

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		

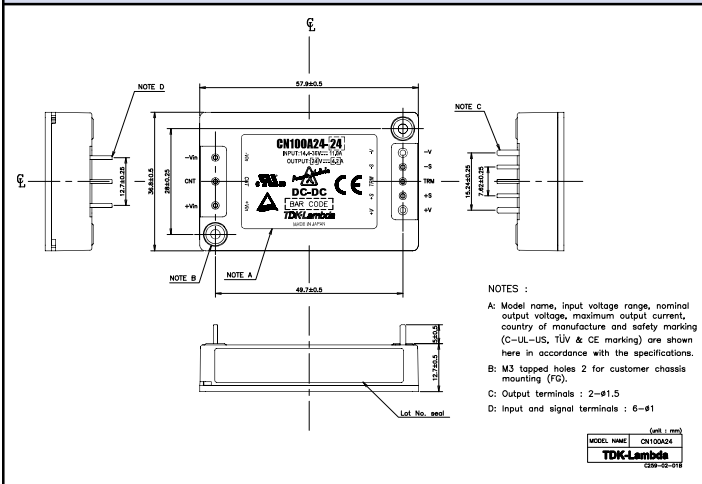
Note: See Installation Manual for full details, test methods of parameters and application notes

(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/>

