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Specification

5 Ton Convertible Air Handler 2/4TEC3F60B1000A

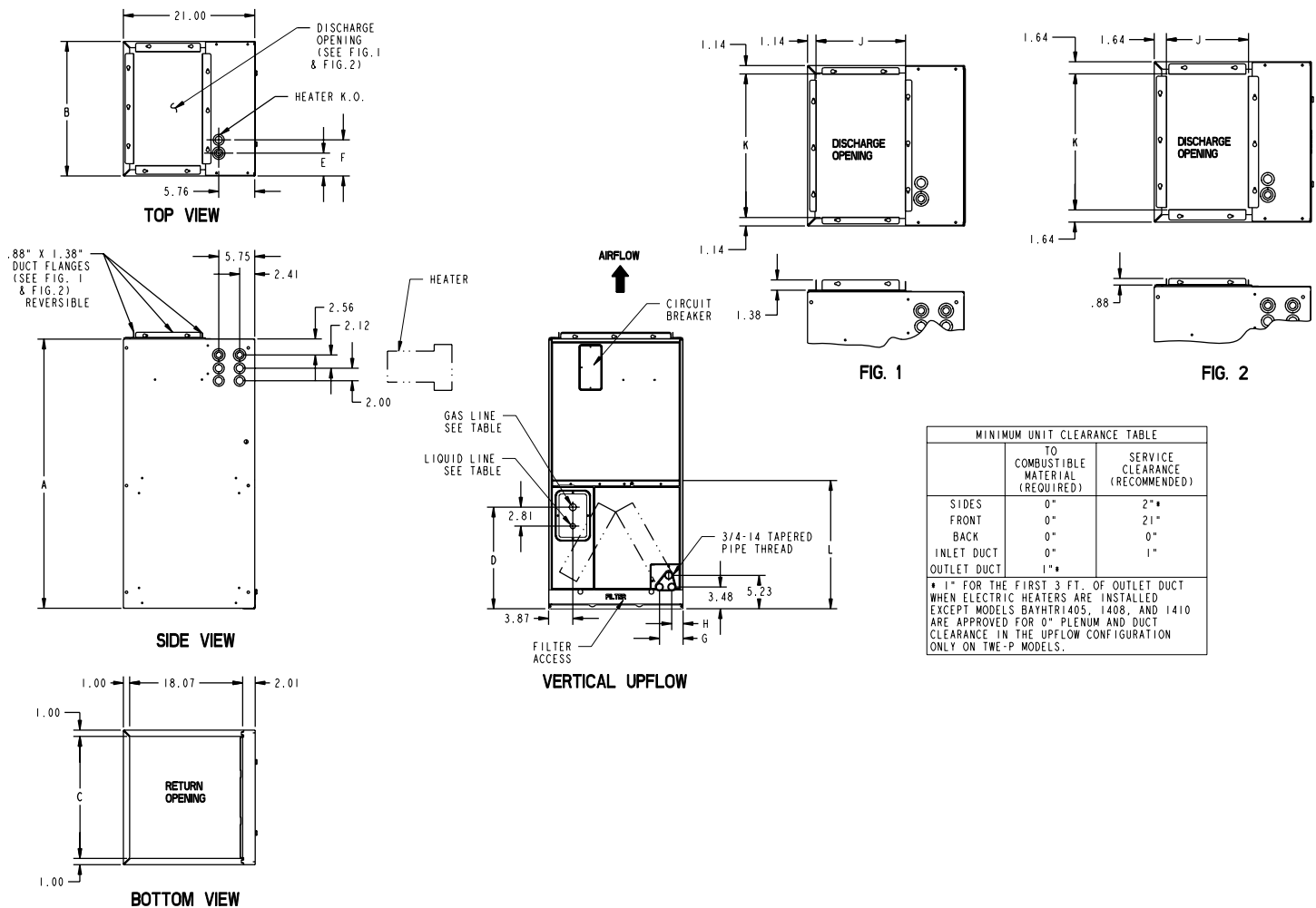


	FIG 1		FIG 2		
MODEL NO.	J	K	J	K	L
2/4TEC3F48, 60	12.02	21.22	11.02	20.22	31.15

MODEL NO.	A	B	C	D	E	F	G	H	Flow Control	R22 Gas Line BRAZE	R22 Liq. Line BRAZE	R-410A Gas Line BRAZE	R-410A Liq. Line BRAZE
2/4TEC3F60B	57.90	23.50	21.50	30.47	4.65	6.77	3.62	1.89	TXV/NB	1-1/8	3/8	7/8	3/8

PRODUCT SPECIFICATIONS

MODEL	2/4TEC3F60B1000A		
RATED VOLTS/PH/HZ.	208-230/1/60		
RATINGS ①	See O.D. Specifications		
INDOOR COIL — Type	Plate Fin		
Rows — F.P.I.	3 - 14 (3-16, 4TEC)		
Face Area (sq. ft.)	6.19		
Tube Size (in.)	3/8 - Copper		
Refrigerant Control	TXV - NonBleed ⑤		
Drain Conn. Size (in.) ②	3/4 NPT		
DUCT CONNECTIONS	See Outline Drawing		
INDOOR FAN — Type	Centrifugal		
Diameter-Width (In.)	11 X 10		
No. Used	1		
Drive - No. Speeds	Direct - 4		
CFM vs. in. w.g. ①	See Fan Performance Table		
No. Motors — H.P.	1 - 1		
Motor Speed R.P.M.	1050		
Volts/Ph/Hz	200-230/1/60		
F.L. Amps	7.6		
FILTER			
Vertical Applications			
Filter Furnished?	Yes		
Type Recommended	High Velocity		
No.-Size-Thickness	1 - 20 X 22 - 1in.		
Horizontal Applications			
Filter Furnished?	No		
Recommended Size ③	See Note ③		
REFRIGERANT	R-22	R-410A	
Ref. Line Connections	Brazed	Brazed	
Coupling or Conn. Size — in. Gas	1-1/8	7/8	
Coupling or Conn. Size — in. Liq.	3/8	3/8	
DIMENSIONS			
	H x W x D		
Crated (In.)	59-1/2 x 26 x 23-1/2		
Uncrated	See Outline Drawing④		
WEIGHT			
Shipping (Lbs.) / Net (Lbs.)	170 /155		

① These Air Handlers are A.R.I. certified with various Split System Air Conditioners and Heat Pumps (ARI STANDARD 210/240). Refer to the Split System Outdoor Unit Product Data Guides for performance data.

② 3/4" Male Plastic Pipe (Ref.: ASTM 1785-76)

③ Minimum filter size for horizontal applications will be based on airflow selection and will be calculated as follows:

Low Velocity Filter: Face area (Sq. Ft.) = CFM / 300

High Velocity Filter: Face area (Sq. Ft.) = CFM / 500

④ The cabinet for this unit is made of two pieces, making it easier to assemble in attics or tight applications.

⑤ Torque Spec for TXV = Tighten 1/6 turn passed finger tight



Airflow Performance 2/4TEC3F60B: Wet coil, No Heaters																
EXTERNAL STATIC PRESSURE (in.w.g.)	AIRFLOW (CFM)															
	VERTICAL								HORIZONTAL							
	230 VOLTS				208 VOLTS				230 VOLTS				208 VOLTS			
	HI	MED-H	M-LO	Low	HI	MED-H	M-LO	Low	HI	MED-H	M-LO	Low	HI	MED-H	M-LO	Low
0	2163	2018	1901	1831	2129	1988	1893	1820	2107	1963	1840	1774	2085	1956	1837	1777
0.1	2132	1974	1852	1796	2091	1954	1833	1769	2063	1927	1810	1743	2049	1912	1797	1729
0.2	2088	1936	1811	1754	2049	1915	1790	1722	2028	1889	1773	1706	2011	1870	1756	1683
0.3	2044	1901	1775	1709	2008	1874	1756	1678	1995	1851	1735	1663	1973	1830	1716	1638
0.4	2004	1867	1741	1663	1970	1835	1723	1634	1962	1814	1698	1617	1934	1793	1678	1593
0.5	1972	1832	1707	1617	1935	1797	1687	1590	1925	1778	1662	1569	1896	1757	1641	1548
0.6	1941	1797	1672	1572	1899	1761	1646	1542	1883	1743	1628	1520	1855	1721	1606	1501
0.7	1902	1760	1635	1526	1858	1725	1602	1489	1834	1710	1595	1473	1812	1685	1570	1450
0.8	1841	1721	1594	1475	1803	1684	1556	1427	1779	1678	1559	1429	1761	1648	1531	1392
0.9	1735	1683	1549	1416	1722	1636	1516	1354	1719	1648	1518	1389	1699	1606	1484	1326
NOTES:	With filter, no horizontal drip tray Small apex baffle Subtract 0.06" W.G. for downflow								As shipped except without filter Subtract 0.05" W.G. for horizontal left							

SEE AIR FLOW RESISTANCE TABLE FOR PRESSURE LOSS WITH SUPPLEMENTARY HEATER.

PRESSURE DROP FOR ELECTRIC HEATERS IN AIR HANDLER MODELS

AIRFLOW CFM	NUMBER OF RACKS				
	1	2	3	4	5
	AIR PRESSURE DROP INCHES W.G.				
600	0.01	0.02	0.02		
700	0.01	0.02	0.02		
800	0.02	0.03	0.03	0.04	
900	0.03	0.03	0.04	0.05	
1000	0.04	0.04	0.05	0.06	
1100	0.04	0.05	0.06	0.07	0.08
1200	0.05	0.06	0.07	0.08	0.09
1300	0.06	0.07	0.08	0.09	0.11
1400	0.07	0.08	0.10	0.11	0.13
1500	0.08	0.09	0.11	0.13	0.15
1600	0.09	0.10	0.12	0.15	0.17
1700	0.10	0.11	0.14	0.17	0.19
1800	0.11	0.13	0.16	0.19	0.21
1900	0.13	0.15	0.18	0.21	0.23
2000	0.14	0.17	0.20	0.23	0.26

HEATER RACKS	
HEATER MODEL NO.	NO. OF RACKS
BAYHTR1405	1
BAYHTR1408	2
BAYHTR1/3410	2
BAYHTR1/3415	3
BAYHTR1419	4

Notes:

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.

2/4TEC3F60B WIRING DATA (Indoor Blower Motor Powered from Heater Circuit *)											
Heater Model No.	Number of Circuits/Phase	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			
NONE	1/1	N/A	N/A	N/A	9.5	15	N/A	N/A	N/A	9.5	15
BAYHTR1405 +++	1/1	4.80	16400	20	35	35	3.60	12300	17.3	31	35
BAYHTR1408 +++	1/1	7.68	26200	32	50	50	5.76	19700	27.7	44	45
BAYHTR1410 +++	1/1	9.60	32800	40	60	60	7.20	24600	34.6	53	60
BAYHTR1415 BRK	2/1	15.36	52400	40/24	60*/30	60*/30	11.53	39300	34.6/20.8	53*/26	60*/30
BAYHTR1415 BRK with Single Circuit Power Source Kit BAYSPEK140B	1/1	15.36	52400	64	90	90	11.53	39300	55.4	79	80
BAYHTR3410 000	1/3	9.60	32800	34.6	43	45	7.20	24600	30.0	37	40
BAYHTR3415 000	1/3	15.36	52400	44.7	56	60	11.53	39300	39.7	50	50
BAYHTR1419 BRK	2/1	19.20	65500	32/48	50*/60	50*/60	14.42	49200	27.7/41.6	44*/52	45*/60
BAYHTR1419 BRK with Single Circuit Power Source Kit BAYSPEK140B	1/1	19.2	65500	80	110	110	14.42	49200	69.3	96	100
NOTES: * Circuit 1/Circuit 2 (Minimum Circuit Ampacity for Circuit 1 includes Blower Motor Amps) +++ = 000, BRK, PDC 000 = pigtails, BRK = contains circuit breakers, PDC = contains pull disconnect											
IMPORTANT: Any power supply and/or combination power supply, circuit or circuits must be wired and protected in accordance with local Electrical Codes.											

		HEATER MODEL NUMBER BAYHTR					
Air Handler Model	Unit Position	Application	1405	1408	*410	*415	1419 1425 * = 1 or 3
			4.80KW	7.68KW	9.60KW	15.36KW	19.20KW 24.98KW
2/4TEC3F60	Vertical	A/C or Elec. Furnace	L	L	L	L	L —
	Upflow	Heat Pump	L	L	L	L	ML —
	Vertical	A/C or Elec. Furnace	L	L	L	L	L —
	Downflow	Heat Pump	L	L	L	ML	MH —
	Horizontal	A/C or Elec. Furnace	L	L	L	L	L —
	Left	Heat Pump	L	L	L	ML	ML —
	Horizontal	A/C or Elec. Furnace	L	L	L	L	L —
	Right	Heat Pump	L	L	L	ML	L —

Mechanical Specifications

General — Blower coil units shall be completely factory assembled including coil, condensate drain pan, fan, motor, filters and controls in an insulated casing that can be applied in horizontal or vertical configuration. This is an “Air-Tite” model with 4.2 “R” value insulation and additional sealing systems.

This new line of 2/4TEC3F Air handlers provides exclusive compact size combined with simple 6-Way convertibility in sizes up to 5 Tons. The unit ships in the vertical upflow configuration and converts to horizontal right just by laying the unit on its side. No tools required. Simple coil rotation provides downflow and horizontal left applications.

The 6-Way convertibility provides you inventory benefits and service/installation flexibility. The simple conversion provides opposite side access for installation and service.

Units shall be UL listed.

Casing — Units shall have a rugged sheet metal and steel frame construction and shall be painted with an enamel finish. Casing shall be insulated and knockouts for electrical power and control wiring.

Refrigerant Circuits — The 2/4TEC3F units have a single refrigerant circuit. The refrigerant circuit shall be controlled shall be controlled by a factory installed non-bleed thermal expansion valve.

Coil — Aluminum fin surface shall be mechanically bonded to 3/8 inch OD copper tubing. Coils are factory pressure and leak tested.

Fan — Forward curved, dynamically balanced and statically balanced with 3 speed direct drive shall be standard, fan motor bearing shall be permanently lubricated.

Controls — Low voltage wire nut connections, fan contactor, and plug in module for accessory electric heat control shall be included.

Filters — Filters shall be included as standard, One inch low velocity semi-permanent type (except 5 ton - washable filter).

Accessories

Electric Heaters — Shall be available in a wide range of capacities and voltages with various staging options, and plug-in control wiring. Heaters shall fit inside the internal compartment.

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