

Report By:

National TAB
1329 E. KEMPER ROAD
SUITE 4210
CINCINNATI, OH 45246



Report: Preliminary Balance Report

Function: Test, Adjust, & Balance

Date: 10/31/2023

PROJECT
AMERICA'S BEST (DAYTON, OH)

2280 MIAMISBURG CENTERVILLE RD

DAYTON, OH 45459

Client

Champion Commercial HVAC

2638 Tem Mile Rd.

Melbourne, KY 41059

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Project: AMERICA'S BEST (DAYTON, OH)

Table Of Contents

Section	Page #
AHU/RTU	3
FAN - Exhaust	7



National TAB

Project: AMERICA'S BEST (DAYTON, OH)

System/Unit: AHU/RTU

Asset: RTU1

AREA:

Unit Data		
	Design	Actual
MFG	NA	CARRIER
Serial Num	-	0923C05980
Model Num	NA	48FCEA05A2A5
Configuration	VERTICAL	VERTICAL
Num PreFilter 1	-	2
PreFilter Size 1	-	24"x16"x2"

Motor Data		
	Design	Actual
Phase	3	1
Rated Voltage	208	208
Rated Amperage	7.1	7.1

Test Data		
	Design	Actual
SF CFM	1600	1572
RA CFM	1300	0
OA CFM	300	1572
RL Voltage	208	212.2
RL Amperage	7.1	4.1
OA Damper Position	-	NOT RESPONSIVE

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.25"
Fan Suction SP	-	-0.44"
Fan Discharge SP	-	0.36"
Total ESP	0.60	0.61"
Fan Total SP	-	0.80"

Completed By: Gabe Merk on 10/31/2023

Notes:

Oa filter 30"x16"

Economizer not responsive.

Economizer stuck at 100% oa.

Written By: Gabe Merk on 10/31/2023



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Project:AMERICA'S BEST (DAYTON, OH)

AHU/RTU

Diffuser Supply (GRD)

RTU1/

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
RTU1-SGRD1	102	D-1	8	200	253	199	99.5
RTU1-SGRD2	100	D-1	8	280	322	258	92.1
RTU1-SGRD3	101	D-1	8	280	347	269	96.1
RTU1-SGRD4	100	D-1	8	280	264	294	105.0
RTU1-SGRD5	101	D-1	8	280	415	273	97.5
RTU1-SGRD6	100	D-1	8	280	339	279	99.6
Total				1600	1940	1572	98.25%



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Project: AMERICA'S BEST (DAYTON, OH)

System/Unit: AHU/RTU

Asset: RTU2

AREA:

Unit Data		
	Design	Actual
MFG	NA	CARRIER
Serial Num	-	3223C08731
Model Num	NA	48FCEM07A2A5
Configuration	VERTICAL	VERTICAL
Num PreFilter 1	-	4
PreFilter Size 1	-	16X16X2

Motor Data		
	Design	Actual
Phase	3	3
Rated Voltage	208	208
Rated Amperage	5.5	5.5

Test Data		
	Design	Actual
SF CFM	2400	1621
RA CFM	1950	1316
OA CFM	450(303)	305
RL Voltage	208	211.7/209.2/211.5
RL Amperage	5.5	1.5/1.6/1.8
OA Damper Position	-	3.5v

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.36"
Fan Suction SP	-	-0.52"
Fan Discharge SP	-	0.30"
Total ESP	0.60	0.66"
Fan Total SP	-	0.82"

Completed By: Gabe Merk on 10/30/2023

Notes:

Oa air filter 30"x16"

Unit Set to max speed.

Written By: Gabe Merk on 10/30/2023



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Project: AMERICA'S BEST (DAYTON, OH)

AHU/RTU

Diffuser Supply (GRD)

RTU2/

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
RTU2-SGRD1	109	D-1	8	280	126	135	48.2
RTU2-SGRD2	109	D-1	8	280	202	219	78.2
RTU2-SGRD3	110	D-1	8	180	157	139	77.2
RTU2-SGRD4	103	D-1	8	215	129	146	67.9
RTU2-SGRD5	105	D-1	6	55	89	55	100.0
RTU2-SGRD6	113	D-1	6	50	81	84	168.0
RTU2-SGRD7	104	D-1	6	115	85	96	83.5
RTU2-SGRD8	111	D-1	8	280	162	167	59.6
RTU2-SGRD9	112	D-1	10	320	138	141	44.1
RTU2-SGRD10	114	D-1	8	205	119	134	65.4
RTU2-SGRD11	108	D-1	8	260	120	116	44.6
RTU2-SGRD12	106	D-1	6	50	69	70	140.0
RTU2-SGRD13	105	D-1	6	60	60	60	100.0
RTU2-SGRD14	107	D-1	6	50	48	59	118.0
Total				2400	1585	1621	67.54%

Completed By: Gabe Merk on 10/31/2023



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Project: AMERICA'S BEST (DAYTON, OH)

System/Unit: FAN - Exhaust

Asset: EF1

AREA:106

Unit Data		
	Design	Actual
MFG	NA	PENNBARRY
Model Num	NA	Z8S
Serial Num	-	Illegible

Test Data		
	Design	Actual
CFM	125	126

Motor Data		
	Design	Actual
Motor MFG	-	N/A
Motor Rpm	-	1050
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	NL

Completed By: Gabe Merk on 10/30/2023



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Project: AMERICA'S BEST (DAYTON, OH)

System/Unit: FAN - Exhaust

Asset: EF2

AREA:107

Unit Data		
	Design	Actual
MFG	NA	PENNBARRY
Model Num	NA	Z8S
Serial Num	-	ILLEGIBLE

Test Data		
	Design	Actual
CFM	125	141

Motor Data		
	Design	Actual
Motor Rpm	-	1050
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	NL

Completed By: Gabe Merk on 10/30/2023

Notes:
Speed adjustment knob not functional.

Written By: Gabe Merk on 10/30/2023