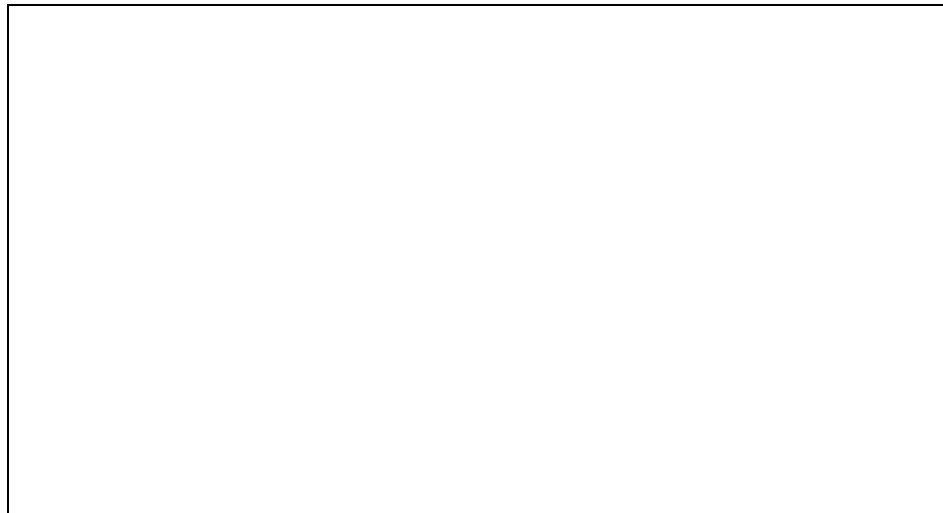




50TFF004-014

SINGLE-PACKAGE ELECTRIC COOLING UNITS WITH FIELD-INSTALLED ELECTRIC HEAT

- PERFORMANCE DATA
- CERTIFIED DIMENSION PRINTS
- CERTIFIED ROOF CURB
DIMENSION PRINTS



Date:	Supersedes:	50TFF004-014 SINGLE-PACKAGE ELECTRIC COOLING UNITS WITH FIELD-INSTALLED ELECTRIC HEAT	50TFF	Rev.: -4SB
JOB NAME:		LOCATION:		
BUYER:		BUYER P.O. #	CARRIER #	
UNIT NUMBER:		MODEL NUMBER:		
UNIT DESIGNATION:				
PERFORMANCE DATA CERTIFIED BY:			DATE:	



DESCRIPTION

Units are a single piece, electric cooling unit, with a low profile, pre-wired, tested and charged at the factory. The units have the capability for convertible supply and return openings and are intended for installation on an accessory curb (ordered separately), or for slab mounting (for horizontal duct connections). Units are designed to accept a field-installed economizer, enthalpy control, manual or two-position outside-air damper, roof curb, as well as many choices of field-installed electric heat. Refer to accessory chart below for full listing.

FEATURES

- Standard one-year full product warranty.
- Five-year protection plan for the motor-compressor.
- Outdoor ambient cooling operation from 25 F (-4 C) to 115 F (46 C).
- Units are tested and certified by ARI and certified by UL and CSA. Factory-run test printout included in each rooftop.
- 24-volt control circuit, with resettable breaker.
- Two-inch disposable-type return air filters in dedicated rack.
- Hermetic compressor on independent circuit with internal line break and overload protection, self-lubricating with internal discharge muffler.
- Scroll compressor with internal overload protection (50TFF007 and 50TFF014).
- Each refrigerant circuit contains a filter drier to trap dirt and particles.
- Single compressor on 3 to 6 ton units.
- Dual compressors on 7 1/2 to 12 1/2 ton units.
- Two-speed direct drive evaporator fan on all units except size 007 which is belt driven. Adjustable belt drive fans are optional on all sizes.
- Non-corrosive condensate pan with self-draining sloping design with both bottom and side drain connections.
- Thru-the-bottom power control entry capability.
- Evaporator and condenser coils constructed of aluminum fins mechanically bonded to seamless copper tubes.
- Single point electrical connections.
- Direct-drive propeller condenser fan totally enclosed with permanently lubricated bearings.
- Pre-painted, insulated cabinet with primer inner panels, certified 500-hr salt spray test and non-corrosive screws.
- Large, easily removable panels provide ready access to unit components for rapid removal or maintenance.
- Filter access door for filter access and maintenance that requires no tools.
- Fixed orifice metering device precisely controls refrigerant flow to each circuit individually.
- Reliable accurate control circuit with color coded wires and easy accessible terminal board.
- Loss of charge, freeze protection, and high pressure switches standard.
- Cooling units with field-installed electric heat with accessory single-point electrical kit have single-point electrical power connection — UL approved.

PERFORMANCE DATA

COOLING

Net Total Cap. _____ Btuh
 Net Sensible Cap. _____ Btuh
 Compressor Power Input _____ kW
 _____ F Outdoor Air Temperature
 Indoor Entering Air db _____ F wb _____ F
 Cfm _____ Ext. Static Pressure _____ in. wg
 EER _____

HEATING

Heating Capacity
 kW _____
 Btuh _____

OPERATING WEIGHT _____ lb (unit) _____ lb (curb)

ELECTRICAL DATA

Power Supply to Unit _____ Volts _____ Phase _____ Hz
 Minimum Circuit Amps _____ Maximum Overcurrent Protection (Fuse only) _____

OPTIONS AND ACCESSORIES

FACTORY-INSTALLED OPTIONS

- EconoMiSer IV with Controller
- EconoMiSer2 with 4-20 mA Actuator Only (PremierLink™ or 3rd Party EMS System Control)
- Copper/Copper Coils — Evaporator, Condenser, Both
- Pre-Coated Condenser Coil
- E-Coat (Post-Coated) Condenser Coil
- Non-Fused Disconnect Switch (factory wired)
- 115-Volt Convenience Outlet (factory wired, load side)
- PremierLink Control
- 25% Manual Air Damper
- Alternate Motor and Drive (except 007 and 009 size)
- High-Static Motor (except size 014)
- Novar 3051 Control

FIELD-INSTALLED ACCESSORIES

- EconoMiSer IV with Controller
- EconoMiSer2 with 4-20 mA Actuator and No Microprocessor — Vertical or Horizontal
- 25% Open Two-Position Damper
- 25% Open Manual Air Damper
- 50% Open Manual Outdoor Air Damper
- 100% Open Two-Position Damper
- Outdoor Air/Return Air Temperature Sensor
- Outdoor Air/Return Air Enthalpy Sensor
- Roof Curb (14 or 24-in. Height)
- Thru-the-Bottom/Roof Curb Electrical Connection Kit
- Time Guard II Compressor Anti-Cycle Control
- Condenser Coil Hail Guard
- Condenser Coil Grille
- Room Temperature Sensor
- PremierLink Control
- CO₂ Sensor (IAQ Control)
- Power Exhaust
- Horizontal Power Exhaust Module (Single Fan)
- 20 F Motormaster® Low Ambient Control Kit
- Programmable Setback Thermostat
- Electrical Mechanical Thermostat and Subbase
- Indoor Fan/Filter Status Indicator
- Electric Resistance Heat Coils
- 62AQ Energy\$Recycler™ Mounting Kit
- 62AQ Energy\$Recycler Supply Air Blower
- 62AQ Energy\$Recycler 460-V Transformer
- 62AQ Energy\$Recycler 575-V Transformer
- Humidistat
- Light Commercial Thermidistat™ Device
- UV-C Lamps
- Other _____

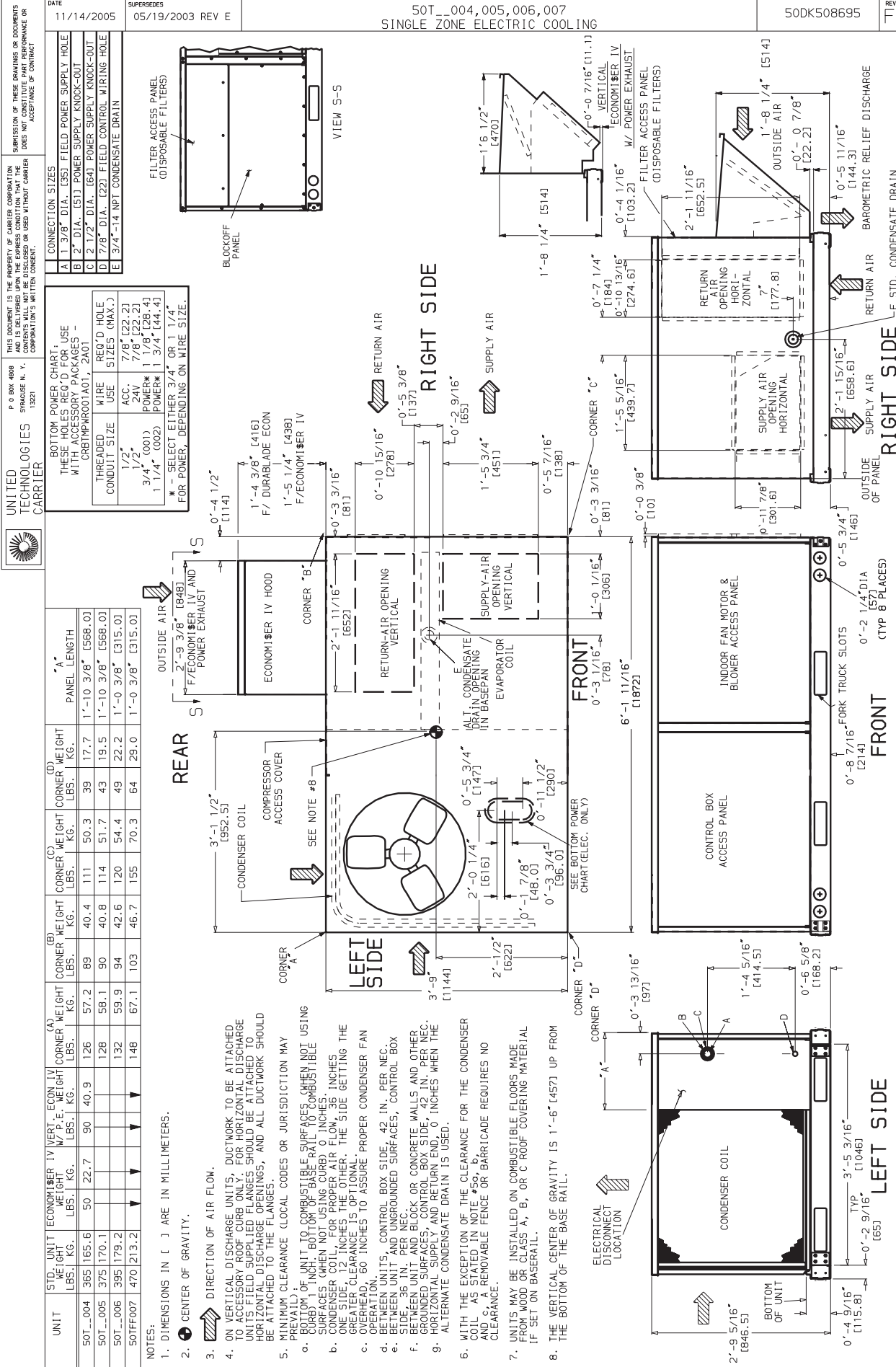
BLANKET QUOTE CONTROLS

- 115-Volt Field Powered GFI Convenience Outlet (line side)
- 115-Volt GFI Convenience Outlet (field powered)
- E-Coated Aluminum/Copper Condenser and Evaporator Coils
- Fused Disconnect
- Hinged Access Panels
- Lockout of High Fire Stage for Heating
- Low Ambient Controller (Motormaster® I)
- Smoke Detector — Return Air
- Smoke Detector — Return and Supply Air
- Smoke Detector — Supply Air
- Split Power (transfer switch NOT included)
- UV-C Lamps (installed and powered with door interlock switch and disconnect switch)

CUT ALONG DOTTED LINE

CUT ALONG DOTTED LINE

CERTIFIED DIMENSION PRINT



UNITED TECHNOLOGIES CARRIER

P O BOX 4898 SPRINGFIELD, MA 01105
THIS DOCUMENT IS THE PROPERTY OF CARRIER CORPORATION AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS WITHOUT THE WRITTEN CONSENT OF CARRIER CORPORATION.

CONNECTION SIZES

A	1 3/8" DIA.	[55]	FIELD POWER SUPPLY HOLE
B	2" DIA.	[51]	POWER SUPPLY KNOCK-OUT
C	2 1/2" DIA.	[64]	POWER SUPPLY KNOCK-OUT
D	7/8" DIA.	[22]	FIELD CONTROL WIRING HOLE
E	3/4"-1 1/4"	NPT	CONDENSATE DRAIN

BOTTOM POWER CHART: USE THESE ACCESSORIES AND ACCESSORIES -

THREADED WIRE CONDUIT SIZE	WIRE USE	REQ'D HOLE SIZE (MAX.)
1/2"	7/8"	[22.2]
3/4"	1 1/8"	[28.4]
1 1/4"	1 3/4"	[44.4]

* - SELECT EITHER 3/4" OR 1 1/4" FOR POWER, DEPENDING ON WIRE SIZE.

50T_004, 005, 006, 007
SINGLE ZONE ELECTRIC COOLING

50DK508695

11/14/2005
05/19/2003 REV E

REV

VIEW S-S

RIGHT SIDE

FRONT

LEFT SIDE

CUT ALONG DOTTED LINE

CUT ALONG DOTTED LINE

CERTIFIED DIMENSION PRINT

UNITED TECHNOLOGIES CARRIER

P.O. BOX 4898
SYRACUSE, N.Y.

THIS DOCUMENT IS THE PROPERTY OF CARRIER CORPORATION AND IS DELIVERED ON THE EXPRESS CONDITION THAT THE USER WILL CONSTITUTE PART PERFORMANCE OR ACCEPTANCE OF CONTRACT.

DATE: 11/14/2005

SUPERSEDES: 10/07/2003 REV D

50TFF008, 009, 012 & 014
SINGLE ZONE ELECTRIC COOLING

50DK509065

REV

UNIT	STD. WEIGHT LBS.	UNIT WEIGHT LBS./KG.	ECONOMIZER IV WEIGHT LBS./KG.	VERT. ECON. IV W/P.P.E. WEIGHT LBS./KG.	CORNER WEIGHT (A)			CORNER WEIGHT (B)			CORNER WEIGHT (C)			CORNER WEIGHT (D)						
					LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.				
50TFF008	755	342	75	34.1	145	65.9	164	74	140	64	240	94	243	110	3'-5 5/16"	378	3'-5 5/16"	1050	2'-9 11/16"	856
50TFF009	760	345					165	75	141	64	209	94	245	111	3'-3 7/8"	1013	3'-3 7/8"	1050	2'-9 11/16"	856
50TFF012	915	415					199	90	170	77	252	114	294	134	2'-5 1/8"	759	4'-1 5/16"	1253	3'-0 3/8"	924
50TFF014	930	422					202	92	172	78	256	116	300	136	1'-2 7/8"	378	4'-1 5/16"	1253	3'-0 3/8"	924

NOTES:

- DIMENSIONS IN () ARE IN MILLIMETERS.
- CENTER OF GRAVITY.
- DIRECTION OF AIR FLOW.
- DUCTWORK TO BE ATTACHED TO ACCESSORY ROOF CURB ONLY.
- MINIMUM CLEARANCE (LOCAL CODES OR JURISDICTION MAY PREVAIL):
 - BOTTOM TO COMBUSTIBLE SURFACES (WHEN NOT USING CURB): 0 INCHES, ON HORIZONTAL DISCHARGE UNITS WITH ELECTRIC HEATERS; 12 INCHES FOR DUCTWORK FOR FLOOR PENETRATIONS; 12 INCHES FOR OTHER PENETRATIONS. THE SIDE GETTING THE GREATER CLEARANCE IS OPTIONAL.
 - OVERHEAD: 60 INCHES TO ASSURE PROPER CONDENSER FAN OPERATION.
 - BETWEEN UNITS, CONTROL BOX SIDE: 42 IN. PER NEC.
 - BETWEEN UNIT AND UNGROUNDED SURFACES, CONTROL BOX SIDE: 36 IN. PER NEC.
 - BETWEEN UNIT AND BLOCK OR CONCRETE WALLS AND OTHER COMBUSTIBLE SURFACES, RETURN AND OUTSIDE AIR RETURN: 12 INCHES PER NEC.
 - HORIZONTAL SUPPLY, RETURN AND OUTSIDE AIR RETURN: 6 INCHES WHEN THE ALTERNATE CONDENSATE DRAIN IS USED.
- WITH THE EXCEPTION OF THE CLEARANCE FOR THE CONDENSER COIL AS STATED IN NOTES 5, 6, AND 7, ALL CLEARANCES ARE TO BE MAINTAINED. CONDENSATE DRAIN IS USED.
- UNITS MAY BE INSTALLED ON COMBUSTIBLE FLOORS MADE FROM WOOD OR CLASS A, B, OR C ROOF COVERING MATERIAL. THE VERTICAL CENTER OF GRAVITY IS 1'-7 1/2" (495) FOR 008 AND 009, 2'-0" (610) FOR 012 AND 014 UP FROM THE BOTTOM OF THE BASE RAIL.

CONNECTION SIZES

A	1 3/8" DIA. (35)	FIELD POWER SUPPLY HOLE
B	2 1/2" DIA. (64)	POWER SUPPLY KNOCK-OUT
C	1 3/4" DIA. (44)	CHARGING PORT HOLE
D	7/8" DIA. (22)	FIELD CONTROL WIRING HOLE
E	3/4" - 1 1/4" NPT	CONDENSATE DRAIN
F	2" DIA. (51)	POWER SUPPLY KNOCK-OUT

ELECTRICAL DISCONNECT LOCATION

REAR VIEW: Shows condenser coil, evaporator, and control panels. Dimensions include 3'-6 15/16" (1093) for the condenser coil and 3'-4 3/8" (1025) for the evaporator. Labels include 'CONDENSER COIL', 'EVAPORATOR', 'ECONOMIZER IV HOOD', 'RETURN AIR OPENING VERTICAL', 'SUPPLY AIR OPENING VERTICAL', 'ALTERNATE CONDENSATE DRAIN IN BASE PAN', and 'SEE BOTTOM POWER CHART (ELECT. ONLY)'. Corner dimensions are also provided.

FRONT VIEW: Shows the front of the unit with dimensions 7'-3 3/8" (2219) and 0'-0 3/8" (10). Labels include 'CONTROL BOX & COMPRESSOR ACCESS PANEL', 'INDOOR-FAN MOTOR, BLOWER AND ELECTRIC HEAT ACCESS PANEL', and 'FORK TRUCK SLOTS (TYP 8 PLACES)'. Dimensions for the control panel are 0'-2 1/4" (57) and 0'-0 3/8" (10).

LEFT SIDE VIEW: Shows the left side of the unit with dimensions 0'-7 3/8" (187) and 0'-3 13/16" (97). Labels include 'CONDENSER COIL', 'BOTTOM OF UNIT', and 'ELECTRICAL DISCONNECT LOCATION'. Dimensions for the condenser coil are 0'-5 3/4" (146) and 0'-2 9/16" (65) TYP.

RIGHT SIDE VIEW: Shows the right side of the unit with dimensions 2'-1" (635) and 0'-10.003. Labels include 'BLOCKOFF PANEL', 'ECONOMIZER IV W/ POWER EXHAUST', 'FILTER ACCESS PANEL (DISPOSABLE FILTERS)', 'RETURN AIR OPENING HORIZONTAL', 'SUPPLY AIR OPENING HORIZONTAL', 'RETURN AIR', 'SUPPLY AIR', 'BARMETRIC RELIEF DISCHARGE', and 'E STD. CONDENSATE DRAIN'. Dimensions for the return air opening are 0'-5 11/16" (144) and 0'-5 7/8" (155).

VIEW S-S: Shows a side view of the unit with dimensions 2'-2" (660) and 0'-10.003. Labels include 'FILTER ACCESS PANEL (DISPOSABLE FILTERS)' and 'BLOCKOFF PANEL'.

DETAILS:

- REAR VIEW: 3'-4 3/8" (1025) F/ECONOMIZER IV AND POWER EXHAUST.
- FRONT VIEW: 0'-0 3/8" (10).
- LEFT SIDE VIEW: 0'-7 3/8" (187), 0'-3 13/16" (97), 0'-5 3/4" (146), 0'-2 9/16" (65) TYP.
- RIGHT SIDE VIEW: 2'-1" (635), 0'-10.003, 0'-4" (101), 1'-0 5/8" (320), 0'-4" (101), 2'-1" (635), 0'-5 11/16" (144), 0'-5 7/8" (155).

BOTTOM POWER CHART USE WITH ACCESSORY PACKAGES (CRIB/IMP/ROO/T/ADT, 2ADT)

WIRE SIZE	CONDENSER SIZE
1/2"	24V
3/4"	24V
1"	24V
1 1/4"	24V
1 3/4"	24V
2"	24V
2 1/2"	24V
3"	24V
3 1/2"	24V
4"	24V
4 1/2"	24V
5"	24V
5 1/2"	24V
6"	24V
6 1/2"	24V
7"	24V
7 1/2"	24V
8"	24V
8 1/2"	24V
9"	24V
9 1/2"	24V
10"	24V
10 1/2"	24V
11"	24V
11 1/2"	24V
12"	24V
12 1/2"	24V
13"	24V
13 1/2"	24V
14"	24V
14 1/2"	24V
15"	24V
15 1/2"	24V
16"	24V
16 1/2"	24V
17"	24V
17 1/2"	24V
18"	24V
18 1/2"	24V
19"	24V
19 1/2"	24V
20"	24V
20 1/2"	24V
21"	24V
21 1/2"	24V
22"	24V
22 1/2"	24V
23"	24V
23 1/2"	24V
24"	24V
24 1/2"	24V
25"	24V
25 1/2"	24V
26"	24V
26 1/2"	24V
27"	24V
27 1/2"	24V
28"	24V
28 1/2"	24V
29"	24V
29 1/2"	24V
30"	24V
30 1/2"	24V
31"	24V
31 1/2"	24V
32"	24V
32 1/2"	24V
33"	24V
33 1/2"	24V
34"	24V
34 1/2"	24V
35"	24V
35 1/2"	24V
36"	24V
36 1/2"	24V
37"	24V
37 1/2"	24V
38"	24V
38 1/2"	24V
39"	24V
39 1/2"	24V
40"	24V
40 1/2"	24V
41"	24V
41 1/2"	24V
42"	24V
42 1/2"	24V
43"	24V
43 1/2"	24V
44"	24V
44 1/2"	24V
45"	24V
45 1/2"	24V
46"	24V
46 1/2"	24V
47"	24V
47 1/2"	24V
48"	24V
48 1/2"	24V
49"	24V
49 1/2"	24V
50"	24V
50 1/2"	24V
51"	24V
51 1/2"	24V
52"	24V
52 1/2"	24V
53"	24V
53 1/2"	24V
54"	24V
54 1/2"	24V
55"	24V
55 1/2"	24V
56"	24V
56 1/2"	24V
57"	24V
57 1/2"	24V
58"	24V
58 1/2"	24V
59"	24V
59 1/2"	24V
60"	24V
60 1/2"	24V
61"	24V
61 1/2"	24V
62"	24V
62 1/2"	24V
63"	24V
63 1/2"	24V
64"	24V
64 1/2"	24V
65"	24V
65 1/2"	24V
66"	24V
66 1/2"	24V
67"	24V
67 1/2"	24V
68"	24V
68 1/2"	24V
69"	24V
69 1/2"	24V
70"	24V
70 1/2"	24V
71"	24V
71 1/2"	24V
72"	24V
72 1/2"	24V
73"	24V
73 1/2"	24V
74"	24V
74 1/2"	24V
75"	24V
75 1/2"	24V
76"	24V
76 1/2"	24V
77"	24V
77 1/2"	24V
78"	24V
78 1/2"	24V
79"	24V
79 1/2"	24V
80"	24V
80 1/2"	24V
81"	24V
81 1/2"	24V
82"	24V
82 1/2"	24V
83"	24V
83 1/2"	24V
84"	24V
84 1/2"	24V
85"	24V
85 1/2"	24V
86"	24V
86 1/2"	24V
87"	24V
87 1/2"	24V
88"	24V
88 1/2"	24V
89"	24V
89 1/2"	24V
90"	24V
90 1/2"	24V
91"	24V
91 1/2"	24V
92"	24V
92 1/2"	24V
93"	24V
93 1/2"	24V
94"	24V
94 1/2"	24V
95"	24V
95 1/2"	24V
96"	24V
96 1/2"	24V
97"	24V
97 1/2"	24V
98"	24V
98 1/2"	24V
99"	24V
99 1/2"	24V
100"	24V
100 1/2"	24V

CERTIFIED ROOF CURB DIMENSION PRINT

P O BOX 4888
SYRACUSE N. Y.
13221

UNITED TECHNOLOGIES
CARRIER

THIS DOCUMENT IS THE PROPERTY OF CARRIER CORPORATION AND IS TO BE USED ONLY FOR THE PROJECT AND LOCATION SPECIFICALLY IDENTIFIED HEREIN. IT IS NOT TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT THE WRITTEN CONSENT OF CARRIER CORPORATION.

DATE: 04/23/03

SUPERSEDES: 11/29/2001 REV R

48HJ/TJ/TF/TM004-007, 50HJ/TJ/TF/TM004-007
50HJQ/TJQ/TFQ004-007 ROOF CURB

50DK501028

REV 5

SUBMISSION OF THESE DRAWINGS OR DOCUMENTS DOES NOT CONSTITUTE PART PERFORMANCE OR ACCEPTANCE BY CONTRACT.

UNIT

MAIL

TYPICAL (4) SIDES

COUNTER FLASHING (FIELD SUPPLIED)

ROOFING FELT (FIELD SUPPLIED)

CANT STRIP (FIELD SUPPLIED)

ROOFING MATERIAL (FIELD SUPPLIED)

RIGID INSULATION (FIELD SUPPLIED)

GAS SERVICE (SEE NOTE #8)

OPENING FOR BASEPAN ENTRY SERVICE (SEE NOTE #8)

SCALE 1:4

SECTION "C-C"

SEE NOTE #2

NOTE: CAMBRIDGEPORT "SURE-LOCK" CORNER FASTENING DEVICE IS ACCEPTABLE ALTERNATE CONSTRUCTION.

NOTES:

1. ROOF CURB ACCESSORY IS SHIPPED DISASSEMBLED.
2. INSULATED PANELS, DIMENSIONS IN [] ARE IN MILLIMETERS. (SUPPLIED WITH CURB)
3. DIMENSIONS IN [] ARE IN MILLIMETERS. (SUPPLIED WITH CURB)
4. ATTACHMENT TO CURB IS STEEL.
5. FLANGES OF DUCT REST ON CURB.
6. SERVICE CLEARANCE 4 FEET ON EACH SIDE. (FIELD SUPPLIED)
7. SERVICE CLEARANCE 4 FEET ON EACH SIDE. (FIELD SUPPLIED)
8. CONNECTOR PACKAGES CRBTMPR001A01 AND 2A01 ARE FOR THRU-THE-CURB TYPE GAS. PACKAGES CRBTMPR003A01 AND 4A01 ARE FOR THE THRU-THE-BOTTOM TYPE GAS CONNECTIONS.

CONNECTOR PKG. ACC.	B	C	D ALT. DRAIN HOLE	GAS	POWER	CONTROL	ACCESSORY PWR
CRBTMPR001A01	1'-9 1/16" [351]	1'-4" [406]	1 3/4" [44.5]	3/4" [19.1NPT]	3/4" [19.1NPT]	1/2" [12.7NPT]	1/2" [12.7NPT]
CRBTMPR002A01	2'-0" [610]			1/2" [12.7NPT]	3/4" [19.1NPT]	3/4" [19.1NPT]	
CRBTMPR004A01				3/4" [19.1NPT]	1 1/4" [31.7]		

VIEW "A-A"

VIEW "B"

VIEW "C-C"

RETURN AIR

SUPPLY AIR

HEAD OF BOLT TO BE ON INSIDE OF FLANGE

TYP. ALL CORNERS

Free Manuals Download Website

<http://myh66.com>

<http://usermanuals.us>

<http://www.somanuals.com>

<http://www.4manuals.cc>

<http://www.manual-lib.com>

<http://www.404manual.com>

<http://www.luxmanual.com>

<http://aubethermostatmanual.com>

Golf course search by state

<http://golfingnear.com>

Email search by domain

<http://emailbydomain.com>

Auto manuals search

<http://auto.somanuals.com>

TV manuals search

<http://tv.somanuals.com>