Installer's Guide

18-GJ02D1-2

1-1/2 – 4 Ton Air Handlers
Upflow / Horizontal Left

2/4TGB3F018A -- 2/4TGB3F048A

⚠ WARNING: HAZARDOUS VOLTAGE - DISCONNECT POWER BEFORE SERVICING

ALL phases of this installation must comply with NATIONAL, STATE AND LOCAL CODES

IMPORTANT — *This Document is* ***customer property*** *and is to remain with this unit. Please return to service information pack upon completion of work.*

A. GENERAL INFORMATION

⚠ WARNING

THIS INFORMATION IS FOR USE BY INDIVIDUALS HAVING ADEQUATE BACKGROUNDS OF ELECTRICAL AND MECHANICAL EXPERIENCE. ANY ATTEMPT TO REPAIR A CENTRAL AIR CONDITIONING PRODUCT MAY RESULT IN PERSONAL INJURY AND/OR PROPERTY DAMAGE. THE MANUFACTURER OR SELLER CANNOT BE RESPONSIBLE FOR THE INTERPRETATION OF THIS INFORMATION, NOR CAN IT ASSUME ANY LIABILITY IN CONNECTION WITH iTS USE.

⚠ CAUTION

EQUIPMENT DAMAGE! TO PREVENT SHORTENING ITS SERVICE LIFE, THE AIR HANDLER SHOULD NOT BE USED DURING THE FINISHING PHASES OF CONSTRUCTION OR REMODELING. The low return air temperatures can lead to the formation of condensate. Condensate in the presence of chlorides and fluorides from paint, varnish, stains, adhesives, cleaning compounds, and cement creates a corrosive condition which may cause rapid deterioration of the cabinet and internal components.

⚠ WARNING

The following warning complies with State of California law, Proposition 65.

This product contains fiberglass wool insulation! Fiberglass dust and ceramic fibers are believed by the State of California to cause cancer through inhalation. Glasswool fibers may also cause respiratory, skin, or eye irritation.

PRECAUTIONARY MEASURES:
--Avoid breathing fiberglass dust.
--Use NIOSH approved dust/mist respirator.
--Avoid contact with the skin or eyes. Wear long sleeved, loose fitting clothing, gloves and eye protection.
--Wash clothes separately from other clothing; rinse washer thoroughly.
--Operations such as sawing, blowing, tear-out, and spraying may generate fiber concentrations requiring additional respiratory protection. Use the appropriate NIOSH approved respirator in these situations.

FIRST AID MEASURES
--Eye contact: Flush eyes with water to remove dust. If symptoms persist, seek medical attention.
--Skin Contact: Wash affected areas gently with soap and warm water after handling.

These instructions do not cover all variations in systems or provide for every possible contingency. Should further information be desired or particular problems arise which are not covered sufficiently by this manual, contact your local distributor or the manufacturer as listed on the air handler nameplate.

These Air Handlers are vertical upflow and horizontal left configuration only. Refer to Section B beginning on page 2 for additional information.

INSPECTION

Check carefully for any shipping damage. This must be reported to and claims made against the transportation company immediately. Check to be sure all major components are in the unit. Any missing parts should be reported to your supplier at once, and replaced with authorized parts only.

INSTALLATION LIMITATIONS & RECOMMENDATIONS

The general location of the air handler is normally selected by the architect, contractor and/or home owner for the most effective application and satisfaction.

These air handlers are suitable for installation in a closet, alcove or utility room with free, non-ducted, air return, using the area space as a return air plenum. With ducted supply air, if the minimum clearances to combustible materials and service access are observed, the above installations are suitable.

NOTE: Condensation may occur on the surface of the air handler when installed in an unconditioned location. When units are installed in unconditioned spaces, verify that all electrical and refrigerant line penetrations on the air handler are sealed completely.

This area may also be used for other purposes, including an electric hot water heater - but in no case shall a fossil fuel device be installed and/or operated in the same closet, alcove or utility room.

In addition, these air handlers are suitable for installation in an attic, garage or crawl space with ducted supply and return air.

This equipment (for models TGB3F42, 48A only) has been evaluated in accordance with the Code of Federal Regulations, Chapter XX, Part 3280 or the equivalent. "SUITABLE FOR MOBILE HOME USE"

For proper installation the following items must be considered:

1. If adequate power is available and correct according to nameplate specifications.
2. Pursuant to Florida Building Code 13-610.2.A.2.1, this unit meets the criteria for a factory sealed air handler.
3. Insulate and seal all ducts, particularly if unit is located outside of the conditioned space.
4. To ensure maximum efficiency and system performance, the existing supply and return duct system static pressures must not exceed the total available static pressure of the air handler. Reference ACCA Manual D, Manual S and Manual RS along with the air handler Product Data (available online) and Service Facts (available online) for additional information.
5. It is recommended that the outline drawing be studied and dimensions properly noted and checked against selected installation site. By noting in advance which knockouts are to be used, proper clearance allowances can be made for installation and possible future service.
6. The Refrigerant lines must be sealed and Electrical inlets need to be sealed at both the low and the high voltage.
7. If supplementary heat is to be added, power supply must be sufficient to carry the load. In addition, minimum air flow settings, unit and duct clearances to combustible material must be maintained as stated on the air handler rating nameplate.

⚠ CAUTION

For air handlers not equipped with a factory installed electric heater, a field installed heater is available from the manufacturer. Only manufacturer-built heaters are approved for use in the air handler. These heaters have been designed and tested in accordance with UL standards to provide safe and reliable operation. A list of approved heaters is provided on the air handler rating nameplate. Heaters that are not factory approved could cause damage and are not covered under equipment warranty.

8. If field installed electric heaters are applied, minimum air flow settings, unit and duct clearances to combustibles must be maintained as stated on the air handler rating nameplate.
9. If the unit is installed without a return air duct, applicable local codes may limit this air handler to installation only in a single story residence & within conditioned space.
10. If the outdoor unit is to be installed later, or by others, then installation of the air

handler must be made to allow access for refrigerant lines, or attach refrigerant lines to air handler when installing.

11. Make sure there are provisions for installing condensate drain lines.
12. Route refrigerant & condensate drain lines away from air handler so they do not interfere with access panels and filters.
13. When external accessories are used, the additional height and width requirements must be considered in the overall space needed.
14. These units are not approved for outdoor installation.
15. These units are approved for draw-through application only.

B. UNIT INSTALLATION

UPFLOW

a. For maximum efficiency, the horizontal drip tray should be removed. Tray removal requires that the coil be removed by sliding the coil out on the coil channel supports. The tray is detached by removing the two screws at the drain pan and the two screws holding the two brackets at the top of the coil.

b. Openings where field wiring enters the cabinet must be completely sealed. The Refrigerant lines must be sealed and Electrical inlets need to be sealed both the low and the high voltage. Location of power entry is shown on the Outline Drawing.

c. **2/4TGB3F042A & 2/4TGB3F 48A Only:** Remove the factory installed baffle assembly from the apex of the coil by removing the 5/16" hex head screws.

Replace this baffle with the factory supplied narrow coil baffle using the screws removed previously (See Figure 1).

d. Position unit on Pedestal or other suitable foundation. If Pedestal is not used, a frame strong enough to support the total weight must be provided. Provide a minimum height of 14 inches for proper unrestricted airflow.

e. If a return air duct is connected to the air handler, it must be the same dimensions as shown in the outline drawing.

f. Pedestal and unit should be isolated from the foundation using a suitable isolating material.

HORIZONTAL LEFT

a. For maximum efficiency and Customer ease of filter maintenance, it is recommended that a properly sized remote filter and grille be installed for horizontal applications. Airflow should not exceed the face velocity of the filter being used. The factory installed filter should then be removed from the unit.

b. The unit is shipped from the factory in the horizontal left airflow position.

c. Openings where field wiring enters the cabinet must be completely sealed . The Refrigerant lines must be sealed and Electrical inlets need to be sealed both the low and the high voltage.Location of power entry is shown on the Outline Drawing.

d. The unit may be suspended as long as the unit is supported from both ends as well as the middle to prevent sagging and service access is not obstructed.

e. If the unit is not suspended it must be isolated carefully to prevent sound transmission. Vibration isolators (purchased locally) must be placed under the unit.

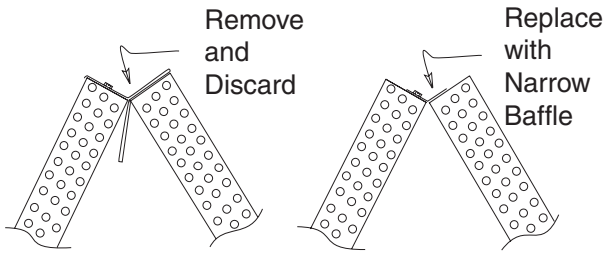


Figure 1. For Maximum Efficiency on Upflow 2/4TGB3F042A & 2/4TGB3F048A Only

f. It is always recommended that an auxiliary drain pan be installed under a horizontal air handler (See Condensate Drain Piping) to prevent possible damage to ceilings.

g. Isolate the auxiliary drain pan from the unit or from the structure.

h. Connect the auxiliary drain line to a separate drain line (no trap is needed in this line) and terminate according to local codes.

i. If a return duct is connected to the Air Handler, it must be the same dimensions as the return opening shown in the outline drawings.

C. DUCT CONNECTIONS

The supply and return air ducts should be connected to the unit with flame retardant duct connectors.

Convertible duct flanges can be field fabricated to make a "flush fit" for ¾" or 1-1/2" ductboard applications. See the Outline drawing for sizes of the discharge opening and flange dimensions. After ductwork is secured, seal the ductwork per local and national codes to prevent air loss/infiltration.

D.Refrigerant Piping

IMPORTANT: Refrigerant piping must be routed to maintain service access to blower compartment and provide easy removal of filter access panel and filter.

1. Refrigerant connections are made outside the cabinet.

NOTE: TXV bulb MUST be protected (wrap a wet rag around the suction line between the TXV bulb and the braze joint) or removed, while brazing the tubing. Overheating of the sensing bulb will affect the functional characteristics and performance of the air handler.

2. If changing the Thermostatic valve (TEV/TXV), be sure to use a wrench and backup wrench to tighten the mechanical fittings 1/6 turn past finger tight upon installation.
3. Installation of refrigerant lines is covered in the installation instructions packaged with the outdoor unit. Evacuation, leak testing and brazing procedures are included in those instructions. Read those instructions before starting installation of refrigerant lines.

NOTE: TXV Equipped is Non-Bleed, and may require a start kit on the outdoor unit.

NOTE: Refrigerant line openings must be sealed along with field wiring.

E. BRAZING TO EVAPORATOR SECTION

IMPORTANT: Do not unseal refrigerant tubing until ready to cut and fit refrigerant lines.

1. Remove the sealing caps from indoor coil field connections.
2. Field supplied tubing should be cut squared-off, ensuring the tube is still round and free of burrs at the connecting end. Clean the tubing to prevent contaminants from entering the system.
3. Run refrigerant tubing into the stub sockets of indoor unit coil. Refrigerant line openings must be completely sealed.
4. Braze and evacuate according to indoor and outdoor installation instructions.

NOTE: Painted areas of unit must be shielded during brazing.

F. CONDENSATE DRAIN PIPING

NOTE: Make certain that the unit has been installed in a level position to ensure proper draining.

The indoor blower is downstream of the evaporator coil which creates a negative pressure at the condensate drain connections during operation. The condensate drain connections in front of the indoor coil are 3/4" NPT. The lower connection is the primary drain. See Figure 2.

Two secondary drain connections are provided for the different orientations (See Figure 2). The lower of the two should be connected as a backup to prevent condensate overflow by a blocked primary drain. The weep hole in center of drain coupling area should be sealed with caulk or RTV.

For proper drainage of condensate, the following steps should be followed:

1. The primary drain line must be trapped with a minimum of 2" water seal as shown in Figure 3.

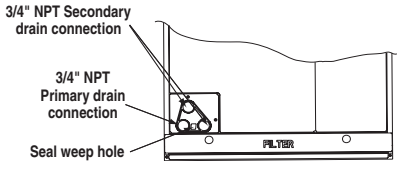


Figure 2. Condensate Drain Locations

2. Do not use preformed 3/4" PVC running traps.

   The use of Field fabricated or manufactured traps is acceptable. A manufactured trap can allow for a float switch option to be added. Refer to the manufacturers data and instructions for details.

3. The trap must be located within 4 feet of the air handler drain outlet connection.
4. It is recommended that a clean-out tee or cross be installed in the primary drain line for future maintenance (See Figure 3).
5. Do not use reducing fittings in the condensate drain lines.
6. Slope the drain lines downward a minimum of 1/4" per foot.
7. Insulate the primary drain to prevent sweating.
8. Provide means for drainage to prevent winter freeze-up of condensate line.
9. Do not connect the drain line to a closed drain system.
10. Use Teflon® tape on the air handler drain line connections! Do Not Use pipe joint compound or PVC/CPVC cement!

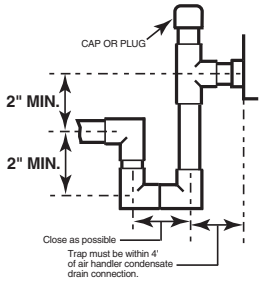


Figure 3. Condensate Trap

It is always recommended that an auxiliary drain pan be installed under a horizontally installed air handler. Connect the auxiliary drain line to a separate drain line (no trap is needed in this line) and terminate according to local codes.

NOTE: DO NOT use a torch or flame near the plastic drain pan coupling.

NOTE: DO NOT tighten the drain pipe excessively. Support the condensate piping and traps outside the unit to prevent strain on the drain coupling.

G. ELECTRICAL — POWER WIRING

⚠ WARNING

ELECTRICAL SHOCK HAZARD! LOCK OUT UNIT DISCONNECT SWITCH IN OPEN POSITION BEFORE SERVICING UNIT. FAILURE TO FOLLOW THIS WARNING COULD RESULT IN PROPERTY DAMAGE, PERSONAL INJURY, OR DEATH.

⚠ WARNING

Grounding Required! Follow proper local and state electrical code on requirements for grounding. Failure to follow code could result in death or serious injury.

1. These Air Handlers are shipped from the factory wired for 230 volts. The units may be wired for 208 volts. Follow instructions on unit wiring diagram located on blower door.
2. The selection of wire and fuse sizes should be made according to the Minimum Branch Circuit Ampacity and the Maximum Overcurrent Device listed on the unit nameplate.
3. Field wiring diagrams for electric heaters and unit accessories are shipped with the accessory.
4. Wiring must conform to National and Local codes. Ground unit per Local codes following recognized safety practices and procedures.

If an electric heater is not installed, the Knockout Plate provided in the Accessory Kit MUST be installed on the outside of the air handler and the conduit terminated to it. The electrical connections are made using the two power leads and ground wire connections which are located near the discharge of the blower.

NOTE: If air handler is used with or without a heater, the 7/8" electrical entry hole as well as any other cabinet penetrations must be sealed air tight.

Pressure Drop for Electrical Heaters in Air Handler Models

NUMBER OF RACKS				
	1	2	3	4
AIRFLOW CFM	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
1200	0.05	0.06	0.07	0.08
1300	0.06	0.07	0.08	0.09
1400	0.07	0.08	0.1	0.11
1500	0.08	0.09	0.11	0.13
1600	0.09	0.1	0.12	0.15
1700	0.1	0.11	0.14	0.17
1800	0.11	0.13	0.16	0.19
1900	0.13	0.15	0.18	0.21
2000	0.14	0.17	0.23	0.2

Strip heater pressure drop measurements listed in this table must be added to system static pressure to correctly use corresponding blower performance table located on Pages 4, 5, & 8.

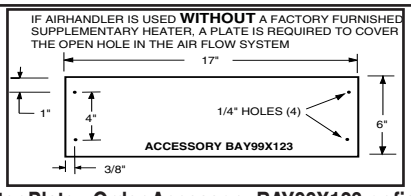


Figure 4. Heater Plate - Order Accessory BAY99X123 or field fabricate to these dimensions

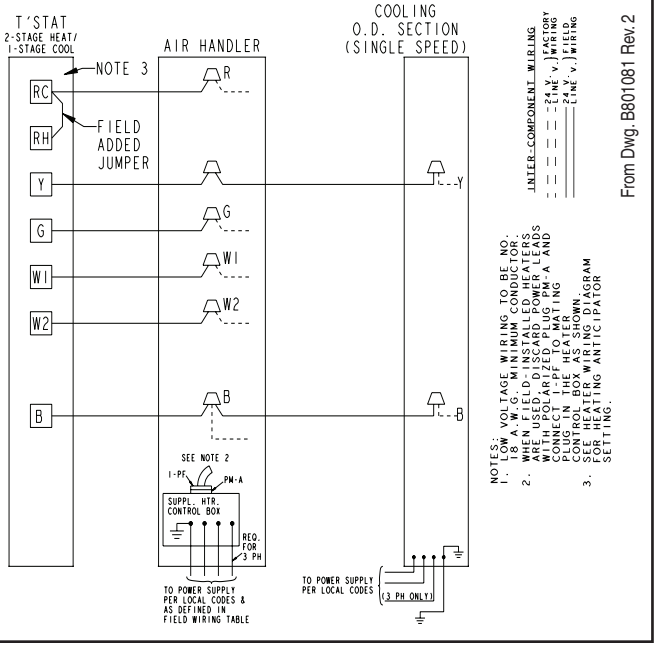
H. CONTROL WIRING

1. Connect wiring between indoor unit, outdoor unit and thermostat. The use of color-coded low-voltage wires is recommended.
2. Field wiring diagrams are provided which show the low voltage wiring hookup for a single speed cooling only system (with supplementary heaters) and a heat pump system (with supplementary heaters). Plug in type electrical connectors are provided for use with supplementary heaters.

IMPORTANT: When supplementary heaters are installed, inspect to insure that all packaging material has been removed.

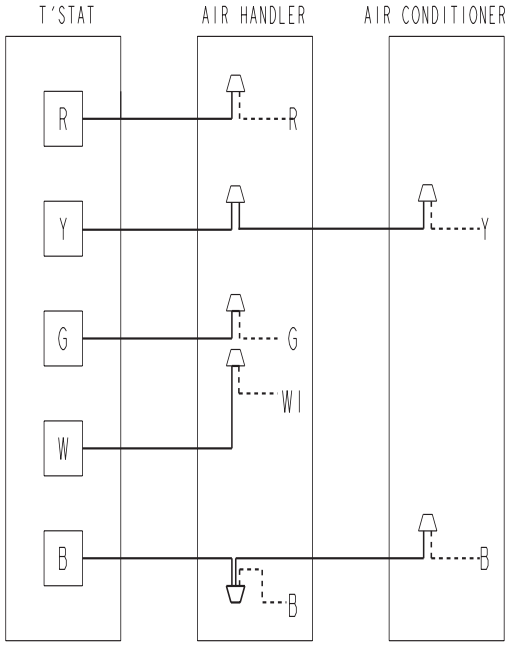
NOTE: Direct drive motors have bearings which are permanently lubricated and under normal use lubrication is not recommended.

2/4TGB AIR HANDLERS WITH SINGLE STAGE COOLING AND TWO STAGE HEATING



From Dwg. B801081 Rev. 2

2/4TGB AIR HANDLERS WITH SINGLE STAGE COOLING, 1 STAGE HEAT



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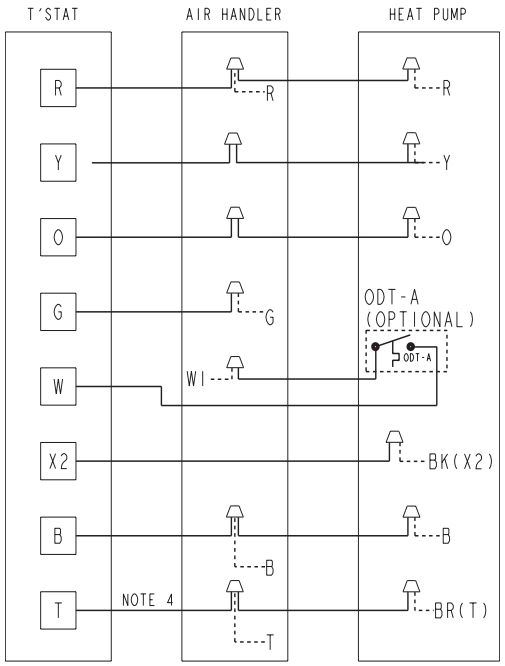
1. BE SURE POWER SUPPLY AGREES WITH EQUIPMENT NAMEPLATE.
2. POWER WIRING AND GROUNDING OF EQUIPMENT MUST COMPLY WITH LOCAL CODES.
3. LOW VOLTAGE WIRING TO BE NO. 18 AWG MINIMUM CONDUCTOR.

24V INTER-COMPONENT WIRING

(FACTORY) (WIRING) (FIELD) (WIRING)

2/4TGB AIR HANDLERS WITH SINGLE SPEED HEAT PUMP



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1. BE SURE POWER SUPPLY AGREES WITH EQUIPMENT NAMEPLATE.
2. POWER WIRING AND GROUNDING OF EQUIPMENT MUST COMPLY WITH LOCAL CODES.
3. LOW VOLTAGE WIRING TO BE NO. 18 AWG MINIMUM CONDUCTOR.

24V INTER-COMPONENT WIRING

(FACTORY) (WIRING) (FIELD) (WIRING)

Airflow Performance
2/4TGB3F18A1000A: Wet coil, No Heaters

EXTERNAL STATIC PRESSURE (in.w.g.)	AIRFLOW (CFM)											
	VERTICAL						HORIZONTAL					
	230 VOLTS			208 VOLTS			230 VOLTS			208 VOLTS		
	HIGH	MED	LOW	HIGH	MED	LOW	HIGH	MED	LOW	HIGH	MED	LOW
0	895	830	648	805	735	567	878	814	659	791	727	576
0.1	864	799	625	771	711	545	841	781	626	758	695	548
0.2	828	766	598	738	679	514	802	743	591	722	659	514
0.3	790	731	567	703	644	477	760	702	555	683	621	476
0.4	748	691	531	664	604	437	715	656	517	639	580	437
0.5	702	645	487	619	559	395	665	607	473	591	536	393
0.6	649	590	433	565	506	345	608	552	422	536	486	341
0.7	582	525	364	499	443	283	544	490	358	474	428	276
0.8	497	445	276	419	364	198	468	418	277	401	357	191
0.9	385	347	164	322	263	78	378	335	172	316	267	75
NOTES:	With filter, no horizontal drip tray - Small apex baffle						As shipped, with filter					

Airflow Performance
2/4TGB3F25A1000A: Wet coil, No Heaters

EXTERNAL STATIC PRESSURE (in.w.g.)	AIRFLOW (CFM)											
	VERTICAL						HORIZONTAL					
	230 VOLTS			208 VOLTS			230 VOLTS			208 VOLTS		
	HIGH	MED	LOW	HIGH	MED	LOW	HIGH	MED	LOW	HIGH	MED	LOW
0	1035	965	773	926	854	692	1015	955	786	935	878	702
0.1	992	934	730	885	814	648	962	910	759	891	834	675
0.2	944	884	695	845	777	616	916	864	718	849	792	632
0.3	896	834	661	804	741	582	872	819	674	807	750	586
0.4	849	788	621	761	700	537	824	773	628	761	705	544
0.5	800	744	569	713	651	477	768	725	580	710	655	501
0.6	742	690	501	655	591	403	702	670	521	650	596	444
0.7	665	603	410	582	516	319	625	601	438	579	526	351
0.8	555	453	293	489	424	238	538	510	314	493	441	190
0.9	396	197	146	367	313	174	443	387	122	391	338	-
NOTES:	With filter, no horizontal drip tray - Small apex baffle						As shipped, with filter					

Airflow Performance
2/4TGB3F30A1000A: Wet coil, No Heaters

EXTERNAL STATIC PRESSURE (in.w.g.)	AIRFLOW (CFM)											
	VERTICAL						HORIZONTAL					
	230 VOLTS			208 VOLTS			230 VOLTS			208 VOLTS		
	HIGH	MED	LOW	HIGH	MED	LOW	HIGH	MED	LOW	HIGH	MED	LOW
0	1114	988	841	976	835	699	1118	1014	858	992	856	721
0.1	1083	960	817	941	818	682	1080	979	836	969	839	702
0.2	1046	935	799	914	801	665	1036	947	815	939	820	686
0.3	1004	908	781	887	781	647	990	913	792	905	798	669
0.4	958	875	757	856	756	625	942	874	764	867	770	648
0.5	908	834	723	818	725	597	893	827	729	824	734	619
0.6	851	782	679	770	684	562	838	770	685	772	688	581
0.7	783	719	624	708	632	519	772	705	630	709	631	532
0.8	699	645	560	633	565	466	685	630	563	629	562	471
0.9	594	560	491	545	483	404	565	548	485	526	479	398
NOTES:	With filter, no horizontal drip tray - Small apex baffle						As shipped, with filter					

Airflow Performance
2/4TGB3F36A1000A: Wet coil, No Heaters

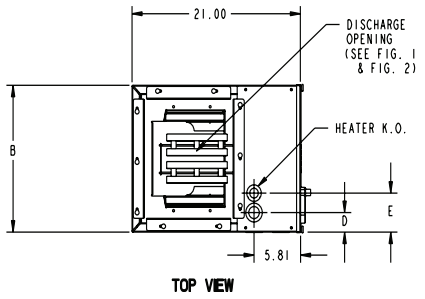
EXTERNAL STATIC PRESSURE (in.w.g.)	AIRFLOW (CFM)											
	VERTICAL						HORIZONTAL					
	230 VOLTS			208 VOLTS			230 VOLTS			208 VOLTS		
	HIGH	MED	LOW	HIGH	MED	LOW	HIGH	MED	LOW	HIGH	MED	LOW
0	1305	1191	1102	1239	1062	957	1262	1187	1112	1211	1080	967
0.1	1259	1154	1076	1200	1039	947	1211	1146	1080	1164	1051	948
0.2	1209	1112	1041	1154	1012	924	1156	1082	1031	1114	1007	930
0.3	1156	1066	1001	1105	980	895	1099	1012	975	1062	955	902
0.4	1101	1018	958	1054	941	863	1044	946	917	1009	901	858
0.5	1043	968	910	1000	896	826	986	888	860	952	845	797
0.6	981	911	857	939	841	781	922	832	800	889	785	722
0.7	911	843	793	866	776	721	843	768	731	813	715	641
0.8	832	757	713	773	697	636	738	676	641	717	627	568
0.9	739	641	610	649	603	511	593	531	517	592	510	520
NOTES:	With filter, no horizontal drip tray - Small apex baffle						As shipped, with filter					

Airflow Performance
2/4TGB3F42A1000A: Wet coil, No Heaters

EXTERNAL STATIC PRESSURE (in.w.g.)	AIRFLOW (CFM)											
	VERTICAL						HORIZONTAL					
	230 VOLTS			208 VOLTS			230 VOLTS			208 VOLTS		
	HIGH	M-HI	LOW	HIGH	M-HI	LOW	HIGH	M-HI	LOW	HIGH	M-HI	LOW
0	1925	1823	1432	1833	1691	1212	1870	1788	1424	1786	1674	1662
0.1	1850	1753	1399	1758	1636	1192	1791	1724	1397	1728	1612	1621
0.2	1765	1676	1363	1686	1563	1168	1717	1648	1358	1657	1545	1558
0.3	1673	1597	1317	1611	1489	1136	1641	1569	1309	1580	1476	1491
0.4	1579	1518	1255	1530	1421	1091	1559	1490	1251	1500	1404	1422
0.5	1484	1440	1175	1439	1358	1031	1466	1411	1184	1416	1328	1350
0.6	1388	1358	1078	1340	1286	956	1363	1326	1105	1326	1244	1262
0.7	1292	1266	966	1233	1182	868	1249	1225	1014	1223	1146	1135
0.8	1192	1154	846	1123	1013	769	1127	1090	906	1096	1027	940
0.9	1084	1008	726	1015	734	663	1003	900	778	933	878	636
NOTES:	With filter, no horizontal drip tray - Small apex baffle						As shipped, with filter					

Airflow Performance Tables continued on back page.

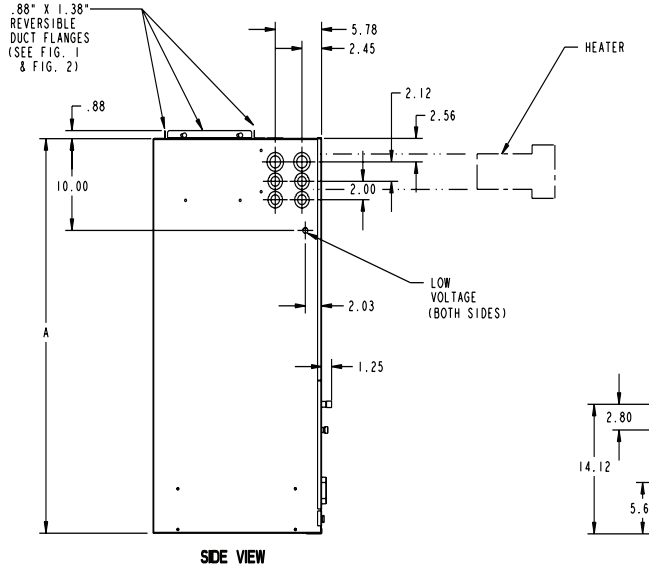
OUTLINE DRAWING FOR 2/4TGB3F18-36A



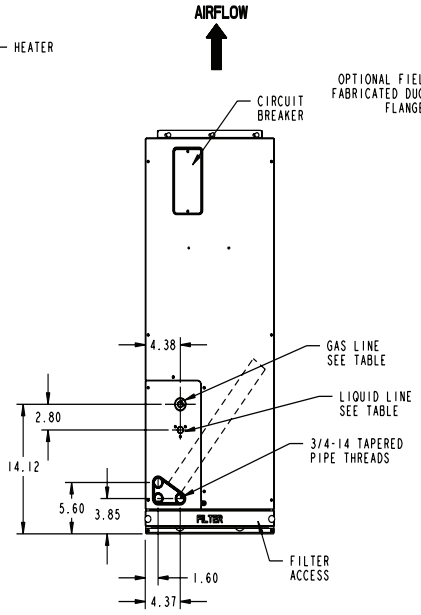
TOP VIEW

MINIMUM UNIT CLEARANCE TABLE		
	TO COMBUSTIBLE MATERIAL (REQUIRED)	SERVICE CLEARANCE (RECOMMENDED)
SIDES	0"	2"
FRONT	0"	21"
BACK	0"	0"
INLET DUCT	0"	1"
OUTLET DUCT	1"*	

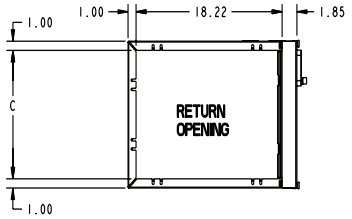
* 1" FOR THE FIRST 3 FT. OF OUTLET DUCT WHEN ELECTRIC HEATERS ARE INSTALLED, EXCEPT MODELS BAYHTR1405, 1408, AND 1410 ARE APPROVED FOR 0" PLENUM AND DUCT CLEARANCE IN THE UPFLOW CONFIGURATION ONLY.



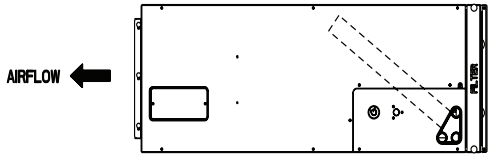
SIDE VIEW



VERTICAL UPFLOW



BOTTOM VIEW



HORIZ LEFT

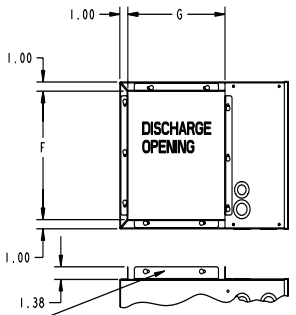


FIG. 1

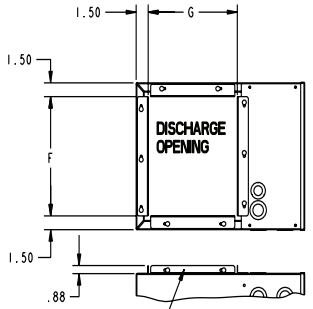


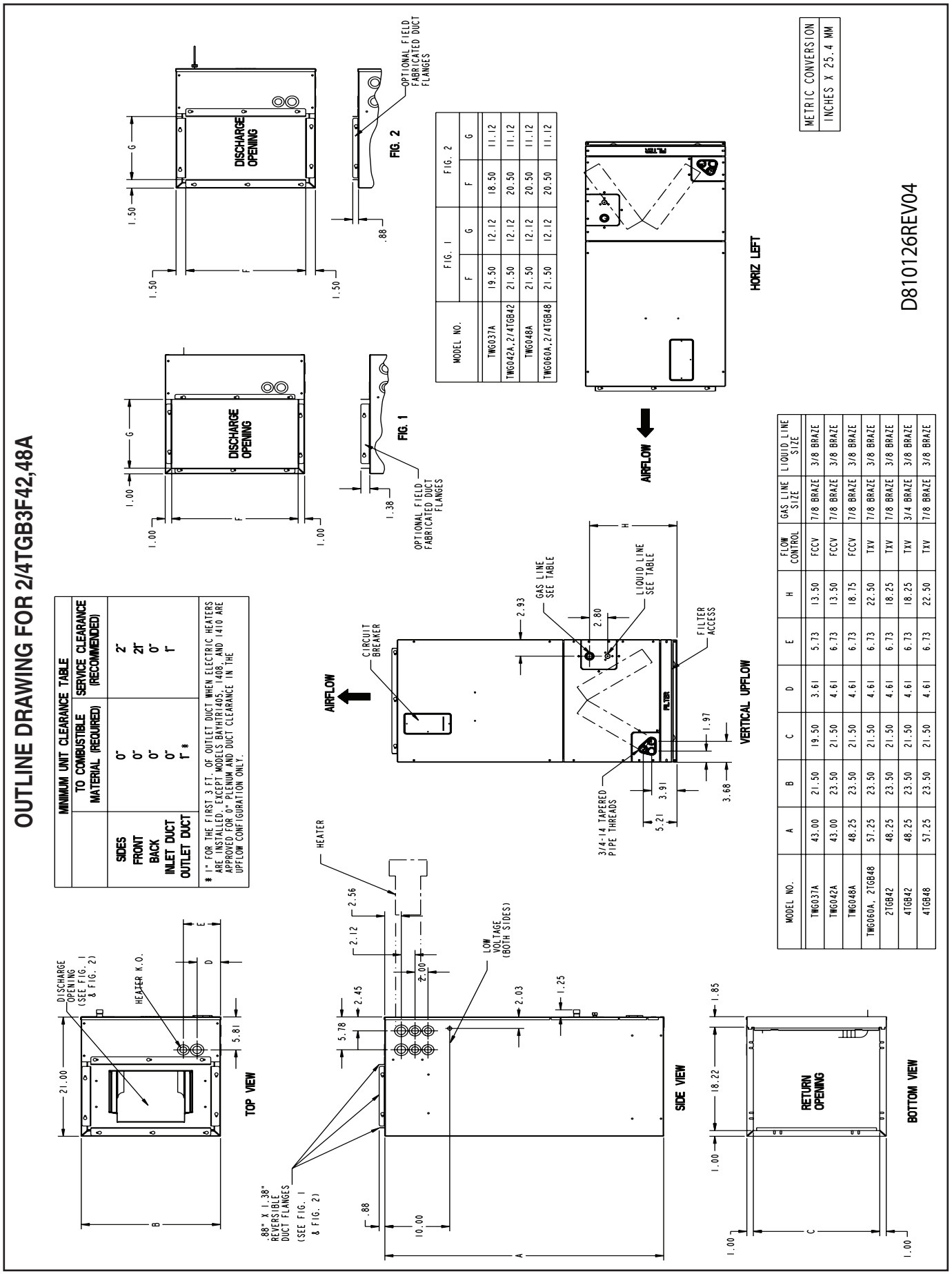
FIG. 2

	FIGURE 1		FIGURE 2	
MODEL NO.	F	G	F	G
TWG018A	14.00	12.12	13.00	11.12
TWG025A	16.00	12.12	15.00	11.12
TWG030A	16.00	12.12	15.00	11.12
TWG036A	16.00	12.12	15.00	11.12
2/4TGB-18	16.00	12.12	15.00	11.12
2/4TGB-25	16.00	12.12	15.00	11.12
2/4TGB-30	16.00	12.12	15.00	11.12
2/4TGB-36	16.00	12.12	15.00	11.12

MODEL NO.	A	B	C	D	E	FLOW CONTROL	GAS LINE SIZE	LIQUID LINE SIZE
TWG018A	43.00	16.00	14.00	2.13	4.25	FCCV	5/8 BRAZE	1/4 BRAZE
TWG025A	45.70	18.00	16.00	3.13	5.25	FCCV	3/4 BRAZE	5/16 BRAZE
TWG030A	45.70	18.00	16.00	3.13	5.25	FCCV	3/4 BRAZE	5/16 BRAZE
TWG036A	52.00	18.00	16.00	3.13	5.25	FCCV	7/8 BRAZE	3/8 BRAZE
2TGB-18	45.70	18.00	16.00	3.13	5.25	TXV	5/8 BRAZE	1/4 BRAZE
2TGB-25	45.70	18.00	16.00	3.13	5.25	TXV	3/4 BRAZE	5/16 BRAZE
2TGB-30	52.00	18.00	16.00	3.13	5.25	TXV	3/4 BRAZE	5/16 BRAZE
2TGB-36	52.00	18.00	16.00	3.13	5.25	TXV	7/8 BRAZE	3/8 BRAZE
4TGB-18	45.70	18.00	16.00	3.13	5.25	TXV	1/2 BRAZE	3/8 BRAZE
4TGB-25	45.70	18.00	16.00	3.13	5.25	TXV	5/8 BRAZE	3/8 BRAZE
4TGB-30	52.00	18.00	16.00	3.13	5.25	TXV	3/4 BRAZE	3/8 BRAZE
4TGB-36	52.00	18.00	16.00	3.13	5.25	TXV	3/4 BRAZE	3/8 BRAZE

METRIC CONVERSION
INCHES X 25.4 MM

D810094REV05



MODEL NO.	A	B	C	D	E	H	FLOW CONTROL	GAS LINE SIZE	LIQUID LINE SIZE
TWG037A	43.00	21.50	19.50	3.61	5.73	13.50	FCCV	7/8 BRAZE	3/8 BRAZE
TWG042A	43.00	23.50	21.50	4.61	6.73	13.50	FCCV	7/8 BRAZE	3/8 BRAZE
TWG048A	48.25	23.50	21.50	4.61	6.73	18.75	FCCV	7/8 BRAZE	3/8 BRAZE
TWG060A, 2TGB48	57.25	23.50	21.50	4.61	6.73	22.50	TXV	7/8 BRAZE	3/8 BRAZE
2TGB42	48.25	23.50	21.50	4.61	6.73	18.25	TXV	7/8 BRAZE	3/8 BRAZE
4TGB42	48.25	23.50	21.50	4.61	6.73	18.25	TXV	3/4 BRAZE	3/8 BRAZE
4TGB48	57.25	23.50	21.50	4.61	6.73	22.50	TXV	7/8 BRAZE	3/8 BRAZE

Airflow Performance 2/4TGB3F48A1000A: Wet coil, No Heaters												
EXTERNAL STATIC PRESSURE (in.w.g.)	AIRFLOW (CFM)											
	VERTICAL						HORIZONTAL					
	230 VOLTS			208 VOLTS			230 VOLTS			208 VOLTS		
	HIGH	M-HI	LOW	HIGH	M-HI	LOW	HIGH	M-HI	LOW	HIGH	M-LO	LOW
0	1917	1664	1309	1836	1473	1101	1787	1645	1391	1751	1510	1134
0.1	1830	1615	1308	1767	1447	1108	1715	1579	1366	1678	1465	1157
0.2	1751	1561	1287	1698	1413	1102	1637	1519	1329	1606	1418	1138
0.3	1675	1501	1256	1627	1372	1086	1555	1454	1282	1532	1362	1102
0.4	1596	1437	1218	1551	1322	1059	1472	1376	1223	1451	1295	1062
0.5	1511	1366	1173	1470	1263	1022	1387	1284	1153	1363	1215	1024
0.6	1420	1289	1118	1382	1192	972	1298	1181	1072	1266	1125	983
0.7	1323	1202	1045	1288	1106	905	1201	1075	981	1163	1027	926
0.8	1223	1104	942	1188	1000	817	1091	980	881	1055	929	830
0.9	1126	992	794	1086	869	702	962	911	775	947	840	663
NOTES:	With filter, no horizontal drip tray - Small apex baffle						As shipped, with filter					

CHECKOUT PROCEDURE

1. Check the Air Handler installation in accordance with this Installer's Guide.

2. “Operational Procedure” for the system installation can be found in the outdoor unit installer guide and will be compatible with this Air Handler.

CHECKOUT PROCEDURES

After installation has been completed, it is recommended that the Air Handler be checked against the following checklist.

1. Make sure power is “OFF” at power disconnect switch.

2. Check all field wiring for tight connections. See that grounding of unit is in accord with code.

3. Make sure unit suspension (if used) is secure and that there are no tools or loose debris in, around or on top of the unit.

4. Check all duct outlets; they must be open and unrestricted.

5. Check drain lines and be sure all joints are tight.

6. Make sure secondary drain pan is installed.

7. Check power supply for correct requirements per unit nameplate.

8. All central air conditioning and heating systems require a return air filter (not included) to operate properly. Make sure a return air filter is installed.

9. Check filters for proper size. Inform owner of proper procedure for removal and reinstallation.

10. Energize the system and carefully observe its operation; make any necessary adjustment.

11. Instruct owner, engineer (if possible) on proper operating procedure and leave Use and Care Manual with owner.

SUPPLEMENTARY HEATERS CHECKOUT PROCEDURES
IF a heater is USED, see "limitations and recommendations"
to determine if the heater requires a SPECIAL CIRCUIT.

1. Be sure the disconnect switch is “OFF”, and safety label (if any) is attached.

2. Check on field wiring for tight connections and grounding according to codes.

3. Check circuit protection for proper size per nameplate specifications.

4. Check control box panel — in place and secured.

NOTE: OPERATION OF HEATERS MUST BE CHECKED DURING THE OPERATIONAL CHECK OF THE TOTAL SYSTEM.

6200 Troup Highway
Tyler, Texas 75707

For more information contact
your local dealer (distributor)