

First Company



Start-up and Operation Data

Customer: _____ Condensing Unit Model: _____

Address: _____ City: _____ Serial Number: _____

(1 letter) – (2 numbers) – (1 letter) – (6 numbers)

Date: _____ Servicing Dealership: _____ Technician: _____

Step 1

Air Handler Information:

Brand: _____ Model Number: _____ Serial Number: _____

Metering Device: Piston TXV Hard Shut-Off TXV Rapid Bleed

Motor Voltage: _____ Amps: _____ Cooling Speed: _____ Heating Speed: _____

Step 2

Evaporator Coil Temperatures:

Evaporator Coil EAT Dry Bulb: _____ Evaporator Coil LAT Dry Bulb: _____ Delta: _____

Evaporator Coil EAT Wet Bulb: _____ Evaporator Coil LAT Wet Bulb: _____ Delta: _____

Step 3

Condensing Unit:

Unit Voltage: _____ Compressor Voltage: _____ Amps: _____ Discharge Line Temp: _____

Min Circuit Amps (MCA): _____ Max Overcurrent Amps (MCO): _____ Breaker/Fuse Size: _____

Start Kit: Yes No Recommended: Kickstart or similar kit with a potential relay only—do not use solid state kits.

Step 4

Refrigerant Pressures / Temperatures:

Outdoor Ambient Temp: _____

Low Side PSIG: _____ { Vapor Line Temp: _____ **minus** Saturated Temp: _____ = _____ degrees of **Superheat** }

High Side PSIG: _____ { Saturated Temp: _____ **minus** Liquid Line Temp: _____ = _____ degrees of **Sub-cooling** }

NOTES:

Proper start-up and operational checks must be performed on each installation and should include gathering all of the information listed above. Please refer to the WCX Installation, Operation, and Maintenance Instructions for complete details.

Start kits should be installed on systems with a 208-volt power supply. In addition, start kits must be installed on all systems with a hard-shut-off TXV. When in doubt as to the type of TXV installed on a system, install a start kit. The addition of a start kit reduces the initial current inrush, reduces contactor wear, and extends compressor life.

System Start-Up and Charging: The proper practice of refrigerant recovery, evacuation, and charging should be followed when replacing/installing a thru-the-wall condensing unit. When charging a system with a piston (fixed orifice) refrigerant metering device, the system should be charged by super heat. A normal super heat range of 8 to 12 degrees is acceptable. When charging a system with a thermal expansion valve (TXV) charging should be accomplished using the sub-cooling method. The recommended sub-cooling operational range is between 13 and 16 degrees. The temperature drop across the evaporator coil will be approximately 18 degrees for a properly operating system.

Head pressure for the WCX units frequently run higher than other split systems especially on days when the temperature is in the mid to upper 90's. This is due to the limited physical size of the condensing coils in the WCX thru-the-wall units. Head pressures are likely to run from the low 400 lb. range to as high as 500 lbs. plus. First Company grilles are the only grilles approved for use with the WCX condensing units. The installation of an architectural grille also increases head pressures. Proper charging of a system with a WCX thru-the-wall condensing unit, based in the parameters above, will insure maximum capacity, efficiency and dependability.