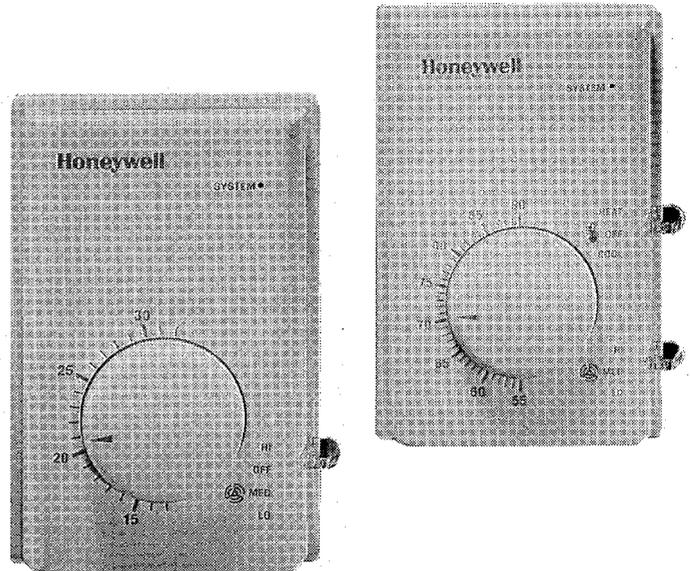


## T6380 Series Electronic Fan Coil Thermostats

The T6380 series of electronic fan coil thermostats provide precision line voltage control of fan-forced Heating, Ventilating and Air Conditioning equipment. Models are available for cooling-only, manual heat-cool changeover, or remote heat-cool changeover systems. Hydronic, source heat-cool systems may be two or four-pipe configuration with 0, 1, or 2 valves. Fan control options include constant, cycled, or user-selectable "On-Auto" operation. Manual fan speed selection is standard. All models feature an "Off" switch.



- Electronic temperature sensing provides energy-efficient, precision operation for maximum comfort.
- Contemporary white sculpted styling.
- Vertical or horizontal mounting configurations.
- Adjustment ranges 55° to 90°F or 13° to 32°C.
- Easy-to-use set point knob.
- LED system status indicator. "OFF" de-energizes all connected loads.
- Three level fan speed selection.
- Constant, cycled, or on-auto selectable fan operation available.
- Models for manual or remote heat-cool changeover heating-only, or cooling-only systems.
- Models for 2 or 4-pipe systems.
- Rugged molded thermoplastic housing with captive mounting screws, mounts on single-gang NEMA-standard (U.S.) electrical box.
- Screw terminal block connections.
- Suitable for inductive-rated loads such as valves, relays, contactors and fans.
- Range stops and cover locking kit available.
- UL Listed. CSA Certified.

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# Specifications

**MODELS:**

Fan Coil System	3-Speed Fan Operation		
	Constant	Cycled	On-Auto
P-pipe System • Cooling only	T6383A Fig. 2a	T6381 A Fig. 5a	T6387A Fig. 8a
	T6383A Fig. 2b	T6381 A Fig. 5b	T6387A Fig. 8b
2-pipe Heat-Cool • Manual Change/Over	T6383B Fig. 3	T6381 B Fig. 6	N/A
	T6383A Fig. 2c	T6381A Fig. 5c	T6387A Fig. 8c
	T6383B Fig. 4b	T6381B Fig. 7b	N/A
4-pipe Heat-Cool • Manual C/O	T6383B Fig. 4a	T6381B Fig. 7a	N/A

**ELECTRICAL RATINGS:**

T6380 Series – Power Supply: 110-130 or 208-277 Vac  
 +10/-15%, 50-60Hz.

T6381, T6387 – Output Rating, cycled (“Auto”) fan control

	120v	208 V	230 V	277 V
50-60 Hz	120v	208 V	230 V	277 V
Full Load Amps*	3.8	2.1	1.9	1.6
Locked Rotor	22.8	12.6	11.4	9.5
Pilot Duty	125 VA			

\*Equivalent to NEMA 1/8 horsepower rating for a hermetically-sealed motor such as a compressor. Allowable connected load must be determined by adding nameplate full load and locked rotor (inrush) ratings of all loads.

T6383 – Output Rating, constant fan operation

Thermostat (Heat and Cool outputs):

50-60Hz	120V	208 V	230 V	277 V
50-60Hz	120V	208 V	230 V	277 V
Full Load Amps	3.8	2.1	1.9	1.6
Locked Rotor A	22.8	12.6	11.4	9.5
Pilot Duty	125 VA			
Resistive (heat only)	10.0 A	N/A	N/A	5.6

Fan (Air Handler):

50-60 Hz	110-130 V	208 V	220-240V	277 V
50-60 Hz	110-130 V	208 V	220-240V	277 V
Full Load Amps**	5.8	3.2	2.9	2.4
Locked Rotor	34.8	19.2	17.4	14.4

\*\*Equivalent to NEMA 1/4 horsepower rating for a hermetically-sealed motor. Allowable load must be determined from fan nameplate ratings

† North American national electrical codes require all ungrounded conductors to electric resistance heating to be broken at the thermostat OFF setting. The 208V and 230V resistive ratings are not UL approved. The 230V rating is site-approveable in Canada on 416V 4-wire Wye distributed systems. The non-inductive rating for 230V “a.c. mains” with one ungrounded conductor is 6.0A.

**CONTROL RANGE:**

55 to 90 F or 13 to 32 C marked in 1” increments.

SYSTEM L.E.D. lights on call for heating or cooling.

Operating range:

-22 to +104 F [-30 to +40 C], 5 to 95% RH, non-condensing.

**PERFORMANCE SPECIFICATIONS:**

Precision: ±1°F temperature swing [0.9°C differential].

Accuracy: 2°F [1°C] droop with 4 A load.

CSA Performance Certification @ 10 A, 120 Vac.

**DIMENSIONS:**

See Fig. 1 - Nominal Dimensions.

**MOUNTING:**

Direct mounting on single-gang NEMA 2” x 3” flush-mount or 2” x 4” surface-mount electrical box, or on 4” x 4” box.

Models available for vertical or horizontal mount.

**WIRING CONNECTIONS:**

Screw terminal block suitable for 1– 14 AWG, 2 – 18 AWG, or 1 – 1.5 mm<sup>2</sup> copper wire.

**APPROVALS:**

CSA Certified LR1322

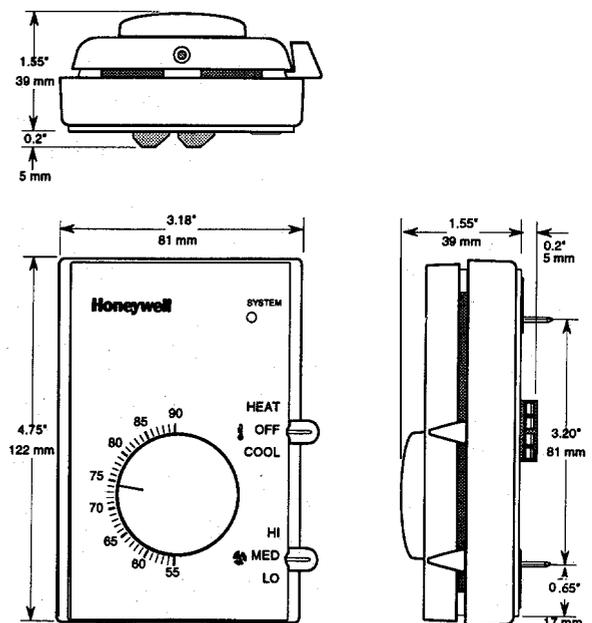
Underwriters Labs Listed E47434.

**Accessories:**

272824A– P Card – Range stop/cover locking kits for models available.

(See Tradeline catalogue or contact your local Honeywell representative for details.)

Fig. 1 — Nominal dimensions in inches and millimeters.



# Installation

## MOUNTING:

Mount the thermostat on an inside wall 4' to 5' [ 1.5 m] above the floor. Do not mount where thermostat can be affected by drafts, radiant heat from the sun, or other sources of heat. T6360's mount on NEMA standard 2"x3" single gang flush or 2"x4" surface mount electrical box, or on 4"x4" box.

## WIRING:

Internal schematic and external wiring connections are shown in Fig. 2a through Fig. 8c. Wiring connections may be made to the 8 position screw terminal block with 1- 14 AWG, or 2- 18 AWG, solid or stranded copper wires.

## OPERATION:

As the temperature changes, the thermostat makes to open a valve and/or power a blower to provide heating or cooling. The speed at which the air is circulated is controlled by the FAN switch. Continuous (ON) or intermittent(AUTO) fan operation is determined by model number.

## CHECKOUT:

Turn power on. Check out operation according to the SYSTEM switch present.

- SYSTEM OFF de-energizes valve and fan circuits.

### Models T6381A: T6383A

- SYSTEM: HI-OFF-MED-LO

Set the SYSTEM switch to HI. Rotate the thermostat knob clockwise to energize the heating\cooling valve and/or fan ( constant or cycled fan). The system LED on the thermostat will light when the heating or cooling circuit is energized.

### Models T6381B: T6383B

- SYSTEM: HEAT - OFF- COOL

Set the SYSTEM to HEAT. Rotate the thermostat knob clockwise to energize the heating valve and/or fan (fan auto/cycled mode). The system LED on the thermostat will light when the heating circuit is energized. Set the SYSTEM to COOL. Rotate the thermostat knob counter-clockwise to energize the cooling valve and/or fan (fan auto/cycled mode). The system LED on the thermostat will light.

### Model T6387A

- SYSTEM: ON -AUTO - OFF

- Set the SYSTEM to ON. The valve will operate on heating or cooling cycle depending on whether hot or chilled water is being supplied.
- Set the SYSTEM to AUTO. The fan will operate with the heating or cooling cycles.

## SETTING:

The T6380 temperature scale is marked 55 to 90°F or 13 to 32°C, depending on the model. Set the dial indicator marker to the desired temperature.

## CALIBRATION:

T6380 thermostats are accurately calibrated at the factory under controlled conditions. Do not attempt to field calibrate this device.

Fig. 2a – T6383A for P-pipe, constant fan, cooling Only

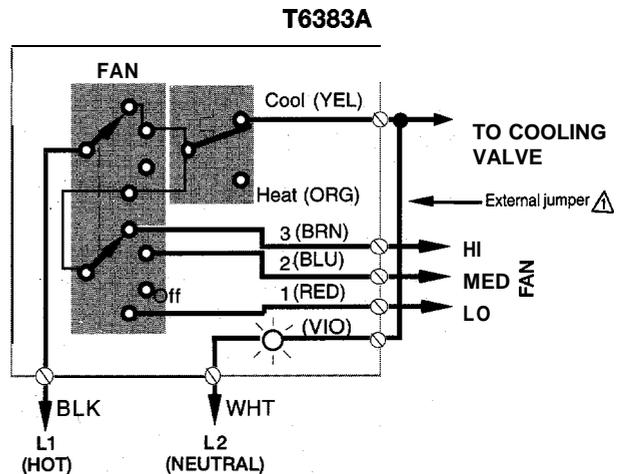
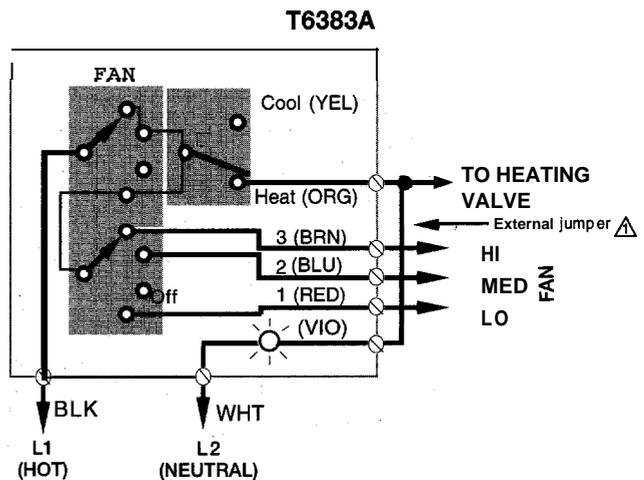


Fig. 2b – T6383A for P-pipe, constant fan, heating Only



## CAUTION

1. Disconnect power supply before installing to prevent electrical shock hazard.
2. Installer must be a trained, experienced service technician.
3. All wiring must comply with national and local electrical codes, ordinances, and regulations.
4. Provide disconnect means and overload protection required.
5. T6380 Series thermostats contain no user-serviceable parts.

# Installation

Fig. 2c – T6383A: P-pipe, heat/cool, seasonal auto-changeover, constant fan

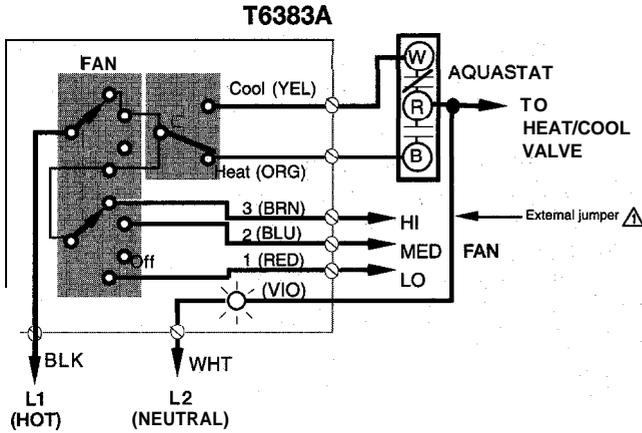


Fig. 4b – T6383B: 2-pipe, heat/cool, auto changeover, with aux. electric heat, constant fan

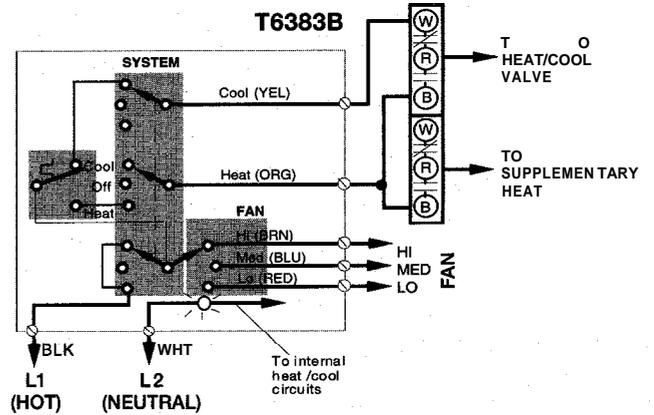


Fig. 3 – T6383B: 2-pipe, heat/cool, manual changeover, constant fan

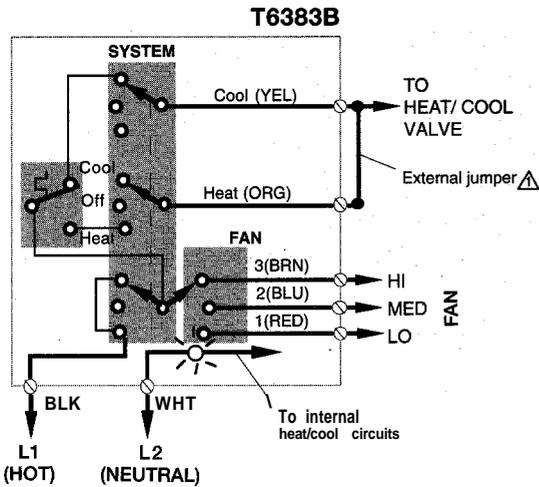


Fig. 5a – T6381A: 2-pipe, cooling only, cycled fan

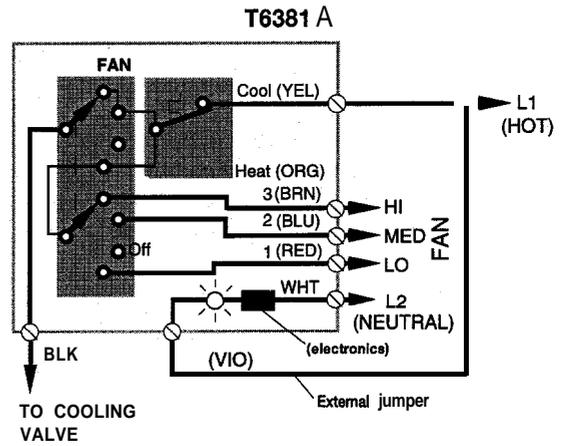


Fig. 4a – T6383B: 4-pipe, heat/cool, manual changeover, constant fan

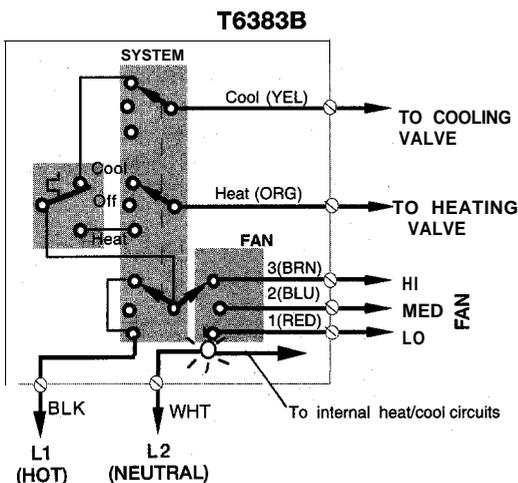
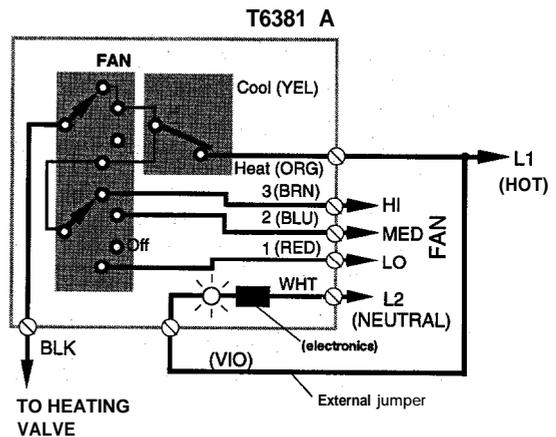


Fig. 5b – T6381 A: 2-pipe, heating only, cycled fan



# Wiring Diagrams

Fig. 5c – T6381A: 2-pipe ; heat/cool, auto-changeover, cycled fan

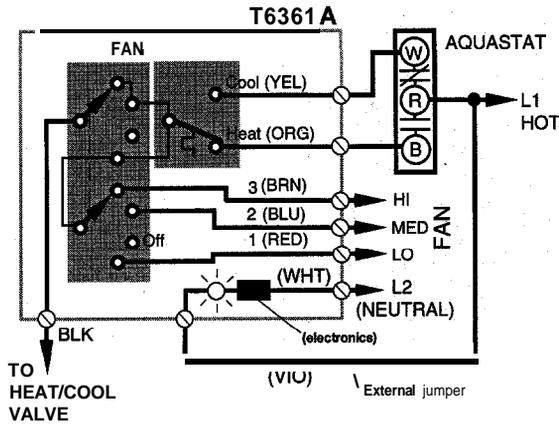


Fig. 7b – T6361 B: 2-pipe, heat/cool, auto-changeover, cycled fan with aux. heat

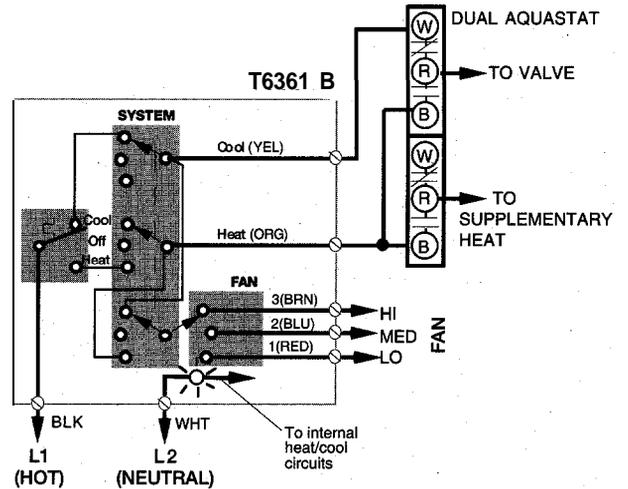


Fig. 6 – T6361 B: 2-pipe, heat/cool, manual changeover, cycled fan

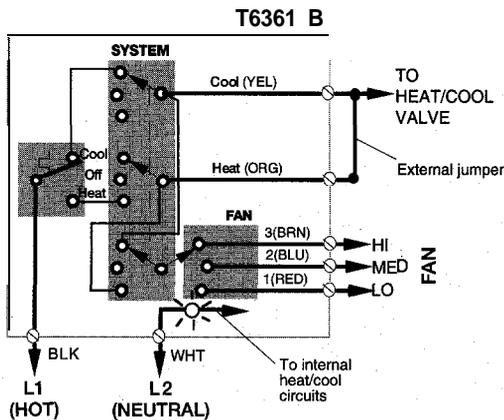


Fig. 8a – T6387A: 2-pipe, cooling only on-auto fan

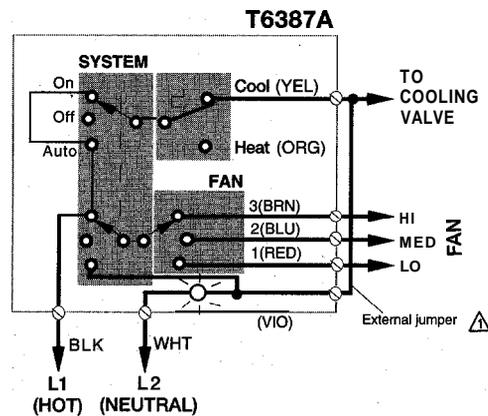
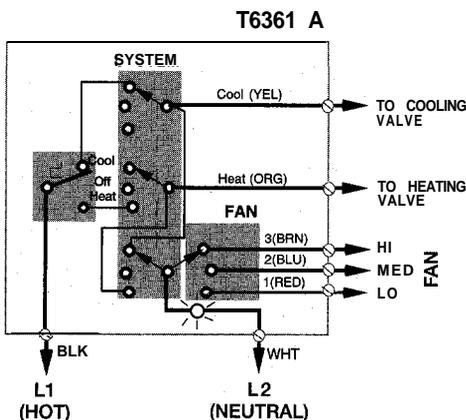


Fig. 7a – T6361 A: 4-pipe, heat/cool, manual changeover, cycled fan



## CAUTION

1. Disconnect power supply before installing to prevent electrical shock hazard.
2. Installer must be a trained, experienced service technician.
3. All wiring must comply with national and local electrical codes, ordinances, and regulations.
4. Provide disconnect means and overload protection required.
5. T6380 Series thermostats contain no user-serviceable parts.

# Wiring Diagrams

Fig. 8b – T6387A: 2-pipe, heating only on-auto fan

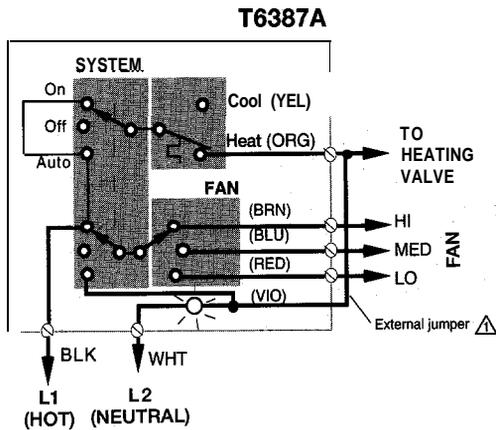
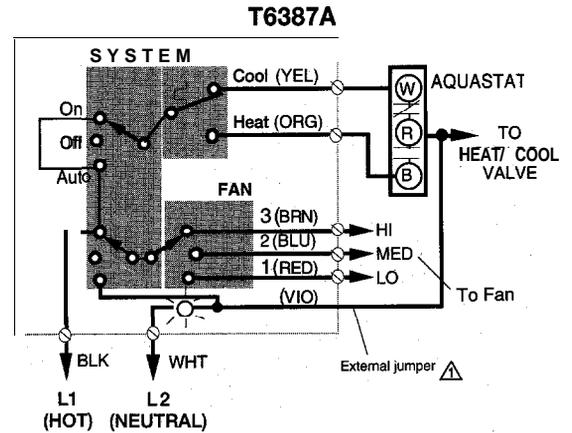


Fig. 8c – T6387A: 2-pipe, heat/cool, auto-changeover, on-auto fan



## CAUTION

1. Disconnect power supply before installing to prevent electrical shock hazard.
2. Installer must be a trained, experienced service technician.
3. All wiring must comply with national and local electrical codes, ordinances, and regulations.
4. Provide disconnect means and overload protection required.
5. T6380 Series thermostats contain no user-serviceable parts.

## Ordering Information

When purchasing replacement and modernization products from your TRADELINE® wholesaler or your distributor, refer to the TRADELINE catalog or price sheets for complete ordering number, or specify:

1. Model
2. Electrical load(s)
3. Accessories.

If you have additional questions, need further information, or would like to comment on our products or services, please write or phone:

1. **Your local** Honeywell Home and Building Control Sales Office (check white pages or phone directory).

2. Home and Building Control Customer Satisfaction  
Honeywell Inc., 1885 Douglas Drive North.  
Minneapolis, MN 55422 (612) 951-1000
3. In Canada — Honeywell Limited  
155 Gordon Baker Road, North York, Ontario M2H3N7

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