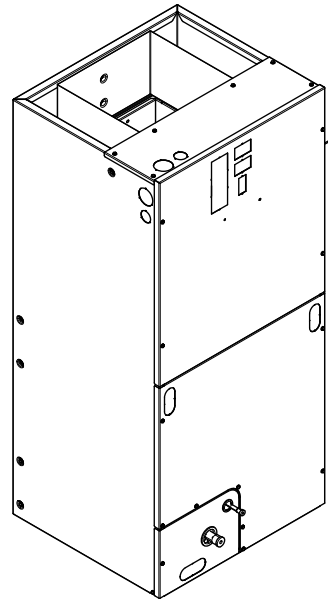


Submittal

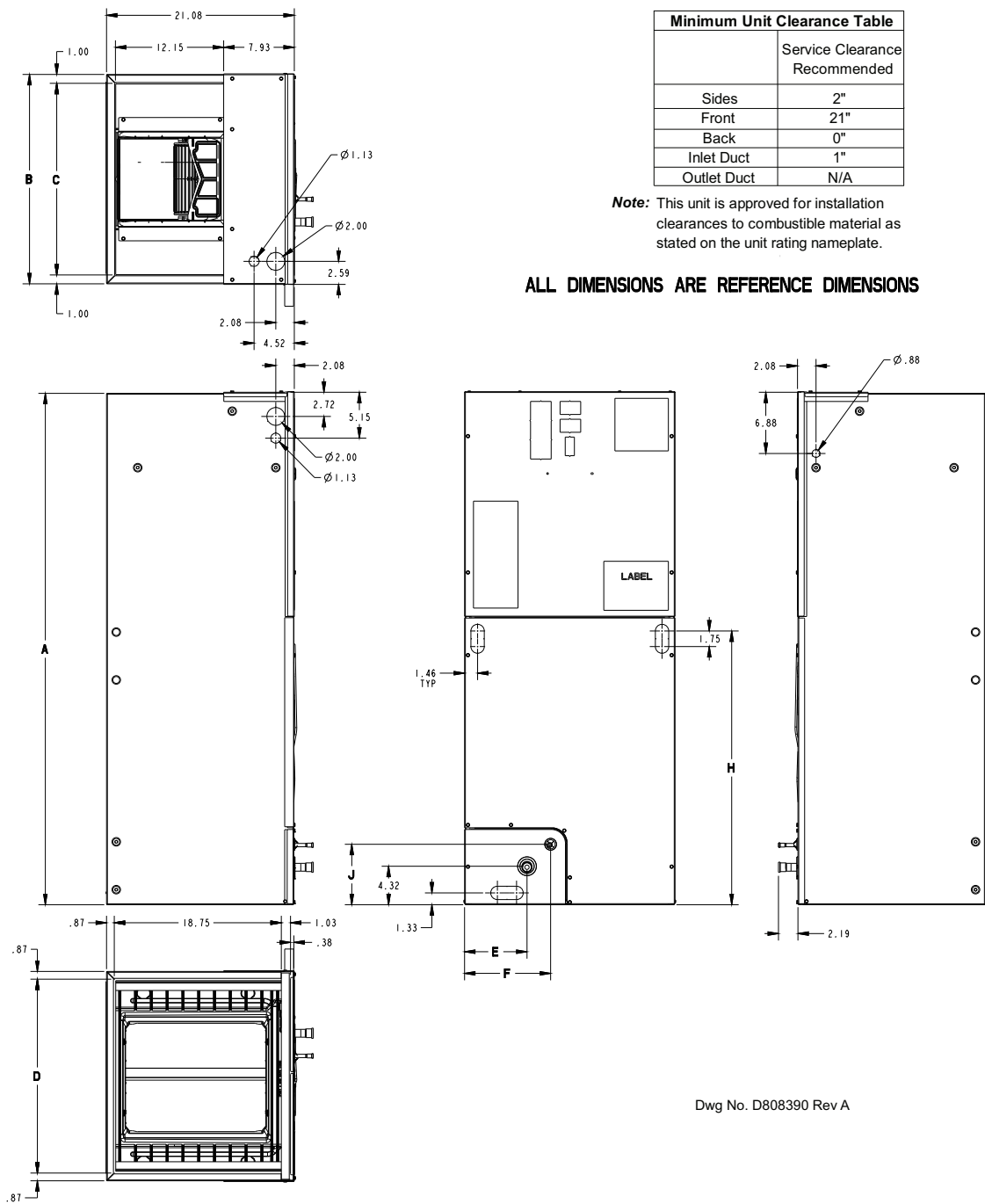
Variable Speed Convertible Air Handler 2 – 3.5 Ton Operation

5TEM6D04AV31SA



The 5TEM6 series air handler is designed for installation in a closet, utility room, alcove, basement, crawlspace or attic. These versatile units are applicable to air conditioning and heat pump applications. Several models are available to meet the specific requirements of the outdoor equipment. Field installed electric resistance heaters are available.

Outline Drawing



PRODUCT DIMENSIONS										
Air Handler Model	A	B	C	D	E	F	H	J	Flow Control	Gas Line Braze
5TEM6D04	51.27	23.50	21.50	21.75	7.01	9.66	24.58	6.76	TXV	7/8
All dimensions are in inches										

Product Specifications

MODEL	5TEM6D04AV31SA
RATED VOLTS/PH/HZ	208-230/1/60
RATINGS^(a)	See O.D. Specifications
INDOOR COIL — Type	Plate Fin
Rows — F.P.I.	4 - 12
Face Area (sq. ft.)	5.50
Tube Size (in.)	3/8
Refrigerant Control	TXV
Drain Conn. Size (in.) ^(b)	3/4 NPT
DUCT CONNECTIONS	See Outline Drawing
INDOOR FAN — Type	Centrifugal
Diameter-Width (In.)	11 X 8
No. Used	1
Drive - No. Speeds	Direct - 16
CFM vs. in. w.g.	See Fan Performance Table
No. Motors — H.P.	1 - 1/2
Motor Speed R.P.M.	Variable
Volts/Ph/Hz	208-230/1/60

F.L. Amps	4.3
FILTER	
Filter Furnished? ^(c)	No
REFRIGERANT	R-454B
Ref. Line Connections	Brazed
Coupling or Conn. Size — in. Gas	7/8
Coupling or Conn. Size — in. Liq.	3/8
DIMENSIONS	H x W x D
Crated (In.)	52-3/4 x 27-1/2 x 25-1/2
Uncrated	51-3/8 x 23-1/2 x 21-1/8
WEIGHT	
Shipping (Lbs.) / Net (Lbs.)	155/144

^(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) Remote filter required.

Minimum Airflow CFM

5TEM6D04AV31SAA		
Heater	Minimum Heater Airflow CFM	
	With Heat Pump	Without Heat Pump
BAYHTR1504BRK, BAYHTR1504LUG, BAYHTR1505BRK, BAYHTR1505LUG	875	675
BAYHTR1508BRK, BAYHTR1508LUG	950	820
BAYHTR1510BRK, BAYHTR1510LUG	1000	820
BAYHTR1517BRK	1000	820
BAYHTR3510LUG	875	820
BAYHTR3517LUG	1000	950
BAYHTR1523BRK	1300	1140

5TEM6D04AV31SAA Airflow Performance with Auxiliary Heat				
Airflow Settings	Dip Switch Settings		Nominal Airflow	See following tables for heater application: - Pressure Drop for Electrical Heaters - Minimum Heating Airflow Matrix (on unit nameplates)
	Switch 7	Switch 8		
Low	ON	ON	696	
Med-Lo	OFF	ON	825	
Med-Hi	ON	OFF	1150	
High	OFF	OFF	1298	

Heater Pressure Drop Table

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

Table 1. Air Flow Performance Tables

STEM6D04AV31SAA COOLING AIRFLOW PERFORMANCE, WET COIL, NO FILTER, NO HEATER												
OUTDOOR UNIT SIZE (TONS)	SPEED SETTING	AIRFLOW SETTING	DIP SWITCH SETTING				AIRFLOW POWER	EXTERNAL STATIC PRESSURE				
			SW1	SW2	SW3	SW4		0.1	0.3	0.5	0.7	0.9
2.5	LOW	300 CFM/ ton	ON	ON	OFF	ON	CFM Watts	717 47	714 97	698 142	669 183	629 219
	NORMAL	341 CFM/ ton	ON	ON	OFF	OFF	CFM Watts	801 61	815 116	812 167	792 216	756 262
	HIGH	384 CFM/ ton	ON	ON	ON	OFF	CFM Watts	890 76	922 136	933 195	922 252	890 308
3	LOW	319 CFM/ ton	OFF	ON	OFF	ON	CFM Watts	887 75	919 135	929 194	918 251	886 306
	NORMAL	363 CFM/ ton	OFF	ON	OFF	OFF	CFM Watts	1106 135	1149 202	1173 272	1176 342	1160 414
	HIGH	408 CFM/ ton	OFF	ON	ON	OFF	CFM Watts	1218 175	1263 249	1287 323	1291 401	1274 480
3.5	LOW	315 CFM/ ton	ON	OFF	OFF	ON	CFM Watts	1117 139	1161 207	1184 227	1188 348	1172 420
	NORMAL	357 CFM/ ton	ON	OFF	OFF	OFF	CFM Watts	1233 179	1277 255	1300 331	1301 407	1281 484
	HIGH	402 CFM/ ton	ON	OFF	ON	OFF	CFM Watts	1323 209	1365 294	1379 372	1365 443	1326 505
4	LOW	308 CFM/ ton	OFF	OFF	OFF	ON	CFM Watts	1223 176	1268 250	1291 326	1294 403	1277 482
	NORMAL (a)	350 CFM/ ton	OFF	OFF	OFF	OFF	CFM Watts	1317 208	1354 293	1378 371	1370 441	1310 503
	HIGH	394 CFM/ ton	OFF	OFF	ON	OFF	CFM Watts	1473 281	1493 372	1468 435	1400 471	1294 482

(a) Factory Default Setting

STEM6D04AV31SAA HEATING AIRFLOW PERFORMANCE, NO FILTER, NO HEATER												
OUTDOOR UNIT SIZE (TONS)	SPEED SETTING	AIRFLOW SETTING	DIP SWITCH SETTING				AIRFLOW POWER	EXTERNAL STATIC PRESSURE				
			SW1	SW2	SW3	SW4		0.1	0.3	0.5	0.7	0.9
2.5	LOW	341 CFM/ ton	ON	ON	OFF	ON	CFM Watts	798 53	815 108	810 158	799 211	761 255
	NORMAL	379 CFM/ ton	ON	ON	OFF	OFF	CFM Watts	873 64	906 124	917 179	912 240	881 292
	HIGH	417 CFM/ ton	ON	ON	ON	OFF	CFM Watts	1018 101	1061 165	1083 229	1087 296	1069 361
3	LOW	381 CFM/ ton	OFF	ON	OFF	ON	CFM Watts	1138 135	1186 204	1215 275	1222 347	1212 422
	NORMAL	424 CFM/ ton	OFF	ON	OFF	OFF	CFM Watts	1232 165	1278 239	1309 317	1314 393	1295 467
	HIGH	466 CFM/ ton	OFF	ON	ON	OFF	CFM Watts	1306 186	1343 265	1373 348	1376 428	1332 483
3.5	LOW	348 CFM/ ton	ON	OFF	OFF	ON	CFM Watts	1199 156	1248 228	1280 303	1285 377	1276 457
	NORMAL	386 CFM/ ton	ON	OFF	OFF	OFF	CFM Watts	1279 179	1319 255	1349 337	1353 415	1319 477
	HIGH	425 CFM/ ton	ON	OFF	ON	OFF	CFM Watts	1382 218	1415 301	1429 389	1399 442	1333 484
4	LOW	338 CFM/ ton	OFF	OFF	OFF	ON	CFM Watts	1279 179	1319 255	1350 337	1353 415	1319 477
	NORMAL (a)	375 CFM/ ton	OFF	OFF	OFF	OFF	CFM Watts	1393 222	1426 307	1437 395	1402 444	1332 484
	HIGH	413 CFM/ ton	OFF	OFF	ON	OFF	CFM Watts	1488 265	1505 352	1411 425	1370 522	1295 349

(a) Factory Default Setting

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 2. Electrical Data

STEM6D04AV31SAA HEATER DATA											
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				4.3 *	5	15			4.3 *	5	15
BAYHTR1504BRK BAYHTR1504LUG	1/1	3.84	13100	16.0	25	25	2.88	9800	13.8	23	25
BAYHTR1505BRK BAYHTR1505LUG	1/1	4.80	16400	20.0	30	30	3.60	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	9.60	32800	40.0	55	60	7.20	24600	34.6	49	50
BAYHTR1517BRK Circuit 1 ^(a)	2/1	9.60	32800	40.0	55	60	7.20	24600	34.6	49	50
BAYHTR1517BRK Circuit 2		4.80	16400	20.0	25	25	3.60	12300	17.3	22	25
BAYHTR1523BRK Circuit 1	2/1	9.60	32800	40.0	55	60	7.20	24600	34.6	49	50
BAYHTR1523BRK Circuit 2		9.60	32800	40.0	50	50	7.20	24600	34.6	43	45
BAYHTR3510LUG	1/3	9.60	32800	23.1	34	35	7.20	24600	20.0	30	30
BAYHTR3517LUG	1/3	14.40	49100	34.6	48	50	10.8- 0	36900	30.0	42	45
* = Motor Amps											

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

Features and Benefits

- Painted 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-454B Thermal Expansion Valve
- Variable Speed ECM Motor
- Low Voltage Pigtail Connections
- Draw Through Design
- Horizontal Drain Pan
- Single Color
- Fused 24V Power
- **5 Year Base Limited Warranty**
- **10 Year Registered Limited Warranty**
- **Optional extended warranty available**

About Trane and American Standard Heating and Air Conditioning

Trane and American Standard create comfortable, energy efficient indoor environments for residential applications. For more information, please visit www.trane.com or www.americanstandardair.com.



The manufacturer has a policy of continuous data improvement and it reserves the right to change design and specifications without notice. We are committed to using environmentally conscious print practices.