

Temperature Controllers

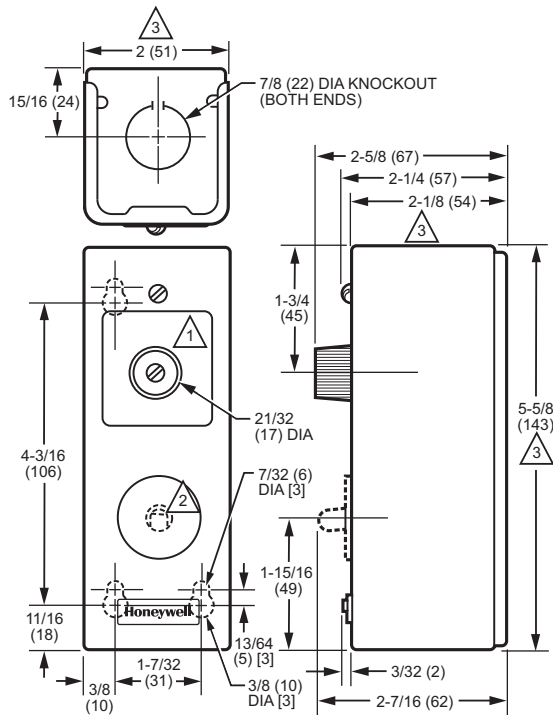
T675A,B; T678A Remote Bulb Controllers



Remote bulb thermostats regulate temperature of air or liquids in ducts, pipes, tanks and boilers.

- Suitable for applications requiring temperature control of air or liquids where controller must be placed outside the sensing area
- Typical uses include control of dampers and valves in heating, cooling and heating-cooling systems
- Fast response models (available for use in return air duct) operate approximately four times faster than standard models
- Controller can be mounted in any position
- Ambient temperature compensation provides good temperature control
- Refer to T775 Electronic Remote Temperature Controller where more exact control is required and/or remote controller location is preferred
- T678 models have a maximum connected load of 2000 VA

Dimensions in inches (millimeters)



- △ 1 T675B DOES NOT HAVE AN ADJUSTMENT KNOB.
- △ 2 T675B HAS A MANUAL RESET BUTTON (INDICATED BY DASHED LINES).
- △ 3 TRADELINE MODELS T675A, T678A ONLY – NOREL COVER INCREASES THESE DIMENSIONS BY APPROXIMATELY 1/8 IN. (3).

M23928

Type: Remote bulb

Application: Regulates temperature of air or liquids in ducts, pipes, tanks and boilers

Voltage: 120 Vac or 240/277 Vac

Frequency: 50 Hz; 60 Hz

Output Type: Relay

Number of Sensor Inputs: 1

Approvals

Canadian Standards Association: CSA Listed: Report -1

Underwriters Laboratories, Inc: UL Listed: E4436, Vol. 4, Sec. 11, Guide XAPX

	Contact Ratings		
	(120 Vac)	(240 Vac)	(277 Vac)
T675A with Adjustable Differential Temperature	8.0 AFL, 48.0 ALR	5.1 AFL, 30.6 ALR	4.2 AFL, 25.2 ALR
T675A with Fixed Differential Temperature	125 VA	125 VA	125 VA
T675B	125 VA	125 VA	125 VA
T678A	8.0 AFL, 48.0 ALR	5.1 AFL, 30.6 ALR	4.2 AFL, 25.2 ALR

Temperature Controllers

Product Number	Maximum Operating Temperature		Setpoint Temperature Range		Differential Temperature		Interstage Differential Temperature		Bulb Size		Capillary Length		Output	Sensor Element	Comments
	(F)	(C)	(F)	(C)	(F)	(C)	(F)	(C)	(inch)	(mm)	(ft)	(m)			
T675A1045/U	125 F	52 C	0 F to 100 F	-18 C to +38 C	3 F to 10 F	1.7 C to 5.6 C	—	—	1/2 in. x 4 3/16 in.	13 mm dia. x 106 mm long	20 ft	6.1 m	1 SPDT	Stainless steel bulb	Stainless Steel Bulb
T675A1102/U	280 F	138 C	160 F to 260 F	71 C to 127 C	3 F to 10 F	1.7 C to 5.6 C	—	—	1/2 in. x 4 3/16 in.	13 mm dia. x 106 mm long	20 ft	6.1 m	1 SPDT	Copper bulb	—
T675A1136/U	125 F	52 C	0 F to 100 F	-18 C to +38 C	1 F fixed	0.6 C fixed	—	—	1/2 in. x 4 3/16 in.	13 mm dia. x 106 mm long	20 ft	6.1 m	1 SPDT	Copper bulb	—
T675A1243/U	125 F	52 C	167 F to 257 F	75 C to 125 C	3 F to 10 F	1.7 C to 5.6 C	—	—	1/2 in. x 4 3/16 in.	13 mm dia. x 106 mm long	5 ft	1.5 m	1 SPDT	Copper bulb	Celsius model
T675A1425/U	200 F	93 C	55 F to 175 F	13 C to 79 C	3.6 F to 12 F	2 C to 6.7 C	—	—	1/2 in. x 3 9/16 in.	13 mm x 90 mm	20 ft	6.1 m	1 SPDT	Copper bulb	—
T675A1458/U	200 F	93 C	55 F to 175 F	13 C to 79 C	1 F fixed	0.6 C fixed	—	—	1/2 in. x 3 9/16 in.	13 mm x 90 mm	5 ft	1.5 m	1 SPDT	Copper bulb	—
* T675A1508/U	125 F	52 C	0 F to 100 F	-18 C to +38 C	3 F to 10 F	1.7 C to 5.6 C	—	—	1/2 in. x 4 3/16 in.	13 mm dia. x 106 mm long	5 ft	1.5 m	1 SPDT	Copper bulb	Includes 107324A Duct Bulb Holder
* T675A1516/U	125 F	52 C	0 F to 100 F	-18 C to +38 C	1 F fixed	0.6 C fixed	—	—	1/2 in. x 4 3/16 in.	13 mm dia. x 106 mm long	5 ft	1.5 m	1 SPDT	Copper bulb	Includes 107324A Duct Bulb Holder
T675A1524/U	200 F	93 C	55 F to 175 F	13 C to 79 C	1 F fixed	0.6 C fixed	—	—	1/2 in. x 3 9/16 in.	13 mm x 90 mm	20 ft	6.1 m	1 SPDT	Copper bulb	—
* T675A1532/U	280 F	138 C	160 F to 260 F	71 C to 127 C	3 F to 10 F	1.7 C to 5.6 C	—	—	1/2 in. x 4 3/16 in.	13 mm dia. x 106 mm long	5 ft	1.5 m	1 SPDT	Copper bulb	Includes 107324A Duct Bulb Holder
* T675A1540/U	200 F	93 C	55 F to 175 F	13 C to 79 C	3.6 F to 12 F	2 C to 6.7 C	—	—	1/2 in. x 3 9/16 in.	13 mm x 90 mm	5 ft	1.5 m	1 SPDT	Copper bulb	Includes 107324A Duct Bulb Holder
* T675A1565/U	125 F	52 C	0 F to 100 F	-18 C to +38 C	3 F to 10 F	1.7 C to 5.6 C	—	—	1/2 in. x 4 3/16 in.	13 mm x 90 mm	20 ft	6.1 m	1 SPDT	Copper bulb	Includes 107324A Duct Bulb Holder
* T675A1706/U	125 F	52 C	0 F to 100 F	-18 C to +38 C	3 F to 10 F	1.7 C to 5.6 C	—	—	coil 1 1/2 in. diameter x 5 in.	coil 38.1 mm x 127 mm	5 ft	1.5 m	1 SPDT	Fast response capillary	Fast response model, includes 131524A Duct Bulb Holder
T675A1771/U	200 F	93 C	55 F to 175 F	13 C to 79 C	1 F fixed	0.6 C fixed	—	—	coil 1 1/2 in. diameter x 5 in.	coil 38.1 mm x 127 mm	5 ft	1.5 m	1 SPDT	Fast response capillary	Fast response model, includes 13154A Duct Bulb Holder
T675B1002/U	125 F	52 C	30 F to 50 F	-1 C to +10 C	Manual Reset	Manual Reset	—	—	1/2 in. x 4 3/16 in.	13 mm dia. x 106 mm long	10 ft	3 m	1 SPDT	Copper bulb	—
T675B1010/U	125 F	52 C	30 F to 50 F	-1 C to +10 C	Manual Reset	Manual Reset	—	—	1/2 in. x 4 3/16 in.	13 mm dia. x 106 mm long	20 ft	6.1 m	1 SPDT	Copper bulb	—
T675B1028/U	125 F	52 C	-20 F to +50 F	-29 C to +10 C	Manual Reset	Manual Reset	—	—	1/2 in. x 4 3/16 in.	13 mm dia. x 106 mm long	10 ft	3 m	1 SPDT	Copper bulb	—
T678A1015/U	125 F	52 C	0 F to 100 F	-18 C to +38 C	3 F fixed	1.7 C fixed	3 F to 10 F adjustable	1.7 C to 5.6 C adjustable	1/2 in. x 4 3/16 in.	13 mm dia. x 106 mm long	20 ft	6.1 m	2 SPDT switch contacts	Copper bulb	maximum connected load = 2000VA
T678A1163/U	125 F	52 C	5 F to 95 F	-15 C to +35 C	3 F fixed	1.7 C fixed	3 F to 10 F adjustable	1.7 C to 5.6 C adjustable	1/2 in. x 4 3/16 in.	13 mm dia. x 106 mm long	20 ft	6.1 m	2 SPDT switch contacts	Copper bulb	maximum connected load = 2000VA; Celsius model
T678A1361/U	200 F	93 C	55 F to 175 F	13 C to 79 C	3.6 F fixed	2.0 C fixed	3.6 F to 12 F adjustable	2.0 C to 6.7 C adjustable	1/2 in. x 3 9/16 in.	13 mm x 90 mm	20 ft	6.1 m	2 SPDT switch contacts	Copper bulb	maximum connected load = 2000VA
* T678A1437/U	125 F	52 C	0 F to 100 F	-18 C to +38 C	3 F fixed	1.7 C fixed	3 F to 10 F adjustable	1.7 C to 5.6 C adjustable	1/2 in. x 4 3/16 in.	13 mm dia. x 106 mm long	5 ft	1.5 m	2 SPDT switch contacts	Copper bulb	maximum connected load = 2000VA

* TRADELINE models • SUPER TRADELINE models

Commercial Components

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Product Number	Maximum Operating Temperature		Setpoint Temperature Range		Differential Temperature		Interstage Differential Temperature		Bulb Size		Capillary Length		Output	Sensor Element	Comments
	(F)	(C)	(F)	(C)	(F)	(C)	(F)	(C)	(inch)	(mm)	(ft)	(m)			
* T678A1445/U	200 F	93 C	55 F to 175 F	13 C to 79 C	3.6 F fixed	2.0 C fixed	3.6 F to 12 F adjustable	2.0 C to 6.7 C adjustable	1/2 in. x 3 9/16 in.	13 mm x 90 mm	5 ft	1.5 m	2 SPDT switch contacts	Copper bulb	maximum connected load = 2000VA
* T678A1478/U	125 F	52 C	0 F to 100 F	-18 C to +38 C	3 F fixed	1.7 C fixed	3 F to 10 F adjustable	1.7 C to 5.6 C adjustable	1/2 in. x 4 3/16 in.	13 mm dia. x 106 mm long	5 ft	1.5 m	2 SPDT switch contacts	Fast response capillary	maximum connected load = 2000VA; Fast response model
* T678A1494/U	200 F	93 C	55 F to 175 F	13 C to 79 C	3.6 F fixed	2.0 C fixed	3.6 F to 12 F adjustable	2.0 C to 6.7 C adjustable	1/2 in. x 3 9/16 in.	13 mm x 90 mm	5 ft	1.5 m	2 SPDT switch contacts	Fast response capillary	maximum connected load = 2000VA; Fast response model
T678A1627/U	125 F	52 C	0 F to 100 F	-18 C to +38 C	3.6 F fixed	2.0 C fixed	3.6 F to 12 F adjustable	2.0 C to 6.7 C adjustable	1/2 in. x 4 3/16 in.	13 mm dia. x 106 mm long	10 ft	3 m	2 SPDT switch contacts	Averaging capillary	maximum connected load = 2000VA
* T678A1692/U	200 F	93 C	—	15 C to 75 C	3.6 F	2.0 C	3.6 F to 12 F	2.0 C to 6.7 C	1/2 in. x 4 in.	13 mm diameter x 102 mm long	5 ft	1.5 m	2 SPDT switch contacts	Copper bulb	maximum connected load = 2000VA; Celsius model

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