-25 to +71 DegC(see derate)
Storage Temperature	-55 to +125 DegC *
Maximum Case Temp	100 DegC *
MTBF	1.53 MHrs
	MIL-HDBK-217F TA=25C FL

PHYSICAL SPECIFICATIONS

Case Material	Nickel-Coated Copper
	Non-Conductive Base
Construction	Fully Encapsulated
Weight	9.71 oz, (272g)

All specifications are typical at nominal input, full load, and 25DegC unless otherwise noted

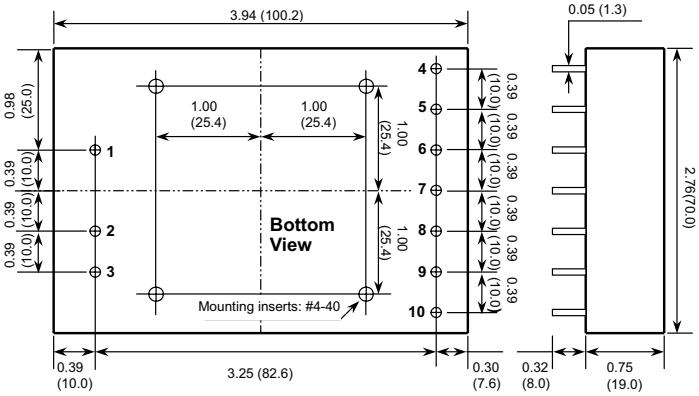
* These are stress ratings. Exposure of the devices to any of these conditions may adversely affect long term reliability. Proper operation under conditions other than the standard operating conditions is neither warranteed nor implied.

Astrodyne products are not authorized or warranteed for use as critical components in life support systems, equipment used in hazardous environments, nuclear controls systems, or other mission-critical applications.

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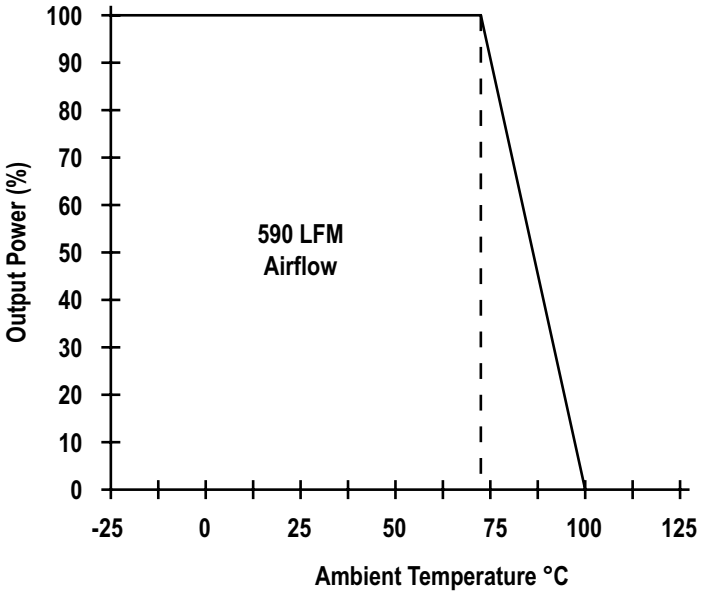
MECHANICAL DIMENSIONS



All dimensions in Inches (mm)
Pin Pitch tolerance ±0.014 (0.35)

Pin #	Single	Dual
1	+ Vin	+ Vin
2	- Vin	- Vin
3	Ctrl	Ctrl
4	Trim	Trim
5	+ Vout	+ Vout or 3.3 out
6	+ Vout	+ Vout or 3.3 out
7	Com	Com
8	Com	Com
9	No Pin	- Vout or 5 out
10	No Pin	- Vout or 5 out

OUTPUT DERATING CURVE



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