



CONSTRUCTION PERMIT APPLICATION

CivC Pizzeria

Applicant Completes: Sections I,II,II (optional), IV, VI, and VII

C19-061208

I. IDENTIFICATION

1. Proposed Work Site at: 270 Chambers Bridge Rd

2. Name of Owner in Fee: TNP Brick

Tel. (732) 262.1058 e-mail _____

Address: 270 Chambers Bridge Rd Brick 08723

street municipality zip code

3. Ownership in Fee: Public ☒ Private ☐

4. Principal Contractor: Bill Leary AC+HTG Tel. (732) 494.9200

Address 6 Green St. Metuchen NJ e-mail 08840

License No. OR, if new home, Builder Reg. No. 19HC0528800 Exp. Date 01/30/20

Home Improvement Contractor Registration No. or Exemption Reason (if applicable): _____

Federal Emp. ID No. 223224342 Fax (732) 632.9848

5. Architect or Engineer _____ Contact _____

Address _____ e-mail _____

Tel. (____) _____ FAX (____) _____

6. Responsible Person in Charge once Work has Begun Bill Leary

Tel. (732) 494.9200 FAX (732) 632.9848

V. FEE SUMMARY (for office use only)

		Update	Update
1. Building	\$		
2. Electrical	\$		
3. Plumbing	\$		
4. Fire Protection	\$		
5. Elevator Devices	\$		
6. Subtotal	\$		
7. Less 20% for State Plan Review	\$		
8. Subtotal	\$		
9. State Permit Surcharge Fee	\$		
10. Subtotal	\$		
11. Cert. of Occupancy	\$		
12. Other	\$		
13. TOTAL	\$		

VI. BUILDING/SITE CHARACTERISTICS

		(office use only)
1. Number of Stories		
2. Height of Structure	ft.	
3. Area—Largest Floor	sq. ft.	
4. New Building Area	sq. ft.	
5. Volume of New Structure	cu. ft.	
6. Max. Live Load		
7. Max Occupancy Load		
8. If Industrialized Building: State Approved		
9. Total Land Area Disturbed	sq. ft.	
10. Flood Hazard Zone		
11. Base Flood Elevation	ft.	
12. Wetlands yes		

IIa. PROPOSED WORK:

☐ Minor Work ☐ New Building ☐ Addition ☐ Demolition

☐ Repair ☐ Alteration ☐ Renovation ☐ Reconstruction

☐ Asbestos Abat. -Subch. ☐ Lead Hazard Abatement ☐ Radon Remediation ☐ Annual Permit

IIb. SUBCODES: (Check all that apply)

☒ Building ☒ Electrical ☒ Plumbing

☐ Fire Protection ☐ Elevator

FOR OFFICE USE ONLY (Optional)

Est. Cost	Plans Rec'd by	Date Rec'd	Rejection Date	Approval Date	Re-viewer	Resubmission Dates	Re-viewer
2,050.00				4/5/19	KCK		
1,100.				4/9/19			
8000.				4-8-19			

TOTAL COSTS

VII. DESCRIPTION OF BUILDING USE

A. RESIDENTIAL (primary use)

1. State Specific Use: _____

2. Use Group, Proposed: _____

3. Change in Use Group, Indicate Former: _____

4. No. of dwelling units: Total Units Income-restricted

Gained, Sale _____

Gained, Rental _____

Lost, Sale _____

Lost, Rental _____

B. NON-RESIDENTIAL (primary use)

1. State Specific Use: _____

2. Use Group, Proposed: _____

3. Change in Use Group, Indicate Present: _____

C. MIXED USE -List secondary use(s): _____

D. Construct. Classification: Present _____ Proposed _____

III. DO YOU WANT: (optional)

1. ☐ Partial Releases

2. ☐ Prototype Processing

IV. DOES OR WILL YOUR BUILDING CONTAIN ANY OF THE FOLLOWING?

1. ☐ Elevators/Escalators/Lifts/ Dumbwaiters/Moving Walks

2. ☐ High Pressure Boilers

3. ☐ Pressure Vessels

4. ☐ Refrigeration Systems

5. ☐ Cross-Connections/Backflow Preventers

6. ☐ Hazardous Uses/Places of Assembly

7. ☐ Sprinklers

8. ☐ Smoke Control Systems in Open Wells

9. ☐ Underground Storage Tanks

10. ☐ Swimming Pools, Spas and Hot Tubs

11. ☐ LP Gas Tanks

CERTIFICATION IN LIEU OF OATH

I. OWNER SECTION (to be completed if the applicant is the owner in fee)

I hereby certify that I am the owner in fee of the property listed on Page 1.

Mark the following applicable boxes:

- A. ☐ I further certify that a new home (private residence) will be constructed on this property for my own use and occupancy. This dwelling is to be occupied by myself and is not to be used for any purpose other than single family residential use. I attest that all construction, plumbing, or electrical work will be done, in whole or in part, by me or by subcontractors under my supervision, in accordance with all applicable laws; and, I further acknowledge that said new home is not covered under the New Home Warranty and Builders Registration Act (N.J.S.A. 46:3B-1 et seq.) and that such fact shall be disclosed to any person purchasing this property within ten years of the date of issuance of a certificate of occupancy.

I UNDERSTAND THAT IN MARKING BOX A, I ACKNOWLEDGE THAT I AM ASSUMING RESPONSIBILITY FOR THE WORK DONE ON SAID PROPERTY, THE CONDITION OF THE PROPERTY PRIOR TO, DURING, AND AFTER ANY WORK PERFORMED, AND FOR THE PERFORMANCE OF THE SUBCONTRACTORS I HIRE, EMPLOY, OR OTHERWISE CONTRACT OR WITH WHOM I MAKE AGREEMENTS TO PERFORM WORK. I AM VOLUNTARILY AND KNOWINGLY ASSUMING THIS RESPONSIBILITY.

- B. ☐ I further certify the following as required by the New Jersey Uniform Construction Code, N.J.A.C. 5:23-2.15(f)1.ix:

I personally prepared the plans submitted for: 1) the new home referred to in A.; or, 2) an addition, alteration, renovation, or repair to an existing single family residence owned and occupied by myself and located on the property listed on Page 1; or, 3) a new structure that will be physically separate from, but that will be deemed part of, an existing single family residence that is owned and occupied by myself and located on the property listed on Page 1.

- C. ☐ I further certify that I will perform or supervise the following work:

C.1. ☐ Building C.2. ☐ Fire Protection

I further certify that I will perform the following work:

C.3. ☐ Electrical C.4. ☐ Plumbing

- D. ☐ I agree to advise all contractors on this project that they are required to be registered with the New Jersey Division of Taxation and to comply with all New Jersey tax laws.

I further certify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(a)5: All required State, county, and local prior approvals have been given, including such certification as the construction official may require.

I understand that if any of the above statements are willfully false, I am subject to punishment.

Signature _____ Date _____

II. AGENT SECTION (to be completed if the applicant is not the owner in fee)

I hereby certify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(d): the proposed work is authorized by the owner in fee; and I have been authorized by the owner in fee to make this application as his agent.

I further certify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(a)5: All required State, county, and local prior approvals have been given, including such certification as the construction official may require.

I agree to advise all contractors on this project that they are required to be registered with the New Jersey Division of Taxation and to comply with all New Jersey tax laws.

I understand that if any of the above statements are willfully false, I am subject to punishment.

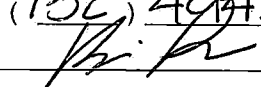
☒ Check if contractor.

Bill Leary A/C & Heating

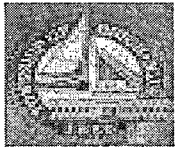
Agent Name **6 Green Street**

Address **Metuchen, NJ 08840**

Telephone **(732) 494-9200**

Signature 

- III. ☐ LEAD HAZARD ABATEMENT: Include Homeowner or Building Owner Affidavit as per N.J.A.C. 5:17.



Brick Township
401 Chambersbridge Rd
Brick, NJ 08723

Date Issued 04/24/2019
Control Number C-19-001208
Permit Number 19-0838
Permit Issue Date 04/09/2019
Certificate Number 19-0838

Certificate

Construction Code Division

(Certificate of Approval)

Identification

Work Site Location: 270 CHAMBERS BRIDGE RD. Brick Township, NJ Block: 701.29 Lot: 1 Qual: _____

Owner in Fee: TOWNSHIP OF BRICK

Owner Address: 401 CHAMBERSBRIDGE RD BRICK NJ 08723

Telephone: _____

Contractor BILL LEARY A/C & HEATING- WHL ENTERPRISES INC

Address 6 GREEN ST METUCHEN NJ

Telephone: (732) 494-9200 Fax: (732) 906-9848

License Number or Builders Registration Number: _____ Federal Emp. Number: 22-3224342

Home Warranty Number: _____

Type of Warranty Plan: ☐ State ☐ Private

Use Group: B Construction Classification: _____

Maximum Live Load: 0 Maximum Occupancy Load: 0

Description of Work/Use: HVAC - - OSCAR'S PIZZA ...REPLACE RTU - COOLING ONLY

Certificate Comments:

☐ **Certificate of Occupancy**

This serves notice that said building or structure has been constructed in accordance with the New Jersey Uniform Construction Code and is approved for occupancy.

☒ **Certificate of Approval**

This serves notice that the work completed has been constructed or installed in accordance with the New Jersey Uniform Construction Code and is approved. If the permit was issued for minor work, this certificate was based upon what was visible at the time of inspection.

☐ **Certificate of Continued Occupancy**

This serves notice that based on a general inspection of the visible parts of the building there are no imminent hazards and the building is approved for continued occupancy.

☐ **Temporary Certificate of Compliance**

The following conditions must be met no later than or the owner will be subject to fine or order to vacate:
This certificate has an expiration date of:
Conditions to be met:

☐ **Certificate of Clearance - Lead Abatement 5:17**

This serves notice that based on written certification, lead abatement was performed as per NJAC5:17 to the following extent.

- ☐ Total removal of lead-based paint hazards in scope of work
☐ Partial or limited time period (years); see file

☐ **Certificate of Clearance - Asbestos Abatement**

This serves notice that based on written certification, asbestos abatement was performed to the following extent.

- ☐ Total removal of asbestos hazards in scope of work
☐ Partial or limited time period (years); see file

☐ **Certificate of Compliance**

This serves notice that said potentially hazardous equipment has been installed and/or maintained in accordance with the New Jersey Uniform Construction Code and is approved for use until

☐ **Temporary Certificate of Occupancy**

The following conditions must be met no later than:
or the owner will be subject to fine or order to vacate:
This certificate has an expiration date of:
Conditions to be met:

Daniel Newman Jr

Construction Official

Fee: \$0.00

Check Number: _____

Collected By: _____

4/1/19- Spoke to Carolyn - Needs specs + weight of
Old + new unit. NP

Civic Center
Pizzeria



**BUILDING
SUBCODE
TECHNICAL SECTION**



Date Received
Control #
Date Issued
Permit #

4/9/19
19-0838

A. IDENTIFICATION—APPLICANT: COMPLETE ALL APPLICABLE INFORMATION. WHEN CHANGING CONTRACTORS, NOTIFY THIS OFFICE. CALL UTILITY DIG NO: 1-800-272-1000.

Block 701-29 Lot 1 Qualification Code _____
Work Site Location 270 Chambers Bridge Rd

Owner in Fee: TWP BRICK

Tel. (732) 262-1058 e-mail _____

Address 270 Chambers Bridge Rd Brick 08123

Contractor: Bill Leary A/C+H/TG Tel. (732) 494-9200

Address 6 Green St

Metuchen NJ 08840

Contractor License No. or Builder Registration No. 19HCD0528800 Exp. Date 06/30/20

Federal Emp. ID No. 223224342 FAX: (732) 632-9848

JOB SUMMARY (Office Use Only)		INSPECTIONS		Dates (Month/Day)	
PLAN REVIEW	Date Initial	Type:	Failure	Failure	Approval Initial
☒ No Plans Required	<u>04/05/19</u> <u>KEK</u>	Footing			
☐ All		Footing Bonding			
☐ Footing/Foundations		Foundation			
☐ Structural/Framework		Slab			
☐ Exterior		Frame			
☐ Interior		Truss Sys./Bracing			
Joint Plan Review Required:		Barrier-Free			
☐ Elec. ☐ Plumb. ☐ Fire ☐ Elevator		Insulation			
SUBCODE APPROVAL for PERMIT		Finishes-Base Layer			
Date: <u>04/05/19</u>		Finishes-Final			
Approved by: <u>KEK</u>		Energy			
SUBCODE APPROVAL for CERTIFICATE		Mechanical			
☐ CO ☐ CCO ☒ GA		TCO			
Date: <u>04/23/19</u>		Other			
Approved by: <u>KEK</u>		Final			<u>4/19/19</u> <u>KEK</u>
		Barrier-Free			

B. BUILDING CHARACTERISTICS

Use Group: Present _____ Proposed _____

No. of Stories _____

Height of Structure _____

Area — Largest Floor _____

New Bldg. Area/All Floors _____

Volume of New Structure _____

Max. Live Load - _____

Max Occupancy Load _____

Constr. Class Present _____ Proposed _____

If Industrialized Building:

Ft. State Approved _____ HUD _____

Sq. Ft. **Est. Cost of Bldg. Work:**

Sq. Ft. 1. New Bldg. \$ _____

cu. ft. 2. Rehabilitation \$ _____

3. Total (1+2) \$ 2050

C. CERTIFICATION IN LIEU OF OATH

I hereby certify that I am the (agent of) owner of record and I am authorized to make this application.

Sign here _____

Print name here: Bill Leary

D. TECHNICAL SITE DATA

DESCRIPTION OF WORK

repl cool only RTU ~~0810~~

COMMERCIAL

TYPE OF WORK

- ☐ New Building
- ☐ Addition
- ☐ Rehabilitation
- ☐ Roofing
- ☐ Siding
- ☐ Fence _____ Height (exceeds 6')
- ☐ Sign _____ Sq. Ft.
- ☐ Pool
- ☐ Retaining Wall _____ Sq. Ft.
- ☐ Asbestos Abatement Subchapter 8
- ☐ Lead Haz. Abatement NJAC 5:17
- ☐ Radon Remediation
- ☒ Other RTU
- ☐ Demolition

FEE (Office Use Only)

\$ _____

Administrative Surcharge \$ _____
Minimum Fee \$ _____
State Permit Surcharge Fee \$ _____
TOTAL FEE \$ _____

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(rev. 11/09)
Professional Printing
(856) 468-7933



ELECTRICAL SUBCODE TECHNICAL SECTION



A. IDENTIFICATION—APPLICANT: COMPLETE ALL APPLICABLE INFORMATION. WHEN CHANGING CONTRACTORS, NOTIFY THIS OFFICE. CALL UTILITY DIG NO: 1-800-272-1000.

Block 701.29 Lot 1 Qualification Code _____
Work Site Location 270 Chambers Bridge rd.

Owner in Fee: TWP. Brick

Tel. (732) 262-1058 e-mail _____

Address 270 Chambers Bridge rd Brick 08723
street municipality zip code

Contractor: Benchmark Electric Tel. (908) 399-4393

Address 229 Cherryville rd e-mail _____
Flemington NJ 08822

Contractor License No. 18228 Exp. Date 03/21

Home Improvement Contractor Registration No. or Exemption Reason (if applicable): _____

Federal Emp. ID No. _____ FAX: (____) _____

B. ELECTRICAL CHARACTERISTICS

Use Group Present _____ Proposed _____

[] Pole/Pad # _____ [] Temporary [] Other _____

Building Occupied as _____ Utility Co. _____

Est. Cost of Elec. Work \$ 1,100

JOB SUMMARY (Office Use Only)		INSPECTIONS		Dates (Month/Day)	
PLAN REVIEW		Type:	Failure	Failure	Approval Initial
[] No Plans Required		Rough			
[] Partial - Underslab Utilities Approved		Barrier-Free			
Date: _____ Approved by: _____		Trench			
[x] Electric Plans Approved <u>SPECS.</u>		Temp. Serv.			
Date: <u>4/9/19</u> Approved by: <u>AJC</u>		Constr. Serv.			
Joint Plan Review Required:		TCO			
[] Bldg. [] Plumb. [] Fire. [] Elev.		Other			
SUBCODE APPROVAL for PERMIT		Service			
Date: <u>4/9/19</u>		Final			<u>4-19-19</u>
Approved by: _____		Barrier-Free			
SUBCODE APPROVAL for CERTIFICATE		Temp. Cut-in-Card Date Issued			
[] CO [] CCO [x] CA		Final Cut-in-Card Date Issued			
Date: <u>4/22/19</u>		Annual Pool Inspection			
Approved by: _____		Date of Grounding and Bonding Certification			

C. CERTIFICATION IN LIEU OF OATH

I hereby certify that I am the (agent of) owner of record and am authorized to make this application and perform the work listed on this application.

Applicant/sign/Contractor sign and seal here: _____

Print name here: Mitchell Hladky

[x] Licensed Elec. Contractor [] Certif'd Landscape Irrigation Cont'r [] Exempt Applicant

D. TECHNICAL SITE DATA

DESCRIPTION OF WORK: Replace cool only Rtu

QTY.	SIZE	ITEMS	FEE (Office Use Only)
<u>1</u>	<u>5</u>	Lighting Fixtures	
		Receptacles	
		Switches	
		Detectors	
		Light Poles	
		Motors - Fract. HP	
		Emergency Exit Lights	
		Communications Points	
		Alarm Devices/F.A.C. Panel	
		TOTAL NUMBERS	\$
		Pool Permit/with UW Lights	
		Storable Pool/Spa/Hot Tub	
		KW Elec. Range/Receptacle	
		KW Oven/Surface Unit	
		KW Elec. Water Heater	
		KW Elec. Dryer/Receptacle	
		KW Dishwasher	
		HP Garbage Disposal	
		KW Central A/C Unit	
		HP/KW Space Heater/Air Handler	
		KW Baseboard Heat	
		HP Motors 1/+ HP	
		KW Transformer/Generator	
		AMP Service	
		AMP Subpanels	
		AMP Motor Control Center	
		KW Elec. Sign/Outline Light	

COMMERCIAL

Administrative Surcharge	\$
Minimum Fee	\$
State Permit Surcharge Fee	\$
TOTAL FEE	\$

Date Received
Control #
Date Issued
Permit #

4/9/19
19-0838

due

COVENE

CIVIC Center
Pizzeria



PLUMBING
SUBCODE
TECHNICAL SECTION

A. IDENTIFICATION—APPLICANT: COMPLETE ALL APPLICABLE INFORMATION. WHEN CHANGING CONTRACTORS, NOTIFY THIS OFFICE. CALL UTILITY DIG NO: 1-800-272-1000.

Block 701.29 Lot 1 Qualification Code _____
Work Site Location 270 Chambers Bridge Rd

Owner in Fee: TNP BRICK
Tel. 732.262.1058 e-mail _____
Address 270 Chambers Bridge Rd Brick 08723
Contractor: Bill Leary A/C/H/T/G Tel. 732.494.9200
Address 6 Green St Metuchen NJ 08840

Contractor License No. 19HCO0528800 Exp. Date 06/30/20
Home Improvement Contractor Registration No. or Exemption Reason (if applicable): _____
Federal Emp. ID No. 223224342 FAX: 732.632.9898

B. PLUMBING CHARACTERISTICS

Use Group: Present _____ Proposed _____
Building Sewer Size _____ Public Sewer _____ Private Septic _____
Water Service Size _____ Public Water _____ Private Well _____

Est. Cost of Plumbing Work \$ 8000

JOB SUMMARY (Office Use Only)		INSPECTIONS		Dates (Month/Day)		
PLAN REVIEW		Type:	Failure	Failure	Approval	Initial
☐ No Plans Required		Slab	_____	_____	_____	_____
☐ Partial -Underslab Utilities Approved		Rough	_____	_____	_____	_____
Date: _____ Approved by: _____		Water	_____	_____	_____	_____
☐ Plumbing Plans Approved		Sewer	_____	_____	_____	_____
Date: _____ Approved by: _____		Fixtures	_____	_____	_____	_____
Joint Plan Review Required		Gas Equipment	_____	_____	_____	_____
☐ Bldg. ☐ Elec. ☐ Fire ☐ Elev.		Gas Piping	_____	_____	_____	_____
SUBCODE APPROVAL for PERMIT		LPGas Tank	_____	_____	_____	_____
Date: <u>4-8-19</u>		Fuel Oil Piping	_____	_____	_____	_____
Approved by: _____		Solar	_____	_____	_____	_____
SUBCODE APPROVAL for CERTIFICATE		TCO	_____	_____	_____	_____
☐ CO ☐ CCO ☐ CA		FINAL	_____	_____	_____	_____
Date: <u>4-22-19</u>			_____	_____	_____	_____
Approved by: _____			_____	_____	_____	_____



Date Received
Control #
Date Issued
Permit #

4/9/19
19-0838

C. CERTIFICATION IN LIEU OF OATH

I hereby certify that I am the (agent of) owner of record and I am authorized to make this application, and perform the work listed on this application.

Applicant Sign / Contractor
Sign AND Seal here: _____

Print name here: Bill Leary

☐ Licensed Plumbing Contractor ☒ Exempt Applicant

D. TECHNICAL SITE DATA (List of all fixtures.)

DESCRIPTION OF WORK

repl cool only RTU

NO	FIXTURE/EQUIPMENT	FEE (Office Use Only)
_____	Water Closet	\$ _____
_____	Urinal/Bidet	_____
_____	Bath Tub	_____
_____	Lavatory	_____
_____	Shower	_____
_____	Floor Drain	_____
_____	Sink	_____
_____	Dishwasher	_____
_____	Drinking Fountain	_____
_____	Washing Machine	_____
_____	Hose Bibb	_____
_____	Water Heater	_____
_____	Fuel Oil Piping	_____
_____	Gas Piping	_____
_____	LPGas Tank	_____
_____	Steam Boiler	_____
_____	Hot Water Boiler	_____
_____	Sewer Pump	_____
_____	Interceptor/Separator	_____
_____	Backflow Preventer	_____
_____	Greasetrap	_____
_____	Sewer Connection	_____
_____	Water Service Connection	_____
_____	Stacks	_____
_____	Garbage Disposal	_____
_____	Other <u>RTU</u>	_____

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Administrative Surcharge \$ _____
Minimum Fee \$ _____
State Permit Surcharge Fee \$ _____
TOTAL FEE \$ _____

100

100

100

100



CONSTRUCTION PERMIT

Date Issued 4/9/2019
Control # C-19-001208
Permit # 19-0838

IDENTIFICATION Block: 701.29 Lot: 1 Qualifier _____
Work Site Location: 270 CHAMBERS BRIDGE RD. Brick Township, NJ Contractor BILL LEARY A/C & HEATING- WHL ENTERPRISES INC
Owner in Fee TOWNSHIP OF BRICK Address 6 GREEN ST. METUCHEN NJ
401 CHAMBERS BRIDGE RD. BRICK NJ 08723 Telephone: (732) 494-9200
Telephone: _____ Lic. No. or Bldrs. Reg. No. 13VH00113800 19HC00528800
Federal Employee No. 22-3224342

Is hereby granted permission to perform the following work:

- | | | |
|--|--|--|
| ☒ BUILDING | ☒ PLUMBING | ☐ LEAD HAZARD ABATEMENT |
| ☒ ELECTRICAL | ☐ FIRE PROTECTION | ☐ DEMOLITION |
| ☐ ELEVATOR DEVICES | ☐ ASBESTOS ABATEMENT
(Subchapter 8 only) | ☐ OTHER |

DESCRIPTION OF WORK:

HVAC - OSCAR'S PIZZA...REPLACE RTU - COOLING ONLY

Note: If construction does not commence within one (1) year of date of issuance, or if construction ceases for a period of six (6) months, this permit is void.

Estimated Cost of Work \$11,150

D. Newman
Construction Official

4/9/19
Date

U.C.C. F170
equiv (rev 1/04)

1 WHITE - INSPECTOR

2 CANARY - OFFICE

3 PINK - TAX ASSESSOR

4 GOLD - APPLICANT

PAYMENTS (Office Use Only)

Building	_____	\$0
Electrical	_____	\$0
Plumbing	_____	\$0
Fire Protection	_____	\$0
Elevator Devices	_____	\$0
Other	_____	\$0.00
DCA Training Fee	_____	\$0
CO Fee	_____	
Other	_____	\$0
Total	_____	\$0
Check No.	_____	
Cash	_____	\$0
Credit	_____	\$0
Collected By	_____	

REQUIRED INSPECTIONS

Construction work must be inspected in accordance with the State Uniform Construction Code Regulations N.J.A.C. 5:23-2.18. This agency will carry out such periodic inspections during the progress of work as are necessary to insure that the work installed conforms with the requirements of the Uniform Construction Code.

The owner or other responsible person in charge of work must notify this agency when work is ready for any required inspections specified below. Requests for inspections must be made at least 24 hours prior to the time the inspection is desired. Inspections will be performed within three business days of the time for which they are requested. The work must not proceed in a manner which will preclude the inspection until it has been made and approval granted.

☐ Required inspections for all subcodes for one- and two-family dwellings are as follows:

1. The bottom of footing trenches before placement of footings, except that in cases of pile foundations, inspections shall be made in accordance with the requirements of the building subcode.
2. Foundations and all walls up to grade level prior to back filling.
3. All structural framing, connections, wall and roof sheathing and insulation; electrical rough wiring, panel and service installation; rough plumbing. The framing inspection shall take place after the rough electrical and plumbing inspections and after the installation of the heating, ventilation and /or air conditioning duct system. The insulation inspection shall be performed after all other subcode rough inspections and prior to the installation of any interior finish material.
4. Installation of all finished materials, sealings of exterior joints, plumbing piping, trim and fixtures; electrical wiring, devices and fixtures; mechanical systems equipment.

Additional required inspections for all subcodes of construction, for other than one- and two-family dwellings, are fire suppression systems, heat producing devices and Barrier Free subcode accessibility, if applicable.

☐ Required special inspections. The applicant by accepting the permit will be deemed to have consented to these requirements:

☒ A final inspection is required for each applicable subcode area before a final Certificate of Occupancy or Approval may be issued. The final inspections include the installation of all interior and exterior finish materials, sealing of exterior joints, mechanical system and other required equipment; electrical wiring, devices and fixtures; plumbing pipes, trim and fixtures; tests required by any provision of the adopted subcodes, Barrier Free accessibility, if applicable; and verification of compliance with NJAC 5:23-3.5, "Posting structures"

☐ A complete copy of released plans must be kept on the job site.

If you do not understand any of this information, please ask.

Nichol Ponsi

From: Carolyn Lakatos <carolyn@billeary.net>
Sent: Friday, April 05, 2019 9:58 AM
To: Nichol Ponsi
Subject: RE: Permit/270 Chambers Bridge Rd Brick Application

The weight for the old unit is 465 Plus the curb adapter 115 Total 580 the first attachment Page 3 column 006

The weight for the new unit is 552 second attachment Page 11 50KC 06

Please let me know if you need any further information

Thank you

Carolyn Lakatos
Bookkeeper
WHL Enterprises, Inc. T/A
Bill Leary A/C & Heating
6 Green Street
Metuchen, NJ 08840
Carolyn@billeary.net
732-494-9200 Ext 205
732-632-9898 Fax
William H. Leary IV
Master HVACR Contractor Lic. # 19HC00528800 NJ HIC REG #13VH00113800

From: Nichol Ponsi <nponsi@twp.brick.nj.us>
Sent: Friday, April 5, 2019 9:20 AM
To: Carolyn Lakatos <carolyn@billeary.net>
Subject: RE: Permit/270 Chambers Bridge Rd Brick Application

Can you just send me weight of old and new unit.
Thank you

From: Carolyn Lakatos [<mailto:carolyn@billeary.net>]
Sent: Thursday, April 04, 2019 4:22 PM
To: Nichol Ponsi
Subject: Permit/270 Chambers Bridge Rd Brick Application

Hi Nicole

Attached above are the cut sheets for the new (1st attachment) and the old (2nd attachment) units

It will be an exact replacement.

Please call me if you have any questions or if you need any further information before processing our permit.

50KC

Cooling Only/Electric Heat

Packaged Rooftop

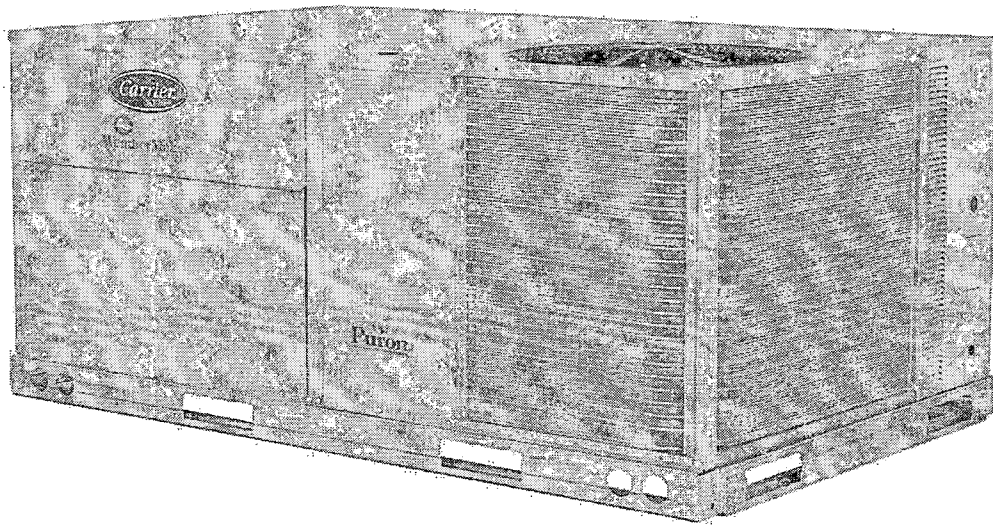
14 SEER

3 to 5 Nominal Tons



United Technologies
turn to the experts

Product Data



C08613



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50KC



Turn to the Experts.

The Carrier rooftop unit (RTU) was designed by customers for customers. With no-strip screw collars, handled access panels, and more we've made your unit easy to install, easy to maintain and easy to use.

Easy to install:

All WeatherMaker® units are field-convertible to horizontal air flow which makes it easy to adjust to unexpected job site complications. Lighter units make easy replacement. Carrier 50KC rooftops fit on existing Carrier curbs dating back to 1989. Also, our large control box gives you room to work and room to mount Carrier accessory controls.

Easy to maintain:

Easy access handles by Carrier provide quick and easy access to all normally serviced components. Our "no-strip" screw system has superior holding power and guides screws into position while preventing the screw from stripping the unit's metal. Take accurate pressure readings by reading condenser pressure with panels on. Simply remove the black, composite plug, route your gauge line(s) through the hole, and connect them to the refrigeration service valve(s).

Easy to use:

The newly designed, central terminal board by Carrier puts all your connections and troubleshooting points in one convenient place, standard. Most low voltage connections are made to the same board and make it easy to find what you're looking for and easy to access it. Carrier rooftops have high and low pressure switches, a filter drier, and 2-in (51mm) filters standard.

FEATURES AND BENEFITS

- Single-stage cooling capacity control on 04 to 06 models.
- SEER's up to 14.1.
- EER's up to 12.0
- Up to 28% lighter than similar industry units. Lighter rooftops make easier replacement jobs.
- 3-5 ton units fit on existing Carrier rooftop curbs making the utility connections the same. This saves time and money on replacement jobs.
- Standardized components and layout. Standardized components and controls make service and stocking parts easier.
- Scroll compressors on all units. This makes service, stocking parts, replacement, and troubleshooting easier.
- Field convertible airflow (3-5 tons). Being able to convert a unit from vertical airflow to horizontal makes it easy to overcome job site complications.
- Standard Direct Drive - ECM indoor motor with optional belt drive system to meet nearly all applications.
- Provisions for bottom or side condensate drain.
- Capable of thru-the-base or thru-the-curb electrical routing.
- Single-point electrical connection.
- Sloped, composite drain pan sheds water; and won't rust.
- Standardized controls and control box layout. Standardized components and controls make stocking parts and service easier.
- Clean, large, easy to use control box.
- Color-coded wiring.
- Large, laminated wiring and power wiring drawings which are affixed to unit make troubleshooting easy.
- Single, central terminal board for test and wiring connections.
- Fast-access, handled, panels for easy access to the blower and blower motor, control box, and compressors.
- "No-strip" screw system guides screws into the panel and captures them tightly without stripping the screw, the panel, or the unit.
- Exclusive, newly-design indoor refrigerant header for easier maintenance and replacement.
- Mechanical cooling (115°F to 40°F or 46°C to 4°C) standard on all models. Winter start kit allows cooling operation down to 25°F (-4°C) and MotorMaster to -20°F (-29°C).
- 2-in (51mm) disposable filters on all units.
- Refrigerant filter-drier on each circuit.
- High and low pressure switches. Added reliability with high pressure switch and low pressure switch.
- Factory-installed Humidi-MiZer® adaptive dehumidification system on all sizes with round tube/plate fin condenser coils, includes MotorMaster I controller.

50KC

MODEL NUMBER NOMENCLATURE

Position:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Example:	5	0	K	C	-	A	0	4	A	1	A	5	-	0	A	0	A	0

Unit Heat Type
50 - Electric Heat
Packaged Rooftop

Model Series - WeatherMaker®
KC - Standard 14 SEER Efficiency

Heat Options
- - No heat

Refrig. Systems Options
A = Standard One-Stage cooling models
B = Standard One-Stage cooling models
with Humidi-MiZer®

Cooling Tons
04 - 3 ton
05 - 4 ton
06 - 5 ton

Sensor Options
A = None
B = RA Smoke Detector
C = SA Smoke Detector
D = RA + SA Smoke Detector
E = CO₂
F = RA Smoke Detector and CO₂
G = SA Smoke Detector and CO₂
H = RA + SA Smoke Detector and CO₂

Indoor Fan Options
0 = Direct Drive ECM
2 = Medium Static Option
3 = High Static Option

**Coil Options for Round Tube/Plate Fin Condenser Coil
(Outdoor - Indoor - Hail Guard)**
A = Al/Cu - Al/Cu
B = Precoat Al/Cu - Al/Cu
C = E-coat Al/Cu - Al/Cu
D = E-coat Al/Cu - E-coat Al/Cu
E = Cu/Cu - Al/Cu
F = Cu/Cu - Cu/Cu
M = Al/Cu - Al/Cu — Louvered Hail Guard
N = Precoat Al/Cu - Al/Cu — Louvered Hail Guard
P = E-coat Al/Cu - Al/Cu — Louvered Hail Guard
Q = E-coat Al/Cu - E-coat Al/Cu — Louvered Hail Guard
R = Cu/Cu - Al/Cu — Louvered Hail Guard
S = Cu/Cu - Cu/Cu — Louvered Hail Guard

Factory Assigned
0 = Standard
1 = LTL

Electrical Options
A = None
C = Non-Fused Disconnect
D = Thru-The-Base Connections
F = Non-Fused Disconnect and
Thru-The-Base Connections

Service Options
0 = None
1 = Unpowered Convenience Outlet
2 = Powered Convenience Outlet
3 = Hinged Panels
4 = Hinged Panels and
Unpowered Convenience Outlet
5 = Hinged Panels and
Powered Convenience Outlet

Intake / Exhaust Options
A = None
B = Temperature Economizer w/ Barometric Relief
F = Enthalpy Economizer w/ Barometric Relief
K = 2-Position Damper
U = Temperature Ultra Low Leak Economizer w/
Barometric Relief
W = Enthalpy Ultra Low Leak Economizer w/
Barometric Relief

Base Unit Controls
0 = Electro-mechanical Controls can be used with W7212
EconoMiSer IV (Non-Fault Detection and Diagnostic)
1 = PremierLink Controller
2 = RTU Open Multi-Protocol Controller
6 = Electro-mechanical with W7220 Economizer
controller Controls. Can be used with W7220
EconoMiSer X (with Fault Detection and Diagnostic)

Design Revision
- = Factory Design Revision

Voltage
1 = 575/3/60
3 = 208-230/1/60
5 = 208-230/3/60
6 = 460/3/60

**Note: On single phase (-3 voltage code) models, the
following are not available as a factory installed option:**
- Humidi-MiZer
- Coated Coils or Cu Fin Coils
- Louvered Hail Guards
- Economizer or 2 Position Damper
- Powered 115 Volt Convenience Outlet

C14250

Table 1 – FACTORY-INSTALLED OPTIONS AND FIELD-INSTALLED ACCESSORIES

CATEGORY	ITEM	FACTORY INSTALLED OPTION	FIELD INSTALLED ACCESSORY
Cabinet	Thru—the—base electrical connections	X	X
	Hinged Access Panels	X	
Coil Options	Cu/Cu indoor and/or outdoor coils ⁵	X	
	Pre—coated outdoor coils ⁵	X	
	Premium, E—coated outdoor coils ⁵	X	
Humidity Control	Humidi—MiZer Adaptive Dehumidification System ⁵	X	
Condenser Protection	Condenser coil hail guard (louvered design) ⁵	X	X
Controls	Thermostats, temperature sensors, and subbases		X
	PremierLink DDC communicating controller	X	X
	RTU Open —protocol controller	X	
	Smoke detector (supply and/or return air)	X	
	Time Guard II compressor delay control circuit		X
	Phase Monitor		X
Economizers & Outdoor Air Dampers	EconoMi\$er IV (for electro—mechanical controlled – Non FDD (Standard air leak damper models) ^{5, 6}	X	X
	EconoMi\$er2 for DDC controls, complies with FDD (Standard and Ultra Low Leak air damper models) ^{5, 7}	X	X
	Motorized 2 position outdoor—air damper ⁵	X	X
	Manual outdoor—air damper (25% and 50%)		X
	Barometric relief ¹	X	X
	Power exhaust		X
	EconoMi\$er X for electro—mechanical controls, complies with FDD (Standard and Ultra Low Leak air damper models) ^{5, 6}	X	X
Economizer Sensors & IAQ Devices	Single dry bulb temperature sensors ²	X	X
	Differential dry bulb temperature sensors ²		X
	Single enthalpy sensors ²	X	X
	Differential enthalpy sensors ²		X
	CO ₂ sensor (wall, duct, or unit mounted) ²	X	X
Electric Heat	Electric Resistance Heaters		X
	Single Point Kit		X
Indoor Motor & Drive	Multiple motor and drive packages	X	
Low Ambient Control	Winter start kit ³		X
	Motormaster® head pressure controller ³		X
Power Options	Convenience outlet (powered) ⁵	X	
	Convenience outlet (unpowered)	X	
	Non—fused disconnect ⁴	X	
Roof Curbs	Roof curb 14—in (356mm)		X
	Roof curb 24—in (610mm)		X

NOTES:

1. Included with economizer.
2. Sensors for optimizing economizer.
3. See application data for assistance.
4. Available on units with MOCP's of 80 amps or less.
5. Not available as factory installed option on single phase (208/230/1/60) models. Use field—installed accessory where available.
6. FDD – (Fault Detection and Diagnostic) capability per California Title 24 section 120.2
7. Models with RTU Open DDC controls comply with California Title 24 Fault Detection and Diagnostic (FDD). PremierLink is non FDD.

FACTORY OPTIONS AND/OR ACCESSORIES

Economizer

Economizers save energy, money and improve comfort levels in the conditioned space. They bring in fresh, outside air for ventilation; and provide cool outside air to cool your building. This also is the preferred method of low ambient cooling. When integrated with CO₂ sensors, economizers can provide even more savings by coupling the ventilation air to only that amount required based on space occupancy. Economizers are available, installed and tested by the factory, with either enthalpy or temperature dry-bulb inputs. There are also models for electromechanical and direct digital controllers. Additional sensors are available as accessories to optimize the economizer. Economizers include gravity controlled barometric relief that helps equalize building pressure and ambient air pressures. This can be a cost effective solution to prevent building pressurization. Economizers are available in Ultra Low Leak and standard low leak versions.

CO₂ Sensor

Improves productivity and saves money by working with the economizer to intake only the correct amount of outside air for ventilation. As occupants fill your building, the CO₂ sensor detects their presence through increasing CO₂ levels, and opens the economizer appropriately.

When the occupants leave, the CO₂ levels decrease, and the sensor appropriately closes the economizer. This intelligent control of the ventilation air, called Demand Control Ventilation (DCV) reduces the overall load on the rooftop, saving money.

Smoke Detectors

Trust the experts. Smoke detectors make your application safer and your job easier. Carrier smoke detectors immediately shut down the rooftop unit when smoke is detected. They are available, installed by the factory, for supply air, return air, or both.

Louvered Hail Guards

Sleek, louvered panels protect the condenser coil from hail damage, foreign objects, and incidental contact.

Convenience Outlet (powered or un-powered)

Reduce service and/or installation costs by including a convenience outlet in your specification. Carrier will install this service feature at our factory. Provides a convenient, 15 amp, 115v GFCI receptacle with "Wet in Use" cover. The "powered" option allows the installer to power the outlet from the line side of the disconnect or load side as required by code. The "unpowered" option is to be powered from a separate 115/120v power source.

Non-fused Disconnect

This OSHA-compliant, factory-installed, safety switch allows a service technician to locally secure power to the rooftop.

Power Exhaust with Barometric Relief

Superior internal building pressure control. This field-installed accessory may eliminate the need for costly, external pressure control fans.

PremierLink, DDC Controller

This CCN controller regulates your rooftop's performance to tighter tolerances and expanded limits, as well as facilitates zoning systems and digital accessories. It also unites your Carrier HVAC equipment together on one, coherent CCN network. The PremierLink can be factory-installed, or easily field-installed.

RTU Open, Multi-protocol Controller

Connect the rooftop to an existing BAS without needing complicated translators or adapter modules using the RTU Open controller. This new controller speaks the 4 most common building automation system languages (Bacnet, Modbus, N2, and Lonworks). Use this controller when you have an existing BAS.

Time Guard II Control Circuit

This accessory protects your compressor by preventing short-cycling in the event of some other failure, prevents the compressor from restarting for 30 seconds after stopping. Not required with PremierLink, RTU Open, or authorized commercial thermostats.

Filter or Fan Status Switches

Use these differential pressure switches to detect a filter clog or indoor fan motor failure. When used in conjunction with a compatible unit controller/thermostat, the switches will activate an alarm to warn the appropriate personnel.

Motorized 2-Position Damper

The new Carrier 2-position, motorized outdoor air damper admits up to 100% outside air. Using reliable, gear-driven technology, the 2-position damper opens to allow ventilation air and closes when the rooftop stops, stopping unwanted infiltration.

Manual OA Damper

Manual outdoor air dampers are an economical way to bring in ventilation air. The dampers are available in 25% and 50% versions.

FACTORY OPTIONS AND/OR ACCESSORIES (cont.)

Optional Humidi-MiZer Adaptive Dehumidification System

Carrier's Humidi-MiZer adaptive dehumidification system is an all-inclusive factory-installed option that can be ordered with any WeatherMaker 50KC-B04-06 rooftop unit.

This system expands the envelope of operation of Carrier's WeatherMaker rooftop products to provide unprecedented flexibility to meet year-round comfort conditions.

The Humidi-MiZer adaptive dehumidification system has the industry's only dual dehumidification mode setting. The Humidi-MiZer system includes two new modes of operation.

The WeatherMaker 50KC-B04-06 rooftop coupled with the Humidi-MiZer system is capable of operating in normal design cooling mode, subcooling mode, and hot gas reheat mode. Normal design cooling mode is when the unit will operate under its normal sequence of operation by cycling compressors to maintain comfort conditions.

Subcooling mode will operate to satisfy part load type conditions when the space requires combined sensible and a higher proportion of latent load control. Hot Gas Reheat mode will operate when outdoor temperatures diminish and the need for latent capacity is required for sole humidity control. Hot Gas Reheat mode will provide neutral air for maximum dehumidification operation.

Motormaster Head Pressure Controller

The Motormaster motor controller is a low ambient, head pressure controller kit that is designed to maintain the unit's condenser head pressure during periods of low ambient cooling operation. This device should be used as an alternative to economizer free cooling when economizer usage is either not appropriate or desired. The Motormaster will either cycle the outdoor fan motors or operate them at reduced speed to maintain the unit operation, depending on the model.

Hinged Access Panels

Allows access to unit's major components with specifically designed hinged access panels. Panels are: filters, control box, fan motor and compressor.

Winter Start Kit

The winter start kit by Carrier extends the low ambient limit of your rooftop to 25°F (-4°C). The kit bypasses the low pressure switch, preventing nuisance tripping of the low pressure switch. Other low ambient precautions may still be prudent.

Alternate Motors and Drives

Some applications need larger horsepower motors, some need more airflow, and some need both. Regardless of the case, your Carrier expert has a factory installed combination to meet your application. A wide selection of motors and pulleys (drives) are available, factory installed, to handle nearly any application.

Thru-the-Base Connections

Thru-the-base connections, available as either an accessory or as a factory option, are necessary to ensure proper connection and seal when routing wire and piping through the rooftop's basepan and curb. These couplings eliminate roof penetration and should be considered for gas lines, main power lines, as well as control power.

Electric Heaters

Carrier offers a full-line of field-installed accessory heaters. The heaters are very easy to use, install and are all pre-engineered and certified.

Table 2 – AHRI COOLING RATING TABLES

UNIT	COOLING STAGES	NOM. CAPACITY (TONS)	NET COOLING CAPACITY (MBH)	TOTAL POWER (KW)	SEER	EER
50KC-*04	1	3	35.4	3.0	14.0	12.00
50KC-*05	1	4	47.5	4.0	14.0	12.00
50KC-*06	1	5	58.5	4.9	14.1	12.00

LEGEND

- AHRI – Air Conditioning, Heating and Refrigeration Institute
 ASHRAE – American Society of Heating, Refrigerating and Air Conditioning, Inc.
 EER – Energy Efficiency Ratio
 SEER – Seasonal Energy Efficiency Ratio

NOTES

1. Rated and certified under AHRI Standard 210/240.
2. Ratings are based on:
Cooling Standard: 80°F (27°C) db, 67°F (19°C) wb indoor air temp and 95°F db outdoor air temp.
3. All 50KC units comply with ASHRAE 90.1 and Department of Energy (DOE) Energy Standard for minimum SEER and EER requirements.
4. 50KC units comply with US Energy Policy Act (2005). To evaluate code compliance requirements, refer to state and local codes.



Use of the AHRI Certified TM Mark indicates a manufacturer's participation in the program. For verification of certification for individual products, go to www.ahridirectory.org.



Table 3 – MINIMUM - MAXIMUM AIRFLOWS COOLING AND ELECTRIC HEAT

UNIT	COOLING		ELECTRIC HEATERS	
	Minimum	Maximum	Minimum	Maximum
50KC-*04	900	1500	900	1500
50KC-*05	1200	2000	1200	2000
50KC-*06	1500	2500	1500	2500

Table 4 – SOUND PERFORMANCE TABLE

UNIT	COOLING STAGES	OUTDOOR SOUND (dB) @60HZ								
		A-WEIGHTED	63	125	250	500	1000	2000	4000	8000
50KC-*04	1	76	78.2	78.0	74.2	73.3	70.6	66.0	62.4	56.9
50KC-*05	1	81	90.9	84.6	79.5	77.9	76.5	71.1	66.9	62.5
50KC-*06	1	77	87.5	82.5	76.1	73.6	71.3	67.1	64.1	60.0

LEGEND

dB – Decibel

NOTES:

1. Outdoor sound data is measure in accordance with AHRI standard 270.
2. Measurements are expressed in terms of sound power. Do not compare these values to sound pressure values because sound pressure accounts for specific environmental factors which do not match individual applications. Sound power values are independent of the environment and therefore more accurate.
3. A-weighted sound ratings filter out very high and very low frequencies, to better approximate the response of an "average" human ear. A-weighted measurements for Carrier units are taken in accordance with 270.



Table 5 – PHYSICAL DATA

(COOLING)

3 - 6 TONS

Refrigeration System		50KC – A/B04	50KC – A/B05	50KC – A/B06
# Circuits / # Comp. / Type		1 / 1 / Scroll	1 / 1 / Scroll	1 / 1 / Scroll
Puron® refig. (R-410A) 1 phase (lbs-oz)		7-2	10-8	16-0
Puron® refig. (R-410A) 3 phase (lbs-oz)		7-2	10-8	14-8
Humidi-MiZer Puron® refig. charge (lbs - oz)		10-6	15-5	26-0
Metering Device (A)		Acutrol	Acutrol	Acutrol
Humidi-MiZer Metering Device (B)		Acutrol + TXV	Acutrol + TXV	Acutrol + TXV
High-press. Trip / Reset (psig)		630 / 505	630 / 505	630 / 505
Low-press. Trip / Reset (psig)		54 / 117	54 / 117	54 / 117
Compressor Capacity Staging (%)		100%	100%	100%
Evap. Coil				
Material (Tube/Fin)		Cu / Al	Cu / Al	Cu / Al
Coil type		3/8-in RTPF	3/8-in RTPF	3/8-in RTPF
Rows / FPI		3 / 15	3 / 15	4 / 15
Total Face Area (ft²)		5.5	5.5	7.3
Condensate Drain Conn. Size		3/4-in	3/4-in	3/4-in
Humidi-MiZer® Coil				
Material (Tube/Fin)		Cu / Al	Cu / Al	Cu / Al
Coil type		3/8-in RTPF	3/8-in RTPF	3/8-in RTPF
Rows / FPI		1 / 17	2 / 17	2 / 17
Total Face Area (ft²)		3.9	3.9	5.2
Evap. Fan and Motor				
Standard Static 1 phase	Motor Qty / Drive Type	1/ Direct	1/ Direct	1/ Direct
	Max BHP	1	1	1
	RPM Range	600-1200	600-1200	600-1200
	Motor Frame Size	48	48	48
	Fan Qty / Type	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal
Medium Static 1 phase	Fan Diameter (in)	10 x 10	10 x 10	10 x 10
	Motor Qty / Drive Type	1/ Belt	1/ Belt	1/ Belt
	Max BHP	1.2	1.2	1.5
	RPM Range	770-1175	770-1175	1035-1466
	Motor Frame Size	48	48	56
High Static 1 phase	Fan Qty / Type	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal
	Fan Diameter (in)	10 x 10	10 x 10	10 x 10
	Motor Qty / Drive Type	1/ Belt	1/ Belt	N/A
	Max BHP	1.5	1.5	N/A
	RPM Range	1035-1466	1035-1466	N/A
Standard Static 3 phase	Motor Frame Size	56	56	N/A
	Fan Qty / Type	1 / Centrifugal	1 / Centrifugal	N/A
	Fan Diameter (in)	10 x 10	10 x 10	N/A
	Motor Qty / Drive Type	1/ Direct	1/ Direct	1/ Direct
	Max BHP	1	1	1
Medium Static 3 phase	RPM Range	600-1200	600-1200	600-1200
	Motor Frame Size	48	48	48
	Fan Qty / Type	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal
	Fan Diameter (in)	10 x 10	10 x 10	11 x 10
	Motor Qty / Drive Type	1/ Belt	1/ Belt	1/ Belt
High Static 3 phase	Max BHP	1.7	1.7	2.9
	RPM Range	770-1175	920-1303	1035-1466
	Motor Frame Size	48	56	56
	Fan Qty / Type	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal
	Fan Diameter (in)	10 x 10	10 x 10	10 x 10
Cond. Coil 1 phase	Motor Qty / Drive Type	1/ Belt	1/ Belt	1/ Belt
	Max BHP	2.9	2.9	2.9
	RPM Range	1035-1466	1208-1639	1303-1687
	Motor Frame Size	56	56	56
	Fan Qty / Type	1 / Centrifugal	1 / Centrifugal	1 / Centrifugal
3 phase	Fan Diameter (in)	10 x 10	10 x 10	10 x 10
	Material (Tube/Fin)	Cu / Al	Cu / Al	Cu / Al
	Coil type	3/8-in RTPF	3/8-in RTPF	3/8-in RTPF
	Rows / FPI	1 / 17	2 / 17	2 / 17
	Total Face Area (ft²)	16.5	16.5	21.3
Cond. fan / motor	Material (Tube/Fin)	Cu / Al	Cu / Al	Cu / Al
	Coil type	3/8-in RTPF	3/8-in RTPF	3/8-in RTPF
	Rows..Fins/in.	1 / 17	2 / 17	2 / 17
	Total Face Area (ft²)	16.5	14.6	18.8
	Qty / Motor Drive Type	1/ Direct	1/ Direct	1/ Direct
Filters	Motor HP / RPM	1/8 / 825	1/4 / 1100	1/4 / 1100
	Fan diameter (in)	22	22	22
	RA Filter # / Size (in)	2 / 16 x 25 x 2	2 / 16 x 25 x 2	4 / 16 x 25 x 2
OA inlet screen # / Size (in)		1 / 20 x 24 x 1	1 / 20 x 24 x 1	1 / 20 x 24 x 1

50KC

N/A – Not Available

NOTES:

1. DIMENSIONS ARE IN INCHES, DIMENSIONS IN [] ARE IN MILLIMETERS.
2.  CENTER OF GRAVITY
3.  DIRECTION OF AIR FLOW

UNIT	J	K (1 PHASE)	K (3 PHASE)
50KC 04	33 3/8 [847]	14 7/8 [377]	14 7/8 [377]
50KC 05	33 3/8 [847]	14 7/8 [377]	18 5/8 [472]
50KC 06	41 3/8 [1051]	14 7/8 [377]	18 5/8 [472]



UNITED
TECHNOLOGIES
CARRIER

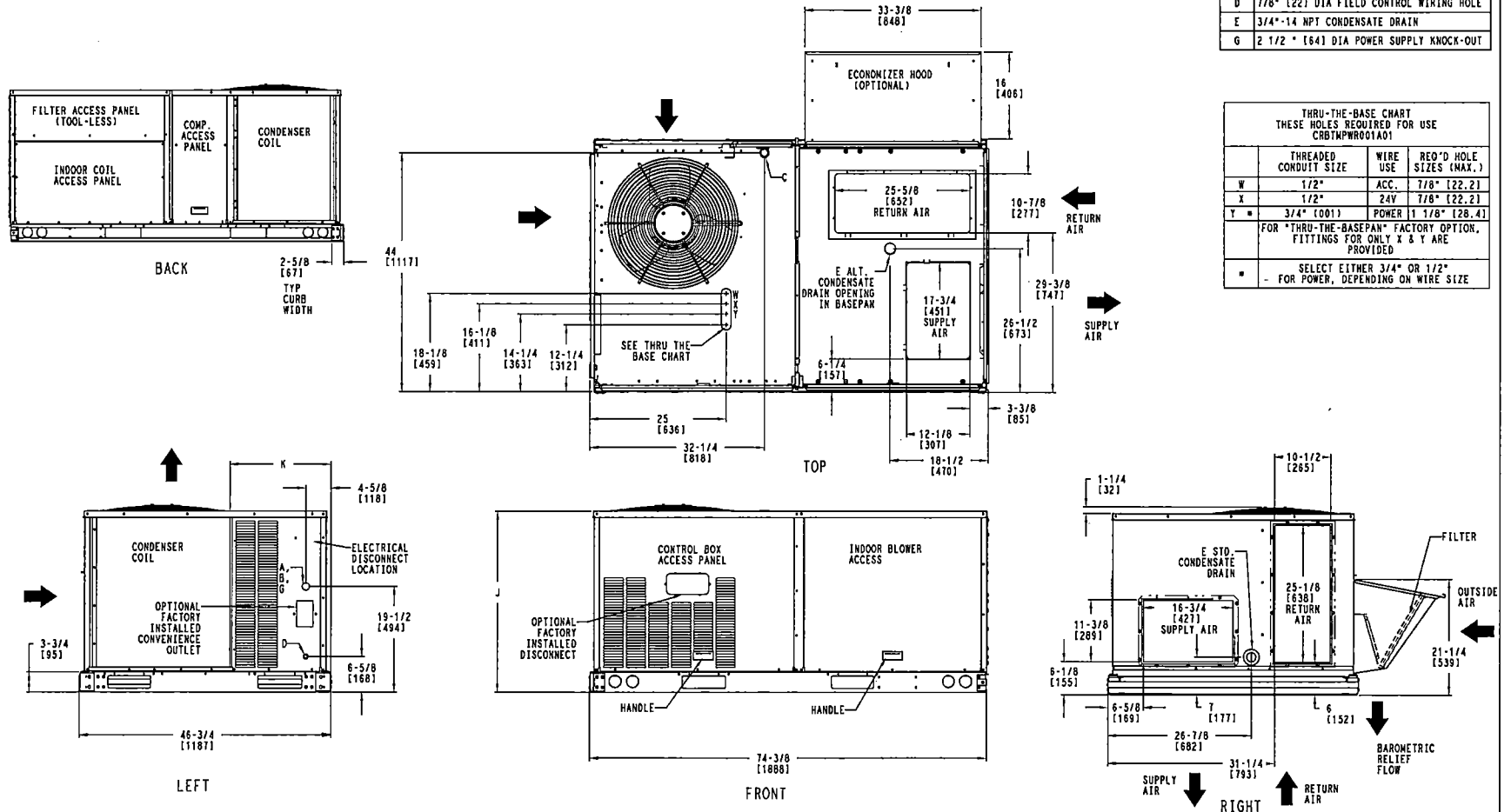
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SIRACUSE, NY
13221

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CONNECTION SIZES	
A	1 3/8" [35] DIA. FIELD POWER SUPPLY HOLE
B	2" [51] DIA. POWER SUPPLY KNOCKOUT
C	1 3/4" [44] DIA. GAUGE ACCESS PLUG
D	7/8" [22] DIA. FIELD CONTROL WIRING HOLE
E	3/4"-14 NPT CONDENSATE DRAIN
G	2 1/2" [64] DIA. POWER SUPPLY KNOCK-OUT

THRU-THE-BASE CHART THESE HOLES REQUIRED FOR USE CRBTHPWR001A01		
THREADED CONDUIT SIZE	WIRE USE	REQ'D HOLE SIZES (MAX.)
W	1/2"	ACC. 7/8" [22.2]
X	1/2"	24V 7/8" [22.2]
Y	3/4" [001]	POWER 1 1/8" [28.4]
FOR "THRU-THE-BASEPAN" FACTORY OPTION, FITTINGS FOR ONLY X & Y ARE PROVIDED		
* SELECT EITHER 3/4" OR 1/2" - FOR POWER, DEPENDING ON WIRE SIZE		

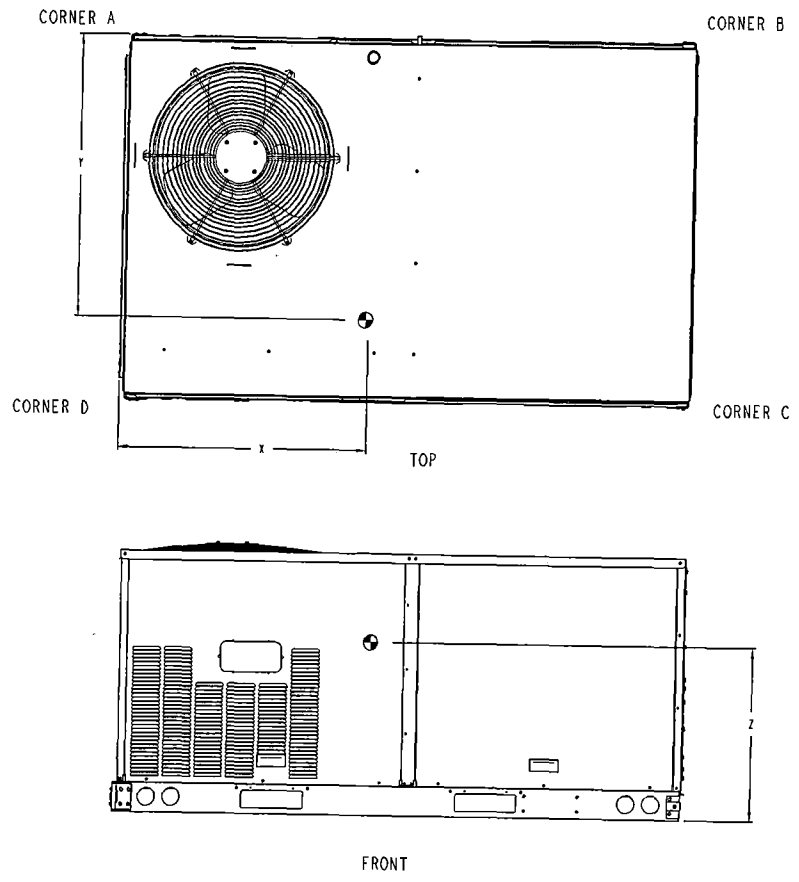


SHEET	DATE	SUPERCODES	50KC 04-06 SINGLE ZONE ELECTRICAL COOLING WITH ELECTRIC HEAT	48KC000282	REV
1 OF 2	08-14-14	-			-

Fig. 1 - Dimensions 50KC 04-06 (sheet 1 of 2)

UNIT	STD. UNIT WEIGHT		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.			HEIGHT
	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z	
50KC 04	445	201	127	57	104	47	97	44	118	53	33 1/2 (851)	22 1/2 (571)	19 3/4 (501)	
50KC 05	499	226	140	63	118	53	110	50	130	59	34 1/8 (866)	22 1/2 (571)	19 3/4 (501)	
50KC 06	552	250	143	65	149	67	133	60	127	57	38 (965)	22 (559)	20 3/4 (527)	

* STANDARD UNIT WEIGHT IS WITHOUT ELECTRIC HEAT AND WITHOUT PACKAGING.
FOR OTHER OPTIONS AND ACCESSORIES, REFER TO THE PRODUCT DATA CATALOG.



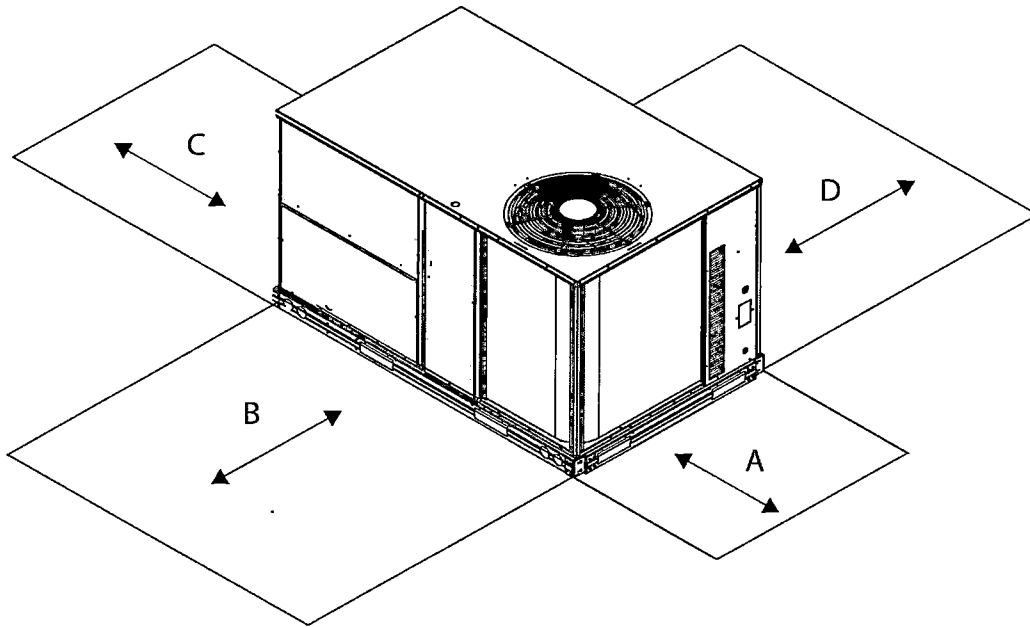
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SHEET 2 OF 2	DATE 08-14-14	SUPPERCEDES -	50KC 04-06 SINGLE ZONE ELECTRICAL COOLING WITH ELECTRIC HEAT	48KC000282	REV -
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50KC

Fig. 2 - Dimensions 50KC 04-06 (sheet 2 of 2)

CURBS, WEIGHTS & DIMENSIONS (cont.)



LOCATION	DIMENSION	CONDITION
A	48-in (1219 mm) 18-in (457 mm) 18-in (457 mm) 12-in (305 mm)	Unit disconnect is mounted on panel No disconnect, convenience outlet option Recommended service clearance Minimum clearance
B	42-in (1067 mm) 36-in (914 mm) Special	Surface behind servicer is grounded (e.g., metal, masonry wall) Surface behind servicer is electrically non-conductive (e.g., wood, fiberglass) Check sources of flue products within 10-ft of unit fresh air intake hood
C	36-in (914 mm) 18-in (457 mm)	Side condensate drain is used Minimum clearance
D	42-in (1067 mm) 36-in (914 mm) Special	Surface behind servicer is grounded (e.g., metal, masonry wall, another unit) Surface behind servicer is electrically non-conductive (e.g., wood, fiberglass) Check for adjacent units or building fresh air intakes within 10-ft (3 m) of this unit's flue outlet

C08337

NOTE: Unit not designed to have overhead obstruction. Contact Application Engineering for guidance on any application planning overhead obstruction or for vertical clearances.

Fig. 3 - Service Clearance

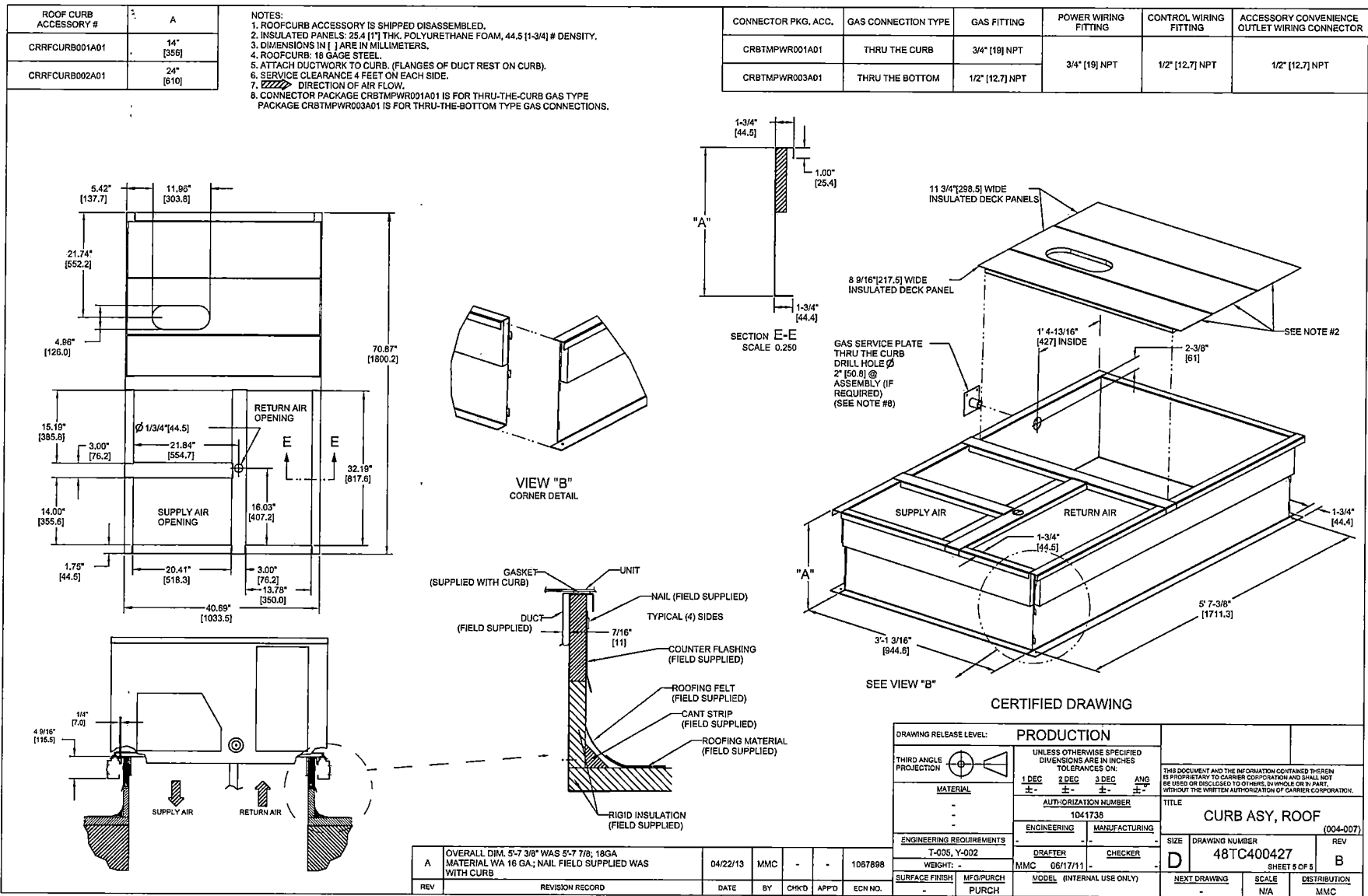


Fig. 4 - Roof Curb Details 50KC 04-06

OPTION / ACCESSORY WEIGHTS

OPTION / ACCESSORY	OPTION / ACCESSORY WEIGHTS					
	04		05		06	
	lb	kg	lb	kg	lb	kg
Humidi-MiZer ¹	50	23	50	23	55	25
Power Exhaust – vertical	45	20	45	20	45	20
Power Exhaust – horizontal	30	14	30	14	30	14
EconoMi\$er (IV, X or 2)	35	16	35	16	35	16
Two Position damper	39	18	39	18	39	18
Manual Dampers	12	5	12	5	12	5
Hail Guard (louvered)	13	6	13	6	17	8
Cu/Cu Condenser Coil ²	37	17	74	34	95	43
Cu/Cu Condenser and Evaporator Coils ²	75	34	112	51	165	75
Roof Curb (14–in. curb)	115	52	115	52	115	52
Roof Curb (24–in. curb)	197	89	197	89	197	89
CO ₂ sensor	2	1	2	1	2	1
Electric Heater	10	5	12	5	12	5
Single Point Kit	10	5	10	5	10	5
Optional Indoor Motor/Drive	6	3	6	3	17	8
Motor Master Controller	9	4	9	4	9	4
Return Smoke Detector	7	3	7	3	7	3
Supply Smoke Detector	7	3	7	3	7	3
Non–Fused Disconnect	5	2	5	2	5	2
Powered Convenience outlet	36	16	36	16	36	16
Non–Powered Convenience outlet	4	2	4	2	4	2
Enthalpy Sensor	2	1	2	1	2	1
Differential Enthalpy Sensor	3	1	3	1	3	1

NOTE: Where multiple variations are available, the heaviest combination is listed.

– Not Available

¹ For Humidi–MiZer add MotorMaster Controller.

² Where available.

APPLICATION DATA

Min operating ambient temp (cooling):

In mechanical cooling mode, your Carrier rooftop can safely operate down to an outdoor ambient temperature of 40°F (4°C) and 25°F (-4°C), with an accessory winter start kit. It is possible to provide cooling at lower outdoor ambient temperatures by using less outside air, economizers, and/or accessory low ambient kits.

Max operating ambient temp (cooling):

The maximum operating ambient temperature for cooling mode is 115°F (46°C). While cooling operation above 115°F (46°C) may be possible, it could cause either a reduction in performance, reliability, or a protective action by the unit's internal safety devices.

Min and max airflow (cooling mode):

To maintain safe and reliable operation of your rooftop, operate within the cooling airflow limits. Operating above the max may cause blow-off, undesired airflow noise, or airflow related problems with the rooftop unit. Operating below the min may cause problems with coil freeze-up.

Airflow:

All units are draw-through in cooling mode.

Outdoor air application strategies:

Economizers reduce operating expenses and compressor run time by providing a free source of cooling and a means of ventilation to match application changing needs. In fact, they should be considered for most applications. Also, consider the various economizer control methods and their benefits, as well as sensors required to accomplish your application goals. Please contact your local Carrier representative for assistance.

Motor limits, Brake horsepower (BHP):

Due to Carrier's internal unit design, air path, and specially designed motors, the full horsepower (maximum continuous BHP) band, as listed in the Physical Data table, can be used with the utmost confidence. There is no need for extra safety factors, as Carrier's motors are designed and rigorously tested to use the entire, listed BHP range without either nuisance tripping or premature motor failure.

Sizing a rooftop

Bigger isn't necessarily better. While an air conditioner needs to have enough capacity to meet the load, it doesn't need excess capacity. In fact, having excess capacity typically results in very poor part load performance and humidity control.

Using higher design temperatures than ASHRAE recommends for your location, adding "safety factors" to the calculated load, and rounding up to the next largest unit, are all signs of oversizing air conditioners. Oversizing can cause short-cycling, and short cycling leads to poor humidity control, reduced efficiency, higher utility bills, drastic indoor temperature swings, excessive noise, and increased wear and tear on the air conditioner.

Rather than oversizing an air conditioner, wise contractors and engineers "right-size" or even slightly undersize air conditioners. Correctly sizing an air conditioner controls humidity better; promotes efficiency; reduces utility bills; extends equipment life, and maintains even, comfortable temperatures. Please contact your local Carrier representative for assistance.

Low ambient applications

When equipped with a Carrier economizer, your rooftop unit can cool your space by bringing in fresh, cool outside air. In fact, when so equipped, accessory low ambient kit may not be necessary. In low ambient conditions, unless the outdoor air is excessively humid or contaminated, economizer-based "free cooling" is the preferred less costly and energy conscious method.

In low ambient applications where outside air might not be desired (such as contaminated or excessively humid outdoor environments), your Carrier rooftop can operate at ambient temperatures down to -20°F (-29°C) using the recommended accessory Motormaster low ambient controller.

Winter start

Carrier's winter start kit extends the low ambient limit of your rooftop to 25°F (-4°C). The kit bypasses the low pressure switch, preventing nuisance tripping of the low pressure switch. Other low ambient precautions may still be prudent.

Table 6 – COOLING CAPACITIES

1-STAGE COOLING

3 TONS

50KC+A04		Ambient Temperature															
		85			95			105			115						
		EA (dB)			EA (dB)			EA (dB)			EA (dB)						
		75	80	85	75	80	85	75	80	85	75	80	85				
900 Cfm		EAT (wb)		58	TC	28.7	28.7	32.6	25.1	25.1	28.6	22.2	22.2	25.3	19.5	19.5	22.2
					SHC	24.8	28.7	32.6	21.7	25.1	28.6	19.1	22.2	25.3	16.7	19.5	22.2
				62	TC	31.8	31.8	32.4	26.0	26.0	29.5	22.3	22.3	26.4	19.5	19.5	23.2
					SHC	23.3	27.9	32.4	20.6	25.0	29.5	18.1	22.3	26.4	15.8	19.5	23.2
				67	TC	36.5	36.5	36.5	34.2	34.2	34.2	29.2	29.2	23.7	23.7	23.7	23.7
1050 Cfm		EAT (wb)			SHC	19.4	24.0	28.5	18.4	22.9	27.4	16.2	20.8	25.3	14.1	18.6	23.1
				72	TC	40.3	40.3	40.3	38.2	38.2	38.2	35.6	35.6	35.6	32.4	32.4	32.4
					SHC	14.9	19.5	24.1	13.9	18.5	23.1	12.9	17.4	22.0	11.6	16.2	20.7
				76	TC	–	43.1	43.1	–	41.0	41.0	–	38.6	38.6	–	35.9	35.9
					SHC	–	15.7	20.6	–	14.8	19.8	–	13.9	18.8	–	12.8	17.6
1200 Cfm		EAT (wb)		58	TC	34.1	34.1	38.8	31.3	31.3	35.6	27.5	27.5	31.2	24.1	24.1	27.4
					SHC	29.5	34.1	38.8	27.0	31.3	35.6	23.7	27.5	31.2	20.7	24.1	27.4
				62	TC	34.9	34.9	39.1	32.9	32.9	35.5	27.5	27.5	32.6	24.1	24.1	28.6
					SHC	27.5	33.3	39.1	25.2	30.3	35.5	22.5	27.5	32.6	19.6	24.1	28.6
				67	TC	38.8	38.8	38.8	36.4	36.4	36.4	33.3	33.3	33.3	27.7	27.7	29.2
1350 Cfm		EAT (wb)			SHC	21.9	27.7	33.5	20.9	26.7	32.6	19.6	25.5	31.4	17.4	23.3	29.2
				72	TC	42.4	42.4	42.4	40.1	40.1	40.1	37.7	37.7	37.7	34.5	34.5	34.5
					SHC	15.8	21.6	27.4	14.9	20.7	26.5	13.9	19.8	25.6	12.7	18.7	24.6
				76	TC	–	44.9	44.9	–	42.7	42.7	–	40.3	40.3	–	37.7	37.7
					SHC	–	16.8	23.1	–	15.9	22.1	–	15.0	21.1	–	14.0	20.1
1500 Cfm		EAT (wb)		58	TC	35.6	35.6	40.4	33.6	33.6	38.1	29.8	29.8	33.9	26.2	26.2	29.8
					SHC	30.8	35.6	40.4	29.0	33.6	38.1	25.7	29.8	33.9	22.5	26.2	29.8
				62	TC	36.3	36.3	39.9	33.7	33.7	39.7	29.9	29.9	35.3	26.2	26.2	31.0
					SHC	28.2	34.1	39.9	27.6	33.7	39.7	24.4	29.9	35.3	21.4	26.2	31.0
				67	TC	39.5	39.5	39.5	37.2	37.2	37.2	34.0	34.0	34.0	29.3	29.3	32.0
1500 Cfm		EAT (wb)			SHC	22.9	29.4	35.8	22.0	28.5	34.9	20.8	27.3	33.9	18.9	25.4	32.0
				72	TC	43.0	43.0	43.0	40.7	40.7	40.7	38.3	38.3	38.3	35.2	35.2	35.2
					SHC	16.2	22.5	28.9	15.3	21.7	28.1	14.3	20.8	27.2	13.2	19.7	26.3
				76	TC	–	45.5	45.5	–	43.3	43.3	–	40.8	40.8	–	38.1	38.1
					SHC	–	17.3	24.0	–	16.4	23.1	–	15.4	22.1	–	14.5	21.1
1500 Cfm		EAT (wb)		58	TC	36.8	36.8	41.8	34.8	34.8	39.5	32.0	32.0	36.4	28.1	28.1	31.9
					SHC	31.9	36.8	41.8	30.1	34.8	39.5	27.7	32.0	36.4	24.2	28.1	31.9
				62	TC	36.9	36.9	43.5	35.4	35.4	38.8	32.1	32.1	37.9	28.1	28.1	33.3
					SHC	30.2	36.9	43.5	27.4	33.1	38.8	26.2	32.1	37.9	22.9	28.1	33.3
				67	TC	40.1	40.1	40.1	37.7	37.7	37.7	34.7	34.7	36.2	30.7	30.7	34.6
1500 Cfm		EAT (wb)			SHC	23.9	31.0	38.0	23.0	30.1	37.2	21.9	29.0	36.2	20.3	27.5	34.6
				72	TC	43.6	43.6	43.6	41.3	41.3	41.3	38.7	38.7	38.7	35.7	35.7	35.7
					SHC	16.5	23.4	30.2	15.6	22.5	29.5	14.7	21.7	28.6	13.6	20.8	27.9
				76	TC	–	46.0	46.0	–	43.7	43.7	–	41.2	41.2	–	38.5	38.5
					SHC	–	17.6	24.8	–	16.7	23.9	–	15.8	22.9	–	14.8	22.0

LEGEND:

- Do not operate
- Cfm Cubic feet per minute (supply air)
- EAT(db) Entering air temperature (dry bulb)
- EAT(wb) Entering air temperature (wet bulb)
- SHC Sensible heat capacity
- TC Total capacity

Table 7 – COOLING CAPACITIES

1-STAGE COOLING

3 TONS

50KC*B04 (3 TONS) – UNIT WITH HUMIDI-MIZER SYSTEM IN SUBCOOLING MODE										
TEMP (F) AIR ENT CONDENSER (Edb)		AIR ENTERING EVAPORATOR – SCFM								
		900			1200			1500		
		Air Entering Evaporator – Ewb (F)								
		72	67	62	72	67	62	72	67	62
75	TC	30.9	32.0	31.9	30.7	33.5	34.3	34.8	31.8	27.6
	SHC	15.1	20.0	26.3	25.1	20.4	15.4	14.0	18.2	21.9
	kW	2.51	2.49	2.42	2.82	2.74	2.68	3.09	3.01	2.88
85	TC	32.8	28.4	23.4	18.7	23.8	29.3	24.5	18.8	13.6
	SHC	11.0	14.6	17.9	13.4	10.3	7.1	2.6	5.6	8.6
	kW	3.36	3.23	3.06	3.62	3.41	3.24	3.79	3.58	3.39
95	TC	31.3	32.0	31.9	30.7	33.5	34.3	34.8	31.8	27.6
	SHC	15.3	20.0	26.3	25.1	20.4	15.4	14.0	18.2	21.9
	kW	2.53	2.49	2.41	2.82	2.74	2.68	3.09	3.01	2.88
105	TC	32.8	28.4	23.4	18.7	23.8	29.3	24.5	18.8	13.6
	SHC	11.0	14.6	17.9	13.4	10.3	7.1	2.6	5.6	8.6
	kW	3.36	3.23	3.06	3.62	3.41	3.24	3.79	3.58	3.39
115	TC	31.3	32.0	31.9	30.7	33.5	34.3	34.8	31.8	27.6
	SHC	15.3	20.0	26.3	25.1	20.4	15.4	14.0	18.2	21.9
	kW	2.53	2.49	2.41	2.82	2.74	2.68	3.09	3.01	2.88

50KC

50KC*B04 (3 TONS) – UNIT WITH HUMIDI-MIZER SYSTEM IN HOT GAS REHEAT MODE										
TEMP (F) AIR ENT CONDENSER (Edb)		AIR ENTERING EVAPORATOR – Ewb (F)								
		75 Dry Bulb 62.5 Wet Bulb (50% Relative)			75 Dry Bulb 64 Wet Bulb (56% Relative)			75 Dry Bulb 65.3 Wet Bulb (60% Relative)		
		Air Entering Evaporator – Cfm								
		900	1200	1500	900	1200	1500	900	1200	1500
80	TC	12.26	13.13	13.65	13.53	14.48	15.00	14.73	15.63	16.20
	SHC	1.76	3.87	6.09	0.75	2.48	4.33	-0.06	1.30	2.81
	kW	1.92	1.93	1.94	1.96	1.98	2.00	2.00	2.01	2.02
75	TC	14.64	15.64	16.30	15.84	16.73	17.32	16.80	17.38	17.91
	SHC	3.87	6.09	8.38	2.88	4.59	6.29	2.03	3.14	4.39
	kW	1.87	1.88	1.88	1.89	1.90	1.91	1.91	1.92	1.93
70	TC	16.72	17.62	18.01	17.42	18.17	18.62	18.02	18.69	18.87
	SHC	5.89	7.85	9.40	4.65	6.08	7.35	3.71	5.09	5.59
	kW	1.78	1.80	1.82	1.81	1.83	1.84	1.82	1.82	1.86
60	TC	17.43	18.50	18.28	18.09	19.03	19.41	18.32	18.29	19.33
	SHC	7.75	10.06	9.51	7.08	8.34	9.60	6.29	6.94	7.88
	kW	1.66	1.62	1.70	1.67	1.69	1.68	1.69	1.70	1.71
50	TC	17.82	18.59	19.72	18.31	19.73	20.26	18.76	20.21	20.73
	SHC	6.40	7.99	10.05	4.79	6.71	7.97	3.40	5.11	6.16
	kW	1.98	2.03	1.94	2.01	1.94	1.97	2.03	1.96	1.99
40	TC	17.70	19.38	19.85	19.10	20.30	20.34	19.53	20.76	21.26
	SHC	6.30	8.74	10.17	5.54	7.26	8.05	4.13	5.64	6.67
	kW	2.07	1.95	1.99	1.93	1.91	2.02	1.96	1.94	1.97

LEGEND

Edb – Entering Dry-Bulb
 Ewb – Entering Wet-Bulb
 kW – Compressor Motor Power Input
 ldb – Leaving Dry-Bulb
 lwb – Leaving Wet-Bulb
 SHC – Sensible Heat Capacity (1000 Btuh) Gross
 TC – Total Capacity (1000 Btuh) Gross

NOTES:

1. Direct interpolation is permissible. Do not extrapolate.
2. The following formulas may be used:

$$t_{db} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet-bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

Table 8 – COOLING CAPACITIES

1-STAGE COOLING

4 TONS

50KC*A05			Ambient Temperature												
			85			95			105			115			
			EA (dB)			EA (dB)			EA (dB)			EA (dB)			
			75	80	85	75	80	85	75	80	85	75	80	85	
1200 Cfm	EAT (wb)	58	TC	41.5	41.5	47.0	38.9	38.9	44.0	36.2	36.2	41.0	33.4	33.4	37.8
			SHC	36.1	41.5	47.0	33.8	38.9	44.0	31.4	36.2	41.0	28.9	33.4	37.8
		62	TC	44.9	44.9	44.9	41.4	41.4	42.6	37.8	37.8	40.8	34.0	34.0	38.8
			SHC	32.6	38.5	44.3	30.9	36.8	42.6	29.2	35.0	40.8	27.3	33.1	38.8
		67	TC	49.7	49.7	49.7	46.8	46.8	46.8	43.1	43.1	43.1	39.2	39.2	39.2
1400 Cfm	EAT (wb)	58	TC	26.5	32.4	38.2	25.3	31.1	37.0	23.7	29.6	35.5	22.1	27.9	33.8
			SHC	53.4	53.4	53.4	51.3	51.3	51.3	48.5	48.5	48.5	44.7	44.7	44.7
		72	TC	19.8	25.7	31.6	19.0	24.8	30.7	17.8	23.7	29.6	16.4	22.3	28.1
			SHC	—	55.3	55.3	—	53.3	53.3	—	51.6	51.6	—	48.6	48.6
		76	TC	—	20.1	26.7	—	19.4	26.0	—	18.7	25.3	—	17.5	23.8
1600 Cfm	EAT (wb)	58	TC	44.4	44.4	50.2	41.6	41.6	47.0	38.7	38.7	43.8	35.7	35.7	40.5
			SHC	38.6	44.4	50.2	36.1	41.6	47.0	33.6	38.7	43.8	31.0	35.7	40.5
		62	TC	46.6	46.6	48.6	43.1	43.1	46.9	39.4	39.4	44.9	35.8	35.8	42.1
			SHC	35.2	41.9	48.6	33.5	40.2	46.9	31.7	38.3	44.9	29.4	35.8	42.1
		67	TC	51.2	51.2	51.2	48.5	48.5	48.5	44.7	44.7	44.7	40.7	40.7	40.7
1800 Cfm	EAT (wb)	58	TC	28.0	34.6	41.2	26.9	33.6	40.3	25.4	32.2	38.9	23.8	30.6	37.3
			SHC	54.4	54.4	54.4	52.3	52.3	52.3	49.9	49.9	49.9	46.2	46.2	46.2
		72	TC	20.2	26.7	33.2	19.4	25.9	32.5	18.5	25.2	31.9	17.1	23.8	30.6
			SHC	—	55.9	55.9	—	53.9	53.9	—	52.1	52.1	—	49.7	49.7
		76	TC	—	20.8	28.5	—	20.0	27.6	—	19.2	26.5	—	18.1	25.3
2000 Cfm	EAT (wb)	58	TC	46.6	46.6	52.7	43.8	43.8	49.6	40.8	40.8	46.2	37.7	37.7	42.7
			SHC	40.5	46.6	52.7	38.1	43.8	49.6	35.4	40.8	46.2	32.7	37.7	42.7
		62	TC	47.9	47.9	52.3	44.6	44.6	50.7	40.9	40.9	48.1	37.8	37.8	44.4
			SHC	37.5	44.9	52.3	35.9	43.3	50.7	33.7	40.9	48.1	31.1	37.8	44.4
		67	TC	51.5	51.5	51.5	48.7	48.7	48.7	44.9	44.9	44.9	40.7	40.7	42.0

LEGEND:

- Do not operate
- Cfm
- Cubic feet per minute (supply air)
- EAT(db)
- Entering air temperature (dry bulb)
- EAT(wb)
- Entering air temperature (wet bulb)
- SHC
- Sensible heat capacity
- TC
- Total capacity

Table 9 – COOLING CAPACITIES

1-STAGE COOLING

4 TONS

50KC*B05 (4 TONS) – UNIT WITH HUMIDI–MIZER SYSTEM IN SUBCOOLING MODE										
TEMP (F) AIR ENT CONDENSER (Edb)		AIR ENTERING EVAPORATOR – SCFM								
		1200			1600			2000		
		Air Entering Evaporator – – Ewb (F)								
		72	67	62	72	67	62	72	67	62
75	TC	35.4	37.1	41.2	40.7	43.2	41.0	44.3	42.2	35.7
	SHC	16.4	21.6	31.5	31.3	24.3	16.9	16.0	22.4	26.9
	kW	3.06	3.07	3.06	3.44	3.43	3.41	3.84	3.82	3.72
85	TC	43.4	36.8	29.6	22.8	30.1	37.9	31.0	23.1	15.6
	SHC	13.0	17.6	21.5	15.5	11.7	7.8	2.0	5.7	9.2
	kW	4.28	4.20	4.05	4.77	4.57	4.42	5.17	4.99	4.81
95	TC	34.5	34.9	35.6	42.8	40.4	37.8	42.4	43.8	39.3
	SHC	16.3	20.9	27.7	36.7	23.8	16.2	16.4	26.1	34.3
	kW	3.25	3.25	3.24	3.63	3.63	3.61	4.04	4.02	4.00
105	TC	44.0	40.3	33.3	26.2	33.7	41.0	34.2	26.1	18.6
	SHC	15.1	22.9	28.9	22.6	17.2	11.1	5.0	10.6	15.8
	kW	4.49	4.47	4.32	4.99	4.87	4.69	5.50	5.28	5.09
115	TC	33.2	33.5	38.3	39.8	37.3	35.4	40.3	42.0	41.3
	SHC	15.6	20.3	31.2	34.7	22.3	15.3	15.9	26.2	39.6
	kW	3.53	3.51	3.46	3.89	3.89	3.88	4.31	4.30	4.26

50KC

50KC*B05 (4 TONS) – UNIT WITH HUMIDI-MIZER SYSTEM IN HOT GAS REHEAT MODE										
TEMP (F) AIR ENT CONDENSER (Edb)		AIR ENTERING EVAPORATOR – Ewb (F)								
		75 Dry Bulb 62.5 Wet Bulb (50% Relative)			75 Dry Bulb 64 Wet Bulb (56% Relative)			75 Dry Bulb 65.3 Wet Bulb (60% Relative)		
		Air Entering Evaporator – Cfm								
		1200	1600	2000	1200	1600	2000	1200	1600	2000
80	TC	15.33	16.26	16.40	17.32	18.21	18.24	18.97	19.72	19.66
	SHC	0.84	3.06	4.94	−0.09	1.62	2.93	−0.90	0.33	1.18
	kW	2.41	2.42	2.42	2.43	2.43	2.43	2.44	2.44	2.44
75	TC	19.17	20.36	20.57	20.97	21.94	21.95	22.30	23.03	22.88
	SHC	4.46	6.89	8.60	3.50	5.31	6.45	2.61	3.93	4.64
	kW	2.76	2.75	2.75	2.76	2.75	2.74	2.76	2.76	2.75
70	TC	22.63	23.67	23.55	23.97	24.55	24.19	24.87	25.09	24.52
	SHC	7.91	10.13	11.21	6.83	8.40	9.04	5.88	7.04	7.39
	kW	2.80	2.78	2.77	2.80	2.77	2.76	2.81	2.80	2.78
60	TC	27.32	28.34	21.46	27.68	16.17	25.05	28.38	18.51	20.56
	SHC	13.66	15.45	13.04	11.75	4.46	12.58	11.21	10.82	10.87
	kW	2.85	2.86	2.86	2.89	2.80	2.91	2.88	2.84	2.88
50	TC	11.00	11.31	12.76	14.48	13.83	13.72	15.32	15.18	17.14
	SHC	7.10	9.20	11.20	5.13	6.46	9.10	4.21	4.49	6.19
	kW	2.95	2.94	2.93	2.94	2.92	2.92	2.94	2.93	2.92
40	TC	9.73	9.83	9.75	12.40	12.60	12.20	15.23	15.45	15.13
	SHC	8.46	9.50	9.20	7.57	8.47	9.50	7.64	8.14	8.80
	kW	3.04	3.04	3.03	3.03	3.01	3.01	3.03	3.02	3.02

LEGEND

Edb – Entering Dry-Bulb
 Ewb – Entering Wet-Bulb
 kW – Compressor Motor Power Input
 ldb – Leaving Dry-Bulb
 lwb – Leaving Wet-Bulb
 SHC – Sensible Heat Capacity (1000 Btuh) Gross
 TC – Total Capacity (1000 Btuh) Gross

NOTES:

1. Direct interpolation is permissible. Do not extrapolate.
2. The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet-bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

Table 10 – COOLING CAPACITIES

1-STAGE COOLING

5 TONS

50KC* A06		Ambient Temperature															
		85			95			105			115						
		EA (dB)			EA (dB)			EA (dB)			EA (dB)						
		75	80	85	75	80	85	75	80	85	75	80	85				
1500 Cfm		EAT (wb)		58	TC	53.0	53.0	60.2	50.0	50.0	56.8	46.9	46.9	53.4	44.4	44.4	50.4
				58	SHC	45.9	53.0	60.2	43.1	50.0	56.8	40.3	46.9	53.4	38.4	44.4	50.4
				62	TC	56.0	56.0	57.5	52.2	52.2	55.4	48.2	48.2	53.3	44.7	44.7	52.1
				62	SHC	41.4	49.5	57.5	39.3	47.4	55.4	37.2	45.2	53.3	36.2	44.2	52.1
				67	TC	62.4	62.4	62.4	58.8	58.8	58.8	54.8	54.8	54.8	51.0	51.0	51.0
				67	SHC	33.5	41.4	49.4	31.7	39.7	47.7	29.6	37.7	45.7	28.6	36.6	44.6
1750 Cfm		EAT (wb)		72	TC	67.5	67.5	67.5	64.3	64.3	64.3	60.7	60.7	60.7	55.4	55.4	55.4
				72	SHC	25.0	32.4	39.8	23.3	31.0	38.6	21.5	29.3	37.0	19.8	27.2	34.7
				76	TC	–	71.1	71.1	–	68.3	68.3	–	64.8	64.8	–	58.4	58.4
				76	SHC	–	25.6	32.7	–	24.2	31.3	–	22.5	29.9	–	20.3	27.7
				58	TC	56.7	56.7	64.3	53.5	53.5	60.8	50.2	50.2	57.2	47.4	47.4	53.9
				58	SHC	49.1	56.7	64.3	46.2	53.5	60.8	43.3	50.2	57.2	41.0	47.4	53.9
2000 Cfm		EAT (wb)		62	TC	58.3	58.3	63.9	54.4	54.4	61.8	51.8	51.8	56.4	47.5	47.5	56.1
				62	SHC	45.3	54.6	63.9	43.2	52.5	61.8	39.6	48.0	56.4	38.9	47.5	56.1
				67	TC	64.0	64.0	64.0	60.6	60.6	60.6	56.6	56.6	56.6	52.3	52.3	52.3
				67	SHC	35.5	44.5	53.6	33.9	43.1	52.4	32.0	41.3	50.6	30.6	39.7	48.8
				72	TC	68.9	68.9	68.9	65.9	65.9	65.9	62.2	62.2	62.2	56.6	56.6	56.6
				72	SHC	25.5	33.9	42.2	24.0	32.7	41.4	22.2	31.1	40.1	20.2	28.7	37.1
2250 Cfm		EAT (wb)		76	TC	–	72.4	72.4	–	69.7	69.7	–	66.1	66.1	–	59.5	59.5
				76	SHC	–	26.4	34.9	–	24.9	33.2	–	23.2	31.7	–	21.0	29.5
				58	TC	59.8	59.8	67.8	56.5	56.5	64.2	53.1	53.1	60.4	50.0	50.0	56.8
				58	SHC	51.8	59.8	67.8	48.9	56.5	64.2	45.8	53.1	60.4	43.3	50.0	56.8
				62	TC	60.2	60.2	69.7	57.0	57.0	66.0	53.2	53.2	62.9	50.1	50.1	59.2
				62	SHC	48.8	59.3	69.7	46.1	56.0	66.0	43.4	53.2	62.9	41.1	50.1	59.2
2500 Cfm		EAT (wb)		67	TC	65.3	65.3	65.3	61.8	61.8	61.8	56.7	56.7	57.6	52.4	52.4	55.7
				67	SHC	37.3	47.4	57.4	35.9	46.2	56.6	36.4	47.0	57.6	34.9	45.3	55.7
				72	TC	70.2	70.2	70.2	67.0	67.0	67.0	63.2	63.2	63.2	57.3	57.3	57.3
				72	SHC	26.1	35.4	44.8	24.5	34.1	43.7	22.8	32.7	42.6	20.6	30.1	39.5
				76	TC	–	73.4	73.4	–	70.6	70.6	–	67.1	67.1	–	60.3	60.3
				76	SHC	–	27.0	36.5	–	25.5	35.0	–	23.8	33.3	–	21.5	31.0

LEGEND:

- Do not operate
- Cfm Cubic feet per minute (supply air)
- EAT(db) Entering air temperature (dry bulb)
- EAT(wb) Entering air temperature (wet bulb)
- SHC Sensible heat capacity
- TC Total capacity

Table 11 – COOLING CAPACITIES

1-STAGE COOLING

5 TONS

50KC*B06 (5 TONS) – UNIT WITH HUMIDITY – MIZER SYSTEM IN SUBCOOLING MODE													
TEMP (F) AIR ENT CONDENSER (Edb)		AIR ENTERING EVAPORATOR – SCFM											
		1750						2000					
		Air Entering Evaporator – Ewb (F)											
75	TC	72	67	62	72	67	62	72	67	62	72	67	62
	SHC	51.1	56.4	57.9	47.8	49.9	57.3	49.6	48.9	53.8	49.6	48.9	53.8
	KW	25.5	36.1	50.4	24.6	31.3	50.3	25.8	32.0	44.8	25.8	32.0	44.8
85	TC	3.20	3.30	3.19	3.25	3.18	3.13	3.22	3.13	3.25	3.22	3.13	3.25
	SHC	54.1	60.4	61.0	56.4	60.4	60.5	56.7	60.7	58.2	56.7	60.7	58.2
	KW	47.2	38.7	28.0	52.3	40.6	28.8	27.2	42.6	56.5	27.2	42.6	56.5
95	TC	3.59	3.67	3.79	3.81	3.70	3.60	3.70	3.74	3.61	3.70	3.74	3.61
	SHC	62.4	56.6	48.4	62.7	58.6	50.5	62.8	60.0	52.6	62.8	60.0	52.6
	KW	26.3	34.9	41.9	27.8	38.7	46.9	29.0	42.1	51.5	29.0	42.1	51.5
105	TC	4.20	4.09	3.92	3.97	4.10	4.25	4.28	4.12	4.03	4.28	4.12	4.03
	SHC	58.8	49.9	41.6	60.5	51.9	43.6	61.6	53.5	47.6	61.6	53.5	47.6
	KW	22.0	29.0	35.8	24.4	32.9	40.7	26.5	36.6	42.3	26.5	36.6	42.3
115	TC	4.64	4.46	4.28	4.33	4.52	4.66	4.69	4.57	4.41	4.69	4.57	4.41
	SHC	51.4	41.9	33.8	53.3	43.7	35.9	54.7	45.3	39.2	54.7	45.3	39.2
	KW	15.7	22.2	29.0	18.1	26.0	33.9	20.4	29.7	35.3	20.4	29.7	35.3
		5.08	4.83	4.63	4.69	4.88	5.14	5.19	4.92	4.77	5.19	4.92	4.77

50KC

50KC*B06 (5 TONS) – UNIT WITH HUMIDITY-MIZER SYSTEM IN HOT GAS REHEAT MODE															
TEMP (F) AIR ENT CONDENSER (Edb)		AIR ENTERING EVAPORATOR – Ewb (F)													
		75 Dry Bulb 62.5 Wet Bulb (50% Relative)						75 Dry Bulb 64 Wet Bulb (56% Relative)						75 Dry Bulb 65.3 Wet Bulb (60% Relative)	
		Air Entering Evaporator – Cfm													
		1750	2000	2250	1750	2000	2250	1750	2000	2250	1750	2000	2250		
80	TC	13.19	12.95	12.70	14.56	14.30	14.00	15.70	15.44	15.05					
	SHC	-2.38	-1.55	-0.65	-4.75	-4.25	-3.69	-6.74	-6.49	-6.21					
	KW	3.15	3.16	3.16	3.19	3.20	3.20	3.22	3.23	3.23					
75	TC	16.14	15.95	15.71	17.36	17.20	16.84	18.30	18.20	17.81					
	SHC	0.44	1.23	2.03	-1.92	-1.36	-0.96	-3.90	-3.50	-3.31					
	KW	3.04	3.05	3.06	3.07	3.08	3.09	3.10	3.12	3.12					
70	TC	18.90	18.68	18.52	19.97	19.85	19.50	20.86	20.62	20.17					
	SHC	3.13	3.80	4.51	0.85	1.39	1.70	-0.97	-0.69	-0.63					
	KW	2.92	2.93	2.95	2.96	2.97	2.98	2.98	2.99	3.00					
60	TC	23.71	23.48	23.16	24.05	23.98	23.52	24.79	24.47	26.99					
	SHC	8.11	8.63	8.88	5.97	6.46	6.58	4.65	4.87	5.94					
	KW	3.17	3.23	3.15	3.21	3.26	3.18	3.23	3.12	3.10					
50	TC	21.91	16.69	16.62	16.81	16.98	16.92	17.08	17.24	17.17					
	SHC	11.51	10.04	9.64	9.77	9.43	8.95	9.30	8.88	8.35					
	KW	3.01	3.07	3.11	3.04	3.10	3.15	3.07	3.14	3.18					
40	TC	21.91	16.69	16.62	16.81	16.98	16.92	17.08	17.24	17.17					
	SHC	11.51	10.04	9.64	9.77	9.43	8.95	9.30	8.88	8.35					
	KW	3.39	3.32	3.24	3.14	3.23	3.15	3.18	3.27	3.08					

LEGEND

Edb – Entering Dry-Bulb
 Ewb – Entering Wet-Bulb
 kW – Compressor Motor Power Input
 Idb – Leaving Dry-Bulb
 Iwb – Leaving Wet-Bulb
 SHC – Sensible Heat Capacity (1000 Btu/h) Gross
 TC – Total Capacity (1000 Btu/h) Gross

Table 12 – STATIC PRESSURE ADDERS (IN. WG) (FACTORY OPTIONS AND/OR ACCESSORIES)

3–5 TONS										
CFM	600	900	1200	1400	1600	1800	2000	2200	2400	2600
1 Electric Heater Module	0.03	0.05	0.07	0.09	0.09	0.10	0.11	0.11	0.12	0.13
2 Electric Heater Modules	0.13	0.15	0.16	0.16	0.16	0.17	0.17	0.17	0.18	0.18

3–5–TONS									
CFM	600	800	1000	1250	1500	1750	2000	2250	2500
Vertical Economizer	0.012	0.020	0.030	0.046	0.066	0.089	0.115	0.145	0.179
Horizontal Economizer	0.018	0.026	0.037	0.053	0.073	0.096	0.124	0.154	0.189

All above data for both standard and ultra low leak models, where available.

3–5–TONS									
CFM	600	800	1000	1250	1500	1750	2000	2250	2500
Humidi–MiZer	0.023	0.033	0.042	0.054	0.067	0.080	0.093	0.106	0.120

3–5–TONS						
Power Exhaust Performance						
Return Duct Static Pressure (in wg)	0.0	0.1	0.2	0.3	0.4	0.5
Vertical Power Exhaust CFM	3239	2974	2642	2244	1780	1249

50KC

GENERAL FAN PERFORMANCE NOTES

1. Interpolation is permissible. Do not extrapolate.
2. External static pressure is the static pressure difference between the return duct and the supply duct plus the static pressure caused by any FIOPs or accessories.
3. Tabular data accounts for pressure loss due to clean filters, unit casing, and wet coils. Factory options and accessories may add static pressure losses. Selection software is available, through your salesperson, to help you select the best motor/drive combination for your application.
4. The Fan Performance tables offer motor/drive recommendations. In cases when two motor/drive combinations would work, Carrier recommended the lower horsepower option.
5. For information on the electrical properties of Carrier motors, please see the Electrical information section of this book.
6. For more information on the performance limits of Carrier motors, see the application data section of this book.
7. The EPACT (Energy Policy Act of 1992) regulates energy requirements for specific types of indoor fan motors. Motors regulated by EPACT include any general purpose, T-frame (three-digit, 143 and larger), single-speed, foot mounted, polyphase, squirrel cage induction motors of NEMA (National Electrical Manufacturers Association) design A and B, manufactured for use in the United States. Ranging from 1 to 200 Hp, these continuous-duty motors operate on 230 and 460 volt, 60 Hz power. If a motor does not fit into these specifications, the motor does not have to be replaced by an EPACT compliant energy-efficient motor. Variable-speed motors are exempt from EPACT compliance requirements. Therefore, the indoor fan motors for Carrier 50KC-*04/06 units are exempt from these requirements.

FAN PERFORMANCE (DIRECT DRIVE)

Table 13 – 50KC-04 Vertical Unit - Direct Drive

Speed (Torque) tap	CFM	ESP	BHP
1	900	0.36	0.16
	975	0.27	0.16
	1050	0.19	0.15
	1125	0.11	0.15
	1200	0.04	0.16
	1275	–	–
	1350	–	–
	1425	–	–
	1500	–	–
2	900	0.53	0.22
	975	0.43	0.21
	1050	0.32	0.21
	1125	0.22	0.20
	1200	0.13	0.19
	1275	0.04	0.18
	1350	–	–
	1425	–	–
	1500	–	–
3	900	0.81	0.32
	975	0.70	0.31
	1050	0.60	0.30
	1125	0.49	0.29
	1200	0.38	0.27
	1275	0.27	0.26
	1350	0.18	0.25
	1425	0.10	0.24
	1500	–	–
4	900	1.06	0.42
	975	0.95	0.42
	1050	0.84	0.42
	1125	0.73	0.41
	1200	0.60	0.39
	1275	0.48	0.38
	1350	0.35	0.36
	1425	0.22	0.34
	1500	0.11	0.31
5	900	1.24	0.51
	975	1.19	0.52
	1050	1.14	0.54
	1125	1.08	0.57
	1200	1.03	0.59
	1275	0.98	0.61
	1350	0.93	0.64
	1425	0.88	0.67
	1500	0.82	0.69

Table 14 – 50KC-04 Horizontal Unit - Direct Drive

Speed (Torque) tap	CFM	ESP	BHP
1	900	0.47	0.21
	975	0.38	0.20
	1050	0.29	0.19
	1125	0.21	0.18
	1200	0.13	0.18
	1275	0.06	0.20
	1350	–	–
	1425	–	–
	1500	–	–
2	900	0.65	0.27
	975	0.54	0.26
	1050	0.44	0.25
	1125	0.33	0.24
	1200	0.23	0.23
	1275	0.13	0.21
	1350	0.02	0.20
	1425	–	–
	1500	–	–
3	900	0.96	0.38
	975	0.84	0.37
	1050	0.73	0.36
	1125	0.61	0.34
	1200	0.50	0.33
	1275	0.38	0.31
	1350	0.26	0.30
	1425	0.15	0.28
	1500	0.04	0.26
4	900	1.17	0.46
	975	1.08	0.46
	1050	0.98	0.46
	1125	0.87	0.45
	1200	0.75	0.44
	1275	0.63	0.42
	1350	0.51	0.40
	1425	0.39	0.39
	1500	0.27	0.37
5	900	1.35	0.52
	975	1.30	0.54
	1050	1.26	0.57
	1125	1.21	0.59
	1200	1.16	0.62
	1275	1.12	0.64
	1350	1.07	0.67
	1425	1.02	0.70
	1500	0.97	0.73

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FAN PERFORMANCE (DIRECT DRIVE) (cont.)

Table 15 – 50KC-05 Vertical Unit - Direct Drive

Speed (Torque) tap	CFM	ESP	BHP
1	1200	0.50	0.32
	1300	0.35	0.31
	1400	0.20	0.29
	1500	–	–
	1600	–	–
	1700	–	–
	1800	–	–
	1900	–	–
	2000	–	–
	1200	0.63	0.38
	1300	0.46	0.36
	1400	0.30	0.34
	1500	0.15	0.32
	1600	–	–
2	1700	–	–
	1800	–	–
	1900	–	–
	2000	–	–
	1200	0.98	0.56
	1300	0.88	0.59
	1400	0.75	0.59
	1500	0.61	0.56
	1600	0.44	0.53
3	1700	0.26	0.53
	1800	0.08	0.48
	1900	–	–
	2000	–	–
	1200	1.00	0.57
	1300	0.94	0.60
	1400	0.87	0.63
	1500	0.78	0.66
	1600	0.68	0.69
4	1700	0.57	0.71
	1800	0.43	0.68
	1900	0.28	0.67
	2000	–	–
	1200	1.03	0.59
	1300	0.96	0.62
	1400	0.89	0.66
	1500	0.82	0.69
	1600	0.75	0.73
5	1700	0.67	0.77
	1800	0.58	0.81
	1900	0.50	0.85
	2000	0.40	0.89

Table 16 – 50KC-05 Horizontal Unit - Direct Drive

Speed (Torque) tap	CFM	ESP	BHP
1	1200	0.61	0.38
	1300	0.45	0.36
	1400	0.30	0.33
	1500	0.15	0.31
	1600	0.03	0.29
	1700	–	–
	1800	–	–
	1900	–	–
	2000	–	–
	1200	0.75	0.44
	1300	0.59	0.42
	1400	0.43	0.39
	1500	0.27	0.37
	1600	0.12	0.35
2	1700	0.01	0.32
	1800	–	–
	1900	–	–
	2000	–	–
	1200	1.13	0.59
	1300	1.03	0.62
	1400	0.91	0.63
	1500	0.76	0.61
	1600	0.61	0.59
3	1700	0.43	0.59
	1800	0.26	0.54
	1900	0.09	0.51
	2000	–	–
	1200	1.15	0.60
	1300	1.08	0.64
	1400	1.01	0.67
	1500	0.93	0.70
	1600	0.84	0.73
4	1700	0.74	0.75
	1800	0.62	0.75
	1900	0.47	0.73
	2000	0.31	0.71
	1200	1.16	0.62
	1300	1.10	0.65
	1400	1.04	0.69
	1500	0.97	0.73
	1600	0.90	0.77
5	1700	0.84	0.81
	1800	0.76	0.85
	1900	0.69	0.89
	2000	0.61	0.93

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FAN PERFORMANCE (DIRECT DRIVE) (cont.)

Table 17 – 50KC-06 Vertical Unit - Direct Drive

Speed (Torque) tap	CFM	ESP	BHP
1	1500	0.46	0.42
	1625	0.29	0.39
	1750	0.11	0.37
	1875	–	–
	2000	–	–
	2125	–	–
	2250	–	–
	2375	–	–
	2500	–	–
2	1500	0.68	0.54
	1625	0.48	0.51
	1750	0.30	0.48
	1875	0.13	0.45
	2000	–	–
	2125	–	–
	2250	–	–
	2375	–	–
	2500	–	–
3	1500	1.17	0.82
	1625	0.98	0.80
	1750	0.78	0.79
	1875	0.56	0.76
	2000	0.36	0.72
	2125	0.17	0.72
	2250	0.02	0.64
	2375	–	–
	2500	–	–
4	1500	1.29	0.91
	1625	1.14	0.89
	1750	0.96	0.92
	1875	0.75	0.90
	2000	0.53	0.86
	2125	0.32	0.82
	2250	0.12	0.78
	2375	0.01	0.75
	2500	–	–
5	1500	1.36	0.94
	1625	1.24	0.99
	1750	1.10	1.02
	1875	0.93	1.05
	2000	0.74	1.03
	2125	0.53	0.99
	2250	0.31	0.94
	2375	0.08	0.90
	2500	–	0.86

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Table 18 – 50KC-06 Horizontal Unit - Direct Drive

Speed (Torque) tap	CFM	ESP	BHP
1	1500	0.59	0.46
	1625	0.41	0.44
	1750	0.23	0.40
	1875	0.07	0.37
	2000	–	–
	2125	–	–
	2250	–	–
	2375	–	–
	2500	–	–
2	1500	0.83	0.58
	1625	0.63	0.55
	1750	0.44	0.52
	1875	0.26	0.49
	2000	0.08	0.45
	2125	–	–
	2250	–	–
	2375	–	–
	2500	–	–
3	1500	1.34	0.87
	1625	1.17	0.85
	1750	0.97	0.83
	1875	0.76	0.80
	2000	0.55	0.76
	2125	0.34	0.76
	2250	0.17	0.68
	2375	0.04	0.63
	2500	–	–
4	1500	1.47	0.94
	1625	1.33	0.93
	1750	1.17	0.97
	1875	0.98	0.96
	2000	0.77	0.92
	2125	0.56	0.88
	2250	0.35	0.84
	2375	0.16	0.79
	2500	0.01	0.73
5	1500	1.52	0.97
	1625	1.42	1.01
	1750	1.30	1.05
	1875	1.16	1.09
	2000	1.00	1.09
	2125	0.82	1.06
	2250	0.62	1.02
	2375	0.40	0.98
	2500	0.16	0.93

FAN PERFORMANCE (BELT DRIVE) (cont.)

Table 19 – 50KC-*04

1 PHASE

3 TON VERTICAL SUPPLY

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
900	594	0.15	740	0.25	867	0.37	981	0.52	1084	0.68
975	618	0.17	758	0.28	881	0.40	991	0.55	1092	0.71
1050	642	0.19	777	0.30	896	0.43	1003	0.58	1102	0.75
1125	668	0.22	797	0.34	912	0.47	1017	0.62	1113	0.79
1200	695	0.25	818	0.37	930	0.51	1032	0.66	1126	0.83
1275	722	0.29	841	0.41	949	0.55	1048	0.71	1140	0.88
1350	750	0.33	864	0.46	968	0.60	1065	0.76	1155	0.93
1425	778	0.37	888	0.50	989	0.65	1083	0.81	1171	0.99
1500	807	0.42	913	0.56	1011	0.71	1103	0.87	1188	1.05

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
900	1180	0.86	1269	1.05	1354	1.25	1434	1.47	–	–
975	1186	0.89	1275	1.08	1358	1.29	–	–	–	–
1050	1194	0.92	1281	1.12	1363	1.32	–	–	–	–
1125	1204	0.97	1289	1.16	1370	1.37	–	–	–	–
1200	1215	1.01	1298	1.21	1378	1.42	–	–	–	–
1275	1227	1.06	1309	1.26	1387	1.47	–	–	–	–
1350	1240	1.12	1321	1.32	–	–	–	–	–	–
1425	1254	1.18	1333	1.38	–	–	–	–	–	–
1500	1270	1.24	1347	1.45	–	–	–	–	–	–

NOTE: For more information, see General Fan Performance Notes.
Boldface indicates field-supplied drive is required.

Medium static 770–1175 RPM, 1.2 BHP max
 High static 1035–1466 RPM, 1.5 BHP max

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Table 20 – 50KC-*04

1 PHASE

3 TON HORIZONTAL SUPPLY

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
900	574	0.13	707	0.23	817	0.34	913	0.47	999	0.61
975	597	0.15	727	0.25	835	0.37	929	0.50	1015	0.64
1050	621	0.18	747	0.28	853	0.40	946	0.53	1030	0.68
1125	646	0.20	768	0.31	872	0.43	964	0.57	1047	0.72
1200	671	0.23	790	0.34	892	0.47	982	0.61	1064	0.76
1275	696	0.26	812	0.38	912	0.51	1001	0.65	1082	0.81
1350	723	0.30	835	0.42	933	0.55	1020	0.70	1100	0.86
1425	749	0.34	859	0.46	955	0.60	1040	0.75	1119	0.91
1500	776	0.38	883	0.51	977	0.65	1061	0.80	1138	0.97

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
900	1078	0.77	1151	0.93	1220	1.11	1284	1.30	1346	1.49
975	1093	0.80	1165	0.97	1233	1.15	1297	1.33	–	–
1050	1108	0.84	1180	1.01	1247	1.19	1311	1.38	–	–
1125	1123	0.88	1195	1.05	1261	1.23	1325	1.42	–	–
1200	1140	0.92	1210	1.10	1276	1.28	1339	1.47	–	–
1275	1157	0.97	1226	1.15	1292	1.33	–	–	–	–
1350	1174	1.02	1243	1.20	1308	1.39	–	–	–	–
1425	1192	1.08	1260	1.26	1325	1.45	–	–	–	–
1500	1210	1.14	1278	1.33	–	–	–	–	–	–

NOTE: For more information, see General Fan Performance Notes.
Boldface indicates field-supplied drive is required.

Medium static 770–1175 RPM, 1.2 BHP max
 High static 1035–1466 RPM, 1.5 BHP max

FAN PERFORMANCE (BELT DRIVE) (cont.)

Table 21 – 50KC-*04

3 PHASE

3 TON VERTICAL SUPPLY

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
900	594	0.15	740	0.25	867	0.37	981	0.52	1084	0.68
975	618	0.17	758	0.28	881	0.40	991	0.55	1092	0.71
1050	642	0.19	777	0.30	896	0.43	1003	0.58	1102	0.75
1125	668	0.22	797	0.34	912	0.47	1017	0.62	1113	0.79
1200	695	0.25	818	0.37	930	0.51	1032	0.66	1126	0.83
1275	722	0.29	841	0.41	949	0.55	1048	0.71	1140	0.88
1350	750	0.33	864	0.46	968	0.60	1065	0.76	1155	0.93
1425	778	0.37	888	0.50	989	0.65	1083	0.81	1171	0.99
1500	807	0.42	913	0.56	1011	0.71	1103	0.87	1188	1.05

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CFM	Available External Static Pressure (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
900	1180	0.86	1269	1.05	1354	1.25	1434	1.47	1511	1.70
975	1186	0.89	1275	1.08	1358	1.29	1437	1.51	1513	1.74
1050	1194	0.92	1281	1.12	1363	1.32	1441	1.54	1516	1.78
1125	1204	0.97	1289	1.16	1370	1.37	1447	1.59	1520	1.82
1200	1215	1.01	1298	1.21	1378	1.42	1454	1.64	1526	1.87
1275	1227	1.06	1309	1.26	1387	1.47	1462	1.69	1533	1.92
1350	1240	1.12	1321	1.32	1397	1.53	1471	1.75	1541	1.99
1425	1254	1.18	1333	1.38	1409	1.59	1481	1.82	—	—
1500	1270	1.24	1347	1.45	1421	1.66	1492	1.89	—	—

NOTE: For more information, see General Fan Performance Notes.
Boldface indicates field-supplied drive is required.

Medium static 770–1175 RPM, 1.7 BHP max
 High static 1035 – 1466 RPM, 2.9 BHP max

Table 22 – 50KC-*04

3 PHASE

3 TON HORIZONTAL SUPPLY

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
900	574	0.13	707	0.23	817	0.34	913	0.47	999	0.61
975	597	0.15	727	0.25	835	0.37	929	0.50	1015	0.64
1050	621	0.18	747	0.28	853	0.40	946	0.53	1030	0.68
1125	646	0.20	768	0.31	872	0.43	964	0.57	1047	0.72
1200	671	0.23	790	0.34	892	0.47	982	0.61	1064	0.76
1275	696	0.26	812	0.38	912	0.51	1001	0.65	1082	0.81
1350	723	0.30	835	0.42	933	0.55	1020	0.70	1100	0.86
1425	749	0.34	859	0.46	955	0.60	1040	0.75	1119	0.91
1500	776	0.38	883	0.51	977	0.65	1061	0.80	1138	0.97

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
900	1078	0.77	1151	0.93	1220	1.11	1284	1.30	1346	1.49
975	1093	0.80	1165	0.97	1233	1.15	1297	1.33	1358	1.53
1050	1108	0.84	1180	1.01	1247	1.19	1311	1.38	1371	1.58
1125	1123	0.88	1195	1.05	1261	1.23	1325	1.42	1385	1.62
1200	1140	0.92	1210	1.10	1276	1.28	1339	1.47	1399	1.68
1275	1157	0.97	1226	1.15	1292	1.33	1354	1.53	1414	1.73
1350	1174	1.02	1243	1.20	1308	1.39	1370	1.59	1429	1.80
1425	1192	1.08	1260	1.26	1325	1.45	1386	1.65	1444	1.86
1500	1210	1.14	1278	1.33	1342	1.52	1403	1.72	1461	1.93

NOTE: For more information, see General Fan Performance Notes.
Boldface indicates field-supplied drive is required.

Medium static 770–1175 RPM, 1.7 BHP max v
 High static 1035 – 1466 RPM, 2.9 BHP max

FAN PERFORMANCE (BELT DRIVE) (cont.)

Table 23 – 50KC-*05

1 PHASE

4 TON VERTICAL SUPPLY

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1200	695	0.25	818	0.37	930	0.51	1032	0.66	1126	0.83
1300	731	0.30	849	0.43	955	0.57	1053	0.72	1145	0.89
1400	769	0.36	880	0.49	982	0.63	1077	0.79	1166	0.97
1500	807	0.42	913	0.56	1011	0.71	1103	0.87	1188	1.05
1600	847	0.49	948	0.63	1042	0.79	1130	0.96	1213	1.14
1700	887	0.57	983	0.72	1073	0.88	1158	1.06	1239	1.24
1800	928	0.66	1020	0.82	1106	0.98	1188	1.16	1266	1.35
1900	969	0.76	1057	0.92	1140	1.09	1219	1.28	1295	1.48
2000	1010	0.87	1095	1.04	1175	1.21	1251	1.41	—	—

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1200	1215	1.01	1298	1.21	1378	1.42	—	—	—	—
1300	1231	1.08	1313	1.28	1390	1.49	—	—	—	—
1400	1249	1.16	1329	1.36	—	—	—	—	—	—
1500	1270	1.24	1347	1.45	—	—	—	—	—	—
1600	1292	1.34	—	—	—	—	—	—	—	—
1700	1315	1.44	—	—	—	—	—	—	—	—
1800	—	—	—	—	—	—	—	—	—	—
1900	—	—	—	—	—	—	—	—	—	—
2000	—	—	—	—	—	—	—	—	—	—

NOTE: For more information, see General Fan Performance Notes.
Boldface indicates field-supplied drive is required.

Medium static 770–1175 RPM, 1.2 BHP max
 High static 1035–1466 RPM, 1.5 BHP max

50KC

Table 24 – 50KC-*05

1 PHASE

4 TON HORIZONTAL SUPPLY

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1200	671	0.23	790	0.34	892	0.47	982	0.61	1064	0.76
1300	705	0.28	820	0.39	919	0.52	1007	0.67	1088	0.82
1400	740	0.33	851	0.45	947	0.58	1034	0.73	1113	0.89
1500	776	0.38	883	0.51	977	0.65	1061	0.80	1138	0.97
1600	813	0.45	916	0.58	1007	0.73	1089	0.89	1165	1.05
1700	851	0.52	949	0.66	1038	0.81	1118	0.97	1192	1.15
1800	888	0.60	984	0.75	1069	0.90	1148	1.07	1221	1.25
1900	927	0.69	1019	0.84	1102	1.00	1179	1.18	1250	1.36
2000	965	0.78	1054	0.94	1135	1.11	1210	1.29	1280	1.48

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1200	1140	0.92	1210	1.10	1276	1.28	1339	1.47	—	—
1300	1162	0.99	1232	1.16	1297	1.35	—	—	—	—
1400	1186	1.06	1254	1.24	1319	1.43	—	—	—	—
1500	1210	1.14	1278	1.33	—	—	—	—	—	—
1600	1236	1.23	1302	1.42	—	—	—	—	—	—
1700	1262	1.33	—	—	—	—	—	—	—	—
1800	1289	1.44	—	—	—	—	—	—	—	—
1900	—	—	—	—	—	—	—	—	—	—
2000	—	—	—	—	—	—	—	—	—	—

NOTE: For more information, see General Fan Performance Notes.
Boldface indicates field-supplied drive is required.

Medium static 770–1175 RPM, 1.2 BHP max
 High static 1035–1466 RPM, 1.5 BHP max

FAN PERFORMANCE (BELT DRIVE) (cont.)

Table 25 – 50KC-*05

3 PHASE

4 TON VERTICAL SUPPLY

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1200	695	0.25	818	0.37	930	0.51	1032	0.66	1126	0.83
1300	731	0.30	849	0.43	955	0.57	1053	0.72	1145	0.89
1400	769	0.36	880	0.49	982	0.63	1077	0.79	1166	0.97
1500	807	0.42	913	0.56	1011	0.71	1103	0.87	1188	1.05
1600	847	0.49	948	0.63	1042	0.79	1130	0.96	1213	1.14
1700	887	0.57	983	0.72	1073	0.88	1158	1.06	1239	1.24
1800	928	0.66	1020	0.82	1106	0.98	1188	1.16	1266	1.35
1900	969	0.76	1057	0.92	1140	1.09	1219	1.28	1295	1.48
2000	1010	0.87	1095	1.04	1175	1.21	1251	1.41	1325	1.61

50KC

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1200	1215	1.01	1298	1.21	1378	1.42	1454	1.64	1526	1.87
1300	1231	1.08	1313	1.28	1390	1.49	1465	1.71	1536	1.94
1400	1249	1.16	1329	1.36	1405	1.57	1478	1.79	1547	2.03
1500	1270	1.24	1347	1.45	1421	1.66	1492	1.89	1561	2.13
1600	1292	1.34	1367	1.54	1440	1.76	1509	1.99	1576	2.23
1700	1315	1.44	1389	1.65	1459	1.88	1527	2.11	1593	2.35
1800	1341	1.56	1412	1.77	1481	2.00	1547	2.23	1612	2.48
1900	1367	1.68	1437	1.90	1504	2.13	1569	2.37	1632	2.62
2000	1395	1.82	1463	2.04	1528	2.28	1591	2.52	1653	2.77

NOTE: For more information, see General Fan Performance Notes.
Boldface indicates field-supplied drive is required.

Medium static 920–1303 RPM, 1.7 BHP max
 High static 1208 – 1639 RPM, 2.9 BHP max

Table 26 – 50KC-*05

3 PHASE

4 TON HORIZONTAL SUPPLY

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1200	671	0.23	790	0.34	892	0.47	982	0.61	1064	0.76
1300	705	0.28	820	0.39	919	0.52	1007	0.67	1088	0.82
1400	740	0.33	851	0.45	947	0.58	1034	0.73	1113	0.89
1500	776	0.38	883	0.51	977	0.65	1061	0.80	1138	0.97
1600	813	0.45	916	0.58	1007	0.73	1089	0.89	1165	1.05
1700	851	0.52	949	0.66	1038	0.81	1118	0.97	1192	1.15
1800	888	0.60	984	0.75	1069	0.90	1148	1.07	1221	1.25
1900	927	0.69	1019	0.84	1102	1.00	1179	1.18	1250	1.36
2000	965	0.78	1054	0.94	1135	1.11	1210	1.29	1280	1.48

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1200	1140	0.92	1210	1.10	1276	1.28	1339	1.47	1399	1.68
1300	1162	0.99	1232	1.16	1297	1.35	1360	1.55	1419	1.75
1400	1186	1.06	1254	1.24	1319	1.43	1381	1.63	1439	1.84
1500	1210	1.14	1278	1.33	1342	1.52	1403	1.72	1461	1.93
1600	1236	1.23	1302	1.42	1365	1.62	1425	1.82	1483	2.04
1700	1262	1.33	1328	1.52	1390	1.72	1449	1.93	1505	2.15
1800	1289	1.44	1354	1.63	1415	1.84	1473	2.05	1529	2.27
1900	1317	1.55	1380	1.75	1441	1.96	1498	2.18	1553	2.41
2000	1345	1.68	1408	1.88	1467	2.10	1524	2.32	1579	2.55

NOTE: For more information, see General Fan Performance Notes.
Boldface indicates field-supplied drive is required.

Medium static 920–1303 RPM, 1.7 BHP max
 High static 1208 – 1639 RPM, 2.9 BHP max