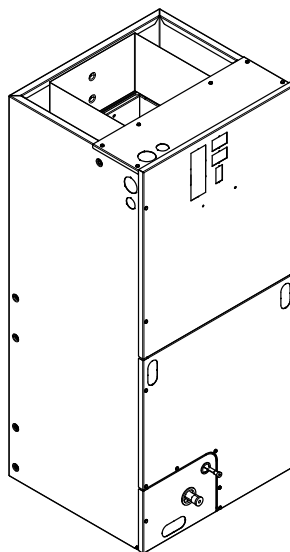
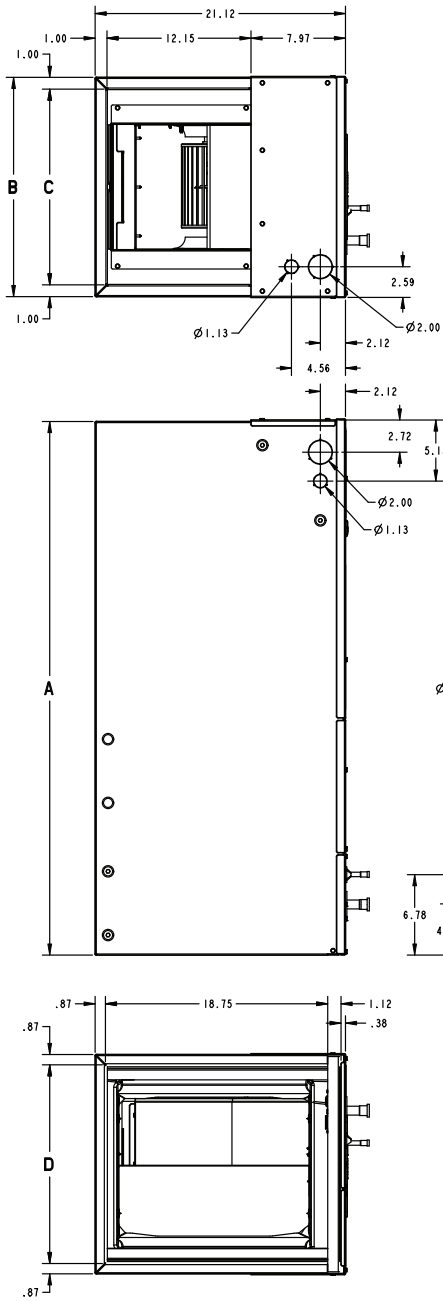


# Submittal

**3.5 Ton  
Convertible Air Handler  
A4AH4E42A1C30C**

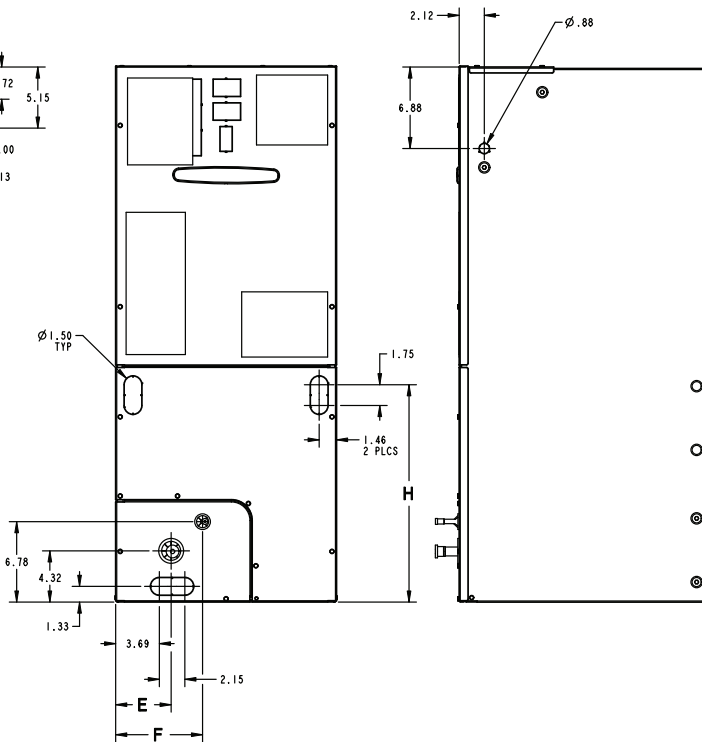


# Outline Drawing



MINIMUM UNIT CLEARANCE TABLE	
	SERVICE CLEARANCE (RECOMMENDED)
SIDES	2"
FRONT	21"
BACK	0"
INLET DUCT	1"
OUTLET DUCT	N/A

NOTE: THIS UNIT IS APPROVED FOR INSTALLATION CLEARANCES TO COMBUSTIBLE MATERIAL AS STATED ON THE UNIT RATING NAMEPLATE



PRODUCT DIMENSIONS									
Air Handler Model	A	B	C	D	E	F	H	Flow Control	Gas Line Braze
A4AH4E42	51.27	23.50	21.50	21.75	7.01	9.66	24.59	TXV	7/8

All dimensions are in inches

# Product Specifications

<b>MODEL</b>	A4AH4E42A1C30C
<b>RATED VOLTS/PH/HZ</b>	208-230/1/60
<b>RATINGS<sup>(a)</sup></b>	See O.D. Specifications
<b>INDOOR COIL — Type</b>	Plate Fin
Rows — F.P.I.	3 - 14
Face Area (sq. ft.)	5.50
Tube Size (in.)	3/8
Refrigerant Control	TXV
Drain Conn. Size (in.) <sup>(b)</sup>	3/4 NPT
<b>DUCT CONNECTIONS</b>	<b>See Outline Drawing</b>
<b>INDOOR FAN — Type</b>	Centrifugal
Diameter-Width (In.)	11 X 8
No. Used	1
Drive - No. Speeds	Direct - 3 <sup>(c)</sup>
CFM vs. in. w.g.	See Fan Performance Table
No. Motors — H.P.	1 - 1/2
Motor Speed R.P.M.	1050
Volts/Ph/Hz	208-230/1/60
F.L. Amps	4.2
<b>FILTER</b>	
Filter Furnished? <sup>(d)</sup>	No
<b>REFRIGERANT</b>	<b>R-410A</b>
Ref. Line Connections	Brazed
Coupling or Conn. Size — in. Gas	7/8

Coupling or Conn. Size — in. Liq.	3/8
<b>DIMENSIONS</b>	H x W x D
Crated (In.)	52-1/2 x 26 x 24
Uncrated	51-3/8 x 23-1/2 x 21-1/8
<b>WEIGHT</b>	
Shipping (Lbs.) / Net (Lbs.)	145/138

- (a) These Air Handlers are A.H.R.I certified with various Split System Air Conditioners and Heat Pumps (AHRI STANDARD 210/240). Refer to the Split System Outdoor Unit Product Data Guides for performance data.
- (b) 3/4" Male Plastic Pipe (Ref: ASTM 1785-76)
- (c) ECM Motor
- (d) Remote filter required.

## Minimum Airflow CFM

<b>A4AH4E42A1C30C</b>		
<b>Heater</b>	<b>Minimum Heat Speed Tap</b>	
	With Heat Pump	Without Heat Pump
BAYHTR1504BRK, BAYHTR1504LUG, BAYHTR1505BRK, BAYHTR1505LUG	Low	Low
BAYHTR1508BRK, BAYHTR1508LUG, BAYHTR1510BRK, BAYHTR1510LUG, BAYHTR3510LUG	Low	Low
BAYHTR1517BRK	Low	Low
BAYHTR1523BRK	Med	Low
BAYHTR3517LUG	Low	Low

# Fixed Orifice Superheat Charging Table

		Indoor Wet Bulb Temp (F)																													
		50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	
Outdoor Dry Bulb Temperature (F)	55	7	9	10	11	12	14	15	17	18	20	21	23	24	26	27	29	30													
	60	5	7	8	9	10	12	13	15	16	18	19	21	22	24	25	27	28	30	31											
	65			4	6	8	10	11	13	14	16	17	18	19	21	22	24	25	27	28	27	31									
	70					5	7	8	10	11	13	14	16	17	18	19	21	22	24	25	27	28	30	31							
	75							5	6	7	9	10	12	14	16	18	19	21	22	24	26	28	29	31	32						
	80										4	6	7	9	10	11	12	14	16	18	19	21	23	25	26	28	29	31	33		
	85											4	6	7	9	10	13	14	16	18	20	21	23	24	26	28	29	30	31	32	
	90													4	6	8	10	11	13	14	16	18	20	22	24	25	27	28	30	31	
	95															4	6	8	10	13	14	16	18	20	22	23	25	26	28	29	
	100																	6	8	10	12	13	16	18	20	21	23	25	27	29	
	105																	4	6	7	9	11	13	15	18	20	22	24	26	28	
	110																			4	7	9	11	13	16	18	21	23	26	28	
	115																						6	9	12	14	16	19	21	24	26

Using a digital psychrometer, measure the return air wet-bulb temperature at the unit just before the coil. Also measure the outdoor dry-bulb temperature. Use these temperatures to locate the target superheat on the charging table. Do not attempt to charge the system if these conditions fall outside of this charging table.  
 ADD refrigerant to DECREASE total superheat. REMOVE refrigerant to INCREASE total superheat. Always allow 10 to 15 minutes of operation after any refrigerant or air flow change prior to determining the final superheat.

# Heater Pressure Drop Table

## A4AH4 Air Handler Models

Airflow CFM	Number of Racks				Heater Racks	
	1	2	3	4	Heater Model	No. of Racks
	Air Pressure Drop — Inches W.G.					
1800	0.02	0.04	0.06	0.14	BAYHTR1504	1
1700	0.02	0.04	0.06	0.14	BAYHTR1505	1
1600	0.02	0.04	0.06	0.13	BAYHTR1508	2
1500	0.02	0.04	0.06	0.12	BAYHTR1510	2
1400	0.02	0.04	0.06	0.12	BAYHTR3510	3
1300	0.02	0.04	0.05	0.11	BAYHTR1517	3
1200	0.01	0.04	0.05	0.10	BAYHTR3517	3
1100	0.01	0.03	0.05	0.09	BAYHTR1523	4
1000	0.01	0.03	0.04	0.09	BAYHTR1525	4
900	0.01	0.03	0.04	0.08		
800	0.01	0.03				
700	0.01	0.02				
600	0.01	0.02				

# Performance and Electrical Data

1. See Product Data or Air Handler nameplate for approved combinations of Air Handlers and Heaters.
2. Heater model numbers may have additional suffix digits.

**Table 1. Air Flow Performance**

<b>A4AH4E42A1C30C (a)</b>			
EXTERNAL STATIC (in w.g)	AIRFLOW		
	Speed Taps — 208–230 VOLTS		
	<b>High</b>	<b>Med</b>	<b>Low †</b>
0.1	1623	1509	1403
0.2	1583	1465	1357
0.3	1539	1420	1309
0.4	1494	1373	1260
0.5	1450	1356	1211
0.6	1399	1276	1159
0.7	1353	1223	1102

1. Values are with wet coil, no filter, and no heaters  
 2. CFM Correction for dry coil = Add 3%  
 3. † = Factory setting  
 4. Low = Tap 1–3, Med = Tap 4, High = Tap 5

(a) For the A4AH4E42A1C30C in downflow applications, airflow must not exceed 1600 cfm due to condensate blow off.

**Table 2. Electrical Data**

<b>A4AH4E42A1C30C</b>											
Heater Model No.	No. of Circuits/ Phases	240 Volt					208 Volt				
		Capacity		Heater Amps per Circuit	Minimum Circuit Ampacity	Maximum Overload Protection	Capacity		Heater Amps per Circuit	Minimum Circuit Ampacity	Maximum Overload Protection
		kW	BTUH				kW	BTUH			
No Heater				4.20 *	5	15			4.20 *	5	15
BAYHTR1504BRK BAYHTR1504LUG	1/1	3.84	13100	16.0	25	25	2.88	9800	13.8	23	25
BAYHTR1505BRK BAYHTR1505LUG	1/1	4.8	16400	20.0	30	30	3.6	12300	17.3	27	30
BAYHTR1508BRK BAYHTR1508LUG	1/1	7.68	26200	32.0	45	45	5.76	19700	27.7	40	40
BAYHTR1510BRK BAYHTR1510LUG	1/1	9.6	32800	40.0	55	60	7.2	24600	34.6	49	50
BAYHTR1517BRK- Circuit 1 <sup>(a)</sup>	2/1	9.6	32800	40.0	55	60	7.2	24600	34.6	49	50
BAYHTR1517BRK- Circuit 2		4.8	16400	20.0	25	25	3.6	12300	17.3	22	25
BAYHTR1523BRK- Circuit 1 <sup>(a)</sup>	2/1	9.6	32800	40.0	55	60	7.2	24600	34.6	49	50
BAYHTR1523BRK- Circuit 2		9.6	32800	40.0	50	50	7.2	24600	34.6	43	45
BAYHTR3510LUG	1/3	9.6	32800	23.1	34	35	7.2	24600	20.0	30	30
BAYHTR3517LUG	1/3	14.4	49200	34.6	48	50	10.8	36900	30.0	42	45
BAYHTR1517BRK with single circuit power source kit BAYSPEKT201A	1/1	14.4	49200	60.0	83	90	10.8	36900	51.9	73	80
BAYHTR1523BRK with single circuit power source kit BAYSPEKT201A	1/1	19.2	65600	80.0	108	110	14.4	49200	69.2	94	100

\* = Motor Amps

<sup>(a)</sup> MCA and MOP for circuit 1 contains the motor amps.

# Features and Benefits

- Galvanized metal cabinet with captured foil face insulation
- 2% or less air leakage
- R-4.2 Insulating Value
- Multi-Position UP/Down Flow, Horizontal Left /Right
- ALL Aluminum Coil
- Electric Heaters with polarized plug connections (sold as accessory)
- R-410A Thermal Expansion Valve
- ECM Motor **(3.5 – 5 Ton Models )**

- Low Voltage Pigtail Connections
- Draw Through Design
- Horizontal Drain pan
- Fused 24V Power
- **5 year warranty**
- **Optional extended warranty available**

***Important:*** *Condensate management kit is required for all 5 ton air handler models installed in downflow applications.*



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