OPERATING MANUAL

DKP6008 DC-DC

Typical:

CNC buck module

The first chapter

1,Introduction instrument

NC DKP6008 DC-DC step-down buck module module is a fully programmable digital display, small size, high power, high efficiency, stable. The use of advanced microprocessor controlled, precise voltage and current adjustment using the keys, can constant voltage constant current output, to facilitate secondary development and microcontroller or computer communications through port reserved. With four eight LED digital control, real-time display the output voltage and current. Meanwhile, the step-down module with CNC job status indicator, you can view real-time job status. The machine has an automatic output after power function can be turned on or off as needed, in addition to the machine also has a key lock function, you can lock the keys to adjust parameters to prevent misuse regulated output voltage and current parameters.

2, the instrument characteristics

1, the use of advanced microprocessors, the key can be precisely regulated output voltage and current;

2, 4 high brightness LED, can display the output voltage, current, capacity, time;

3, can be set to automatically output after power;

4, lockable parameter adjustment keys to prevent misuse adjustment disorder output voltage and current parameters.

5, can be reserved through the port with the MCU or computer communications, ease of secondary development

6, high-quality power devices with peripherals precision operational amplifier CV and CC loop configuration, which greatly improves the performance of the module;

7, using two 0.8mm double-wound high current inductor, input using two 470uF / 100V electrolytic

capacitor, output using two 1000uF / 63V electrolytic capacitor, comes with fan cooling, the temperature rise is small, the output voltage quality is very good ;

8, all-digital display, easy to use;

9, can be constant voltage, constant current output;

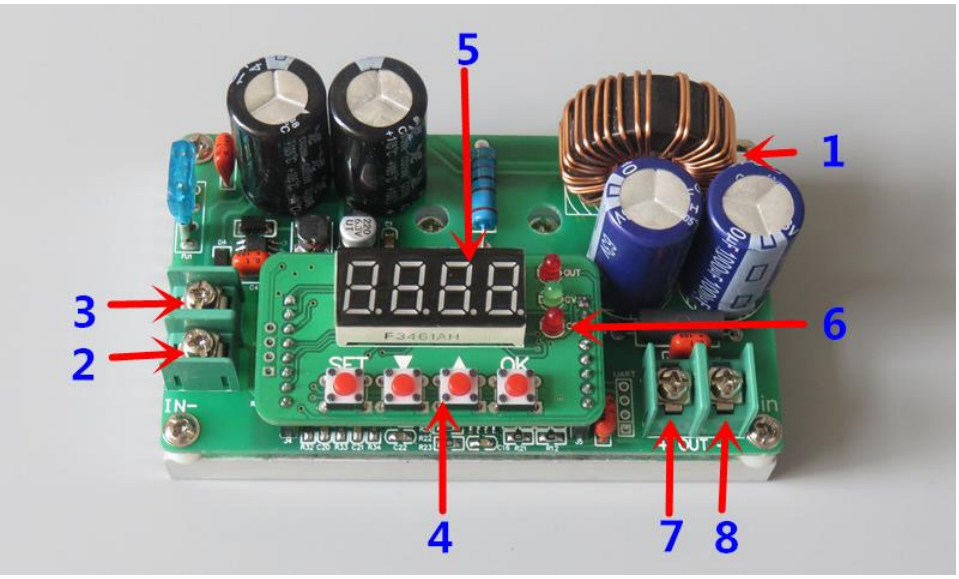
10, working status indicator module with, respectively, the output OUT, constant voltage CV, constant current CC indicator, you can view real-time job status;

3, technical indicators

Project	Parameters
Input voltage range of	6V～65V
Output voltage adjustment range	0～60V
Output current range	0～8A
Output power	0～400W
Output*voltage*setting*resolution	10mV
Output current setting resolution	10mA
Power Effect	CV<0.5%+10mV　CC<1%+10mA
Load Effect	CV<0.5%+10mV　CC<1%+10mA
Output ripple	< 40mVpp(Input 54V, output 12V, current 5A)
100Hz volatility transmission ratio	< 1/10000
Typical efficiency	88%(Input 54V, output 36V, current 3A)
Voltage and current display precision	10mV、10mA
Voltage display error	±1%+20mV
Current display error	±2%+20mA
Response time	< 50ms
Storage operations	M0 ~ M9 10 group stores
Cooling	onboard radiator, please pay attention to ventilation
Operating ambient temperature	0～40℃
Storage temperature	-20～70℃
Environment	designed for indoor use with a maximum
Dimensions(length*width*height)	135×95×38（mm）

Chapter II Instrument Description

1,the module description



Module shown in Figure 2-1 DKP6008

Grade	Explanation	Grade	Explanation
1	cooling fan	5	digital Tube
2	the negative input terminal	6	operation indicator
3	enter the correct pole	7	output +
4	operation buttons	8	output -

Module Description Table 2-1 DKP6008

2, the display shows

Digital display	Description
00.00	voltage value，00.00~60.00V
0.00A	current values，0.00A~7.99A
0.00C	capacity value，0.00AH~99.9AH
0.00H	time value，0.00H~9.59H

Display Description Table 2-2 DKP6008

Chapter III Instructions

1,wiring

Correctly connect the input and output to ensure that the range of input voltage requirements, the reverse is prohibited.

2, set the voltage and current values

After the power-on default display format is the voltage set value, the voltage value displayed is "00.00", the unit is "V", for example, "12.00" means "12.00V". Press the "SET" button to switch to the current set value, the current value of the display format is "0.00A", the unit is "A", such as "1.20A" indicates "01.20A".

Setting method: Press the button to increase the value, press the button to decrease the set value, press accurately set, press can be quickly set. Press the "SET" button to switch to set the current or voltage value.

3, open output

After setting voltage and current values, you can directly press "OK" key to output, output after press "OK button" to switch voltage and current display.

4, adjust the output voltage and current values under the state

Output state when the voltage value is displayed by pressing the button on the output voltage can be increased by pressing the button under the output voltage can be reduced by pressing the button you can increase the current set value when displaying the current value, press the next button can reduce the current setting, press accurately set, press can be quickly set.

5, turn off the output

Output state, press the "SET" button to turn off the output.

6, the automatic power-output function

Automatic power-output function is enabled:

Press "SET" button to enter the parameter setting page, click on the button to adjust to "-F2-" option, then click on the "OK" button, digital display "Yo-0", click on the button, the display switches to "Yo -1 ", and finally click" OK "button to save the settings.

Auto power-output function close method:

Press "SET" button to enter the parameter setting page, click on the button to adjust to "-F2-" option, then click on the "OK" button, digital display "Yo-1", click on the next button, the display switches to "Yo -0 "and finally click" OK "button to save the settings.

7, function display output capacity

Under the current status display, press the "OK" button for 3 seconds to display x.xxC; capacitance value at that time is displayed, press "OK" button to restore the current display.

In the display voltage state, long press the "OK" button to display x.xxH more than 3 seconds; the value of the time value is displayed, press "OK" button to restore the voltage display.

8, parameters save, recall

Save parameters:

Press "SET" button to enter the parameter setting page, click on the button or down button to adjust the "-F0-" option, then click on the "OK" button, digital display "Sn-0", click on the button or down button to change the address, and finally click "OK" button to save a good set parameters are saved to the corresponding address bits.

Parameters recall:

Press "SET" button to enter the parameter setting page, click on the button or down button to adjust the "-F1-" option, then click on the "OK" button, digital display "Lo-0", click on the button or down button to change the address, and finally click "OK" button to save parameters corresponding address bit out of tune.

A total of 0-9 ten-bit address, the default boot address bits 0 output data.

9, parameter adjustment key lock and unlock function

Lock keys Features:

After the lock button can lock function is turned "on" button and the "down" button, then you can not adjust the output voltage and current parameters. Adjust output parameters to prevent misuse of chaos, but "SET" and "OK" button and then you can use any.

Open the keyboard lock function method:

Output in the closed state, click on the "SET" key to display the setting parameters as voltage, press "OK" button, when "-LoC" Release the button when the digital display, this time it will be the parameter adjustment keys locked.

Off the key lock function method:

Output in the closed state, click on the "SET" key to display the current parameter setting, press "OK" button, release the button when the digital display "ULoC", the parameters will be adjusted at this time unlocking key.

Precautions

1, can not exceed the voltage and current range of the instrument, otherwise it will damage the instrument.

2, positive and negative can not be reversed, reverse can damage the instrument.

3, the working temperature of -10 ~ 80 ℃, Storage temperature -20 ~ 70 ℃, and the instrument in a dry environment.

4. Do not attempt to disassemble the instrument, destroy the package will void the warranty. This instrument there are no user-serviceable parts, repairs may only be designated repair outlets or by returning the factory.

5, please do not move the instrument to avoid severe irreparable damage to the internal circuit when the instrument is working properly.

Warranty and service

Thank you for purchasing electronic sine studio products. To maximize the use of your new product features, we recommend that you take the following a few simple steps:

1. Read the safe and efficient use.

2. Read the warranty terms and conditions.

Warranty conditions:

From the date of shipment from the instrument warranty for one year. During the warranty period, the company's failure to repair or replace the instrument selected according to the situation. For service, please send the product to our studio.

Warranty does not cover the following cases:

User operation or improper maintenance; or use the software to provide their own user interfaces; unauthorized modification of the instrument.