

# National TAB

Project: CW 9000 - At Home Design Center

## System/Unit: AHU/RTU



Comfort. Under control.

Asset: ERTU-8

AREA:128

Unit Data		
	Design	Actual
MFG	NA	YORK
Serial Num	-	N2E2504418
Model Num	NA	ZF120N24R4A1
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	*1
OA Filter Size 1	-	*1
Num PreFilter 1	-	4
PreFilter Size 1	-	20X24X2

Test Data		
	Design	Actual
SF CFM	4080	3750
SF RPM	NA	1229
RA CFM	3780	3698
OA CFM	300	0
RL Voltage	480	488/490/489
RL Amperage	4.1	3.9/3.8/3.9
OA Damper Position	-	*1
Brake Horse Power	NA	2.83

Motor Data		
	Design	Actual
Motor MFG	-	BALDOR
Frame	-	56HZ
Horsepower	-	3.0
Motor Rpm	-	1750
Phase	-	3
Rated Voltage	-	460
Rated Amperage	-	4.1
Service Factor	-	1.15

Performance Data		
	Design	Actual
MA Plenum SP	NA	-1.02
Fan Suction SP	NA	-1.41
Fan Discharge SP	NA	0.32
Total ESP	0.6"	1.34
Fan Total SP	NA	1.73

Drive Data		
	Design	Actual
Motor Sheave Size	-	1VM50
Motor Bore Size	-	0.875"
Motor Sheave SetPt	-	5.18
Fan Sheave Size	-	AK74
Fan Sheave Bore	-	1"
Belt CL Distance	-	18.5"
Num of Belts	-	1
Belt Size	-	A54

Completed By: Michael Gabbert

Notes: \*1 No OSA intake for unit.

# National TAB

Project: CW 9000 - At Home Design Center

## AHU/RTU



Comfort. Under control.

### Diffuser Supply (GRD)

#### ERTU-8/128

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
8-1	128	D	12X12	340	273	309	90.9
8-2	128	D	12X12	340	198	306	90.0
8-3	128	D	12X12	340	205	319	93.8
8-4	128	D	12X12	340	251	318	93.5
8-5	128	D	12X12	340	253	321	94.4
8-6	128	D	12X12	340	289	307	90.3
8-7	128	D	12X12	340	245	311	91.5
8-8	128	D	12X12	340	290	309	90.9
8-9	128	D	12X12	340	175	306	90.0
8-10	128	D	12X12	340	246	312	91.8
8-11	128	D	12X12	340	230	306	90.0
8-12	128	D	12"X12"	340	257	326	95.9

Completed By: Michael Gabbert on

# National TAB

Project: CW 9000 - At Home Design Center

## System/Unit: AHU/RTU



Comfort. Under control.

Asset: ERTU-9

AREA:129

Unit Data		
	Design	Actual
MFG	NA	TRANE
Serial Num	-	221413097L
Model Num	NA	YHC047E4RMA26H
Configuration	NA	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	36X15
Num PreFilter 1	-	4
PreFilter Size 1	-	16X25X2

Test Data		
	Design	Actual
SF CFM	2425	1589
SF RPM	NA	DIRECT DRIVE
RA CFM	2215	1411
OA CFM	210	217
RL Voltage	208/230	214
RL Amperage	NL	1.4
OA Damper Position	-	5%
Brake Horse Power	NA	NA

Motor Data		
	Design	Actual
Motor MFG	-	GENTEQ
Frame	-	NL
Horsepower	-	1
Motor Rpm	-	NL
Phase	-	1
Rated Voltage	-	208/230
Rated Amperage	-	NL
Service Factor	-	NL

Performance Data		
	Design	Actual
MA Plenum SP	NA	-0.11
Fan Suction SP	NA	-0.22
Fan Discharge SP	NA	0.11
Total ESP	0.6"	0.22
Fan Total SP	NA	0.33

Drive Data		
	Design	Actual
Motor Sheave Size	-	DIRECT DRIVE
Motor Bore Size	-	DIRECT DRIVE
Motor Sheave SetPt	-	DIRECT DRIVE
Fan Sheave Size	-	DIRECT DRIVE
Fan Sheave Bore	-	DIRECT DRIVE
Belt CL Distance	-	DIRECT DRIVE
Num of Belts	-	DIRECT DRIVE
Belt Size	-	DIRECT DRIVE

Completed By: Michael Gabbert

Notes: \*1 Unit model number indicates unit is a 4 ton unit. Grille design equates to more than unit tonnage. Unit was balanced proportionately at 65% of grille design.

# National TAB

Project: CW 9000 - At Home Design Center

## AHU/RTU



Comfort. Under control.

### Diffuser Supply (GRD)

#### ERTU-9/129

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
9-1	131	A	8	215	11	130	60.5
9-2	131	A	8	215	33	129	60.0
9-3	120	A	8	75	109	50	66.7
9-4	139	A	10	300	172	211	70.3
9-5	139	A	10	300	207	185	61.7
9-6	130	A	8	140	0	93	66.4
9-7	130	A	8	140	16	92	65.7
9-8	129	A	8	225	162	141	62.7
9-9	129	A	8	225	143	163	72.4
9-10	139	A	8	140	259	86	61.4
9-11	129	A	8	225	150	162	72.0
9-12	129	A	8	225	167	147	65.3

Completed By: Michael Gabbert on

# National TAB

Project: CW 9000 - At Home Design Center

## System/Unit: AHU/RTU



Comfort. Under control.

Asset: ERTU-10

AREA:133

Unit Data		
	Design	Actual
MFG	NA	YORK
Serial Num	-	N2E2504422
Model Num	NA	ZF120N24R4A1
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	*1
OA Filter Size 1	-	*1
Num PreFilter 1	-	4
PreFilter Size 1	-	20X24X2

Test Data		
	Design	Actual
SF CFM	4430	3694
SF RPM	NA	1003
RA CFM	3890	3694
OA CFM	540	0
RL Voltage	460	490/491/488
RL Amperage	4.1	4.4/4.2/4.2
OA Damper Position	-	*1
Brake Horse Power	NA	3.12

Motor Data		
	Design	Actual
Motor MFG	-	BALDOR
Frame	-	56HZ
Horsepower	-	3
Motor Rpm	-	1750
Phase	-	3
Rated Voltage	-	460
Rated Amperage	-	4.1
Service Factor	-	1.15

Performance Data		
	Design	Actual
MA Plenum SP	NA	-0.26
Fan Suction SP	NA	-0.77
Fan Discharge SP	NA	0.79
Total ESP	0.6"	1.05
Fan Total SP	NA	1.56

Drive Data		
	Design	Actual
Motor Sheave Size	-	1VM50
Motor Bore Size	-	0.875"
Motor Sheave SetPt	-	4.22
Fan Sheave Size	-	AK74
Fan Sheave Bore	-	1"
Belt CL Distance	-	18.5"
Num of Belts	-	1
Belt Size	-	A54

Completed By: Michael Gabbert

Notes: \*1 No OSA intake for unit. \*2 Unit model number indicates unit is a 10 ton unit. Grille design equates to more than unit tonnage. \*3 Unit is operating at highest possible amp draw. Unit was balanced proportionately at 83% of grille design.

# National TAB

Project: CW 9000 - At Home Design Center

## AHU/RTU



Comfort. Under control.

### Diffuser Supply (GRD)

#### ERTU-10/133

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
10-1	135	A	8	200	146	180	90.0
10-2	134	A	10	290	390	229	79.0
10-3	134	C	10	250	138	188	75.2
10-4	134	C	10	250	203	215	86.0
10-5	134	C	10	250	172	186	74.4
10-6	133	C	10	190	151	174	91.6
10-7	133	A	8	190	187	164	86.3
10-8	133	C	10	190	166	172	90.5
10-9	133	A	8	190	178	170	89.5
10-10	133	C	10	190	183	149	78.4
10-11	135	A	8	200	175	182	91.0
10-12	135	A	8	200	223	169	84.5
10-13	135	C	10	240	209	201	83.8
10-14	135	C	10	240	213	198	82.5
10-15	135	C	10	240	219	204	85.0
10-16	135	C	10	240	169	182	75.8
10-17	135	C	10	240	248	220	91.7
10-18	135	C	10	240	178	179	74.6
10-19	136	C	10	200	212	183	91.5
10-20	136	C	10	200	62	149	74.5

Completed By: Michael Gabbert on

# National TAB

Project: CW 9000 - At Home Design Center

## System/Unit: AHU/RTU



Comfort. Under control.

Asset: ERTU-11

AREA:113

Unit Data		
	Design	Actual
MFG	NA	TRANE
Serial Num	-	221314008L
Model Num	NA	YHC120F4RLA26
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	36X15
Num PreFilter 1	-	3/2
PreFilter Size 1	-	20X25X2/20X30X2

Test Data		
	Design	Actual
SF CFM	4530	4788
SF RPM	NA	DIRECT DRIVE
RA CFM	4055	4323
OA CFM	475	465
RL Voltage	NA	485/480/482
RL Amperage	NA	2.0/2.0/1.9
OA Damper Position	-	10%
Brake Horse Power	NA	NA

Motor Data		
	Design	Actual
Motor MFG	-	NA
Frame	-	NA
Horsepower	-	NA
Motor Rpm	-	NA
Phase	-	NA
Rated Voltage	-	NA
Rated Amperage	-	NA
Service Factor	-	NA

Performance Data		
	Design	Actual
MA Plenum SP	NA	-0.44
Fan Suction SP	NA	-0.73
Fan Discharge SP	NA	0.55
Total ESP	0.6"	0.99
Fan Total SP	NA	1.28

Drive Data		
	Design	Actual
Motor Sheave Size	-	DRIVEDIRECT
Motor Bore Size	-	DRIVEDIRECT
Motor Sheave SetPt	-	DRIVEDIRECT
Fan Sheave Size	-	DRIVEDIRECT
Fan Sheave Bore	-	DRIVEDIRECT
Belt CL Distance	-	DRIVEDIRECT
Num of Belts	-	DRIVEDIRECT
Belt Size	-	DRIVEDIRECT

Completed By: Michael Gabbert

Notes:

# National TAB

Project: CW 9000 - At Home Design Center

## AHU/RTU



Comfort. Under control.

### Diffuser Supply (GRD)

#### ERTU-11/113

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
11-1	126	A	10	300	235	324	108.0
11-2	123	D	16X6	225	396	247	109.8
11-3	123	D	16X6	225	302	236	104.9
11-4	123	D	16X6	225	459	242	107.6
11-5	123	D	16X6	225	371	233	103.6
11-6	124	C	10	235	87	258	109.8
11-7	124	C	10	235	201	237	100.9
11-8	124	C	10	235	359	249	106.0
11-9	124	C	10	235	299	248	105.5
11-10	124	C	10	235	416	222	94.5
11-11	124	C	10	235	288	215	91.5
11-12	121	A	8	225	225	236	104.9
11-13	121	D	18X10	270	324	297	110.0
11-14	121	A	8	225	169	248	110.2
11-15	126	A	10	300	331	328	109.3
11-16	121	A	8	225	256	245	108.9
11-17	121	A	8	225	238	242	107.6
11-18	121	A	8	225	231	247	109.8
11-19	121	A	8	225	229	234	104.0

Completed By: Michael Gabbert on

# National TAB

Project: CW 9000 - At Home Design Center

## System/Unit: AHU/RTU



Comfort. Under control.

Asset: ERTU-12

AREA:127

Unit Data		
	Design	Actual
MFG	NA	TRANE
Serial Num	-	213510930D
Model Num	NA	YHD300G4RHD16H
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	60X17
Num PreFilter 1	-	4/8
PreFilter Size 1	-	16X20X2/20X20X2

Test Data		
	Design	Actual
SF CFM	9170	9154
SF RPM	NL	721
RA CFM	7905	8289
OA CFM	870	865
RL Voltage	480	486/487/488
RL Amperage	6.67	4.8/5.0/4.8
OA Damper Position	-	15%
Brake Horse Power	NA	5.47

Motor Data		
	Design	Actual
Motor MFG	-	WEG
Frame	-	184TZ
Horsepower	-	7.5
Motor Rpm	-	3465
Phase	-	3
Rated Voltage	-	460
Rated Amperage	-	6.67
Service Factor	-	1.15

Performance Data		
	Design	Actual
MA Plenum SP	NA	-0.47
Fan Suction SP	NA	-0.78
Fan Discharge SP	NA	0.55
Total ESP	0.6"	1.02
Fan Total SP	NA	1.33

Drive Data		
	Design	Actual
Motor Sheave Size	-	1VP44
Motor Bore Size	-	1.125"
Motor Sheave SetPt	-	3.99
Fan Sheave Size	-	19"
Fan Sheave Bore	-	1.25"
Belt CL Distance	-	21.25"
Num of Belts	-	1
Belt Size	-	BX81

Completed By: Michael Gabbert

Notes: \*1 Unable to read unit diffusers, unit was traversed for total airflow.

# National TAB

Project: CW 9000 - At Home Design Center

## AHU/RTU



Comfort. Under control.

### Diffuser Supply (GRD)

#### ERTU-12/127

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
12-1	132	DUCT TRAVERSE	74"X18"	9170	989	9154	99.8
12-2	132	A1	8	250			-
12-3		D	16X6	185			-
12-4		D	16X6	185			-
12-5		D	16X6	185			-
12-6		D	16X6	185			-
12-7	132	A	10	300			-
12-8		D	16X6	185			-
12-9		D	16X6	185			-
12-10		D	16X6	185			-
12-11		D	16X6	185			-
12-12	1	D	16X6	185			-
12-13		D	16X6	185			-
12-14		D	16X6	185			-
12-15		D	16X6	185			-
12-16		D	16X6	185			-
12-17		D	16X6	185			-
12-18		D	16X6	185			-
12-19		D	16X6	185			-
12-20		D	16X6	185			-
12-21	132	D	16X6	185			-
12-22	127	D	18X10	400			-
12-23	127	D	18X10	400			-
12-24	127	D	18X10	400			-
12-25	127	D	18X10	400			-
12-26	127	D	18X10	400			-
12-27	127	D	18X10	400			-
12-28	127	D	18X10	400			-
12-29	127	D	18X10	400			-
12-30	127	D	18X10	400			-
12-31	127	D	18X10	400			-
12-32	104	D	10X10	240			-
12-33	127	D	18X10	400			-
12-34	127	D	18X10	400			-

Completed By: Michael Gabbert on

# National TAB

Project: CW 9000 - At Home Design Center  
System/Unit: FAN - Exhaust



Comfort. Under control.

Asset: EF-4

AREA:124

Unit Data		
	Design	Actual
<b>MFG</b>	NA	GREENHECK
<b>Model Num</b>	NA	CUE-100-4-VG-1-19-X
<b>Serial Num</b>	-	21386303
<b>Type</b>	UPBLAST	UPBLAST

Test Data		
	Design	Actual
<b>CFM</b>	1005	831
<b>RL Voltage</b>	-	122
<b>RL Amperage</b>	-	2.7
<b>Total ESP</b>	0.7	0.21

Motor Data		
	Design	Actual
<b>Motor MFG</b>	-	BROAD-OCEAN
<b>Frame</b>	-	NL
<b>Horsepower</b>	NA	1/4
<b>Motor Rpm</b>	NA	300-1750
<b>Phase</b>	NA	1
<b>Voltage (rated)</b>	NA	115
<b>Amperage (rated)</b>	-	2.85
<b>Service Factor</b>	-	1.25

Completed By: Michael Gabbert

Notes: \*1 Fan is operating at highest possible amp draw. Fan is operating at 82% of design. \*2 Unable to balance diffusers due to no dampers installed.

# National TAB

Project: CW 9000 - At Home Design Center

## FAN - Exhaust



Comfort. Under control.

### Diffuser Ret/Exh (GRD)

#### EF-4/124

Asset						
Asset Name	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
E4-1	E	16X16	335	611	548	163.6
E4-2	E	16X16	335	206	186	55.5
E4-3	E	16X16	335	99	97	29.0

Completed By: Michael Gabbert on

# National TAB

Project: CW 9000 - At Home Design Center  
System/Unit: FAN - Exhaust



Comfort. Under control.

Asset: EF-5

AREA:122

Unit Data		
	Design	Actual
<b>MFG</b>	NA	GREENHECK
<b>Model Num</b>	NA	CUE-095-6-V6-1-19-X
<b>Serial Num</b>	-	21386568
<b>Type</b>	UPBLAST	UPBLAST

Test Data		
	Design	Actual
<b>CFM</b>	705	651
<b>RL Voltage</b>	-	120
<b>RL Amperage</b>	-	0.5
<b>Total ESP</b>	0.5	0.15

Motor Data		
	Design	Actual
<b>Motor MFG</b>	-	GREENHECK
<b>Frame</b>	-	NL
<b>Horsepower</b>	NA	1/5
<b>Motor Rpm</b>	NA	350-1750
<b>Phase</b>	NA	1
<b>Voltage (rated)</b>	NA	115
<b>Amperage (rated)</b>	-	2.3
<b>Service Factor</b>	-	1.0

Completed By: Bayley Morvant

Notes:

# National TAB

Project: CW 9000 - At Home Design Center

## FAN - Exhaust



Comfort. Under control.

### Diffuser Ret/Exh (GRD)

#### EF-5/122

Asset						
Asset Name	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
E5-1	G	16X16	705	1063	651	92.3

Completed By: Michael Gabbert on