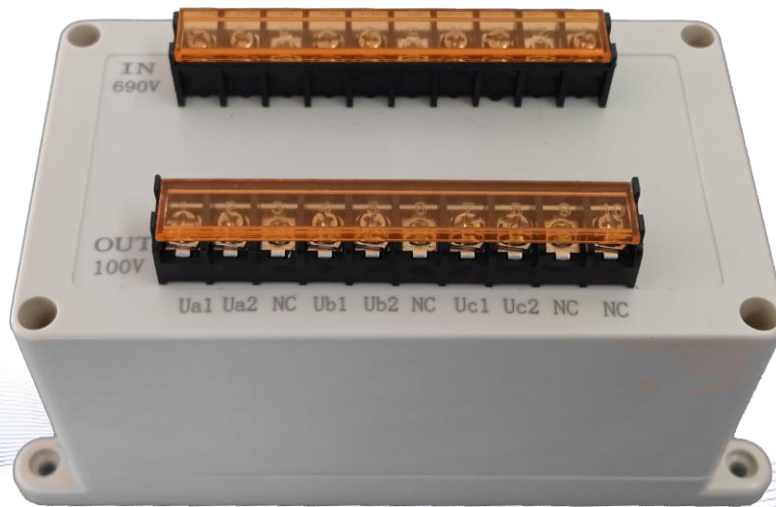


SmartGen

MAKING CONTROL SMARTER

PTM6910 POTENTIAL TRANSFORMER MODULE USER MANUAL



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Table 1 Software Version

Date	Version	Note
2023-03-24	1.0	Original release.
2023-08-07	1.1	Modify product appearance diagram and overall and cutout dimension diagram.

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1 OVERVIEW

PTM6910 Potential Transformer Module is a module that transforms input voltage 690VAC (Rated) to output 100VAC (Rated). It can be applied in higher voltage acquisition scenario together with the controller.

2 PERFORMANCE AND CHARACTERISTICS

- Input voltage range: (0~828)VAC;
- Output voltage range: (0~120)VAC;
- Phase shift: <math><30^\circ</math>;
- Accuracy: <math><0.2\%</math>;
- Realize signal isolation;
- Suitable for 3P3W, and 3P4W.

3 SPECIFICATION

Table 2 Technical Parameters

Items	Contents
Input Voltage (Rated)	690VAC
Output Voltage (Rated)	100VAC
Overall Dimension	188mmx88mmx96.9mm
Working Temperature	(-40~+85) $^\circ$ C
Working Humidity	$\leq 90\%$ RH
Storage Temperature	(-60~+90) $^\circ$ C
Weight	About 2800g

4 WIRE CONNECTION

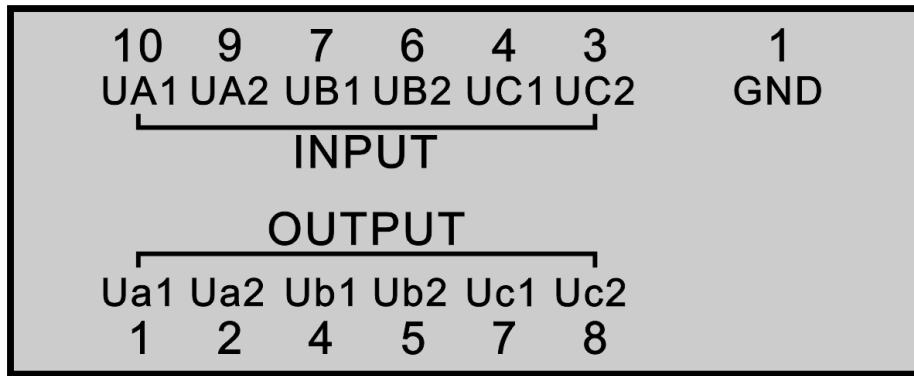


Fig.1 PTM6910 Terminals

Table 3 Connection Terminal Description 1

Input Terminal No.	Function	Size	Remark
1	GND	1.0mm ²	Connect to the ground
2	NC	/	NC
3	UC2	1.0mm ²	Connect to input N-phase
4	UC1	1.0mm ²	Connect to input W-phase
5	NC	/	NC
6	UB2	1.0mm ²	Connect to input N-phase
7	UB1	1.0mm ²	Connect to input V-phase
8	NC	/	NC
9	UA2	1.0mm ²	Connect to input N-phase
10	UA1	1.0mm ²	Connect to input U-phase

Table 4 Connection Terminal Description 2

Output Terminal No.	Function	Size	Remark
1	Ua1	1.0mm ²	Connect to controller U-phase
2	Ua2	1.0mm ²	Connect to controller N-phase
3	NC	/	NC
4	Ub1	1.0mm ²	Connect to controller V-phase
5	Ub2	1.0mm ²	Connect to controller N-phase
6	NC	/	NC
7	Uc1	1.0mm ²	Connect to controller W-phase
8	Uc2	1.0mm ²	Connect to controller N-phase
9	NC	/	NC
10	NC	/	NC

5 TYPICAL WIRING DIAGRAM

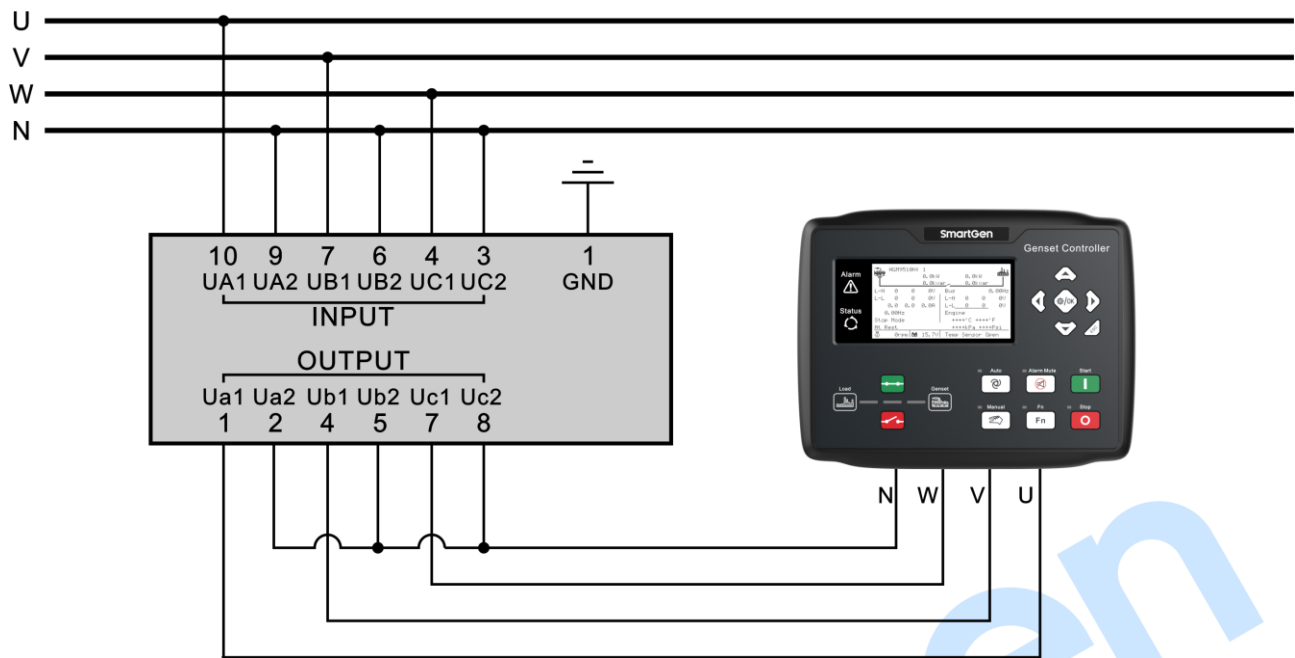


Fig.2 Generating Voltage Sampling Wire Connection

NOTES:

- (1) PT ratio of controller can be set according to the site situation.
- (2) This module is only applicable to genset controller of SmartGen and PT ratio needs to be set.
- (3) This module is used for signal transformation, not for both signal transformation and power supply.

6 OVERALL DIMENSION AND INSTALLATION DIMENSION

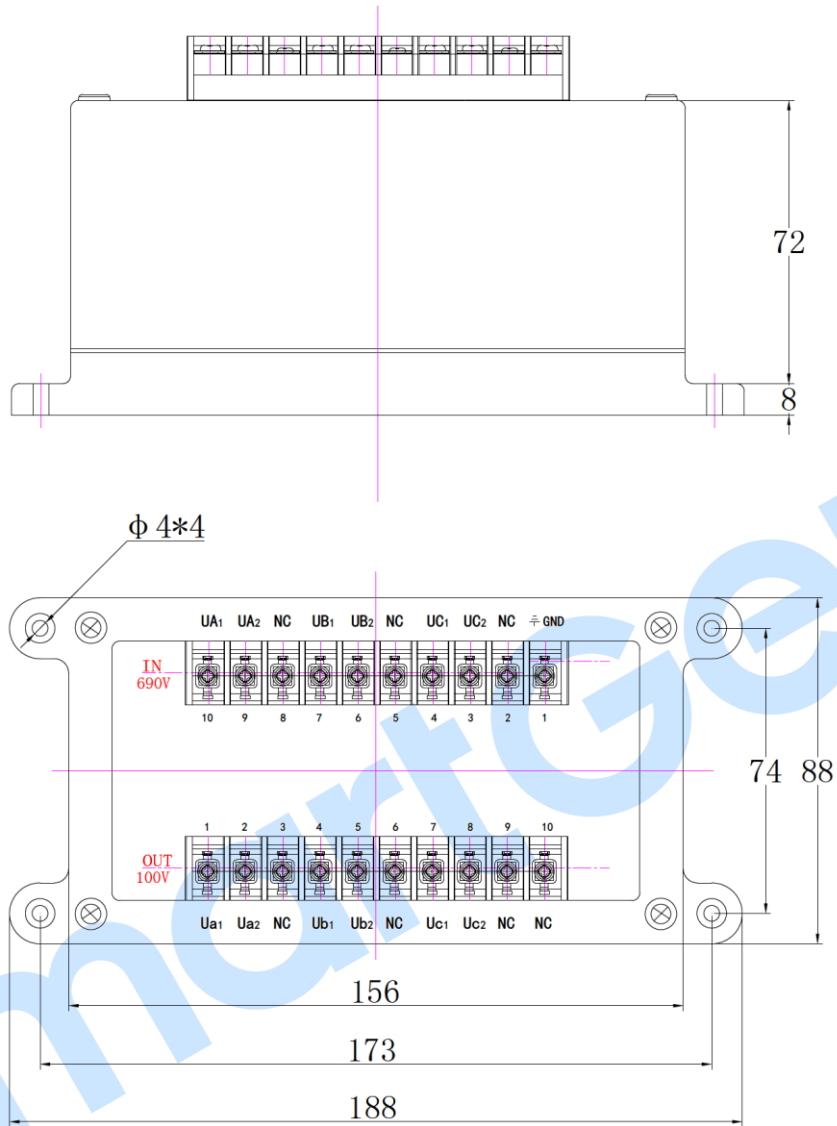


Fig.3 PTM6910 Overall Dimension and Installation Dimension (Unit: mm)

7 TROUBLESHOOTING

Table 5 Troubleshooting

Symptoms	Possible Solutions
Sampling voltage value abnormal on controller	Check module wire connection or the PT ratio of the controller.
Sampling voltage phase sequence abnormal on controller	Check module wire connection.
Sampling voltage loss of phase on controller	Check module wire connection.