

NEXGEN

DEDICATED OUTDOOR AIR SYSTEMS

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START-UP FORM: NR SERIES

Packaged Dedicated Outdoor Air Unit

Technician Name:

Start-Up Date:

Part Number:
ADFMNRST
Rev.: 27 June 2022DS



Field start-up should be performed by a qualified technician.

The technician is responsible for assuring that all of the items on the unit start-up checklist are properly installed and operating. Upon completion, a copy of the form should be returned fieldservice@addison-hvac.com.

Installation Code and Quarterly Inspections:

All installation and service of NexGen equipment must be performed by a contractor qualified in the installation and service of equipment sold and supplied by NexGen and conform to all requirements set forth in the NexGen manuals and all applicable governmental authorities pertaining to the installation, service, operation and labeling of the equipment.

To help facilitate optimum performance and safety, NexGen recommends that a qualified contractor conduct, at a minimum, quarterly inspections of your NexGen equipment and perform service where necessary, using only replacement parts sold and supplied by NexGen.

Further Information:

Applications, engineering and detailed guidance on systems design, installation and equipment performance is available through NexGen representatives. Please contact us for any further information you may require, including the Installation, Operation and Service Manual.

This product is not for residential use. This document is intended to assist licensed professionals in the exercise of their professional judgment.

DANGER



ELECTRICAL SHOCK HAZARD
Disconnect electric before service. More than one disconnect switch may be required to disconnect electric from equipment. Equipment must always be properly grounded.



SEVERE INJURY HAZARD
Do not enter equipment while in operation. Equipment may start automatically. Do not operate with access doors open. Installation, operation, and maintenance must be performed by a trained technician only.

WARNING



EXPLOSION HAZARD
System contains R-410A refrigerant. Operating pressures may exceed limits of R-22 service equipment. Use proper refrigerant handling practices, tools, and equipment. Failure to follow these instructions can result in death, injury, or property damage.



BURN HAZARD
Allow equipment to cool before service. Internal components of equipment may still be hot after operation.



FALLING HAZARD
Use proper safety equipment and practices to avoid falling. Do not use any part of the equipment as a support.

Failure to follow these instructions can result in death, injury, or property damage.

GENERAL INFORMATION

Customer Name:	<input type="text"/>	Project Name:	<input type="text"/>
Address:	<input type="text"/>	Contractor Name:	<input type="text"/>
	<input type="text"/>	Unit Model #:	<input type="text"/>
City/State/Zip:	<input type="text"/>	Unit Serial #:	<input type="text"/>
Phone/Fax:	<input type="text"/>	Unit Tag #:	<input type="text"/>

APPLICATION INFORMATION

Outdoor Air Temp (°F or °C):	<input type="text"/>	db	<input type="text"/>	wb	Supply Air Temp (°F or °C):	<input type="text"/>	db	<input type="text"/>	wb
Return Air Temp (°F or °C):	<input type="text"/>	db	<input type="text"/>	wb	Outdoor Fan Temp (°F or °C):	<input type="text"/>	db	<input type="text"/>	wb
Design Duct ESP:	<input type="text"/>								

UNIT NAMEPLATE INFORMATION

Unit Electrical:		Supply Voltage:			
Volts: <input type="text"/>	Hertz: <input type="text"/>	Phase: <input type="text"/>	L1-L2: <input type="text"/>	L2-L3: <input type="text"/>	L1-L3: <input type="text"/>
Unit Controls:					
Manufacturer: <input type="text"/>	Installed By: <input type="text"/>				
Description & Operation:	<input type="text"/>				

Supply Fan Motor:		
Make: <input type="text"/>	Model: <input type="text"/>	
Voltage: <input type="text"/>	AMPS: <input type="text"/>	Quantity: <input type="text"/>
HP: <input type="text"/>	<i>AC supply fans need to run at 50Hz minimum. EC supply fans need to run at 90% minimum.</i>	Design CFM: <input type="text"/>

Exhaust Fan Motor:		
Make: <input type="text"/>	Model: <input type="text"/>	
Voltage: <input type="text"/>	AMPS: <input type="text"/>	Quantity: <input type="text"/>
HP: <input type="text"/>		Design CFM: <input type="text"/>

UNIT INFORMATION

Condenser Fan Motor:

Make: Model:

Voltage: AMPS: Quantity:

HP:

Energy Conservation Wheel Motor:

Make: Model:

Voltage: AMPS: HP:

Unit Compressors:

Manufacturer:

C1A - Model Number: Serial Number: Nameplate:

C1B - Model Number: Serial Number: Voltage:

C2B - Model Number: Serial Number: Phase:

C2B - Model Number: Serial Number:

Unit Air Filters:

	Type:	Size:	
EC Wheel:	<input style="width: 100%; height: 25px;" type="text"/>	<input style="width: 100%; height: 25px;" type="text"/>	Quantity: <input style="width: 100%; height: 25px;" type="text"/>
Pre-Filters:	<input style="width: 100%; height: 25px;" type="text"/>	<input style="width: 100%; height: 25px;" type="text"/>	Quantity: <input style="width: 100%; height: 25px;" type="text"/>
Final Filters:	<input style="width: 100%; height: 25px;" type="text"/>	<input style="width: 100%; height: 25px;" type="text"/>	Quantity: <input style="width: 100%; height: 25px;" type="text"/>
ECW Regen:	<input style="width: 100%; height: 25px;" type="text"/>	<input style="width: 100%; height: 25px;" type="text"/>	Quantity: <input style="width: 100%; height: 25px;" type="text"/>
Other:	<input style="width: 100%; height: 25px;" type="text"/>	<input style="width: 100%; height: 25px;" type="text"/>	Quantity: <input style="width: 100%; height: 25px;" type="text"/>

Comments:

START-UP CHECK

Supply Fan:	<input type="text"/>	L1 (AMPS)	<input type="text"/>	L2 (AMPS)	<input type="text"/>	L3 (AMPS)	<input type="text"/>	CFM	<input type="text"/>	ESP ¹ (inWG)	
	<input type="text"/>	Command % or RPM									
Exhaust Fan:	<input type="text"/>	L1 (AMPS)	<input type="text"/>	L2 (AMPS)	<input type="text"/>	L3 (AMPS)	<input type="text"/>	CFM	<input type="text"/>	ESP ² (inWG)	
	<input type="text"/>	Command % or RPM									
Energy Recovery Wheel:	<input type="text"/>	L1 (AMPS)	<input type="text"/>	L2 (AMPS)	<input type="text"/>	L3 (AMPS)					
OA Damper Operation:	<input type="text"/>	Actuator Model:	<input style="width: 100%;" type="text"/>								
Return Damper Operation:	<input type="text"/>	Actuator Model:	<input style="width: 100%;" type="text"/>								
Other Damper Operation:	<input type="text"/>	Actuator Model:	<input style="width: 100%;" type="text"/>								

Notes:
 1. Taken from field supply ductwork.
 2. Taken from field return ductwork.

COOLING CHECK

Cooling Type:	Water Cooled:	Air-Cooled:	Chilled Water Coil:
Glycol Type:	<input style="width: 100%;" type="text"/>	Control Valve:	<input style="width: 100%;" type="text"/>
Refrigerant Type:	<input style="width: 100%;" type="text"/>	Charge:	<input style="width: 100%;" type="text"/>
		Fans Run & Cycle Properly:	<input style="width: 100%;" type="text"/>
Number of Circuits:	<input style="width: 100%;" type="text"/>		
Water-Source Condenser Coil Cooling:	<input type="text"/>	GPM	<input type="text"/>
	Water In °F:	<input type="text"/>	Water Out °F:
	<input type="text"/>	Glycol %:	<input type="text"/>
			<input type="text"/>

Compressor Circuit #1:

Suction Pressure:	<input style="width: 100%;" type="text"/>	Suction Temp:	<input style="width: 100%;" type="text"/>	Saturation Temp:	<input style="width: 100%;" type="text"/>
Discharge Pressure:	<input style="width: 100%;" type="text"/>	Discharge Temp:	<input style="width: 100%;" type="text"/>	Saturation Temp:	<input style="width: 100%;" type="text"/>
Liquid Pressure:	<input style="width: 100%;" type="text"/>	Liquid Temp:	<input style="width: 100%;" type="text"/>		
Superheat:	<input style="width: 100%;" type="text"/>	<i>To Calculate Superheat: Convert suction pressure to saturation temperature, then subtract the suction line temperature.</i>			
Subcooling:	<input style="width: 100%;" type="text"/>	<i>To Calculate Subcooling: Convert liquid line pressure to condensing temperature, then subtract the liquid line temperature.</i>			

Superheat and Subcooling readings must be taken with the reheat circuit disabled, and in the cooling mode. Additionally, Subcooling circuit must be energized and open.

Compressor 1A AMPS:	<input style="width: 100%;" type="text"/>	L1	<input style="width: 100%;" type="text"/>	L2	<input style="width: 100%;" type="text"/>	L3	
Compressor 1B AMPS:	<input style="width: 100%;" type="text"/>	L1	<input style="width: 100%;" type="text"/>	L2	<input style="width: 100%;" type="text"/>	L3	
							Unloading Switch Settings:
							Cut In:
							<input style="width: 100%;" type="text"/>
							Cut Out:
							<input style="width: 100%;" type="text"/>

COOLING CHECK

Compressor Circuit #2:

Suction Pressure:	<input style="width: 90%;" type="text"/>	Suction Temp:	<input style="width: 90%;" type="text"/>	Saturation Temp:	<input style="width: 90%;" type="text"/>
Discharge Pressure:	<input style="width: 90%;" type="text"/>	Discharge Temp:	<input style="width: 90%;" type="text"/>	Saturation Temp:	<input style="width: 90%;" type="text"/>
Liquid Pressure:	<input style="width: 90%;" type="text"/>	Liquid Temp:	<input style="width: 90%;" type="text"/>		
Superheat:	<input style="width: 90%;" type="text"/>	<i>To Calculate Superheat: Convert suction pressure to saturation temperature, then subtract the suction line temperature.</i>			
Subcooling:	<input style="width: 90%;" type="text"/>	<i>To Calculate Subcooling: Convert liquid line pressure to condensing temperature, then subtract the liquid line temperature.</i>			

Superheat and Subcooling readings must be taken with the reheat circuit disabled, and in the cooling mode. Additionally, Subcooling circuit must be energized and open.

Compressor 2A AMPS:	<input style="width: 90%;" type="text"/>	L1	<input style="width: 90%;" type="text"/>	L2	<input style="width: 90%;" type="text"/>	L3	Unloading Switch Settings:
Compressor 2B AMPS:	<input style="width: 90%;" type="text"/>	L1	<input style="width: 90%;" type="text"/>	L2	<input style="width: 90%;" type="text"/>	L3	Cut In: <input style="width: 90%;" type="text"/>
							Cut Out: <input style="width: 90%;" type="text"/>

Post Cooling Type:	N/A:	DX:	Chilled Water Coil:
Glycol Type:	<input style="width: 90%;" type="text"/>	Control Valve:	<input style="width: 90%;" type="text"/>
Refrigerant Type:	<input style="width: 90%;" type="text"/>		
Number of Circuits:	<input style="width: 90%;" type="text"/>		

Condenser Fans:

Condenser Fan 1 AMPS:	<input style="width: 90%;" type="text"/>	L1	<input style="width: 90%;" type="text"/>	L2	<input style="width: 90%;" type="text"/>	L3	Condenser Air Temperature:
Condenser Fan 2 AMPS:	<input style="width: 90%;" type="text"/>	L1	<input style="width: 90%;" type="text"/>	L2	<input style="width: 90%;" type="text"/>	L3	Inlet A °F <input style="width: 90%;" type="text"/>
Condenser Fan 3 AMPS:	<input style="width: 90%;" type="text"/>	L1	<input style="width: 90%;" type="text"/>	L2	<input style="width: 90%;" type="text"/>	L3	Outlet A °F: <input style="width: 90%;" type="text"/>
Condenser Fan 4 AMPS:	<input style="width: 90%;" type="text"/>	L1	<input style="width: 90%;" type="text"/>	L2	<input style="width: 90%;" type="text"/>	L3	Condenser Air Temperature:
Condenser Fan 5 AMPS:	<input style="width: 90%;" type="text"/>	L1	<input style="width: 90%;" type="text"/>	L2	<input style="width: 90%;" type="text"/>	L3	Inlet B °F <input style="width: 90%;" type="text"/>
Condenser Fan 6 AMPS:	<input style="width: 90%;" type="text"/>	L1	<input style="width: 90%;" type="text"/>	L2	<input style="width: 90%;" type="text"/>	L3	Outlet B °F: <input style="width: 90%;" type="text"/>
Condenser Fan 7 AMPS:	<input style="width: 90%;" type="text"/>	L1	<input style="width: 90%;" type="text"/>	L2	<input style="width: 90%;" type="text"/>	L3	Condenser Air Temperature:
Condenser Fan 8 AMPS:	<input style="width: 90%;" type="text"/>	L1	<input style="width: 90%;" type="text"/>	L2	<input style="width: 90%;" type="text"/>	L3	Inlet C °F <input style="width: 90%;" type="text"/>
Condenser Fan 9 AMPS:	<input style="width: 90%;" type="text"/>	L1	<input style="width: 90%;" type="text"/>	L2	<input style="width: 90%;" type="text"/>	L3	Outlet C °F: <input style="width: 90%;" type="text"/>

Variable speed or digital compressors must be operated at 100%.

COOLING CHECK

Hot Gas Bypass/Hot Gas Reheat:

Hot Gas Bypass: Valve Begins to Open at 105PSI - Fully Open at 100PSI

Hot Gas Reheat: Staged: Modulating: SAT °F:

Additional Charge: Added or Subtracted - Circuit 1: Additional Charge: Added or Subtracted - Circuit 2:

Refrigerant Oil Added - Circuit 1: Yes No Refrigerant Oil Added - Circuit 2: Yes No

Amount of Oil Added (Ounces): Amount of Oil Added (Ounces):

Type of Oil Added: Type of Oil Added:

HEATING CHECK

Heating Type: Heat Pump: Hot Water: Electric: Gas: Gas Type:

Heat Stages - Qty: Manifold Pressure:

Modulating Type:

Electric Heat AMPS: L1 L2 L3 kW:

Water Source Coil: GPM Water In °F: Water Out °F: Glycol %: WPD

Hot Water Coil Heating: GPM Water In °F: Water Out °F: Glycol %: WPD

Steam Coil Heating: PSI Temp In °F: Temp Out °F:

CO² Reclaim Heating: PSI Temp In °F: Temp Out °F:

Entering Air Temperature (EAT): °F db

Supply Air Temperature (SAT): °F db

ENERGY CONSERVATION

Type: EC Wheel: Desiccant Wheel: Fixed-Plate:

Exhaust Air Before the HX: db wb

Exhaust Air After the HX: db wb

Entering Air Before the HX: db wb

Entering Air After the HX: db wb

Comments:

Owner's Representative: _____

Signature: _____