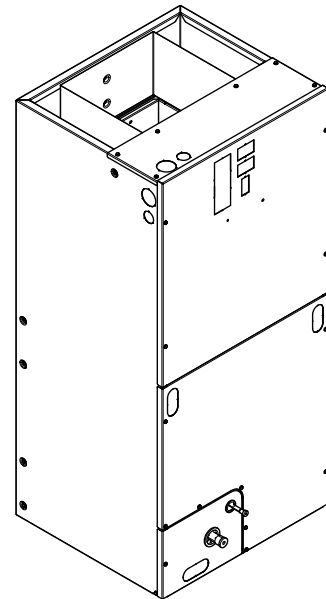


Submittal

Variable Speed Convertible Air Handlers 3.5 – 5 Ton

5TEMCD07AV51DA



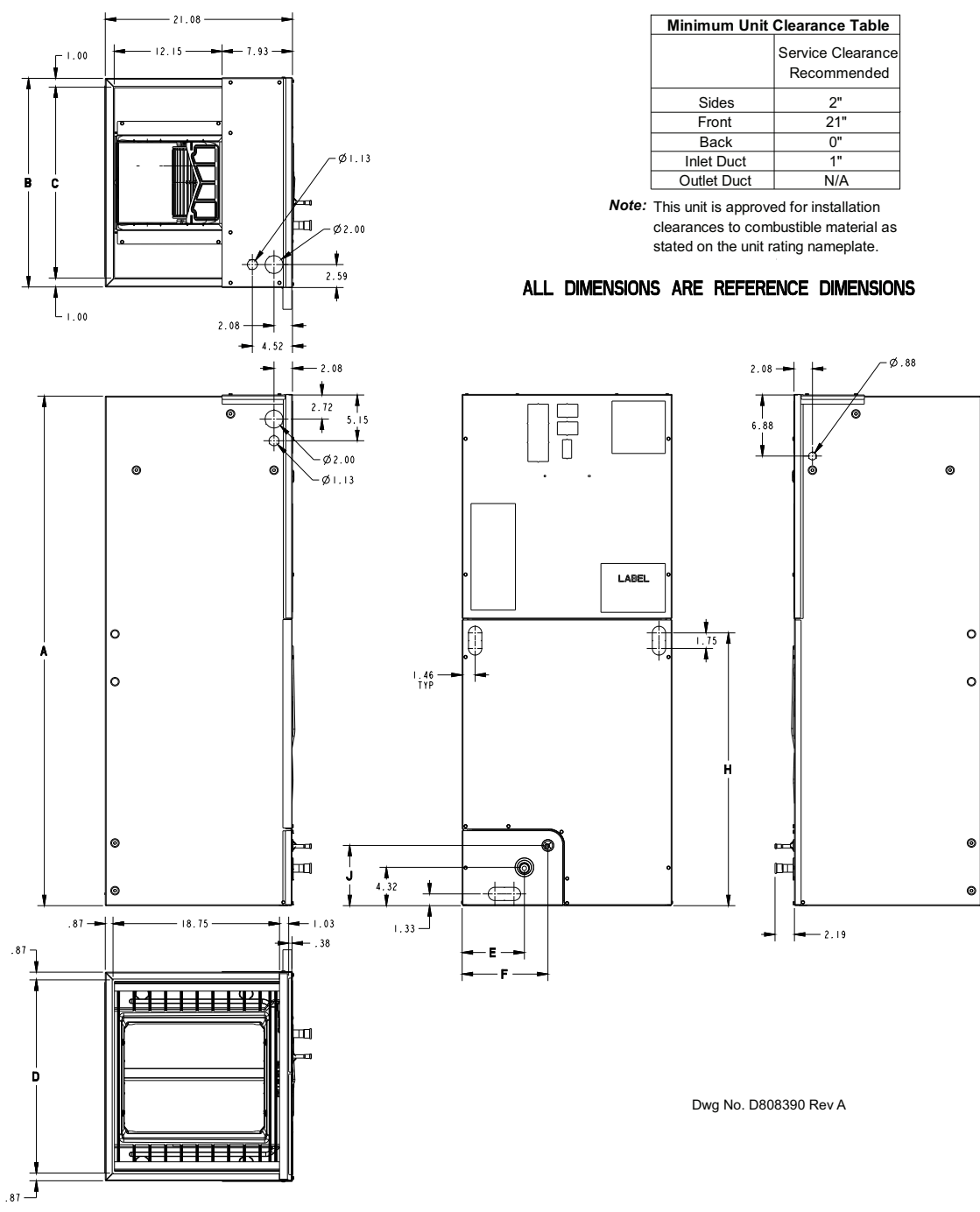
The Diagnostics Mobile App is available by scanning a QR code located inside this unit or by searching for the Link Diagnostics App in your App Store.

Note: The 5TEMC 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.

Note: This unit can be used in Link Communicating mode or 24 volt mode.

Note: Use Diagnostics App to configure blower delays, accessories, ect. in 24 volt mode.

Outline Drawing



Dwg No. D808390 Rev A

PRODUCT DIMENSIONS										
Air Handler Model	A	B	C	D	E	F	H	J	Flow Control	Gas Line Braze
5TEMCD07	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	5TEMCD07AV51DA
Brand	Trane, American Standard
Family Description	R-454B Variable Speed Air Handler
Description	R-454B Variable Speed Air Handler, All-Aluminum Plate Fin Coil, 4-Way Poise, Link Communicating or 24V System Control, 208-230/1/60, 42K - 60K BTUH Capacity
Application Configuration	4-Way
RATED CAPACITY RANGE (BTUH)	42K - 60K
SYSTEM CONTROL TYPE	Link Communicating or 24V
POWER CONN. - V/PH/HZ	208-230/1/60
Max Breaker Size, Without Electric Heater (Amps)	15
Max Breaker Size, With Electric Heater (Amps) ^(a)	60
Name Plate	See Unit Nameplate
COIL TYPE	All-Aluminum Plate Fin
Refrigerant Type	R-454B
Refrigerant Control	TXV
Refrigerant Line Connection - Gas (in.)	7/8
Refrigerant Line Connection - Liquid (in.)	3/8
BLOWER TYPE	Direct Drive Centrifugal
Configuration	Draw Through
Dimensions (Diameter x Width (in.))	11 x 8
Motor Type	Variable Speed
Nominal CFM ^(b)	2000
Speed (RPM)	1050
Volts/Ph/Hz	208-230/1/60
Full Load Amps	6.0
FILTER RACK (YES, NO)	No
Dimensions (Length x Width (in.))	n/a
DUCT CONNECTIONS	L x W
Supply (in.)	12.15 x 21.50
Return (in.)	18.75 x 21.75
DRAIN CONN. SIZE (IN.)	3/4 NPT
DIMENSIONS	H x W x D
Uncrated (in.)	57-3/8 x 23-1/2 x 21-1/8
Crated (in.)	58-1/8 x 25-7/8 x 25-1/2
WEIGHT - SHIPPING/NET (LBS.)	185/174

^(a) Maximum overcurrent protection is dependent on which electric heater is installed. See Installation, Operation, and Maintenance manual or unit name plate.

^(b) For CFM versus external static pressure (in. w.c.), refer to Installation, Operation, and Maintenance manual.

Minimum Airflow CFM

5TEMCD07AV51DA		
Heater	Minimum Heater Airflow CFM	
	With Heat Pump	Without Heat Pump
BAYHTR1504+++, BAYHTR1505+++	900	800
BAYHTR1508+++, BAYHTR3510LUG	1200	1000
BAYHTR1510+++	1350	1000
BAYHTR1517BRK, BAYHTR3517LUG	1400	1100
BAYHTR1523BRK	1430	1300
BAYHTR1525BRK	1850	1600

Note: Heater model number digits "+++" are LUG or BRK.

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 Data

5TEMCD07AV51DA 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				
			0.1	0.3	0.5	0.7	0.9		0.1	0.3	0.5	0.7	
3 tons	290 CFM/ton	CFM Watts	864 / 1015 80 / 96	856 / 883 119 / 121	851 / 772 170 / 141	850 / 676 217 / 160	820 / 590 276 / 182	CFM Watts	864 / 1015 80 / 96	856 / 883 119 / 121	851 / 772 170 / 141	850 / 676 217 / 160	820 / 590 276 / 182
	350 CFM/ton	CFM Watts	1037 / 1179 120 / 137	1037 / 1059 170 / 164	1040 / 957 224 / 185	1030 / 866 265 / 204	1030 / 784 334 / 221	CFM Watts	1037 / 1179 120 / 137	1037 / 1059 170 / 164	1040 / 957 224 / 185	1030 / 866 265 / 204	1030 / 784 334 / 221
	400 CFM/ton	CFM Watts	1184 / 1317 160 / 180	1187 / 1207 215 / 209	1193 / 1110 275 / 233	1180 / 1024 325 / 251	1190 / 945 380 / 268	CFM Watts	1184 / 1317 160 / 180	1187 / 1207 215 / 209	1193 / 1110 275 / 233	1180 / 1024 325 / 251	1190 / 945 380 / 268
	450 CFM/ton	CFM Watts	1334 / 1457 205 / 232	1336 / 1354 265 / 265	1343 / 1263 335 / 290	1340 / 1181 395 / 310	1340 / 1105 460 / 327	CFM Watts	1334 / 1457 205 / 232	1336 / 1354 265 / 265	1343 / 1263 335 / 290	1340 / 1181 395 / 310	1340 / 1105 460 / 327
	290 CFM/ton	CFM Watts	1015 / 1147 115 / 128	1000 / 1025 160 / 155	1000 / 921 205 / 176	1000 / 829 255 / 194	1000 / 746 309 / 212	CFM Watts	1003 / 1103 103 / 149	1002 / 1004 203 / 260	1002 / 1004 203 / 260	1002 / 1004 203 / 260	1002 / 1004 203 / 260
3.5 tons	350 CFM/ton	CFM Watts	1210 / 1341 165 / 188	1210 / 1231 220 / 218	1210 / 1136 280 / 241	1210 / 1050 335 / 260	1210 / 971 395 / 277	CFM Watts	1209 / 157 1212 / 208	1218 / 1218 208 / 269	1218 / 1218 208 / 269	1222 / 1222 334 / 403	1224 / 1224 403 / 403
	400 CFM/ton	CFM Watts	1380 / 1503 195 / 252	1380 / 1403 285 / 286	1390 / 1314 355 / 312	1390 / 1233 420 / 332	1390 / 1159 485 / 349	CFM Watts	1384 / 217 1386 / 275	1393 / 1393 340 / 412	1393 / 1393 340 / 412	1402 / 1402 487 / 487	1402 / 1402 487 / 487
	450 CFM/ton	CFM Watts	1560 / 1667 295 / 332	1560 / 1575 365 / 369	1570 / 1492 440 / 398	1570 / 1416 515 / 421	1579 / 1345 595 / 439	CFM Watts	1563 / 293 1563 / 362	1566 / 1566 429 / 507	1566 / 1566 429 / 507	1585 / 1585 604 / 604	1585 / 1585 604 / 604
	290 CFM/ton	CFM Watts	1140 / 1304 145 / 175	1140 / 1192 200 / 204	1140 / 1095 255 / 227	1140 / 1008 310 / 246	1150 / 929 365 / 263	CFM Watts	1144 / 138 1147 / 188	1152 / 1152 247 / 309	1152 / 1152 247 / 309	1155 / 1155 376 / 376	1154 / 1154 376 / 376
	350 CFM/ton	CFM Watts	1380 / 1525 220 / 262	1380 / 1426 285 / 295	1390 / 1338 355 / 322	1390 / 1257 420 / 343	1390 / 1183 485 / 360	CFM Watts	1384 / 217 1386 / 275	1393 / 1393 340 / 412	1393 / 1393 340 / 412	1402 / 1402 487 / 487	1402 / 1402 487 / 487
4 tons	400 CFM/ton	CFM Watts	1590 / 1711 305 / 356	1590 / 1621 380 / 267	1590 / 1539 455 / 356	1590 / 1464 535 / 267	1600 / 1394 610 / 466	CFM Watts	1589 / 305 1588 / 376	1591 / 1591 444 / 522	1591 / 1591 444 / 522	1585 / 1585 604 / 604	1585 / 1585 604 / 604
	450 CFM/ton	CFM Watts	1790 / 1898 410 / 474	1790 / 1816 495 / 597	1800 / 1741 585 / 548	1800 / 1670 670 / 575	1810 / 1604 760 / 597	CFM Watts	1800 / 419 1794 / 509	1791 / 1791 575 / 660	1791 / 1791 575 / 660	1745 / 1745 749 / 749	1745 / 1745 749 / 749
	290 CFM/ton	CFM Watts	1430 / 1571 240 / 283	1440 / 1475 310 / 318	1440 / 1388 375 / 345	1440 / 1309 445 / 367	1440 / 1236 515 / 384	CFM Watts	1435 / 237 1436 / 297	1442 / 1442 364 / 437	1442 / 1442 364 / 437	1450 / 1450 514 / 514	1450 / 1450 514 / 514
	350 + CFM/ton	CFM Watts	1740 / 1851 380 / 442	1740 / 1767 465 / 482	1750 / 1690 550 / 514	1750 / 1619 635 / 541	1760 / 1552 720 / 562	CFM Watts	1747 / 388 1747 / 472	1742 / 1742 472 / 539	1742 / 1742 472 / 539	1707 / 1707 710 / 710	1707 / 1707 710 / 710
	400 CFM/ton	CFM Watts	2000 / 2087 540 / 619	2000 / 2012 635 / 663	2010 / 1942 735 / 700	1980 / 1873 810 / 729	1870 / 317 810 / 378	CFM Watts	2015 / 559 2015 / 679	1995 / 739 1995 / 810	1995 / 739 1995 / 810	1877 / 1877 810 / 810	1877 / 1877 810 / 810
5 tons †	450 CFM/ton	CFM Watts	2260 / 2141 745 / 686	2210 / 2068 810 / 729	2100 / 1999 810 / 766	1980 / 903 810 / 359	1870 / 315 810 / 405	CFM Watts	2125 / 641 2117 / 779	2100 / 810 2100 / 810	2100 / 810 2100 / 810	1932 / 1932 810 / 810	1932 / 1932 810 / 810
	† Factory Setting - Status LED will blink once per 100 CFM requested. In torque mode, actual airflow may be lower. - In horizontal and downflow applications, airflow should be limited to 1800 CFM due to condensate blowoff.												
	- Torque mode will reduce airflow when static is above approximately 0.3" water column. - All heating modes default to Constant CFM. - Cooling airflow values are with wet coil, no filter												

Electrical Data

Note: Heater size needs to be set in Configuration Menu.

Table 1. Electrical Data

5TEMCD07AV51DA 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				5.7 *	7	15			5.7 *	7	15
BAYHTR1504BRK	1/1	3.84	13100	16.0	27	30	2.88	9800	13.8	24	25
BAYHTR1504LUG											
BAYHTR1505BRK	1/1	4.80	16400	20.0	32	35	3.60	12300	17.3	29	30
BAYHTR1505LUG											
BAYHTR1508BRK	1/1	7.68	26200	32.0	47	50	5.76	19700	27.7	42	45
BAYHTR1508LUG											
BAYHTR1510BRK	1/1	9.60	32800	40.0	57	60	7.20	24600	34.6	50	50
BAYHTR1510LUG											
BAYHTR1517BRK Circuit 1 (a)	2/1	9.60	32800	40.0	57	60	7.20	24600	34.6	50	50
BAYHTR1517BRK Circuit 2		4.80	16400	20.0	25	25	3.60	12300	17.3	22	25
BAYHTR1523BRK Circuit 1 (a)	2/1	9.60	32800	40.0	57	60	7.20	24600	34.6	50	50
BAYHTR1523BRK Circuit 2		9.60	32800	40.0	50	50	7.20	24600	34.6	43	45
BAYHTR1525BRK Circuit 1 (a)	4/1	6.00	20500	25.0	38	40	4.50	15400	21.6	34	35
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	35	40	7.20	24600	20.0	31	35
BAYHTR3517LUG	1/3	14.40	49100	34.6	50	60	10.80	36900	30.0	44	45
* = Motor Amps											

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

Features and Benefits

- Link™ Communicating or 24V control
- 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

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