

2 x 4" 100W AC-DC Power Supplies

Features

- ◆ Convection, conduction or forced air cooling
- ◆ 100W Rating at 50°C Ambient
- ◆ 50W Conduction Cooling Rating at 80°C Ambient
- ◆ 75W With 1m/s Airflow at 85°C Ambient
- ◆ ITE & Medical Certifications (2 x MOPP)
- ◆ Suitable for Class I and Class II installations
- ◆ Class B Conducted and Radiated EMI



Key Market Segments & Applications



Specifications		CUS100ME
Input Voltage range		85 - 264VAC (47 - 440Hz ⁽¹⁾). Derate linearly to 90% load from 90 to 85VAC input
Inrush Current (Cold start at 230VAC input)	A	<65A
Input Current (100W load)	A	1.4A at 100VAC input
Hold Up Time (Typ)	ms	>24ms
Harmonic Compliance	-	EN/IEC61000-3-2 Class A. Minimum PF 0.97/0.89 (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
Ripple & Noise	mV (pk-pk)	≤1%
Load Regulation	mV	≤1% (0 - 100% load)
Line Regulation	mV	≤0.5% (85 - 264VAC)
Short Circuit Protection	%	110 - 190%. Hiccup mode, automatic recovery
Overvoltage Protection	V	Latching (unit shutdown), cycle AC input to reset
Efficiency	%	Up to 94%
Active Average Efficiency	%	>87%
Operating Temperature	-	-20°C to +85°C, see derating curves for operation above +50°C ⁽²⁾
Storage Temperature	°C	-40 to +85°C
Operational Altitude	m	5000m
Humidity (non condensing)	%RH	5 - 95%RH
Cooling	-	Convection, conduction (coldplate) or forced air cooling ⁽²⁾
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 ⁽³⁾
Conducted & Radiated EMI	-	EN55011 / EN55032-B (See application notes for conditions)
Immunity	-	EN61000-4-2 (Lvl 4), -3 (Lvl 3), -4 (Lvl 4), -5 (Lvl 3), -6 (Lvl 3), -8 (Lvl 4) -11 (class 3), EN60601-1-2:2015 (Ed4)
Weight (Typ)	g	Open Frame: 180g; /U: 240g; /A: 255g; /B: 220g
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

Note 1: For operation at 400-440Hz and/or DC input please contact Technical Sales

Note 2: See website for full derating curves

Note 3: EN60335-1 Compliant versions available (subject to MOQ). Please contact Technical Sales

Model Selector			
Model	Nominal Output Voltage (V)	Maximum ⁽²⁾ Current Convection (A)	Maximum ⁽²⁾ Power (W)
CUS100ME-12	12	8.33	100
CUS100ME-12/U	12	8.33	100
CUS100ME-12/A	12	8.33	100
CUS100ME-12/B	12	8.33	100
CUS100ME-15	15	6.66	100
CUS100ME-15/U	15	6.66	100
CUS100ME-15/A	15	6.66	100
CUS100ME-15/B	15	6.66	100
CUS100ME-18	18	5.55	100
CUS100ME-18/U	18	5.55	100
CUS100ME-18/A	18	5.55	100
CUS100ME-18/B	18	5.55	100
CUS100ME-24	24	4.16	100
CUS100ME-24/U	24	4.16	100
CUS100ME-24/A	24	4.16	100
CUS100ME-24/B	24	4.16	100
CUS100ME-28	28	3.57	100
CUS100ME-28/U	28	3.57	100
CUS100ME-28/A	28	3.57	100
CUS100ME-28/B	28	3.57	100
CUS100ME-36	36	2.77	100
CUS100ME-36/U	36	2.77	100
CUS100ME-36/A	36	2.77	100
CUS100ME-36/B	36	2.77	100
CUS100ME-48	48	2.08	100
CUS100ME-48/U	48	2.08	100
CUS100ME-48/A	48	2.08	100
CUS100ME-48/B	48	2.08	100

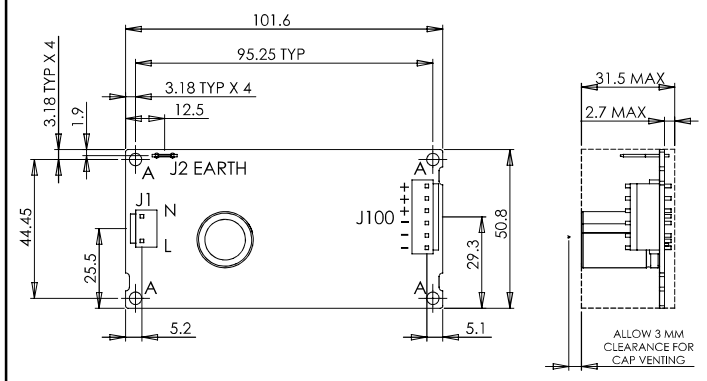
Note 2: See website for full derating curves

Non-standard outputs can be requested within the following ranges * Subject to MOQ, please consult sales

Model:	CUS100ME-12	CUS100ME-15	CUS100ME-18	CUS100ME-24	CUS100ME-28	CUS100ME-36	CUS100ME-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 /B versions



Style	Cooling	Output Power / Ambient Temperature			
		-20 to 50°C	70°C	80°C	85°C
Open frame	Convection	100W	60W	20W	-
/U or /B	Conduction	100W	100W	50W	-
All versions	1m/s air	100W	100W	83.3W	75W

Options

Suffix	Description
Blank	Open frame construction, dual input fuses, JST connectors
/U	U channel construction
/A	U channel with cover
/B	Baseplate
/M*	Molex connectors
/E*	Single input fuse in Live line
Examples CUS100ME-24/UEM, CUS100ME-12V5/A (example of model set at 12.5V)	

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



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