



PACKAGED ROOFTOP AIR CONDITIONING UNITS

START-UP CHECKLIST

Supersedes 100.50-CL1 (705)

Form 100.50-CL1 (905)

035-13463-000

ECO² PACKAGED ROOFTOP START-UP CHECKLIST

OFFICE LOCATION _____	YORK CONTRACT NO. _____
TECHNICIAN'S NAME _____	UNIT MODEL NUMBER _____
JOB NAME _____	UNIT SERIAL NUMBER _____
START DATE _____	SOFTWARE (APPLICATION) REV. _____
COMPRESSOR # 1 SERIAL NO. _____	COMPRESSOR # 2 SERIAL NO. _____
COMPRESSOR # 3 SERIAL NO. _____	COMPRESSOR # 4 SERIAL NO. _____
COMPRESSOR # 5 SERIAL NO. _____	COMPRESSOR # 6 SERIAL NO. _____

PRE START-UP

* IOM REFERENCE:

GENERAL UNIT INSPECTION

(SECTION – Heading)

- | | |
|--|---|
| <input type="checkbox"/> Unit checked for shipping damage | INSTALLATION – Unit Inspection |
| <input type="checkbox"/> Unit installed with proper clearances | INSTALLATION – Location and Clearances |
| <input type="checkbox"/> Unit within slope limitations | INSTALLATION – Location and Clearances |
| <input type="checkbox"/> Refrigeration system check presence of oil (gross leaks) | START-UP – Unit Checks |
| <input type="checkbox"/> Terminal screws and wiring connections tightened in control panel | START-UP – Unit Checks |
| <input type="checkbox"/> Clean air filters installed | INSTALLATION – Filters |
| <input type="checkbox"/> Economizer hoods installed properly | INSTALLATION – Airhoods for Economizers |
| <input type="checkbox"/> Condensate drain properly trapped | INSTALLATION – Condensate Drain |
| <input type="checkbox"/> VAV heat relay signal to VAV boxes wired (VAV only) | INSTALLATION – VAV Heat Relay Output |
| <input type="checkbox"/> Return air bypass damper field wired (Flexsys option) | INSTALLATION – Return Air Bypass Actuator |
| <input type="checkbox"/> All field wiring complete and inspected | INSTALLATION – Field Wiring, Power Wiring |

* IOM REFERENCE:

FAN INSPECTION

(SECTION – Heading)

- | | |
|--|--|
| <input type="checkbox"/> Sheaves properly aligned and tight on shaft - Fan wheels tight on shaft | MAINTENANCE – Sheave Alignment |
| <input type="checkbox"/> Belt tension adjusted properly | MAINTENANCE – Belt Tensioning |
| <input type="checkbox"/> Bearings greased – Set screws torque checked | MAINTENANCE – Fan Bearing Lubrication / Fan Shaft Bearings |
| <input type="checkbox"/> Static Pressure Probe installed on outside of unit (VAV & Modulating Power Exhaust) | INSTALLATION – Static Pressure Probe Installation |
| <input type="checkbox"/> Transducer pneumatic tubing installed for duct static and building pressure transducers | INSTALLATION – Static Pressure Control Tubing |
| <input type="checkbox"/> Verify proper fan rotation | START-UP – Fan Rotation |

PRE START-UP (CONTINUED)

COMPRESSOR OPERATION

* IOM REFERENCE:

(SECTION – Heading)

- Verify correct compressor rotation

START-UP – Verifying Compressor Rotation



Scroll compressors will only pump in one direction and MUST be properly phased. To insure proper rotation, observe discharge and suction pressure when the compressor starts. If the compressor is phased correctly, the discharge pressure will increase and the suction pressure will decrease. If this does not occur, phasing of the power supply must be verified.

* Installation, Operation & Maintenance Manual - 106-130 Ton, Mod E – Form 100.50-NOM3
 - 50-105 Ton, Mod D – Form 100.50-NOM4

UNIT SETPOINTS

REFERENCE:

- Verify unit setup per Quick-Start Guide,
 50 - 130 Ton Units

Form 100.50-SU1

COMMENTS:

POST START-UP

ELECTRICAL DATA

	NAMEPLATE	ACTUAL
SUPPLY VOLTAGES	_____	_____
CONTROL VOLTAGES	N/A	_____
SUPPLY FAN AMPS	_____	_____
EXHAUST FAN AMPS	_____	_____
CONDENSER FAN 1 AMPS	_____	_____
CONDENSER FAN 2 AMPS	_____	_____
CONDENSER FAN 3 AMPS	_____	_____
CONDENSER FAN 4 AMPS	_____	_____
CONDENSER FAN 5 AMPS	_____	_____
CONDENSER FAN 6 AMPS	_____	_____
COMPRESSOR 1 AMPS	_____	_____
COMPRESSOR 2 AMPS	_____	_____
COMPRESSOR 3 AMPS	_____	_____
COMPRESSOR 4 AMPS	_____	_____
COMPRESSOR 5 AMPS	_____	_____
COMPRESSOR 6 AMPS	_____	_____
AIRFLOW CFM (DESIGN)	_____	_____
AIRFLOW CFM – VAV MIN DESIGN	_____	_____

COMMENTS:

POST START-UP (CONTINUED)

REFRIGERANT CIRCUITS

	VALUE		
SYSTEM 1 SUBCOOLING	LIQUID PRESSURE:		
	LIQUID TEMPERATURE:		
SYSTEM 2 SUBCOOLING	LIQUID PRESSURE:		
	LIQUID TEMPERATURE:		
SYSTEM 3 SUBCOOLING	LIQUID PRESSURE:		
	LIQUID TEMPERATURE:		
SYSTEM 1 SUPERHEAT	SUC PRESSURE:		
	SUC TEMPERATURE:		
SYSTEM 2 SUPERHEAT	SUC PRESSURE:		
	SUC TEMPERATURE:		
SYSTEM 3 SUPERHEAT	SUC PRESSURE:		
	SUC TEMPERATURE:		
COMP. SIGHT GLASS LEVEL	SYSTEM 1 A _____ B _____	SYSTEM 2 A _____ B _____	SYSTEM 3 A _____ B _____
OUTSIDE AIR TEMPERATURE			
SUPPLY AIR TEMPERATURE			
RETURN AIR TEMPERATURE			
MIXED AIR TEMP TO EVAP COIL			
HOT GAS BYPASS OPERATION/SETTING	OPERATION VERIFIED <input type="checkbox"/>	SETTING _____ PSIG	

COMMENTS:

