

# ACCESSORY KIT INSTALLATION INSTRUCTIONS

## Honeywell Building Automation Controller

**THIS UNIT IS EQUIPPED WITH HONEYWELL'S DIGITAL CONTROLLER W7750. THE CONTROLLER WILL OPERATE AS A "STAND-ALONE" DEVICE, OR CAN BE INTEGRATED WITH A BUILDING AUTOMATION SYSTEM (BAS).**

### FIELD WIRING CONNECTIONS

In addition to the high voltage connections shown in the unit installation instructions, the following connections are required.

1. **Stand-Alone Operation** - All units are equipped with a return air sensor, and are ready for stand-alone operation. A zone temperature sensor may be installed in place of the return air sensor, (see Figure 1) but is not included.
2. **Building Automation System Operation** - For networking with a BAS system, with or without a zone temperature sensor, the LONWORKS bus noted in Figure 1 must be connected.

For programming information specific to your building application, contact the local Honeywell office/distributor.

### SEQUENCE OF OPERATION

All of the following operational sequences are provided on a stand-alone basis, and do not require connection to a BAS system, except as noted.

#### COOLING

On a demand for cooling, a signal is sent from terminal AO1 (#18) on the W7750 to the economizer (see economizer operation) and from 1 OUT (#23) to G. On a demand for second stage cooling, a signal is sent from 4 OUT (#20) to Y1 on the relay board to energize the first stage compressor. On two stage cooling units, a demand for third stage of cooling will energize terminal 5 OUT (#19) on the W7750, which will power Y2 on the relay board, bringing on the second stage of mechanical cooling.

#### ECONOMIZER

The W7750 supplies a milliamp signal output to the economizer. A 500-ohm resistor, R1, in the economizer section converts the milliamp signal to a 0-10VDC signal suitable for the economizer actuator. The W7750 uses the input from the outdoor air enthalpy sensor, OAS, to determine if the outdoor air is suitable for free cooling.

During the occupied mode (default), terminal AO1 (#18) sends a signal to the economizer actuator, causing the actuator to go to minimum position for ventilation. On a call for first stage cooling, if the outdoor air is suitable, the W7750 will enable free cooling. The outdoor air enthalpy sensor provides information to determine if free cooling is available. When free cooling is available, the economizer actuator will modulate the economizer damper to provide 55°F discharge air. If free cooling is not available, the economizer actuator will remain in the minimum position.

#### HEATING

On a demand for heating, the W7750 sends a signal to W1 on the relay board energizing first stage heating and to G activating the indoor blower. On two stage heating systems, a demand for second stage heat energizes W2 on the relay board bringing on second stage heating.

#### AIRFLOW STATUS

All units are shipped with an airflow proving switch. Airflow must be confirmed before heating, cooling or economizer will be energized. Terminal DI2 (#28) is the confirmed status input for the indoor blower. When airflow has been proven, the air proving switch contacts close, sending a signal to the W7750. If airflow is not proven, the contacts remain open which prevents any operation. If airflow is lost after being proven, the W7750 will de-energize all heating, cooling and economizer systems.

**TABLE 1: FACTORY DEFAULT SETTINGS - STANDALONE OPERATION**

Function	Default
Cooling Set Point	75°F
Heating Set Point	70°F
Economizer Damper Position	15-20%
Occupancy	Occupied

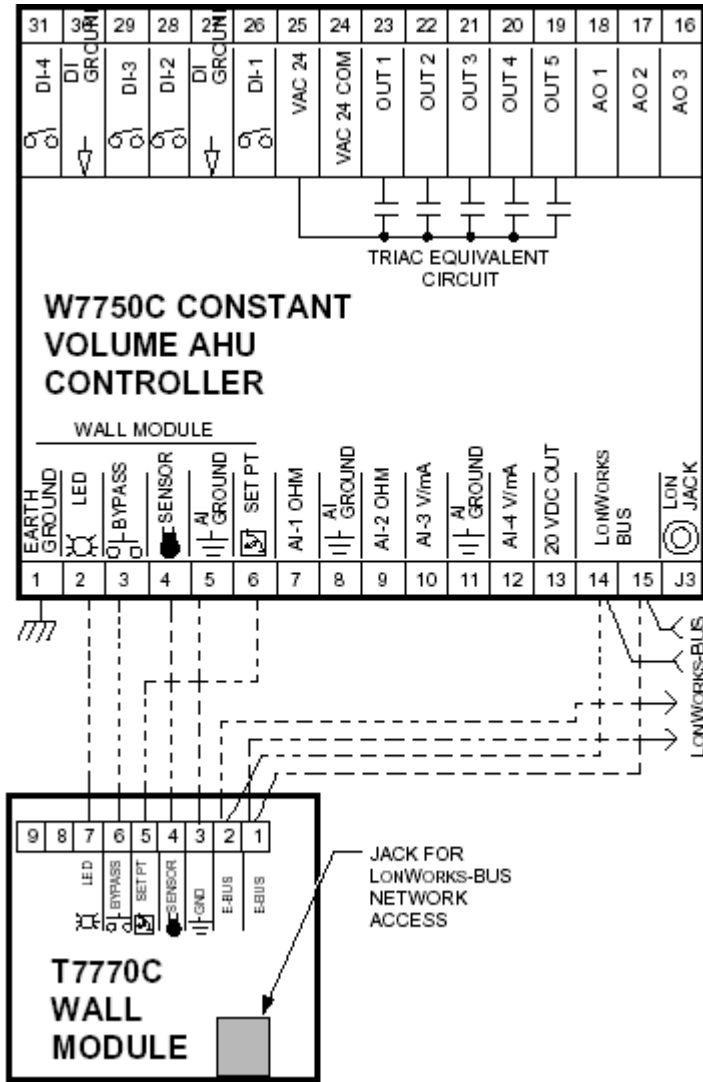


FIGURE 1 - BUILDING AUTOMATION SYSTEM CONNECTIONS