CAUTION

As with any mechanical equipment, personal injury can result from contact with sharp sheet metal edges. Be careful when you handle this equipment.

IMPORTANT

The Clean Air Act of 1990 bans the intentional venting of refrigerant (CFCs, HCFCs and HFCs) as of July 1, 1992. Approved methods of recovery, recycling or reclaiming must be followed. Fines and/or incarceration may be levied for noncompliance.

These units must be installed as a part of a matched system as specified in the Product Specifications (EHB) bulletin.

General

Branch box V8MIDB01 (12A51) is used with VPA mini heat pump outdoor units to simplify refrigerant piping connections with up to four indoor units to create a VRF (variable refrigerant flow) system that uses HFC-410A refrigerant. Two branch boxes can be used to connect a total of up to seven indoor units to a single outdoor unit.

Refer to the Product Specification bulletin (EHB) for the proper use of branch boxes with matching VPA mini heat pumps, indoor units, branch pipes, line sets and controls.

These instructions are intended as a general guide and do not supersede local or national codes in any way. Authorities having jurisdiction should be consulted before installation.

Shipping and Packing List

Check the components for shipping damage. If you find any damage, immediately contact the last carrier.

Package 1 of 1 contains the following:
1 - Assembled branch box
4 - ¼” to ⅜” adaptor
4 - ½” to ⅝” adaptor
5 - Gas pipe insulation sleeves (for flared connections)
5 - Liquid pipe insulation sleeves (for flared connections)
**Branch Box Installation**

Use the provided suspension brackets to suspend the branch box between the outdoor and indoor units. The branch box location must accommodate the size of the box and the required straight pipe lengths entering the branch box. Refer to the dimension drawing above and figure 3.

1 - Use the branch box as a template to mark the location of the suspension brackets. Use a plumb line or a laser to transfer the bracket positions to the main structural ceiling.

2 - Make sure that the structural ceiling is able to support the weight of the branch box. It may be necessary to add extra support. If the structural ceiling is constructed of concrete, install anchors to accept four ¾" threaded rods to suspend the branch box. If the structural ceiling includes wooden joists, use angle iron or a Unistrut channel fixed securely in place to accept the ¾" threaded rods. See figure 1.

3 - Slide one nut and one washer onto each threaded rod. Use electrical tape to keep the washer from falling off. Position the nuts slightly above the final resting place of the four suspension brackets.

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**Figure 1. Suspending Methods**
4 - Raise the branch box and insert the threaded rods into the suspension brackets. Slide a washer and then a nut onto each rod below each suspension bracket. Use the leveling nut (beneath suspension bracket) to adjust the branch box. Remove the electrical tape holding the upper washers and nuts in place and tighten each of the four nuts above the brackets down onto the brackets. This will ensure that the branch box remains level. See figure 2.

5 - Continue with refrigerant piping connections.

Field piping connections from the outdoor unit gas and liquid pipes are provided on both sides of the branch box to provide easy access in all applications. Each branch box can accommodate up to four indoor units. Outgoing gas and liquid connections are on the front of the box.

Refrigerant piping connections are made using the provided brass flare nuts. Adaptors are provided with the branch box to accommodate use of different pipe sizes. Refer to the VPA mini heat pump installation instructions for detailed information on refrigerant piping connections.

After refrigerant piping has been installed and checked for leaks, apply the provided insulation sleeves over all flared connections.

If the application requires the use of two branch boxes to accommodate five, six or seven total indoor units, consult the Lennox VRF Application Department for assistance. **Branch boxes cannot be connected in series.**

**WARNING**

Use only R410A refrigerant to charge this system. Use of other refrigerant or gas will damage the equipment.

Do not allow air or other contaminants to enter system during installation of refrigerant piping. Contaminants will result in lower system capacity and abnormally high operating pressures and may result in system failure or explosion.

Insulate all refrigerant piping.

After refrigerant piping connections have been completed, check the system for leaks per commissioning instructions.
Refrigerant Piping — Continued

**TYPICAL APPLICATION WITH ONE BRANCH BOX**

NOTE - Refrigerant piping from the outdoor unit can be brought into either side of the branch box.

**TYPICAL APPLICATION WITH TWO BRANCH BOXES**

NOTE - Branch box(es) should be placed between the outdoor unit and indoor units. Branch boxes cannot be connected in series.