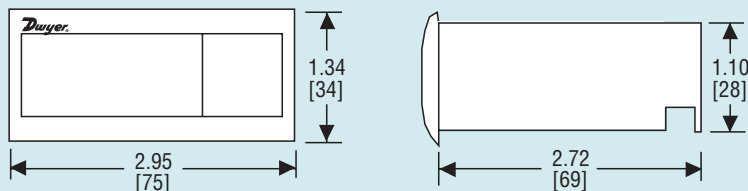




Series
TS

Digital Temperature Switch

3-Digit Display, Heating/Cooling Control, 8 or 16 Amp Relay



Panel Cutout 2-51/64 x 1-9/64 (71 x 29)

The TS Digital Temperature Switch is designed to regulate many heating and cooling applications. Easy programming via the tactile front keypad enables quick setup of the 12 parameters for simple, reliable operation. The user can define set point, heating/cooling regulation, hysteresis, cycle time, ambient probe adjustment and defrosting time. The unit features error or alarm messaging and password protection. View probe temperature on the bright red, 3-digit LED display. Select between 8 amp SPDT or 16 amp SPST relay outputs, temperature display in °F or °C, and 110 VAC, 230 VAC, or 12 VDC power supplies. The Series TS includes a thermistor with 5 ft (1.5 m) cable, fitting clips for panel mounting, gasket, rear terminal cover, and instruction manual.

Temperature

STOCKED MODELS

Model Number	Description
TS-13010	110V, 16A, °F
TS-13011	110V, 16A, °C
TS-13020	230V, 16A, °F
TS-13021	230V, 16A, °C
TS-13030	12 VAC/VDC, 16A, °F
TS-13031	12 VAC/VDC, 16A, °C
TS-83010	110V, 8A, °F
TS-83011	110V, 8A, °C
TS-83020	230V, 8A, °F
TS-83021	230V, 8A, °C
TS-83030	12 VAC/VDC, 8A, °F
TS-83031	12 VAC/VDC, 8A, °C

PARAMETERS

	Description	Units	Range
SP	Set point	Degrees	r1 to r2
r0	Differential or hysteresis	Degrees	1 to 20
r1	Lower Value Set Point	Degrees	-50 to 150°
r2	Higher Value Set Point	Degrees	-50 to 302°F (-50 to 150°C)
d0	Heating or Cooling Control	Option	Ht/Co
d2	Time for Defrosting	Minutes	0 to 59 min.
d8	Interval Time between Defrosting	Hours	1 to 24 hr.
c0	Min. stop time for Load	Minutes	0 to 59 min.
c1	Continuous Cycle Time	Hours	0 to 24 hr.
P1	Ambient Probe Adjustment	Degrees	-10 to 10
H5	Parameter Access code	Numeric	0 to 99 (Set at -00 from factory)
t0	Max. Temp. on Display	Degrees	-50 to 302°F (-50 to 150°C)

SPECIFICATIONS

Probe range: -58 to 302°F (-50 to 150°C).

Input: 1.5-inch (4 cm) thermistor (1000Ω @ 25°C) with 5 ft (1.5 m) cable.

Output: 8A SPDT or 16A SPST relay @ 250 VAC resistive (Depending on model).

Horsepower Rating (HP): 1/3 HP for 8A and 3/4 HP for 16A.

Control Type: ON/OFF.

Power Requirements: 110 VAC, 230 VAC or 12 VDC (Depending on model). 4VA (230V)

Accuracy: ±1°C.

Display: 3-Digit, red, 1/2" digits.

Resolution: ±1 digit.

Memory Backup: Nonvolatile memory.

Ambient Operating Temperature: 14 to 158°F (-10 to 70°C).

Storage Temperature: -4 to 176°F (-20 to 80°C).

Weight: 2.3 oz (65 g).

Front Panel Rating: NEMA 4X (IP65).

Agency Approvals: CE, URc, UR

APPLICATIONS

TS Digital Temperature Switches are suitable for industrial chillers, environmental chambers, walk-ins and freezers, heat sealers, sterilizers, beer and wine chillers, mug frosters, coolers, display cases and cabinets, warmers, meat and produce storage, floral preservation, refrigerated transportation, laboratories, food service equipment, ovens and dryers, tobacco preservation, hot melt glue stitchers for case erectors, cool rooms, burn-in rooms and chambers, and cold water citrus packing.