

## 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, small motor etc.

Small case (66×59×24 mm)

Big case (74×72×28 mm)

Customize solution available with CLL Series:  
input and output voltage between 5VDC ~ 56VDC  
Output power < 200W



Small Case



Big Case

RoHS

CE

### 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: 1% 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℃ ~ 75℃

Storage Temperature: -20℃ ~ 80℃

Storage Humidity: 20~90%

Weight:

Small Case: 170~190g

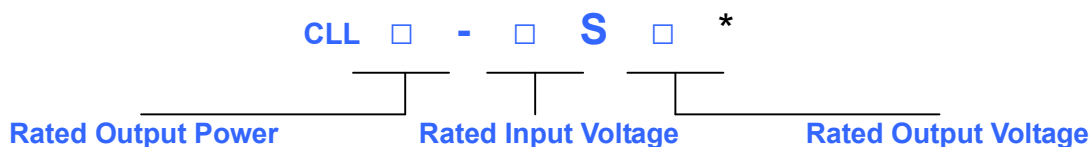
Big Case: 240~280g

\* 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

\*\*\* Not every model can achieve 94% efficiency.

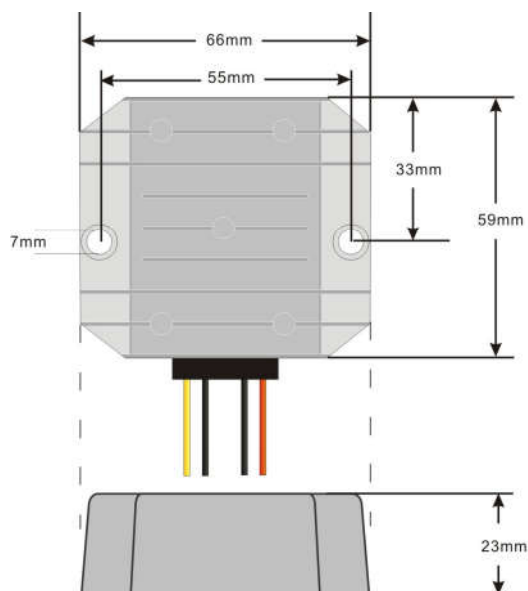
## Ordering Information:



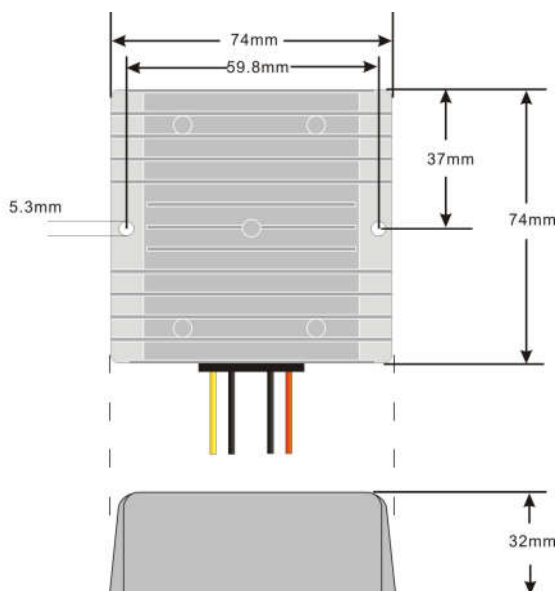
## Example:

Input: 12V (10~15VDC)	Output: 24V	Output Power: 8A (200W)	CLL200-12S24
Output: 12V (10~30VDC)	Output: 5V	Output Power: 10A (50W)	CLL50-12S05

## Dimensions:



Small Case



Big Case

NOTE: The size may change slightly (a few mm). If you need exactly the same size, please contact before ordering.