TDK·Lambda

CUS150M Series

2 x 4" 150W AC-DC Power Supplies

Features

- ◆ 150W Convection Rating (/U version)
- ◆ ITE & Medical Certifications (2 x MOPP)
- Class B Conducted and Radiated EMI
- Suitable for Class I and Class II installations
- Compact 2 x 4 x 1.24" Footprint
- Suitable for BF Rated Equipment
- Operation up to 85°C Ambient

Key Market Segments & Applications



Specifications



Specifications		
Model		CUS150M
Input Voltage Range (1)	-	85 - 264VAC (47 - 440Hz (2)). Derate linearly to 90% load from 90 to 85VAC input
Inrush Current (Cold start at 230VAC input)	A	<65A
Input Current (150W load)	A	2.2A at 100VAC input
Hold Up Time (Typ)	ms	>18ms
Harmonic Compliance	-	EN/IEC61000-3-2 Class A, Class C >120W. Minimum PF 0.98/0.92 (115/230Vac, 100% load)
Leakage Current	uA	<250uA at 230VAC 63Hz
Touch Current (enclosure leakage)	uA	<100uA
Temperature Coefficient	%/°C	±0.02%/°C
No Load Power Draw at 230VAC input	W	<0.5W
Output Adjustment	-	No adjustment
Fan Supply	-	10 - 12V (see model selector), 0.5A, +14%/-6% regulation
Ripple & Noise	mV (pk-pk)	
Load Regulation	mV	<u>≤</u> 1% (0 - 100% load)
Line Regulation	mV	<u><</u> 0.5% (90 - 264VAC)
Short Circuit Protection	%	110 - 170%. Hiccup mode, automatic recovery
Overvoltage Protection	V	Latching (unit shutdown), cycle AC input to reset
Efficiency	%	Up to 94%
Active Average Efficiency	%	>91%
Operating Temperature	-	-20 (1) to +85°C, see derating curves on website (70°C maximum for fan version /F)
Storage Temperature	°C	-40 to +85°C (70°C maximum for fan version /F)
Operational Altitude	m	5000m
Humidity (non condensing)	%RH	5 - 95%RH (15 - 90%RH for /F fan version)
Cooling	-	Convection, conduction or forced air cooling (see derating curves on website)
Withstand Voltage	VAC	Input to Ground 1.5kVAC (1xMOPP), Input to Output 4kVAC (2xMOPP), Output to Ground 1.5kVAC (1xMOPP)
Isolation Resistance	MΩ	>100MΩ at 25C & 70%RH, Output to Ground 500VDC
Insulation Class	-	Construction suitable for Class I or Class II installation
Vibration (non operating)	-	2G, 10-500Hz for 1 hour
Shock	-	30G, 11ms half sine
Safety Agency Certifications	-	IEC/EN/UL60950-1 and 60601-1. ES60601-1. IEC/EN/UL62368-1. Designed to meet IEC61010-1. EN60335-1 compliant models available ⁽¹⁾
Conducted & Radiated EMI	-	EN55011 / EN55032-B (See application notes for conditions)
Immunity	-	EN60601-1-2:2015 (Edition 4), EN61000-4-2 (Lvl 4), -3 (Lvl 3), -4 (Lvl 4), -5 (Lvl 3), -6 (Lvl 3), -8 (Lvl 4) -11 (class 3)
Weight (Typ)	g	Open Frame: 185g; /U: 245g; /A: 255g; /B: 220g, /F: 265g
Size (WxLxH)	In (mm)	Open frame version: 2 x 4 x 1.24" (50.8 x 101.6 x 31.5mm)
Warranty	yrs	Five years
Connectors	-	Input: JST B2P3-VH, Output: JST B6P-VH, Fan: Molex 22-04-1021
Note 1: Contact factory regarding option	modele for	-/10°C start up, DC input and models compliant to EN60335-1. MOOs may apply

Note 1: Contact factory regarding option models for -40°C start up, DC input and models compliant to EN60335-1. MOQs may apply. Note 2: For operation at 400-440Hz, please contact Technical Support.

CUS150M Series

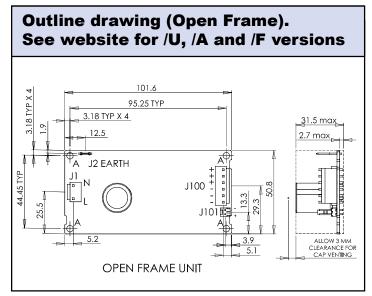
Model Selector

Model	Nominal Output Voltage (V)	Fan Supply Voltage (V)	Maximum ⁽³⁾ Current Convection (A)	Maximum Current Forced Air (A)	Maximum ⁽³⁾ Power Convection (W)	Maximum Power Forced Air (W)
CUS150M-12 or /B	12	11.6	10	12.5	120	150
CUS150M-12/A or U	12	11.6	12.5	12.5	150	150
CUS150M-12/F	12	11.6	12.5	-	150	-
CUS150M-15 or /B	15	9.8	8	10	120	150
CUS150M-15/A or U	15	9.8	10	10	150	150
CUS150M-15/F	15	9.8	10	-	150	n/a
CUS150M-18 or /B	18	11.6	6.66	8.33	120	150
CUS150M-18/A or U	18	11.6	8.33	8.33	150	150
CUS150M-18/F	18	11.6	8.33	n/a	150	n/a
CUS150M-24 or /B	24	11.6	5	6.25	120	150
CUS150M-24/A or U	24	11.6	6.25	6.25	150	150
CUS150M-24/F	24	11.6	6.25	-	150	-
CUS150M-28 or /B	28	10.8	4.3	5.4	120	150
CUS150M-28/A or U	28	10.8	5.4	5.4	150	150
CUS150M-28/F	28	10.8	5.4	-	150	-
CUS150M-36 or /B	36	11.6	3.33	4.2	120	150
CUS150M-36/A or U	36	11.6	4.2	4.2	150	150
CUS150M-36/F	36	11.6	4.2	-	150	-
CUS150M-48 or /B	48	11.6	2.5	3.12	120	150
CUS150M-48/A or U	48	11.6	3.12	3.12	150	150
CUS150M-48/F	48	11.6	3.12	-	150	-

Note 3: See derating curves on website Non-standard outputs can be requested within the following ranges (excluding the /F version);

Model:	CUS150M-12	CUS150M-15	CUS150M-18	CUS150M-24	CUS150M-28	CUS150M-36	CUS150M-48
Voltage range:	12 - 13.2	15 - 16.5	18 - 19.8	24 - 26.4	28 - 30.8	36 - 39.6	48 - 50

Non-standard output versions may be subject to minimum order quantities and variations to specification. For all non-standard output voltage settings please consult Sales.



Options			
Suffix	Description		
Blank	Open frame construction, dual input fuses, JST connectors		
/B	Base plate		
/U	U channel construction		
/A	U channel with cover		
/F	U channel with cover construction, top mounted fan		
/E*	Single input fuse in Live line		
/M	Molex connectors		
Example:			
CUS150M-15/UE U channel with cover construction, single input fuse			
* Subject to	* Subject to MOO, please consult sales		

Subject to MOQ, please consult sales

For Additional Information, please visit https://product.tdk.com/info/en/products/power/index.html

