SPECIFICATIONS

IMPORTANT

The specifications given in this publication do not include normal manufacturing tolerances. Therefore, this unit might not exactly match listed specifications. This product is tested and calibrated under closely controlled conditions; minor performance differences can be expected if those conditions are changed.

Models: See Table 1.

Dimensions: See Fig. 1.

Finish (color): Trident White.

Batteries: No batteries required.

Table 1. T7350 Thermostat Features.

Model	Applications	Maximum Stages[a]		Features	Auxiliary Relay	LONWORKS® Capability?
		Heat	Cool			
T7350A	Conventional or Heat Pump	1[b]	1[b]		Yes	No
T7350B		2[b]	2[b]	Outdoor, Discharge Air Capability	Yes	
T7350D		3 (2)[c]	3 (4)[c]	Humidity, Occupancy, Outdoor, Discharge Air Capability	Yes	
T7350H1009					Isolated Normally Open	Yes
T7350H1017	Modulating	2 modulating, 2[b] relay		Humidity, Occupancy, Outdoor, Discharge Air Capability, 4-20 mA output (2-10 Vdc with 500 ohm resistor)		Yes
T7350M					Yes	No

[a] All models are down-selectable and can be configured to control fewer stages than the maximum allowed.

[b] One extra stage (of either heat or cool) can be configured using the auxiliary relay.

[c] Heat pump applications for these models have a maximum of two heat stages and two cool stages.

Mounting Means:
Mounts on subbase.
Subbase Mounts On:
Wall: Using two 5/8 in. long #6-32 screws (included).
Outlet Box: Using sheet metal screws.

Throttling Range for Modulating Outputs:
Automatically adjusts based on heat/cool stages. Manually adjustable with TStatSpec software or PDA.

Clock Accuracy (at 77° F [25° C]):±1 min./month (30 days).

Minimum Stage Operation Time (fixed):
Minimum On
Heat: 1 minutes.
Cool: 3 minutes.
Minimum Off (Cool and Heat Pump): 1 minute.

Electrical Ratings:
Power: 24 Vac, 50/60 Hz.; 20 to 30 Vac, 50/60 Hz.
Input:
Temperature: 20K ohms.
Humidity: 0-10 Vdc.
Outdoor: 3000 PTC.
Discharge Air: 20K ohms.
Occupancy Sensor: Dry contact switching 30 Vdc at 1 mA.
All Relay Outputs (at 30 Vac):
Running: 1.5A maximum.
Inrush: 7.5A maximum.
Modulating Output: 4 to 20 mA with 510 ohm maximum terminating resistance.
System Current Draw (without load):
5 VA maximum at 30 Vac, 50/60 Hz.

NOTE: Relays are N.O. Single-Pole, Single-Throw (SPST).

Outdoor Sensor Wiring: Requires 18 gauge wire.

Humidity Ratings:5% to 90% RH, noncondensing.

Emergency Heat Indication:
Display indicates when Emergency Heat is activated (Em).

Temperature:
Ratings:
Operating Ambient: 30°F to 110°F (-1°C to 43°C).
Shipping: -30°F to +150°F (-34°C to +66°C).
Display Accuracy: ±1°F (±1°C).
Setpoint:
Range:
Heating: 40°F to 90°F (4°C to 32°C).
Cooling: 45°F to 99°F (7°C to 37°C).
Deadband: 2°F (1°C).
Default Settings: See Table 2.

Loss of Power: The thermostat maintains programmed times and temperatures for the life of the product. Clock and day information is retained for a minimum of 48 hours.

NOTE: To achieve the 48-hour power-loss clock retention, the T7350 must be powered for at least 5 minutes.

Communicating Model T7350H:
Connection Terminals for the LonWorks Bus.
Network jack for quick access by personal computer based tools.
Communications service-pin pushbutton to simplify startup.
LonMark Functional Profile: 8500_20 Space Comfort Controller.
LonMark SCC Object Type: 8504 Rooftop See Fig. 2.
LonMark Program Identifier: 80:00:0C:55:04:03:04:2E.
LonMark Application Interoperability: version 3.3
Honeywell LonMark Plug-In file downloads:
http://plugin.ge51.honeywell.de/index.htm#

Table 5. T7350D Subbase for Three-stage Heat, Three-stage Cool Systems.

Terminal		Description
Conventional	Heat Pump	
RC[a]	RC[a]	24 VAC Cooling transformer.
RH[a]	RH[a]	24 VAC Heating transformer.
X	X	Common.
aux	aux	Auxiliary relay.
W1	O/B	Conventional: Stage 1 heating relay. Heat Pump: Changeover relay for heating (B) or cooling (O)[b].
W2	W1	Conventional: Stage 2 heating relay. Heat Pump: 1st Stage auxiliary heat relay.
Y1	Y1	Conventional: Stage 1 cooling relay. Heat Pump: Stage 1 compressor relay.
Y2	Y2	Conventional: Stage 2 cooling relay. Heat Pump: Stage 2 compressor relay.
AS	AS	Discharge Air Sensor connection (1).
AS	AS	Discharge Air Sensor connection (2).
OS	OS	Outdoor Air Sensor connection (1).
OS	OS	Outdoor Air Sensor connection (2).
G	G	Fan relay.
T3	T3	TR20 Series remote sensor connection (GND).
T4	T4	TR20 Series remote sensor connection (Sensor).
T5	T5	TR20 Series remote sensor connection (Set Pt).
T6	T6	TR20 Series remote sensor connection (Bypass).
T7	T7	TR20 Series remote sensor connection (LED).
W3	W2	Conventional: Stage 3 heat or stage 4 cool relay. Heat Pump: 2nd Stage auxiliary heat relay.
Y3	—	Conventional: Stage 3 cooling relay.
HS	HS	Humidity Sensor connection (signal: 0-10 Vdc).
HC	HC	Humidity Sensor connection (common).
HP	HP	Humidity Sensor connection (power).
M	M	Motion Sensor connection (1).
M	M	Motion Sensor connection (2).

[a] Factory jumper between RC and RH for systems with one transformer.

[b] For changeover functional details, see Operation section.

Table 6. T7350H Subbase for Three-stage Heat, Three-stage Cool Systems with Network Communications

Terminal		Description
Conventional	Heat Pump	
RC[a]	RC[a]	24 VAC Cooling transformer.
RH[a]	RH[a]	24 VAC Heating transformer.
X	X	Common.
aux[b]	aux[b]	Auxiliary relay connection (normally open).
aux[b]	aux[b]	Auxiliary relay connection (common).
W1	O/B	Conventional: Stage 1 heating relay. Heat Pump: Changeover relay for heating (B) or cooling (O)[c].
W2	W1	Conventional: Stage 2 heating relay. Heat Pump: 1st Stage auxiliary heat relay.
Y1	Y1	Conventional: Stage 1 cooling relay. Heat Pump: Stage 1 compressor relay.
Y2	Y2	Conventional: Stage 2 cooling relay. Heat Pump: Stage 2 compressor relay.
AS	AS	Discharge Air Sensor connection (1).
AS	AS	Discharge Air Sensor connection (2).
OS	OS	Outdoor Air Sensor connection (1).
OS	OS	Outdoor Air Sensor connection (2).
G	G	Fan relay.
T3	T3	TR20 Series remote sensor connection (GND).
T4	T4	TR20 Series remote sensor connection (Sensor).
T5	T5	TR20 Series remote sensor connection (Set Pt).
T6	T6	TR20 Series remote sensor connection (Bypass).
T7	T7	TR20 Series remote sensor connection (LED).
W3	W2	Conventional: Stage 3 heat or stage 4 cool relay. Heat Pump: 2nd Stage auxiliary heat relay.
Y3	—	Conventional: Stage 3 cooling relay.
HS	HS	Humidity Sensor connection (signal: 0-10 Vdc).
HC	HC	Humidity Sensor connection (common).
HP	HP	Humidity Sensor connection (power).
M	M	Motion Sensor connection (1).
M	M	Motion Sensor connection (2).
ebus	ebus	LonWorks Bus (1).
ebus	ebus	LonWorks Bus (2).

[a] Factory jumper between RC and RH for systems with one transformer.

[b] Floating auxiliary contact (not connected to transformer hot or common).

[c] For changeover functional details, see Operation section.

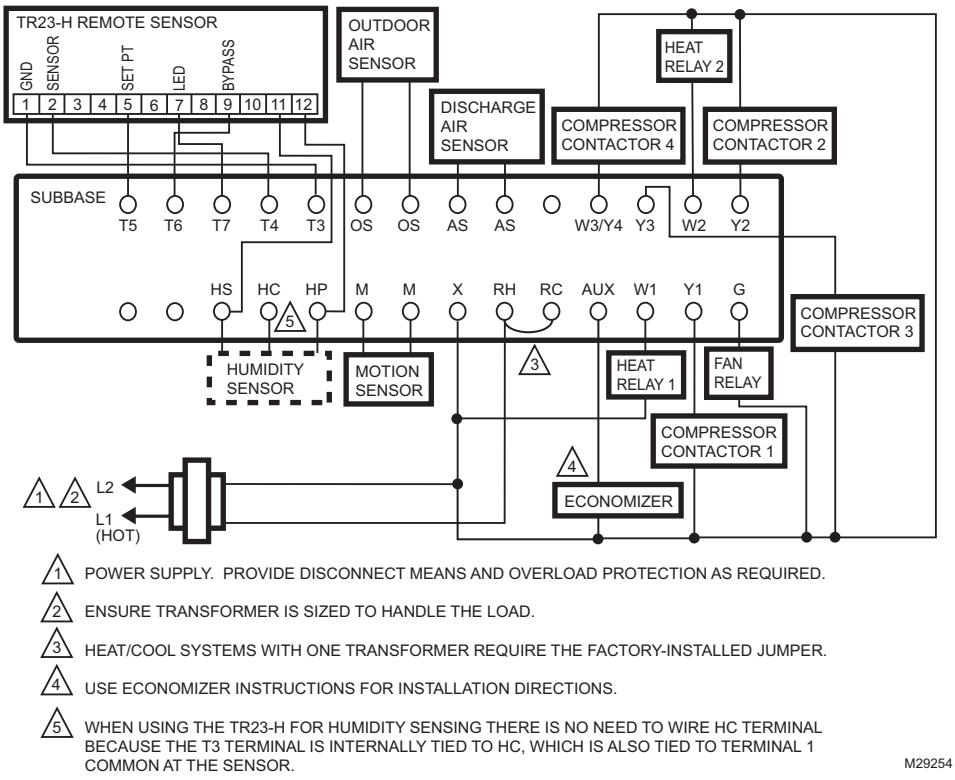

Fig. 21. Typical hookup of T7350D in two-stage heat and four-stage cool conventional system.

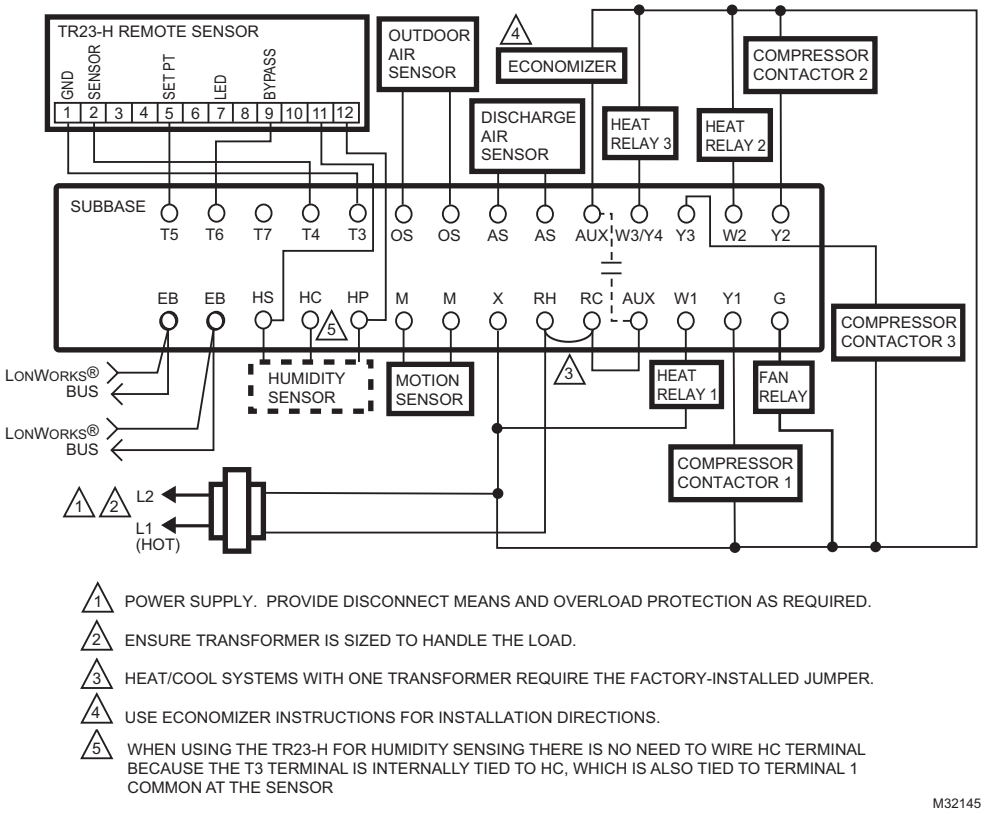

Fig. 22. Typical hookup of T7350H1009 in three-stage heat and three-stage cool conventional system with one transformer.

[c] Only Available if user selected one or more of following: Dehumidification Reset, Dehumidification Minimum On, or Dehumidification Reheat.

[d] Config ID cannot handle Standby setpoints. Keypad users cannot set Occupied setpoints that violate Not Occupied setpoint relationship. The T7350 algorithm never allows the effective setpoint outside Not Occupied setpoints.

Table 21. Exceptions to Factory Defaults

Configuration Option	T7350A	T7350B	T7350D T7350H1009	T7350M T7350H1017
Heat Output Stages	1	2	3	0
Cool Output Stages	1	2	3	0
Room Humidity Sensor	None	None	Local	Local
Heat Throttling Range	3	4	7	5
Cool Throttling Range	3	4	7	5
Heat Integral Time	3100	2500	1650	1250
Cool Integral Time	3100	2500	1650	1250

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