Rail DC / DC Converters: 30~200 Watts





Features

- Wide input: 60 ~ 160vdc
- IEC 61373 Shock & Vibration
- Base plate cooled
- Full power at +100°C base plate temperature
- Parallel operation for 200W modules
- Quarter / Half brick i ndustry standard package options
- -40°C operation
- Fully isolated output 3000vac
- International safety approvals
- Overvoltage protection
- Overload & Short circuit protection

General Specifications

Input Voltage 60 ~ 160Vdc

Input current 0.34 ~ 2.16A (model dependent)

Output Voltage Refer to table

Output Power 30 ~ 200 watts

External Trim Refer to table, via external trim network

Efficiency Typically 88% (model dependent)

 Ripple & Noise
 5V
 12V
 15V
 24V

 mV pk-pk
 100mV
 150mV
 150mV
 240mV

Line Regulation 5V 12V 15V 24V 20mV 48mV 60mV 96mV

Load Regulation 5V 12V 15V 24V 40mV 96mV 120mV 192mV

Protection Overcurrent protection set at 105~140%

Overvoltage protection (cycle input or

remote on/off to reset)

Remote Sense Yes

Remote ON/OFF Short = On, Open = Off

Parallel Operation CN200A only

Operating Temp. -40°C to +100°C base plate

Temperature Coeff. 0.02% per ℃

Safety

Humidity 5-95% RH non condensing

Cooling Conduction via base plate (refer to manual)

Isolation Input-Output: 3kVAC,

Input-Baseplate: 1.5Kvac Output-Baseplate: 500VAC

UL60950-1, EN60950-1, CSA60950-1

Vibration IEC61373 Cat 1, Grade B

Size CN30A ~ CN100A: 58 x 37 x 12.7mm

CN200A: 61 x 58 x 12.7mm

Weight CN30A ~ CN100A: 70g

CN200A: 150g

Description

The **CN** series is "building Block" power module, that allows system design Engineers to integrate the is module onto their own pcb.

This provides complete flexibility in system profile design and in addition reducing cost dramatically compare to a stand-alone dc/dc converter.

They are suitable for both rail rolling stock and fixed installations, enabling customers to design cost-effective EN50155 compliant systems .

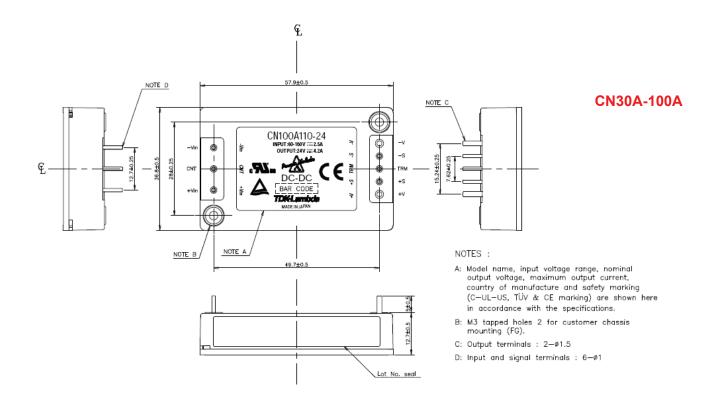
Designed for harsh environments, the CN-A Series meets the stringent shock and vibration requirements of IEC61373 Category 1 Class B. In addition, all models accept the wide-range DC input commonly found in railway applications, which allows operation from any voltage between 60 and 160V. These base-plate-cooled power supplies, with industry standard quarter-brick or half-brick pinout, provide exceptionally high, true us eable power from -40 to +100°C, without derating.

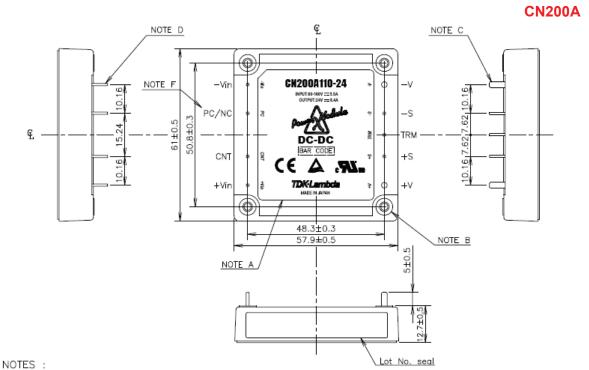
Manual & Full Application notes on CN-A series, visit our website

Model	Ou V	tput A	Voltage Range	Power W
CN30A110-5	5V	6A	4.5 ~ 6V	30W
CN50A110-5	5V	10A	4.5 ~ 6V	50W
CN100A110-5	5V	20A	4.5 ~ 6V	100W
CN200A110-5	5V	40A	4.5 ~ 6V	200W
CN30A110-12	12V	2.5A	10.8 ~13.2V	30W
CN50A110-12	12V	4.2A	10.8 ~13.2V	50W
CN100A110-12	12V	8.4A	10.8 ~13.2V	100W
CN200A110-12	12V	16.7A	10.8 ~13.2V	200W
CN30A110-15	15V	2.0A	13.5~16.5V	30W
CN50A110-15	15V	3.4A	13.5~16.5V	50W
CN100A110-15	15V	6.7A	13.5~16.5V	100W
CN200A110-15	15V	13.4A	13.5~16.5V	200W
CN30A110-24	24V	1.3A	21.6~26.4V	30W
CN50A110-24	24V	2.1A	21.6~26.4V	50W
CN100A110-24	24V	4.2A	21.6~26.4V	100W
CN200A110-24	24V	8.4A	21.6~26.4V	200W

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- A: Model name, input voltage range, nominal output voltage, maximum output current, country of manufacture and safety marking (C-UL-US, TÜV & CE marking) are shown here in accordance with the specifications.
- B: M3 tapped holes 4 for customer chassis mounting (FG).
 C: Output terminals : 2-\(\textit{\rightarrow}\)2-\(\textit{\righ
- D: Input and signal terminals : 7-ø1
- E: Unless otherwise specified dimensional tolerance : ±0.25
- F: 5V output model : NC
- 12V, 15V, 24V output models : PC