Series 40T2 Digital Temperature Controller





Benefits/Features

- Field selectable °F or °C
- Universal temperature sensor or transmitter input
- Configuration key to quickly load parameters from one unit to another
- Heating and cooling operation modes
- TTL/RS-485 communication

Applications

Food service equipment

Industrial process control

Description

The **Series 40T2 Digital Temperature Controller** accepts a variety of inputs for temperature measurements and set points up to 999°F/537°C. Observing the current status of the controller is made easier with the 3-digit, multi-color LED display that has alarm and output symbols. For added versatility, the temperature units can be field selected for °F or °C. A flashing alarm informs users when the current temperature exceeds preset limits. The Modbus® protocol TTL slave port can be used to communicate over a TTL/ RS-485 interface. When programming multiple units, the 40X2-K programming key is available to reduce setup time.

Specifications

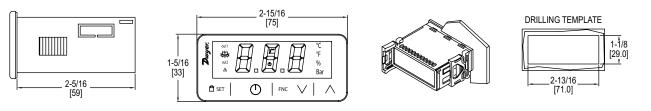
opcomounons	
Sensor Input	RTD, thermocouple, thermistor, current, or voltage. 1 digital multipurpose dry contact (not available if unit configured for Pt 100, Pt 1000, or Ni 120 3-wire input).
Multipurpose Input	Dry contact 3.3V, 1 mA (not available if sensor input is configured for Pt 100, Pt 1000, or Ni 120 3-wire input).
Sensor Input Types	Current: 0-20 mA/4-20 mA, configurable; Voltage: 0-10 V/2-10 V, configurable; PTC probe: -58 to 302°F (-50 to 150°C); NTC probe: -40 to 230°F (-40 to 110°C); PT100 probe*: -148 to 999°F (-100 to 650°C); PT1000 probe*: -148 to 999°F (-100 to 650°C); N120 probe: -112 to 572°F (-80 to 300°C); J T/C*: -130 to 999°F (-90 to 700°C); K T/C*: -130 to 999°F (-90 to 999°C).
Output	Relay contact.
Control Type	On-off.
Power Requirements	115 VAC or 230 VAC (50/60 Hz), or 12-24 VAC/DC (50/60 Hz) depending on model.
Accuracy	±2°F (1°C).
Communication	TTL/RS-485 interface, Modbus® protocol port for programming or BMS.
Display	3 digit LED display.
Relay Output	K1 16 A in-rush res. @ 250 VAC, SPDT, type 1.
Alarm	Built in buzzer.
Operating Humidity	10-90% RH non-condensing.
Operating Temperature	23 to 131°F (-5 to 55°C).
Storage Temperature	-13 to 158°F (-25 to 70°C).
Weight	2.3 oz (65 g).
Front Panel Rating	IP65.
Compliance	CE, UKCA, cURus.
*Lippor range limited by 2	digit display

*Upper range limited by 3-digit display.

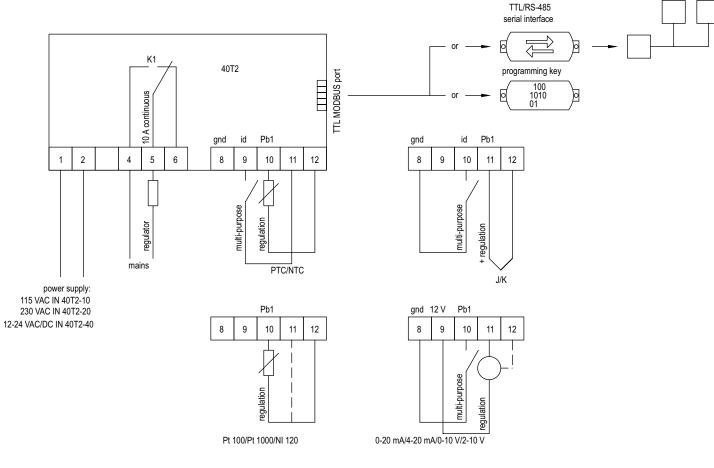


BMS

Dimensions

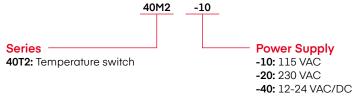


Wiring Diagram



How to Order

Use the **bold** characters from the chart below to construct a product code.



Accessories

Model	Description
40X2-K	40M2/T2 programing key
TCS-J	J type thermocouple, 4" probe, 48" extension
TCS-K	K type thermocouple, 4" probe, 48" extension
TS-1	PTC sensor, brass sheath, PVC cable, 5 ft. (1.5 m) length
TS-2	PTC sensor, SS sheath, PVC cable, 5 ft (1.5 m) length
TS-7	NTC sensor, no sheath, PVC cable, 5 ft (1.5 m) length

Modbus® is a registered trademark of Schneider Electric USA, Inc.

©Copyright 2023 Dwyer Instruments, LLC Printed in U.S.A. 12/23

DS-40T2 Rev. 1

Important Notice: Dwyer Instruments, LLC reserves the right to make changes to or discontinue any product or service identified in this publication without notice. Dwyer advises its customers to obtain the latest version of the relevant information to verify, before placing any orders, that the information being relied upon is current.

DWYEROMEGA

Improving the world one measurement at a time.



dwyeromega.com dwyer-inst.com