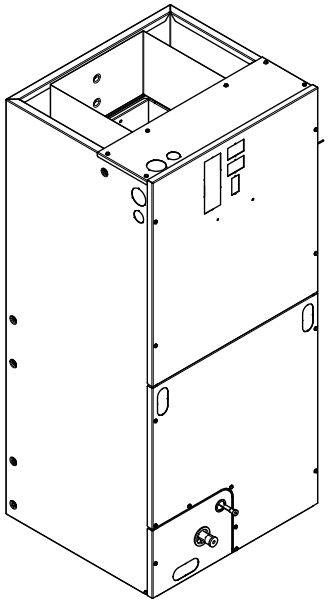
Submittal

Variable Speed Convertible Air Handler
3.5 – 5 Ton Operation

5TEM6D07AV51SA

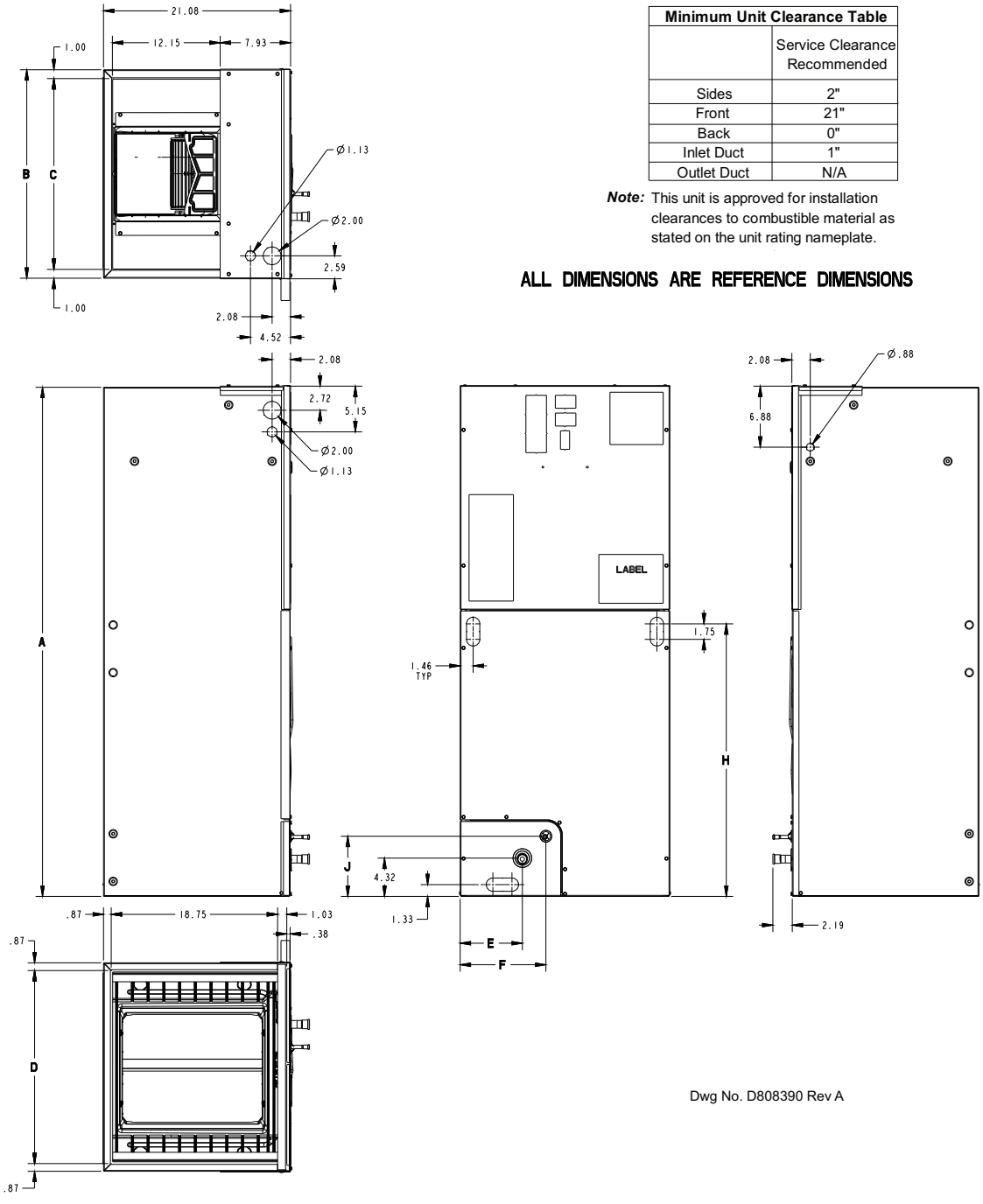


The 5TEM6 series air handler is designed for installation in a closet, utility room, alcove, basement, crawlspace or attic. These versatile units are applicable to air conditioning and heat pump applications. Several models are available to meet the specific requirements of the outdoor equipment. Field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

March 2024

5TEM6D07A-SUB-1A-EN

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.

ALL DIMENSIONS ARE REFERENCE DIMENSIONS

Dwg No. D808390 Rev A

PRODUCT DIMENSIONS										
Air Handler Model	A	B	C	D	E	F	H	J	Flow Control	Gas Line Braze
5TEM6D07	57.40	23.50	21.50	21.75	7.01	9.66	30.71	6.76	TXV	7/8
All dimensions are in inches										

Product Specifications

MODEL	5TEM6D07AV51SA
RATED VOLTS/PH/HZ	208-230/1/60
RATINGS[a]	See O.D. Specifications
INDOOR COIL — Type	Plate Fin
Rows — F.P.I.	4 - 14
Face Area (sq. ft.)	6.88
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 - 3/4
Motor Speed R.P.M.	Variable
Volts/Ph/Hz	208-230/1/60

F.L. Amps	6.8
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.)	58-1/8 x 25-7/8 x 25-1/2
Uncrated	57-3/8 x 23-1/2 x 21-1/8
WEIGHT	
Shipping (Lbs.) / Net (Lbs.)	185/174

[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

5TEM6D07AV51SAA		
Heater	**Minimum Heater Airflow CFM**	
	With Heat Pump	Without Heat Pump
BAYHTR1504BRK, BAYHTR1504LUG, BAYHTR1505BRK, BAYHTR1505LUG	1200	975
BAYHTR1508BRK, BAYHTR1508LUG	1350	975
BAYHTR1510BRK, BAYHTR1510LUG	1350	975
BAYHTR1517BRK	1365	975
BAYHTR3510LUG	1300	975
BAYHTR3517LUG	1365	1120
BAYHTR1523BRK	1365	1300
BAYHTR1525BRK	1810	1505

5TEM6D07AV51SAA 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	1000	
Med-Lo	OFF	ON	1130	
Med-Hi	ON	OFF	1354	
High	OFF	OFF	1596	

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

5TEM6D07AV51SAA 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
3	LOW	324 CFM/ ton	ON	ON	OFF	ON	CFM Watts	993 101	1003 149	997 197	974 246	935 295
	NORMAL	368 CFM/ ton	ON	ON	OFF	OFF	CFM Watts	1077 122	1095 175	1096 227	1079 280	1045 332
	HIGH	423 CFM/ ton	ON	ON	ON	OFF	CFM Watts	1233 173	1258 236	1264 297	1254 356	1227 413
3.5	LOW	314 CFM/ ton	OFF	ON	OFF	ON	CFM Watts	1074 121	1092 174	1092 226	1075 279	1040 331
	NORMAL	357 CFM/ ton	OFF	ON	OFF	OFF	CFM Watts	1208 164	1232 225	1239 284	1228 342	1200 399
	HIGH	411 CFM/ ton	OFF	ON	ON	OFF	CFM Watts	1453 258	1479 333	1490 405	1487 474	1468 539
4	LOW	298 CFM/ ton	ON	OFF	OFF	ON	CFM Watts	1134 135	1157 191	1162 249	1149 302	1118 357
	NORMAL	339 CFM/ ton	ON	OFF	OFF	OFF	CFM Watts	1346 217	1371 286	1380 352	1373 416	1351 478
	HIGH	389 CFM/ ton	ON	OFF	ON	OFF	CFM Watts	1605 371	1633 401	1647 481	1648 556	1635 626
5	LOW	305 CFM/ ton	OFF	OFF	OFF	ON	CFM Watts	1565 301	1592 383	1606 461	1605 534	1591 603
	NORMAL [a]	347 CFM/ ton	OFF	OFF	OFF	OFF	CFM Watts	1754 414	1791 499	1794 582	1788 665	1798 745
	HIGH [b]	399 CFM/ ton	OFF	OFF	ON	OFF	CFM Watts	1993 557	1997 645	1968 707	1906 743	1811 753

[a] Factory Default Setting

[b] Airflow must not exceed 1800 cfm in horizontal right, horizontal left, and downflow applications due to condensate blowoff. The 5 ton high tap shall not be used in these applications.

5TEM6D07AV51SAA 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
3	LOW	360 CFM/ ton	ON	ON	OFF	ON	CFM Watts	1058 108	1074 159	1079 11	1067 264	1031 315
	NORMAL	400 CFM/ ton	ON	ON	OFF	OFF	CFM Watts	1139 128	1159 183	1176 242	1166 296	1136 351
	HIGH	440 CFM/ ton	ON	ON	ON	OFF	CFM Watts	1292 183	1318 248	1333 314	1328 375	1307 436
3.5	LOW	348 CFM/ ton	OFF	ON	OFF	ON	CFM Watts	1162 136	1183 193	1199 253	1190 308	1162 364
	NORMAL	387 CFM/ ton	OFF	ON	OFF	OFF	CFM Watts	1336 199	1364 267	1378 335	1375 398	1356 461
	HIGH	426 CFM/ ton	OFF	ON	ON	OFF	CFM Watts	1509 261	1544 341	1557 417	1559 489	1550 558
4	LOW	338 CFM/ ton	ON	OFF	OFF	ON	CFM Watts	1332 197	1360 265	1375 333	1371 397	1352 459
	NORMAL	375 CFM/ ton	ON	OFF	OFF	OFF	CFM Watts	1521 265	1556 346	1569 422	1571 495	1563 564
	HIGH	413 CFM/ ton	ON	OFF	ON	OFF	CFM Watts	1667 341	1714 426	1726 510	1725 587	1724 665
5	LOW	326 CFM/ ton	OFF	OFF	OFF	ON	CFM Watts	1650 330	1694 415	1707 497	1707 574	1705 651
	NORMAL [a]	362 CFM/ ton	OFF	OFF	OFF	OFF	CFM Watts	1805 423	1846 509	1855 597	1831 660	1811 729
	HIGH	398 CFM/ ton	OFF	OFF	ON	OFF	CFM Watts	1980 515	1991 604	1992 694	1923 723	1851 753

[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

5TEM6D07AV51SAA 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				6.8 *	9	15			6.8 *	9	15
BAYHTR1504BRK BAYHTR1504LUG	1/1	3.84	13100	16.0	29	30	2.88	9800	13.8	26	30
BAYHTR1505BRK BAYHTR1505LUG	1/1	4.80	16400	20.0	34	35	3.60	12300	17.3	30	30
BAYHTR1508BRK BAYHTR1508LUG	1/1	7.68	26200	32.0	49	50	5.76	19700	27.7	43	45
BAYHTR1510BRK BAYHTR1510LUG	1/1	9.60	32800	40.0	59	60	7.20	24600	34.6	52	60
BAYHTR1517BRK Circuit 1 [a]	2/1	9.60	32800	40.0	59	60	7.20	24600	34.6	52	60
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	59	60	7.20	24600	34.6	52	60
BAYHTR1523BRK Circuit 2		9.60	32800	40.0	50	50	7.20	24600	34.6	43	45
BAYHTR1525BRK Circuit 1	4/1	6.00	20500	25.0	40	40	4.50	15400	21.6	36	40
BAYHTR1525BRK Circuit 2		6.00	20500	25.0	31	35	4.50	15400	21.6	27	30
BAYHTR1525BRK Circuit 3		6.00	20500	25.0	31	35	4.50	15400	21.6	27	30
BAYHTR1525BRK Circuit 4		6.00	20500	25.0	31	35	4.50	15400	21.6	27	30
BAYHTR3510LUG	1/3	9.60	32800	23.1	36	40	7.20	24600	20.0	33	35
BAYHTR3517LUG	1/3	14.40	49100	34.6	51	60	10.80	36900	30.0	45	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.

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Supersedes (New)