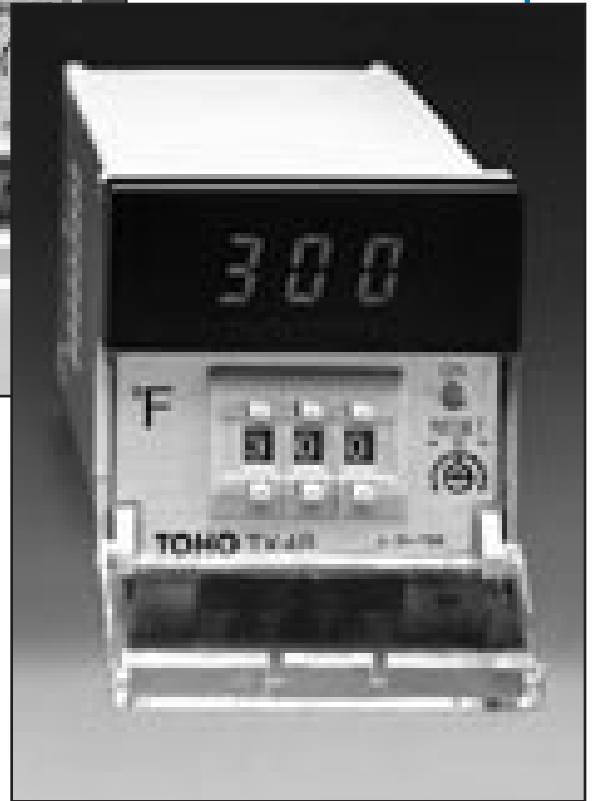


TX-48

*The TX-48A
and TX-48B
are compact, highly
accurate, and
versatile for
many applications*



The TX-48 is a reliable controller offering you a choice of digital displays: numeric or offset indication.



For Novice or Expert

The TX-48 controller series from Toho Electronics offers reliable service for a variety of process control applications. The TX-48A and TX-48B are identical controllers with respect to internal design, but each offers a different type of digital indication. The TX-48A features a bright three-digit LED display that shows you the current process temperature at all times. The TX-48B features an array of five LEDs which function as a deviation indicator. A quick glance at the TX-48B lets you know immediately if your process is at setpoint without having to read and interpret any numbers.

Both units are easy to use right out of the box and feature simple push-button operation to input setpoint. A clear plastic shield protects buttons from accidental change. You can select either on/off or proportional control by setting an accessible jumper plug. A potentiometer on the front panel allows you to fine-tune the system to correct slight deviations in a stabilized temperature.

The TX-48L model is a digital indicator that can be used to convert temperature input, into a current or voltage output.

INPUT RANGE:

Thermocouple:

J: 0–299°C 0–399°F
 0–399°C 0–799°F
 0–799°C 0–999°F
 0–999°C

K: 0–299°C 0–399°F
 0–399°C 0–799°F
 0–799°C 0–999°F
 0–999°C

RTD:

Pt100: 0–99.9°C 0–199°F
 0–199°C 0–399°F
 0–399°C 0–799°F
 –99–99°C

Current/voltage:

4–20 mA, 1–5 V: 0–50.0°C 0–50.0°F
 0–99.9°C 0–99.9°F
 0–199°C 0–199°F
 0–299°C 0–299°F
 0–399°C 0–399°F
 0–599°C 0–599°F
 0–799°C 0–799°F
 0–999°C 0–999°F
 –99–99°C 99–99°F

- Setting mode:** Digital set with digital switch (3 digits)
- Indicating mode:** Digital indication by a 7-segment, 3-digit LED*
- Setting accuracy:** Within ±1.0% FS
- Indicating accuracy:** Within ±1.0% FS
- Isolation resistance:** More than 20MΩ (at DC 500V)
- Weight:** Including fitting metals, about 230g
- Supply power:** See “Supply Voltage” in model configuration
- Allowance of power fluctuation:** 85–110% of supply power
- Consumption of power:** About 2VA
- Ambient temperature:** –10–55°C (subject to no freezing condition)
- Ambient moisture:** 35–85% relative humidity
- Control mode**
 - ON/OFF adjustment sensitivity:** 0.3% FS (fixed)
 - Proportional Band:** 3% FS (fixed)
 - Manual reset range:** Variable more than ± 3% FS
 - Time Proportional output:** Current output: 4–20mA (load below 400Ω.)
- Voltage output:** 1–5 V (short circuit protection)
- Control output:** Relay contact output: AC 250V 3A (resistance load)
- SSR drive voltage output:** DC 12V 30mA

* TX48B n/a

MODEL CONFIGURATION

T X 4 8

SET AND INDICATION	
Digital set, digital indication	A
Digit set, LED deviation meter	B
Digital indication only	L

CONTROL MODE	
Indication only*	01
ON/Off control	02
Time proportioning control	04
proportioning control	05

INPUT	
K Thermocouple	K
J Thermocouple	J
RTD Pt100	P
DC 4–20mA	I
DC 1–5V	E

OUTPUT	
Relay contact output**	X
Voltage pulse for SSR driving**	P
DC 4–20mA	I
DC 1–5V	E
DC 0–1V*	E1
DC 0–10mV*	E2

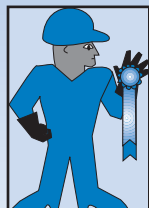
SCALE	
(see scale ranges)	

SUPPLY VOLTAGE	
100, 110V 50/60Hz	P1
200, 220V 50/60Hz	P2
DC 12V	P5



* TX-48L only

** TX-48L n/a



TOHO TX-48 MODELS A&B BENEFITS:

Digital displays—your choice of either LED numerical display (TX-48A), or LED array deviation indicator (TX-48B)

On/off and time proportioning control—allows you to choose the mode of control operation

Upscale burnout protection—prevents overheating in the event of sensor failure

Front panel display—shows both PV and SV simultaneously

Inputs—J, K, or RTD, 4–20mA, 1–5V DC

Outputs—relay, DC voltage pulse, 4–20mA, 1–5V DC, 0–1V DC, 0–10mV DC

Power supply—110 or 220V AC, 12V DC

Acrylic shield—protects buttons from being accidentally pushed

Manual reset potentiometer—allows you to fine-tune the controller near setpoint

Easy push-button operation

Economical