

**Non-isolated DC-DC Converter**

**Compact Size, Full-load Efficiency > 90%**

**Die Cast Housing & Epoxy Resin Sealing, IP67**

**Low Cost & Long Life Circuit Design**

**Customize Solution Available**

CLL is a low cost series designed for common usage in low voltage range (3-56VDC). It is a cost effective solution for pumps, LED lights, motor etc.

A Size: 100 \* 127 \*63 mm

B Size: 150 \* 127 \*63

C Size: 220 \* 127 \*63 mm

D Size: 300 \* 127 \*63 mm

Curstomize solution available with CLL Series:  
input and output voltage between 5VDC ~ 72VDC  
Output power < 3kW



**Input Characteristic**

Default Input Voltage Range\* :

Step-up Converter:

12V = 10~15VDC

24V = 20~30VDC

Step-down Converter:

12V = 10~30VDC

24V = 18~36VDC

36V = 30~44VDC

48V = 40~56VDC

Input Reverse Protection: NOT implemented by default

**Output Characteristic**

Full-load Efficiency: 90~94%  
Ripple p-p: 2% of output voltage (MAX)  
Load Regulation: 1.5%  
Max Non-load Consumption: 0.5% of full-load power  
Over-load Protection: +10% of rated output current  
Short-circuit Protection: yes

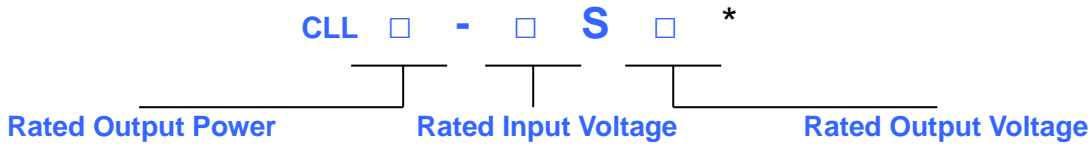
**Other info**

Allowed Case Temperature: -10°C ~ 95°C  
Storage Temperature: -20°C ~ 80°C  
Storage Humidity: 20~90%

\* Input range can be customized, the range listed is for standard types. Input range is not always the same for different models

\*\* Can implement in customize products

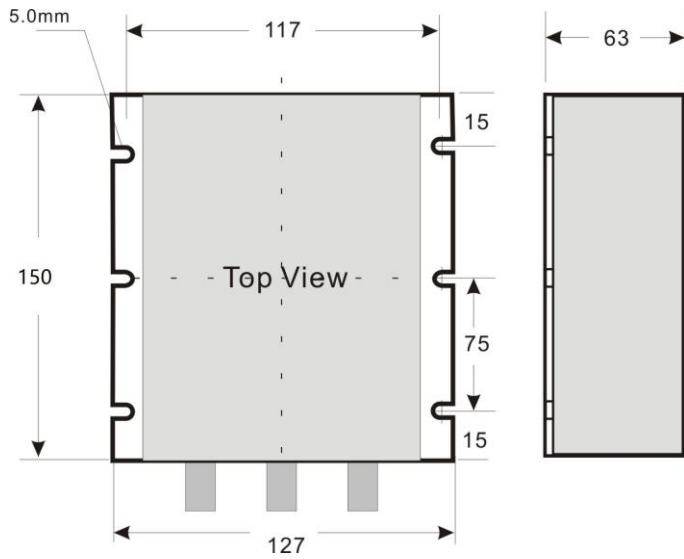
Ordering Information:



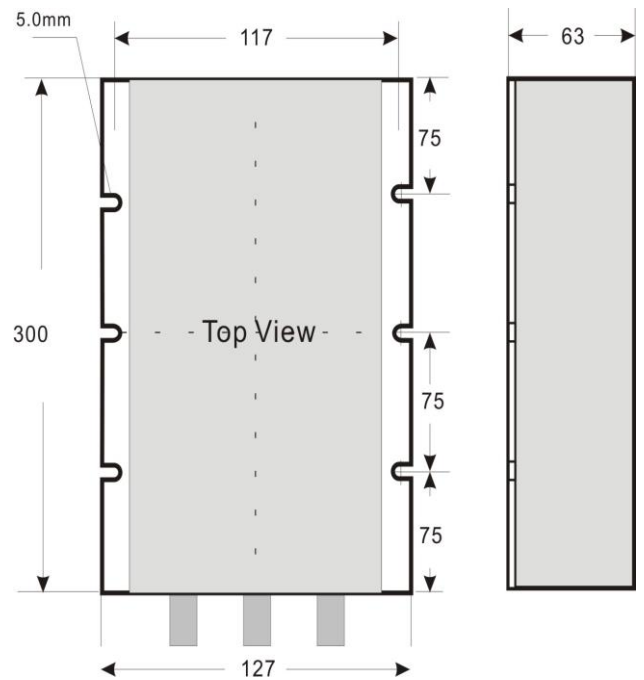
Example:

Input: 12V (10~15VDC)	Output: 24V	Output Power: 40A (960W)	CLL960-12S24
Input: 12V (10~30VDC)	Output: 5V	Output Power: 50A (250W)	CLL250-12S05

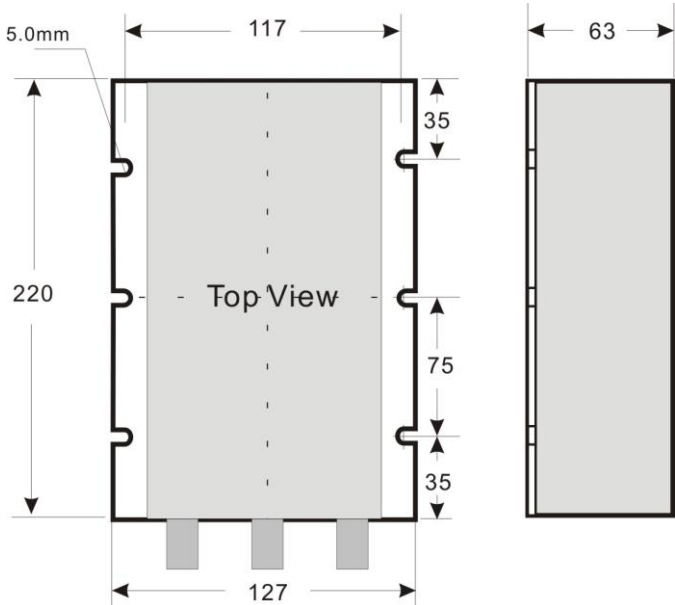
Dimensions (Unit: mm):



**B Size: 500-1000W \***



**D Size: 2000-3000W \***



**C Size: 800-1500W \***

\* Input and output voltage and power together determine the size. Rated power is not the only factor.