



CLIMATEWORX
INTERNATIONAL

MISSION CRITICAL Air Conditioning Systems

12”In Row

Commissioning Checklist

Commissioning

WARNING!



Do not run this equipment for longer than 6 hours, or use this equipment for regular operation, in the absence of a heat load for which the system is designed. Failure to comply with these instructions, or failure to follow the steps in this manual will void the manufacturer's warranty and may damage the equipment, or result in a reduced operating life of some components, leading to early equipment failure.

*For machines with 410A refrigerant use manifold sets range up to 800 psig on the high side and 250 psig on the low side with a 250psig low side retard. *VM*



Before switching on the unit, the following checklist should be completed by ClimateWorx authorized personnel only. Failure to do so may damage the unit and void warranty.

Model no. : _____ Serial no. : _____

Client : _____

Location : _____ Unit no. : _____

Tested by : _____ Date : _____

General



Switch off main power isolator and all branch circuit breakers/fuses.

- Remove all transit bolts and fixtures.
- Check for smooth rotation of all fan blades.
- Check drain pipe connected and fitted with 100mm minimum air trap.
- Verify water flows away freely from drain pipe.
- Check air filter fitted and direction of airflow pointing into the unit.
- Check all electrical connections are tight.
- Check main power and interconnecting control wires installed are suitably sized to cope with the imposed load marked on the unit serial plate.
- Verify any short circuit in power branch circuits and control transformer circuits.
- Check supply voltage within $\pm 10\%$ of the values marked in the unit serial plate.

- Record supply voltage : L1 - : _____ V
L2 - : _____ V



The fans will start after the following procedure. Make sure the fans are ready to run.

Switch on the control transformer and fan circuit breakers, and power up the unit. The unit is factory programmed to automatic startup when power applied. Manually turn on the unit if necessary.

- Record the input and output voltage of transformers :
Transformer TX1 - Primary : _____ V _____ A
Secondary tapping 1 : _____ V _____ A
Secondary tapping 2 : _____ V _____ A
- Check that all fans are operating simultaneously

Chilled water circuit



Switch off main isolator and all branch circuit breakers/fuses.

- Check chilled water supply pipe fitted and direction of water flow correct.
- Check for any sign of water leak.
- Check air purged from the cooling coil.
- Check valve manual override operation.

Air-cooled condenser



Make sure the main isolator on the condenser power box is switched off.

- Check that condenser fans rotate freely.
- Check supply voltage within $\pm 10\%$ of the values marked in the unit serial plate.
- Record supply voltage : L1 - L2 : _____ V
L2 - L3 : _____ V
L3 - L1 : _____ V

Insert a jumper wire on the condenser interlock terminals. Switch on the main isolator on the condenser power box.

- Check the rotation direction of the condenser fans. Interchange two power wires if the rotation is reversed.
- Record the running current of the condenser fan motors

Fan 1 -L1 : _____ A L2 : _____ A L3 : _____ A

Fan 2 -L1 : _____ A L2 : _____ A L3 : _____ A

Switch off the main isolator and remove jumper wire. Switch on main isolator again for commissioning of the refrigeration system.

Refrigeration system

- Check signs of oil leak



Follow the instruction in the section “Charging” in the Installation guide to properly charge the refrigeration circuit if this has not been done already. It is generally the responsibility of the installing contractor to assure the proper charging of the system.

Cooling Only: Switch on main power isolator to turn on the unit. Adjust the temperature setpoint to energize the compressor.

- Record the compressor operating pressures:

Normal refrigerant operating pressures at 22°C (72°F), 50% R.H are:

R-410A: Suction Pressure 115 to 130 psig / Discharge Pressure 380 to 425 psig

Note: Discharge pressure may vary with outdoor ambient conditions. Adjustment to the low ambient control device (regulating valve, manual bypass valve if equipped, condenser fan speed control or condenser ORI valve) may be necessary.

Discharge : _____ psig Temperature : _____ ° F

Suction : _____ psig

- Record room conditions:

Temperature : _____ ° C Humidity : _____ % RH

- Record the superheat: Normal superheat is 10-12⁰F (10-15⁰F at Compressor)

_____ °F

- Record the subcooling: Normal subcooling is 12-19⁰F

_____ °F

- Record the compressor running current

L1 : _____ A L2 : _____ A L3 : _____ A

Special Notes on Site Conditions:



Use the space provided to record site conditions or aspects of the installation that you feel may pose a concern for the unit's proper operation. For example: Absence of adequate load, poor air flow, air short circuiting or obstructions, poor duct design, raised floor height, other cooling equipment in the space etc. Continued unit operation with improper conditions will void the manufacturer's warranty and may damage the equipment, or result in a reduced operating life of some components, leading to early equipment failure. Please contact our office at 1-800-648-2584

_____	_____	I have been advised of the conditions listed above and will not touch the equipment
NAME	PHONE NO.	
_____	_____	I have been instructed in the operation of the equipment.
NAME	PHONE NO	

You have finished the start-up checklist. Please return this checklist to the factory within 14 days to register the warranty. Failure to do so will cause undue stress on the end user in the event of a warranty claim