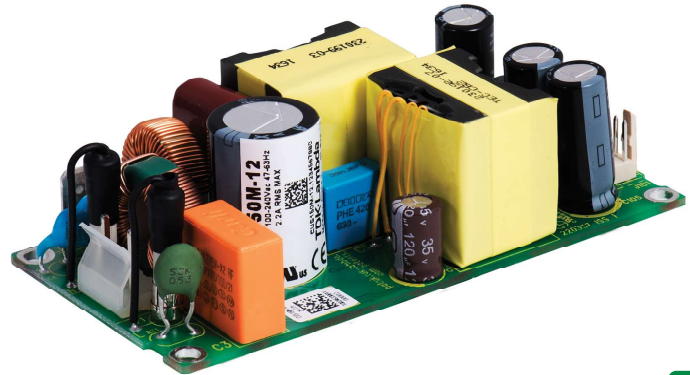


2 x 4" 150W AC-DC Power Supplies

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

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, PF 0.7 at 230VAC >20% load, class C >120W output
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)	<1%
Load Regulation	mV	≤1% (0 - 100% load)
Line Regulation	mV	≤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 cooling or forced air (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. Designed to meet IEC61010-1. EN60335-1 compliant models available, contact factory
Conducted & Radiated EMI	-	EN55011 / EN55032-B (See application notes for conditions)
Immunity	-	EN60601-1-2;2015 (Ed4), 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; /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 Sales regarding option models for -40°C start up and DC input

Note 2: For operation at 400-440Hz, please contact Technical Support. MOQs may apply.

Model Selector

Model	Nominal Output Voltage (V)	Fan Supply Voltage (V)	Maximum Current Convection ⁽²⁾ (A)	Maximum Current Forced Air (A)	Maximum Power Convection ⁽²⁾ (W)	Maximum Power Forced Air (W)
CUS150M-12	12	11.6	10	12.5	120	150
CUS150M-12/U	12	11.6	12.5	12.5	150	150
CUS150M-12/A	12	11.6	12.5	12.5	150	150
CUS150M-12/F	12	11.6	12.5	-	150	-
CUS150M-15	15	9.8	8	10	120	150
CUS150M-15/U	15	9.8	10	10	150	150
CUS150M-15/A	15	9.8	10	10	150	150
CUS150M-15/F	15	9.8	10	-	150	n/a
CUS150M-18	18	11.6	6.66	8.33	120	150
CUS150M-18/U	18	11.6	8.33	8.33	150	150
CUS150M-18/A	18	11.6	8.33	8.33	150	150
CUS150M-18/F	18	11.6	8.33	n/a	150	n/a
CUS150M-24	24	11.6	5	6.25	120	150
CUS150M-24/U	24	11.6	6.25	6.25	150	150
CUS150M-24/A	24	11.6	6.25	6.25	150	150
CUS150M-24/F	24	11.6	6.25	-	150	-
CUS150M-28	28	10.8	4.3	5.4	120	150
CUS150M-28/U	28	10.8	5.4	5.4	150	150
CUS150M-28/A	28	10.8	5.4	5.4	150	150
CUS150M-28/F	28	10.8	5.4	-	150	-
CUS150M-36	36	11.6	3.33	4.2	120	150
CUS150M-36/U	36	11.6	4.2	4.2	150	150
CUS150M-36/A	36	11.6	4.2	4.2	150	150
CUS150M-36/F	36	11.6	4.2	-	150	-
CUS150M-48	48	11.6	2.5	3.12	120	150
CUS150M-48/U	48	11.6	3.12	3.12	150	150
CUS150M-48/A	48	11.6	3.12	3.12	150	150
CUS150M-48/F	48	11.6	3.12	-	150	-

Non-standard outputs can be requested within the following ranges (excluding the /F version);

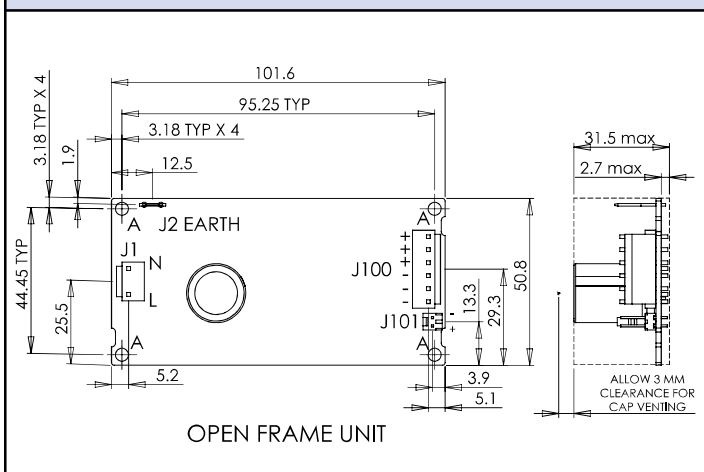
Note 2: See derating curves on website

*15V, 18V, 28V and 36V models available Q3 2018

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.

Outline drawing (Open Frame). See website for /U, /A and /F versions



Options

Suffix	Description
Blank	Open frame construction, dual input fuses, JST connectors
/M**	Molex connectors
/E**	Single input fuse in Live line
/U	U channel construction
/A	U channel with cover
/F	U channel with cover and top mounted fan

Example:

CUS150M-15/UE
U channel with cover construction, single input fuse

** Subject to MOQ, please consult sales

For Additional Information, please visit
<http://www.us.tdk-lambda.com/lp/products/cus-m-series>

