LED Broadcast Test Comm

Single Output 250W Low Profile Power Supplies

Features	Benefits
• High efficiency up to 90%	• Compact convection cooled device
• 30mm high	• Slim design for use in panels
• Wide range AC input	• Allows global use
• Convection cooled	• No fan noise
• High grade component selection	• 3 year warranty

Specification

Model		CUS250LD
AC Input Voltage (3)	VAC	85 - 265VAC (300VAC for 5s)
Input Frequency	Hz	47 - 63Hz
DC Input Voltage	VDC	120 - 370VDC (No safety certification)
Inrush Current (cold start)	A	20A at 115VAC, 40A at 230VAC
Power Factor (1)	-	Meets EN61000-3-2 (Typical PF 0.98/0.95)
Input Current (115/230VAC)	A	2.8 / 1.4
Temperature Coefficient	-	<0.02%/°C
Overcurrent Protection	-	> 105%
Overvoltage Protection (2)	V	3.3V: 4 - 5.25V, 4.2V: 5 - 6.5V, 5V: 5.75 - 7.5V, 12V: 13.8 - 16.2V, 24V: 27.6 - 32.4V
Hold Up Time	ms	20ms
Leakage Current (240VAC 60Hz)	mA	<0.75mA
Remote Sense	-	No
LED Indicator	-	Green LED = On
Operating Temperature (3)	°C	-25°C to +70°C. Derate down to 50% load from +40°C to +70°C
Storage Temperature	°C	-30°C to +75°C
Operating Humidity (non condensing)	%	30 - 90% RH
Storage Humidity (non condensing)	%	10 - 90% RH
Cooling	-	Convection
Withstand Voltage	-	Input to Ground 2kVAC, Input to Output 3kVAC, Output to Ground 500VAC for 1 min.
Isolation Resistance	-	>100M at 25°C & 70%RH, Output to Ground 500VDC
Vibration (non operating)	-	10 - 55Hz: 19.6m/s^2 constant sweep 1 min X, Y, Z for 1 hour
Shock	-	< 196.1 m/s^2 (20G)
Immunity	-	IEC61000-4-2 (lv 2, 3), -3 (lv3), -4 (lv 3), -5 (lv3, 4), -6 (lv 3), -8 (lv 4), -11
Safety Agency Certifications	-	IEC/UL/CSA/EN62368-1, 60950-1 (cTUVus), CE Mark
Conducted & Radiated EMI	-	EN55022-B, FCC--B
Weight (Typ)	g	700
Size (LxWxH)	mm	198 x 102 x 30
Warranty	yrs	3

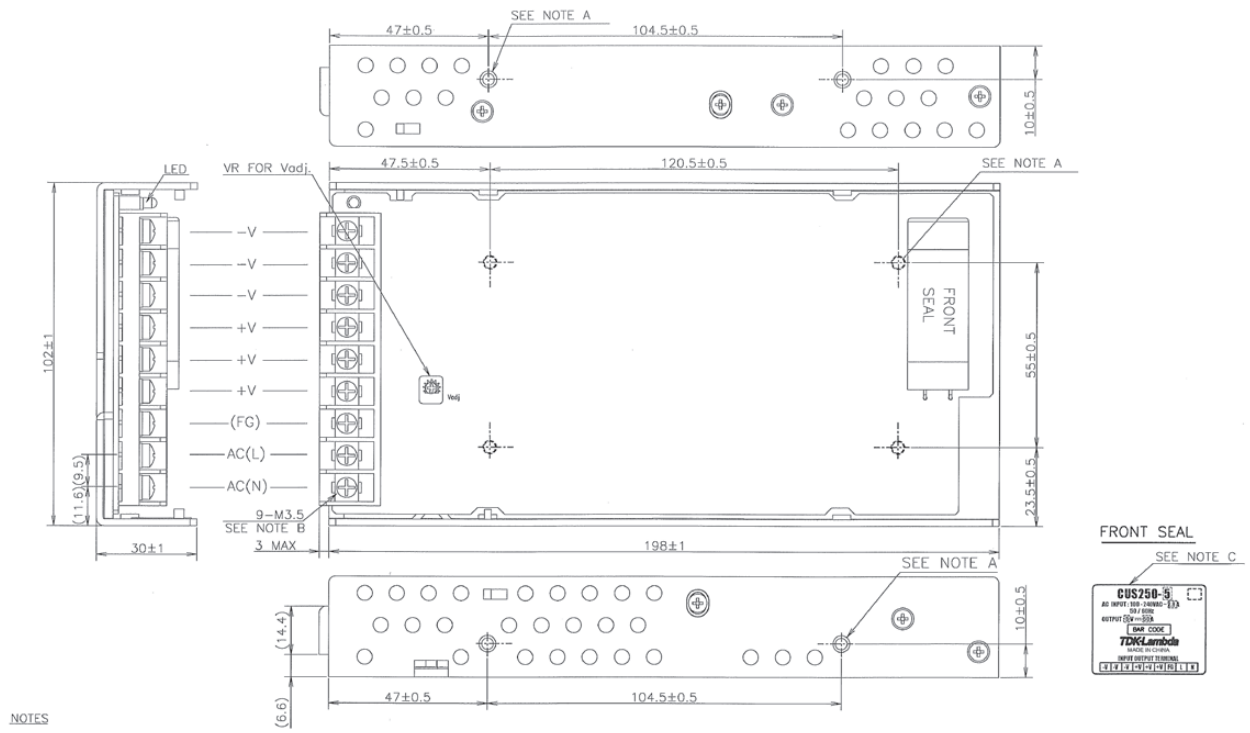
Notes:

(1) 115 / 230VAC input
(2) Cycle AC to reset
(3) See derating curves on page 3. Output derating vs input voltage - derate linearly to 80% load from 115VAC to 85VAC input **(not for CUS250LD-3)**

Model Selector

Model	Voltage	Adjust Range (V)	Max Current (A)	Max Power (W)	Load Reg (mV)	Line Reg (mV)	Ripple Noise (mV)	Efficiency (typ) % (1)
CUS250LD-3	3.3V	2.97 - 3.63	50	165	40	20	120	86 / 88
CUS250LD-4	4.2V	3.78 - 4.62	50	210	40	20	120	87 / 89
CUS250LD-5	5V	4.5 - 5.5	50	250	40	20	120	88 / 90
CUS250LD-12	12V	10.8 - 13.2	21	252	96	48	120	88 / 90
CUS250LD-24	24V	21.6 - 26.4	10.5	252	192	96	150	88 / 90

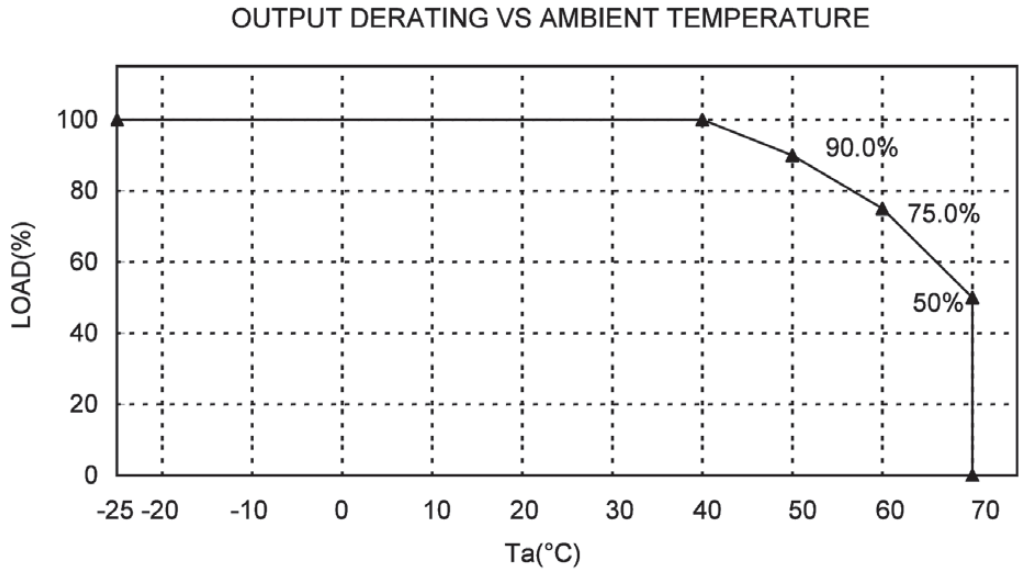
Outline Drawing CUS250LD Series

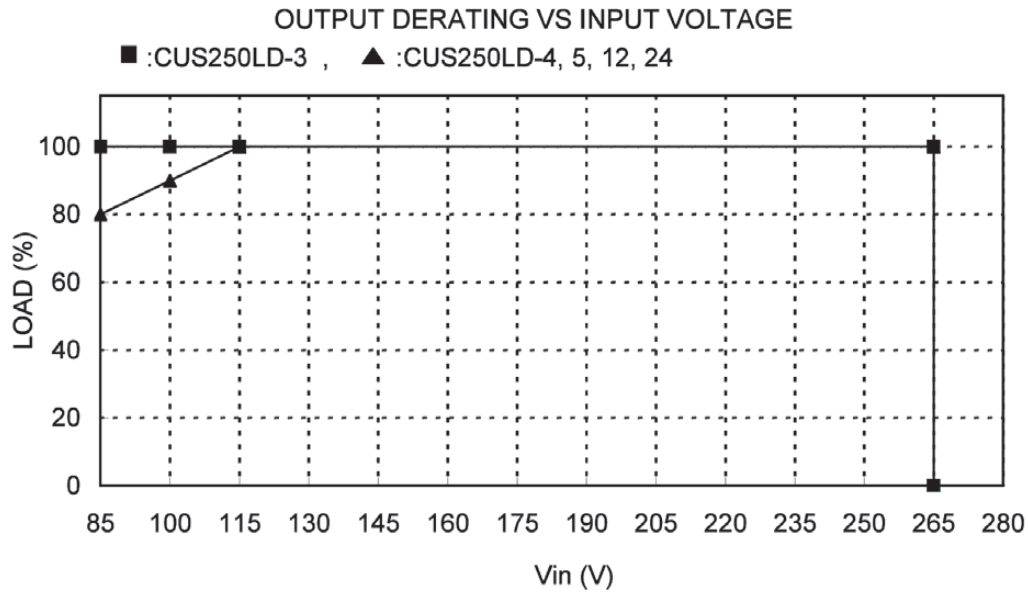


NOTES

A: M3.5 EMBOSSED, TAPPED AND COUNTERSUNK HOLES (8) FOR CUSTOMER CHASSIS MOUNTING. SCREWS MUST NOT PROTRUDE INTO POWER SUPPLY BY MORE THAN 6mm.
B: RECOMMENDED SCREW TORQUE (M3.5 SCREW) < 0.75N·m
C: MODEL NAME, MAXIMUM OUTPUT POWER, NOMINAL OUTPUT VOLTAGE, MAXIMUM OUTPUT CURRENT,ARE SHOWN HERE IN ACCORDANCE WITH THE SPECIFICATIONS.

Output Derating Curve CUS250LD





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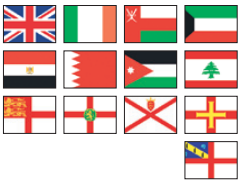

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