Dallas, Texas, USA

**This manual must be left with the owner for future reference.**

**NOTE:** *Twinning of furnaces is not permitted with the Refrigerant Detection System Kit!*

# INSTALLATION AND SETUP GUIDE

## Low Global Warming Potential (GWP) Refrigerant Detection System (RDS) Non-Communicating Control Board (24 Volt Only)

CONTROLS
508426-01
05/2025
Supersedes 02/2025

## Contents

**⚠WARNING**

Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life.

Installation and service must be performed by a licensed professional HVAC installer (or equivalent) or a service agency.

**⚠WARNING**

All systems charged with at least 4 lbs of R-454B refrigerant are required to have a refrigerant detection system installed to prevent the build up of R-454B refrigerant in enclosed spaces of the HVAC equipment. A refrigerant detection system may be required for systems that have less than 4 lbs of R-454B refrigerant. For more information, contact Lennox Technical Support.

Installing a residential HVAC system that uses R-454B refrigerant without a refrigerant detection system may lead to a fire hazard within the home in the event of a refrigerant leak.

**⚠WARNING**

The Lennox® RDS Non-Communicating Control Board has been tested with Lennox® coils only. Do not use a non-Lennox refrigerant detection system controller or non-Lennox sensor with Lennox® coils. Do not use the Lennox® Non-Communicating Control Board with non-OEM coils or air handlers.

**⚠WARNING**

Improper installation of the RDS Non-Communicating Control Board may lead to unreliable equipment operation and unreliable refrigerant detection.

In addition to installing the RDS Non-Communicating Control Board, considerations must be made regarding sensor mounting location. Please refer to the respective Lennox air handler, coil, and/or sensor kit installation guides for further details.

**⚠CAUTION**

It is the responsibility of the licensed installer or service agency to obtain the appropriate training and/or certifications to service A2L-classified HVAC systems with R-454B refrigerants.

**⚠CAUTION**

Unit must remain powered except during service.

## Certifications

- CSA C22.2 No. 60335-2-40:22; Fourth ed.
- UL 60335-2-40; Fourth ed.

## Shipping and Packing List

| Qty | Description | Cat. No. |
|---|---|---|
| 1 | Lennox® Low GWP Refrigerant Detection System | 27A02 |
| 2 | Mounting Hardware - #6-18 1” Phillips Drive pan head with dry wall anchor | N/A |

**NOTE:** *This kit is sold separately from the refrigerant detection sensor. The refrigerant sensor is included as part of a Lennox sensor kit, R-454B-only coil, or R-454B-only air handler.*

## Overview

Lennox® Low GWP Refrigerant Detection System Non-Communicating Control Board ensures safe operation of Lennox residential HVAC systems equipped with R-454B refrigerant. The RDS Non-Communicating Control Board connects to the refrigerant detection sensor, the indoor unit, the outdoor unit and the thermostat to control the HVAC system if refrigerant is detected by the sensor. The RDS Non-Communicating Control Board functions with standard 24VAC or Lennox-communicating control interfaces.

## Operating Environment Specifications

The Low GWP Refrigerant Detection Kit is designed to withstand the following conditions:

| Condition | Temperature Range |
|---|---|
| Normal Operation | -40°F - 185°F (40°C - 85°C) |
| Shipping/Storage | |
| | **Functional Range** |
| Humidity | 10% to 90% non-condensing at 104°F (40°C) |

## Product Features

- Detects unsafe levels of R-454B refrigerant and prevents refrigerant from reaching the lower flammability limit, should a leak occur in the indoor coil
- Multicolor LED (light-emitting diode) communicates the state of the RDS Non-Communicating Control Board
- Test/Reset button (to verify the functionality of the RDS Non-Communicating Control Board)
- Composite case with mounting hardware for drywall installation
- Supports a maximum of two refrigerant detection sensors
- Supports standard 24VAC control split HVAC equipment (Single-Stage, Two-Stage, Variable Speed, Heat Pump, AC, Gas Furnace, Air Handler); see “Thermostat Compatibility”
- Compliant with UL-60355-2-40 & CSA
- Compatible with OEM approved sensor

**NOTE:** *A refrigerant detection system must be installed on an outdoor unit that requires R-454B refrigerant.* Some indoor units may already feature a refrigerant detection control functionality and may not require this kit; contact Technical Support for more information.

## Introduction

The Lennox® Low GWP Refrigerant Detection System (RDS) ensures safe operation of Lennox residential HVAC systems equipped with R-454B refrigerant.

The RDS activates the blower if refrigerant levels within the cabinet reach 12% of the lower flammability limit (LFL).

**NOTE:** *The UL standard is 25% of the LFL.*

Power to all ignition sources within the HVAC system is automatically shut down until the RDS detects safe refrigerant levels. The RDS restores power to ignition sources after it detects refrigeration concentrations are safe. The HVAC system will then resume normal operation.

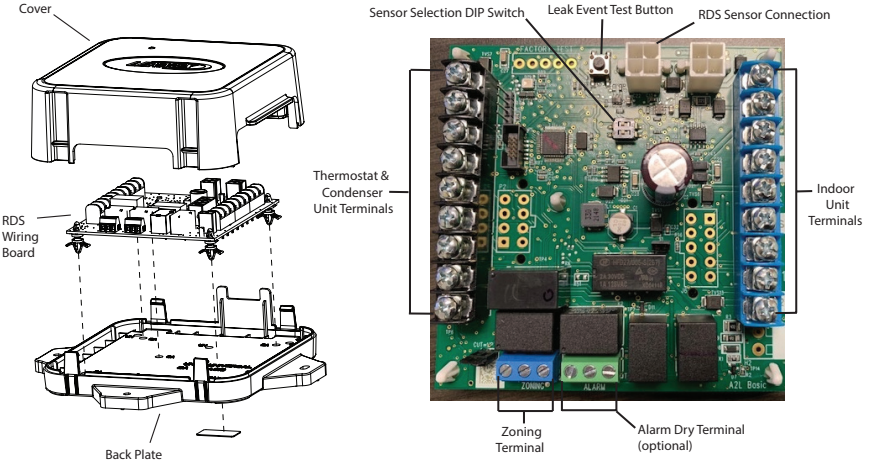



**Figure 1. RDS Non-Communicating Control Board**

## Dimensions

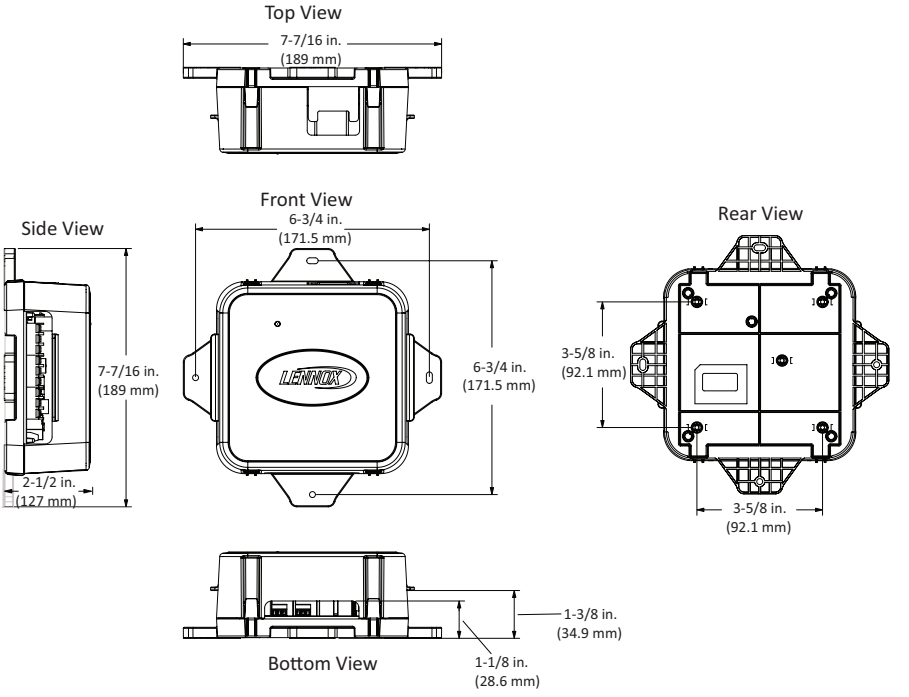



**Figure 2. RDS Non-Communicating Control Board - Dimensions**

## Installation

### Sensor Part Number Verification

Verify the refrigerant detection system sensor's part number, which is found on the sensor/cable, prior to installation. The part number is 107648-01 for all units except downflow coils. The part number for the downflow coil is 067649701.

**NOTE:** *All sensors paired to a single RDS Non-Communicating Control Board* ***must share the same part number*** *(107648-01 for all units except downflow coils; 067649701 for downflow coils) to ensure the RDS Non-Communicating Control Board functions properly.*

### Mounting Methods

Some mounting surfaces may be difficult to access after the RDS Non-Communicating Control Board is installed. Wire the RDS Non-Communicating Control Board *prior* to mounting in a confined space.

For drywall/closet installations, use the included drywall hardware. For attic/crawlspace/basement installations, use the included and field-provided hardware.

### Mounting Location

The RDS Non-Communicating Control Board can be mounted to the indoor unit, plenum, a stud, or joist in an attic, crawlspace, or other unfinished area within 48 inches of the refrigerant sensor cable grommet on the coil or air handler. Drywall anchors and screws are provided for installation in finished areas, such as closets. Mount the RDS Non-Communicating Control Board in a clean, dry environment that is away from dust, water, and other contaminant accumulation.

**NOTE:** *Mounting the RDS Non-Communicating Control Board farther than 48 inches away from the refrigerant sensor may prevent reliable operation due to cable strain and water seepage on cable connections.*

- **Do not** place the RDS Non-Communicating Control Board in the secondary drain pan
- Use the screws provided to mount the RDS Non-Communicating Control Board
- Tighten the screws to a snug fit

**NOTE:** *Do not over-tighten the screws. Over-tightening the screws may strip the hardware and apply excessive stress on the enclosure.*

**Refrigerant Detection System Sensor**
(sold separately)

The RDS sensor must be mounted as specified in its accompanying manual. Mounting the sensor incorrectly or in an improper location may result in refrigerant detection failure.

## Condensate Safety Switch (Float Switch)

In applications that require a condensate safety switch (float switch) the float switch must be wired between the room thermostat and the Refrigerant Detection System. The float switch's normally closed contacts may be wired to interrupt the "R" wire or the "Y" wire between the thermostat and the RDS Non-Communicating Control Board. See the RDS Non-Communicating Control Board wiring diagrams. This ensures the RDS Non-Communicating Control Board is powered continuously and operates normally. Do not wire the condensate safety switch or any other field installed safety switches between the indoor unit transformer and the RDS Non-Communicating Control Board. The RDS Non-Communicating Control Board must remain powered at all times.

### Refrigerant Detection System Sensors

The Lennox Refrigerant Detection System requires a Lennox RDS sensor located in the indoor coil. See table below.

| Indoor Unit Model | RDS Control Board Sensor Catalog Number | Description |
|---|---|---|
| • CK40CT Upflow<br>• CK40HT Horizontal<br>• CK40DT Downflow "Revision 01" Coils | 26Z69 | Refrigerant Detection System Coil Sensor Kit |
| • CBK45UHPT<br>• CBK45UHET<br>• CBK45UHVT<br>• CK47UHET "Revision 01" Air Handlers | 27J27 | Refrigerant Detection System Air Handler Sensor Kit |
| • CK40CT Upflow,<br>• CK40HT Horizontal,<br>• CK40DT Downflow "Revision 71" Coils | Factory Installed | RDS Sensor is Factory Installed in "Revision 71" Coils |
| All Lennox R-454B Air Handlers and Coils ***except*** CK40DT downflow coils | 27V53 | Coil Sensor Repair Kit<br>(Replacement Sensor only, without mounting bracket & components provided in the Sensor Kit) |

| Indoor Unit Model | RDS Control Board Sensor Catalog Number | Description |
|---|---|---|
| R-454B CK40DT Downflow Coils | 27Z35 | Coil Sensor Repair Kit<br>(Replacement Sensor only, without mounting bracket and components provided in the Sensor Kit) |

## Routing the Sensor Cable

Figure 3 illustrates how to best route the sensor cable from the RDS Non-Communicating Control Board to the sensor within the indoor unit for the Upflow, Downflow, and Horizontal orientations. For details on mounting the sensor itself, refer to the respective sensor kit, air handler, or coil installation guide.

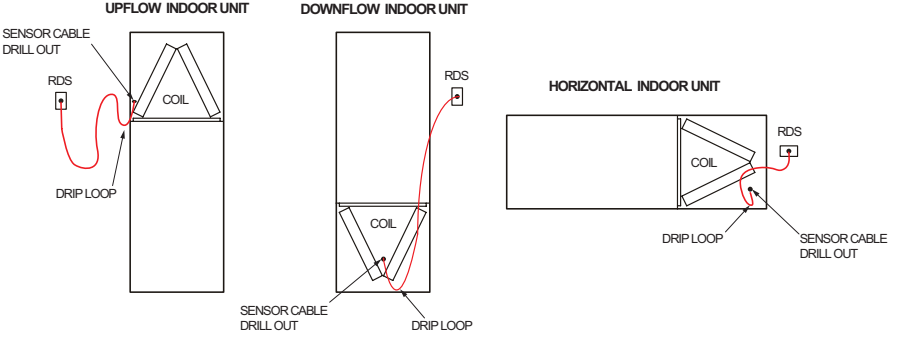



**Figure 3. Routing the Sensor Cable**

**⚠WARNING**

Do not strap the RDS Non-Communicating Control Board to existing tubing or other electrical cables.

## Connecting the RDS Sensor

Ensure the cable is properly connected into the number one (1) sensor plug. The Molex plug clip should lock into the Molex connection point for a secured connection, as shown below in Figure 4. Verify the connection is free of dust, debris, and moisture.

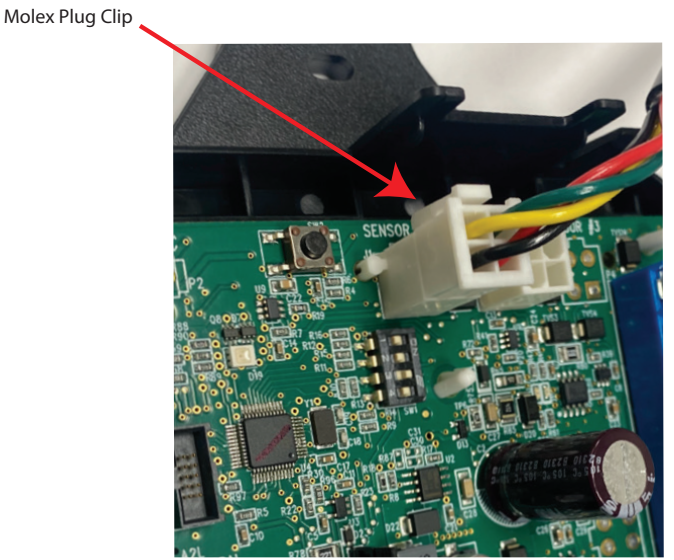



**Figure 4. Connecting the RDS sensor to RDS Non-Communicating Control Board**

## Secondary Sensor

### Additional Line Set Joints

If additional joints are present outside of the line set sleeve, the system installation must comply with one of the options listed. Refer to Refrigerant Detection Sensor Kit Installation Instructions Form# (508467-01); see Line Set Joints.

### Multiple Systems Installed in Same Space

For any Low GWP refrigerant system with additional joints not covered by line set joint sleeves, each system in the same space must have refrigerant detection sensor installed below the level of the burners.

If a secondary refrigerant sensor is required, it must be mounted as follows:

- **Upflow Applications**: Mounted on an unused side furnace return air connection at least nine (9) inches above the floor and within nine(9) inches from front of furnace.
- **Horizontal Applications**: Mounted on the lower section of the side return furnace air connection, within nine(9) inches of both the blower deck and front of furnace.
- **Downflow Applications**: Mounted on one side of the evaporator coil nine(9) inches above the floor and within nine(9) inches from front of coil.

Connect the refrigerant sensor to the second sensor input on the RDS Control. Refer to the instructions provided with the RDS sensor or the RDS controller to enable the second sensor (see “DIP Switch Settings” on page 12).

## DIP Switch Settings

Default Switch DIP Settings

The following are the default DIP switch settings:

- DIP Switch 1 → OFF
- DIP Switch 2 → OFF

The default setting requires the RDS Control Board to have two (2) sensors installed.

The sensor settings must be adjusted according to the number of sensors installed. If a second sensor is not installed (in Sensor 2 plug), DIP Switch 2 must be turned to the ON position.

Non-Default Configurations

Adjust the DIP switch settings to the sensor configuration. Failure to do so will cause faults upon powering-up.

**Table 1. DIP Switch Settings**

| Configuration | DIP1 | DIP2 |
|---|---|---|
| One (1) sensor, connected to SENSOR 1 plug | OFF | ON |
| Two (2) sensors, connected to SENSOR 1 plug and SENSOR 2 plug | OFF | OFF |

Configurations other than the ones shown in "Table 1. DIP Switch Settings" will cause a service fault.

Each DIP switch corresponds to a sensor position (i.e., DIP switch 1 to sensor 1; DIP switch 2 to sensor 2). The default factory switch positions are set to OFF. The RDS Non-Communicating Control Board software reads the OFF position as an active sensor. A sensor should be present for the corresponding sensor connector. Setting the DIP switch to ON disables the sensor position.

**NOTE:** *Refer to 508467-01 (Installation Instructions for Refrigerant Leak Detection Sensor Kit - Indoor Coils) to determine whether more than one (1) Refrigerant Detector Sensor is required.*

## Modes of Operation

The modes of operation for the RDS Non-Communicating Control Board are Initializing, Normal, Refrigerant Detected, Sensor Not Connected, and Fault.

### Initializing

The RDS Non-Communicating Control Board is establishing connection with the refrigerant detection sensor and is completing an initial five (5) minute purge sequence.

### Normal

The HVAC system is functioning normally. The RDS Non-Communicating Control Board has not detected refrigerant.

### Refrigerant Detected

When the RDS Non-Communicating Control Board detects refrigerant:

1. The RDS Non-Communicating Control Board shuts off the (R) input (24VAC power) to the thermostat, which de-energizes the outdoor unit compressor and heat sources, such as gas and/or electric strip heat. No heating or cooling demands will be met.
2. The RDS Non-Communicating Control Board activates the blower (high speed). The blower purges refrigerant from the cabinet, plenum, and ductwork. After the RDS Non-Communicating Control Board determines the refrigerant levels are below the UL standard threshold, the blower will continue to function for an additional seven (7) minutes.
3. After the blower sequence is complete, the HVAC system resumes normal operation.

**NOTE:** *The HVAC system may not maintain a cooling or heating setpoint if the RDS detects excessive levels of R454B within the system. Any refrigerant that remain unaddressed for an extended time may cause the HVAC system to shut down on a low refrigerant pressure limit condition.*

### Sensor Not Connected

If no sensors are connected to the RDS Control Board, the LED will flash red four (4) times, indicating a service fault (sensor communication issue). Heat/Cool operation is still permissible and the blower motor will run continuoulsly at a high speed.

### Fault

When a fault is detected within the RDS Non-Communicating Control Board, the indoor unit blower engages and remains engaged at a constant output until the fault is cleared.

## Diagnostic Codes

The RDS Non-Communicating Control Board is equipped with a multicolor LED (Light-Emitting Diode) within its enclosure. The LED signals the state of the RDS Non-Communicating Control Board.

See Table 2 to review the diagnostic codes.

**Table 2. LED Diagnostic Codes**

| State | LED Diagnostic Code | Action |
|---|---|---|
| Initializing | Flashing green[1] | Not Applicable |
| Monitoring | Solid green with blue flash[2] | Not Applicable |

**Table 2. LED Diagnostic Codes**

| State | LED Diagnostic Code | Action |
|---|---|---|
| Mitigating (Refrigerant Detected) | Flashing blue | Check coil tubes for refrigerant. Repair the issue and restart the equipment. |
| Fault/Service | Solid blue, interrupted by issue flash code | Refer to Table 7 for troubleshooting steps. |

1. A rapid flash indicates the RDS Non-Communicating Control Board is in the process of sensor enumeration.
2. A blue flash indicates a purge has previously occurred.

## Red LED Diagnostic Codes

Red diagnostic codes indicate a specific RDS Non-Communicating Control Board issue. Yellow diagnostic codes indicate the sensor's position (if applicable).

**Table 3. Red LED Diagnostic Codes**

| Red Flash | Applies to Individual Sensor(s) | Issue | Action |
|---|---|---|---|
| 1 | Yes | Sensor indicates fault | Replace the sensor (See "Refrigerant Detection System Sensors" on page 8). |
| 2 | No | Spare Code - Unused | Not Applicable |
| 3 | Yes | Incompatible sensor type | Replace with a compatible sensor (See "Refrigerant Detection System Sensors" on page 8). |
| 4 | Yes | Sensor communications issue | • Verify sensor DIP switch settings are correct.<br>• Verify sensor connection is secure.<br>• Ensure connection is clean and free of debris. |

**Table 3. Red LED Diagnostic Codes**

| Red Flash | Applies to Individual Sensor(s) | Issue | Action |
|---|---|---|---|
| 5 | No | Indoor unit wiring connected incorrectly to the "Black TSTAT" terminal strip on the RDS Non-Communicating Control Board | • Check wiring connections.<br>• Ensure the indoor unit is wired to the "Blue INDOOR" terminal strip.<br>• Verify the Room Thermostat is wired to the "Black TSTAT" terminal strip. |
| 6 | No | Invalid configuration of sensor count | Verify the DIP switch setting is correct and matches the number of sensors being used. |

## Test Button Functionality

The RDS Non-Communicating Control Board is equipped with a Test/Reset button. The Test button can be used to complete several functions, depending on the mode of operation of the RDS Non-Communicating Control Board.

Table 4 lists the functions of the Test button during each mode of operation.

**Table 4. Test Button Function**

| Mode of Operation | Press the Test Button to... |
|---|---|
| Normal | • Trigger a refrigerant detection response.<br>• Verify all equipment is wired correctly into the RDS Non-Communicating Control Board (after installation). |
| Refrigerant Detected | Reset the RDS Non-Communicating Control Board to a normal mode of operation after refrigerant has been detected and purged from the HVAC system. |
| Fault | Reset the RDS Non-Communicating Control Board after troubleshooting and resolving a fault condition. If the fault is not resolved, the RDS Non-Communicating Control Board will enter the Fault mode again. |

### Test Button - Additional Functions

Table 5 lists the additional functions of the Test Button while the RDS Non-Communicating Control Board is functioning within the states of Initializing, Monitoring, Refrigerant Detection, Servicing and Fault. Refer to “Refrigerant Detection System Sensors” on page 8.

**Table 5. Additional Button Functions**

| State | Press | Action |
|---|---|---|
| Initializing | Short | Skips remaining pre-purge after sensors are recognized by the RDS Non-Communicating Control Board |
| Initializing | Long | Reset control |
| Monitoring | Short | Clear purge-counter if prior mitigation has occurred; Test mitigation |
| Monitoring | Long | Reset control |
| Mitigating | Short | If testing mitigation, end test |
| Servicing | Short | Reevaluate fault condition - if cleared return to monitoring, otherwise update indicator |
| Servicing | Long | Reset control |
| Fault | Short | Reevaluate fault condition - if cleared return to monitoring, otherwise update indicator |
| Fault | Long | Reset control |

## Thermostat Compatibility

Thermostats that preserve memory settings are compatible with the RDS Non-Communicating Control Board. Examples include:

- Battery-powered thermostats
- Analog thermostats
- Smart thermostats
- Late-model programmable thermostats

**NOTE:** *Early-generation digital and programmable thermostats may not retain the operation mode and temperature setpoints after a power outage.*

The following scenarios are likely to occur when home occupants are not available to adjust the thermostat setpoints as the system is recovering from refrigerant detection and resuming normal operation:

- Heating could be lost during a cold night
- Cooling could be lost during a hot day
- The thermostat could reset to an incorrect temperature setpoint

### Compatibility Verification

Complete the following process to determine whether the thermostat is compatible with the RDS Non-Communicating Control Board.

1. Change the thermostat's current setpoint and operating mode.
2. Power cycle the breaker to the furnace.

**NOTE:** *Wait five (5) minutes before supplying power to the furnace breaker.*

3. Note whether the thermostat maintained its setpoints and operating mode.
   a. If the thermostat maintained the settings, the thermostat is compatible with the RDS Non-Communicating Control Board.
   b. If the thermostat did not maintain its setpoint and/or operating mode, the thermostat is not compatible with the RDS Non-Communicating Control Board. Recommend replacing with a compatible thermostat.

## Additional Applications

In zoned applications, all dampers will remain open when the RDS Non-Communicating Control Board is in Fault or Refrigerant Detected mode. Normal heating and cooling demands are permissible, but the blower will remain engaged until the fault condition is addressed.

### Zone HVAC System

If the RDS Non-Communicating Control Board is installed in a zone HVAC system, the RDS Non-Communicating Control Board will open all zone dampers if refrigerant is detected.

**NOTE:** *Proper wiring of the zone panel to the RDS Non-Communicating Control Board is required for all zone dampers to open.*

After the purge sequence is complete, the zone system will resume normal operation.

### External Alarm

(*For applications with external alarms wired directly to the RDS Non-Communicating Control Board.*)

The RDS Non-Communicating Control Board triggers the external alarm system when it enters Refrigerant Detected mode. For alarm notifications, the RDS Non-Communicating Control Board provides a dry relay contact that is rated 3A at 30 VAC/DC.

## Start Up Test Procedure

The RDS Non-Communicating Control Board is equipped with a Test/Reset button, see “Test Button Functionality” on page 15. After the RDS Non-Communicating Control Board has been mounted and wired, restore power to the HVAC system. The system will then run through a purge sequence for five (5) minutes. After the purge sequence is complete, proceed to testing cooling demand and heating demand.

### Cooling Demand

1. Prompt a cooling demand at the thermostat.
2. Press the Test button on the RDS Non-Communicating Control Board.

   The system then executes a refrigerant detection response.
3. Observe the following sequence:
   a. The LED indicator flashes the sequence for refrigerant detection (flashing blue).
   b. The blower powers up.
   c. The outdoor compressor powers down.
4. Press the Test button to terminate the simulated Refrigerant Detected mode upon test completion.

### Heating Demand

1. Prompt a heating demand at the thermostat.
2. Press the Test button on the RDS Non-Communicating Control Board.

   The system then executes a refrigerant detection response.
3. Observe the following sequence:
   a. The LED indicator flashes the sequence for refrigerant detection (flashing blue).
   b. The blower powers up.
   c. The gas burners power down.
   d. The outdoor compressor powers down.
4. Press the Test button to terminate the simulated Refrigerant Detected mode upon test completion.

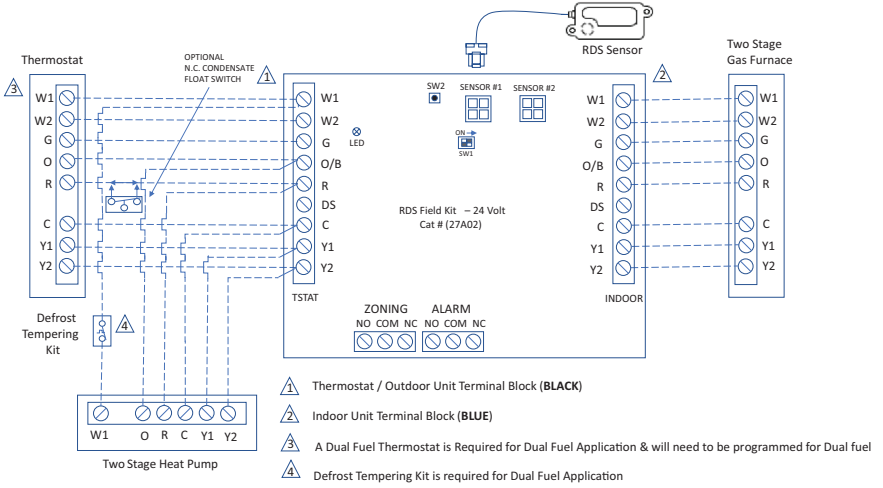
The installation of the RDS Non-Communicating Control Board is complete after both sequences are successfully completed.

## Wiring Diagrams

Lennox provides wires designated for wiring the sensor cable. Wires required for the RDS installation are field supplied.

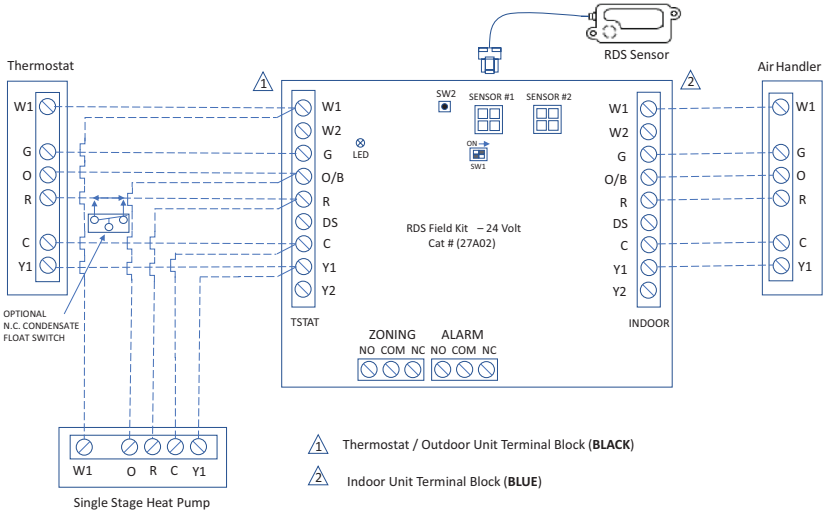
The RDS supports OEM and non-OEM split gas furnace and air handler installations. Wiring diagrams are provided for several common split furnace system configurations to identify exact wire types and terminal locations.

### Two Stage Heat Pump with Two Stage Furnace

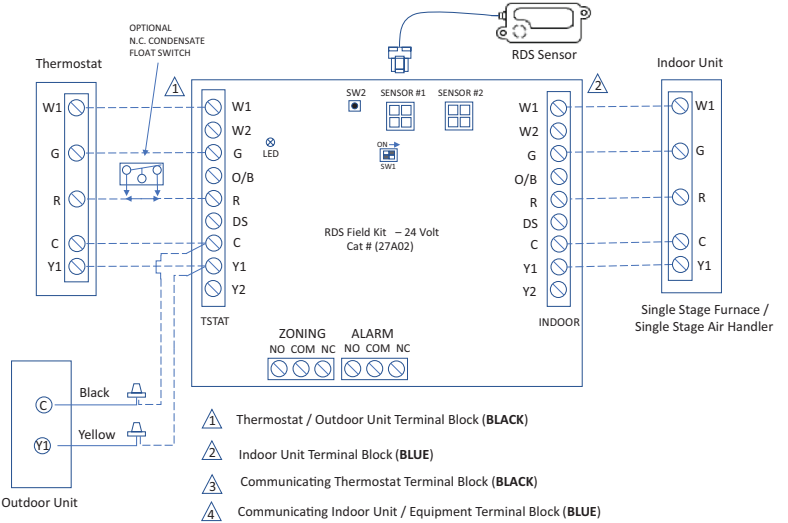



1. Thermostat / Outdoor Unit Terminal Block (**BLACK**)
2. Indoor Unit Terminal Block (**BLUE**)
3. A Dual Fuel Thermostat is Required for Dual Fuel Application & will need to be programmed for Dual fuel
4. Defrost Tempering Kit is required for Dual Fuel Application

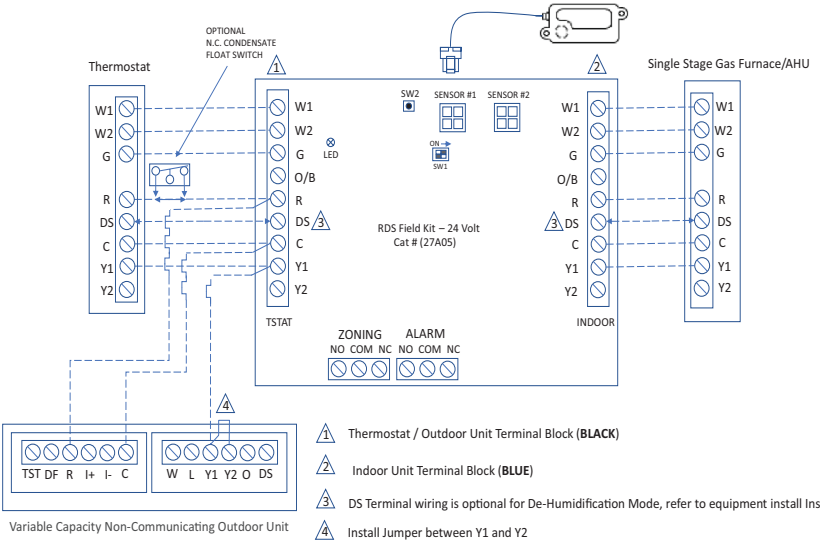
# Single Stage Heat Pump with Air Handler



## Single Stage Outdoor Unit with Single Stage Furnace/Air Handler

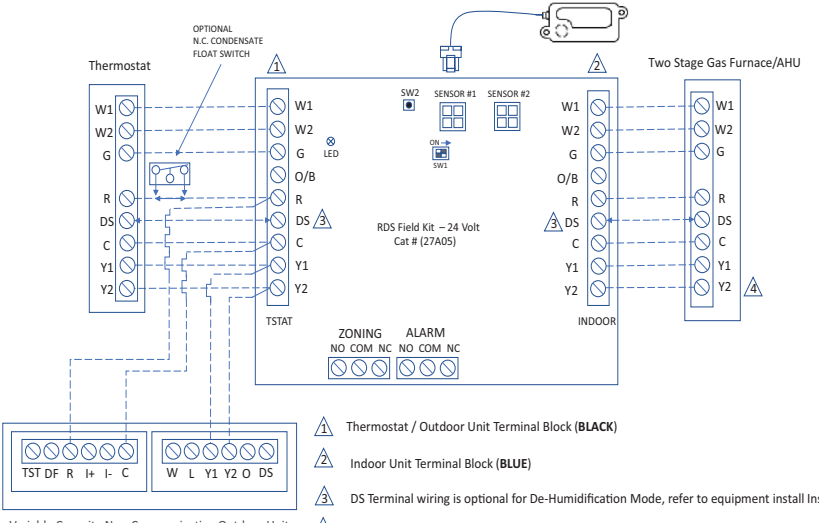


# Single Stage Furnace/Air Handler with Variable Capacity Non-Communicating Outdoor Unit



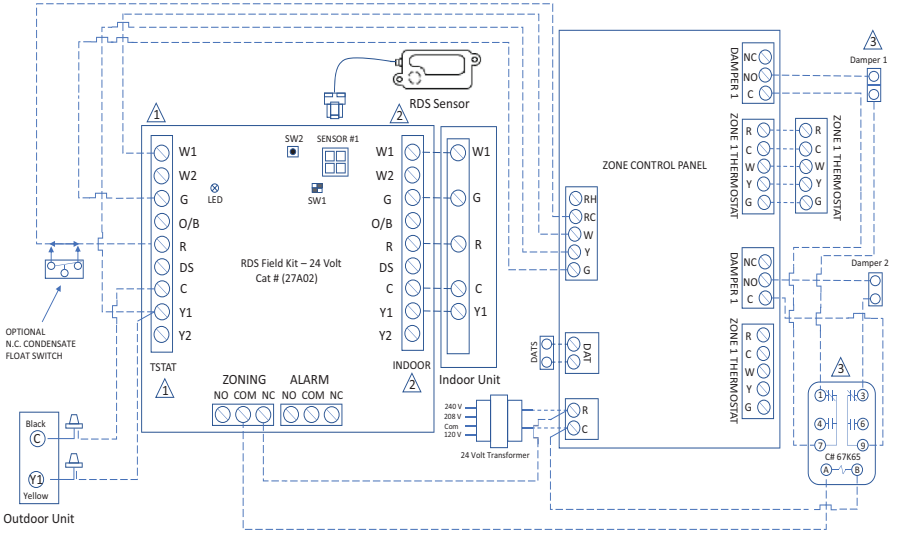

1. Thermostat / Outdoor Unit Terminal Block (**BLACK**)
2. Indoor Unit Terminal Block (**BLUE**)
3. DS Terminal wiring is optional for De-Humidification Mode, refer to equipment install Instructions
4. Install Jumper between Y1 and Y2

# Two Stage Furnace/Air Handler with Variable Capacity Non-Communicating Outdoor Unit




1. Thermostat / Outdoor Unit Terminal Block (**BLACK**)
2. Indoor Unit Terminal Block (**BLUE**)
3. DS Terminal wiring is optional for De-Humidification Mode, refer to equipment install Instructions
4. See indoor unit install instruction for Two Stage unit configuration

# Non-Communicating Zoning with Single Stage Indoor Unit and Single Stage Outdoor Unit

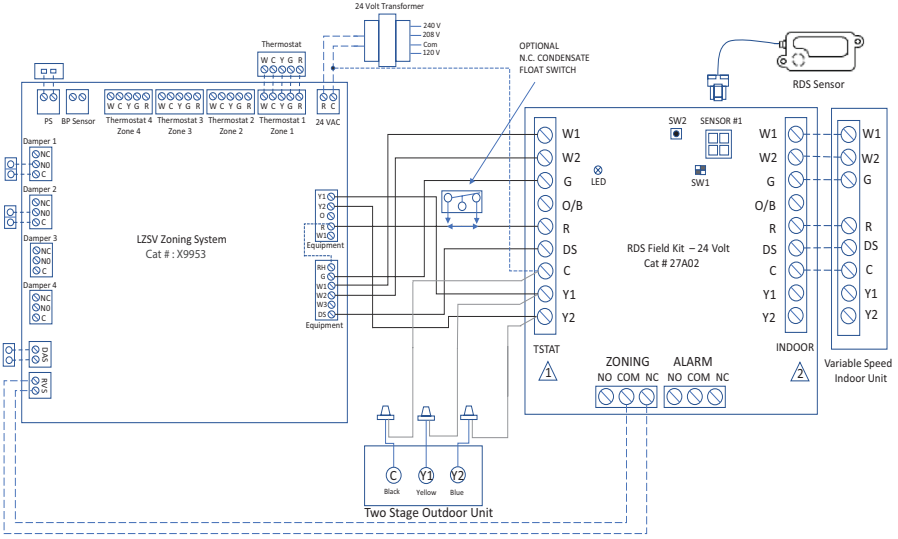



1 Thermostat / Outdoor Unit Terminal Block (**BLACK**)

2 Indoor Unit Terminal Block (**BLUE**)

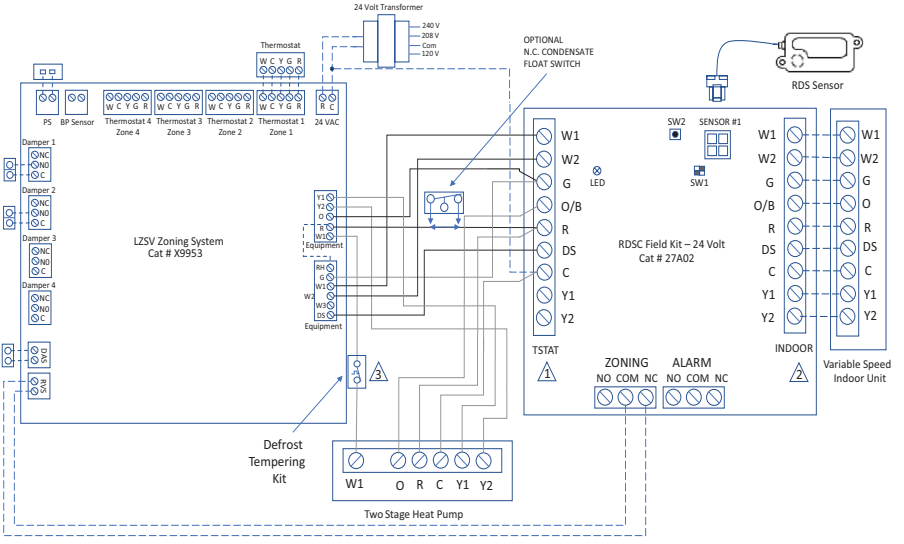
3 For Non-Lennox Dampers: The relay must be wired as "Powered Open."

# Non-Communicating Zoning (LZSV) with Variable Speed Indoor Unit and Two Stage Outdoor Unit




1. Thermostat / Outdoor Unit Terminal Block (**BLACK**)
2. Indoor Unit Terminal Block (**BLUE**)
3. For Non-Lennox Dampers: The relay must be wired as "Powered Open."

# Non-Communicating Zoning (LZSV) with Variable Speed Indoor Unit and Two Stage Heat Pump




1. Thermostat / Outdoor Unit Terminal Block (**BLACK**)
2. Indoor Unit Terminal Block ( **BLUE**)
3. Defrost Tempering Kit is required for Dual Fuel Application

## Diagnostic Codes and Troubleshooting

**Table 6. LED Diagnostic Codes**

| State | LED Diagnostic Code | Action Required |
|---|---|---|
| Initializing | Flashing green | None |
| Monitoring | Solid green.<br>If a prior mitigation occurred, a blue flash interrupts the solid green LED. | None |
| Mitigating (Refrigerant Detected) | Flashing blue | Check coil tubes for refrigerant. Repair the issue and restart the equipment. |
| Fault/Service | Solid blue, interrupted by issue diagnostic code | Refer to Table 7 for troubleshooting steps. |

**Table 7. Red LED Diagnostic Codes / Troubleshooting**

| Red Flash | Applies to Individual Sensor(s) | Issue | Action Required |
|---|---|---|---|
| 1 | Yes | Sensor indicates fault | Replace the sensor<br>(See “Refrigerant Detection System Sensors” on page 8.) |
| 2 | No | Spare Code - Unused | Not Applicable |
| 3 | Yes | Incompatible sensor type | Replace the sensor<br>(See “Refrigerant Detection System Sensors” on page 8.) |
| 4 | Yes | Sensor communications issue | • Verify sensor DIP switch settings are correct.<br>• Verify sensor connection is secure.<br>• Ensure connection is clean and free of debris. |

**Table 7. Red LED Diagnostic Codes / Troubleshooting**

| Red Flash | Applies to Individual Sensor(s) | Issue | Action Required |
|---|---|---|---|
| 5 | No | Indoor unit wiring incorrectly connected to the “Black TSTAT” terminal strip on the RDS control. | • Check wiring connections.<br>• Ensure the indoor unit is wired to the “Blue INDOOR” terminal strip.<br>• Verify the Room Thermostat is wired to the “Black TSTAT” terminal strip. |
| 6 | No | Invalid configuration of sensor count | Verify the DIP switch setting is correct and matches the number of sensors being used. |