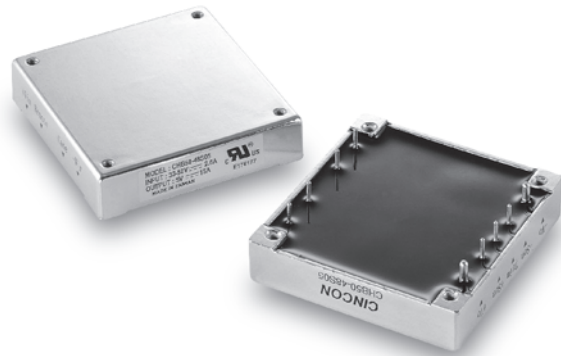


CHB50

S E R I E S

25-50 WATT DC-DC CONVERTERS SINGLE OUTPUT



Features

- 25W-50W Isolated Output
- Efficiency to 89%
- 300KHz Switching Frequency
- 2 : 1 Input Range
- Regulated Outputs
- Continuous Short Circuit Protection
- Five-Sided Metal Case
- Half-Brick size meet industrial standard
- CE Mark Meets 2006/95/EC, 93/68/EEC, and 89/336/EEC
- Safety Meets UL60950-1, EN60950-1, and IEC60950-1
- UL60950-1 Approval

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT		INPUT CURRENT		% EFF.	Capacitor Load max.
			MIN.	MAX.	NO LOAD	FULL LOAD		
CHB50-12S25	9-18 VDC	2.5 VDC	0 mA	10 A	50 mA	2740 mA	76	10000µF
CHB50-12S33		3.3 VDC	0 mA	10 A		3481 mA	79	10000µF
CHB50-12S05		5 VDC	0 mA	10 A		5020 mA	83	10000µF
CHB50-12S12		12 VDC	0 mA	4.16 A		4781 mA	87	4000µF
CHB50-12S15		15 VDC	0 mA	3.33 A		4781 mA	87	2000µF
CHB50-12S24		24 VDC	0 mA	2.08 A		4781 mA	87	1500µF
CHB50-24S25	18-36 VDC	2.5 VDC	0 mA	10 A	50 mA	1335 mA	78	10000µF
CHB50-24S33		3.3 VDC	0 mA	10 A		1698 mA	81	10000µF
CHB50-24S05		5 VDC	0 mA	10 A		2450 mA	85	10000µF
CHB50-24S12		12 VDC	0 mA	4.16 A		2363 mA	88	10000µF
CHB50-24S15		15 VDC	0 mA	3.33 A		2363 mA	88	4000µF
CHB50-24S24		24 VDC	0 mA	2.08 A		2363 mA	88	2000µF
CHB50-48S25	36-75 VDC	2.5 VDC	0 mA	10 A	50 mA	676 mA	77	10000µF
CHB50-48S33		3.3 VDC	0 mA	10 A		848 mA	81	10000µF
CHB50-48S05		5 VDC	0 mA	10 A		1240 mA	84	10000µF
CHB50-48S12		12 VDC	0 mA	4.16 A		1181 mA	88	10000µF
CHB50-48S15		15 VDC	0 mA	3.33 A		1181 mA	88	4000µF
CHB50-48S24		24 VDC	0 mA	2.08 A		1168 mA	89	2000µF

NOTE: 1. Nominal Input Voltage 12, 24 or 48 VDC

Specifications

INPUT SPECIFICATIONS:

Input Voltage Range.....	12V.....	9-18V
	24V.....	18-36V
	48V.....	36-75V
Input Surge Voltage (100ms max.)	12V	25Vdc max.
	24V	50Vdc max.
	48V	100Vdc max.
Undervoltage lockout:		
12Vin.....	power up.....	8.8V, power down8V
24Vin.....	power up.....	17V, power down16V
48Vin	power up	34V, power down32.5V
Positive Logic Remote ON/OFF ^{3,4}		
Input Filter		PI Type

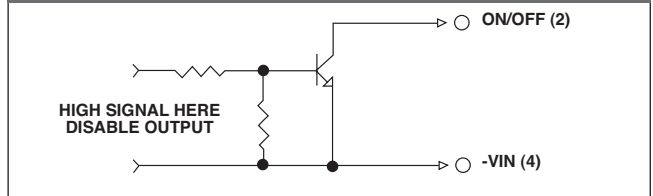
OUTPUT SPECIFICATIONS:

Voltage Accuracy.....	±1% max.
Transient Response :25% Step Load Change.....	< 500µs
External Trim Adj. Range	±10%
Ripple & Noise, 20MHz BW ⁵ , 2.5V & 3.3V & 5V.....	20mV RMS max.
	75mV pk-pk max.
12V & 15V.....	30mV RMS max.
	100mV pk-pk max.
24V.....	100mV RMS max.
	240mV pk-pk max.
Temperature Coefficient.....	±0.03%/°C max.
Short Circuit Protection.....	Continuous
Line Regulation ¹	±0.2% max.
Load Regulation ²	±0.2% max.
Over Voltage Protection trip Range, % Vo nom.....	115-140%
Current Limit	110% -150% Nominal Output
Start up time	5ms typ.

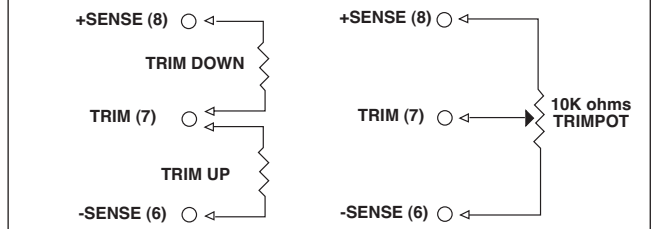
GENERAL SPECIFICATIONS:

Efficiency.....	See Table
Isolation Voltage	Input/Output..... 1500VDC min.
	Input/Case..... 1500VDC min.
	Output/Case..... 1500VDC min.
Isolation Resistance	10 ⁷ ohm min.
Isolation Capacitance	1000pF typ.
Switching Frequency	(12/24)Vin..... 400KHz, typ.
	48Vin..... 300KHz, typ.
Operating Case Temperature	-40°C to 100°C
Storage Temperature	-55°C to +105°C
Thermal Shutdown, Case Temp.	100°C typ.
Humidity	95% RH max. Non condensing
MTBF	MIL-STD-217F, GB, 25°C, Full Load 1000Khrs typ.
Dimensions	2.28x2.40x0.50 inches (57.9x61.0x12.7 mm)
Case Material.....	Aluminum
Weight.....	88g

Remote On/Off Control



External Output Trim



PIN CONNECTION

Pin	Function
1	+V Input
2	ON/OFF
3	CASE
4	-V Input
5	-V Output
6	-Sense
7	Trim
8	+Sense
9	+V Output

NOTE:

1. Measured From High Line to Low Line.
2. Measured From Full Load to Zero Load.
3. Logic Compatibility Open Collector ref. to -Input.
Module ONOpen Circuit
Module OFF <0.8Vdc
4. Suffix "N" to the Model Number with Negative Logic Remote ON/OFF.
5. Output Ripple and Noise measured with 10µF tantalum and 1µF Ceramic capacitor across output
6. Suffix "-C" to the Model Number with Clear Mounting Insert (3.2mm DIA.)

CASE HB

All Dimensions In Inches(mm)
Tolerance Inches: x.xx= ±0.02, x.xxx= ±0.010
 Millimeters: x.x= ±0.5, x.xx= ±0.25

