

Temperature Controllers

T775 Series 2000 Special Stand-Alone Controllers



The T775 electronic remote temperature controllers are the next generation of commercial and agricultural controls capable of remote sensing of temperature, humidity, pressure, etc., and providing switched and/or proportional outputs to various types of loads.

- Universal model (T775U) can control pressure, humidity, or any variable analog input
- Special boiler model (T775P) for boiler control
- Special Staged Sequencing Model (T775L) for sequence staging of relays with one or two setpoints
- Special Expansion Model (T775S) for staging up to 12 relays with two setpoints (each T775S provides 4 relays)
- Save time on installations with the easy-to-use graphical interface, large display, and the intuitive programming
- Use the time clock scheduler or digital input to control the setback and disable output options to help save energy
- Provide very fast or very fast response times on modulating outputs by adjusting the integral and derivative times (PI or PID)
- Configure models with reset in a few easy steps
- Eliminate the need for a separate time delay device and protect equipment with the minimum off time option
- Use the T775L and T775P to stage up to 12 relays (with optional T775S) from two independent heat or cool setpoints
- Support for digital output alarm on the T775P configurable based on minimum, maximum, or differential temperature

Type: Stage Sequencer with Reset Option-NEMA 1

Application: Staging controller for applications where electronic accuracy and remote sensing of temperature is required.

Bulb Size (T775L, T775P): 1/4 in. diameter x 2 in. long (6.35 mm diameter x 50.8 mm)

Accuracy: ±1 F at 77 F (±1 C at 25 C)

Sensor Element: 1097 ohms PTC at 77 F (25 C)

Maximum distance to sensor: Up to 1,000 ft (up to 304 m)

Relay Contact Ratings

(24 Vac): 10.0A resistive

(120 Vac): 1/2 hp; 9.8 AFL, 58.8 ALR, 125 VA Pilot Duty

(240 Vac): 1/2 hp; 4.9 AFL, 29.4 ALR, 125 VA Pilot Duty

Voltage: 24 Vac or 120/240 Vac

Analog Output Type: 2-10 Vdc; 0-10 Vdc; 4-20 mA; Electronic Series 90

Frequency: 50 Hz; 60 Hz

Operating Ambient Temperature Range:

-40 F to 125 F @ 50 Hz; -40 F to 140 F @ 60 Hz

(-40 C to 52 C @ 50 Hz; -40 C to 60 C @ 60 Hz)

Setpoint Temperature Range: -40 F to 248 F (-40 C to 120 C)

Throttling Range: 1 F to 150 F (0.5 C to 66 C)

Differential Temperature: 1 F to 150 F (0.5 C to 66 C)

Approvals

C-Tick: Approved

Underwriters Laboratories, Inc: Approved

CE: Approved

Canadian Underwriters Laboratories, Inc: Approved

Other: IP65: Approved

Accessories:

107324A-Capillary Holder Assembly for duct insertion, 8 3/8 in. long

H7655A1001-Humidity Transmitter, 5% RH accuracy, wall mount, without temp output

H7655B1009-Humidity Transmitter, 5% RH accuracy, duct mount, with optional 20K ohm temp output

P7640A1000-Differential Pressure Transmitter, 0-1.0, 0-0.5, 0-0.25, or 0-0.1 in. w.c., uni- or bi-directional, panel mount, with display

P7640A1018-Differential Pressure Transmitter, 0-1.0, 0-0.5, 0-0.25, or 0-0.1 in. w.c., uni- or bi-directional, panel mount, without display

P7640A1026-Differential Pressure Transmitter, 0-10, 0-5, 0-2.5, 0-1.0 in. w.c., uni- or bi-directional, panel mount, with display

P7640A1034-Differential Pressure Transmitter, 0-10, 0-5, 0-2.5, 0-1.0 in. w.c., uni- or bi-directional, panel mount, without display

P7640B1008-Differential Pressure Transmitter, 0-1.0, 0-0.5, 0-0.25, or 0-0.1 in. w.c., uni- or bi-directional, duct mount, with display

P7640B1016-Differential Pressure Transmitter, 0-1.0, 0-0.5, 0-0.25, or 0-0.1 in. w.c., uni- or bi-directional, panel mount, without display

P7640B1024-Differential Pressure Transmitter, 0-10, 0-5, 0-2.5, 0-1.0 in. w.c., uni- or bi-directional, duct mount, with display

P7640B1032-Differential Pressure Transmitter, 0-10, 0-5, 0-2.5, 0-1.0 in. w.c., uni- or bi-directional, duct mount, without display

Product Number	Relay Output	Sensor Inputs	Description	Expandable	Digital Output	Output Reset	Replaces	Sensors Included	Stages Loop Control
T775L2007/U	4 SPDT	2	Stage sequencer with reset option	Add 1 or 2 T775Ss (4 relays ea)		Yes	—	50021579-001 (1)	Yes
T775P2003/U	4 SPDT	3	Special boiler with reset option	Add 1 or 2 T775Ss (4 relays ea)	1	Yes	—	50021579-001 (3)	Yes
T775S2008/U	4 SPDT	—	Relay Expansion Module	—		—	—	None	—
T775U2006/U	2 SPDT	2 (Sensor B used for reset only)	Universal - humidity, pressure, etc.	—		Yes	H775E1002; H775D1003; H775C1004; H775B1005; H775A1063; H775A1048; H775A1022; H775A1006	None	—
T775U2016/U	2 SPDT	2	Universal-Control to sensor A (universal input) and Sensor B (temp) independently	—		Yes	—	None	—