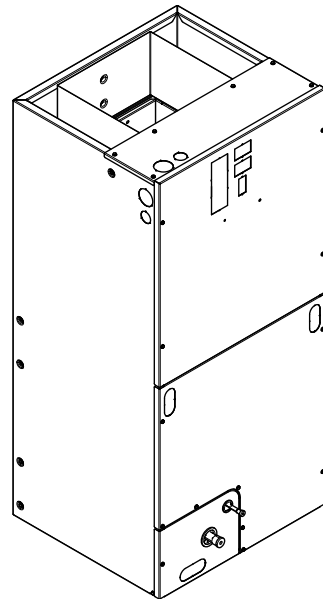


Submittal

Variable Speed Convertible Air Handlers 3 – 4 Ton

5TEMCD05AV41DA



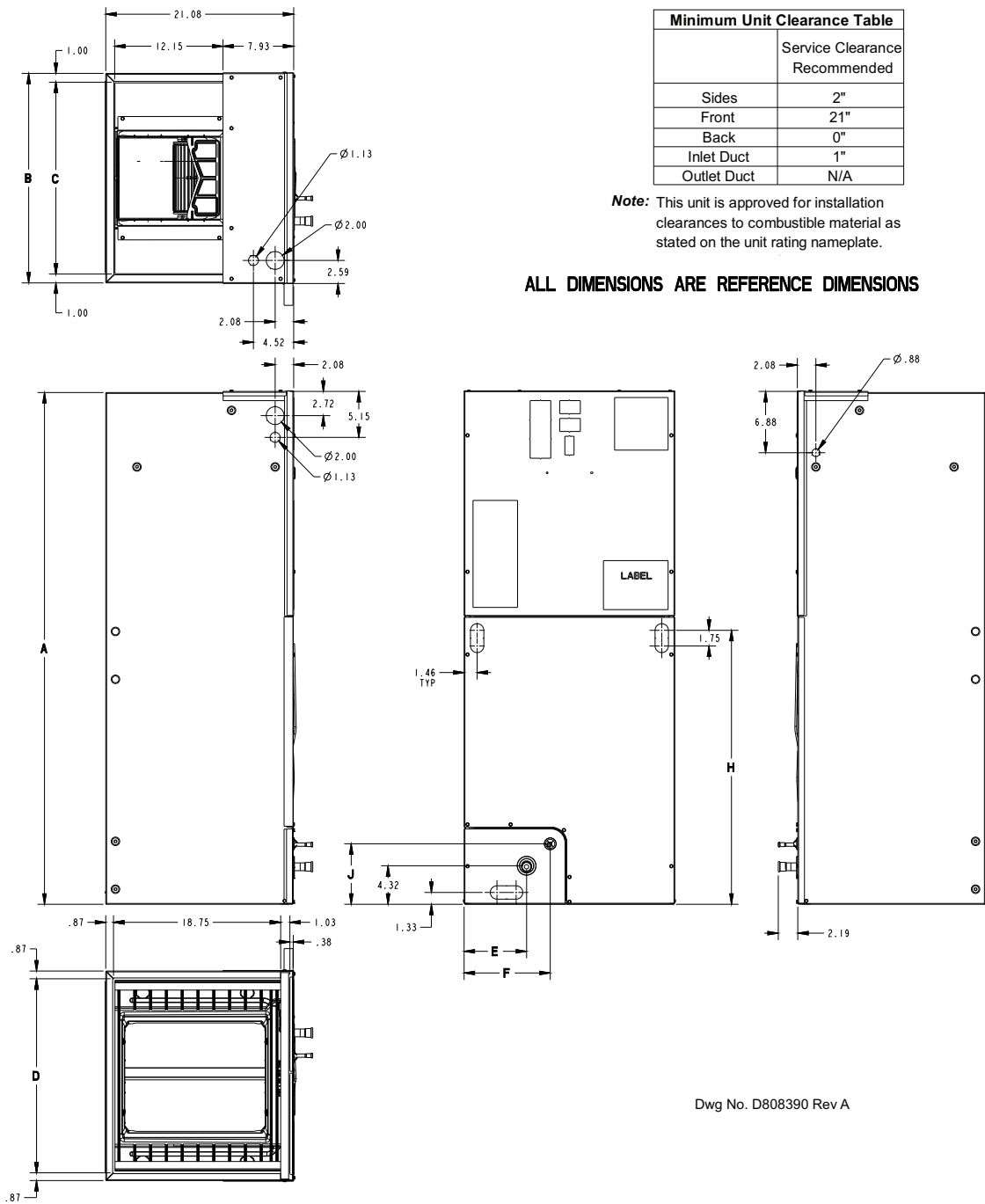
The Diagnostics Mobile App is available by scanning a QR code located inside this unit or by searching for the Link Diagnostics App in your App Store.

Note: The 5TEM 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



PRODUCT DIMENSIONS										
Air Handler Model	A	B	C	D	E	F	H	J	Flow Control	Gas Line Braze
5TEMCD05	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	5TEMCD05AV41DA
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, 36K - 48K BTUH Capacity
Application Configuration	4-Way
RATED CAPACITY RANGE (BTUH)	36K - 48K
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)	1400
Speed (RPM)	1050
Volts/Ph/Hz	208-230/1/60
Full Load Amps	3.9
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.)	51-3/8 x 23-1/2 x 21-1/8
Crated (in.)	52-3/4 x 27-1/2 x 25-1/2
WEIGHT - SHIPPING/NET (LBS.)	155/144

^(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

5TEMCD05AV41DA		
Heater	Minimum Heater Airflow CFM	
	With Heat Pump	Without Heat Pump
BAYHTR1504+++, BAYHTR1505+++	675	675
BAYHTR1508+++, BAYHTR1510+++, BAYHTR1517BRK, BAYHTR3510LUG	950	900
BAYHTR3517LUG	1050	950
BAYHTR1523BRK	1500	1300

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

STEMCD05AV41DA AIRFLOW PERFORMANCE CONSTANT CFM MODE / CONSTANT TORQUE MODE																	
OUTDOOR MULTIPLIER (TONS)	COOLING AIRFLOW SETTING	AIRFLOW POWER	EXTERNAL STATIC PRESSURE (Constant CFM / 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			
2.5 tons	290 CFM/ton	CFM Watts	735/837	727/702	700/593	673/415	660/415	290 CFM/ton	CFM Watts	735	727	700	735	727	700	673	660
	350 CFM/ton	CFM Watts	883/972	884/849	882/746	881/657	870/577	350 CFM/ton	CFM Watts	883	884	882	883	884	882	881	870
	400 CFM/ton	CFM Watts	1007/1084	1016/971	1033/874	1020/788	1010/711	400 CFM/ton	CFM Watts	1007	1016	1033	1007	1016	1033	1020	1010
	450 CFM/ton	CFM Watts	1133/1198	1146/1093	1176/1001	1140/919	1130/845	450 CFM/ton	CFM Watts	1133	1146	1176	1133	1146	1176	1140	1130
	290 CFM/ton	CFM Watts	878/993	879/872	876/771	874/682	865/602	290 CFM/ton	CFM Watts	878	879	876	878	879	876	874	865
3 tons	350 CFM/ton	CFM Watts	1057/1154	1068/1045	1091/952	1070/869	1060/793	350 CFM/ton	CFM Watts	1057	1068	1091	1057	1068	1091	1070	1060
	400 CFM/ton	CFM Watts	122/160	1223/1190	1255/1102	1210/1024	1190/952	400 CFM/ton	CFM Watts	122	1223	1255	1223	1223	1255	1210	1190
	450 CFM/ton	CFM Watts	1364/1426	1375/1334	1393/1253	1340/1179	1330/1110	450 CFM/ton	CFM Watts	1364	1375	1393	1364	1375	1393	1340	1330
	290 CFM/ton	CFM Watts	230/287	286/317	350/339	429/355	480/367	290 CFM/ton	CFM Watts	230	286	350	230	286	350	429	480
	350 CFM/ton	CFM Watts	1022/1123	1031/1012	1050/917	1030/832	1030/756	350 CFM/ton	CFM Watts	1022	1031	1050	1022	1031	1050	1030	1030
3.5 tons	400 CFM/ton	CFM Watts	113/148	158/172	209/188	275/201	325/213	400 CFM/ton	CFM Watts	113	158	209	113	158	209	275	325
	450 CFM/ton	CFM Watts	1235/1312	1249/1214	1242/1128	1230/1050	1220/978	450 CFM/ton	CFM Watts	1235	1249	1242	1235	1249	1242	1230	1220
	290 CFM/ton	CFM Watts	178/227	229/254	288/274	367/288	420/299	290 CFM/ton	CFM Watts	178	229	288	178	229	288	367	420
	400 CFM/ton	CFM Watts	1416/1471	1424/1383	1399/1303	1380/1230	1370/1163	400 CFM/ton	CFM Watts	1416	1424	1399	1416	1424	1399	1303	1370
	450 CFM/ton	CFM Watts	254/314	313/263	378/368	455/385	510/398	450 CFM/ton	CFM Watts	254	313	378	254	313	378	455	510
4 tons †	290 CFM/ton	CFM Watts	1601/1618	1591/1536	1547/1462	1500/1394	1390/1330	290 CFM/ton	CFM Watts	1601	1591	1547	1601	1591	1547	1500	1390
	350 CFM/ton	CFM Watts	356/420	423/454	497/480	553/500	520/514	350 CFM/ton	CFM Watts	356	423	497	356	423	497	553	520
	400 CFM/ton	CFM Watts	1168/1276	1182/1175	1182/1087	1170/1007	1160/935	400 CFM/ton	CFM Watts	1168	1182	1182	1168	1182	1182	1170	1160
	450 CFM/ton	CFM Watts	155/209	204/235	260/254	337/268	390/279	450 CFM/ton	CFM Watts	155	204	260	155	204	260	337	390
	290 CFM/ton	CFM Watts	1416/1492	1424/1404	1399/1325	1380/1252	1370/1185	290 CFM/ton	CFM Watts	1416	1424	1399	1416	1424	1399	1380	1370
4 tons †	350 CFM/ton	CFM Watts	254/326	313/357	378/381	455/398	510/411	350 CFM/ton	CFM Watts	254	313	378	254	313	378	455	510
	400 CFM/ton	CFM Watts	1628/1616	1614/1535	1534/1461	1500/1393	1390/1329	400 CFM/ton	CFM Watts	1628	1614	1534	1628	1614	1534	1500	1390
	450 CFM/ton	CFM Watts	373/435	441/468	517/492	568/510	520/524	450 CFM/ton	CFM Watts	373	441	517	373	441	517	568	520
	290 CFM/ton	CFM Watts	1714/1605	1686/1525	1550/1452	1500/1385	1390/1321	290 CFM/ton	CFM Watts	1714	1686	1550	1714	1686	1550	1500	1390
	400 CFM/ton	CFM Watts	431/435	505/468	584/492	617/510	520/570	400 CFM/ton	CFM Watts	431	505	584	431	505	584	617	520
	† 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 1700 CFM due to condensate blowoff.																

Electrical Data

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

Table 1. Electrical Data

5TEMCD05AV41DA 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				3.9 *	5	15			3.9 *	5	15
BAYHTR1504BRK	1/1	3.84	13100	16.0	25	25	2.88	9800	13.8	22	25
BAYHTR1504LUG											
BAYHTR1505BRK	1/1	4.80	16400	20.0	30	30	3.60	12300	17.3	27	30
BAYHTR1505LUG											
BAYHTR1508BRK	1/1	7.68	26200	32.0	45	45	5.76	19700	27.7	39	40
BAYHTR1508LUG											
BAYHTR1510BRK	1/1	9.60	32800	40.0	55	60	7.20	24600	34.6	48	50
BAYHTR1510LUG											
BAYHTR1517BRK Circuit 1 ^(a)	2/1	9.60	32800	40.0	55	60	7.20	24600	34.6	48	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	55	60	7.20	24600	34.6	48	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	33	35	7.20	24600	20.0	29	30
BAYHTR3517LUG	1/3	14.40	49100	34.6	48	50	10.80	36900	30.0	42	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**

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