SUBMITTAL

Project

BCF - Harvey, LA #315

Date

Wednesday, September 15, 2021

Carrier Strategic Accounts
www.commercial.carrier.com

STRATEGIC ACCOUNTS SUBMITTAL APPROVAL FORM

Review of the submittal is needed to validate conformance of equipment specifications to system design criteria. Installing contractor is responsible for verifying equipment being supplied matches final bid documents and/or replacement equipment needed. Carrier will not be responsible for installation and/or removal of any incorrect units. After review of the submittal, please select approval action and report any discrepancies in the comments section.

Submittal was reviewed for design conformity.

Job Name: BCF - Harvey, LA #315

Job Location: Harvey, LA #315

- ☐ Approve
- ☐ Reject/Revise/Resubmit

Comments: _____

_____

_____

_____

_____

_____

Accepted By: _____

Title: _____

Company: _____

Date: _____

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Project: BCF - Harvey, LA #315 09/15/2021
Prepared By: 02:29PM

RTU - 1,3

Tag Cover Sheet
Unit Report
Certified Drawing
Performance Report

Unit Report For RTU - 1,3

Project: BCF - Harvey, LA #315 09/15/2021
Prepared By: 02:29PM

Unit Parameters

Unit Model: **50HCBE28L3Q6-6XHJ0**
Unit Size: ..... **28 (25 Tons)**
Volts-Phase-Hertz: **460-3-60**
Heating Type: ..... **Electric**
Duct Cfg: ..... **Vertical Supply / Vertical Return**
Two-Stage Cooling with Humidi-MiZer

Dimensions (ft. in.) & Weight (lb.) ***

Unit Length: ..... **13' 1.75"**
Unit Width: ..... **7' 2.375"**
Unit Height: ..... **4' 9.375"**
*** Total Operating Weight: ..... **3025** lb

*** Weights and Dimensions are approximate. Weight does not include unit packaging. Approximate dimensions are provided primarily for shipping purposes. For exact dimensions and weights, refer to appropriate product data catalog.

Lines and Filters

Condensate Drain Line Size: **3/4**
Return Air Filter Type: ..... **Throwaway**
Return Air Filter Quantity: **9**
Return Air Filter Size: ..... **16 x 25 x 2**

Unit Configuration

Medium Electric Heat
Condensate Overflow Switch and RA and SA Smoke Detectors
High Static Option Vertical Models
E-Coated Al/Cu - E-coated Al/Cu Louvered Hail Guards
Electromechanical Controls w/W7220 Econo Controller
Enthalpy Ultra Low Leak Econo w/PE (cent) - Vertical Air Only
Foil Faced Insulation, Hinged Access Panels and Powered Convenience Outlet
Non-Fused Disconnect
Standard Packaging
2-Speed indoor fan motor controlled by VFD
Humidi-MiZer™ Adaptive Dehumidification System

Warranty Information

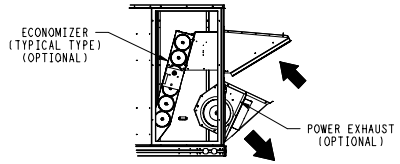
5-Year compressor parts (STD.)
1-Year parts (STD.)
Start-up, First Unit
Complete Unit 1st Year Carrier CCS Labor
Start-up, Each Additional Unit

NOTE: Please see Warranty Catalog 500-089 for explanation of policies and ordering methods.

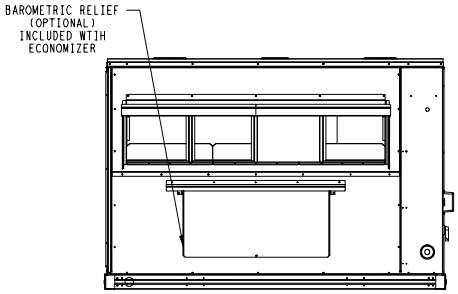
Ordering Information

Part Number	Description	Quantity
50HCBE28L3Q6-6XHJ0	Rooftop Unit	2
	Base Unit	
	Medium Electric Heat	
	Condensate Overflow Switch and RA and SA Smoke Detectors	
	High Static Option Vertical Models	
	E-Coated Al/Cu - E-coated Al/Cu Louvered Hail Guards	
	Foil Faced Insulation, Hinged Access Panels and Powered Convenience Outlet	
	Humidi-MiZer™ Adaptive Dehumidification System	
	Ultra Low leak Enty Econo X, W7220 control, cent pwr exhaust. Meets Calf. Title 24 FDD & Leak Rates	
	2 Speed Fan Controller (VFD) and Non-Fused Disconnect	
Field Installed Accessories		
--HH--57AC-081	Enthalpy Control for W7220 Controller	2
--HL--38MG-029	Humidistat	2

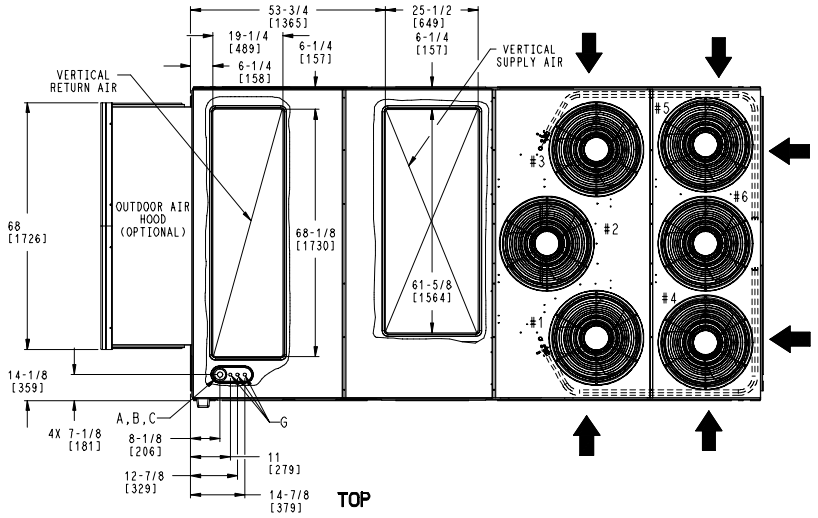
CRSDTEST001A00	Smoke detector remote test/Reset/Alarm indicator kit	2



BACK
(PANELS REMOVED TO SHOW ECONOMIZER AND POWER EXHAUST OPTIONS)



LEFT
SHOWN WITH THE BAROMETRIC RELIEF OPTION INSTALLED

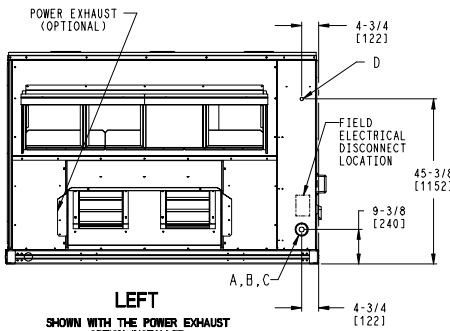


TOP

	CONNECTION SIZES
A	1 3/8" DIA [35] FIELD POWER SUPPLY KNOCKOUT
B	3" DIA [76] FIELD POWER SUPPLY KNOCKOUT
C	3 5/8" DIA [92] FIELD POWER SUPPLY KNOCKOUT
D	7/8" DIA [22] FIELD CONTROL WIRING HOLE
G	7/8" DIA [22] FIELD CONTROL WIRING KNOCKOU

NOTES:

1. DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE IN MILLIMETERS.
2. CENTER OF GRAVITY
3. DIRECTION OF AIR FLOW
4. ALL VIEW DRAWN USING 3RD ANGLE



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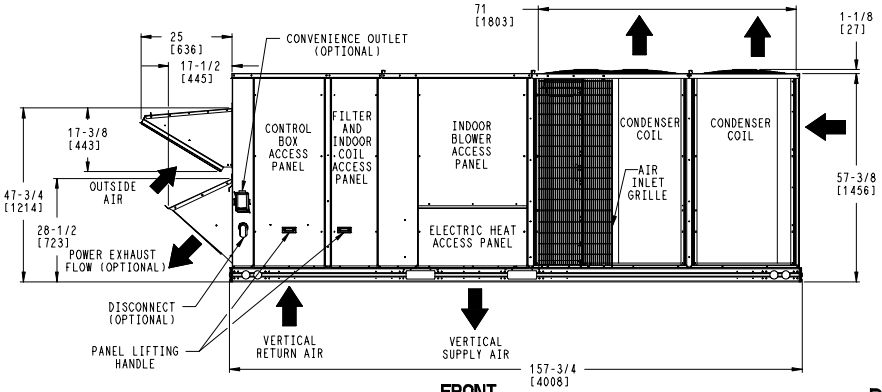
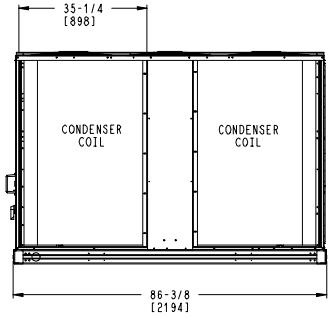


FRONT

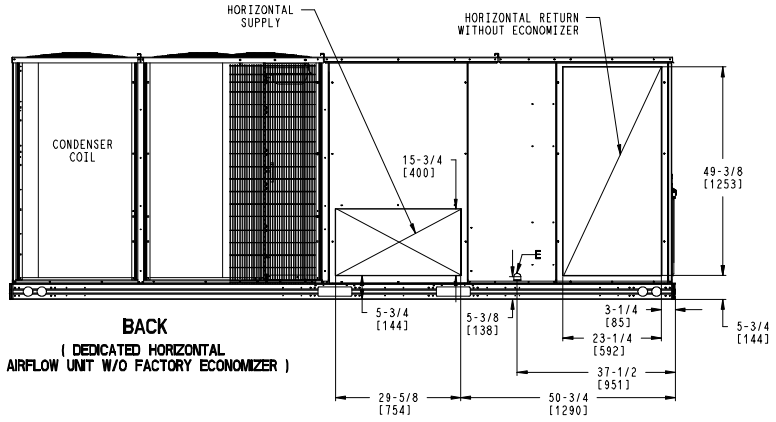


RIGHT

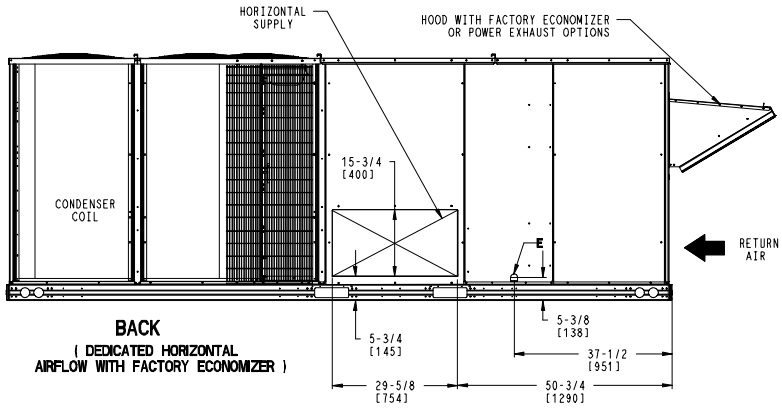
DEDICATED VERTICAL AIRFLOW UNIT

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES			REV
U.S. ECCN:NSR	1 OF 5	02/08/19	10/19/13	50HC 28 SINGLE ZONE ELECTRICAL COOLING WITH ELECRIC HEAT	50HE502161	B

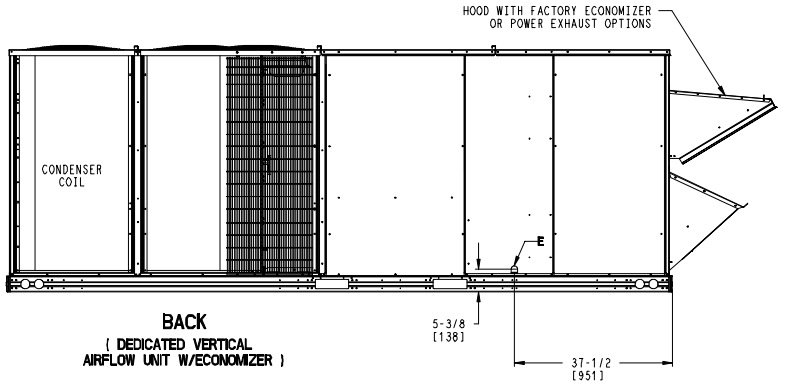
	CONNECTION SIZES
E	3/4"-14 NPT CONDENSATE DRAIN



BACK
(DEDICATED HORIZONTAL AIRFLOW UNIT W/O FACTORY ECONOMIZER)



BACK
(DEDICATED HORIZONTAL AIRFLOW WITH FACTORY ECONOMIZER)

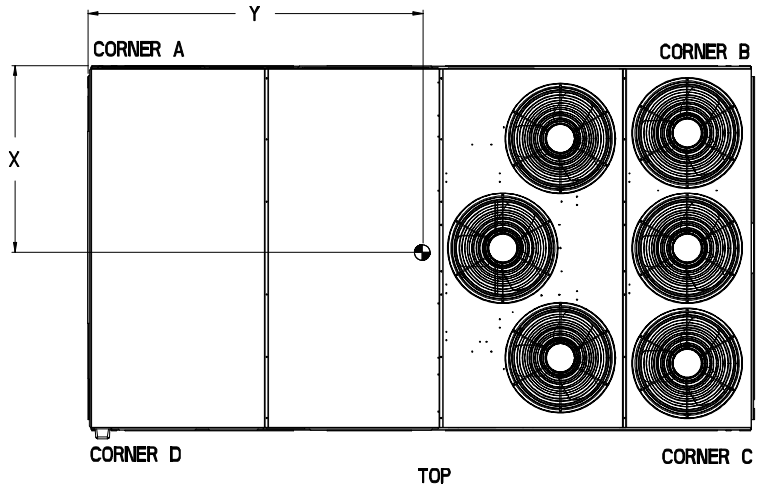


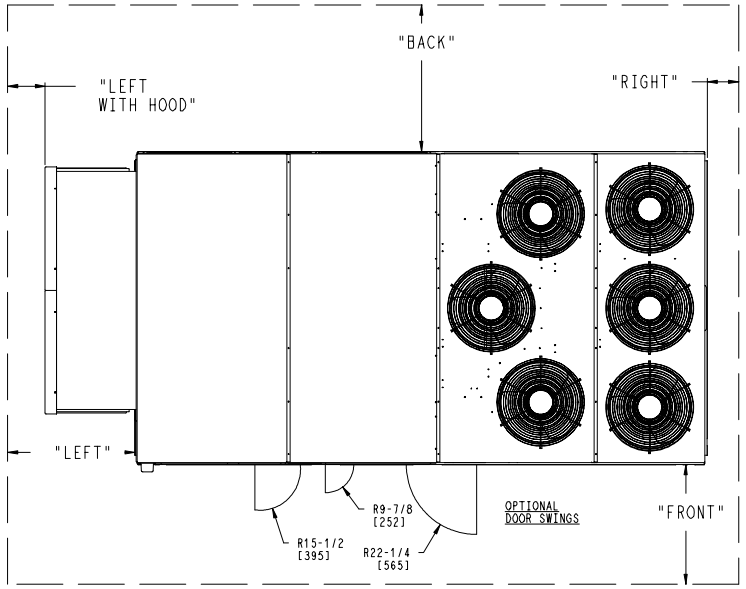
BACK
(DEDICATED VERTICAL AIRFLOW UNIT W/ECONOMIZER)

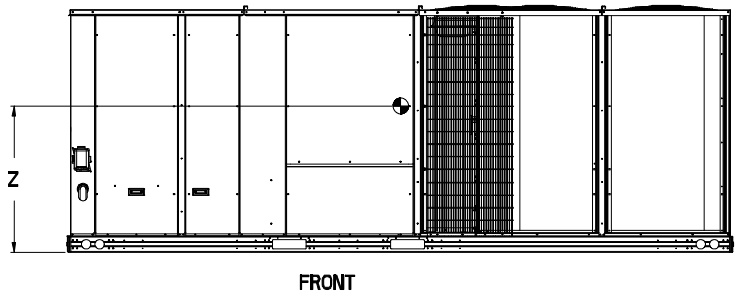
ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES			REV
U.S. ECCN:NSR	3 OF 5	02/08/19	10/19/13	50HC 28 SINGLE ZONE ELECTRICAL COOLING WITH ELECRIC HEAT	50HE502161	B

UNIT	STD UNIT WEIGHT *		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		
	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
50HC28	2193	997	545	248	528	240	551	251	569	259	44 [1118]	77 1/2 [1969]	19 [483]

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





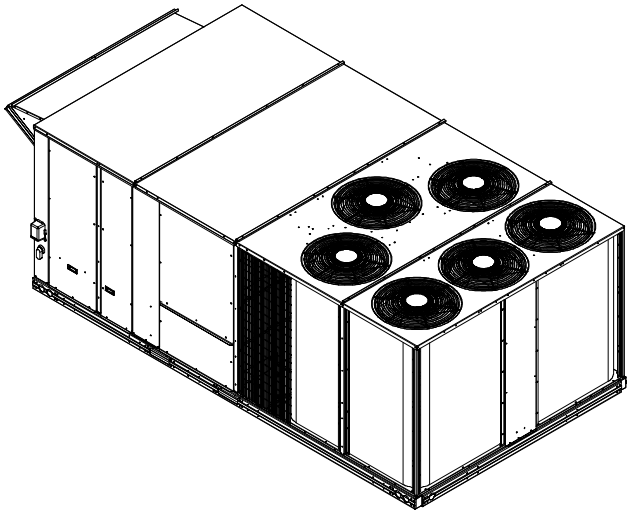


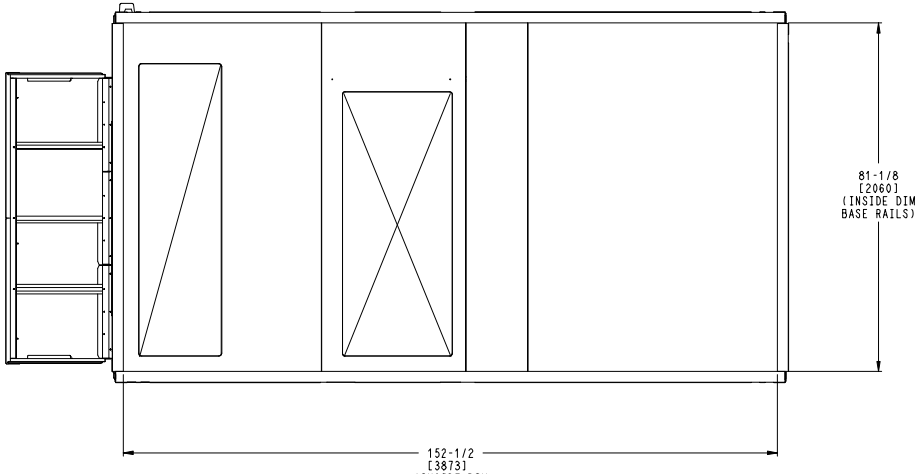
NOTES:

1. CLEARANCE ABOVE THE UNIT TO BE 72"
2. FOR ALL MINIMUM CLEARANCES LOCAL CODES OR JURISDICTIONS MAY PREVAIL.

	CLEARANCE		
	SERVICE WITH:	SERVICE WITH:	OPERATING
SURFACE	CONDUCTIVE BARRIER	NONCONDUCTIVE BARRIER	CLEARANCE
FRONT	48 [1219mm]	36 [914mm]	18 [457mm]
LEFT	48 [1219mm]	42 [1067mm]	18 [457mm]
BACK	42 [1067mm]	36 [914mm]	18 [457mm]
LEFT WITH HOOD	36 [914mm]	36 [914mm]	18 [457mm]
RIGHT	36 [914mm]	36 [914mm]	18 [457mm]
TOP	72 [1829mm]	72 [1829mm]	72 [1829mm]

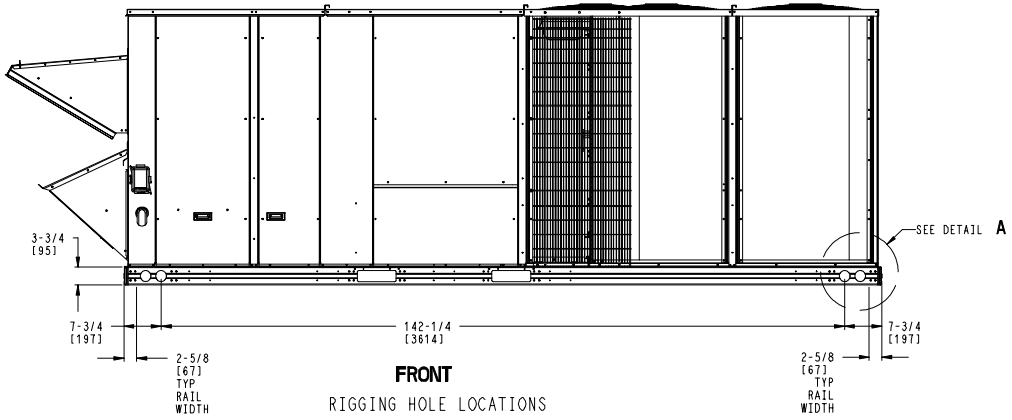
ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES			REV
U.S. ECCN:NSR	4 OF 5	02/08/19	10/19/13	50HC 28 SINGLE ZONE ELECTRICAL COOLING WITH ELECRIC HEAT	50HE502161	B





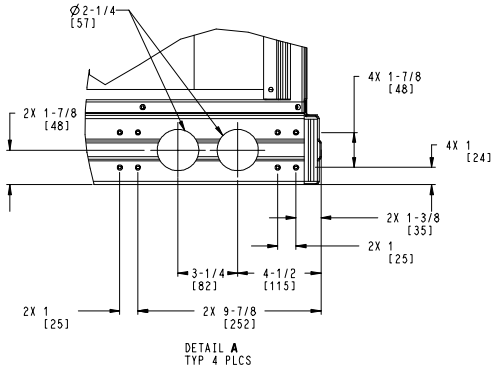
BOTTOM

INSIDE BASERAIL DIMENSIONS



FRONT

RIGGING HOLE LOCATIONS



DETAIL **A**
TYP 4 PLCS

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES			REV
U.S. ECCN:NSR	5 OF 5	02/08/19	10/19/13	50HC 28 SINGLE ZONE ELECTRICAL COOLING WITH ELECRIC HEAT	50HE502161	B

Performance Summary For RTU - 1,3

Project: BCF - Harvey, LA #315 09/15/2021
Prepared By: 02:29PM

Part Number:50HCBE28L3Q6-6XHJ0

ARI EER:	**11.40**	
Application EER (Rooftop Unit only):	**11.54**	
IEER (Max Cooling at Normal Cooling Design Mode):	**12.7**	

Base Unit Dimensions

Unit Length:	**157.8**	in
Unit Width:	**86.4**	in
Unit Height:	**57.4**	in

Operating Weight

Base Unit Weight:	**2193**	lb
Two-Stage Cooling with Humidi-MiZer:	**120**	lb
Medium Electric Heat:	**100**	lb
High Static Option Vertical Models:	**16**	lb
E-Coated Al/Cu - E-coated Al/Cu Louvered Hail Guards:	**150**	lb
Enthalpy Ultra Low Leak Econo w/PE (cent) - Vertical Air Only:	**371**	lb
Foil Faced Insulation, Hinged Access Panels and Powered Convenience Outlet:	**40**	lb
2 Speed Fan Controller (VFD) and Non-Fused Disconnect:	**35**	lb
Total Operating Weight:	**3025**	lb

Unit

Unit Voltage-Phase-Hertz:	**460-3-60**	
Air Discharge:	**Vertical**	
Fan Drive Type:	**Belt**	
Actual Airflow:	**9000**	CFM
Site Altitude:	**0**	ft

Cooling Performance

Condenser Entering Air DB:	**95.0**	F
Evaporator Entering Air DB:	**80.0**	F
Evaporator Entering Air WB:	**67.0**	F
Entering Air Enthalpy:	**31.44**	BTU/lb
Evaporator Leaving Air DB:	**57.4**	F
Evaporator Leaving Air WB:	**56.4**	F
Evaporator Leaving Air Enthalpy:	**24.01**	BTU/lb
Unit Discharge Air DB:	**58.9**	F
Unit Discharge Air WB:	**57.0**	F
Unit Discharge Air Enthalpy:	**24.37**	BTU/lb
Gross Cooling Capacity:	**301.02**	MBH
Net Cooling Capacity:	**286.40**	MBH
Gross Sensible Capacity:	**219.88**	MBH
Net Sensible Capacity:	**205.26**	MBH
Compressor Power Input:	**20.54**	kW
Coil Bypass Factor:	**0.097**	

Heating Performance

Heating Airflow:	**9000**	CFM
Entering Air Temp:	**70.0**	F
Leaving Air Temp:	**86.1**	F
Electric Heating Capacity:	**45.90**	kW

Supply Fan

External Static Pressure:	**1.00**	in wg
Options / Field Installed Accessories Static Pressure		
Electric Heaters:	**0.10**	in wg
Humidi-MiZer Dehumidification System:	**0.10**	in wg
Economizer:	**0.09**	in wg
Power Exhaust:	**(Fan Data Includes Drop)**	

Total Application Static (ESP + Unit Opts/Acc.): **1.29** in wg
Fan RPM: **1011**
Fan Power: **5.02** BHP
NOTE: **Selected IFM RPM Range: 941 - 1176**
Supply Fan Motor Maximum Continuous BHP: **11.9** HP
Supply Fan Motor Nominal HP: **7.5** HP
Supply Fan Motor Efficiency at Full Load (%): **92**

Power Exhaust

Return Duct Static: **0.40** in wg
Max. Air to Exhaust: **4590** CFM

Electrical Data

Voltage Range: **414 - 506**
Compressor #1 RLA: **18.6**
Compressor #1 LRA: **125**
Compressor #2 RLA: **16**
Compressor #2 LRA: **140**
Actual Electric Heater kW: **45.9**
Electric Heater FLA: **60.1**
Indoor Fan Motor Type: **HIGH**
Indoor Fan Motor FLA: **14.3**
Power Supply MCA: **88.5**
Power Supply MOCP (Fuse or HACR): **100**
Disconnect Size FLA: **95**
Disconnect Size LRA: **373**
Electrical Convenience Outlet FLA (based on unit line voltage): **2.2**
Power Exhaust [Motor Qty / FLA(ea motor)]: **2 / 3.1**
Outdoor Fan [Qty / FLA (ea)]: **6 / 0.9**
NOTE: Convenience outlet must be field connected to the line/load side of the unit disconnect per local code.

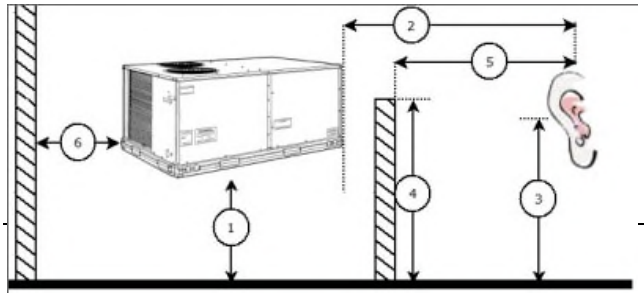
Control Panel SCCR: 5kA RMS at Rated Symmetrical Voltage

Acoustics

Sound Rating: **86.0** db
Sound Power Levels, db re 10E-12 Watts

	Discharge	Inlet	Outdoor
63 Hz	96.1	92.3	97.1
125 Hz	89.0	77.5	88.3
250 Hz	79.3	68.4	84.4
500 Hz	79.7	67.1	83.3
1000 Hz	76.9	61.6	80.7
2000 Hz	75.8	56.1	77.4
4000 Hz	75.9	52.5	73.4
8000 Hz	70.1	47.5	67.3
A-Weighted	83.8	70.5	85.9

Advanced Acoustics



Advanced Accoustics Parameters

1. Unit height above ground: .....**30.0** ft
2. Horizontal distance from unit to receiver: .....**50.0** ft
3. Receiver height above ground: .....**5.7** ft
4. Height of obstruction: .....**0.0** ft
5. Horizontal distance from obstruction to receiver: .**0.0** ft
6. Horizontal distance from unit to obstruction: .....**0.0** ft

Detailed Acoustics Information

Octave Band Center Freq. Hz	63	125	250	500	1k	2k	4k	8k	Overall
A	97.1	88.3	84.4	83.3	80.7	77.4	73.4	67.3	98.1 Lw
B	70.9	72.2	75.8	80.1	80.7	78.6	74.4	66.2	85.9 LwA
C	64.7	55.9	52.0	50.9	48.3	45.0	41.0	34.9	65.7 Lp
D	38.5	39.8	43.4	47.7	48.3	46.2	42.0	33.8	53.5 LpA

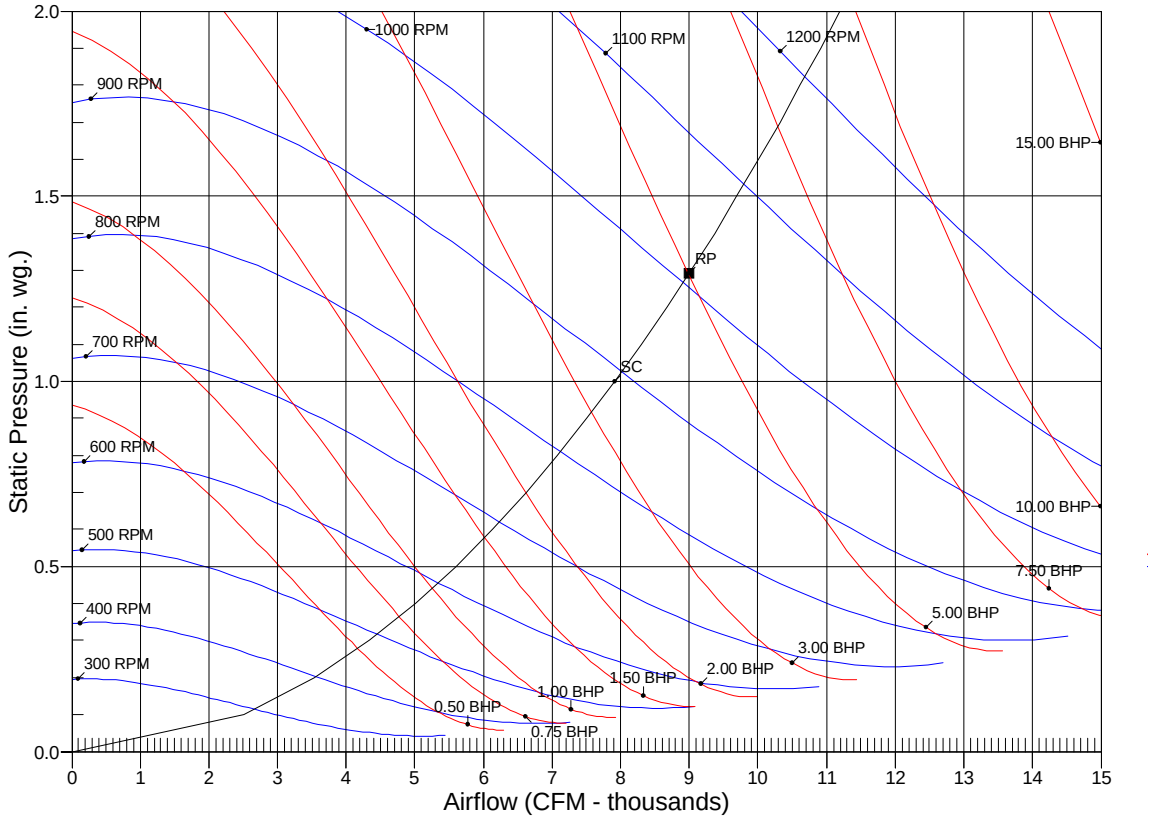
Legend
A Sound Power Levels at Unit's Acoustic Center, Lw
B A-Weighted Sound Power Levels at Unit's Acoustic Center, LwA
C Sound Pressure Levels at Specific Distance from Unit, Lp
D A-Weighted Sound Pressure Levels at Specific Distance from Unit, LpA

Calculation methods used in this program are patterned after the ASHRAE Guide; other ASHRAE Publications and the AHRI Acoustical Standards. While a very significant effort has been made to insure the technical accuracy of this program, it is assumed that the user is knowledgeable in the art of system sound estimation and is aware of the tolerances involved in real world acoustical estimation. This program makes certain assumptions as to the dominant sound sources and sound paths which may not always be appropriate to the real system being estimated. Because of this, no assurances can be offered that this software will always generate an accurate sound prediction from user supplied input data. If in doubt about the estimation of expected sound levels in a space, an Acoustical Engineer or a person with sound prediction expertise should be consulted.

Performance Summary For RTU - 1,3

Project: BCF - Harvey, LA #315 09/15/2021
Prepared By: 02:29PM

Fan Curve



RPM = 1011 BHP = 5.02 Maximum RPM = 1190 Maximum BHP = 11.90
SC - System Curve RP - Rated Point

RTU - 2,4

Tag Cover Sheet
Unit Report
Certified Drawing
Performance Report

Unit Report For RTU - 2,4

Project: BCF - Harvey, LA #315 09/15/2021
Prepared By: 02:29PM

Unit Parameters

Unit Model: **50HCBD28L3Q6-6XHJ0**
Unit Size: ..... **28 (25 Tons)**
Volts-Phase-Hertz: **460-3-60**
Heating Type: ..... **Electric**
Duct Cfg: ..... **Vertical Supply / Vertical Return**
Two-Stage Compressor Models

Dimensions (ft. in.) & Weight (lb.) ***

Unit Length: ..... **13' 1.75"**
Unit Width: ..... **7' 2.375"**
Unit Height: ..... **4' 9.375"**
*** Total Operating Weight: ..... **2905** lb

*** Weights and Dimensions are approximate. Weight does not include unit packaging. Approximate dimensions are provided primarily for shipping purposes. For exact dimensions and weights, refer to appropriate product data catalog.

Lines and Filters

Condensate Drain Line Size: **3/4**
Return Air Filter Type: ..... **Throwaway**
Return Air Filter Quantity: **9**
Return Air Filter Size: ..... **16 x 25 x 2**

Unit Configuration

Medium Electric Heat
Condensate Overflow Switch and RA and SA Smoke Detectors
High Static Option Vertical Models
E-Coated Al/Cu - E-coated Al/Cu Louvered Hail Guards
Electromechanical Controls w/W7220 Econo Controller
Enthalpy Ultra Low Leak Econo w/PE (cent) - Vertical Air Only
Foil Faced Insulation, Hinged Access Panels and Powered Convenience Outlet
Non-Fused Disconnect
Standard Packaging
2-Speed indoor fan motor controlled by VFD

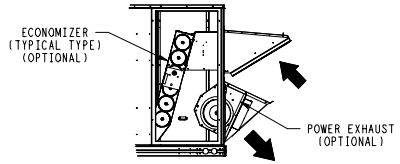
Warranty Information

5-Year compressor parts (STD.)
1-Year parts (STD.)
Complete Unit 1st Year Carrier CCS Labor
Start-up, Each Additional Unit

NOTE: Please see Warranty Catalog 500-089 for explanation of policies and ordering methods.

Ordering Information

Part Number	Description	Quantity
50HCBD28L3Q6-6XHJ0	Rooftop Unit	2
	Base Unit	
	Medium Electric Heat	
	Condensate Overflow Switch and RA and SA Smoke Detectors	
	High Static Option Vertical Models	
	E-Coated Al/Cu - E-coated Al/Cu Louvered Hail Guards	
	Foil Faced Insulation, Hinged Access Panels and Powered Convenience Outlet	
	Ultra Low leak Enty Econo X, W7220 control, cent pwr exhaust. Meets Calf. Title 24 FDD & Leak Rates	
	2 Speed Fan Controller (VFD) and Non-Fused Disconnect	
Field Installed Accessories		
--HH--57AC-081	Enthalpy Control for W7220 Controller	2
CRSDTEST001A00	Smoke detector remote test/Reset/Alarm indicator kit	2



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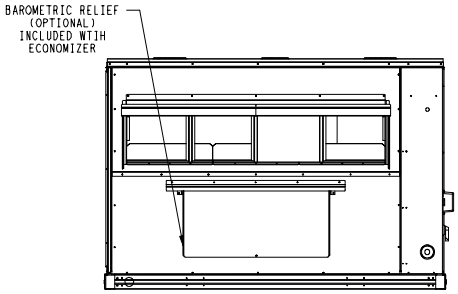

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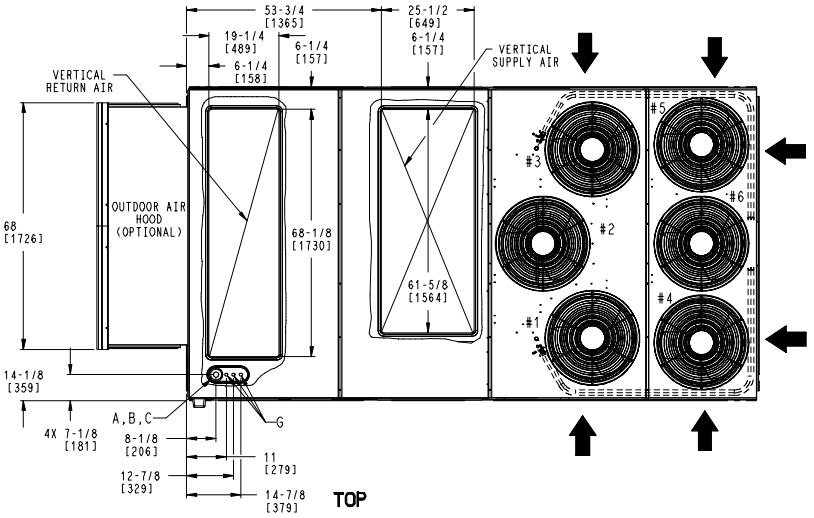
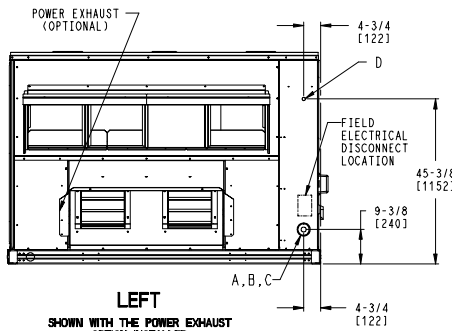


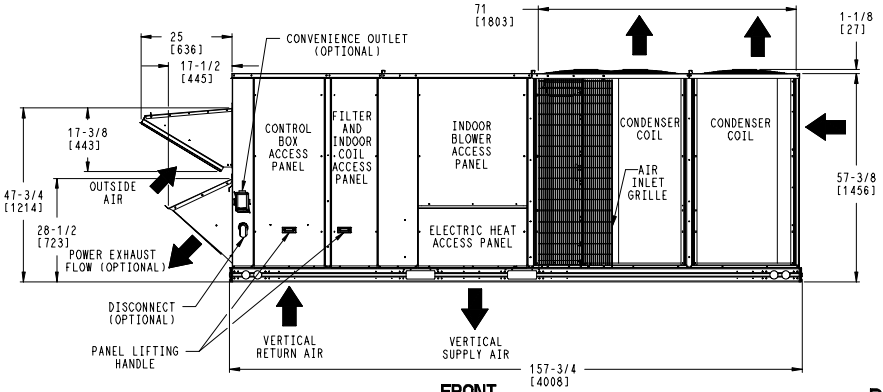
TOP

	CONNECTION SIZES
A	1 3/8" DIA [35] FIELD POWER SUPPLY KNOCKOUT
B	3" DIA [76] FIELD POWER SUPPLY KNOCKOUT
C	3 5/8" DIA [92] FIELD POWER SUPPLY KNOCKOUT
D	7/8" DIA [22] FIELD CONTROL WIRING HOLE
G	7/8" DIA [22] FIELD CONTROL WIRING KNOCKOU

NOTES:
1. DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE IN MILLIMETERS.
2. CENTER OF GRAVITY
3. DIRECTION OF AIR FLOW
4. ALL VIEW DRAWN USING 3RD ANGLE



LEFT
SHOWN WITH THE POWER EXHAUST OPTION INSTALLED



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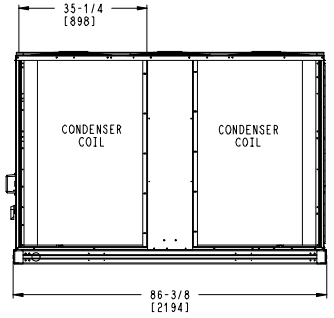
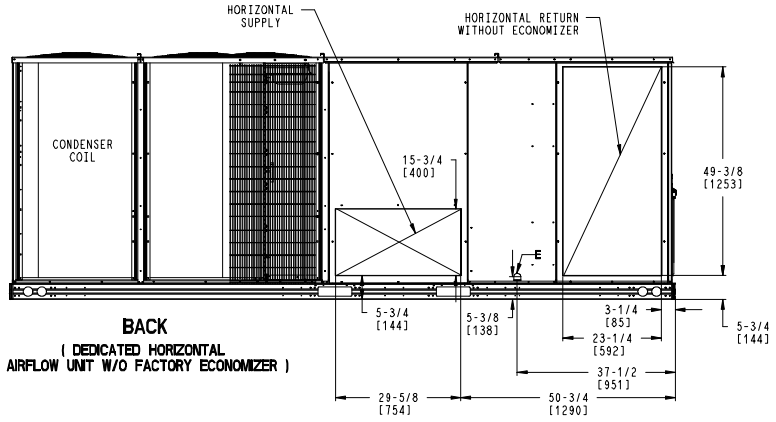


RIGHT

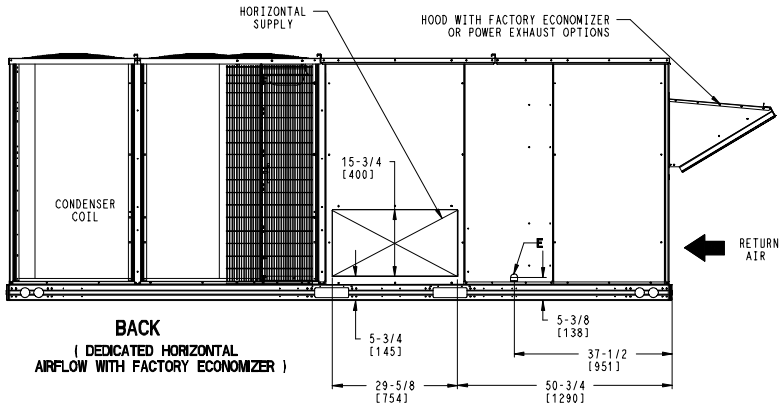
DEDICATED VERTICAL AIRFLOW UNIT

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES			REV
U.S. ECCN:NSR	1 OF 5	02/08/19	10/19/13	50HC 28 SINGLE ZONE ELECTRICAL COOLING WITH ELECRIC HEAT	50HE502161	B

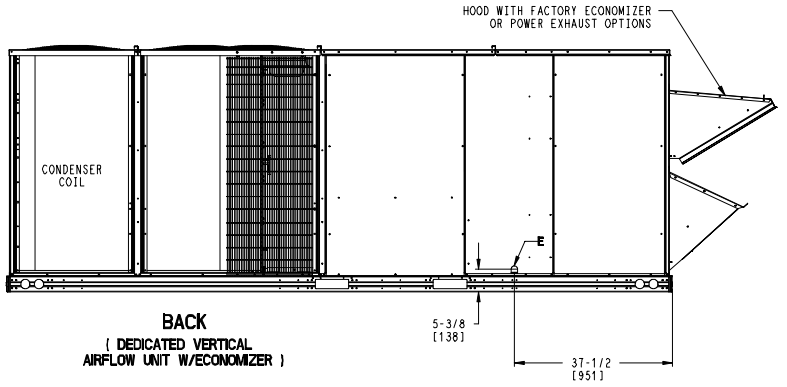
	CONNECTION SIZES
E	3/4"-14 NPT CONDENSATE DRAIN



BACK
(DEDICATED HORIZONTAL AIRFLOW UNIT W/O FACTORY ECONOMIZER)



BACK
(DEDICATED HORIZONTAL AIRFLOW WITH FACTORY ECONOMIZER)

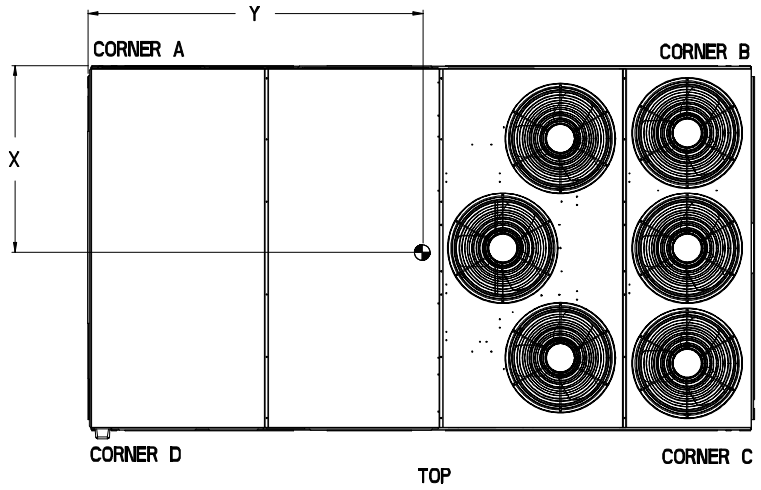


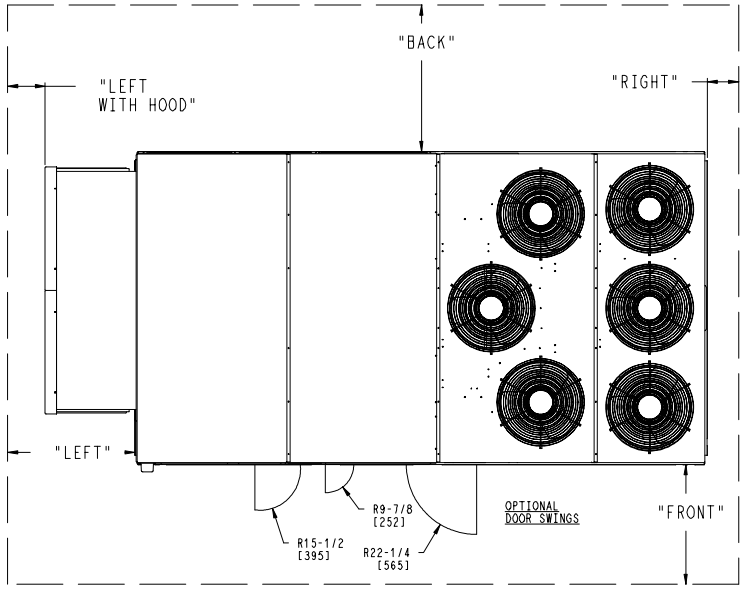
BACK
(DEDICATED VERTICAL AIRFLOW UNIT W/ECONOMIZER)

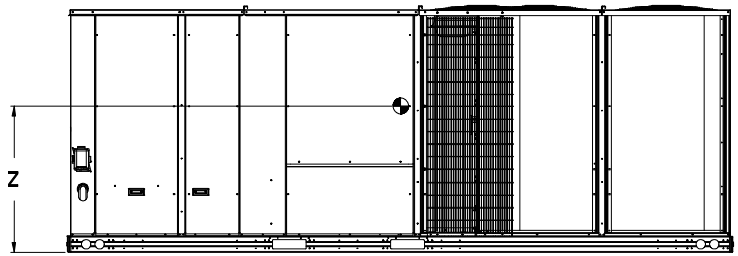
ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES			REV
U.S. ECCN:NSR	3 OF 5	02/08/19	10/19/13	50HC 28 SINGLE ZONE ELECTRICAL COOLING WITH ELECRIC HEAT	50HE502161	B

UNIT	STD UNIT WEIGHT *		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		
	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
50HC28	2193	997	545	248	528	240	551	251	569	259	44 [1118]	77 1/2 [1969]	19 [483]

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





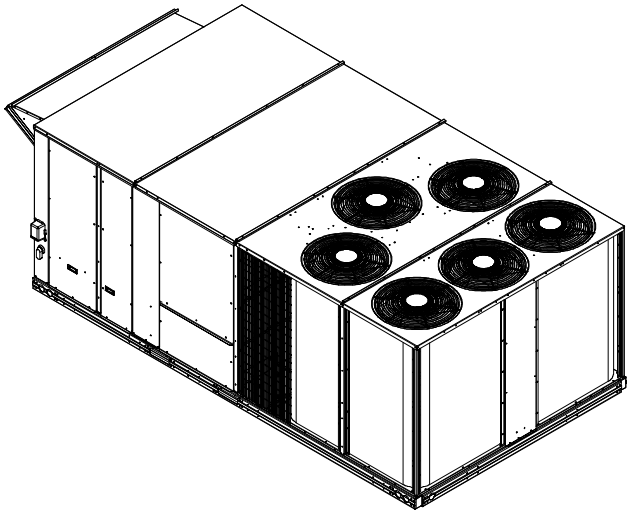


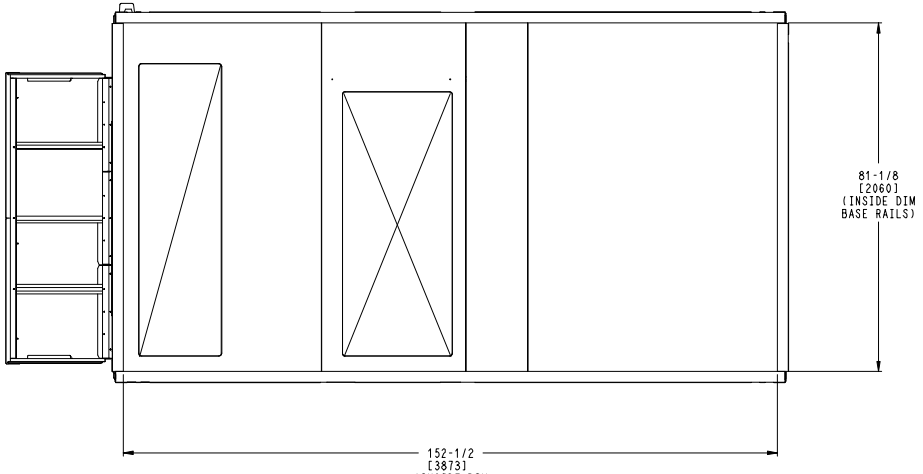
NOTES:

1. CLEARANCE ABOVE THE UNIT TO BE 72"
2. FOR ALL MINIMUM CLEARANCES LOCAL CODES OR JURISDICTIONS MAY PREVAIL.

	CLEARANCE		
	SERVICE WITH:	SERVICE WITH:	OPERATING
SURFACE	CONDUCTIVE BARRIER	NONCONDUCTIVE BARRIER	CLEARANCE
FRONT	48 [1219mm]	36 [914mm]	18 [457mm]
LEFT	48 [1219mm]	42 [1067mm]	18 [457mm]
BACK	42 [1067mm]	36 [914mm]	18 [457mm]
LEFT WITH HOOD	36 [914mm]	36 [914mm]	18 [457mm]
RIGHT	36 [914mm]	36 [914mm]	18 [457mm]
TOP	72 [1829mm]	72 [1829mm]	72 [1829mm]

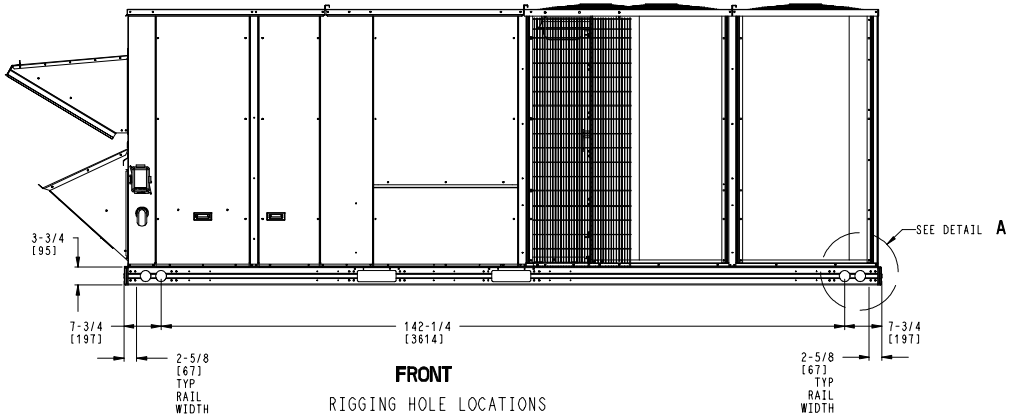
ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES			REV
U.S. ECCN:NSR	4 OF 5	02/08/19	10/19/13	50HC 28 SINGLE ZONE ELECTRICAL COOLING WITH ELECRIC HEAT	50HE502161	B





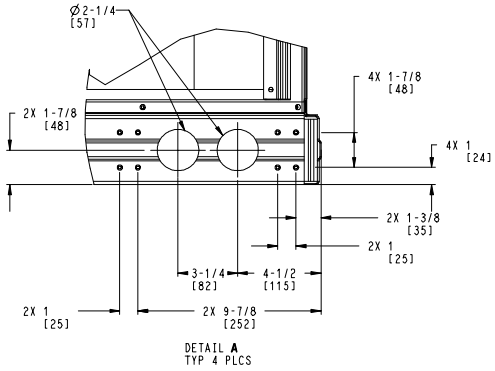
BOTTOM

INSIDE BASERAIL DIMENSIONS



FRONT

RIGGING HOLE LOCATIONS



DETAIL **A**
TYP 4 PLCS

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES			REV
U.S. ECCN:NSR	5 OF 5	02/08/19	10/19/13	50HC 28 SINGLE ZONE ELECTRICAL COOLING WITH ELECRIC HEAT	50HE502161	B

Part Number:50HCBD28L3Q6-6XHJ0

ARI EER:	**11.40**	
Application EER (Rooftop Unit only):	**11.65**	
IEER:	**12.7**	

Base Unit Dimensions

Unit Length:	**157.8**	in
Unit Width:	**86.4**	in
Unit Height:	**57.4**	in

Operating Weight

Base Unit Weight:	**2193**	lb
Medium Electric Heat:	**100**	lb
High Static Option Vertical Models:	**16**	lb
E-Coated Al/Cu - E-coated Al/Cu Louvered Hail Guards:	**150**	lb
Enthalpy Ultra Low Leak Econo w/PE (cent) - Vertical Air Only:	**371**	lb
Foil Faced Insulation, Hinged Access Panels and Powered Convenience Outlet:	**40**	lb
2 Speed Fan Controller (VFD) and Non-Fused Disconnect:	**35**	lb
Total Operating Weight:	**2905**	lb

Unit

Unit Voltage-Phase-Hertz:	**460-3-60**	
Air Discharge:	**Vertical**	
Fan Drive Type:	**Belt**	
Actual Airflow:	**9000**	CFM
Site Altitude:	**0**	ft

Cooling Performance

Condenser Entering Air DB:	**95.0**	F
Evaporator Entering Air DB:	**80.0**	F
Evaporator Entering Air WB:	**67.0**	F
Entering Air Enthalpy:	**31.44**	BTU/lb
Evaporator Leaving Air DB:	**57.4**	F
Evaporator Leaving Air WB:	**56.4**	F
Evaporator Leaving Air Enthalpy:	**24.01**	BTU/lb
Unit Discharge Air DB:	**58.8**	F
Unit Discharge Air WB:	**56.9**	F
Unit Discharge Air Enthalpy:	**24.35**	BTU/lb
Gross Cooling Capacity:	**301.01**	MBH
Net Cooling Capacity:	**287.10**	MBH
Gross Sensible Capacity:	**219.92**	MBH
Net Sensible Capacity:	**206.01**	MBH
Compressor Power Input:	**20.56**	kW
Coil Bypass Factor:	**0.180**	

Heating Performance

Heating Airflow:	**9000**	CFM
Entering Air Temp:	**70.0**	F
Leaving Air Temp:	**86.1**	F
Electric Heating Capacity:	**45.90**	kW

Supply Fan

External Static Pressure:	**1.00**	in wg
Options / Field Installed Accessories Static Pressure		
Electric Heaters:	**0.10**	in wg
Economizer:	**0.09**	in wg
Power Exhaust:	**(Fan Data Includes Drop)**	
Total Application Static (ESP + Unit Opts/Acc.):	**1.19**	in wg
Fan RPM:	**986**	

Fan Power: **4.78** BHP
NOTE: **Selected IFM RPM Range: 941 - 1176**
Supply Fan Motor Maximum Continuous BHP: **11.9** HP
Supply Fan Motor Nominal HP: **7.5** HP
Supply Fan Motor Efficiency at Full Load (%): **92**

Power Exhaust

Return Duct Static: **0.40** in wg
Max. Air to Exhaust: **4590** CFM

Electrical Data

Voltage Range: **414 - 506**
Compressor #1 RLA: **18.6**
Compressor #1 LRA: **125**
Compressor #2 RLA: **16**
Compressor #2 LRA: **140**
Actual Electric Heater kW: **45.9**
Electric Heater FLA: **60.1**
Indoor Fan Motor Type: **HIGH**
Indoor Fan Motor FLA: **14.3**
Power Supply MCA: **88.5**
Power Supply MOCP (Fuse or HACR): **100**
Disconnect Size FLA: **95**
Disconnect Size LRA: **373**
Electrical Convenience Outlet FLA (based on unit line voltage): **2.2**
Power Exhaust [Motor Qty / FLA(ea motor)]: **2 / 3.1**
Outdoor Fan [Qty / FLA (ea)]: **6 / 0.9**
NOTE: Convenience outlet must be field connected to the line/load side of the unit disconnect per local code.

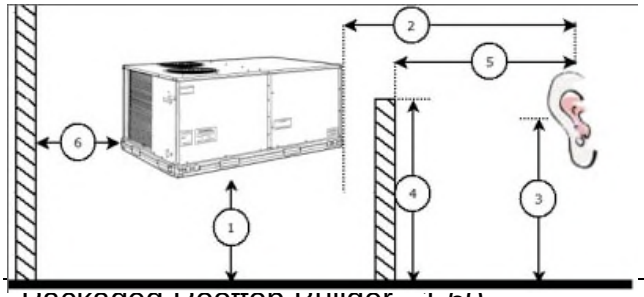
Control Panel SCCR: 5kA RMS at Rated Symmetrical Voltage

Acoustics

Sound Rating: **86.0** db
Sound Power Levels, db re 10E-12 Watts

	Discharge	Inlet	Outdoor
63 Hz	95.8	92.0	97.1
125 Hz	88.2	76.7	88.3
250 Hz	78.7	67.7	84.4
500 Hz	79.3	66.7	83.3
1000 Hz	76.3	60.9	80.7
2000 Hz	75.2	55.6	77.4
4000 Hz	75.4	52.0	73.4
8000 Hz	69.5	46.9	67.3
A-Weighted	83.3	70.0	85.9

Advanced Acoustics



Advanced Accoustics Parameters

1. Unit height above ground: .....**30.0** ft
2. Horizontal distance from unit to receiver: .....**50.0** ft
3. Receiver height above ground: .....**5.7** ft
4. Height of obstruction: .....**0.0** ft
5. Horizontal distance from obstruction to receiver: .**0.0** ft
6. Horizontal distance from unit to obstruction: .....**0.0** ft

Detailed Acoustics Information

Octave Band Center Freq. Hz	63	125	250	500	1k	2k	4k	8k	Overall
A	97.1	88.3	84.4	83.3	80.7	77.4	73.4	67.3	98.1 Lw
B	70.9	72.2	75.8	80.1	80.7	78.6	74.4	66.2	85.9 LwA
C	64.7	55.9	52.0	50.9	48.3	45.0	41.0	34.9	65.7 Lp
D	38.5	39.8	43.4	47.7	48.3	46.2	42.0	33.8	53.5 LpA

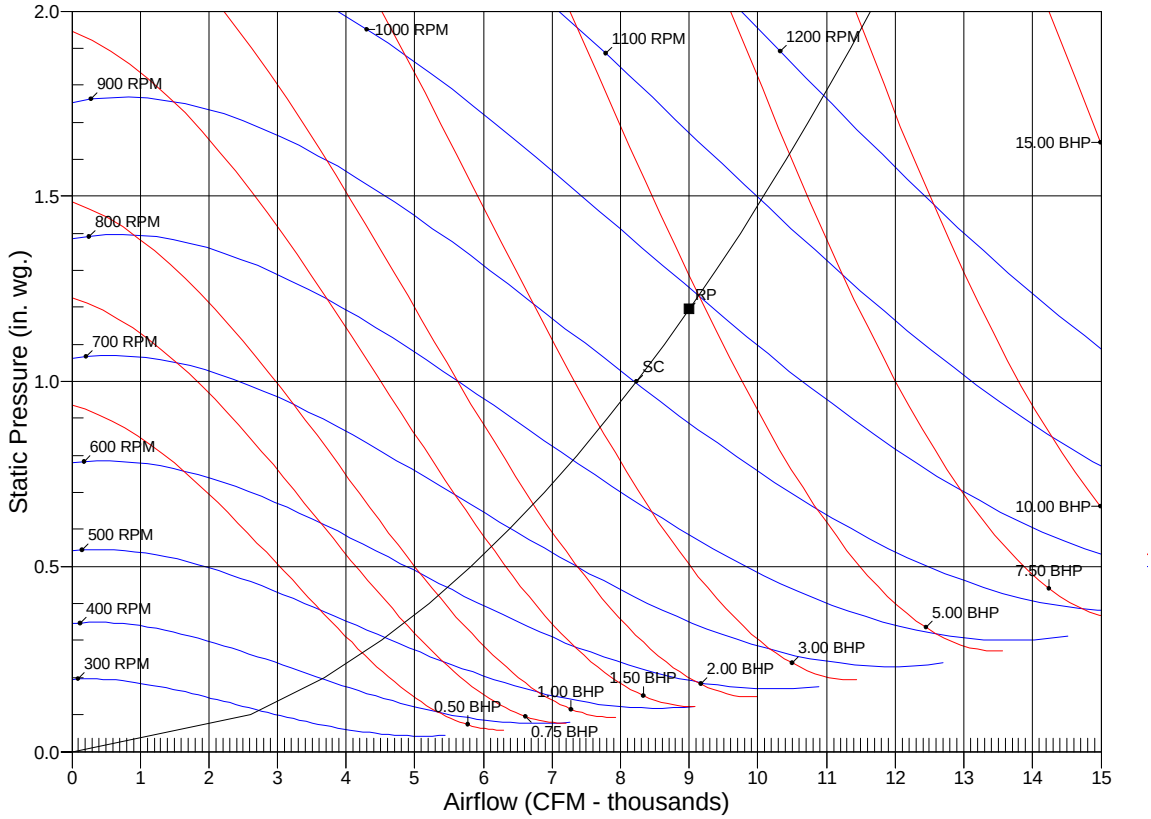
Legend
A Sound Power Levels at Unit's Acoustic Center, Lw
B A-Weighted Sound Power Levels at Unit's Acoustic Center, LwA
C Sound Pressure Levels at Specific Distance from Unit, Lp
D A-Weighted Sound Pressure Levels at Specific Distance from Unit, LpA

Calculation methods used in this program are patterned after the ASHRAE Guide; other ASHRAE Publications and the AHRI Acoustical Standards. While a very significant effort has been made to insure the technical accuracy of this program, it is assumed that the user is knowledgeable in the art of system sound estimation and is aware of the tolerances involved in real world acoustical estimation. This program makes certain assumptions as to the dominant sound sources and sound paths which may not always be appropriate to the real system being estimated. Because of this, no assurances can be offered that this software will always generate an accurate sound prediction from user supplied input data. If in doubt about the estimation of expected sound levels in a space, an Acoustical Engineer or a person with sound prediction expertise should be consulted.

Performance Summary For RTU - 2,4

Project: BCF - Harvey, LA #315 09/15/2021
Prepared By: 02:29PM

Fan Curve



RPM = 986 BHP = 4.78 Maximum RPM = 1190 Maximum BHP = 11.90
SC - System Curve RP - Rated Point

RTU - 5

Tag Cover Sheet
Unit Report
Certified Drawing
Performance Report

Unit Parameters

Unit Model:..... **50HCCE09L3Q6-6WHJ0**
Unit Size:.....**09 (8.5 Tons)**
Volts-Phase-Hertz:..... **460-3-60**
Heating Type:..... **Electric**
Duct Cfg:..... **Vertical Supply / Vertical Return**
Two stage cooling models with Humidi-MiZer

Dimensions (ft. in.) & Weight (lb.) ***

Unit Length:.....**7' 4.125"**
Unit Width:.....**4' 11.5"**
Unit Height: .....**4' 1.375"**
*** Total Operating Weight: ..... **1330** lb

*** Weights and Dimensions are approximate. Weight does not include unit packaging. Approximate dimensions are provided primarily for shipping purposes. For exact dimensions and weights, refer to appropriate product data catalog.

Lines and Filters

Condensate Drain Line Size: **3/4**
Return Air Filter Type:.....**Throwaway**
Return Air Filter Quantity:..... **4**
Return Air Filter Size:.....**20 x 20 x 2**

Unit Configuration

High Electric Heat
Condensate Overflow Switch and RA and SA Smoke Detectors
High Static Belt Drive
E-coat Al/Cu - E-coat Al/Cu - Louvered Hail Guards
Electromechanical Controls w/W7220 Econo Controller
Enthalpy Ultra Low Leak Econo w/Baro Relief
Foil Faced Insulation, Hinged Access Panels and Powered Convenience Outlet
Non-Fused Disconnect
Standard Packaging
2-Speed indoor fan motor controlled by VFD
Humidi-MiZer™ Adaptive Dehumidification System

Warranty Information

5-Year compressor parts (STD.)
1-Year parts (STD.)
Complete Unit 1st Year Carrier CCS Labor
Start-up, First Unit

NOTE: Please see Warranty Catalog 500-089 for explanation of policies and ordering methods.

Ordering Information

Part Number	Description	Quantity
50HCCE09L3Q6-6WHJ0	Rooftop Unit	1
	Base Unit	
	High Electric Heat	
	Condensate Overflow Switch and RA and SA Smoke Detectors	
	High Static Belt Drive	
	E-coat Al/Cu - E-coat Al/Cu - Louvered Hail Guards	
	Foil Faced Insulation, Hinged Access Panels and Powered Convenience Outlet	
	Humidi-MiZer™ Adaptive Dehumidification System	
	Ultra Low leak Enty Econo X with baro relief, W7220 control. Meets Calf. Title 24 FDD & Leak Rates	
	2 Speed Fan Controller (VFD) and Non-Fused Disconnect	
Field Installed Accessories		
CRPECONV004A00	Hinged Access Door	1
CRSDTEST001A00	Smoke detector remote test/Reset/Alarm indicator kit	1
--HH--57AC-081	Enthalpy Control for W7220 Controller	1

--HL--38MG-029	Humidistat	1
CRPWREXH023A01	Power Exhaust System	1

NOTES:

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

UNIT	J	K	H
50HC-A,D07	41 1/4 [1048]	33 3/4 [857]	15 7/8 [403]
50HC-D08	49 3/8 [1253]	36 3/8 [925]	15 7/8 [403]
50HC-D09	49 3/8 [1253]	36 3/8 [925]	15 7/8 [403]

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

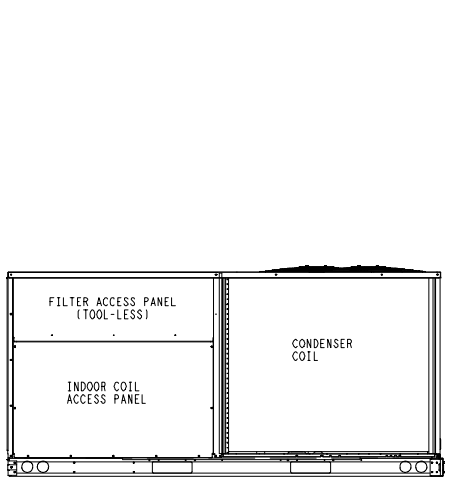
THRU-THE-BASE CHART (FIELD INST)

THESE HOLES REQUIRED FOR USE WITH ACCY KITS:
CRBTMPWR001A01: 07
CRBTMPWR002A01: 08,09

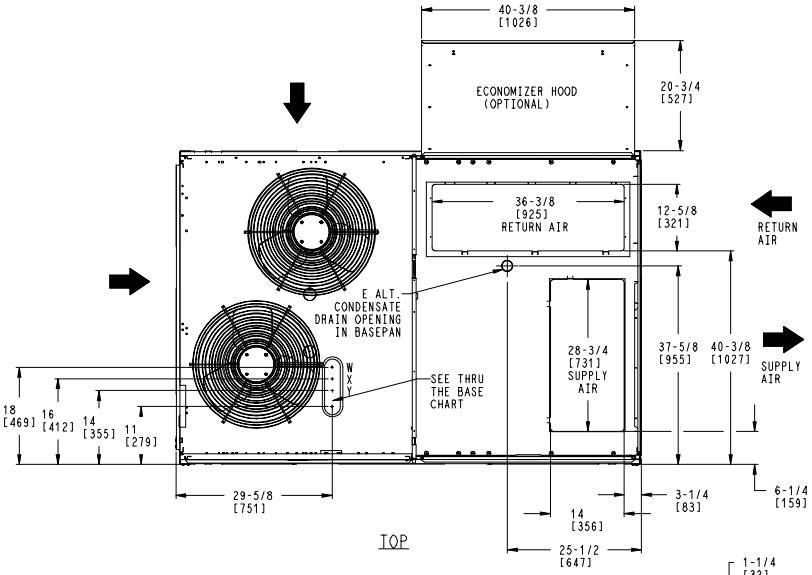
	THREADED CONDUIT SIZE	WIRE USE	REQ'D HOLE SIZES (MAX.)
W	1/2"	ACC.	7/8" [22.2]
X	1/2"	24V	7/8" [22.2]
Y	3/4" (001) 1 1/4" (002)	POWER	1 1/8" [28.6] 1 3/4" [44.4]

THRU-THE-BASE CHART (FIOP)

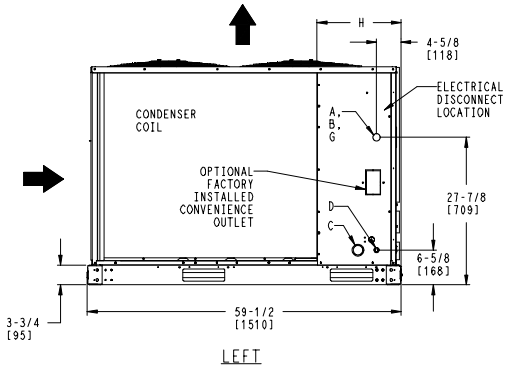
FOR "THRU-THE-BASEPAN" FACTORY OPTION, FITTINGS FOR ONLY X & Y ARE PROVIDED: (1) 1/2" & (1) 1 1/4" ELECTRICAL FITTINGS.



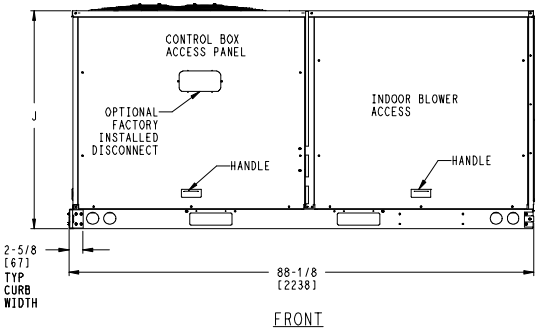
BACK



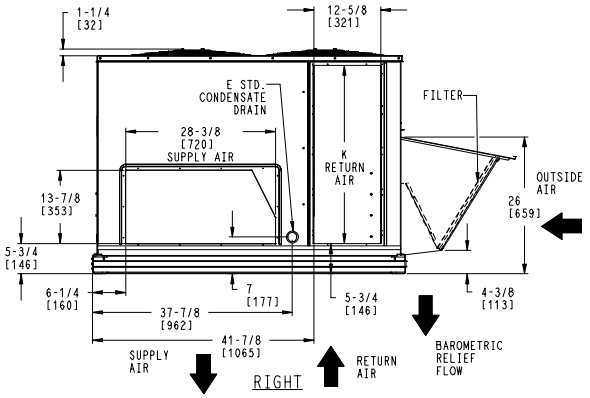
TOP



LEFT



FRONT

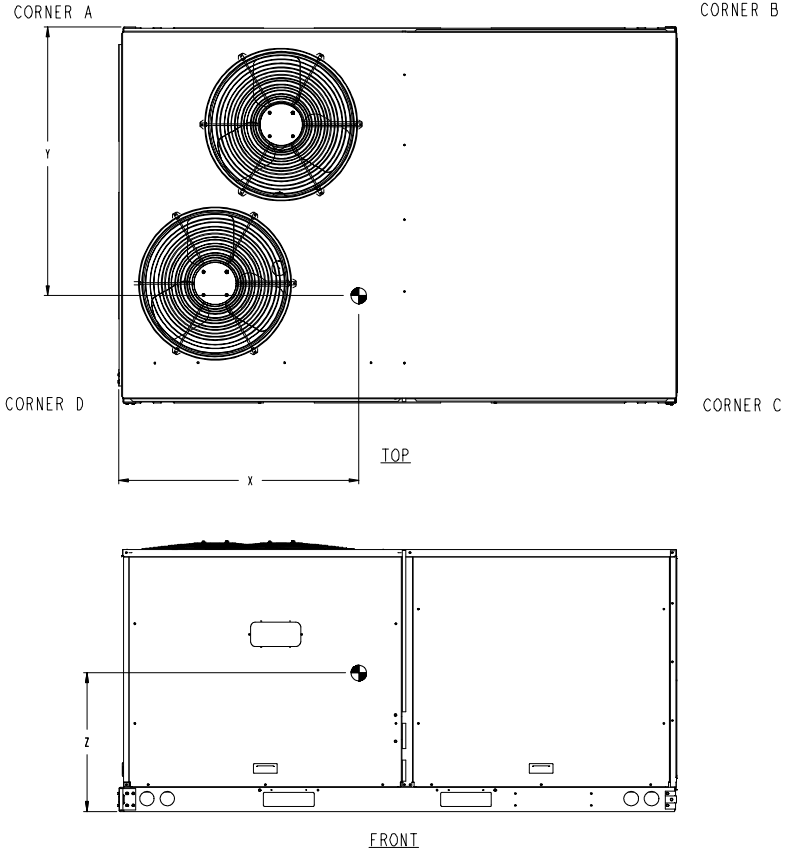


RIGHT

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES			REV
U.S. ECCN:NSR	1 OF 2	09/28/16	10/06/10	50HC 07-09 SINGLE ZONE ELECTRICAL COOLING WITH ELECTRICAL HEAT	48TM502709	B

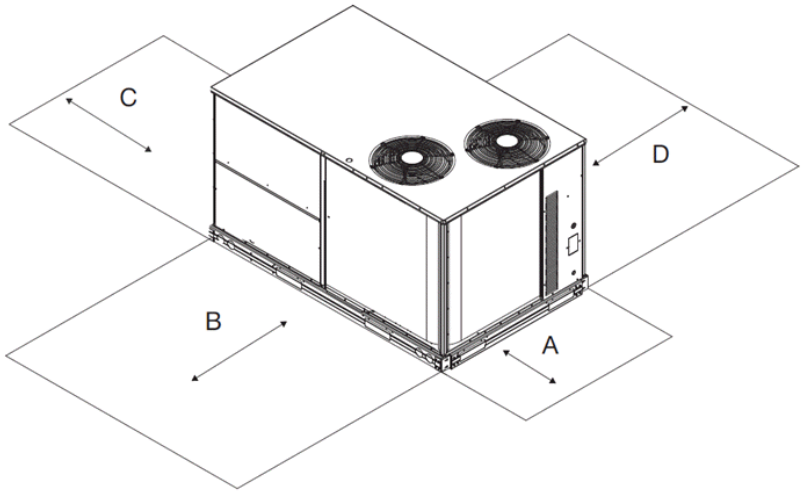
UNIT	STD. UNIT WEIGHT *		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		
	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
50HC-A,D07	715	324.3	161.3	73.2	142.4	64.6	192.9	87.5	218.5	99.1	41 3/8 [1051]	34 1/4 [870]	20 1/2 [521]
50HC-D08	860	390	199.4	90.4	176.4	80	227.3	103	256.9	116.5	41 3/8 [1051]	33 1/2 [851]	23 3/4 [603]
50HC-D09	860	390	199.4	90.4	176.4	80	227.3	103	256.9	116.5	41 3/8 [1051]	33 1/2 [851]	23 3/4 [603]

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



ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES			REV
U.S. ECCN:NSR	2 OF 2	09/28/16	10/06/10	50HC 07-09 SINGLE ZONE ELECTRICAL COOLING WITH ELECTRICAL HEAT	48TM502709	B

Service Clearance



C11247

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

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

Chassis 3-4a

Performance Summary For RTU - 5

Project: BCF - Harvey, LA #315 09/15/2021
Prepared By: 02:29PM

Part Number:50HCCE09L3Q6-6WHJ0

ARI EER:	**12.20**	
Application EER (Rooftop Unit only):	**10.97**	
IEER (Max Cooling at Normal Cooling Design Mode):	**14.0**	

Base Unit Dimensions

Unit Length:	**88.1**	in
Unit Width:	**59.5**	in
Unit Height:	**49.4**	in

Operating Weight

Base Unit Weight:	**860**	lb
Two stage cooling models with Humidi-MiZer:	**80**	lb
High Electric Heat:	**102**	lb
Condensate Overflow Switch and RA and SA Smoke Detectors:	**15**	lb
High Static Belt Drive:	**15**	lb
E-coat Al/Cu - E-coat Al/Cu - Louvered Hail Guards:	**34**	lb
Enthalpy Ultra Low Leak Econo w/Baro Relief:	**74**	lb
Foil Faced Insulation, Hinged Access Panels and Powered Convenience Outlet:	**40**	lb
2 Speed Fan Controller (VFD) and Non-Fused Disconnect:	**35**	lb
Field Installed Accessories		
Power Exhaust System:	**75**	lb
Total Operating Weight:	**1330**	lb

Unit

Unit Voltage-Phase-Hertz:	**460-3-60**	
Air Discharge:	**Vertical**	
Fan Drive Type:	**Belt**	
Actual Airflow:	**3600**	CFM
Site Altitude:	**0**	ft

Cooling Performance

Condenser Entering Air DB:	**95.0**	F
Evaporator Entering Air DB:	**80.0**	F
Evaporator Entering Air WB:	**67.0**	F
Entering Air Enthalpy:	**31.44**	BTU/lb
Evaporator Leaving Air DB:	**58.7**	F
Evaporator Leaving Air WB:	**57.9**	F
Evaporator Leaving Air Enthalpy:	**24.95**	BTU/lb
Unit Discharge Air DB:	**60.2**	F
Unit Discharge Air WB:	**58.4**	F
Unit Discharge Air Enthalpy:	**25.32**	BTU/lb
Gross Cooling Capacity:	**105.18**	MBH
Net Cooling Capacity:	**99.14**	MBH
Gross Sensible Capacity:	**82.92**	MBH
Net Sensible Capacity:	**76.88**	MBH
Compressor Power Input:	**6.66**	kW
Coil Bypass Factor:	**0.065**	

Heating Performance

Heating Airflow:	**3600**	CFM
Entering Air Temp:	**70.0**	F
Leaving Air Temp:	**103.6**	F
Electric Heating Capacity:	**38.30**	kW

Supply Fan

External Static Pressure:	**1.00**	in wg
Options / Field Installed Accessories Static Pressure		
Humidi-MiZer Dehumidification System:	**0.17**	in wg

Economizer: **0.16** in wg
Power Exhaust: **(Fan Data Includes Drop)**
Total Application Static (ESP + Unit Opts/Acc.): **1.33** in wg
Fan RPM: **923**
Fan Power: **2.08** BHP
NOTE: **Selected IFM RPM Range: 838 - 1084**
Supply Fan Motor Maximum Continuous BHP: **3.7** HP
Supply Fan Motor Application HP: **3.7** HP
NOTE:**Motors with application horse power are specifically designed and tested for Carrier rooftop units therefore do not have a standard HP rating.**
Supply Fan Motor Efficiency at Full Load (%): **82**

Power Exhaust

Return Duct Static: **0.40** in wg
Max. Air To Exhaust: **2850** CFM

Electrical Data

Voltage Range: **414 / 506**
Compressor #1 RLA: **6.2**
Compressor #1 LRA: **41**
Compressor #2 RLA: **6.2**
Compressor #2 LRA: **41**
Actual Electric Heater kW: **38.3**
Electric Heater FLA: **50.2**
Indoor Fan Motor Type: **HIGH**
Indoor Fan Motor FLA: **4.9**
Power Supply MCA: **74**
Power Supply MOCP (Fuse or HACR): **80**
Disconnect Size FLA: **68**
Disconnect Size LRA: **129**
Electrical Convenience Outlet FLA (based on unit line voltage): **2.2**
Power Exhaust [Kit Qty / FLA(ea kit)]: **1 / 1.8**
Outdoor Fan [Qty / FLA (ea)]: **2 / 0.8**
NOTE: Convenience outlet must be field connected to the line/load side of the unit disconnect per local code.

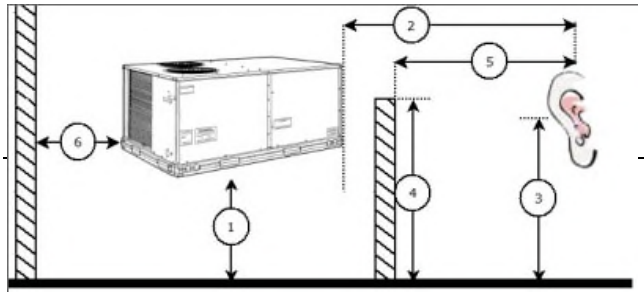
Control Panel SCCR: 5kA RMS at Rated Symmetrical Voltage

Acoustics

Sound Power Levels, db re 10E-12 Watts

	Discharge	Inlet	Outdoor
63 Hz	90.6	86.6	88.6
125 Hz	85.3	80.2	85.0
250 Hz	72.0	67.1	81.6
500 Hz	70.1	65.8	79.5
1000 Hz	68.8	64.5	77.4
2000 Hz	65.5	58.7	74.1
4000 Hz	66.4	56.6	71.0
8000 Hz	63.3	51.0	66.3
A-Weighted	75.8	70.3	82.0

Advanced Acoustics



Advanced Accoustics Parameters

1. Unit height above ground: .....**30.0** ft
2. Horizontal distance from unit to receiver: .....**50.0** ft
3. Receiver height above ground: .....**5.7** ft
4. Height of obstruction: .....**0.0** ft
5. Horizontal distance from obstruction to receiver: .**0.0** ft
6. Horizontal distance from unit to obstruction: .....**0.0** ft

Detailed Acoustics Information

Octave Band Center Freq. Hz	63	125	250	500	1k	2k	4k	8k	Overall
A	88.6	85.0	81.6	79.5	77.4	74.1	71.0	66.3	91.4 Lw
B	62.4	68.9	73.0	76.3	77.4	75.3	72.0	65.2	82.6 LwA
C	56.2	52.6	49.2	47.1	45.0	41.7	38.6	33.9	59.0 Lp
D	30.0	36.5	40.6	43.9	45.0	42.9	39.6	32.8	50.2 LpA

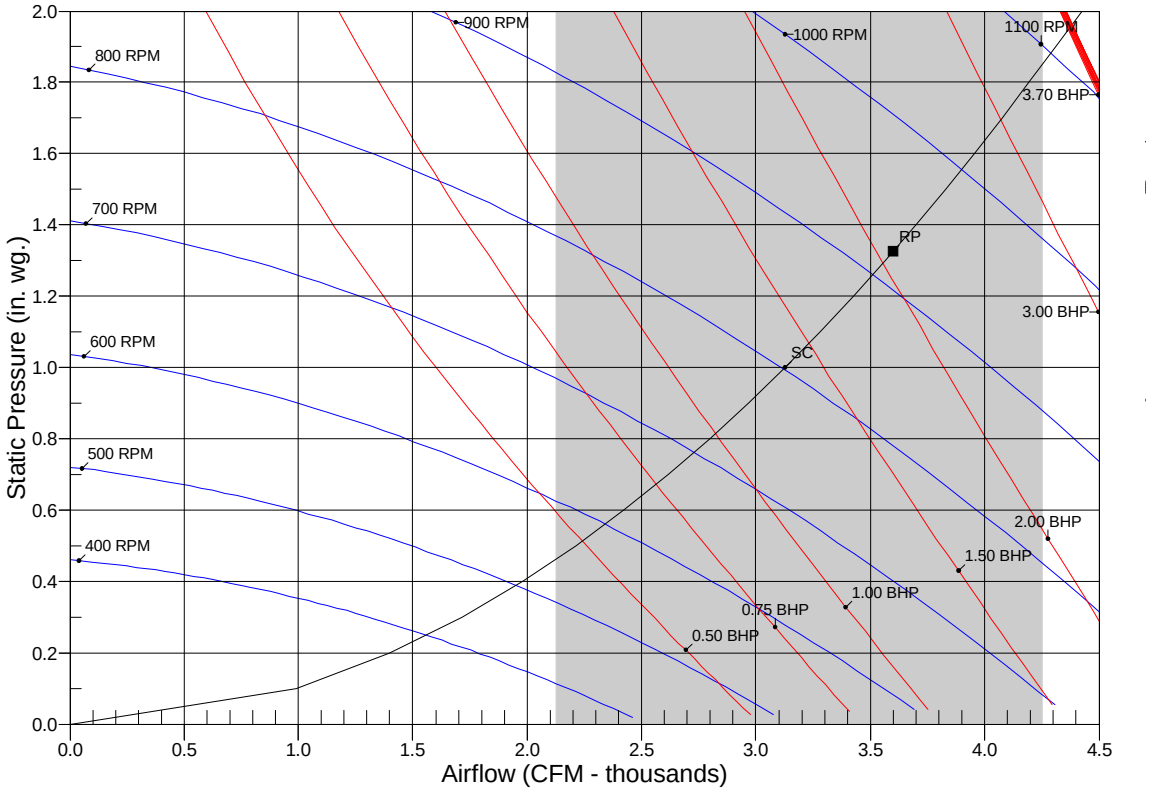
Legend
A Sound Power Levels at Unit's Acoustic Center, Lw
B A-Weighted Sound Power Levels at Unit's Acoustic Center, LwA
C Sound Pressure Levels at Specific Distance from Unit, Lp
D A-Weighted Sound Pressure Levels at Specific Distance from Unit, LpA

Calculation methods used in this program are patterned after the ASHRAE Guide; other ASHRAE Publications and the AHRI Acoustical Standards. While a very significant effort has been made to insure the technical accuracy of this program, it is assumed that the user is knowledgeable in the art of system sound estimation and is aware of the tolerances involved in real world acoustical estimation. This program makes certain assumptions as to the dominant sound sources and sound paths which may not always be appropriate to the real system being estimated. Because of this, no assurances can be offered that this software will always generate an accurate sound prediction from user supplied input data. If in doubt about the estimation of expected sound levels in a space, an Acoustical Engineer or a person with sound prediction expertise should be consulted.

Performance Summary For RTU - 5

Project: BCF - Harvey, LA #315 09/15/2021
Prepared By: 02:29PM

Fan Curve



RPM = 923 BHP = 2.08 Maximum RPM = 1400 Maximum BHP = 3.70
Note: Please contact application engineering for selections outside the shaded region.
SC - System Curve RP - Rated Point

RTU - 8

Tag Cover Sheet
Unit Report
Certified Drawing
Performance Report

Unit Report For RTU - 8

Project: BCF - Harvey, LA #315 09/15/2021
Prepared By: 02:29PM

Unit Parameters

Unit Model:..... **50HCCE14L3Q6-6WHJ0**
Unit Size:.....**14 (12.5 Tons)**
Volts-Phase-Hertz:..... **460-3-60**
Heating Type:..... **Electric**
Duct Cfg:..... **Vertical Supply / Vertical Return**
Two stage cooling models with Humidi-MiZer

Dimensions (ft. in.) & Weight (lb.) ***

Unit Length:.....**9' 7.875"**
Unit Width:.....**5' 3.375"**
Unit Height: .....**4' 9.375"**
*** Total Operating Weight: ..... **2063** lb

*** Weights and Dimensions are approximate. Weight does not include unit packaging. Approximate dimensions are provided primarily for shipping purposes. For exact dimensions and weights, refer to appropriate product data catalog.

Lines and Filters

Condensate Drain Line Size: **3/4**
Return Air Filter Type:.....**Throwaway**
Return Air Filter Quantity:..... **6**
Return Air Filter Size:.....**18 x 24 x 2**

Unit Configuration

High Electric Heat
Condensate Overflow Switch and RA and SA Smoke Detectors
High Static Belt Drive
E-coat Al/Cu - E-coat Al/Cu - Louvered Hail Guards
Electromechanical Controls w/W7220 Econo Controller
Enthalpy Ultra Low Leak Econo w/Baro Relief
Foil Faced Insulation, Hinged Access Panels and Powered Convenience Outlet
Non-Fused Disconnect
Standard Packaging
2-Speed indoor fan motor controlled by VFD
Humidi-MiZer™ Adaptive Dehumidification System

Warranty Information

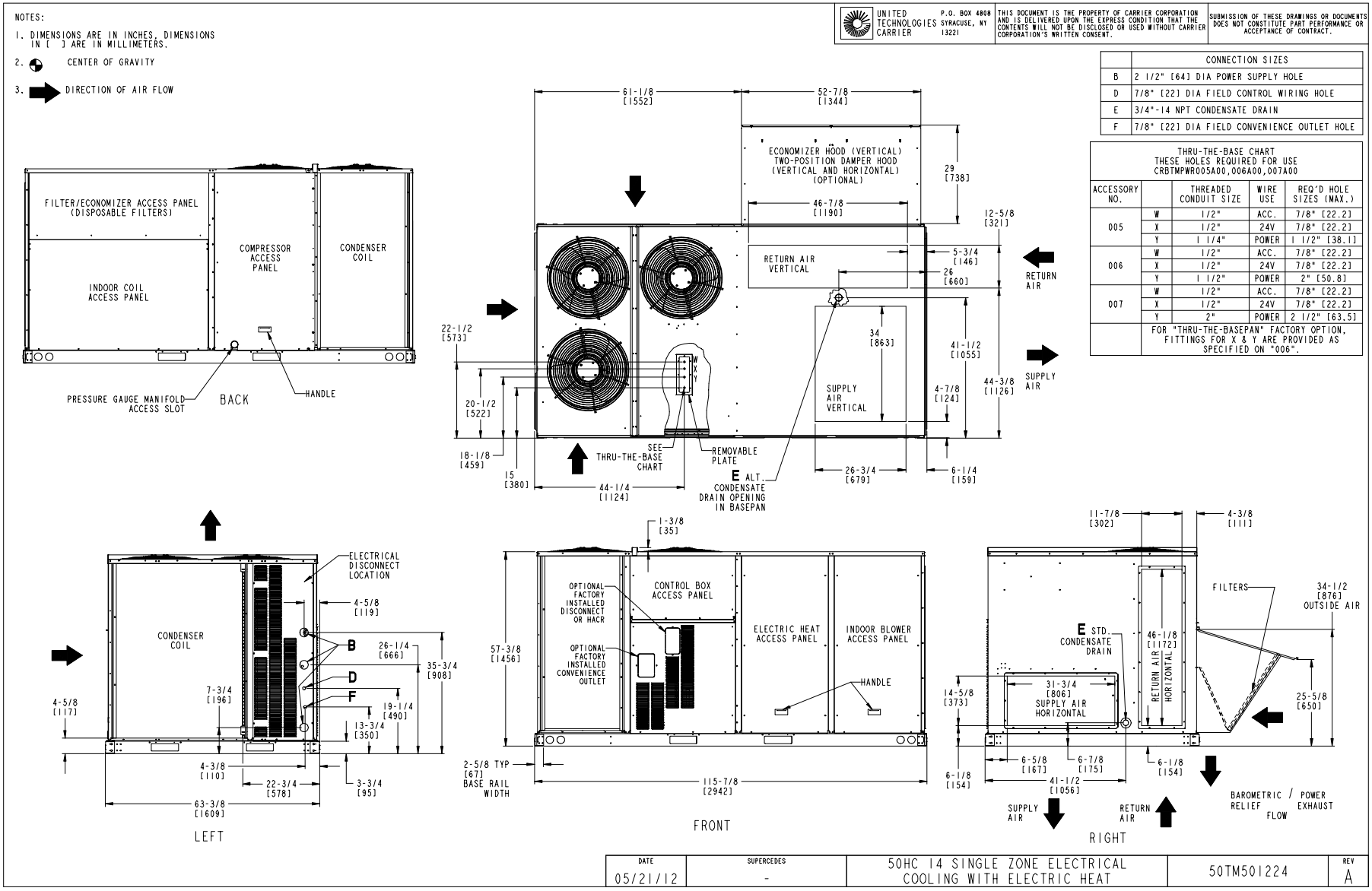
5-Year compressor parts (STD.)
1-Year parts (STD.)
Complete Unit 1st Year Carrier CCS Labor
Start-up, First Unit

NOTE: Please see Warranty Catalog 500-089 for explanation of policies and ordering methods.

Ordering Information

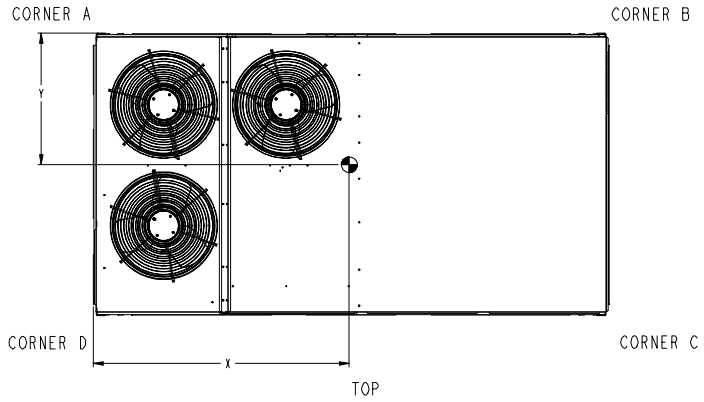
Part Number	Description	Quantity
50HCCE14L3Q6-6WHJ0	Rooftop Unit	1
	Base Unit	
	High Electric Heat	
	Condensate Overflow Switch and RA and SA Smoke Detectors	
	High Static Belt Drive	
	E-coat Al/Cu - E-coat Al/Cu - Louvered Hail Guards	
	Foil Faced Insulation, Hinged Access Panels and Powered Convenience Outlet	
	Humidi-MiZer™ Adaptive Dehumidification System	
	Ultra Low leak Enty Econo X with baro relief, W7220 control. Meets Calf. Title 24 FDD & Leak Rates	
	2 Speed Fan Controller (VFD) and Non-Fused Disconnect	
Field Installed Accessories		
CRSDTEST001A00	Smoke detector remote test/Reset/Alarm indicator kit	1
--HH--57AC-081	Enthalpy Control for W7220 Controller	1
--HL--38MG-029	Humidistat	1

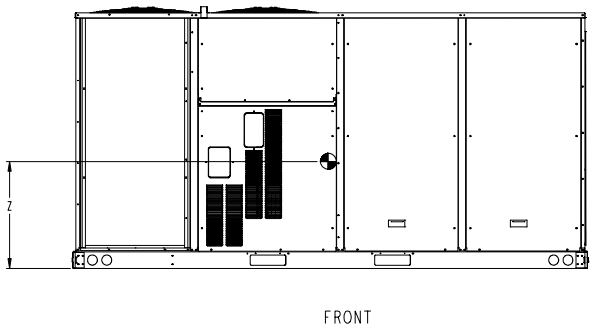
CRPWREXH081A00	Power Exhaust System	1
CRPECONV007B00	Hinged Access Door	1
CRRFCURB074A00	14-inch Roof Curb	1

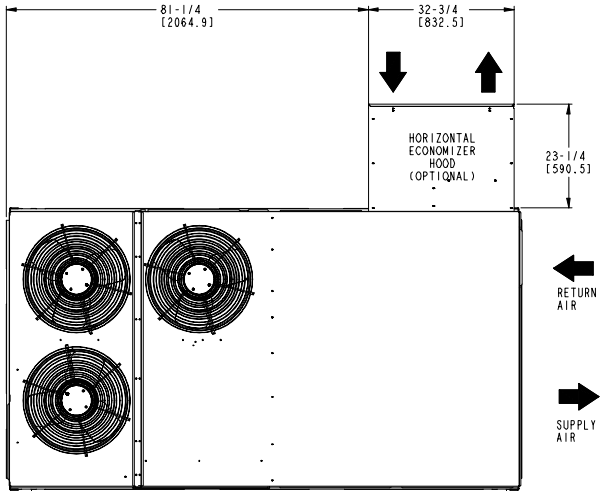

NOTES:
1. DIMENSIONS ARE IN INCHES, DIMENSIONS IN [ ] ARE IN MILLIMETERS.
2. CENTER OF GRAVITY
3. DIRECTION OF AIR FLOW
UNITED TECHNOLOGIES CARRIER P.O. BOX 4808 SYRACUSE, NY 13221
THIS DOCUMENT IS THE PROPERTY OF CARRIER CORPORATION AND IS DELIVERED UPON THE EXPRESS CONDITION THAT THE CONTENTS WILL NOT BE DISCLOSED OR USED WITHOUT CARRIER CORPORATION'S WRITTEN CONSENT.
SUBMISSION OF THESE DRAWINGS OR DOCUMENTS DOES NOT CONSTITUTE PART PERFORMANCE OR ACCEPTANCE OF CONTRACT.
CONNECTION SIZES
B 2 1/2" [64] DIA POWER SUPPLY HOLE
D 7/8" [22] DIA FIELD CONTROL WIRING HOLE
E 3/4"-14 NPT CONDENSATE DRAIN
F 7/8" [22] DIA FIELD CONVENIENCE OUTLET HOLE
THRU-THE-BASE CHART
THESE HOLES REQUIRED FOR USE CRBTMPWR005A00,006A00,007A00
ACCESSORY NO. | | THREADED CONDUIT SIZE | WIRE USE | REQ'D HOLE SIZES (MAX.)
005 W 1/2" ACC. 7/8" [22.2]
X 1/2" 24V 7/8" [22.2]
Y 1 1/4" POWER 1 1/2" [38.1]
006 W 1/2" ACC. 7/8" [22.2]
X 1/2" 24V 7/8" [22.2]
Y 1 1/2" POWER 2" [50.8]
007 W 1/2" ACC. 7/8" [22.2]
X 1/2" 24V 7/8" [22.2]
Y 2" POWER 2 1/2" [63.5]
FOR "THRU-THE-BASEPAN" FACTORY OPTION, FITTINGS FOR X & Y ARE PROVIDED AS SPECIFIED ON "006".
FILTER/ECONOMIZER ACCESS PANEL (DISPOSABLE FILTERS)
COMPRESSOR ACCESS PANEL
CONDENSER COIL
INDOOR COIL ACCESS PANEL
PRESSURE GAUGE MANIFOLD ACCESS SLOT
HANDLE
BACK
61-1/8 [1552]
52-7/8 [1344]
ECONOMIZER HOOD (VERTICAL) TWO-POSITION DAMPER HOOD (VERTICAL AND HORIZONTAL) (OPTIONAL)
29 [738]
46-7/8 [1190]
12-5/8 [321]
RETURN AIR VERTICAL
5-3/4 [146]
26 [660]
RETURN AIR
22-1/2 [573]
34 [863]
41-1/2 [1055]
SUPPLY AIR VERTICAL
4-7/8 [124]
44-3/8 [1126]
SUPPLY AIR
20-1/2 [522]
18-1/8 [459]
15 [380]
44-1/4 [1124]
SEE THRU-THE-BASE CHART
REMOVABLE PLATE
E ALT. CONDENSATE DRAIN OPENING IN BASEPAN
26-3/4 [679]
6-1/4 [159]
ELECTRICAL DISCONNECT LOCATION
CONDENSER COIL
4-5/8 [119]
B
26-1/4 [666]
35-3/4 [908]
D
F
19-1/4 [490]
13-3/4 [350]
7-3/4 [196]
4-5/8 [117]
4-3/8 [110]
22-3/4 [578]
3-3/4 [95]
63-3/8 [1609]
LEFT
1-3/8 [35]
OPTIONAL FACTORY INSTALLED DISCONNECT OR HACR
OPTIONAL FACTORY INSTALLED CONVENIENCE OUTLET
CONTROL BOX ACCESS PANEL
ELECTRIC HEAT ACCESS PANEL
INDOOR BLOWER ACCESS PANEL
HANDLE
57-3/8 [1456]
2-5/8 TYP [67] BASE RAIL WIDTH
115-7/8 [2942]
FRONT
11-7/8 [302]
4-3/8 [111]
FILTERS
34-1/2 [876] OUTSIDE AIR
E STD. CONDENSATE DRAIN
46-1/8 [1172] RETURN AIR HORIZONTAL
14-5/8 [373]
31-3/4 [806] SUPPLY AIR HORIZONTAL
25-5/8 [650]
6-5/8 [167]
6-7/8 [175]
6-1/8 [154]
41-1/2 [1056]
6-1/8 [154]
SUPPLY AIR
RETURN AIR
BAROMETRIC RELIEF / POWER EXHAUST FLOW
RIGHT
DATE 05/21/12
SUPERCEDES -
50HC 14 SINGLE ZONE ELECTRICAL COOLING WITH ELECTRIC HEAT
50TM501224
REV A

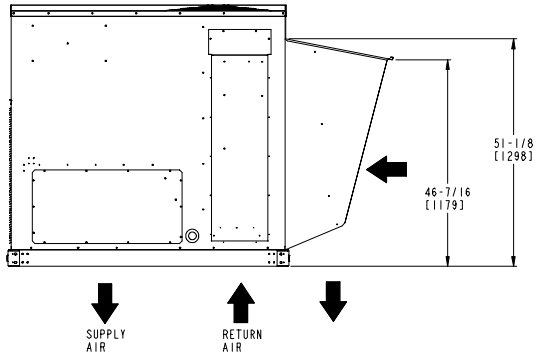
UNIT	STD UNIT WEIGHT		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		
	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
50HC 14	1360	617	335	151	361	164	344	156	320	145	60 1/8 [1527]	31 [787]	21 1/8 [536]

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





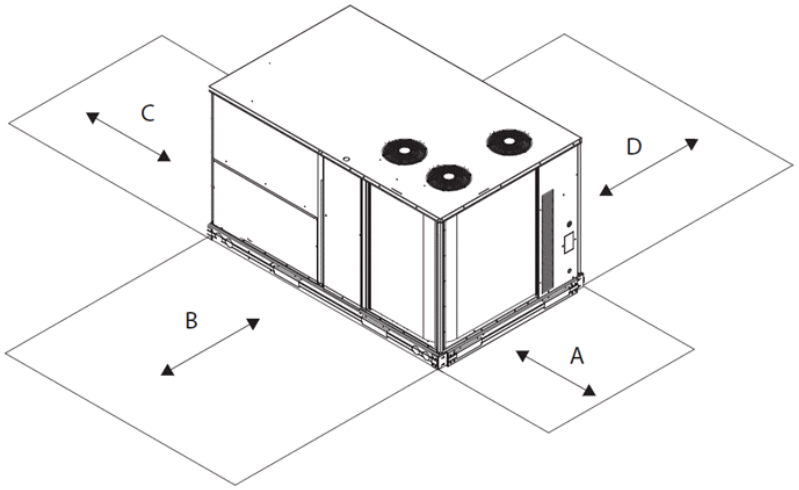




HORIZONTAL ECONOMIZER

DATE	SUPERCEDES			REV
05/21/12	-	50HC 14 SINGLE ZONE ELECTRICAL COOLING WITH ELECTRIC HEAT	50TM501224	A

Service Clearance



C1057B

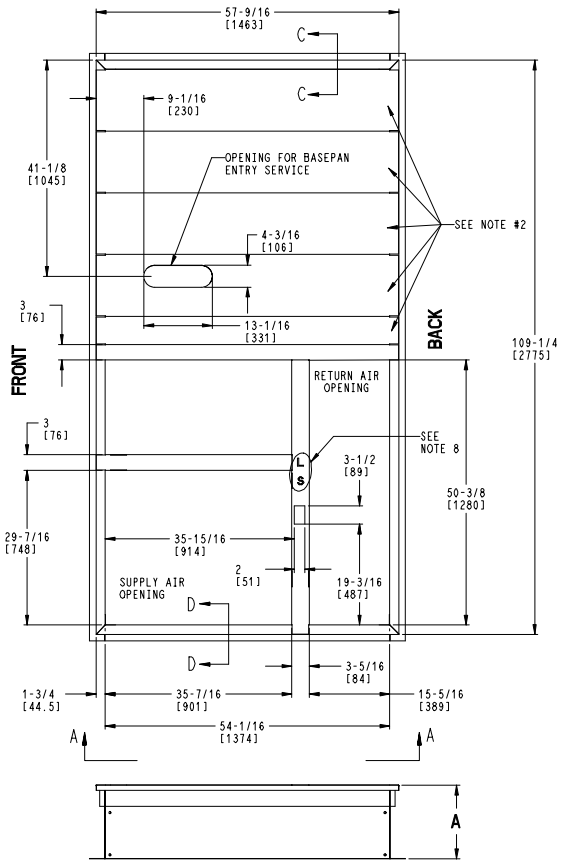
LOCATION	DIMENSION	CONDITION
A	48-in (1219 mm)	• Unit disconnect is mounted on panel
	18-in (457 mm)	• No disconnect, convenience outlet option • Recommended service clearance
	12-in (305 mm)	• Minimum clearance
B	42-in (1067 mm)	• Surface behind servicer is grounded (e.g., metal, masonry wall)
	36-in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

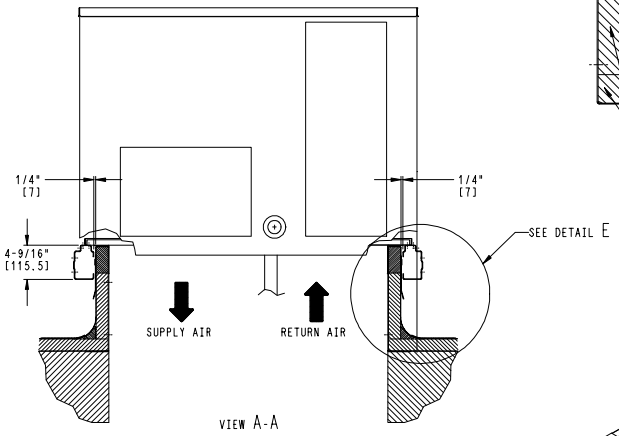
NOTE: Unit not designed to have overhead obstruction. Contact Application Engineering for guidance on any application planning overhead obstruction or vertical clearances.

Chassis 5

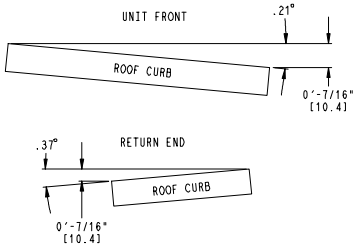
ROOF CURB ACCESSORY #	A
CRRFCURB074A00	14" [356]
CRRFCURB075A00	24" [610]

NOTES:
1. ROOFCURB ACCESSORY IS SHIPPED DISASSEMBLED.
2. INSULATED PANELS: 1/2" THK. NEOPRENE FOAM, 1.0# DENSITY.
3. DIMENSIONS IN [ ] ARE IN MILLIMETERS.
4. ROOFCURB SIDEWALLS: 16 GAGE STEEL.
5. ATTACH DUCTWORK TO CURB. (FLANGES OF DUCT REST ON CURB).
6. SERVICE CLEARANCE 4 FT ON EACH SIDE.
7. ➡ DIRECTION OF AIR FLOW.
8. "L" & "S" DESIGNATIONS DENOTE LOCATION OF COMMON CROSS RAIL. (POSITION "L" FOR LARGE DUCT OPENING CURB).

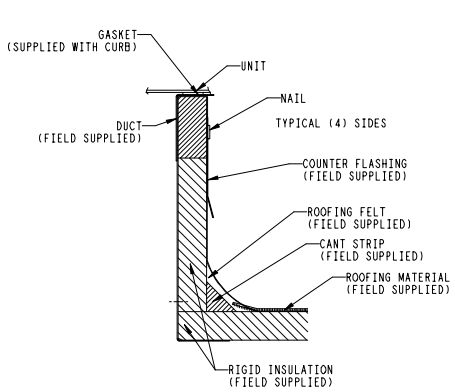




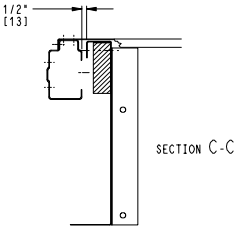
VIEW A-A



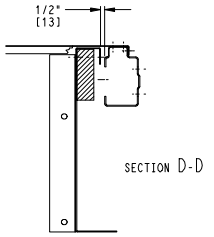
MAX CURB LEVELING TOLERANCES



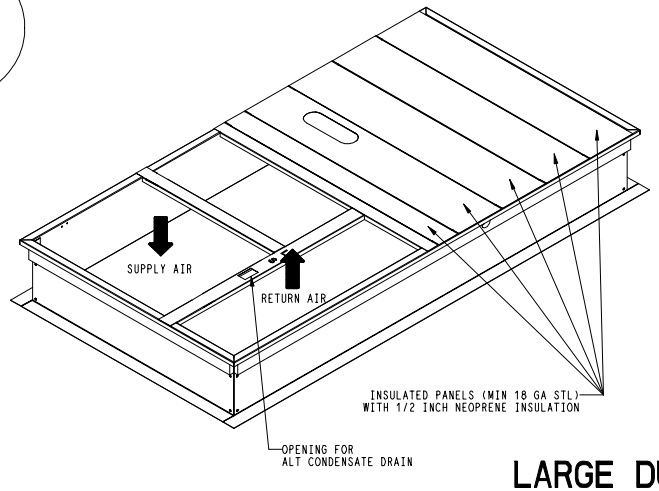
DETAIL E



SECTION C-C



SECTION D-D



LARGE DUCT OPENINGS

DATE	SUPERCEDES			REV
02/15/13	-	48/50HCD14 / 48/50TCD16 / 48/50LC08,09,12 ROOF CURB	50TM500780	A

Part Number:50HCCE14L3Q6-6WHJ0

ARI EER:	**12.40**	
Application EER (Rooftop Unit only):	**11.84**	
IEER (Max Cooling at Normal Cooling Design Mode):	**14.1**	

Base Unit Dimensions

Unit Length:	**115.9**	in
Unit Width:	**63.4**	in
Unit Height:	**57.4**	in

Operating Weight

Base Unit Weight:	**1360**	lb
Two stage cooling models with Humidi-MiZer:	**90**	lb
High Electric Heat:	**65**	lb
Condensate Overflow Switch and RA and SA Smoke Detectors:	**15**	lb
High Static Belt Drive:	**45**	lb
E-coat Al/Cu - E-coat Al/Cu - Louvered Hail Guards:	**45**	lb
Enthalpy Ultra Low Leak Econo w/Baro Relief:	**103**	lb
Foil Faced Insulation, Hinged Access Panels and Powered Convenience Outlet:	**40**	lb
2 Speed Fan Controller (VFD) and Non-Fused Disconnect:	**35**	lb

Field Installed Accessories

Power Exhaust System:	**85**	lb
14-inch Roof Curb:	**180**	lb
Total Operating Weight:	**2063**	lb

Unit

Unit Voltage-Phase-Hertz:	**460-3-60**	
Air Discharge:	**Vertical**	
Fan Drive Type:	**Belt**	
Actual Airflow:	**4200**	CFM
Site Altitude:	**0**	ft

Cooling Performance

Condenser Entering Air DB:	**95.0**	F
Evaporator Entering Air DB:	**80.0**	F
Evaporator Entering Air WB:	**67.0**	F
Entering Air Enthalpy:	**31.44**	BTU/lb
Evaporator Leaving Air DB:	**56.7**	F
Evaporator Leaving Air WB:	**55.5**	F
Evaporator Leaving Air Enthalpy:	**23.48**	BTU/lb
Unit Discharge Air DB:	**58.0**	F
Unit Discharge Air WB:	**56.0**	F
Unit Discharge Air Enthalpy:	**23.79**	BTU/lb
Gross Cooling Capacity:	**150.44**	MBH
Net Cooling Capacity:	**144.58**	MBH
Gross Sensible Capacity:	**105.75**	MBH
Net Sensible Capacity:	**99.88**	MBH
Compressor Power Input:	**9.89**	kW
Coil Bypass Factor:	**0.037**	

Heating Performance

Heating Airflow:	**4200**	CFM
Entering Air Temp:	**70.0**	F
Leaving Air Temp:	**104.5**	F
Electric Heating Capacity:	**45.90**	kW

Supply Fan

External Static Pressure:	**1.00**	in wg

Options / Field Installed Accessories Static Pressure

Electric Heaters: ..... **0.02** in wg
Humidi-MiZer Dehumidification System: ..... **0.06** in wg
Economizer: ..... **0.02** in wg
Power Exhaust: ..... **(Fan Data Includes Drop)**
Total Application Static (ESP + Unit Opts/Acc.): ..... **1.11** in wg
Fan RPM: **708**
Fan Power: ..... **2.02** BHP
NOTE: ..... **The Selected Indoor Fan Motor requires a Field-Supplied Drive (RPM Range: 776 - 955).**
Supply Fan Motor Maximum Continuous BHP: ..... **7.0** HP
Supply Fan Motor Nominal HP: ..... **5.0** HP
Supply Fan Motor Efficiency at Full Load (%): **90**

Power Exhaust

Return Duct Static: ..... **0.40** in wg
Max. Air To Exhaust: ..... **2850** CFM

Electrical Data

Voltage Range: ..... **414 / 506**
Compressor #1 RLA: **8.2**
Compressor #1 LRA: **66**
Compressor #2 RLA: **8.2**
Compressor #2 LRA: **66**
Actual Electric Heater kW: **45.9**
Electric Heater FLA: **60.2**
Indoor Fan Motor Type: ..... **HIGH**
Indoor Fan Motor FLA: **10.2**
Power Supply MCA: **78**
Power Supply MOCP (Fuse or HACR): **80**
Disconnect Size FLA: **86**
Disconnect Size LRA: **188**
Electrical Convenience Outlet FLA (based on unit line voltage): **2.2**
Power Exhaust [Kit Qty / FLA(ea kit)]: ..... **1 / 1.8**
Outdoor Fan [Qty / FLA (ea)]: ..... **3 / 0.8**
NOTE: Convenience outlet must be field connected to the line/load side of the unit disconnect per local code.

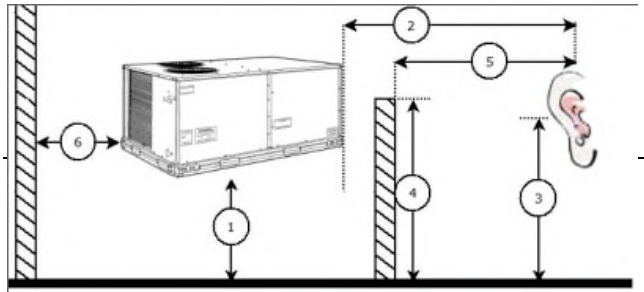
Control Panel SCCR: 5kA RMS at Rated Symmetrical Voltage

Acoustics

Sound Power Levels, db re 10E-12 Watts

	Discharge	Inlet	Outdoor
63 Hz	89.7	86.5	89.3
125 Hz	86.3	79.6	86.0
250 Hz	71.6	66.0	82.9
500 Hz	72.1	66.0	80.7
1000 Hz	70.4	64.8	78.5
2000 Hz	67.4	59.2	73.6
4000 Hz	68.7	56.7	69.6
8000 Hz	63.8	50.4	64.5
A-Weighted	77.1	70.3	83.0

Advanced Acoustics



Advanced Accoustics Parameters

1. Unit height above ground: .....**30.0** ft
2. Horizontal distance from unit to receiver: .....**50.0** ft
3. Receiver height above ground: .....**5.7** ft
4. Height of obstruction: .....**0.0** ft
5. Horizontal distance from obstruction to receiver: .**0.0** ft
6. Horizontal distance from unit to obstruction: .....**0.0** ft

Detailed Acoustics Information

Octave Band Center Freq. Hz	63	125	250	500	1k	2k	4k	8k	Overall
A	89.3	86.0	82.9	80.7	78.5	73.6	69.6	64.5	92.2 Lw
B	63.1	69.9	74.3	77.5	78.5	74.8	70.6	63.4	83.2 LwA
C	56.9	53.6	50.5	48.3	46.1	41.2	37.2	32.1	59.8 Lp
D	30.7	37.5	41.9	45.1	46.1	42.4	38.2	31.0	50.8 LpA

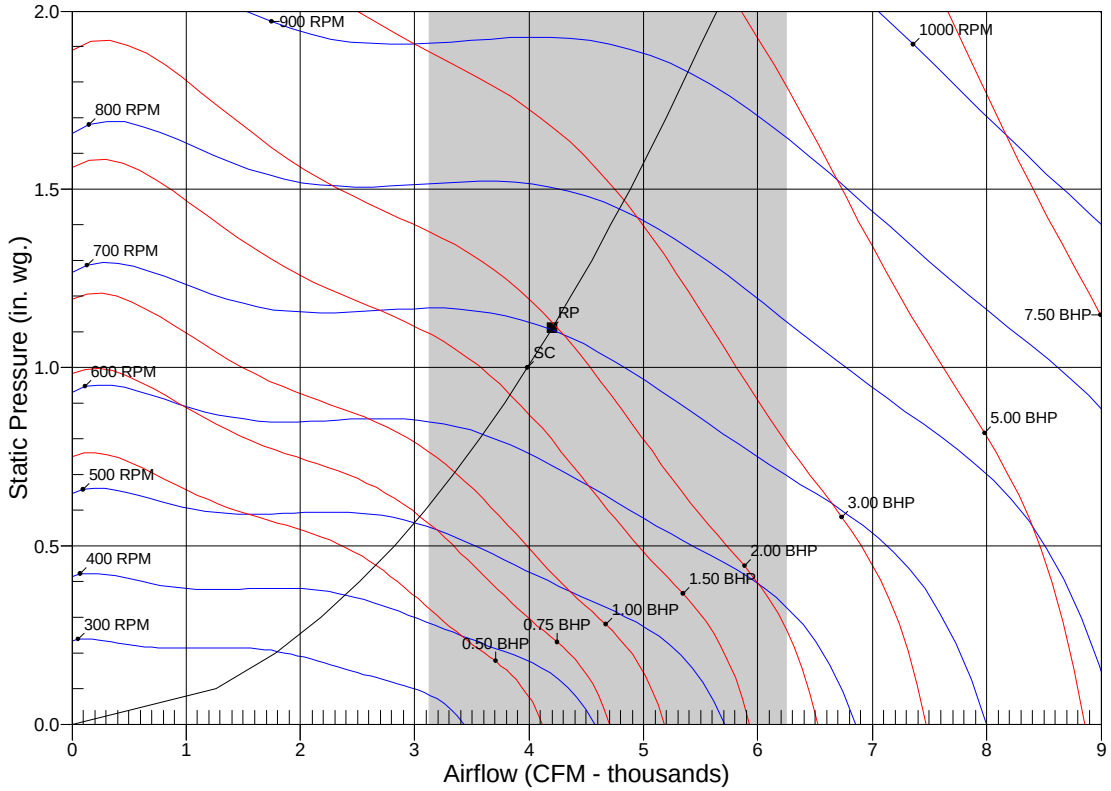
Legend
A Sound Power Levels at Unit's Acoustic Center, Lw
B A-Weighted Sound Power Levels at Unit's Acoustic Center, LwA
C Sound Pressure Levels at Specific Distance from Unit, Lp
D A-Weighted Sound Pressure Levels at Specific Distance from Unit, LpA

Calculation methods used in this program are patterned after the ASHRAE Guide; other ASHRAE Publications and the AHRI Acoustical Standards. While a very significant effort has been made to insure the technical accuracy of this program, it is assumed that the user is knowledgeable in the art of system sound estimation and is aware of the tolerances involved in real world acoustical estimation. This program makes certain assumptions as to the dominant sound sources and sound paths which may not always be appropriate to the real system being estimated. Because of this, no assurances can be offered that this software will always generate an accurate sound prediction from user supplied input data. If in doubt about the estimation of expected sound levels in a space, an Acoustical Engineer or a person with sound prediction expertise should be consulted.

Performance Summary For RTU - 8

Project: BCF - Harvey, LA #315 09/15/2021
Prepared By: 02:29PM

Fan Curve



RPM = 708 BHP = 2.02 Maximum RPM = 1100 Maximum BHP = 6.10
Note: Please contact application engineering for selections outside the shaded region.
SC - System Curve RP - Rated Point

SUBMITTAL

MicroMetl

FORM NO. 18544-1P | **DATE: 10/15**

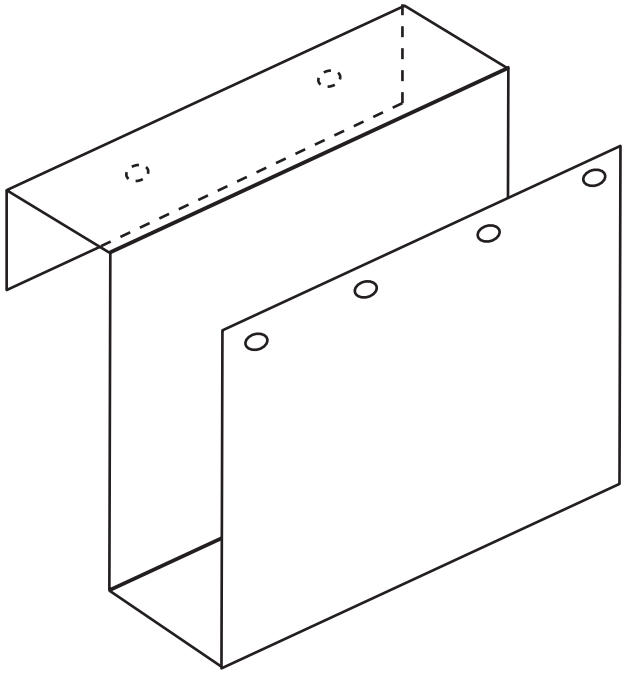
Submitted To: _____
Compnay: _____
Drawn By: _____
Job Name: _____
Equipement: _____
Notes: _____

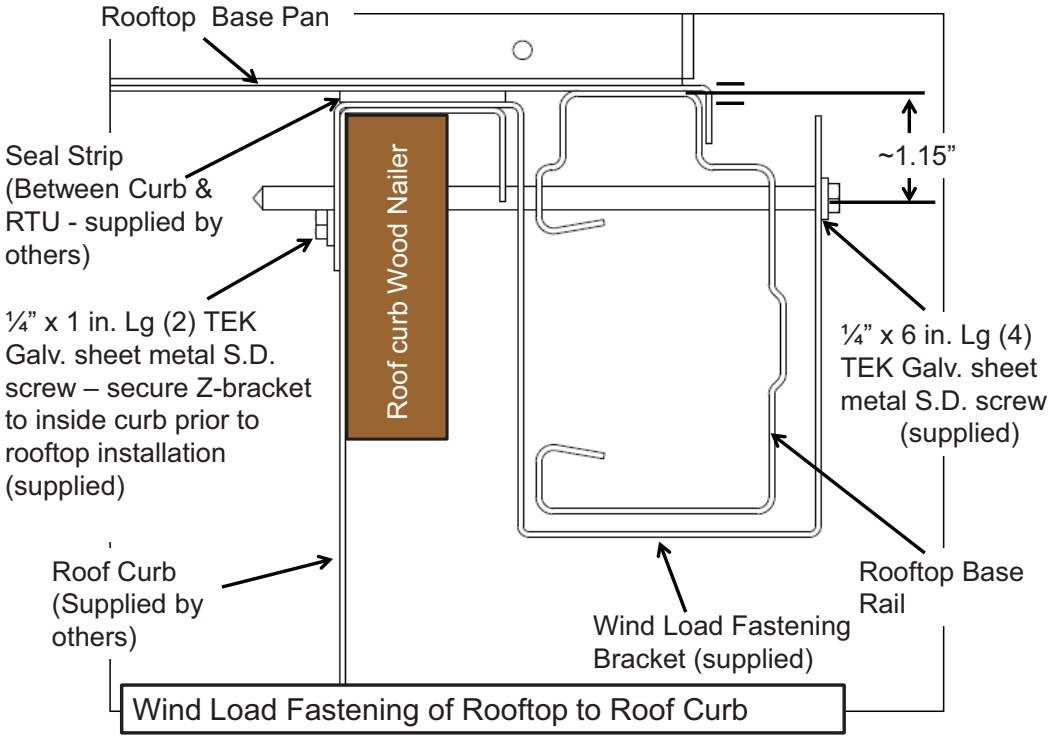
Wind Load Fasteners for Florida Building Code 5th Addition

Part Number:

BRK-CRBHOLD-01

Hold-Down Brackets





Wind Load Fastening of Rooftop to Roof Curb

*Kit Includes:

- (4) Unit-To-Curb hold down brackets
- (16) 1/4" x 6" long TEK galvanized screws
- (8) 1/4" x 1" long TEK galvanized screws
- (1) Instruction sheet

NOTES:

1. Fastener kit is recommended and approved by Carrier Corp. for Florida installations
2. For fastener bracket locations and quantities required for specific job and specific units, contact local distributor.