

## 12V to 24V 100A 2400W DC-DC CONVERTER, NON-ISOLATED

### FEATURES

- ✓ Wide input voltage from 11V to 16V
- ✓ Stable output voltage is 24V
- ✓ 100% full rated power
- ✓ 100% full stable output Current
- ✓ High efficiency up to 95%
- ✓ Waterproof sealed
- ✓ Cooling by free air convection
- ✓ Surface mountable
- ✓ 1 year warranty
- ✓ Over current protection, Over voltage protection
- ✓ Over temperature shutdown protection
- ✓ According to: ISO 7637-2:2004 IP68

model	input voltage range (Vdc)	output voltage (Vdc)	output current typ (A)	output power max (W)	ripple and noise typ (mVp-p)	efficiency typ (%)
H100-12-24	11-16	24	100	2400	120	95

Note: All specifications measured at 25°C, nominal input voltage, and full load unless otherwise noted.

### INPUT

Parameter	Test conditions or description	Min	Typ	Max	Units
operating input voltage	12 V input	11	12	16	Vdc

### OUTPUT

Parameter	Test conditions or description	Min	Typ	Max	Units
line regulation	measured from high line to low line			±0.2	%
load regulation	measured from full load to zero load			±0.2	%
voltage accuracy				±1.5	%
adjust range		23.95	24	24.05	V
temperature coefficient			±0.03		%/°C

### PROTECTIONS

Parameter	Test conditions or description	Min	Typ	Max	Units
output over voltage protection	%Vo	115		140	%
short circuit protection	Continuous				
current limit	% nominal output current	105	110	125	%
thermal shutdown case temp.			85		°C
cooling	free air convection				
fuse	built in PCB		200		A

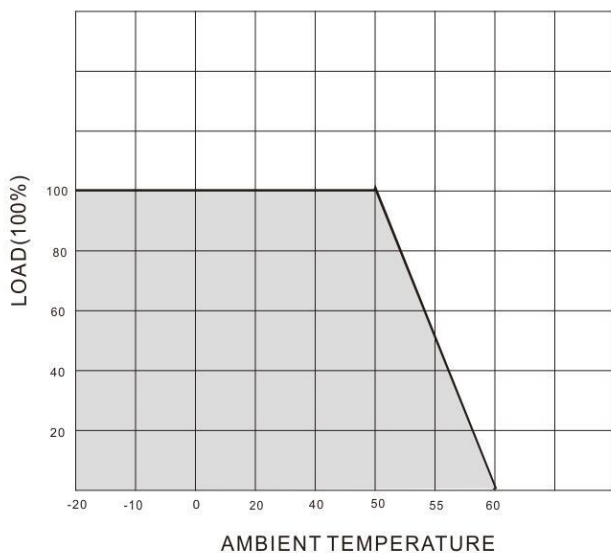
## SAFETY AND COMPLIANCE

Parameter	Test conditions or description	Min	Typ	Max	Units
safety approvals	EN 61000-6-3:2007/A1:2011/AC:2012 EN 55014-1:2006/A2:2011 EN 60950-1:2006/AC:2011				
enclosures	IP68				

## ENVIRONMENTAL

Parameter	Test conditions or description	Min	Typ	Max	Units
case operating temperature		-40	25	85	°C
Ambient temperature		-20		60	°C
storage temperature		-40		105	°C
humidity	non-condensing			95	%

## DERATING CURVE



## MECHANICAL

Parameter	Test conditions or description	Min	Typ	Max	Units
dimensions ( L x W x H )	(300*195*88mm)				MM
wire length					cm
case material	aluminum				
weight			6000		grams
Package	1pcs/box, 2pcs/carton				
Carton measurement					cm

## PHOTOS



## INSTALLATION STEPS

### Installation steps

1. Turn off all power and load
2. Connect Output+ to Load+ and GND to Load-
3. Insert fuse in input cable, then connect Input+ to BAT+ and GND to BAT-
4. Check all polarity.
5. Turn on power and converter works.

## DIAGRAM WIRING

OUTPUT+ TO LOAD+      OUTPUT- TO GND

INPUT+ TO BATTERY+      INPUT- TO GND

### Notes:

Never reverse the input polarity, or it burns the converter or fuse.

Choose enough big copper input and output cable and less 2m.

## REVISION HISTORY

rev.	description	date
1.0	initial release	5/4/2014
2.0	revision	November 21, 2017

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Power conversion solutions from 1W to 200kW