



**48HJD/HJF015, 017
SINGLE-PACKAGE COOLING UNITS WITH
FACTORY-INSTALLED GAS HEAT**

**50HJ015, 017
SINGLE-PACKAGE COOLING UNITS WITH
FACTORY-INSTALLED OPTIONAL ELECTRIC HEAT**

- PERFORMANCE DATA**
- CERTIFIED DIMENSION PRINTS**
- CERTIFIED ROOF CURB
DIMENSION PRINT**
- HORIZONTAL SUPPLY/RETURN
ADAPTER ROOF CURB
DIMENSION DRAWING**
- SERVICE OPTION DIMENSION PRINT**



Date:	Supersedes:	48/50HJ015,017 SINGLE-PACKAGE COOLING UNIT WITH GAS HEAT (48HJ) OR OPTIONAL ELECTRIC HEAT (50HJ)	48HJ 50HJ	Rev.: -2SB
JOB NAME:		LOCATION:		
BUYER:		BUYER P.O. #	CARRIER #	
UNIT NUMBER:		MODEL NUMBER:		
PERFORMANCE DATA CERTIFIED BY:				DATE:




Certified to ISO 9001:2000





**ALL 208/230,
460-V UNITS**

DESCRIPTION

The 48HJ units are one-piece, high-efficiency, electric cooling/gas heating units and the 50HJ units are one-piece, high-efficiency, electric cooling/optional electric heating units, prewired and precharged. The 48/50HJ units have bottom air openings for separate supply and return ductwork. The 48HJD units are low heat units and the 48HJF are high heat units. The unit is intended for installation on an accessory curb (ordered separately). Horizontal supply and return connections are also possible with a factory-preassembled, horizontal conversion adapter roof curb accessory (ordered separately). Bottom discharge on concentric applications requires a transition duct (field-supplied) external to the unit.

FEATURES

Standard one-year warranty.

Five-year warranty on the compressors.

Units are rated in accordance with ARI standard 360. Standard unit is certified and listed by ETL and ETL, Canada.

Low outdoor temperature cooling operation to 40 F (4 C) as standard.

Dual freeze-stat protection is provided as standard.

Compressor protection includes high and low-pressure cutouts and overtemperature protection.

Indoor and outdoor coils constructed of aluminum fins mechanically bonded to seamless internally grooved copper tubes.

Crankcase heaters standard on all models.

Dual thermostatic expansion valve (TXV) metering devices.

Filter drier is provided in each refrigeration circuit.

Manually adjustable outside air intake for up to 25% outside air.

Automatic changeover (when used with an auto-changeover thermostat).

Single-point gas and electric connections. Disconnect in accordance with NEC must be field-supplied and installed.

All units utilize 2-stage cooling.

Belt drive adjustable evaporator fan.

Cabinet made of Weather Armor pre-painted, baked enamel finish and insulated with neoprene-coated fiberglass.

Cooling systems have low and high-pressure switches. Two-inch disposable type return-air filters factory installed.

Provision for alternate and return in base unit. Horizontal supply available by using accessory curb. EconoMiSer IV may be used with horizontal supply and return.

Power exhaust and barometric relief must be external to unit if used with horizontal supply return.

Three direct-drive propeller condenser fans with vertical discharge.

48HJ UNITS ONLY

Ten-year non-prorated warranty on Alumagard™ coated Turbo-tubular™ heat exchanger.

2-stage gas heat in a single 2-stage gas valve.

Induced draft combustion system with Hall Effect sensor to detect proper operation of induced-draft motor.

Heavy Alumagard coated heat exchangers with aluminized steel burners.

Heating controls with solid-state direct spark ignition system (pilotless system) and redundant gas valve. High temperature limit switches and auto. reset flame rollout switch standard.

Integrated gas control board with built in diagnostics to determine error codes and control fan on/off delays for energy savings and maximum comfort control.

Integrated gas control board provides anti-cycle protection for gas heat operation.

PERFORMANCE DATA

Unit Operating Weight _____

COOLING

Gross Total Capacity _____

at Condenser Air Temperature _____

Gross Sensible Capacity _____

Compressor Power Input _____

Indoor Entering Air db _____ wb _____

Airflow _____ External Static Pressure _____

Indoor Fan Motor Size _____

Exhaust Fan Motor Size _____

Curb Weight _____

HEATING

Heating Capacity:

Stage 1 _____

Stage 2 _____

Heating Capacity Total _____

Stage 1 _____

Stage 2 _____

Heating Capacity Total _____

ELECTRICAL DATA

Power Supply to Unit _____ Volts _____ Phase _____ Hz
Minimum Circuit Amps _____ Maximum Overcurrent Protection _____

SUBMITTAL DATA

Job Name _____
Architect _____
Engineer _____
Contractor _____
Unit Designation _____

OPTIONS AND ACCESSORIES

FACTORY-INSTALLED OPTIONS

- ☐ Low/High Gas Heat (48HJ only)
- ☐ Low/Medium/High Electric Heat (50HJ only)
- ☐ Convenience Outlet
- ☐ Copper Fin Condenser Coil
- ☐ Copper Fin Condenser and Evaporator Coil
- ☐ Double Wall in Unit Airstream
- ☐ E-Coated Condenser Coils (Aluminum Fin)
- ☐ E-Coated Condenser Coils (Copper Fin)
- ☐ EconoMi\$er IV
- ☐ High-Static Motor and Drive
- ☐ Hinged Access Panel
- ☐ Hydronic Glycol Coil (50HJ Only)
- ☐ Pre-Coated Condenser Coils (Aluminum Fin)
- ☐ Smoke Detectors
- ☐ CO₂ Sensors

FIELD-INSTALLED ACCESSORIES

- ☐ 25% Open Two-Position Damper
- ☐ Barometric Relief Damper
- ☐ Condenser Coil Hail Guard
- ☐ EconoMi\$er IV
- ☐ EconoMi\$er 2
- ☐ PremierLink™ Controls
- ☐ Electronic Programmable Thermostat
- ☐ Enthalpy or Differential Enthalpy Sensors
- ☐ Horizontal Adapter Curb
- ☐ Humidistat
- ☐ Indoor Air Quality Sensor
- ☐ Light Commercial Thermidistat™ Device
- ☐ Low Ambient Kit
- ☐ LP (Liquid Propane) Conversion Kit (48HJ Only)
- ☐ Manual Outdoor Air Damper
- ☐ Motormaster® I Head Pressure Pressure Control
- ☐ Outdoor Air Enthalpy Sensor (with EconoMi\$er2 Only)
- ☐ Power Exhaust
- ☐ Return Air Enthalpy Sensor
- ☐ Return Air Temperature Sensor
- ☐ Roof Curb
- ☐ Thermostats and Subbases
- ☐ Time Guard II Control Circuit
- ☐ UV-C (Ultra-Violet C-Band) Germicidal Lamps
- ☐ Winter Start Time Delay
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____

CUT ALONG DOTTED LINE

CUT ALONG DOTTED LINE

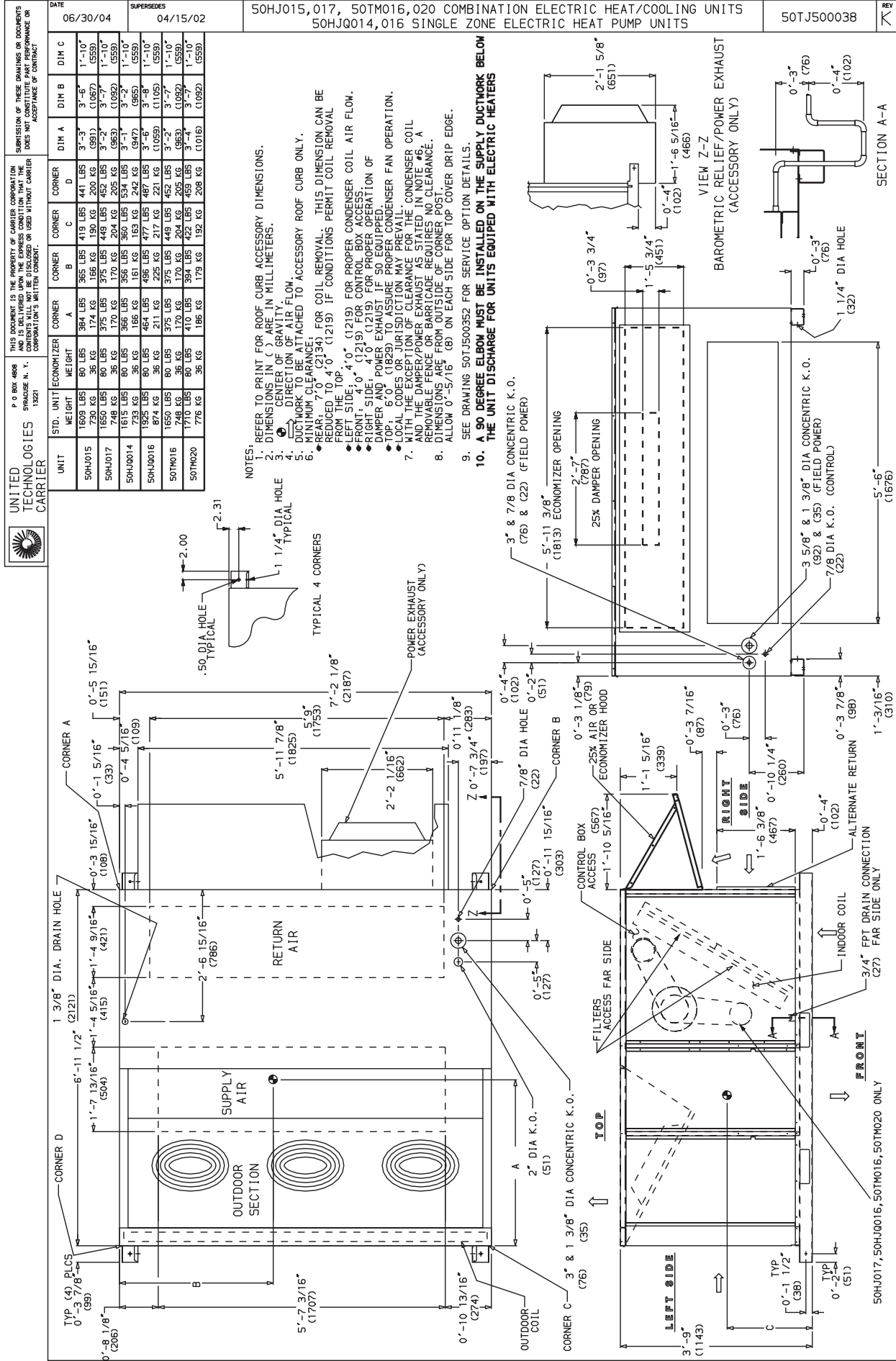
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CUT ALONG DOTTED LINE

CUT ALONG DOTTED LINE

CERTIFIED DIMENSION PRINT



CERTIFIED ROOF CURB DIMENSION PRINT

UNITED TECHNOLOGIES CARRIER

DATE: 07/19/05 SUPERSEDES: 05/15/02

50HJQ014, 016; 50H48JD/HJF015, 017, 025; 50F8TJD/TJF016, 020, 024, 028
542J150, 180; 551A/581A155, 180, 240; 559F/579F180, 216, 240, 300
48/50TM016, 020, 025; 580F/558F180, 210, 240
ROOF CURB (BOTTOM SUPPLY/RETURN UNITS AND OPTIONAL SIDE SUPPLY)

50PQ500834

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STRONG H. T.
13221

UNITED TECHNOLOGIES CARRIER

NOTES:
1. ROOF CURB ACCESSORY IS SHIPPED DISASSEMBLED.
2. INSULATED PANELS: 1" THICK NEOPRENE COATED 1-1/2 LB DENSITY.
3. DIMENSIONS IN () ARE IN MILLIMETERS.
4. DIRECTION OF AIR FLOW
5. ROOF CURB: 16 GA. (VA03-56) STL.
6. A 90 DEGREE ELBOW MUST BE INSTALLED ON THE SUPPLY DUCT WORK BELOW THE UNIT DISCHARGE FOR UNITS EQUIPPED WITH ELECTRIC HEATERS.

NOTE:
TO PREVENT THE HAZARD OF STAGNANT WATER BUILD-UP IN THE DRAIN PAN OF THE INDOOR SECTION, UNIT CAN ONLY BE PITCHED AS SHOWN.

CONDENSATE DRAIN
CONDENSER AND COMPRESSOR END

CONDENSER AND COMPRESSOR END

KEEP THIS AREA CLEAR FOR POWER (GAS ENTRY FOR GAS FIRED ROOFTOPS)

PLAN VIEW OF ROOF CURB

OUTLINE OF UNIT

5'-10 1/2" (1791)

5'-9" (1753)

0'-5 3/16" (132)

ATTACH DUCT TO ROOF CURB

RETURN OPENING CURB

SUPPLY OPENING CURB

COMPR. SECT.

1'-10 3/4" (578)

1'-3 1/16" (310)

1'-7 13/16" (504)

1'-1 15/16" (349)

1'-0" (305)

0'-1 1/4"

6'-2 3/16" (1885) (REF SUPPLY OPENING)

MITERED CORNERS (TOP ONLY)

INSULATED PANEL FOR SIDE SUPPLY AND RETURN (CRRFCURB012A00 ONLY)

0'-1 3/4" (44)

0'-1 1/4" (32)

HEIGHT FROM TABLE

0'-3" (76)

5'-6" (1676)

6'-2 1/4" (1886)

0'-6 1/8" (155)

0'-2 1/2" (64)

0'-7 1/16" (1703)

0'-1 3/4" (44)

0'-2" (51)

NOTE #2

TYP (4 CORNERS)

(CRRFCURB012A00 ONLY)

(CRRFCURB012A00 ONLY)

(CRRFCURB012A00 ONLY)

UNIT OPENINGS

1'-4 5/16" (415)

1'-4 9/16" (421)

OPTIONAL RETURN

SUPPLY

RETURN

OPTIONAL SIDE SUPPLY

RETURN AIR

SUPPLY AIR

SECTION A-A

FIELD DUCT (FIELD SUPPLIED)

DUCT (FIELD SUPPLIED)

GASKET (SUPPLIED WITH CURB)

NAIL

COUNTER FLASHING (FIELD SUPPLIED)

ROOFING FELT (FIELD SUPPLIED)

CANT STRIP (FIELD SUPPLIED)

ROOFING MATERIAL (FIELD SUPPLIED)

RIGID INSULATION (FIELD SUPPLIED)

DIMENSIONS (degrees and inches)

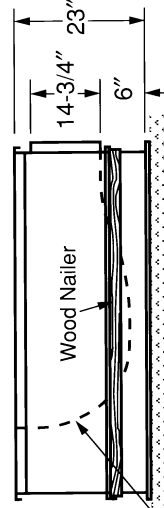
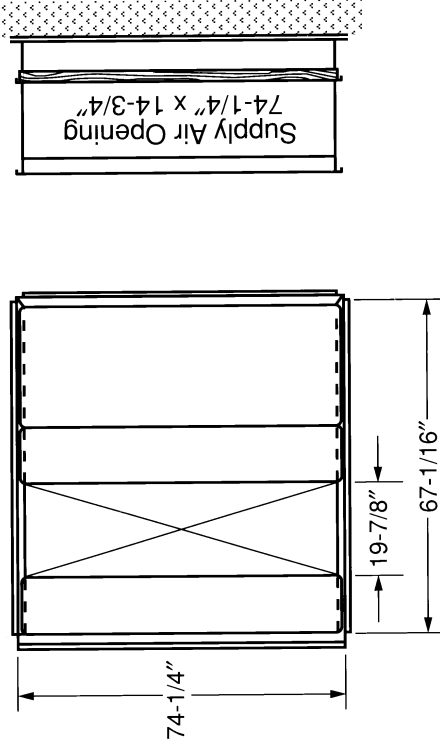
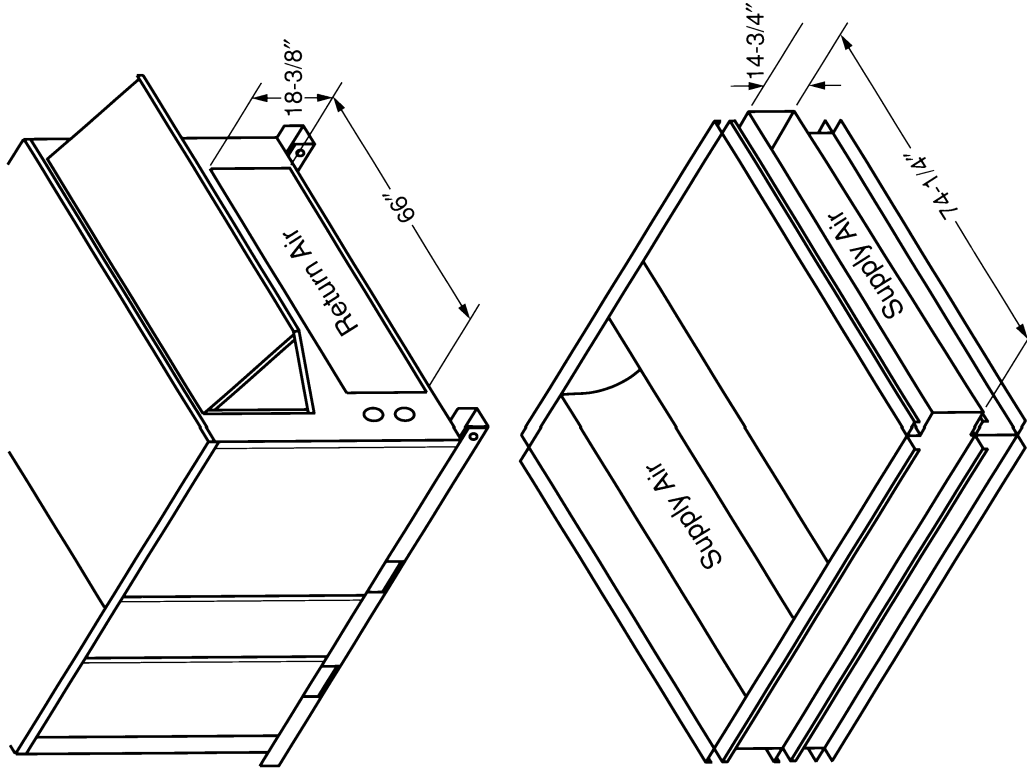
UNIT	A		B	
	DEG.	IN.	DEG.	IN.
ALL	.28	.45	.28	.43

UNIT LEVELING TOLERANCES
•From edge of unit to horizontal.

CUT ALONG DOTTED LINE

CUT ALONG DOTTED LINE

HORIZONTAL SUPPLY/RETURN ADAPTER DIMENSION DRAWING



Factory Supplied Transition Duct
(Fully Insulated)

3-1/2"

14-3/4"

Supply Duct
Opening

Wood Nailer

Roofing Material
(Field Supplied)

Rigid Insulation
(Field Supplied)

NOTE: The horizontal supply/return adapter roof curb
has the same length and width as the standard roof
curb.

FACTORY PRE-ASSEMBLED HORIZONTAL
SUPPLY/RETURN ADAPTER ACCESSORY
CRRFCURB013A00

SERVICE OPTION DIMENSION PRINT



UNITED
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