

CHENNIC Isolated DC-DC Inverter

(JCIDI30)



Description

JCIDI30 series isolated DC/DC converter applies advanced technology and is configured specifically for electric vehicles. It is very suitable to supply power to the lamp and audio system as it is very stable and clean. The advantages of high efficiency, stability and compact size, are achieved by adopting the advanced high frequency technology. It is sealed by silica glue to get water and vibration proof, which ensures the stability of the vehicle in atrocious condition.

It also can be used as a charger to charge the 12V battery in the electric automobile according to the customer's requirement.

Current equalizer is built in, which makes converters work in parallel possible in order to enlarge the capability.

Specifications

Input Voltage:	36V 48V 60V 72V 96V 120V 144V 156V
Output Voltage:	13.8V @0A (Can be used to charge battery) 12.0V @30A (typical)
Output Current:	30A
Maximum Efficiency:	≥90%
Environmental Enclosure:	IP68
Shock and Vibration:	SAEJ1378
Safety-North America:	UL2202/UL1564 2nd Edition
Emissions- North America:	FCC Part 15/ICES 003 Class A
Immunity-Europe:	EN61000-4-2/3/5/6/11
Operating Temperature:	-20°C-50°C(-22-122)

Protections

Water and Vibration Proofed: All sealed by silica glue to get water and vibration proof, which is suitable for all kinds of condition.

Input reverse polarity protection: Shut down, auto-reset.

Water Proofed Fuse: Input or output fuse, simple wiring.

Short Circuit: Shut down with little plus current, auto-reset, ensure the wire safety.

Superheating Cutback: Reduce output current if the temperature is over 65°C, ensure the continuous power for your car.

Input Reverse Polarity: Electronic protection, auto-reset.

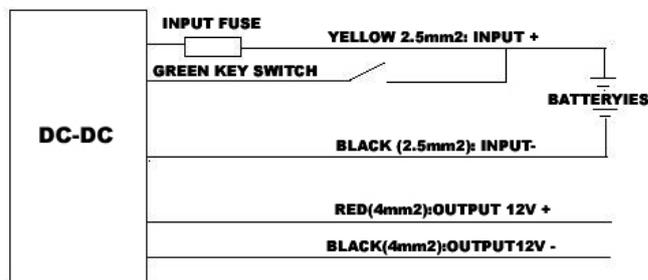
Input Low Protection: Shut down, auto-reset, prevent the battery from over discharging

Type Table

Type	Battery Voltage	Operate Range	Output Voltage	Output current
JCIDI30-3612	36V	28.1—48.7V	12V	30A
JCIDI30-4812	48V	37.5—65.0V	12V	30A
JCIDI30-6012	60V	47.0—78.0V	12V	30A
JCIDI30-7212	72V	56.5—94.0V	12V	30A
JCIDI30-9612	96V	72.0—110.0V	12V	30A
JCIDI30-12012	120V	76.0—145.0V	12V	30A
JCIDI30-14412	144V	120.5—195V	12V	30A

Note: other voltage is available

Wire



Note: It will cause problem when disconnecting the output as input.

Yellow: Input + (2.5mm²) Red: Output + (4.0mm²)

Black: Input- (2.5mm²) Black: Output - (4.0mm²)

Green cable is the manipulative line, connects with manipulative switch. This manipulative line should connect with a switch and anode of input power supply (Yellow 2.5mm²). When the switch is connected, converter will start working; when the switch is down, the converter will stop working.

Security guide

Warning: This mark reminds the users of dangerous operation.

Attention: This mark reminds the users of the important operation.

Forbid repairing by your own.

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 If there are unmoral sounds and bad smell, please cut down the power. If you are in need of repair, please connect with our company, we will solve your problem at the shortest time.

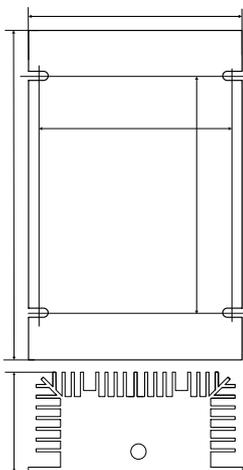
 Don't lengthen and change output wire.

 Don't put the converter near by the heat.

 The battery voltage must be suitable for the converter input voltage.

 Please don't pull and wave the charger wire in order to avoid pulling, waving and shaking it.

■ Installation Size



■ Trouble shooting guide

If your converter can't work normally, please check as follows before you ask to repair:

Trouble phenomenon	Cause analysis	Resolve methods
Output voltage is too low	Output wires is too long, which leads the voltage to drop too much	Recover the output wire to standard length.
The converters can't work	Fuse may burn.	Change the fuse (If it burns again after change, it means there are some problems inside.

Please contact with our company if the charger still can't work normally after checking accord to the above-mentioned.

■ Daily maintenance

Attention:

- 1 Put in safe, no-dust, no-rain working condition.
- 2 Don't open the machine if you are a non-electrical worker.
- 3 Packaged putting if there is long time no use.
- 4 The connection of input and output can't be opposite.
- 5 If the fuse damages caused by input reversed connection, you can change fuse by yourself. (Changed fuse must be the same with the old one)

■ Maintenance

If there is phenomenon as follows during warranty period, they won't belong to the quality problem of our company.

1. Damage caused by wrong operation
- 2 Damage caused by opening the charger without our company's permission.
- 3 Damage caused by transportation. For example, knocking, bumping and knocking down.
- 4 Damage caused by wrong input voltage and opposite connection.
- 5 Damage caused by pulling and pushing the input or output wires seriously.
- 6 Damage caused by strengthening the input and output wires which leads to the shortage of output voltage.

Please read this manual carefully before

140mm
(5.5")

use the converter!

For more information please contact:

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