

D099

DJSF1352-RN rail-mounted DC power meter

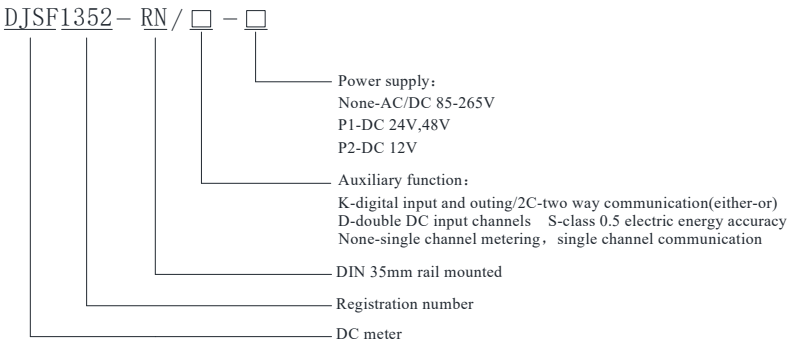
Installation and Operation Instruction V1.2

1. Overview

DJSF1352-RN rail-mounted DC power meter with double DC input channels, designed for telecommunications base stations, DC charging piles, solar photovoltaic and other applications, this series of meters can measure the voltage, current, power and forward and reverse energy and so on in the DC system.The actual use of the site, you can measure the total power, but also measure the energy within a specified period of time. The test results can be used for local display, but also with industrial control equipment, computers to form a measurement and control system.

The meter can have infrared communication interface and RS-485 communication interface, and supports Modbus-RTU protocol and DLT645-97 (07) protocol at the same time.The meter can have relay alarm output and digital input function;You can set the ratio, alarm, and communication through the meter panel keys according to different requirements.The meter can have event recording of switch (Modbus protocol), programming and event setting records (645 protocol), instantaneous and timing freeze function of data (645 protocol), maximum and minimum value recording function of voltage and current power.

2. Product specification



- Note: 1.when dual DC input (D) function is selected, if Hall current sensor input is used in current channel,a power supply module shall be provided to supply power to the second Hall sensor;if D function is not provided,the built-in power supply of elecctric meter can be used.
2. when level 0.5(S) precision function is selected,the current only supports 75mV input ,and S and K functions cannot be selected at the same time.
3. When P2 is selected for power supply,the current only supports 75mV input,and s and P2 can not be selected at the same time.

3. Technical parameters

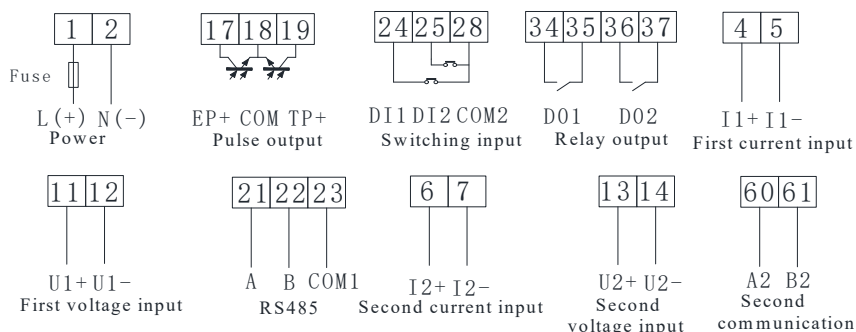
Technical parameters		Index	
Input	Nominal value	Voltage input range	Current input
		DC 0-1000V See the physical wiring diagram	Shunt: 0-75mV; Hall sensor: 0-5V,100mA and so on.
	Overload	1.2 times rated (continuous); 2 times rated/1 second;	
	Power	Voltage: ≤0.2VA, current ≤0.1VA	
Accuracy class		Class 1 or Class 0.5	
Function	Display	8-bit segment LCD screen (LCD)	
	Communication Interface	RS485 (two options)	
	Communication protocol	Modbus-RTU, DL/T 645-2007, DLT698	
	Switch	Switch output	2 Relay outputs, 2A/30VDC or 2A/250VAC
		Switch input	2 dry contact inputs
	Pulse output	A second pulse output, a energy pulse output	
See the SYS->PLUS display in the meter menu settings. For example: The meter displays 100, which is 100imp/kWH			
Power Supply	Voltage range	AC/DC 85-265V or DC12V(±10%)or DC24V(±10%) or DC48V(±10%)	
	Power consumption	≤ 3W	
Power frequency withstand voltage		Power supply // Signal input // Other circuits 3kV/1min Other circuits not connected to each other except power supply and signal input 2kV/1min	
Impulse withstand voltage		±6.5KV	
Insulation resistance		≥ 40M Ω	
Average barrier-free working		≥50000h	
Environment	Temperature	Normal operating temperature: -25 °C ~ +65 °C; Limit working temperature: -40 °C ~ +70 °C; Storage temperature: -40°C~+80°C	
	Humidity	≤93%RH, no condensation, no corrosive gas	
	Altitude	≤2500m	

Pulse constant:

Maximum power≤	999.9W	10000	imp/kWh
	9.999kW	1000	imp/kWh
	99.99kW	100	imp/kWh
	999.9kW	10	imp/kWh
	9999kW	1	imp/kWh

Maximum power = rated voltage * voltage ratio * current ratio * 1.2

4. Terminals and wiring

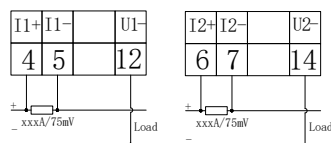


Note: The second DC input channel and DI and DO functions are optional.

When the current input mode is current shunt input:

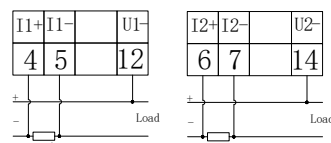
Class 1 Three-wire connection

Current shunt connected to the positive



First channel Second channel

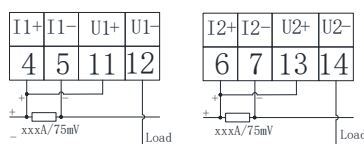
Current shunt connected to the negative



First channel Second channel

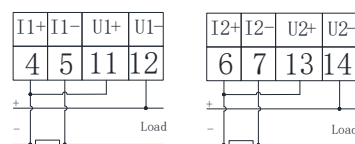
Class 0.5 Three-wire connection

Current shunt connected to the positive



First channel Second channel

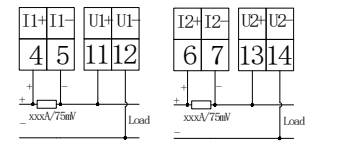
Current shunt connected to the negative



First channel Second channel

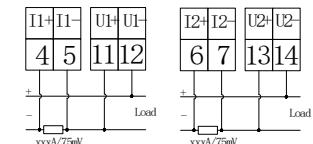
Class 0.5 or 1 Four-wire connection

Current shunt connected to the positive



First channel Second channel

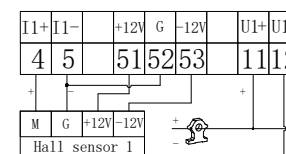
Current shunt connected to the negative



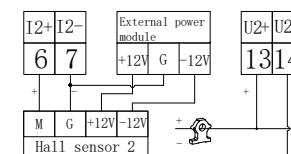
First channel Second channel

When the current input mode is Hall sensor input:

(1) Dual power Hall (0-5V output):

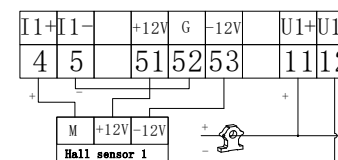


First channel

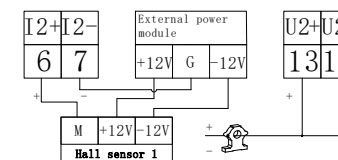


Second channel

(2) Dual power Hall (0-100mV output):



First channel



Second channel

Note: 1. When current shunt is connected to the negative, set the **NEG** option to on in the meter menu, see section 6 menu programming interface for details.

2. When the two current inputs are input by the Hall current sensor, the power supply of the second Hall current sensor cannot be used with the built-in power supply of the meter, and the power module needs to be externally connected.

3. When the current is input by the shunt, the voltage value measured by the four-wire method has an error of about one thousandth.

4. It is recommended to use a 0.75mm² or 1mm² shielded twisted pair for the current signal line, and the shield layer needs to be connected to the ground.