

Acrel Multi-function Meter Wiring Instruction

Three-phase three-wire diagram

1. Terminal numbers 1 and 2 are auxiliary power supply: as shown in the figure above, connect the phase voltage 220V input. Among them, the fire wire of the auxiliary power supply is installed 5A fuse, the neutral wire is directly connected to the zero line copper bar.

## 2. Voltage wiring:

In the case of three-phase three-wire, the voltage signal terminals are connected in V-shaped wiring mode, 11 is connected to A-phase voltage, 12 is connected to B-phase voltage, 13 is connected to C voltage and 14 is connected to B-phase voltage; the voltage wire is a 1.5 square BVR multi-core hard wire, and the live wire is connected to the meter. A 5A fuse needs to be installed between them.

## 3. Current wiring:

In the case of three-phase three-wire, the current signal terminals are connected in a V-shape, and **the primary current of the transformer flows from the P1 side to the P2 side**; the output S1 of the A mutual inductor is connected to the 4th terminal, S2 is connected to the 5th terminal, the C mutual inductor S1 is connected to the 8th terminal, and S2 Connect to 9 terminals, of which the terminal with \* corresponds to the S1 terminal of the transformer; the current wire uses a 2.5 square BVR multi-core hard wire. 4. Communication terminals: RS485 (A+, B-) A is connected to port 21, B is connected to port 22, use RVSP2\*1.0 square Core twisted pair shielded flexible wire.

5. Be sure to wire according to the instructions, wrong connection will lead to inaccurate measurement. There are wiring diagrams on the side labels of the meter.



Three-phase four-wire diagram

1. Terminal numbers 1 and 2 are auxiliary power supply: as shown in the figure above, connect the phase voltage 220V input. Among them, the fire wire of the auxiliary power supply is installed 5A fuse, the neutral wire is directly connected to the zero row.

2. Voltage wiring:

In the case of three-phase four-wire, the voltage signal terminals are connected in a Y-shaped wiring mode, respectively corresponding to 11 connected to A-phase voltage, 12 to B-phase voltage, 13 to C voltage and 14 to N line; the voltage line uses a 1.5 square BVR multi-core hard wire , a 5A fuse should be installed between the live wire and the meter.

3. Current wiring:

In the case of three-phase three-wire, the current signal terminals are

connected in a V-shape, and the primary current of the transformer flows from the P1 side to the P2 side; the output S1 of the A mutual inductor is connected to the 4th terminal, S2 is connected to the 5th terminal, the C mutual inductor S1 is connected to the 8th terminal, and S2 Connect to 9 terminals, of which the terminal with \* corresponds to the S1 terminal of the transformer; the current wire uses a 2.5 square BVR multi-core hard wire.

4. Communication terminals: RS485 (A+, B-) A is connected to port 21, B is connected to port 22, use RVSP2\*1.0 square multi-core twisted pair shielded flexible wire.

5. Be sure to wire according to the instructions, wrong connection will lead to inaccurate measurement. There are wiring diagrams on the side labels of the meter.

Acrel after-sales Service Department August  $8^{th}$  2018