DJSF1352RN Application manual

1. install

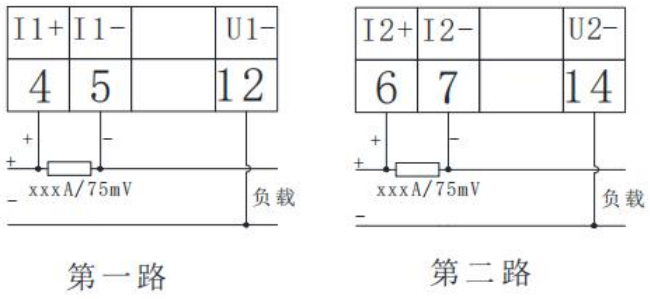
2. wiring

2.1 current sensor

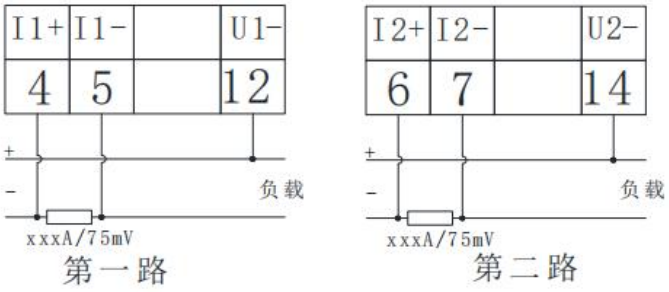
2.1.1 Splitter access

2.1.1.1 Three-line wiring

2.1.1.1.1 positive current shunt

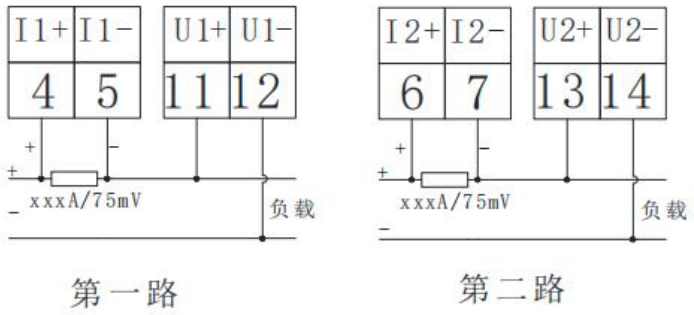


2.1.1.1.1 Negative current shunt access (neg.t set to on, see 5.2 for details)

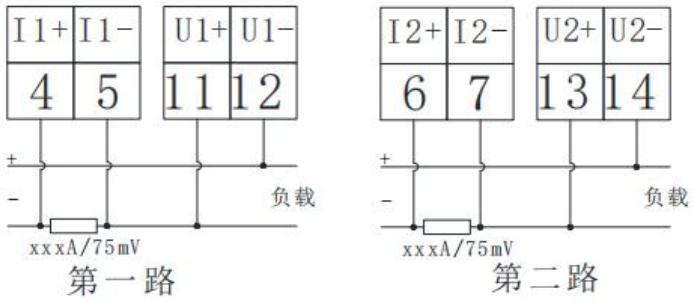


2.1.1.2 Four-wire wiring (level 0.5 only 4-wire)

2.1.1.2.1 positive current shunt



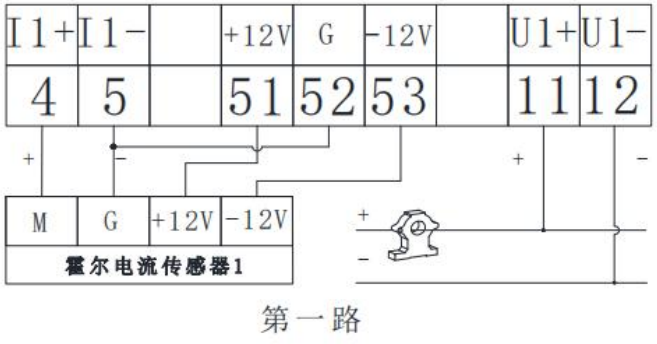
2.1.1.2.2 Access of negative electrode current shunt (neg.t is set to on, see 5.2 for details)

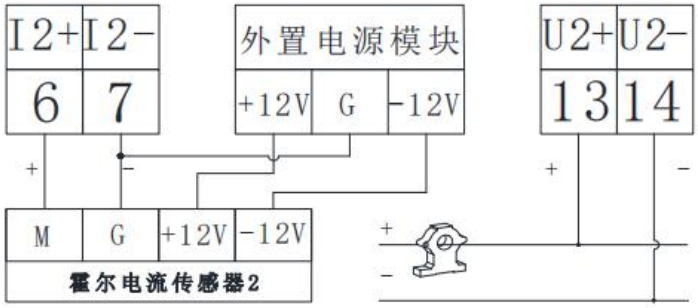


2.1.2 Hall sensor access

Note: ± 12V power load capacity of 100 mA

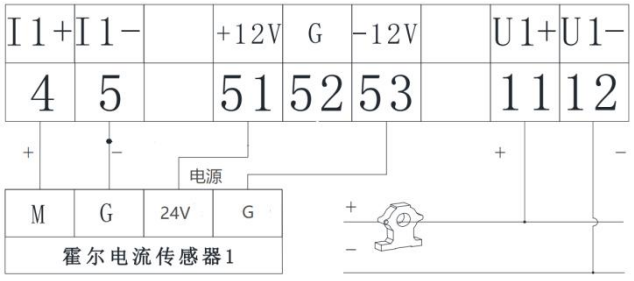
2.1.2.1 Dual Power Supply Hall (0-5V output)



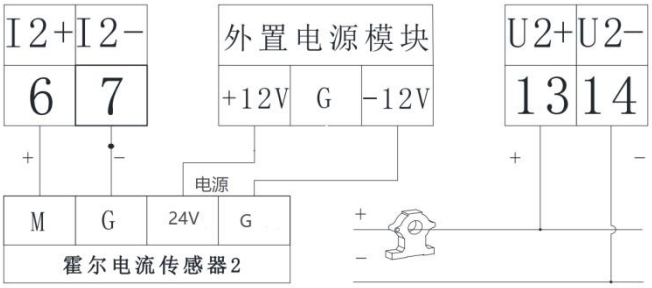


第二路

2.1.2.2 Single Power Supply Hall (4-20 mA output)



第一路



第二路

3. parameter setting

3.1 Current change ratio setting

3.1.1 current diverter

If the shunt parameter is 300A / 75 mV

The current change ratio (In.PI) is set to 300.

3.1.2 hall sensor

If the Hall sensor parameter is 0-300A / 0-5V, 0-300A / 4-20 mA.

The current change ratio (In.PI) is set to 300.

3.2 Voltage ratio setting

If the voltage is directly connected, the voltage change ratio (In.PT) is set to 1.

If the voltage is connected indirectly to, if the voltage sensor parameter is 1500V / 5V, the voltage variable ratio (In.PT) is set to 300.

4. Communication problem

4.1 hardware

1. Whether the communication port voltage is normal (do not connect to the bus amount, to unlock the AB terminal of the terminal scale, generally 4.5V)
2. Verify that the 485 communication line used for the test is normal
3. Whether the AB port wiring is inversely connected or disconnected
4. Whether the instrument and the host communication parameters are consistent
5. Whether to add the terminal resistance

4.2 Modbus protocol

1. The second road address is the first road address + 1.

   The table address is 1

   Read the first current message: 01 03 00 00 00 02 CRC

   Read the second current message: 02 03 00 00 00 02 CRC

2. The voltage, current and power communication value is abnormal, and the check data type is 16-bit signed shaping.
3. The electric power communication value is abnormal, and the verification data type is 32 bits of unsigned plastic surgery.
4. PLC communication or configuration software requires offset 40001 (corresponding register address 0)
5. If the software developed by the customer itself or the third-party software reading is abnormal, it is recommended to use the modpoll test. The modscan is not recommended (the data type cannot be locally modified).

4.3 645 Agreement

1. The default is 12 digits after the factory serial number, and the second road is the first road address + 1.
2. Support positive and negative electric energy, multiple rate electric energy, voltage and current power and other reading.
3. Generally charging pile customers will use 645 protocol, the general port rate is 2400, even check. If you cannot communicate, check the motherboard communication parameters. If the monitoring messages are normal, you can try to open the 645 lead guide.
4. If the customer developed software or the third-party software reading is abnormal, recommend the customer to use the 645 debugging software used by our company.

5. Current problem

5.1 Numerical is not allowed

1. Use the DC clamp meter to measure the current in the main circuit. If shown in the error range, solve the problem. If inconsistent with the display, refer to Step 2.

2. Check the 3.1 settings with the actual shunt or Hall parameter. If the current parameter is not set correctly, after modifying the parameter, the actual current is displayed in the error range to solve the problem. If the current parameter is set consistent with the diverter parameter (or Hall), refer to Step 3.

3. Use the multimeter DC file to measure the current input terminal (the first circuit is 4 and 5, and the second circuit is 6 and 7) to check whether the voltage is 75 mV * actual current / shunt rated current (if Hall: 5V * actual current / shunt rated current). Example: If the shunt parameter is 300A / 75 mV and the actual current is 150A, the terminal voltage of terminals 4 and 5 is 75*150/300=37.5mV. If the Hall parameter is 300A / 5V and the actual current is 150A, then the terminals 4 and 5 are 5*150/300=2.5V. If consistent with the theory, then return to the factory for repair. If inconsistent with theory, check whether shitter or Hall uses a shield line.

5.2 The symbols are the opposite

Check the wiring, whether the negative electrode is connected. If it is a negative electrode access connection method, you need to set neg.t to on

5.3 Zero point number show

If when no load, rated current 300A and current display 3A, set the current shielding value 3 / 300 = 1.0%.

6. Voltage problem

6.1 Numerical is not allowed

6.1.1 Direct access of the voltage

1. Use the multimeter to measure the input voltage (11,12 first and 13,14 second). If shown in the error range, solve the problem. If inconsistent with the display, refer to Step 2.

2. Refer to Check 3.2 settings. If the voltage parameter is not set correctly, after modifying the parameter, the actual voltage is displayed in the error range to solve the problem. If the voltage parameters are set abnormally, return to the factory for maintenance.

6.1.2 Indirect voltage access

1. Measure the main loop using a multimeter. If shown in the error range, solve the problem. If inconsistent with the display, refer to Step 2.

2. Reference check 3.2 setting. If the voltage parameter is not set correctly, after modifying the parameter, the actual voltage is displayed in the error range to solve the problem. If the voltage parameter setting is not abnormal, refer to step 3.

3. Use the multimeter DC file to measure the voltage input terminal (the first circuit is 11,12, the second circuit is 13,14) to check whether the voltage is 5V * actual voltage / primary rated voltage. E. g. If the primary voltage of the voltage sensor is 1500V and the actual voltage is 750V, the terminal voltage of terminals 11 and 12 is 5V*750/1500=2.5V. If consistent with the theory, then return to the factory for repair. If inconsistent with the theory, check whether the shielding line is used.

6.2 The symbols are the opposite

Check the wiring, whether the negative electrode is connected. If it is a negative electrode access connection method, you need to set neg.t to on

6.3 Zero point number show

If the rated voltage is 1000V and the voltage is 10V, set the voltage shielding value 10 / 1000 = 1.0%.

7. Power problem

7.1 Power is not allowed

Check the value and symbol of voltage, current and power. If not, refer to Chapter 5, Chapter 6.

7.2 Electricity zero

1. Key zero

Refer to the power reset video

The electric energy goes full 1000000.000kwh automatically clear zero

2. Communication zero

2.1 First zero enabling command

If the address is 1, then send it

ADR CRC

01 BB 55 01 00 02 04 00 A5 00 00 96 74

2.2 Write any value (0x10 instruction) to register 08

ADR CRC

01 10 00 08 00 01 02 00 00 A7 18

8. Site calibration zero

Ensure that the voltage and current signal is zero

1. Press set key to display PASS, press Enter;
2. Enter the password, the default is 0001, press the return car to confirm;
3. Press the left and right keys until you turn to the ver interface, press the Enter key;
4. Press the left and right keys until 0000 appears, press the return key;
5. Enter the hidden menu password screen and display 0001.
6. Enter the password 0510, press the enter key, and enter the user calibration zero interface.
7. Clr. 0 is currently displayed, and zero according to return. Return to the ver interface after completion.
8. If you need to restore the factory parameters, press the left / right key in the Clr. 0 interface to display dEFAULt, and press the return key to restore Factory parameters. Return to the ver

interface after completion.

Refer to the zero-point calibration video

9. error code

Fault code	Fault content	failure cause	The exclusion method
0.EE.Err	User set parameter check error	Interference when the instrument is overcharged	It can be eliminated by resetting the save
1.EE.Err	Multiple rate period set parameter check error		It can be eliminated by resetting the save
2.EE.Err	Calibration data calibration error		Need to return to the factory for maintenance
3.EE.Err	User set parameter check error and complex rate period		It can be eliminated by resetting the save
4.EE.Err	User set parameter calibration error, calibration data calibration error		Need to return to the factory for maintenance
5.EE.Err	Repricing period: set parameter calibration error and calibration data calibration error		Need to return to the factory for maintenance
6.EE.Err	User set parameter calibration error, compound rate period set parameter calibration error, and calibration data calibration error		Need to return to the factory for maintenance
1.Plus.Err	The constant of the first route metering pulse setting exceeds the allowable value	User parameter setting is abnormal	Re-check the voltage and current rating and variable ratio and save to eliminate
2.Plus.Err	The constant of the second route metering pulse setting exceeds the allowable value		Re-check the voltage and current rating and variable ratio and save to eliminate
1.Line.Err	First-line metering communication error	1. The instrument operation is seriously disturbed 2. The	The instrument is power off and powered on again after 1 minute. If it still exists, it needs to return to the

		internal needle is loose during transportation	factory for maintenance
2.Line.Err	The second route metering communication error		The instrument is power off and powered on again after 1 minute. If it still exists, it needs to return to the factory for maintenance
rupt	When the current input is 4-20mA model, and the actual input current is lower than 4 mA, it is determined as a broken line	1. Hall power is abnormal 2. There is interference at the scene	1. Measure whether the Hall power supply is normal 2. Hall output using shielded lines

1. Precision problem

Reference standard: GB / T 33708-2017

8.3 参比电压下的基本误差限值

电压线路施加参比电压，仪表的百分数误差不应超过表 11 中给定的相应准确度等级的限值。若该仪表为双向电能测量仪表，则表 11 的值适用于电流的每个方向。

表 11 参比电压下的基本误差限值

电流值(电流直接接入)	电流值(电流间接接入)	各等级仪表百分数误差限值			
		0.2	0.5	1	2
$0.01I_b \leqslant I < 0.1I_b$	$0.01I_n \leqslant I < 0.05I_n$	±0.4	±1.0	—	—
$0.1I_b \leqslant I \leqslant I_{max}$	$0.05I_n \leqslant I \leqslant I_{max}$	±0.2	±0.5	—	—
$0.05I_b \leqslant I < 0.1I_b$	$0.02I_n \leqslant I < 0.05I_n$	—	—	±1.5	±2.5
$0.1I_b \leqslant I \leqslant I_{max}$	$0.05I_n \leqslant I \leqslant I_{max}$	—	—	±1.0	±2.0

2. internal resistance

2.1 Voltage circuit internal resistance of 20 MΩ

2.2 Internal resistance of the current circuit is 15k Ω