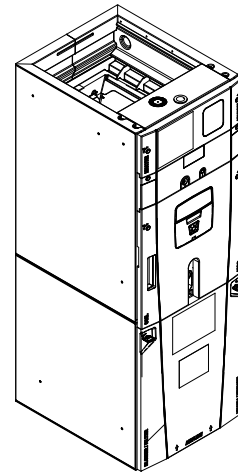


Submittal

Variable Speed Convertible Air Handler 3-1/2 Ton

TAM9A0C42V41DA



Note: "Graphics in this document are for representation only. Actual model may differ in appearance."

Note: For use with BAYEA series heaters ONLY

TAG: _____

▲ SAFETY WARNING

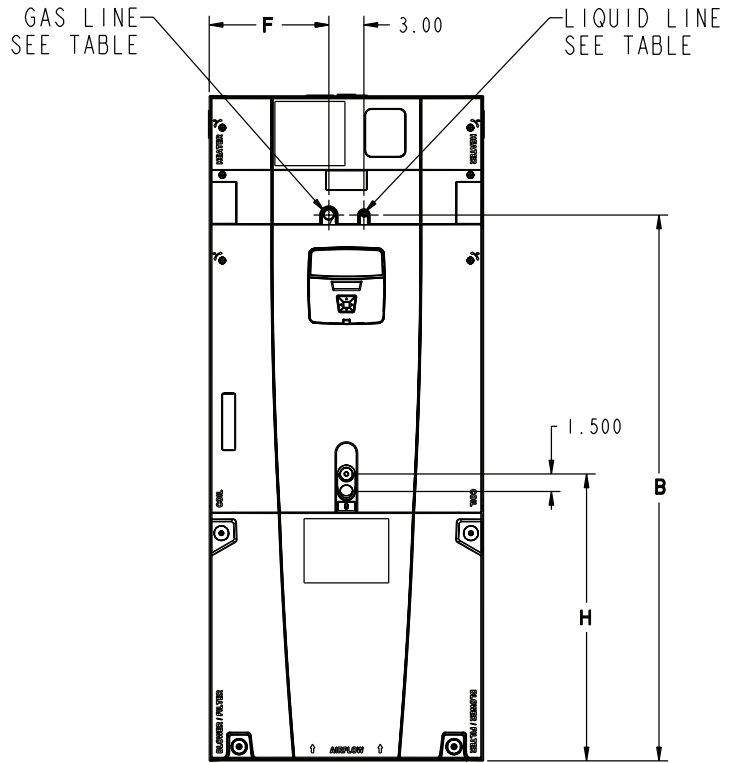
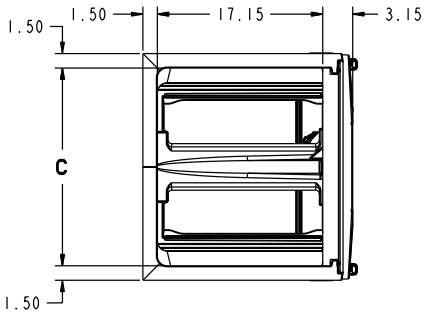
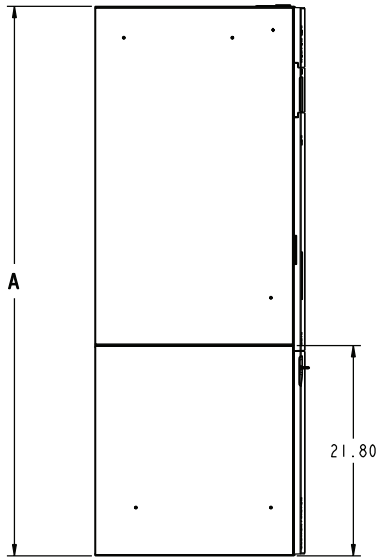
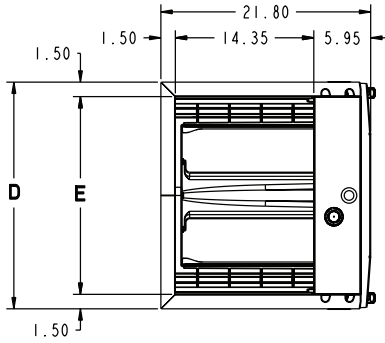
Only qualified personnel should install and service the equipment. The installation, starting up, and servicing of heating, ventilating, and air-conditioning equipment can be hazardous and requires specific knowledge and training. Improperly installed, adjusted or altered equipment by an unqualified 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.

May 2017

TAM9A0C42-SUB-1B-EN

 Ingersoll Rand.

TAM9 OUTLINE DRAWING



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

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

Model Number	A	B	C	D	E	F	H	FLOW CONTROL	GAS LINE BRAZE	LIQ LINE BRAZE
TAM9A0C42H41DA	56.9	46.7	20.5	23.5	20.5	10.3	24.5	EEV	7/8	3/8

PRODUCT SPECIFICATIONS

MODEL	TAM9A0C42CV41DA	F.L. Amps	3.0 — 3.5 ^(c)
RATED VOLTS/PH/HZ.	200 — 230/1/60	FILTER	
RATINGS ^(a)	See O.D. Specifications	Filter Furnished?	No
INDOOR COIL — Type	Plate Fin	Type Recommended	Throwaway
Rows — F.P.I.	4— 14	No.-Size-Thickness	1 — 22 x 20 — 1 in.
Face Area (sq. ft.)	5.04	REFRIGERANT	R-410A
Tube Size (in.)	3/8	Ref. Line Connections	Brazed
Refrigerant Control	EEV	Coupling or Conn. Size-in. Gas	7/8
Drain Conn. Size (in.) ^(b)	3/4 NPT	Coupling or Conn. Size-in. Liq.	3/8
DUCT CONNECTIONS	See Outline Drawing	DIMENSIONS	H x W x D
INDOOR FAN — Type	Centrifugal	Crated (In.)	58 x 25.5 x 24.5
Diameter-Width (In.)	11 x 10	Uncrated	56.9 x 23.5 x 21.8
No. Used	1	WEIGHT	
Drive — No. Speeds	Direct — Variable	Shipping (Lbs.)/Net (Lbs.)	162/150
CFM vs. in. w.g.	See Fan Performance Table	^(a) These Air Handlers are AHRI certified with various Split System Air Conditioners and Heat Pumps (AHRI STANDARD 210/240).	
No. Motors — H.P.	1 — 1/2	^(b) 3/4" Male Plastic Pipe (Ref.:ASTM 1785-76)	
Motor Speed RPM	Variable ECM	^(c) Check motor nameplate for actual FLA.	
Volts/Ph/Hz	208-230/1/60		

HEATER ATTRIBUTE DATA

TAM9A0C42V41DA											
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	-	-	3.5 **	4	15	-	-	3.5 **	4	15
BAYEAAC04++1	1	3.84	13100	16.0	24	25	2.88	9800	13.8	22	25
BAYEAAC05++1	1	4.80	16400	20.0	29	30	3.60	12300	17.3	26	30
BAYEAAC08++1	1	7.68	26200	32.0	44	45	5.76	19700	27.7	39	40
BAYEAAC10++1	1	9.60	32800	40.0	54	60	7.20	24600	34.6	48	50
BAYEAAC10LG3	1-3 PH	9.60	32800	23.1	33	35	7.20	24600	20.0	29	30
BAYEABC15LG3	1-3 PH	14.40	42000	34.6	47	50	10.80	36900	30.0	41	45
BAYEABC15BK1 - Circuit 1 ^(a)	2	9.60	32800	40.0	54	60	7.20	24600	34.6	48	50
BAYEABC15BK1 - Circuit 2		4.80	16400	20.0	25	25	3.60	12300	17.3	22	25
BAYEABC20BK1 - Circuit 1 ^(a)	2	9.60	32800	40.0	54	60	7.20	24600	34.6	48	50
BAYEABC20BK1 - Circuit 2		9.60	32800	40.0	50	50	7.20	24600	34.6	43	45

Note: ** Motor Amps

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

Note: See Product Data or Air Handler nameplate for approved combinations of Air Handlers and Heaters.

Note: Heater model numbers may have additional suffix digits.

TAM9 Air Flow Performance Tables

OUTDOOR MULTIPLIER (TONS)	TAM9A0C42 AIRFLOW PERFORMANCE										CONSTANT CFM MODE / CONSTANT TORQUE MODE									
	EXTERNAL STATIC PRESSURE (Constant CFM / Torque)					CONSTANT CFM MODE / Constant Torque					HEATING AIRFLOW SETTING	AIRFLOW POWER	EXTERNAL STATIC PRESSURE							
	0.1	0.3	0.5	0.7	0.9	0.1	0.3	0.5	0.7	0.9			0.1	0.3	0.5	0.7	0.9			
2.5 tons	290 CFM/ton	747/905	743/764	742/591	741/342	739/NA	290 CFM/ton	744	741	740	738	734	290 CFM/ton	744	741	740	738	734		
	370 CFM/ton	937/1072	942/956	946/823	947/655	944/458	350 CFM/ton	51	90	130	170	209	350 CFM/ton	889	892	894	894	890		
	400 CFM/ton	1006/1136	1014/1027	1020/903	1022/760	1019/586	400 CFM/ton	76	123	169	215	259	400 CFM/ton	1006	1016	1018	1019	1016		
	450 CFM/ton	1122/1247	1135/1146	1143/1035	1146/911	1142/768	450 CFM/ton	103	156	209	280	308	450 CFM/ton	1124	1135	1142	1144	1140		
	450 CFM/ton	125/176	185/200	245/216	303/224	357/223	450 CFM/ton	136	196	256	313	366	450 CFM/ton	136	196	256	313	366		
3 tons	290 CFM/ton	885/1026	889/904	891/763	892/590	889/341	290 CFM/ton	884	887	889	889	885	290 CFM/ton	884	887	889	889	885		
	370 CFM/ton	1108/1233	1120/1132	1128/1019	1131/893	1128/747	350 CFM/ton	75	121	168	214	257	350 CFM/ton	1053	1062	1067	1069	1066		
	400 CFM/ton	121/171	181/195	240/210	297/218	350/217	400 CFM/ton	115	171	227	280	330	400 CFM/ton	115	171	227	280	330		
	450 CFM/ton	1194/1316	1208/1220	1218/1115	1221/999	1215/868	400 CFM/ton	160	225	289	349	403	400 CFM/ton	1196	1209	1218	1219	1212		
	450 CFM/ton	147/204	212/229	276/246	337/255	393/256	450 CFM/ton	220	295	367	430	480	450 CFM/ton	220	295	367	430	480		
3.5 tons †	290 CFM/ton	1343/1463	1361/1374	1371/1279	1368/1175	1352/1061	290 CFM/ton	1347	1363	1371	1366	1342	290 CFM/ton	1347	1363	1371	1366	1342		
	370 CFM/ton	200/272	275/300	348/320	413/331	469/334	350 CFM/ton	220	295	367	430	480	350 CFM/ton	220	295	367	430	480		
	400 CFM/ton	1020/1149	1028/1041	1034/919	1037/779	1034/609	290 CFM/ton	107	160	214	271	315	290 CFM/ton	1020	1028	1033	1033	1031		
	450 CFM/ton	99/142	152/164	206/178	259/183	308/182	400 CFM/ton	107	160	214	271	315	400 CFM/ton	1020	1028	1033	1033	1031		
	450 CFM/ton	1287/1408	1304/1317	1314/1218	1315/1110	1304/981	350 CFM/ton	169	236	301	362	417	350 CFM/ton	1220	1234	1243	1244	1236		
4 tons	290 CFM/ton	179/245	250/272	320/291	384/301	441/303	290 CFM/ton	169	236	301	362	417	290 CFM/ton	169	236	301	362	417		
	370 CFM/ton	1395/1514	1413/1427	1421/1334	1415/1233	1369/1124	400 CFM/ton	244	322	395	458	475	400 CFM/ton	1440	1416	1421	1411	1355		
	400 CFM/ton	221/299	300/328	374/348	440/361	480/364	450 CFM/ton	244	322	395	458	475	450 CFM/ton	1440	1416	1421	1411	1355		
	450 CFM/ton	1584/1687	1593/1605	1576/1518	1474/1425	1350/1326	350 CFM/ton	347	428	474	545	630	350 CFM/ton	1589	1592	1545	1434	1315		
	450 CFM/ton	313/405	399/435	467/458	477/472	468/477	450 CFM/ton	347	428	474	545	630	450 CFM/ton	1589	1592	1545	1434	1315		
4 tons	290 CFM/ton	1156/1302	1169/1205	1178/1098	1181/981	1174/848	290 CFM/ton	1157	1169	1177	1179	1174	290 CFM/ton	1157	1169	1177	1179	1174		
	370 CFM/ton	1487/1618	1500/1534	1496/1445	1445/1350	1319/1248	350 CFM/ton	147	209	271	330	383	350 CFM/ton	1400	1416	1421	1411	1335		
	400 CFM/ton	288/359	369/389	441/411	481/425	470/429	400 CFM/ton	147	209	271	330	383	400 CFM/ton	1400	1416	1421	1411	1335		
	450 CFM/ton	1616/1728	1614/1646	1543/1543	1423/1423	1301/1301	400 CFM/ton	1615	1615	1545	1431	1313	400 CFM/ton	1615	1615	1545	1431	1313		
	450 CFM/ton	363/433	443/464	475/475	472/472	463/463	450 CFM/ton	363	444	474	471	462	450 CFM/ton	363	444	474	471	462		
450 CFM/ton	1711/1711	1621/1621	1514/1514	1393/1393	1273/1273	450 CFM/ton	430	453	462	458	452	450 CFM/ton	1716	1629	1528	1411	1297			
450 CFM/ton	432/432	456/456	465/465	460/460	453/453	450 CFM/ton	430	453	462	458	452	450 CFM/ton	1716	1629	1528	1411	1297			

- † 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

TAM9A0C42 Minimum Heating Airflow Settings									
MODEL NO.	BAYEAA04BK1 BAYEAA04LG1 BAYEAA05BK1 BAYEAA05LG1	978/1380	BAYEAA08BK1 BAYEAA08LG1	1035/1380	BAYEAA10BK1 BAYEAA10LG1	BAYEAA10LG3	BAYEABC15BK1	BAYEACB15LG3	BAYEABC20BK1
TAM9A0C42	978/1093	978/1380	978/1380	1035/1380	1035/1380	920/1093	1035/1438	1150/1495	1380/1610
WITHOUT HEAT PUMP / WITH HP — SEE AIR HANDLER NAMEPLATE									

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
- Communicating or 24 Volt control
- Control Display Assembly (CDA) with enhanced diagnostic information and setup capability
- 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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