SUBMITTAL

Project

Nike - Additional Units

Date

Tuesday, January 3, 2023

Table Of Contents

Project: Nike - Additional Units 01/04/2023
Prepared By: 01:28PM

- Quote includes replacement models for RTU 4-5. These replacement models are currently in stock.
  - Differences include: Standard efficiency, low gas heat, no humidi-mizer, no coil coating, no disconnect.
  - Field installed accessories: Hail guards, unpowered convenience outlet, RTUopen board, economizer, and related sensors.

RTU 4,5

Tag Cover Sheet
Unit Report
Certified Drawing
Performance Report

Unit Report For RTU 4,5

Project: Nike - Additional Units 01/04/2023
Prepared By: 01:28PM

Unit Parameters

Unit Model:.....**48TCDD08A2A6-0A0G0**
Unit Size:.....**08 (7.5 Tons)**
Volts-Phase-Hertz:.....**460-3-60**
Heating Type:.....**Gas**
Heat Control:.....**Low Heat**
Duct Cfg:.....**Vertical Supply / Vertical Return**
DX Options:.....**Round Tube Plate Fin Coils**

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

Unit Length:.....**7' 4.125"**
Unit Width:.....**4' 11.5"**
Unit Height: .....**3' 5.25"**
Total Operating Weight:..... **870** 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

Gas Line Size: **1/2**
Condensate Drain Line Size: **3/4**
Return Air Filter Type: **Throwaway**
Return Air Filter Quantity: **4**
Return Air Filter Size: **16 x 20 x 2**

Selection includes construction throwaway filter into the base fan curve. This filter is not MERV Rated.

Unit Configuration

Medium Static Option
Al/Cu - Al/Cu
Base Electromechanical Controls
Standard Packaging
2-Speed indoor fan motor controlled by VFD

Warranty Information

1-Year parts(std.)
5-Year compressor parts(std.)
10-Year heat exchanger - Aluminized(std.)

No optional warranties were selected.

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

Ordering Information

Part Number	Description	Quantity
48TCDD08A2A6-0A0G0	Rooftop Unit	2
	Base Unit	
	Medium Static Option	
	Electromechanical control, No intake or exhaust option	
	2 Speed Fan Controller (VFD)	
Field Installed Accessories		
CRLVHLGD014A00	ACC-LVD HAIL GRD RTU'S	2
CRCONVOUT01A00	20A Outlet Kit w/ Relo Bracket	2
CRECOMZR068A01	CH 3-4 low leak economizer, DDC, DB VE	2
OPN-RTUM2	RTU Open; rooftop, air source heat pump and split system controller with Molex connections. Requires one RTU Open wiring harness and one supply air temperature sensor sold separately. Meets California Title 24 Section 120.2 FDD requirements.	2
OPN-RTUHRN	RTU Open Wiring Harness; required for RTU Open field retrofit - Molex to fork terminal connections.	2
33ZCSENSAT	Air Temperature Sensor	2
33CSENTSEN	Enthalpy Transmitter	2
Curb Adapter	Curb Adapter	2

Certified Drawing for RTU 4,5

Project: Nike - Additional Units
Prepared By:

NOTES:

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

UNIT	OUTDOOR COIL TYPE	J	K	H
48TC-A08	RTPF	41 1/4 [1048]	33 3/4 [857]	15 7/8 [403]
48TC-A09	RTPF	49 3/8 [1253]	36 3/8 [925]	27 7/8 [708]
48TC-A12	RTPF	49 3/8 [1253]	36 3/8 [925]	15 7/8 [403]
48TC-D08	RTPF	41 1/4 [1048]	33 3/4 [857]	15 7/8 [403]
48TC-D09	RTPF	49 3/8 [1253]	36 3/8 [925]	15 7/8 [403]
48TC-D12	RTPF	49 3/8 [1253]	36 3/8 [925]	15 7/8 [403]
48TC-D08	MCHX	41 1/4 [1048]	33 3/4 [857]	23 [584.2]
48TC-D12	MCHX	49 3/8 [1253]	36 3/8 [925]	11 [279.4]

RTPF - ROUND TUBE, PLATE FIN (COPPER/ALUM)
MCHX - NOVATION (ALUM/ALUM)

A	1 3/
B	2 1/
C	1 3/
D	7/8"
E	3/4"
F	1/2" 3/4"
G	2 "

THRU-THE

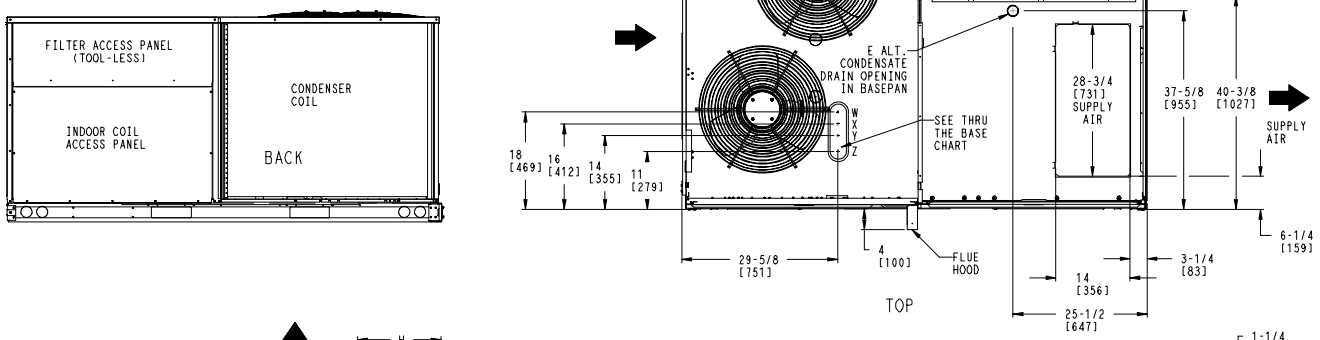
THESE HOLES CRBTMPWR002 CRBTMPWR004

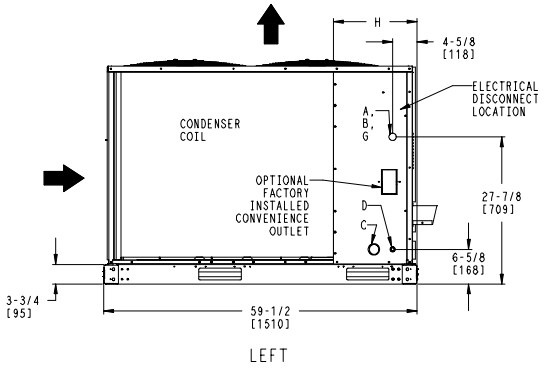
W	
X	
Y	1 1
Z *	(0
*	(002 FLAN

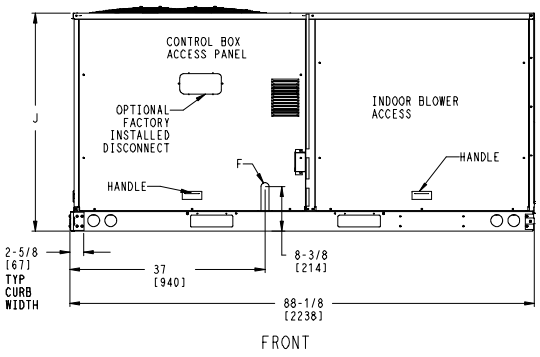
THRU-

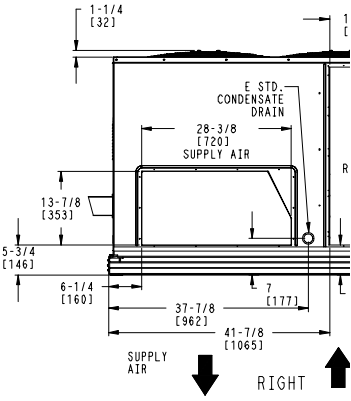
FOR *THRU-T FITTINGS FO

**	FOR SUPP BETW 48TC









SHEET	DATE	SUPERCEDES	48TC 08-12 SINGLE ZONE ELECTRICAL COOLING WITH GAS HEAT
1 OF 2	10-01-10	11-24-08	

Certified Drawing for RTU 4,5

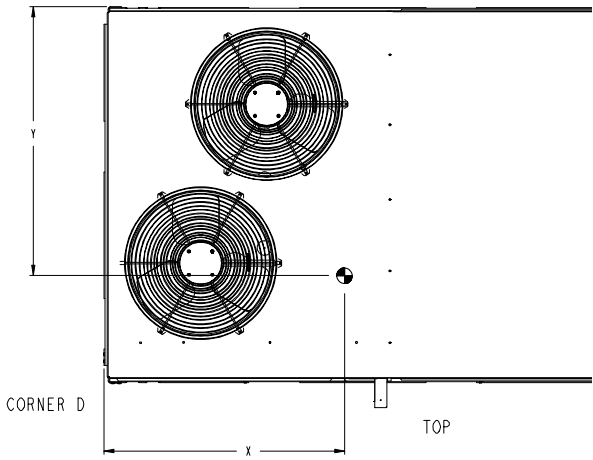
Project: Nike - Additional Units
Prepared By:

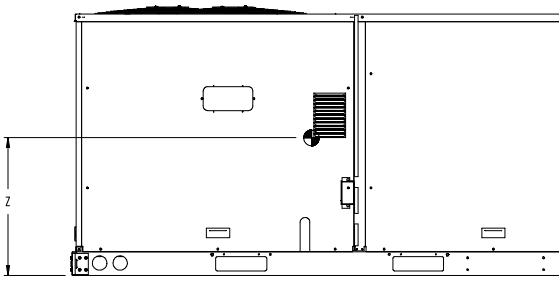
UNIT	OUTDOOR COIL TYPE	STD. UNIT WEIGHT ***		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		
		LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
48TC-A08	RTPF	780	354	178	81	158	72	209	95	236	107	41 1/2 [1054]	33 7/8 [860]	20 1/2 [521]
48TC-A09	RTPF	920	418	212	96	183	83	243	110	282	128	40 7/8 [1038]	34 [864]	23 1/8 [587]
48TC-A12	RTPF	930	422	216	98	196	89	247	112	272	123.5	42 [1067]	33 1/8 [841]	24 1/4 [616]
48TC-D08	RTPF	835	379	164	74.5	170	77.2	255	115.8	246	111.7	44 7/8 [1140]	35 5/8 [905]	19 3/8 [492]
48TC-D09	RTPF	930	422	228	103.5	187	85	232	105.3	283	128.5	39 3/4 [1010]	32 7/8 [835]	18 5/8 [473]
48TC-D12	RTPF	940	427	231	104.9	189	85.8	234	106.2	286	129.8	39 3/4 [1010]	33 [838]	18 1/2 [470]
48TC-D08	MCHX	805	365.5	160	72.6	153	69.5	240	109	260	118	43 [1092]	36 3/8 [924]	20 3/8 [517.7]
48TC-D12	MCHX	895	406.3	185	84	176	79.9	260	118	274	124.4	42 7/8 [1089]	35 1/2 [902]	22 7/8 [581]

RTPF - ROUND TUBE, PLATE FIN (COPPER/ALUM)
MCHX - NOVATION (ALUM/ALUM)

*** STANDARD UNIT WEIGHT IS WITH LOW GAS HEAT AND WITHOUT PACKAGI
FOR OTHER OPTIONS AND ACCESSORIES, REFER TO THE PRODUCT DATA CATA

CORNER A





SHEET	DATE	SUPERCEDES	48TC 08-12 SINGLE ZONE ELECTRICAL COOLING WITH GAS HEAT
2 OF 2	10-01-10	11-24-08	

Part Number:48TCDD08A2A6-0A0G0

ARI EER:	**11.00**	
IEER:	**12.8**	

Base Unit Dimensions

Unit Length:	**88.1**	in
Unit Width:	**59.5**	in
Unit Height:	**41.3**	in

Operating Weight

Base Unit Weight:	**835**	lb
Medium Static Option:	**15**	lb
2 Speed Fan Controller (VFD):	**20**	lb
Total Operating Weight:	**870**	lb

Unit

Unit Voltage-Phase-Hertz:	**460-3-60**	
Air Discharge:	**Vertical**	
Fan Drive Type:	**Belt**	
Actual Airflow:	**2500**	CFM
Site Altitude:	**0**	ft

Cooling Performance

Condenser Entering Air DB:	**95.0**	F
Evaporator Entering Air DB:	**76.8**	F
Evaporator Entering Air WB:	**69.8**	F
Entering Air Enthalpy:	**33.77**	BTU/lb
Evaporator Leaving Air DB:	**58.9**	F
Evaporator Leaving Air WB:	**58.8**	F
Evaporator Leaving Air Enthalpy:	**25.59**	BTU/lb
Gross Cooling Capacity:	**92.05**	MBH
Gross Sensible Capacity:	**48.34**	MBH
Compressor Power Input:	**6.39**	kW
Coil Bypass Factor:	**0.071**	

Heating Performance

Heating Airflow:	**2500**	CFM
Entering Air Temp:	**47.7**	F
Leaving Air Temp:	**85.8**	F
Gas Heating Input Capacity:	**125.0**	MBH
Gas Heating Output Capacity:	**103.0**	MBH
Temperature Rise:	**38.1**	F
Thermal Efficiency (%):	**82.0**	

Supply Fan

External Static Pressure:	**0.80**	in wg
Fan RPM:	**757**	
Fan Power:	**1.47**	BHP
NOTE:	**Selected IFM RPM Range: 733 - 949**	

Selection includes construction throwaway filter into the base fan curve. This filter is not MERV Rated.

Electrical Data

Voltage Range:	**414 - 506**
Compressor #1 RLA:	**6.1**
Compressor #1 LRA:	**41**
Compressor #2 RLA:	**6.1**
Compressor #2 LRA:	**41**
Indoor Fan Motor Type:	**MED**

Indoor Fan Motor FLA (Total): **3.8**
Combustion Fan Motor FLA (ea): **0.25**
Power Supply MCA: **20**
Power Supply MOCP (Fuse or HACR): **25**
Disconnect Size FLA: **20**
Disconnect Size LRA: **113**
Electrical Convenience Outlet: **None**
Outdoor Fan [Qty / FLA (ea)]: **2 / 0.8**

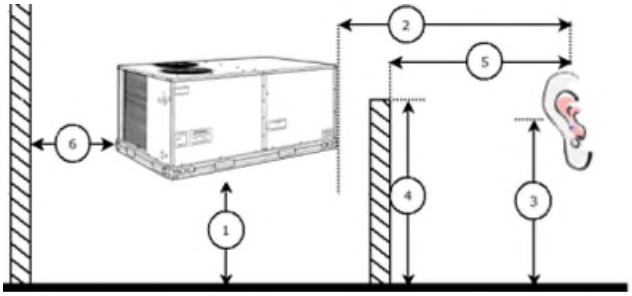
Control Panel SCCR: 5kA RMS at Rated Symmetrical Voltage

Acoustics

Sound Power Levels, db re 10E-12 Watts

	Discharge	Inlet	Outdoor
63 Hz	98.5	95.9	85.8
125 Hz	90.2	85.8	84.3
250 Hz	76.6	74.1	80.5
500 Hz	68.7	65.8	78.7
1000 Hz	65.5	62.8	76.4
2000 Hz	64.8	57.6	72.7
4000 Hz	65.5	56.8	68.3
8000 Hz	68.5	56.8	65.1
A-Weighted	78.4	74.4	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	85.8	84.3	80.5	78.7	76.4	72.7	68.3	65.1	89.6 Lw
B	59.6	68.2	71.9	75.5	76.4	73.9	69.3	64.0	81.4 LwA
C	53.4	51.9	48.1	46.3	44.0	40.3	35.9	32.7	57.2 Lp
D	27.2	35.8	39.5	43.1	44.0	41.5	36.9	31.6	49.0 LpA

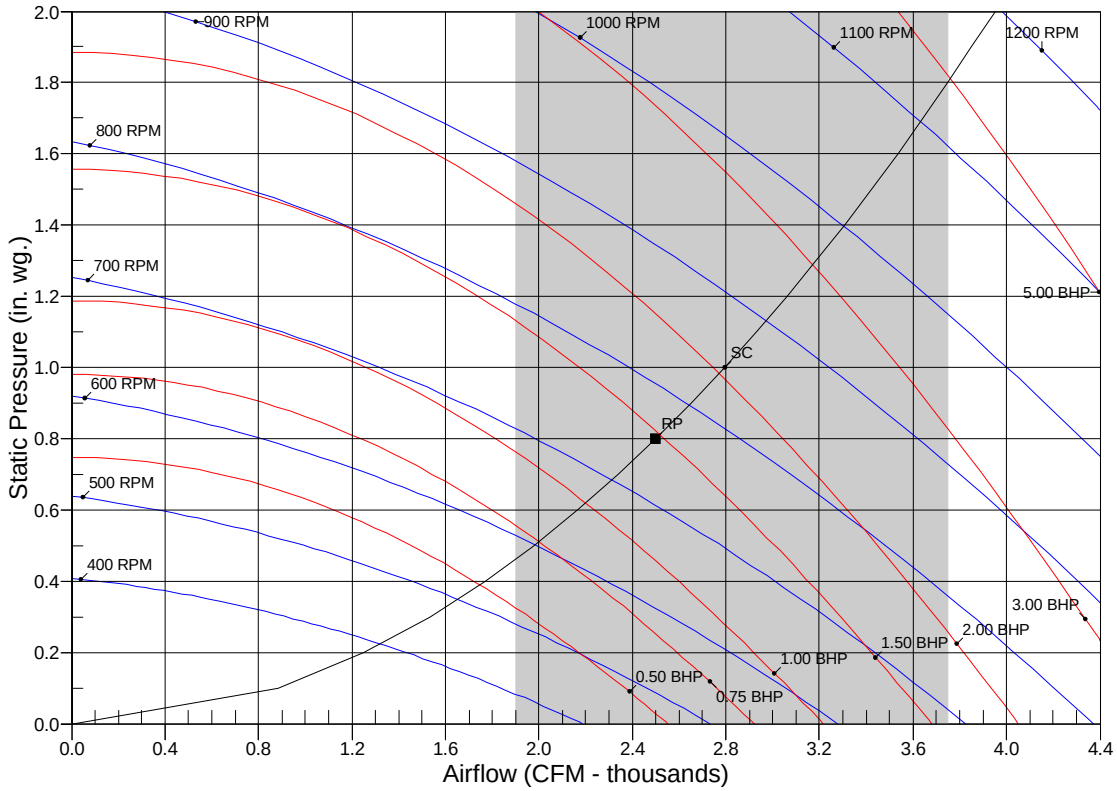
Performance Summary For RTU 4,5

Project: Nike - Additional Units 01/04/2023
Prepared By: 01:28PM

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.

Fan Curve



RPM = 757 BHP = 1.47 Maximum RPM = 1400 Maximum BHP = 4.70
Note: Please contact application engineering for selections outside the shaded region.
SC - System Curve RP - Rated Point