

SmartGen

MAKING CONTROL SMARTER

PTM6940A TRANSFORMER MODULE USER MANUAL



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Table - 1 Software Version

Date	Version	Note
2023-07-27	1.0	Original release.

1 OVERVIEW

PTM6940A is a transformer module that converts the input voltage of 690VAC (rated) to the output voltage of 400VAC (rated), which can be used with controller for high voltage acquisition.

2 PERFORMANCE AND CHARACTERISTICS

- Input voltage range: (0~828) VAC;
- Output voltage range: (0~480) VAC;
- Phase shift: $\leq 2^\circ$;
- Accuracy: $\leq 1\%$;
- Signal isolation;
- Applicable for 3P3W and 3P4W systems;
- Load power: $>10VA$.

3 SPECIFICATIONS

Table 2 – Technical Parameters

Items	Contents
Input Volt. (rated)	690VAC
Output Volt. (rated)	400VAC
Overall Dimensions	88mmx188mmx72mm
Working Temp.	(-25~+70) $^\circ$ C
Working Humidity	(20~93)%RH
Storage Temp.	(-30~+80) $^\circ$ C
Weight	2.839kg

4 TERMINAL CONNECTIONS

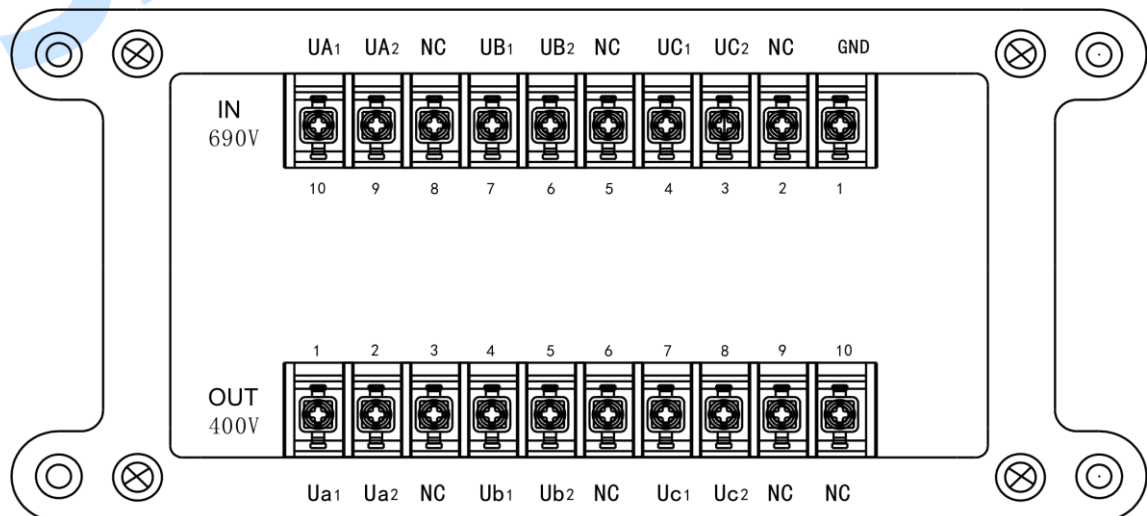


Fig.1 – PTM6940A Terminals

Table 3 – Terminal Connection of Input Port

Terminal No.	Name	Function	Remarks
1	GND	Earth Terminal	Connect to cable shielding layer
2	NC	NC	/
3	UC ₁	C-phase Voltage Input	Primary coil of C-phase
4	UC ₂		
5	NC	NC	/
6	UB ₁	B-phase Voltage Input	Primary coil of B-phase
7	UB ₂		
8	NC	NC	/
9	UA ₁	A-phase Voltage Input	Primary coil of A-phase
10	UA ₂		

Table 4 – Terminal Connection of Output Port

Terminal No.	Name	Function	Remarks
1	U _{a1}	A-phase Voltage Output	Secondary coil of A-phase
2	U _{a2}		
3	NC	/	/
4	U _{b1}	B-phase Voltage Output	Secondary coil of B-phase
5	U _{b2}		
6	NC	/	/
7	U _{c1}	C-phase Voltage Output	Secondary coil of B-phase
8	U _{c2}		
9	NC	/	/
10	NC	/	/

5 TYPICAL APPLICATION DIAGRAM

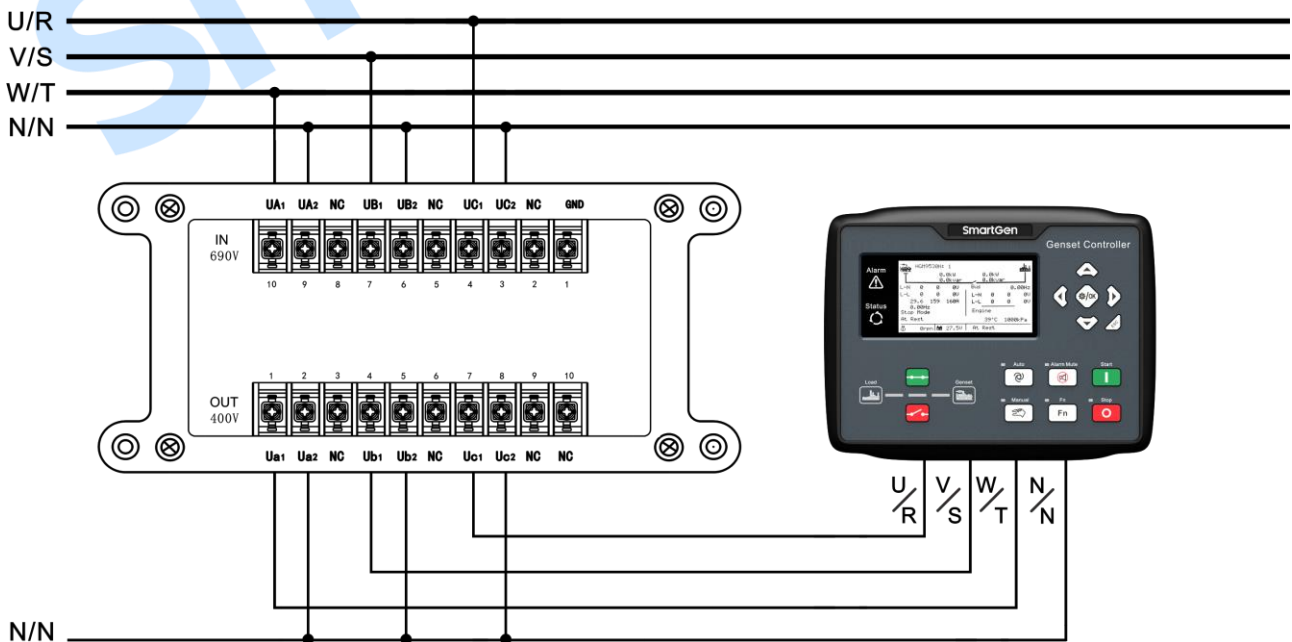


Fig.2 – GEN Voltage Sampling Connection

6 CASE DIMENSIONS AND PANEL CUTOUT

Unit: mm

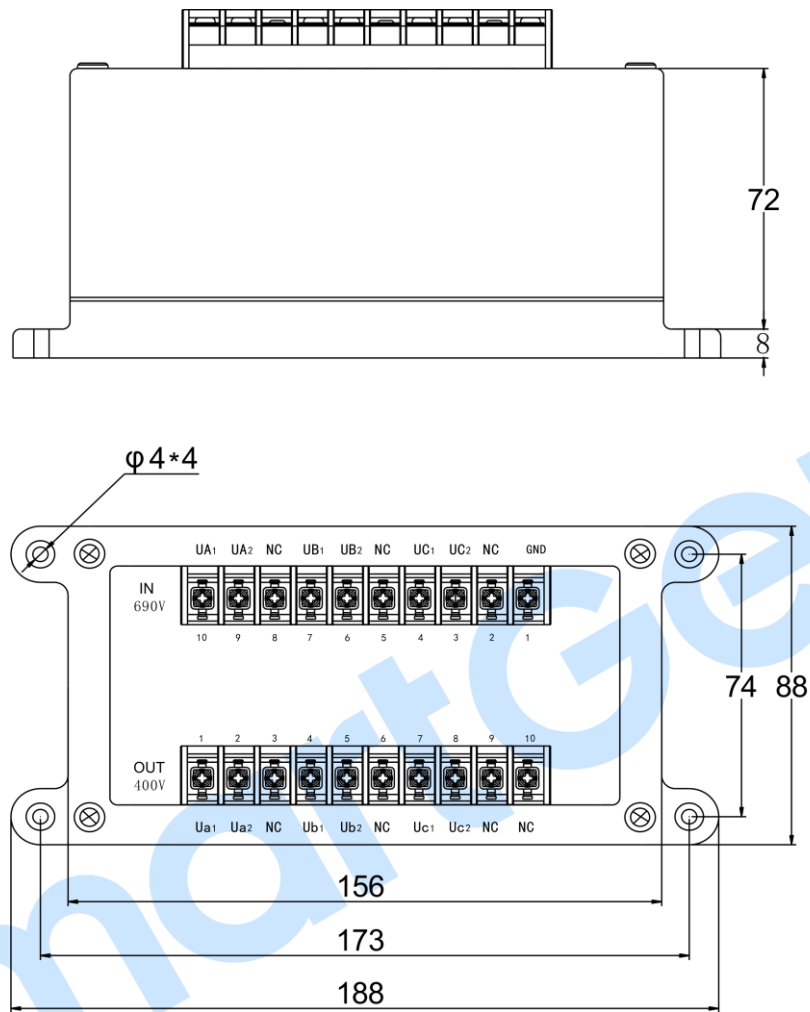


Fig.3 – Case Dimensions and Panel Cutout