INSTALLATION INSTRUCTIONS FOR INTEGRATED CONTROL REPLACEMENT KIT (15T94) USED WITH ICOMFORT® ENABLED SL280, EL296 AND SL297 UNITS

WARNING
This conversion kit is to be installed by a licensed professional service technician (or equivalent) or other qualified agency in accordance with the manufacturer’s instructions, all codes and requirements of the authority having jurisdiction.

Shipping and Packing List

Package 1 of 1 contains:

1 - Integrated control - 103130- (two-digit suffix) -

Application

Use replacement integrated control kit (15T94) with icomfort enabled SL280, EL296 and SL297 units. This control is designed for use with a 120V ignitor only. Do not install this integrated control in a furnace equipped with a 95V ignitor. Integrated control 103130-(two-digit suffix) can be used in communicating or non-communicating applications.

Installation

WARNING
Protect the control from direct contact with water. If the control has been in direct contact with water, replace the control.

WHEN SERVICING CONTROLS, label all wires prior to disconnecting. Wiring errors can cause improper and dangerous operation. VERIFY proper operation after servicing.

WARNING
Disconnect power before servicing unit. Shut off main gas supplies to appliance until installation is complete.

- Turn off electrical and gas supplies to the furnace.
- Remove the access panel and the control box cover. Label the wires before disconnecting.
- Disconnect the wires and harness connectors from the existing control.
- Remove control by unlatching the two mounting legs on the right side of the control and then rotate the control toward you.
- Replace with the provided control and reconnect the marked wires and harness connectors.
- Restore electrical and gas supplies to the furnace.

Non-Communicating System

For non-communicating applications set all DIP switch settings and on-board links exactly as the control being replaced.

When replacing the control in a non-communicating system, it must be configured using the flow chart on page 4.

WARNING
Ensure proper earth grounding of appliance. Ensure proper connection of line neutral and line hot wires.
Communicating Enabled Furnace with a Non-Communicating Outdoor Unit

Communicating Enabled Furnace with a Communicating Enabled Outdoor Unit

Communicating systems using the Communicating thermostat require four thermostat wires between the thermostat and the furnace/air handler control and four wires between the outdoor unit and the furnace/air handler control. When a thermostat cable with more than four wires is used, the extra wires must be properly connected to avoid electrical noise. The wires must not be left disconnected.

Use wire nuts to bundle the four unused wires at each end of the cable. A single wire should then be connected to the indoor unit end of the wire bundle and attached to the “C” terminals as shown above.

FIGURE 1
**NOTE:** Communicating Thermostat Senses Humidity & Controls Hum Contacts To Cyclic Humidifier Based On Demand. No Other Control Or Humidistat Required.

Optional outdoor air sensor for use with humidifier (if not already in the system for other functions, built into all communicating enabled outdoor units).

In a communicating system, neither furnace nor air handler transformer will have adequate VA to power 24V UV light applications. An additional transformer for UV light applications is required.

**Maximum total length of all connections on the RSBus is limited to 1500ft.**

Wire gauge of RSBus wire is 18.

**NOTE:** 24V UV LIGHT APPLICATIONS

In a communicating system, neither furnace nor air handler transformer will have adequate VA to power 24V UV light applications. An additional transformer for UV light applications is required.

**HEPA Bypass Filter X2680 HEPA Interlock Kit**

**LVCS Ventilation Control System**

Optional Accessories for use with any Communicating System

**24V Humidifier Connections**

*24V IN jumper not used in non-communicating configuration*

**COMMUNICATING ENABLED OUTDOOR UNIT**

**COMMUNICATING ENABLED FURNACE**

**COMMUNICATING THERMOSTAT**

**COMMUNICATING ENABLED SYSTEM**

**COMMUNICATING ENABLED SYSTEM WIRING**

**COMMUNICATING SYSTEM WIRING**

**FIGURE 2**
Program Unit Capacity/Size Mode

Power-Up - Number displayed represents by integrated control unit size code (furnace model and capacity). If three horizontal bars are displayed followed by continuous E203, furnace control does not recognize unit size code. Configure per the following:

Furnace control in IDLE mode (No heating, cooling or indoor fan operation)

To enter Program Unit Capacity/Size: push and hold button next to 7-segment LED display until solid “P” symbol appears. Release button.

IMPORTANT: Field replacement controls may need to be manually configured to validate furnace unit size code.

Solid P starts blinking on 7-Segment LED

Push and hold button. Integrated control will display unit size code number for each furnace model for three seconds.

SL280 UNITS

SL296 UNITS

SL297 UNITS

When the correct unit size code is displayed, release button. Selected code will flash for 10-second period. During that period, press and hold push button for 5 seconds. Integrated control will store code in memory and will automatically exit Program Unit Capacity/Size Mode and reset. (If second period expires or push button is held less than five seconds, control will automatically exit Program Capacity/Size Mode and go into IDLE mode without storing unit size code. If this happens, programming function must be repeated).

Verify that the selected unit size code is correct and stored in non-volatile memory by cycling the 24 volt power to the furnace control. (At 24 volt power-up of the furnace control, the 7-segment LED will display a unit size code. If three horizontal bars display, board does not recognize unit size code. Programming function must be repeated).

FINISHED

FIGURE 3
FIGURE 9