Report By:

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

Report: AHU37A-B Evaluation Report

Function: Test, Adjust, & Balance

Date: 11/18/2025

Completed By: National TAB

PROJECT

VA Hospital Eval (Indianapolis, IN)

1481 West Tenth Street

Indianapolis, IN 46202

Client

Specialized Engineering Solutions

10360 ELLISON CIR

OMAHA, NE 68134

National TAB

Project: VA Hospital Eval (Indianapolis, IN)

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Project: VA Hospital Eval (Indianapolis, IN)

System/Unit: AHU-DUAL FAN

National TAB NEBB JOE HERTENSTEIN CERTIFICATION 3629 Exp. 12/31/25 Air and Hydronic Testing

Asset: AHU-37A 1 AREA:

UNIT DATA - SUPPLY		
	Design	**Actual**
Manufacturer	YORK	YORK
Model Number	NA	CM
Serial Number	-	5476
No. Pre-Filters / Size (1)	-	
No. Pre-Filters / Size (2)	-	
No. Pre-Filters / Size (3)	-	
No. Final Filters / Size (1)	-	
No. Final Filters / Size (2)	-	
No. Final Filters / Size (3)	-	

MOTOR DATA - SUPPLY	
	Actual
Motor MFG / Frame	- / 286
Horsepower / RPM	54 / 1750
Rated Volts / Phase	480 / 3
Rated Amperage / SF	

DRIVE DATA - SUPPLY		
	Design	**Actual**
Motor Sheave Size / Bore	-	
Fan Sheave Size / Bore	-	
Belt CL Distance	-	
No. Belts / Size	-	5/B97

TEST DATA - SUPPLY		
	Design	**Actual**
Total CFM	-	
Fan RPM	-	
VFD Speed	-	59 HZ
RL Voltage	-	460 [1]
RL Amperage	-	31 (AVE)
Motor B.H.P.	-	

PERFORMANCE DATA - SUPPLY		
	Design	**Actual**
Static Pressure Stpt	-	
Suction S.P.	-	
Discharge S.P.	-	
Total S.P.	-	
Chilled Water Coil P.D.	-	
Pre Heat Coil P.D.	-	
Final Filters P.D.	-	
Heat Wheel P.D.	-	
Pre-Filters P.D.	-	
Total ESP	-	

UNIT DATA - EXHAUST/RETURN		
	Design	**Actual**
Manufacturer	-	
Model Number	-	
Serial Number	-	
No. Pre-Filters / Size (1)	-	
No. Pre-Filters / Size (2)	-	
No. Pre-Filters / Size (3)	-	

MOTOR DATA - EXHAUST/RETURN	
	Actual
Motor MFG / FRAME	
Horsepower / RPM	
Rated Volts / Phase	
Rated Amperage / SF	

DRIVE DATA - EXHAUST/RETURN		
	Design	**Actual**
Motor Sheave Size / Bore	-	
Fan Sheave Size / Bore	-	
Belt CL Distance	-	
No. Belts / Size	-	

TEST DATA - EXHAUST/RETURN		
	Design	**Actual**
Total CFM	-	
Relief CFM	-	
Fan RPM	-	
VFD Speed	-	
RL Voltage	-	
RL Amperage	-	
Motor B.H.P.	-	

PERFORMANCE DATA - EXHAUST/RETURN		
	Design	**Actual**
Static Pressure Stpt	-	
Suction S.P.	-	
Discharge S.P.	-	
Total S.P.	-	
Heat Wheel P.D.	-	
Pre-Filters P.D.	-	
Total ESP	-	

Notes:
MANF DATE 10/1992 JOB IDENT T47207 AC37B
UNIT IS LABELED AS 37A
UNIT IN OPERATION & NOT ABLE TO ACCESS INSIDE UNIT. UNIT DATA COLLECTED FROM UNIT TAG IN DOCUMENT FOUND ON SITE.
EBTRON DISPLAY FLOW STATION = 2027 CFM (AS FOUND)
Supply @94% during VAV readout

Written By: Aaron Cosby on 10/08/2025

National TAB

Project: VA Hospital Eval (Indianapolis, IN)

System/Unit: AHU-DUAL FAN

National TAB NEBB JOE HERTENSTEIN CERTIFICATION 3629 Exp. 12/31/25 Air and Hydronic Testing

Asset: AHU-37B 1 AREA:TWINNED WITH AHU-37A

UNIT DATA - SUPPLY		
	Design	**Actual**
Manufacturer	YORK	YORK
Model Number	NA	CM
Serial Number	-	5475
No. Pre-Filters / Size (1)	-	
No. Pre-Filters / Size (2)	-	
No. Pre-Filters / Size (3)	-	
No. Final Filters / Size (1)	-	
No. Final Filters / Size (2)	-	
No. Final Filters / Size (3)	-	

MOTOR DATA - SUPPLY	
	Actual
Motor MFG / Frame	
Horsepower / RPM	
Rated Volts / Phase	480/3
Rated Amperage / SF	

DRIVE DATA - SUPPLY		
	Design	**Actual**
Motor Sheave Size / Bore	-	
Fan Sheave Size / Bore	-	
Belt CL Distance	-	
No. Belts / Size	-	

TEST DATA - SUPPLY		
	Design	**Actual**
Total CFM	-	
Fan RPM	-	
VFD Speed	-	57.65 HZ
RL Voltage	-	448 (AVE)
RL Amperage	-	NA
Motor B.H.P.	-	

PERFORMANCE DATA - SUPPLY		
	Design	**Actual**
Static Pressure Stpt	-	
Suction S.P.	-	
Discharge S.P.	-	
Total S.P.	-	
Chilled Water Coil P.D.	-	
Pre Heat Coil P.D.	-	
Final Filters P.D.	-	
Heat Wheel P.D.	-	
Pre-Filters P.D.	-	
Total ESP	-	

UNIT DATA - EXHAUST/RETURN		
	Design	**Actual**
Manufacturer	-	
Model Number	-	
Serial Number	-	
No. Pre-Filters / Size (1)	-	
No. Pre-Filters / Size (2)	-	
No. Pre-Filters / Size (3)	-	

MOTOR DATA - EXHAUST/RETURN	
	Actual
Motor MFG / FRAME	
Horsepower / RPM	
Rated Volts / Phase	
Rated Amperage / SF	

DRIVE DATA - EXHAUST/RETURN		
	Design	**Actual**
Motor Sheave Size / Bore	-	
Fan Sheave Size / Bore	-	
Belt CL Distance	-	
No. Belts / Size	-	

TEST DATA - EXHAUST/RETURN		
	Design	**Actual**
Total CFM	-	
Relief CFM	-	
Fan RPM	-	
VFD Speed	-	
RL Voltage	-	
RL Amperage	-	
Motor B.H.P.	-	

PERFORMANCE DATA - EXHAUST/RETURN		
	Design	**Actual**
Static Pressure Stpt	-	
Suction S.P.	-	
Discharge S.P.	-	
Total S.P.	-	
Heat Wheel P.D.	-	
Pre-Filters P.D.	-	
Total ESP	-	

Notes:
UNIT MANF-10/1992 JOB IDENT: 74206 AC37A
UNIT IS LABELED AS 37B
UNIT IN OPERATION & NOT ABLE TO ACCESS INSIDE UNIT. UNIT DATA COLLECTED FROM UNIT TAG IN DOCUMENT FOUND ON SITE.
EBTRON DISPLAY FLOW STATION = 2119 CFM (AS FOUND)

Written By: Joe Hertenstein on 10/01/2025

National TAB

Project: VA Hospital Eval (Indianapolis, IN)

System/Unit: FAN - Return

Asset: AHU37A-RF1 AREA:

Unit Data		
	Design	**Actual**
MFG	PennBarry	PennBarry
Model Num	ESI245ARR9C2	ESI245ARR9C2
Serial Num	-	G242558
Type	-	INLINE TUBULAR

Motor Data		
	Design	**Actual**
Motor MFG	-	
Frame	-	254T
Horsepower	-	15
Motor Rpm	-	1765
Phase	-	3
Voltage (rated)	-	230/460
Amperage (rated)	-	35.4/17.7
Service Factor	-	1.15

Drive Data	
	Actual
Motor Sheave Size	NOT ACCESSIBLE
Fan Sheave Size	NOT ACCESSIBLE
Num of Belts	2
Belt Size	2L432G

Test Data		
	Design	**Actual**
CFM	-	
Return Fan RPM	-	1559
Motor Frequency	-	52.8 HZ
Return Fan System SetPt	-	
RL Voltage	-	
RL Amperage	-	11.8 (AVE)
Suction ESP	-	-2.74"
Discharge ESP	-	+1.06"
Total ESP	-	3.8"

National TAB

Project: VA Hospital Eval (Indianapolis, IN)

System/Unit: FAN - Return

Asset: AHU37B-RF1 AREA:

Unit Data		
	Design	**Actual**
MFG	PennBarry	PennBarry
Model Num	ESI245ARR9C2	ESI245ARR9C2
Serial Num	-	H60726
Type	-	INLINE TUBULAR

Motor Data		
	Design	**Actual**
Motor MFG	-	BALDOR
Frame	-	245T
Horsepower	-	15
Motor Rpm	-	1765
Phase	-	3
Voltage (rated)	-	230/460
Amperage (rated)	-	35.4/17.7
Service Factor	-	1.15

Drive Data	
	Actual
Motor Sheave Size	NOT ACCESSIBLE
Fan Sheave Size	NOT ACCESSIBLE
Num of Belts	2
Belt Size	2L432G

Test Data		
	Design	**Actual**
CFM	-	
Return Fan RPM	-	
Motor Frequency	-	54 HZ
Return Fan System SetPt	-	
RL Voltage	-	460
RL Amperage	-	14 (AVE)
Suction ESP	-	-2.78"
Discharge ESP	-	+1.03
Total ESP	-	3.81"
Brake Horse Power	-	

VAV - Single Duct

AHU-37A 1/

Asset							
TU-37-01	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM
	CAV	14		2788			
	Heat CFM	Ak (max)					
TU-37-02	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM
	CAV	12		1783			
	Heat CFM	Ak (max)					
TU-37-03	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM
	CAV	8		372			
	Heat CFM	Ak (max)					
TU-37-04	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM
	CAV	8		1129			
	Heat CFM	Ak (max)					
TU-37-06	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM
	CAV	8		104			
	Heat CFM	Ak (max)					
TU-37-07	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM
	CAV	12		1803			
	Heat CFM	Ak (max)					
TU-37-08	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM
	CAV	(2) 12		3166			
	Heat CFM	Ak (max)					
TU-37-09	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM
	CAV	8		221			
	Heat CFM	Ak (max)					
TU-37-5	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM
	CAV	8		744			
	Heat CFM	Ak (max)					
TU-37-10	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM
	CAV	6		570			
	Heat CFM	Ak (max)					
TU-37-11	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM
	CAV	6		0			
	Heat CFM	Ak (max)					

	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM
TU-37-12	CAV	6		457			
	Heat CFM	Ak (max)					
	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM
TU-37-13	CAV	14		846			
	Heat CFM	Ak (max)					
	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM
TU-37-14	CAV	14		1666			
	Heat CFM	Ak (max)					
	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM
TU-37-15	CAV	10		524			
	Heat CFM	Ak (max)					
	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM
TU-37-16	CAV	6		40			
	Heat CFM	Ak (max)					
	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM
TU-37-17	CAV	10		696			
	Heat CFM	Ak (max)					
	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM
TU-37-18	CAV	14		1724			
	Heat CFM	Ak (max)					
	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM
TU-37-21	CAV	12		4179			
	Heat CFM	Ak (max)					
	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM
TU-37-23	CAV	8		284			
	Heat CFM	Ak (max)					
	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM
TU-37-24	CAV	10		1096			
	Heat CFM	Ak (max)					
	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM
TU-37-25	CAV	8		826			
	Heat CFM	Ak (max)					

	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM
TU-37-26							
	Heat CFM	Ak (max)					
	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM
TU-37-27	CAV	8		305			
	Heat CFM	Ak (max)					
	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM
TU-37-28	CAV	10		538			
	Heat CFM	Ak (max)					
	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM
TU-37-29	CAV	8		465			
	Heat CFM	Ak (max)					
	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM
TU-37-30							
	Heat CFM	Ak (max)					
	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM
TU-37-31							
	Heat CFM	Ak (max)					
	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM
TU-37-32	CAV	8		58			
	Heat CFM	Ak (max)					
	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM
TU-37-33	CAV	12		1617			
	Heat CFM	Ak (max)					
	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM
TU-37-34							
	Heat CFM	Ak (max)					
	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM
TU-37-35							
	Heat CFM	Ak (max)					
	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM
TU-37-36	CAV	8		54			
	Heat CFM	Ak (max)					

	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM
TU-37-37	CAV	12		2295			
	Heat CFM	**Ak (max)**					

	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM
TU-37-38	CAV	8		598			
	Heat CFM	**Ak (max)**					

	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM
TU-37-39	CAV	8		32			
	Heat CFM	**Ak (max)**					

	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM
TU-37-40	CAV	8		882			
	Heat CFM	**Ak (max)**					

Asset	Notes	Date	Written By
TU-37-02	Double	10/08/2025	Aaron Cosby
TU-37-07	OR7 labeled tu-37-01 Double VAV	10/08/2025	Aaron Cosby
TU-37-11	Ductwork capped off	10/08/2025	Nick Payne
TU-37-26	Swapped for 1a	10/08/2025	Aaron Cosby
TU-37-30	Swapped for 4a	10/08/2025	Aaron Cosby
TU-37-31	Removed	10/08/2025	Aaron Cosby
TU-37-34	Swapped out	10/08/2025	Aaron Cosby
TU-37-35	Swapped out	10/08/2025	Aaron Cosby

VAV - Single Duct

AHU-37A 1/

Asset									
Asset Name	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM	Heat CFM	Ak (max)
AFCV-37-01	CAV	12		1910					
AFCV-37-02									
AFCV-37-04									
AFCV-37-05									
AFCV-37-06									
AFCV-37-07									
AFCV-37-08	CAV	(2) 10		873					
AFCV-37-09	CAV	14		1071					
AFCV-37-10	CAV	6		517					
AFCV-37-11	CAV	12		1690					
AFCV-37-12	CAV	10		705					
AFCV-37-13	NA	NA		0					
AFCV-37-14	CAV	14		701					
AFCV-37-15	CAV	10		829					
AFCV-37-16	CAV	14		545					
AFCV-37-17	CAV	14		725					
AFCV-37-18	NA	NA		0					
AFCV-37-19	CAV	8		79					
AFCV-37-20	CAV	5		0					
AFCV-37-21	CAV	7		281					
AFCV-37-22	CAV	7		696					
AFCV-37-23	CAV	(2) 12		1022					
AFCV-37-24	CAV	6		657					
AFCV-37-25	CAV	10		1160					
AFCV-37-26									
AFCV-37-27	CAV	6		191					
AFCV-37-28	CAV	6		548					
AFCV-37-29	CAV	6		280					
AFCV-37-30	CAV	8		31					
AFCV-37-31	CAV	8		274					
AFCV-37-32									
AFCV-37-33									
AFCV-37-34	CAV	12		869					
AFCV-37-35	CAV	10		0					
AFCV-37-36	CAV	12		416					
AFCV-37-37	CAV	12		801					
AFCV-37-38	CAV	8		131					
AFCV-37-39	CAV	12		832					
AFCV-37-40	CAV	(2) 12		901					
AFCV-37-44	CAV	12		11					
AFCV-37-45	CAV	12		0					

Asset	Notes	Date	Written By
AFCV-37-13	Removed and capped.	10/08/2025	Nick Payne
AFCV-37-18	Removed and capped.	10/08/2025	Nick Payne
AFCV-37-20	duct is capped off	10/08/2025	Nick Payne
AFCV-37-21	2 VAVs connected to duct	10/08/2025	Aaron Cosby
AFCV-37-24	2 VAVs connected to duct	10/08/2025	Aaron Cosby
AFCV-37-26	Removed	10/08/2025	Aaron Cosby
AFCV-37-32	Swapped for 1	10/08/2025	Aaron Cosby
AFCV-37-33	Swapped for 1	10/08/2025	Aaron Cosby