

MORNSUN®

3.3W, AC-DC CONVERTER

LD03-10C0505-01M is a high-performance, small size power converter offered by MORNSUN for PCB mount installation applications. It features universal input voltage, taking both DC and AC input voltage, Low ripple and noise, high efficiency, high reliability, safer isolation. It widely used in industrial, electricity, office and civil applications.



PRODUCT FEATURES

- I Universal Input: 85~264VAC/120~370VDC
- I Low Ripple and Noise
- I AC and DC all in one (input from the same terminal)
- I EMI/RFI conducted: level B
- I Group pluse / Surge: level 3
- I Multiple output protection function: over current protection, Short circuit protection
- I Meet Industrial level specifications

PRODUCT PROGRAM

Model	package (mm)	Input Voltage (Vac)	Output power (W)	Output Voltage(V)			Output current(mA)			Ripple and Noise (max.)(mV)	Efficiency (%) (typ)
				Vo1	Vo2	Vo3	Io1	Io2	Io3		
LD03-10C0505-01M	52.5*24.5*18.5	85~264	3.3	5	5	12	400	100	50	100	75

INPUT SPECIFICATIONS

Input Voltage Range	85~264Vac, 120~370Vdc
Input Frequency (Hz)	47~63Hz
Input Current (A)	30mA Typ@ Vin=220Vac, Io=100%

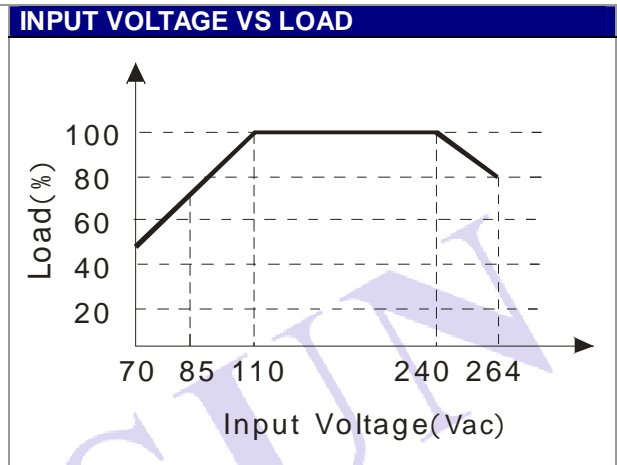
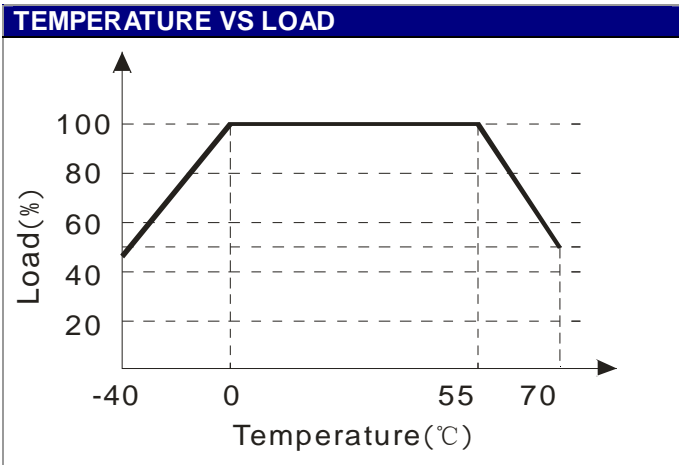
OUTPUT SPECIFICATIONS

Voltage set accuracy	±2% (main output)
Input variation	±0.5% (main output) ±1.5% (supplement output)
Load variation (Load balancing)	±3% (main output) ±5% (supplement output)
Ripple& noise(p-p) (20MHz Bandwidth)	100mV (max)
Hold-up time Vin=230Vac	80ms (typ.)
No-load power consumption	0.75W(max)
Output over current protection	≥115%Io and auto resume
Output short circuit protection	Continuous, and auto resume

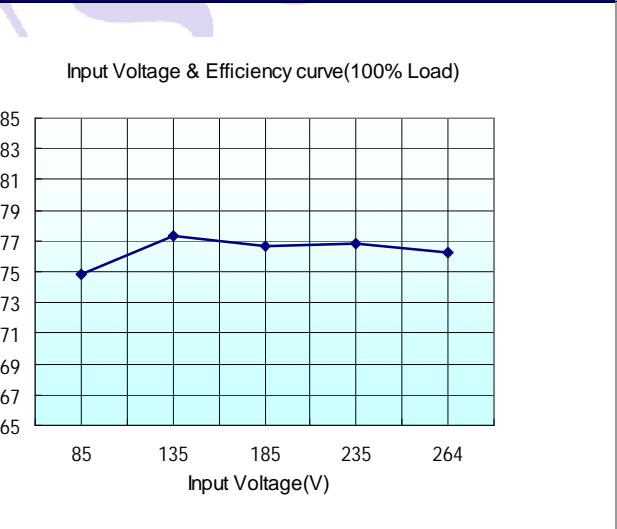
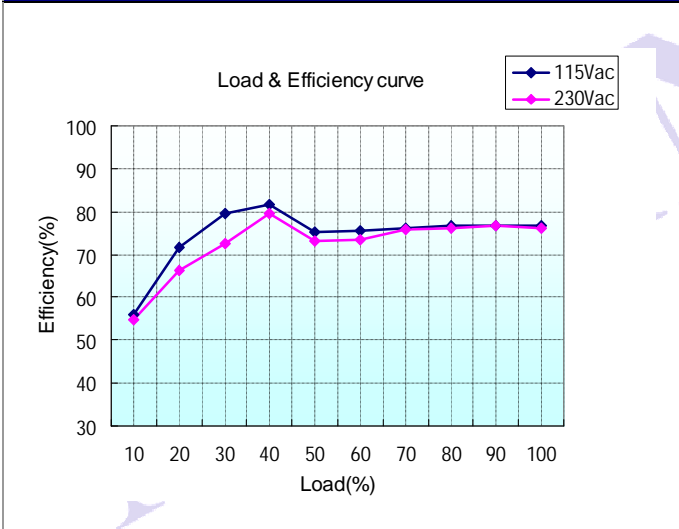
COMMON SPECIFICATIONS

Operating temperature	below 0°C, above 55°C derating	-40~70°C
Isolation voltage	Input-Output	3000Vac 1min
	Output-Output	500Vdc 1min

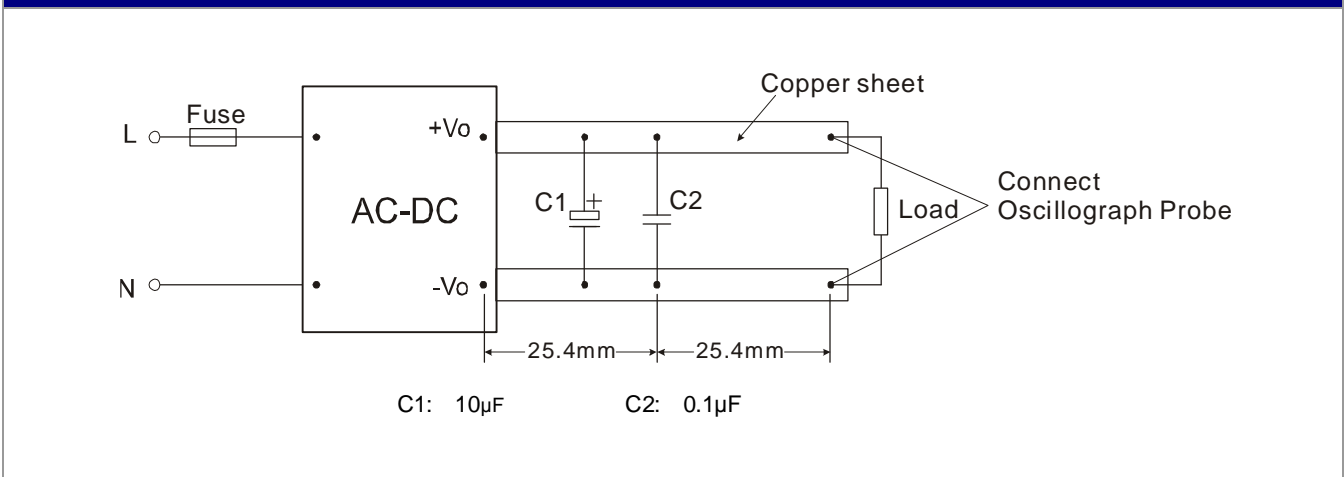
EMC compliance	Electrostatic discharge Electrostatic fast transients Surge EMI/RFI conducted	IEC/EN 61000-4-2 level 3 6KV/8KV IEC/EN 61000-4-4 level 3 2KV IEC/EN 61000-4-5 level 3 1KV/2KV EN55022 level B
Cooling	Free air convection	
<p>Note:</p> <p>1. Unless otherwise specified, all specifications above are measured at input voltage $V_{in}=220V_{ac}$, $I_o=100\%$, $T_A=25^{\circ}C$.</p> <p>2. Ripple and Noise are measured by the method of anear measure (The details see the anear measure).</p> <p>3. Product can not be operated continuously over current, or it will cause permanent damage to the device.</p>		



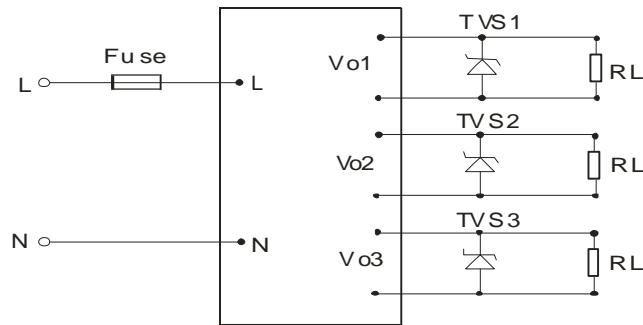
TYPICAL EFFICIENCY CURVE



ANEAR MEASURE



TYPICAL APPLICATIONS

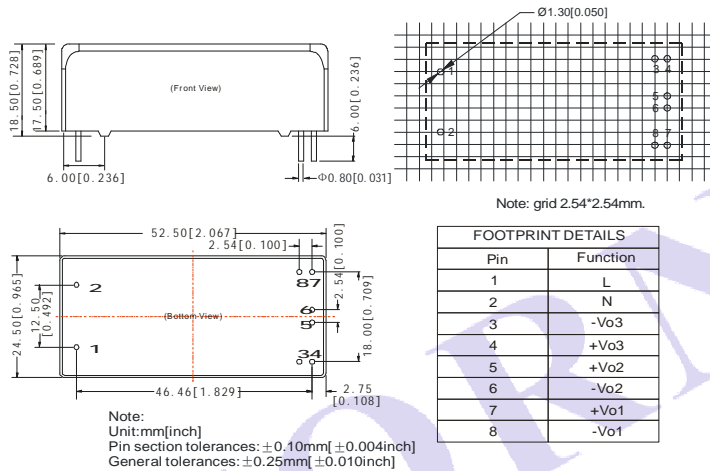


EXTERNAL CAPACITORS TYPICAL VALUE

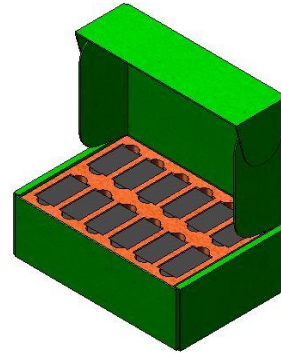
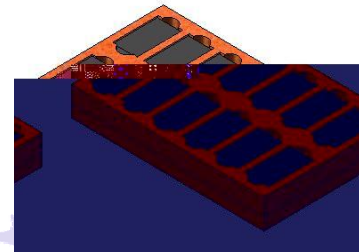
Model	FUSE	TVS1	TVS2	TVS3
LD03-10C0505-01M	1A/250V	P6KE6.8A	P6KE6.8A	P6KE16A

Note: Fuse is recommended to start protection when input fails. TVS is a recommended component to protect post-circuits.

OUTLINE DIMENSIONS & FOOTPRINT DETAILS



PACKAGE DIAGRAM



Inner packaging dimensions: L*W*H=255*170*80mm

Packaging quantity: 24pcs

Outer packaging dimensions: L*W*H=405*380*305mm

Packaging quantity: 144pcs

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