

50 & 100W 14.4 to 36VDC Input DC-DC Converters

Features

- ◆ 14.4 - 36VDC Input
- ◆ IEC 61373 Shock and Vibration
- ◆ Base-plate Cooled
- ◆ Full Power at 100°C base plate
- ◆ Small Size
- ◆ Quarter Brick Footprint
- ◆ Wide input range



Key Market Segments & Applications



| Specifications | | | | |
|------------------------------|--------|--|-------------|-------------|
| Model | | | | |
| Nominal Output Voltage | VDC | 5V | 12V | 24V |
| Input Voltage Range | VDC | 14.4 - 36VDC (40V transient for 3 seconds) | | |
| Input Current | A | 2.48 - 4.91A (model dependant) | | |
| Output Voltage Adjustment | VDC | 4.5 - 6 | 10.8 - 13.2 | 21.6 - 26.4 |
| Ripple & Noise (max) pk-pk | mV | 100 | 150 | 240 |
| Line Regulation (max) | mV | 20 | 48 | 96 |
| Load Regulation (max) | mV | 40 | 96 | 192 |
| Overcurrent Protection | % | 105 - 140% | | |
| Overvoltage Protection | % | 125 - 145% (Cycle input or remote on/off to reset) | | |
| Remote Sense | - | Yes | | |
| Remote On/Off | - | Yes; Low = ON, Open = OFF | | |
| Operating Temperature | °C | -40°C to +100°C Baseplate | | |
| Storage Temperature | °C | -40°C to +100°C | | |
| Temperature Coefficient | %/°C | 0.02%/°C | | |
| Humidity (non condensing) | %RH | 5 - 95% RH Operating and Non Operating | | |
| Cooling | - | Conduction (See Installation Manual for heatsink selection) | | |
| Withstand Voltage | VAC | Input to Base-plate: 2kVAC; Input to Output 3.0kVAC for 1 min.; Output to Base-plate: 500VAC for 1 min | | |
| Isolation Resistance | - | >100M at 25C and 70%RH, Output to Base plate 500VDC | | |
| Vibration (1) | - | Non Operating, 10-55Hz (sweep for 1 min.) Amplitude 0.825mm constant (Max 49 m/s ²) X,Y,Z 1 hour each IEC61373 - Category 1, Grade B | | |
| Shock (1) | - | 196.1m/s ² , IEC61373 - Category 1, Grade B | | |
| Safety Agency Certifications | - | IEC/UL/CSA/EN60950-1, IEC/UL/CSA/EN62368-1, CE | | |
| Weight (Typ) | g | 70g | | |
| Size (WxHxD) | in(mm) | 1.45 x 0.5 x 2.28" (36.8 x 12.7 x 57.9) | | |
| Warranty | yrs | 5 Years | | |

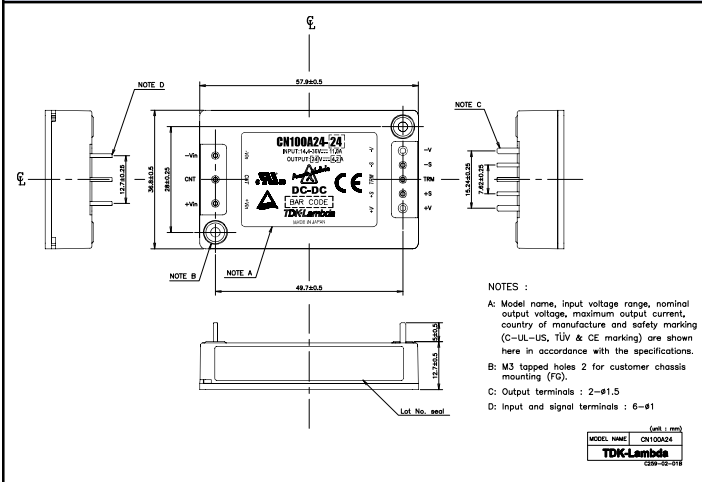
Note: See Installation Manual for full details, test methods of parameters and application notes

(1) Compliant to EN50155 & IEC60571

Model Selector

| Model | Voltage (V) | Output Current (A) | Maximum Power (W) | Input Current (A) | Efficiency (%) (100% load, 24VDC In) |
|-------------|-------------|--------------------|-------------------|-------------------|--------------------------------------|
| CN50A24-5 | 5 | 10 | 50 | 2.48 | 85 |
| CN100A24-5 | 5 | 20 | 100 | 4.91 | 86 |
| CN50A24-12 | 12 | 4.2 | 50.4 | 2.47 | 86 |
| CN100A24-12 | 12 | 8.4 | 100.8 | 4.83 | 88 |
| CN50A24-24 | 24 | 2.1 | 50.4 | 2.47 | 86 |
| CN100A24-24 | 24 | 4.2 | 100.8 | 4.83 | 88 |

Outline Drawing



Option

| Suffix | Description |
|---------|---|
| /CO | Pcb coating for EN50155 & IEC60571 compliance |
| Example | CN50A24-5/CO |

Heat Sink Accessory

| Model | Description |
|---------|----------------------|
| HAQ-10T | 25mm transverse fins |

For Additional Information, please visit
<https://product.tdk.com/en/power/>

