



QMS  
ISO 9001:2000  
登録番号 JSAQ 097

本製品は審査登録 (ISO9001) された工場で製造されたものです。



JAB  
QMS Accreditation  
認定番号 R001



# DESK-TOP TEMPERATURE CONTROLLER **303**series



BX-303



TRZ-303

## Features

- Capable of directly connecting heaters and others to the temperature controller. This can save wiring labors.
- User-friendly control. Various applications and control methods are available to meet user requirements.
- Small and portable: You can move and place the controller anywhere you want.

\* For specifications of the controller, see the TTM-000 series or TTM-00B series catalogue.

## Wide application

- Small temperature controlled bath and small electric heating furnace
- Physical and chemical experimental laboratory, research institute, and experimental manufacturing room
- Test running of machine and equipment
- Heat equipment such as a mantle heater
- Others

## Model Configurations for Ordering

BX-303-004-   -

TRZ-303

Input*	0	K thermocouple	
	1	JPt100	
Output	R	Relay contact	
	P	SSR	
Special specification		P2	AC200V

\*1. The initial input type is "K thermocouple" (when the controller is shipped out from the factory.)

Change the Input Type parameter when you are using "Pt100/JPt100."

\*2. Only "SSR" output type is available for TRZ-303.

\*3. The controller can use from 100 VAC to 200 VAC supply voltages.

Creation From Sensor To System

**TOHO ELECTRONICS INC.**

Web Site: <http://www.toho-inc.co.jp>

E-Mail: [overseas@toho-inc.co.jp](mailto:overseas@toho-inc.co.jp)

## Specifications

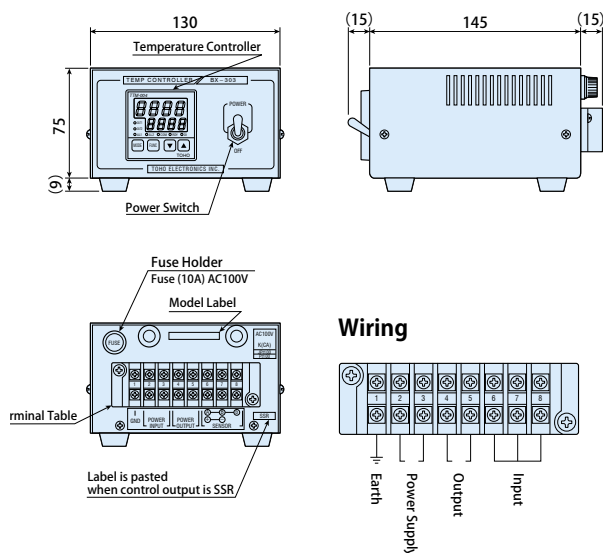
Model (Equipped Temperature Controller)		BX-303 (TTM-004)	TRZ-303 (TTM-00B)
Sensor Input		K type thermocouple (C. A) or RTD (JPt100・Pt100)	
Control Action		PID control with Auto-tuning (changeable to ON/OFF control)	
Temperature Range	Thermocouple	0-400°C	0-1300°C※Initial setting is 1200°C.
	RTD	0-100.0°C	0-500.0°C
Output Method		Relay Contact	-
		SSR drive voltage	SSR drive voltage
Output Capacity		100VAC 10A Max. (Up to 1KW) Load resistance)	12A Max. (Up to 1.2KW) Load resistance)
Power Consumption (100VAC Power Supply)	Relay	Approx. 4W or 5.5VA (No Load)	-
	SSR	Approx. 3W or 5VA (No Load)	Approx. 3W or 5VA (No Load)
Weight	Relay Type	1135g	-
	SSR Type	1108g	900g
Setting and Indication Accuracy	Thermocouple	±(0.3% + digit) of process value or ±2°C, either of bigger numerical values is taken. (Ambient temperature:23°C ± 10°C)	
	RDT	±(0.3% + digit) of process value or ±0.9°C, either of bigger numerical values is taken. (Ambient temperature:23°C ± 10°C)	
Voltage Source		100ACV ± 10%	100-200ACV ± 10%
Operating Condition		0-45°C 35-85%RH (Under non-condensation)	0-40°C 35-85%RH (Under non-condensation)
Storage Condition		-20-55°C 35-85%RH (Under non-condensation)	
Fuse		10A	15A
Special Specification		Power Supply Voltage 200VAC (Output capacity 250VAC 5A)	-
Remark		Refer to the catalogue of TTM-000 series for the detail of controller.	Refer to the catalogue of TTM-00B series for the detail of controller.

### Note for TRZ-303

- ① Please do not switch to the input type other than K thermocouple, Pt100 and JPt100.
- ② The initial input type is "K thermocouple" (when the controller is shipped out from the factory.) Please change the setting of input type when you use Pt100 or JPt100
- ③ K thermocouple, Pt100 and JPt100 are usable, but please do not connect more than two at once.

## Dimensions

### BX-303



### TRZ-303

