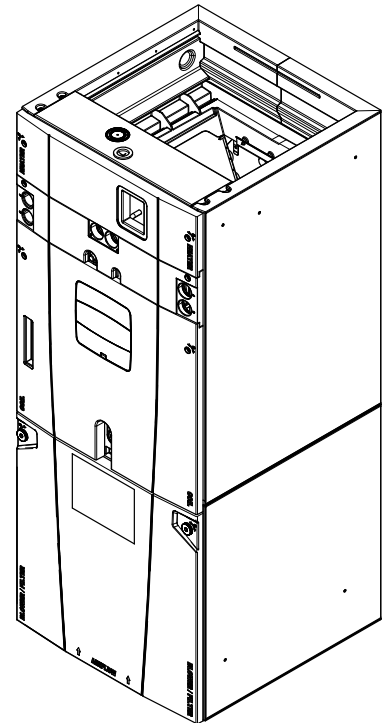


# Specification

## 3-1/2 Ton, Convertible Air Handler TAM7A0C42H31SC

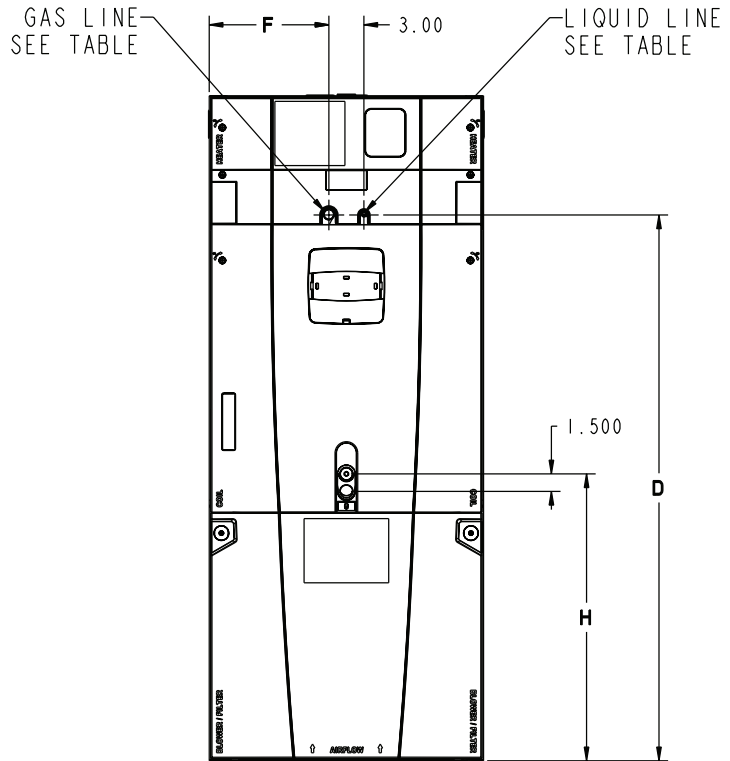
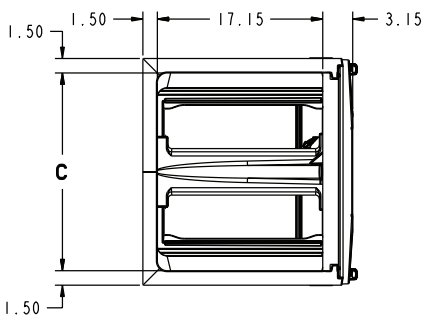
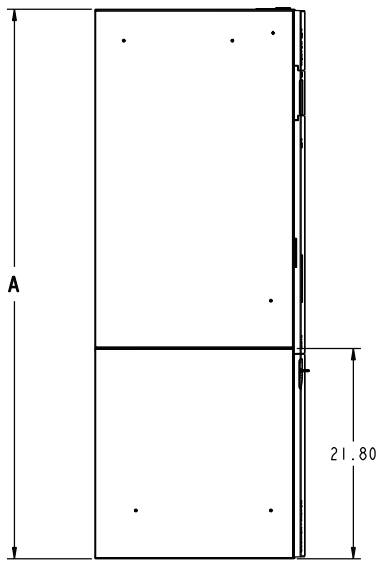
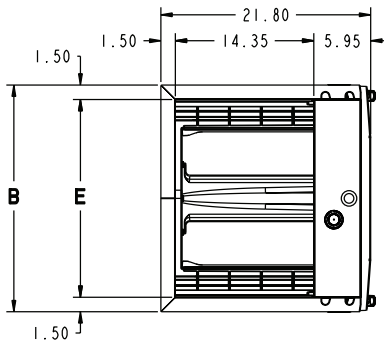


TAG: \_\_\_\_\_

### **▲ SAFETY WARNING**

Only qualified personnel should install and service the equipment. The installation, starting up, and servicing of heating, ventilating, and air-conditioning equipment can be hazardous and requires specific knowledge and training. Improperly installed, adjusted or altered equipment by an unqualified person could result in death or serious injury. When working on the equipment, observe all precautions in the literature and on the tags, stickers, and labels that are attached to the equipment.

# Outline Drawing



MINIMUM UNIT CLEARANCE TABLE		
	TO COMBUSTIBLE MATERIAL (REQUIRED)	SERVICE CLEARANCE (RECOMMENDED)
SIDES	0"	2"
FRONT	0"	21"
BACK	0"	0"
INLET DUCT	0"	
OUTLET DUCT	0"	

MODEL NO.	A	B	C	D	E	F	H	FLOW CONTROL	GAS LINE BRAZE	LIQ LINE BRAZE
TAM7A0C42H31SC	56.9	23.5	20.5	46.7	20.5	10.3	24.5	EEV	7/8	3/8

# PRODUCT SPECIFICATIONS

<b>MODEL</b>	<b>TAM7A0C42H31SC</b>
<b>RATED VOLTS/PH/HZ.</b>	200-230/1/60
<b>RATINGS</b> (a)	See O.D. Specifications
<b>INDOOR COIL — Type</b>	Plate Fin
Rows — F.P.I.	4 — 14
Face Area (sq. ft.)	5.04
Tube Size (in.)	3/8
Refrigerant Control	EEV
Drain Conn. Size (in.) <sup>(b)</sup>	3/4 NPT
<b>DUCT CONNECTIONS</b>	See Outline Drawing
<b>INDOOR FAN — Type</b>	Centrifugal
Diameter-Width (In.)	11 x 10
No. Used	1
Drive — No. Speeds	Direct - Variable
CFM vs. in. w.g.	See Fan Performance Table
No. Motors — H.P.	1 — 1/2
Motor Speed RPM	Variable ECM
Volts/Ph/Hz	208-230/1/60
F.L. Amps	3.0
<b>FILTER</b>	
Filter Furnished?	No
Type Recommended	Throwaway
No.-Size-Thickness	1 — 22 x 20 — 1 in.
<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.)	57-1/4 x 25-1/4 x 23-1/2
Uncrated	56-15/16 x 23-1/2 x 21-3/4
<b>WEIGHT</b>	
Shipping (Lbs.)/Net (Lbs.)	162/151

(a) These Air Handlers are AHRI certified with various Split System Air Conditioners and Heat Pumps (AHRI STANDARD 210/240).

(b) 3/4" Male Plastic Pipe (Ref.: ASTM 1785-76)

<b>TAM7A0C42H31SC</b>											
Heater Model No.	No. of Circuits	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	0	-	-	3.0 **	4	15	-	-	3.0 **	4	15
BAYEVAC05++1	1	4.80	16400	20.0	29	30	3.60	12300	17.3	25	25
BAYEVAC08++1	1	7.68	26200	32.0	44	45	5.76	19700	27.7	38	40
BAYEVAC10++1	1	9.60	32800	40.0	54	60	7.20	24600	34.6	47	50
BAYEVAC10LG3	1-3 PH	9.60	32800	23.1	32	35	7.20	24600	20.0	28	30
BAYEVBC15LG3	1-3 PH	14.40	42000	34.6	47	50	10.80	36900	30.0	41	45
BAYEVBC15BK1-Circuit 1 <sup>(a)</sup>	2	9.60	32800	40.0	54	60	7.20	24600	34.6	47	50
BAYEVBC15BK1-Circuit 2		4.80	16400	20.0	25	25	3.60	12300	17.3	22	25
BAYEVBC20BK1-Circuit 1	2	9.60	32800	40.0	54	60	7.20	24600	34.6	47	50
BAYEVBC20BK1-Circuit 2		9.60	32800	40.0	50	50	7.20	24600	34.6	43	45

1. \*\* Motor Amps  
 2. See Air Handler nameplate for additional information.  
 3. Heater model numbers may have additional suffix digits.

(a) MCA and MOP for circuit 1 contains the motor amps

TAM7A0C42 AIRFLOW PERFORMANCE													CONSTANT CFM MODE / CONSTANT TORQUE MODE												
OUTDOOR MULTIPLIER (TONS)	COOLING AIRFLOW SETTING			AIRFLOW POWER			EXTERNAL STATIC PRESSURE (Constant CFM / Constant Torque)						HEATING AIRFLOW SETTING			AIRFLOW POWER			EXTERNAL STATIC PRESSURE						
	330 CFM/ton	350 CFM/ton	370 CFM/ton	390 CFM/ton	330 CFM/ton	350 CFM/ton	370 CFM/ton	0.1	0.3	0.5	0.7	0.9	360 CFM/ton	380 CFM/ton	400 CFM/ton	0.1	0.3	0.5	0.7	0.9					
2.5 tons	853/988	896/1030	939/1072	983/1115	820/712	867/597	815/523	832/861	870/768	918/665	969/877	813/208	866/353	918/458	969/546	912	897	893	895	901					
	68/96	76/107	85/118	95/131	149/125	162/137	191/128	108/114	162/137	176/151	222/155	232/143	250/144	268/155	288/169	82	125	170	170	264					
	880/909	896/1030	939/1072	983/1115	870/768	867/597	815/523	832/861	870/768	918/665	969/877	813/208	866/353	918/458	969/546	956	945	943	946	951					
	119/126	127/171	130/139	143/152	162/137	162/137	191/128	119/126	162/137	176/151	222/155	232/143	250/144	268/155	288/169	92	137	185	234	283					
	926/956	939/1072	983/1115	1030/1190	920/823	867/597	815/523	832/861	870/768	918/665	969/877	813/208	866/353	918/458	969/546	1000	992	992	997	1002					
	130/139	143/152	152/171	164/174	176/151	162/137	191/128	108/114	162/137	176/151	222/155	232/143	250/144	268/155	288/169	102	151	201	253	304					
3 tons	853/988	896/1030	939/1072	983/1115	820/712	867/597	815/523	832/861	870/768	918/665	969/877	813/208	866/353	918/458	969/546	1044	1040	1042	1047	1052					
	68/96	76/107	85/118	95/131	149/125	162/137	191/128	108/114	162/137	176/151	222/155	232/143	250/144	268/155	288/169	114	166	219	273	325					
	880/909	896/1030	939/1072	983/1115	870/768	867/597	815/523	832/861	870/768	918/665	969/877	813/208	866/353	918/458	969/546	1071	1069	1072	1078	1082					
	119/126	127/171	130/139	143/152	162/137	162/137	191/128	119/126	162/137	176/151	222/155	232/143	250/144	268/155	288/169	122	175	230	285	339					
	926/956	939/1072	983/1115	1030/1190	920/823	867/597	815/523	832/861	870/768	918/665	969/877	813/208	866/353	918/458	969/546	1126	1127	1132	1139	1142					
	130/139	143/152	152/171	164/174	176/151	162/137	191/128	108/114	162/137	176/151	222/155	232/143	250/144	268/155	288/169	138	195	254	312	368					
3.5 tons †	853/988	896/1030	939/1072	983/1115	820/712	867/597	815/523	832/861	870/768	918/665	969/877	813/208	866/353	918/458	969/546	1181	1186	1193	1200	1201					
	68/96	76/107	85/118	95/131	149/125	162/137	191/128	108/114	162/137	176/151	222/155	232/143	250/144	268/155	288/169	157	218	280	341	399					
	880/909	896/1030	939/1072	983/1115	870/768	867/597	815/523	832/861	870/768	918/665	969/877	813/208	866/353	918/458	969/546	1239	1247	1256	1261	1259					
	119/126	127/171	130/139	143/152	162/137	162/137	191/128	119/126	162/137	176/151	222/155	232/143	250/144	268/155	288/169	177	243	309	373	432					
	926/956	939/1072	983/1115	1030/1190	920/823	867/597	815/523	832/861	870/768	918/665	969/877	813/208	866/353	918/458	969/546	177	243	309	373	432					
	130/139	143/152	152/171	164/174	176/151	162/137	191/128	108/114	162/137	176/151	222/155	232/143	250/144	268/155	288/169	177	243	309	373	432					
4 tons	853/988	896/1030	939/1072	983/1115	820/712	867/597	815/523	832/861	870/768	918/665	969/877	813/208	866/353	918/458	969/546	1308	1319	1329	1331	1323					
	68/96	76/107	85/118	95/131	149/125	162/137	191/128	108/114	162/137	176/151	222/155	232/143	250/144	268/155	288/169	205	276	346	412	470					
	880/909	896/1030	939/1072	983/1115	870/768	867/597	815/523	832/861	870/768	918/665	969/877	813/208	866/353	918/458	969/546	1381	1394	1401	1398	1332					
	119/126	127/171	130/139	143/152	162/137	162/137	191/128	119/126	162/137	176/151	222/155	232/143	250/144	268/155	288/169	237	313	386	452	475					
	926/956	939/1072	983/1115	1030/1190	920/823	867/597	815/523	832/861	870/768	918/665	969/877	813/208	866/353	918/458	969/546	1456	1468	1471	1443	1323					
	130/139	143/152	152/171	164/174	176/151	162/137	191/128	108/114	162/137	176/151	222/155	232/143	250/144	268/155	288/169	275	355	429	481	470					
4 tons	853/988	896/1030	939/1072	983/1115	820/712	867/597	815/523	832/861	870/768	918/665	969/877	813/208	866/353	918/458	969/546	1511	1520	1517	1436	1317					
	68/96	76/107	85/118	95/131	149/125	162/137	191/128	108/114	162/137	176/151	222/155	232/143	250/144	268/155	288/169	304	386	459	477	466					
	880/909	896/1030	939/1072	983/1115	870/768	867/597	815/523	832/861	870/768	918/665	969/877	813/208	866/353	918/458	969/546	1598	1599	1536	1426	1308					
	119/126	127/171	130/139	143/152	162/137	162/137	191/128	119/126	162/137	176/151	222/155	232/143	250/144	268/155	288/169	356	437	472	470	461					
	926/956	939/1072	983/1115	1030/1190	920/823	867/597	815/523	832/861	870/768	918/665	969/877	813/208	866/353	918/458	969/546	1679	1620	1534	1417	1301					
	130/139	143/152	152/171	164/174	176/151	162/137	191/128	108/114	162/137	176/151	222/155	232/143	250/144	268/155	288/169	409	451	471	464	456					

- † Factory Setting
- Status LED will blink once per 100 CFM requested. In torque mode, actual airflow may be lower.
- Torque mode will reduce airflow when static is above approximately 0.35" water column.
- All heating modes default to Constant CFM.
- Cooling airflow values are with wet coil, no filter

**MINIMUM HEATER AIRFLOW CFM — HEATER MATRIX**

MODEL NO.	BAYEVAC05BK1AA BAYEVAC05LG1AA	BAYEVAC08BK1AA BAYEVAC08LG1AA	BAYEVAC10BK1AA BAYEVAC10LG1AA	BAYEVAC10LG3AA	BAYEVCB15LG3AA	BAYEVCB20BK1AA
TAM7A0C42H31SC	978/1093	978/1380	1035/1380	920/1093	1035/1438	1380/1610
WITHOUT HEAT PUMP / WITH HP — SEE AIR HANDLER NAMEPLATE						

**Note:** Minimum auxiliary heating airflow is automatically configured by the air handler model and the auxiliary heater model number. This is not field adjustable.

## Features and Benefits

- Unique cabinet design
  - 2% or less air leakage
  - Precision applied — durable door seals
  - Specially designed air seal around refrigerant, condensate and conduit connections
  - Double wall foamed cabinet system
  - R-4.2 Insulating Value (Avg Insulating Value R-8.2)
  - No loose fiber design
  - Smooth cleanable interior design
  - Sweat eliminating design
  - Composite foamed cabinet doors
  - Water proof cabinet design
  - Integrated horizontal drain pans
  - Modular cabinet
- Multi-position up/down flow horizontal left/right
- Side return option (sold as accessory)
- Control board protection pocket built into cabinet wall
- Pre-marked Conduit Connection Locations
- Alert port to view control board codes without door removal
- Alert code notification
- Low voltage terminal connection point
- Phillips head door fasteners
- **Vortica®** blower with polarized plug connections and integrated slide deck for easy removal
- Aluminum coil with integrated slide deck for easy removal and polarized plug connections on coil EEV
- Patented enhanced coil fin
- Electronic Expansion Valve (EEV) with low ambient and low superheat compressor protection
- Dual refrigerant compatible as shipped
- Slide in electric heaters with polarized plug connections (sold as accessory)
- Slide in hot water coils with polarized plug connections (sold as accessory)
- UVC light kit with safety switch and polarized plug connections (sold as accessory)
- Labeled panels and connections
- Molded in 1" standard filter rail
- Variable speed ECM motor
- Soft start fan motor operation
- **Comfort R™** mode
- Built in fan delay modes
- Maximum width of 23.5"
- Compact 20.8" depth with doors removed
- Fused 24v power
- Safety door switch
- **5 Year Warranty**
- **10 Year Warranty Registered**
- **Optional Extended Warranty Available**



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