



Device Introduction

Shiva Amvaj thermostat 0 .. 900 °C is a fully microprocessor-controlled system using K-type thermocouple is able to display temperature up to 900°C.

MODEL : TRB - 900
 CODE : 15B2
 WEIGHT : 175 gr
 (72 x86 x60) mm
 IP 30



VER:9801

Set 4 following parameters according to table ①

1-Temperature(SU) : desired temperature for thermocouple environment
 2-Hysteresis(hYS) : if temperature changes around adjusted temperature (SU) occurs quickly, it causes output relay to get disconnected and connected continuously. To refuse this you can adjust hYS parameter from 2°C to 10% of SU temp. So when thermocouple warms to reachSU temperature, output relay gets disconnected. It is reconnected by decreasing temperature and reaching to SU-hYS.

3-Delay time for relay disconnection (Off) : to refuse the effect of transient mode when relay is disconnected, set this time from 0 to 99 seconds.

In this situation output relay wouldn't be disconnected upon reaching temperature to SU. So to make relay disconnected, temperature must be equal or more thanSU at a minimum disconnection delay time duration.

⑤

4-Delay time for relay connection (ON) : This parameter is considered like previous one in order to refuse the effect of transient mode at relay reconnection time. To make relay reconnected, thermocouple temperature must be less than SU-hYS at the adjusted time for connection delay.

Device adjustment

Table ①

Enter to adjustment mode	PV indicator	SV indicator(blinking)	Adjusting value Using ↑ or ↓ key
←	SU	Adjustable Temp	0 - 900
←	ON	Delay time for relay connection	0 - 99
←	Off	Delay time for relay Disconnection	0 - 99 ISO 9001-2015
←	hYS	Output disconnection and connection band	2-10% SU
←	Save Applied changes		

⑥

Calibration

In the event that displayed temperature by device varies from your reference temperature you can calibrate the device according to table ②.

Table ②

Enter to adjustment mode	PV indicator	SV indicator(blinking)	Adjusting value Using ↑ or ↓ key
← (5 seconds)	oFS	Temperature difference for calibrate	(-100.... +10)
←	Save Applied changes		

Example: if temperature displayed by thermostat is 2°C more than reference temperature you must set number -2 in this stage.

Note: if an interruption occurs or no key is pressed during device adjusting or temp calibrating, device returns to normal mode or displaying thermocouple environment temp after 6 seconds and no changes would be saved.

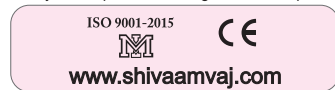
⑦



Respecting the customer is our duty

3 year no question asked guarantee under these conditions;
 1-at most it should be within 3 years from the date printed on the label of the product
 2-the label on the product should be safe and sound

Shiva Amvaj products in accordance with international standards and with a 3 year no question asked guarantee are presented



customer support: (+98)3135723690-1
 sale :(+98)3135723444-5 fax: (+98)3135723400

Email: info@shivaamvaj.com

Shiva Amvaj Company is also presenting services in cyberspace

Shiva Amvaj number: 0098 913 403 4351

⑧

①

Features

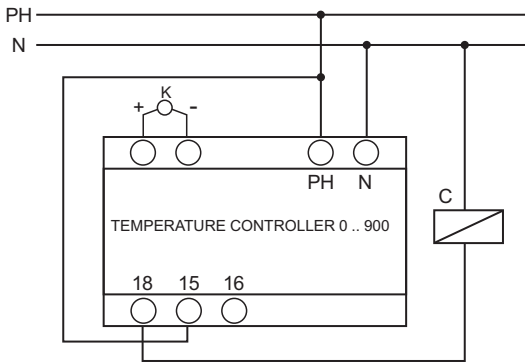
- Having indicators to display
 - PV : real temperature
 - SV : adjusted temperature
 - LED(REL) : relay connection
- Capabilities
 - Temperature measurement accuracy of 1°C
 - OFF and ON band adjustment of hysteresis output
 - OFF and ON delay time adjustment
 - Sensor disconnecting recognition
 - Device calibration according to desired reference

Technical specifications

- Power voltage : 180-250 VAC/50-60Hz
- Temperature measurement interval : 0-900°C
- Sensor : K-type thermocouple
- Efficiency at
 - Temperature : -20°C..+65°C
 - Humidity : 70%
- Output : 5A relay

②

Device Installation



③

Device Operation

2 indicators are used to display PV(PROCESS VALUE) measuring temperature and SV(SETPOINT VALUE) adjusted temperature.

Connect the thermocouple to system based on schematic considering following notifications:

- 1- K-Type thermocouple
- 2- The thermocouple connection wire to device should be as short as possible.
- 3- keep thermocouple connection wire far from high voltage cables.

Note1: if thermocouple connection wires are long, the error of measured temperature could be compensated in calibration section according to table ②.

Note2: If thermocouple is separated from Device unexpectedly ,PV indicator displays SEr blinking in order to show sensor disconnection. This message will be shown until sensor reconnects.

Note3: If thermocouple specific terminals becomes short circuit(connect together by a wire),PV indicator displays environment temperature.

④

WWW.SHIVAAMVAJ.COM

WWW.SHIVAAMVAJ.COM

WWW.SHIVAAMVAJ.COM

WWW.SHIVAAMVAJ.COM