# **Installation Instructions**

## 2 - 5 Ton Air Handler Twinning Instructions - Commercial Split Systems

### INTRODUCTION

These instructions are primarily intended to assist qualified individuals experienced in the proper installation of heating and/or air conditioning appliances. Before beginning the installation, read these instructions thoroughly and follow all warnings and cautions in the instructions and on the unit. Improper installation, service, adjustment, or maintenance can cause explosion, fire, electrical shock, or other conditions which may result in personal injury or property damage.

These instructions are to be used when connecting two 2 - 5 Ton (B5 style) Air Handlers to a common single stage A/C condensing unit or heat pump. Twinning is possible for B5 units with PSC or X-13 motors, and not possible for units with variable speed motors.

#### **ELECTRICAL WIRING**

**General**–Electrical power wiring must be made in accordance with all applicable local codes and ordinances, and with the current revision of the National Electrical Code (ANSI/NFPA 70). If any of the original wire as supplied with the unit must be replaced, it must be replaced with wire material having the same gauge and temperature rating.

**Line Voltage**–See the air handler unit wiring label/instructions for proper high voltage wiring. Use separate branch electrical circuits for each air handler.

**Low Voltage**-All low voltage wiring instructions, cautions, and warnings accompanying the air handler remain applicable, except for:

1. Both air handler's 24V transformers must be removed from the control circuit by removing and discarding

the RED wire located on the transformer's secondary. The S3BM and S3BN series A/C outdoor units come standard with 24V power supply sufficient for powering both air handlers.

- 2. Low voltage wiring should be connected as shown in Figure 1.
- 3. Wire all other low voltage thermostat terminals to both air handlers as needed per the installation instructions.
- For 2 5 Ton (B5 style) air handlers equipped with a printed circuit board control, 24V (R) must be connected to both indoor units.

#### **REFRIGERANT PIPING**

The refrigerant piping to each air handler (or coil) should be of equal length and size. Run the copper pipes from condensing unit to a point equidistant between the air handlers (or coils). Place a tee in the lines at this point. After the tee, as close to the air handler as practical, reduce the pipe size to match the piping of the air handler or coil.



Figure 1. Low Voltage Wiring



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