

Ref: 39.002

**Features:**

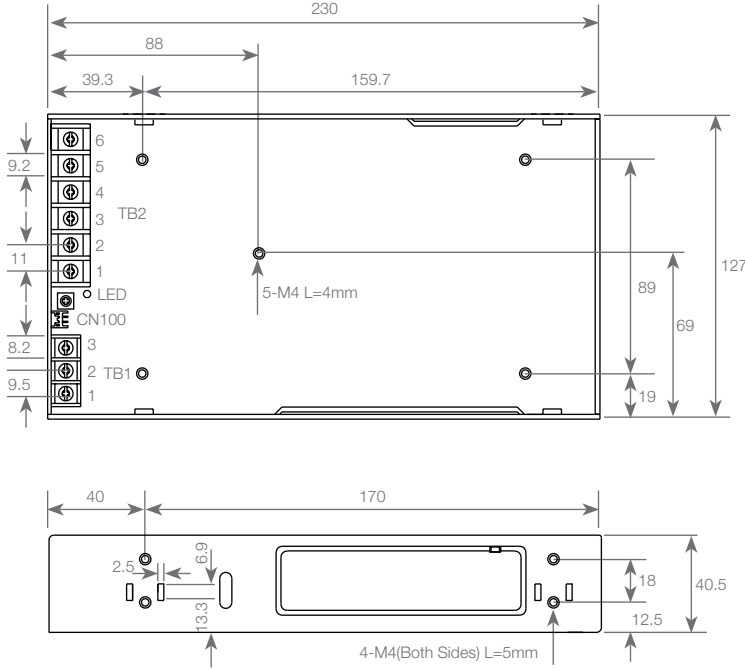
- Universal AC input / full range
- Built-in active PFC function
- High efficiency up to 90.5%
- Forced air cooling by built-in DC fan
- Built-in remote On-Off control / remote sense / DC OK signal
- Protections: short circuit, overload, over volatge, over temperature
- Protection functions: OVP/SCP/OCP/OTP
- Factory control or automation apparatus
- RF application



Output	Power	504W
	Voltage (V)	48V
	Constant current region	16.8 ~24V
	Rated current	10.5A
	Current range	0 ~ 10.5A
	Ripple and noise (max.)	150mV
	Voltage tolerance	± 1.0%
	Line regulation	± 0.2%
Input	Load regulation	± 0.5%
	Voltage range	85~264VAC - 120~370VDC
	Frequency range	47~63Hz
	Power factor	PF ≥ 0.95/230VAC - PF ≥ 0.98/115VAC (full load)
	Efficiency	90.5%
	AC current	5.3A/115VAC - 2.65A/230VAC
	Inrush current	20A/115VAC - 40A/230VAC
Protection	Leakage current	< 2mA / 240VAC
	Over load	105 ~ 130%
	Over voltage	58.4 ~ 68V (shut down o/p voltage, re-power on the recover)
Function	Over temperature	Shut down o/p voltage, recovers automatically after temperature goes down
	Remote control	power ON: open or 0~0.8VDC between RC+ (Pin 4) & RC-(Pin3) on CN100 power OFF: 4~10VDC between RC+ (Pin 4) & RC-(Pin3) on CN100
	Remote sense	compensate voltage drop on the load wiring up to 0.3V
Environment	Fan control	RTH 2±50°C±10°C Fan on - RTH 2±40°C±10°C Fan off (Fan always on for 3.3~5V, Fan ON/OFF control for 12~48V)
	Working temperature	-30 ~ +70°C
	Working humidity	20 ~ 90% RH non-condensing
	Storage temperature humidity	-40 ~ +85°C, 10 ~ 95% RH
	Temperature coefficient	± 0.03% °C (0 ~ 50°C)
	Vibration	10 ~ 500Hz, 2G 10min / 1cycle, period for 60 min. each along X, Y, Z axes
Other	Degree of protection	IP20
	MTBF	187.7K hrs min. MIL-HDBK-217F (25°C)
	Dimension	230x127x40.5mm
	Packing	1 unit
	Guarantee	3 years



**Measurements:**



AC Input Terminal  
Pin No. Assignment (TB1)

Pin No.	Assignment
1	AC/L
2	AC/N
3	FG $\pm$

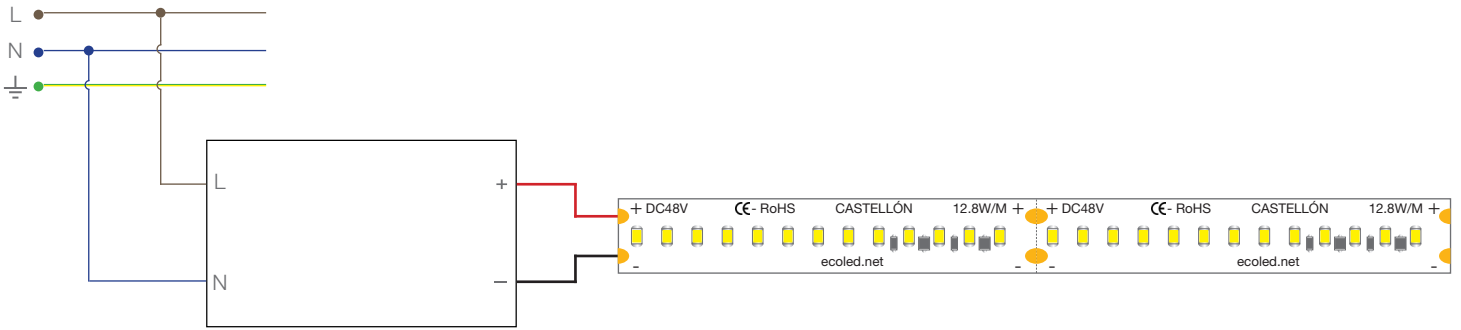
DC Output Terminal  
Pin No. Assignment (TB2)

Pin No.	Assignment
1 ~ 3	DC OUTPUT -V
4 ~ 6	DC OUTPUT +V

Connector Pin No. Assignment (CN100) :  
HRS DF11-04DP-2DS or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	-S		
2	+S	HRS DF11-4DS or equivalent	HRS DF11-**-**SC or equivalent
3	RC-		
4	RC+		

**Diagram:**



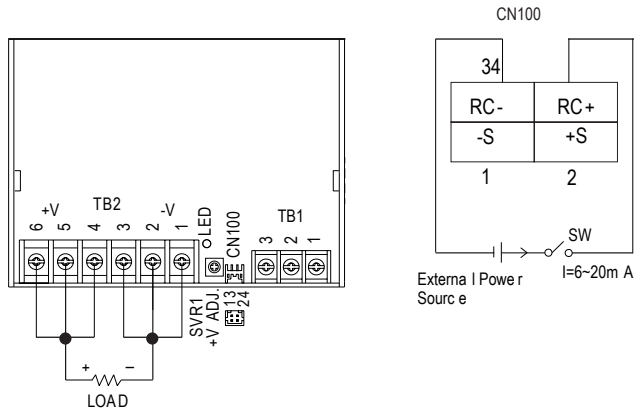
**Function Description of CN100:**

Pin No.	Function	Description
1	-S	Negative sensing. The -S signal should be connected to the negative terminal of the load. The -S and +S leads should be twisted in pair to minimize noise pick-up effect. The maximum line drop compensation is 0.3V.
2	+S	Positive sensing. The +S signal should be connected to the positive terminal of the load. The +S and -S leads should be twisted in pair to minimize noise pick-up effect. The maximum line drop compensation is 0.3V.
3	RC-	Return for RC+ signal input.
4	RC+	Turns the output on and off by electrical or dry contact between pin 4 ( RC+) and pin 3 (RC-). 0~0.8VDC or open: Power ON, 4~10VDC: Power OFF.

**Function manual:**

**Remote Control**

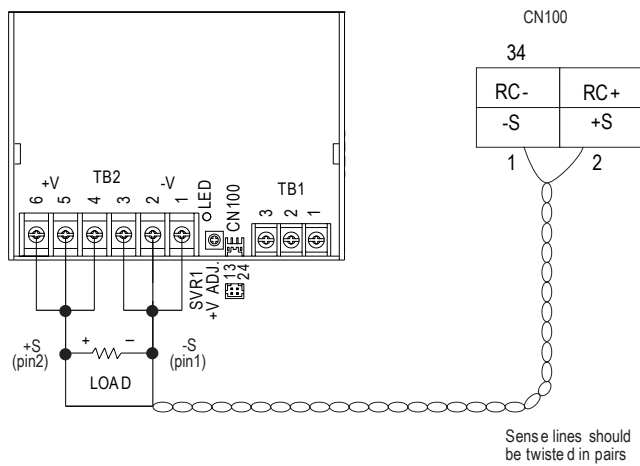
The PSU can be turned ON/OFF by using the "Remote Control" function.



Between RC-(pin3) and RC+(pin4) on CN100	PSU Status
SW OFF (0 ~ 0.8VDC) or open	ON
SW ON (4 ~ 10V)	OFF

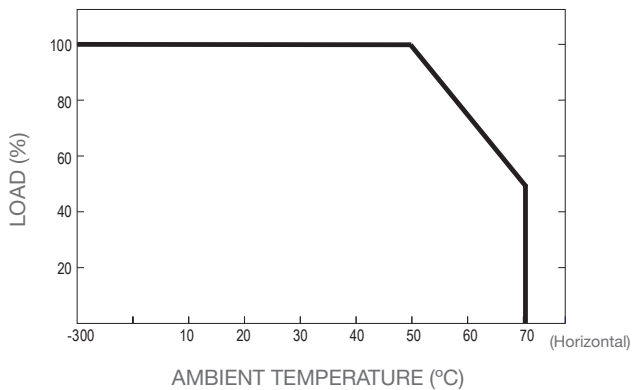
**Remote Sense**

The remote sensing compensates voltage drop on the load wiring up to 0.3V

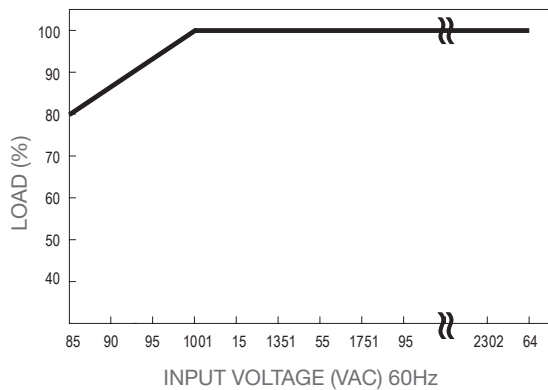


**Type performance graphs**

**Derating Curve**



**Static Characteristics**





## Assembly and Safety Information

### Applied standards CE:

- EN 62368-1
- EN 60950-1
- EN 61000-3-2
- EN 61000-3-3
- EN 61000-6-2
- EN 61000-4-2
- EN 61000-4-3
- EN 61000-4-4
- EN 61000-4-5
- EN 61000-4-6
- EN 61000-4-8
- EN 61000-4-11
- EN 62368-1
- EN 55022
- EN 55032
- EN 55024

### Applied standards CCC:

- GB 4943.1

### Applied standards CB:

- IEC 60950-1
- IEC 62368-1

### Applied standards UL:

- UL 62368-1

## Description

- Our Ref: 39.002 is a 500W led AC/DC driver which features a constant power mode.
- It operates from 85~264VAC input voltage and offers the models with the DC output mostly demanded from the industry.
- each model os cooled by the built-in fan speed control, working for the temperate uo to 70°C.
- Moreover, Ref: 39.002 provides vast design flexibility by equipping various built-in functions such as remote ON-OFF control, remote sede DC OK sognañ, etc.