

# T775 Electronic Standalone Controller

**Honeywell**



WE BUILT IT, SO YOU DON'T HAVE TO

**No Assembly Required**

# Built-In Control

## With The T775, You'll Know You Have Exactly What You Need, Because All The Features Are Self-Contained

Some controllers require you to piece together separate modules to get the control features you want, and those added relays can, well, add up. So can the added LCD display, an added transformer module and more. The Honeywell T775 Electronic Standalone Controller puts an end to add-on costs. All the features you need for a variety of applications are built right into the T775, including the LCD display. You won't have to worry about having the right modules in stock or needing to piece them together. The T775 has it all.

### It's All Inside

**Easy-To-Use Graphical Interface** — Operating the new T775 is as easy as operating your cell phone. The easy-to-use, intuitive programming will save you time on every job.

**Internal Time Clock Scheduler** — The Setback and Disable Output options, controlled by the built-in scheduler or digital input, will help save energy during unoccupied times and give you more control of the equipment without needing to purchase an additional time clock.

**Up To Two Independent Modulating Outputs** — Each output can be individually configured for 0-10 Vdc, 2-10 Vdc, 4-20 mA or Series 90, so a single device can handle many field requirements to save you time selecting the right control for the job.

**NEMA 4X Enclosure Option** — Certain models are offered with NEMA 4X enclosures to protect them from water and corrosion. They can be installed in animal confinement areas, green houses, washdown areas, swimming pools and other similar locations, giving you the control you need for harsh locations.

**Modulating High Or Low Limit Control** — If you need to protect your coil from freezing or your equipment from overheating, models offering this feature give you the ability to adjust your control temperature at sensor A to protect equipment at sensor B. You get consistent control while still protecting your equipment.

**Optional Configurable Integral And Derivative Times** — Standard on every device, this feature delivers pinpoint control. PI or PID control on modulating outputs is set up by default to behave just like the previous T775 Series 1000, but now you can adjust reaction times and behavior, giving you more control.

**Reset Models With Simplified Setup** — Reset programming has never been easier. Simply enter the high and low control temperatures and the corresponding high and low outdoor temperatures, and you're done. As your outside temperature gets colder, the setpoint temperature automatically adjusts to save energy.

**Configurable Minimum Off Time** — If needed, setting a minimum off time can protect equipment and reduce the need for a separate time delay device.

**Sensor Calibration** — Calibrate input sensors up to +/-10° F. This can be used to compensate for resistance drops in wire leads, to offset the input temperature for sensor location and more.

**Fewer Models** — Fourteen T775 models replace 38 Series 1000 models, so you'll reduce inventory and eliminate the headache of trying to choose the right model.

### Special Models

Several T775 models are designed to ensure your control needs can still be met with a single unit for special applications.

**Universal Model To Control Pressure, Humidity Or Temperature** — The T775U Universal model has an easy setup for configuring control of pressure or humidity with a 0-10 Vdc or 4-20 mA input. Control humidity with % RH displayed, or control pressure with in. w.c., psi, Pa, or kPa displayed. CO<sub>2</sub> sensors are also compatible but reading for sensor is displayed in percent instead of ppm. Outputs include two modulating and two relay outputs that can each have their own setpoint. The T775U even offers the ability to reset the output based on outdoor temperature — handy when you need to reduce window condensation when setting humidity levels. With the T775U, you'll enjoy complete versatility in a single control that gives you the freedom to do what the job requires.

**Special Sequencing Model For Staging Up To 12 Relays With Up To Two Setpoints** — The sequencer model has four stages, plus you can add up to two optional 4-stage expansion relay modules for 8- or 12-stage operation. The flexible setup allows you to configure these stages for heating, cooling or both. Because sequencer models operate up to 12 stages, you can control multiple low-mass boilers, chillers, electric heat and other equipment from a single controller.

**Special Boiler Model** — The T775 boiler model offers features including dedicated pump output, staging for up to 12 relays, digital output alarm, pump exercise, pump pre-purge and post-purge, warm weather shut-down, built-in scheduler, displayed run time, equal run time, first-on, first-off and more. With a single control, you can handle multi-boiler applications. The T775 boiler model can be used on chillers as well.

# T775 Electronic Remote Temperature Controllers

## Models for Standard Applications

Product Number	Description	Replaces	Relay Outputs	Analog Outputs 4-20 mA, 0-10 Vdc, 2-10 Vdc, & Series 90	Floating Output <sup>1</sup>	Sensor Inputs Available	# Sensors Included <sup>2</sup>
T775A2009	Standard	T775A1001	1 SPDT			1	1
T775B2016	Standard-NEMA 4X		2 SPDT		1	2	1
T775B2032	Standard	T775A1019, T775B1000	2 SPDT		1	2	1
T775B2024	Standard-NEMA 4X	T775C1009, T775D1008	4 SPDT		2	2	1
T775B2040	Standard	T775A1027, T775A1035, T775B1018, T775B1026, T775B1040	4 SPDT		2	2	1
T775M2006	Modulating		None	2		2	1
T775M2022	Modulating-NEMA 4X		2 SPDT	2		2	1
T775M2048	Modulating	T775E1015, T775E1023, T775E1056, T775E1064, T775E1098	2 SPDT	2		2	1
T775M2014	Modulating-NEMA 4X	T775G1005, T775G1013, T775G1021, T775G1039	4 SPDT	2		2	1
T775M2030	Modulating	T775E1114, T775F1022, T775F1055, T775F1089	4 SPDT	2		2	1
T775R2035	Reset option	T775J1001, T775J1076	2 SPDT		1	2	2
T775R2043	Reset option	T775J1019, T775J1027, T775J1035	None	2		2	2
T775R2027	Reset option	T775J1043, T775J1050, T775J1068	2 SPDT	2		2	2
T775R2001	Reset option		4 SPDT		2	2	2
T775R2019	Reset option		4 SPDT	2		2	2

<sup>1</sup> One floating output eliminates two relay outputs.

<sup>2</sup> 50021579-001 included with non-NEMA 4X models, and T775-SENS-WR included with NEMA 4X models.

## Models for Special Applications

Product Number	Description	Replaces	Relay Outputs	Analog Outputs 4-20 mA, 0-10 Vdc, 2-10 Vdc, & Series 90	Digital Output	Dedicated Pump Output	Sensor Inputs Available	# Sensors Included	Expandable <sup>1</sup>	Output Reset
T775P2003 <sup>4</sup>	Special boiler with reset		4 SPDT		1	•	3	3	•	•
T775L2007	Stage sequencer with reset option		4 SPDT <sup>2</sup>				2	1	•	•
T775U2006	Universal — humidity, pressure, etc.	H775A1006, H775A1022, H775A1048, H775A1063, H775B1005, H775C1004, H775D1003, H775E1002	2 SPDT	1 or 2			2 <sup>3</sup>			•
T775S2008	Relay expansion module		4 SPDT	Use with T77P or T775L						

<sup>1</sup> 4 or 8 more relays possible with T775S2008 relay expansion module(s).

<sup>2</sup> Up to 2 independent non-sequenced relays are also available.

<sup>3</sup> First input configurable for temperature, 0-10 Vdc, or 4-20 mA; second input temperature only for reset.

<sup>4</sup> Includes dedicated pump output, equal run time, pump pre-purge and post-purge, WWSD and more.



### Make The Switch

Whether you're replacing an older control or working on a new project, Honeywell T775 controls are a smart choice.



# T775 Electronic Remote Temperature Controllers

## Compatible Components

	Part Number	Description	Application	Use With
Temperature	50021579-001	Standard temperature sensor for indoor applications	Monitoring temperature of return air, discharge air and mixed air	All T775 Series 2000 models
	T775-SENS-WR	Water-resistant sensor with 5-ft. leads		
	T775-SENS-WT	Water-tight sensor with 6-ft. leads		
	T775-SENS-OAT	Outdoor air temperature sensor	Outdoor air for reset	
	C7031D2003	5-in. immersion sensor (order immersion well separately, 50001774-001)	Hot or chilled water	
	C7031J2009	12-in. duct averaging sensor with four elements	Duct discharge air	
	C7046D1008	8-in. duct probe with mounting flange	Duct discharge air mounts on flat duct or plenum surface	
	C7100D1001	12-in. flat response, duct averaging sensor with flange	Averaging duct discharge air for use in troubleshooting	
C7130B1009	Room mount sensor	Wall mount air temperature sensor		
Humidity	H7625A/B	Humidity transmitter, 2% RH accuracy, wall mount or duct mount, with optional 20K ohm temp output	Humidity and temperature	T775U2006
	H7635A/B/C	Humidity transmitter, 3% RH accuracy, wall mount, duct mount or outdoor mounting, with optional 20K ohm temp output		
	H7655A	Humidity transmitter, 5% RH accuracy, wall mount	Humidity	
	H7655B	Humidity transmitter, 5% RH accuracy duct mount with optional 20K ohm temp output	Humidity and temperature	
Pressure	P7640A	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	Clean rooms, hospitals, fume hoods and computer rooms	
CO <sub>2</sub>	C7232 <sup>1</sup>	Non-Dispersive Infrared (NDIR) carbon dioxide sensor, 0-2,000 ppm adjustable, 0/2-10 Vdc or 0/4 to 20 mA adjustable, one adjustable SPST relay output, wall or duct mount, LCD option and Honeywell logo option	Ventilation and air conditioning systems to control the amount of fresh outdoor air supplied to maintain acceptable levels of CO <sub>2</sub> in the space (demand control ventilation)	
	C7632 <sup>1</sup>	Non-Dispersive Infrared (NDIR) carbon dioxide sensor, fixed 0-2,000 ppm, fixed 0-10 Vdc output, wall or duct mount and Honeywell logo option		

<sup>1</sup> CO<sub>2</sub> sensors are compatible but reading will be displayed in percent, not ppm, or set for Pa units. And enter minimum and maximum PPM values.

### Learn More

For more information on Honeywell T775 Electronic Standalone Controllers, call **1-800-466-3993** or visit **customer.honeywell.com**.

### Automation and Control Solutions

In the U.S.:

Honeywell

1985 Douglas Drive North  
Golden Valley, MN 55422-3992

In Canada:

Honeywell Limited

35 Dynamic Drive  
Toronto, Ontario M1V 4Z9

In Latin America:

Honeywell

9315 N.W. 112th Avenue  
Miami, FL 33178  
www.honeywell.com