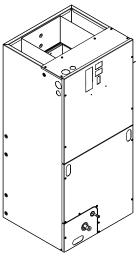
Installer's Guide

Communicating / 24 Volt Control Convertible Air Handlers 2 — 5 Ton

TEM8A0B24V21DA TEM8A0B30V31DA TEM8A0C36V31DA TEM8A0C42V41DA TEM8A0C48V41DA TEM8A0D48V41DA TEM8A0C60V51DA TEM8A0D60V51DA





The TEM8 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.

A SAFETY WARNING

Only qualified personnel should install and service the equipment. The installation, starting up, and servicing of heating, ventilating, and air-conditioning equipment can be hazardous and requires specific knowledge and training. Improperly installed, adjusted or altered equipment by an unqualified person could result in death or serious injury. When working on the equipment, observe all precautions in the literature and on the tags, stickers, and labels that are attached to the equipment.



SAFETY SECTION **AIR HANDLERS**

Important: This document contains a wiring diagram,

a parts list, and service information. This is customer property and is to remain with this unit. Please return to service information pack upon completion of work.

Important: These instructions do not cover all variations in systems nor provide for every possible contingency to be met in connection with the installation. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's purposes, the matter should be referred to your installing dealer or local distributor.

A WARNING

HAZARDOUS VOLTAGE!

Failure to follow this Warning could result in property damage, severe personal injury, or death.

Disconnect all electric power, including remote disconnects before servicing. Follow proper lockout/tagout procedures to ensure the power cannot be inadvertently energized.

A CAUTION

GROUNDING REQUIRED!

Failure to inspect or use proper service tools may result in equipment damage or personal injury. Reconnect all grounding devices. All parts of this product that are capable of conducting electrical current are grounded. If grounding wires, screws, straps, clips, nuts, or washers used to complete a path to ground are removed for service, they must be returned to their original position and properly fastened.

A WARNING

LIVE ELECTRICAL COMPONENTS!

Failure to follow this Warning could result in property damage, severe personal injury, or death.

Follow all electrical safety precautions when exposed to live electrical components. It may be necessary to work with live electrical components during installation, testing, servicing, and troubleshooting of this product.

A WARNING

PRESSURIZED REFRIGERANT!

Failure to follow this Warning could result in personal injury

System contains oil and refrigerant under high pressure. Recover refrigerant to relieve pressure before opening the system. Do no use nonapproved refrigerants or refrigerant substitutes or refrigerant additives.

A CAUTION

SHARP EDGE HAZARD!

Failure to follow this Caution could result in property damage or personal injury. Be careful of sharp edges on equipment or any cuts made on sheet metal while installing or servicina.

▲ CAUTION

HAZARDOUS VAPORS!

Failure to follow this caution could result in property damage or personal injury. Equipment corrosion 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.

CAUTION

COIL IS PRESSURIZED!

- Coil is pressurized with approximately 8-12 psi dry air and factory checked for leaks.
- Carefully release the pressure by removing the rubber plug on the liquid line.
- If no pressure is released, check for leaks.

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A WARNING

SAFETY HAZARD!

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 a NIOSH approved dust/mist respirator
- Avoid contact with the skin or eyes. Wear longsleeved, 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 AREA GENTLY WITH SOAP AND WARM WATER AFTER HANDLING.

This warning complies with state of California law, Proposition 65.

A WARNING

SAFETY HAZARD!

This appliance is not to be used by persons (including children) with reduced physical, sensory, or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction.

A WARNING

SAFETY HAZARD!

Children should be supervised to ensure that they do not play with the appliance.

Important: Installation of this unit shall be made in accordance with the National Electric Code, NFPA No. 90A and 90B, and any other local codes or utilities requirements.

Important: Air handlers do not require repositioning of the coil or drain pan for upflow or horizontal left applications. See the downflow and horizontal right installation sections for application instructions. Note: Air handlers have been evaluated in accordance with the Code of Federal Regulations, Chapter XX, Part 3280 or the equivalent. "SUITABLE FOR MOBILE HOME USE."

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

Note: The manufacturer recommends installing ONLY A.H.R.I approved, matched indoor and outdoor systems. Some of the benefits of installing approved matched indoor and outdoor split systems are maximum efficiency, optimum performance, and the best overall system reliability.

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Features

Table 1. Standard Features

- COMMUNICATING OR 24 VOLT CONTROL
- MULTI-POSITION UPFLOW, DOWNFLOW, HORIZONTAL LEFT AND HORIZONTAL RIGHT
- PAINTED FINISH ON GALVANIZED STEEL EXTERIOR WITH FULLY INSULATED CABINET THAT MEETS R4.2 VALUE
- STURDY POLYCARBONATE DRAIN PANS
 - The TEM air handler has factory installed drain pans and is shipped for upflow and horizontal left applications
- 208/230 VAC OPERATION
- VARIABLE-SPEED DIRECT DRIVE BLOWER.
- FACTORY INSTALLED R-410A THERMAL EXPANSION VALVE
- ALL ALUMINUM COIL
- BOTTOM RETURN
- MEETS THE MINIMUM LEAKAGE REQUIREMENTS FOR THE FLORIDA AND CALIFORNIA BUILDING CODES

Table 2. Optional Accessories

- 4,5,8,10,15,20, and 25 KW SINGLE PHASE ELECTRIC HEATERS
 - Circuit breakers available on single phase 4, 5, 8, 10, 15, 20, and 25 KW heaters
 - Lugs available on single phase 4, 5, 8, and 10 KW heaters
 - Lugs available on three phase 10 and 15 KW heaters
- SINGLE POINT POWER ENTRY KIT (for 15 and 20 KW heaters)
- SUPPLY DUCT FLANGE KIT
- DOWNFLOW SUB-BASE KITS TAYBASE185, TAYBASE235, TAYBASE260
- SLIM FIT FILTER BOX KIT BAYSF1185AAA, BAYSF1235AAA, BAYSF1265AAA

Installation Instructions

1. Unpacking

Carefully unpack the unit and inspect the contents for damage. If any damage is found at the time of delivery, proper notification and claims should be made with the carrier.

Check the rating plate to assure model number and voltage, plus any kits match with what you ordered. The manufacturer should be notified within 5 days of any discrepancy or parts shortage.

2. Location

The air handler should be centrally located and may be installed in a closet, alcove, utility room, basement, crawl space or attic. Minimum clearances must be met.

Important: The downflow sub-base may be required with electric heat applications.
See minimum clearance table on unit nameplate.

The unit must be installed in a level position to ensure proper condensation drainage. Make sure the unit is level in both directions within 1/8" on either side.

When the unit is installed in a closet or utility room, the room should be large enough, and have an opening to allow replacement of the unit. All servicing is done from the front and a clearance of 21" is needed for service unless the closet door aligns with the front of the air handler.

If you are installing the unit in an unconditioned space such as an attic or crawl space, you must ensure that the area provides sufficient air circulation to prevent moisture collection on the cabinet during high dew point conditions. A drain pan must be installed under the entire unit when it is installed in or above a finished ceiling or in an unconditioned space.

3. Duct Work

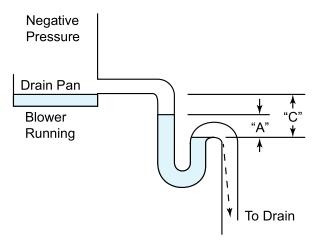
The duct work should be installed in accordance with the NFPA No. 90A "Installation of Air Conditioning and Ventilating systems" and No. 90B "Residential Type Warm Air Heating and Air Conditioning Installation."

The duct work should be insulated in accordance with the applicable requirements for the particular installation as required by HUD, FHA, VA the applicable building code, local utility or other governing body.

4. Condensate Drain

The unit is supplied with primary and auxiliary condensate drains that have 3/4" NPT connections. The primary drain must be trapped outside the unit and piped in accordance with applicable building codes.

The figure shows the operation of a properly designed trap under normal operating conditions when the blower is running and the condensate is draining. Note the difference in height of the water column must at least equal the normal negative static pressure existing during operation between the cooling coil and blower. It is advisable to have the difference in water column height somewhat greater than the normal maximum operating static to allow for greater static caused by dirty filters or for the bounce of the water column on start up.



Proper operation of condensate trap under normal operating conditions.

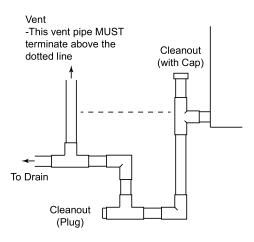
"A" height of water column equals negative static pressure existing in system.

"C" dimension should at least equal two times the maximum negative static pressure that can occur in system.

Do not reduce the drain line size less than the connection size on the drain pan. Condensate should be piped to an open drain or to the outside. All drains must pitch downward away from the unit a minimum of 1/4" per foot of line to ensure proper drainage.

Important: If cleanout Tee is used, stand pipe must be sealed/capped.

Important: If a vent Tee is used, it must be downstream from the trap.



Insulate the primary drain line to prevent sweating where dew point temperatures may be met. (Insulation is optional depending on climate and application needs.)

5. Refrigerant Piping

Refrigerant piping external to the unit shall be sized in accordance with the instructions of the manufacturer of the outdoor equipment.

6. Metering Device

All units are shipped and installed with an internally-checked, non-bleed TXV designed for air conditioning or heat pump operation. Some outdoor models may require a start assist kit. See outdoor unit for more information.

7. Blower

This unit is supplied with a variable speed motor with a direct drive blower wheel which can obtain various air flows. The unit is shipped with factory set cooling and heating air flows. Performance tables are available for additional airflow settings. Disconnect all power to the unit before making any adjustments to the airflow settings. Be sure to check the air flow and the temperature drop across the evaporator coil to ensure sufficient air flow.

8. Airflow Adjustment

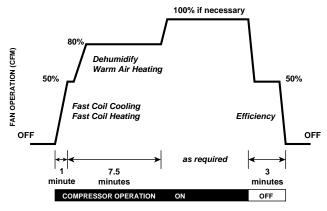
Note: A CDA tool may be plugged into the TEM8 control board and used to configure or monitor the system

9. Indoor Blower Timing

Table 3. Delay Options

, ,	be configured for heating and re are 4 blower off delay options
Option 1	90 seconds at 100% air flow
Option 2	No delay
Option 3	180 seconds at 50% air flow
Option 4	Enhanced Mode

Figure 1. Enhanced Mode



10. Wiring

Consult all schematic and pictorial wiring diagrams of this unit and the outdoor equipment to determine compatibility of wiring connections and to determine specific requirements.

All field wiring to the air handler should be installed

in accordance with the latest edition of the National Electric Code NFPA No. 70 and any local codes. Check rating plates on unit for rated volts, minimum circuit ampacity and maximum over current protection. Supply circuit power wiring must be 75 degree C (167 degree F) minimum copper conductors only. Copper supply wires shall be sized to the National Electric Code or local code requirements, whichever is more stringent.

The unit is shipped wired for 230/240 Volt AC 60 HZ 1 Phase Operation. If the unit is to be operated at 208 VAC 60HZ, follow the instructions on the indoor unit wiring diagram to change the low voltage transformer to 208 VAC operation (Ensure unit is properly grounded).

Class 2 low voltage control wiring should not be run in conduit with power wiring and must be separated from power wiring unless class 1 wire with proper voltage rating is used.

Low voltage control wiring should be 18 Awg, color coded (105 degree C minimum). For lengths longer than 100ft., 16 Awg wire should be used. Make certain that separation of control wiring and power wiring has been maintained.

11. Air Filter

To protect the coil, blower and other internal parts from excessive dirt and dust an air filter must be installed before air enters the evaporator coil. A remote filter must be installed. Consult the filter manufacturer for proper sizing and maximum velocity requirements.

Important: Air filters shall meet the test requirements in UL 900.

12. Operational and Checkout Procedures

To obtain proper performance, all units must be operated and charge adjustments made in accordance with procedures found in the Service Facts document of the outdoor unit. After installation has been completed, it is recommended that the entire system be checked against the checkout list located at the back of this document. See "Checkout Procedures," p.

13. Maintenance

The system air filter(s) should be inspected, cleaned or replaced at least monthly. Make certain that the access panels are replaced and secured properly before placing the unit back in operation. This product is designed for dependable service; however, periodic maintenance should be scheduled and conducted by trained professional service personnel. This service should be conducted at least annually and should include testing and inspection of electrical and refrigerant components, flushing of condensate drain, and repriming of condensate trap. The heat transfer surface should be cleaned. The blower motor is permanently lubricated for normal operating conditions.

Sequence of Operation

Abbreviations

AFC = Airflow Control

Note: Use variable speed outdoor Sequence of Operation in conjunction with the TEM8 Sequence of Operation.

The installing and servicing technician should have an understanding of the sequence of operation to be able to properly setup and diagnose functions of the air handler.

See unit, electric heat, and field wiring diagrams for additional information.

Continuous Fan

Important: If the indoor air exceeds 60% relative humidity or simply feels uncomfortably humid, it is recommended that the indoor fan only be used in the AUTO mode.

- When a fan request is received from the thermostat, the AFC sends a command to the serial communicating blower motor to run. Airflow can be adjusted through the thermostat.
- Humidity Control When enabled at the thermostat, this feature will disable any blower off delays and disable continuous fan mode when the humidity is above the dehumidification setpoint. This will help prevent coil condensation from being evaporated back into the air stream.

Cooling Mode

- When a request for 1st stage cooling is received, the AFC sends a command to the serial communicating blower motor to run at 1st stage cooling airflow. (Delay profiles from the thermostat may change blower motor timing and actual airflow demand)
- When a request for 2nd stage cooling is received, the AFC sends a command to the serial communicating blower motor to run at 100 % cooling airflow.
- When a request for cooling is removed, the AFC will turn off the blower motor after any user selected fan-off delays have expired.

Note: Delay profiles from the thermostat may change blower motor timing and actual airflow demand.

Heat pump (compressor only)

 When a request for 1st stage heat is received, the AFC sends a command to the serial communicating blower motor to run at 1st stage heating airflow.

- Humidifier contacts close on demand from thermostat.
- When a request for 2nd stage mechanical heat is received, the AFC sends a command to the serial communicating blower motor to run at 100 % heating airflow.
- When a request for heat pump is removed, the AFC will turn off the blower motor after any user selected fan-off delays have expired.

Note: Delay profiles from the thermostat may change blower motor timing and actual airflow demand.

Electric Heat

- When a request for electric heat is received, the AFC will energize the on board 24 volt relays per the amount of heat requested from the thermostat and the size of the heater installed.
- The AFC sends a command to the serial communicating blower motor to run proper airflow and close the blower interlock relay on the EHC.

Defrost

- The OD unit will initiate defrost and send a message to the AFC.
- Electric or hydronic heat will be energized to help temper the air.

Unit Test Mode

Unit Test Mode will exit if any demand is given to the

To enter Unit Test Mode:

- 1. Set System Switch on comfort control to Off.
- Scroll down to the Unit Test selection and push the "Enter" button.

Sequence of Unit Test Mode (OD unit is not energized during the Unit Test Mode)

- AFC energizes the blower at 50% and then continues to ramp until it reaches 100% cooling airflow.
- 2. Humidifier contacts close when the blower starts.
- 3. AFC energizes the W relays in 10 second intervals. The blower remains at 100% air flow.
- All relays de-energize and the blower shuts off five seconds after the last bank of heat is energized.

Note: If an error occurs during the Unit Test Mode, the Fault LED will flash a code and continue the test.

Electrical — Low Voltage

Table 4. Low Voltage Maximum Wire Length

The Low Voltage Maximum Wire Length table defines the size and combined total maximum	Control Wire —	Communicating
length of the low voltage wiring from the	WIRE SIZE	MAX. WIRE LENGTH
outdoor unit, to the indoor unit, and to the thermostat.	18 AWG	500 FT. Combineed
Note: The use of color coded low voltage wire is recommended to simplify	Control Wir	e — 24 Volt
connections between the outdoor unit,	WIRE SIZE	MAX. WIRE LENGTH
the control, and the indoor unit.	18 AWG	100 FT. Combineed

Table 5. Humidifier and External Switch

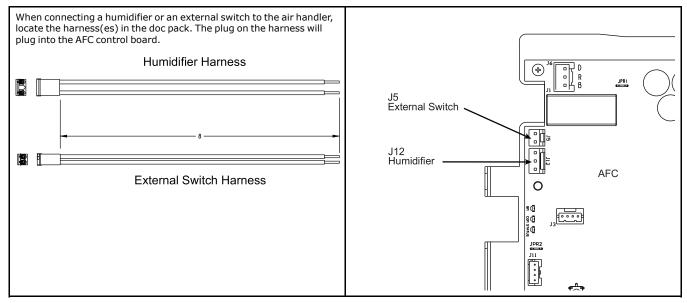
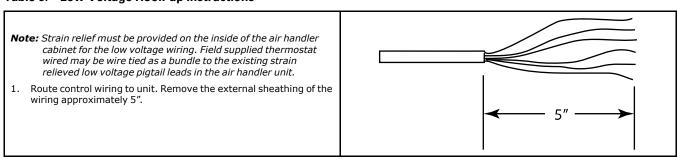
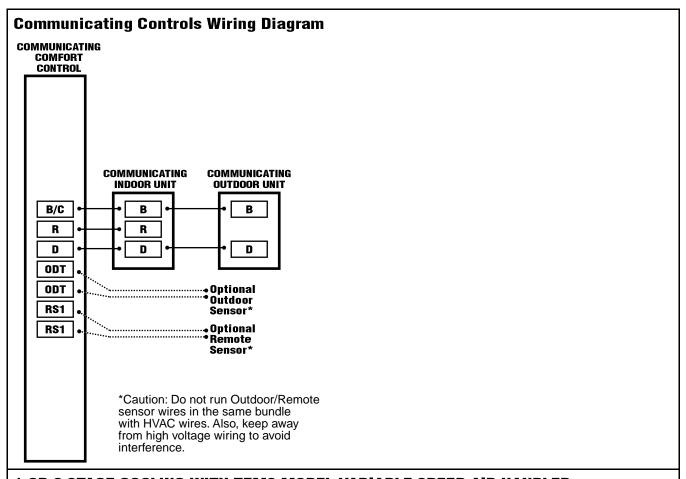
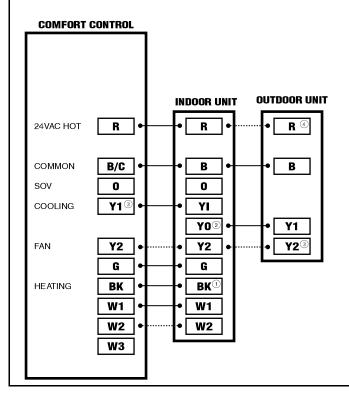


Table 6. Low Voltage Hook-up Instructions



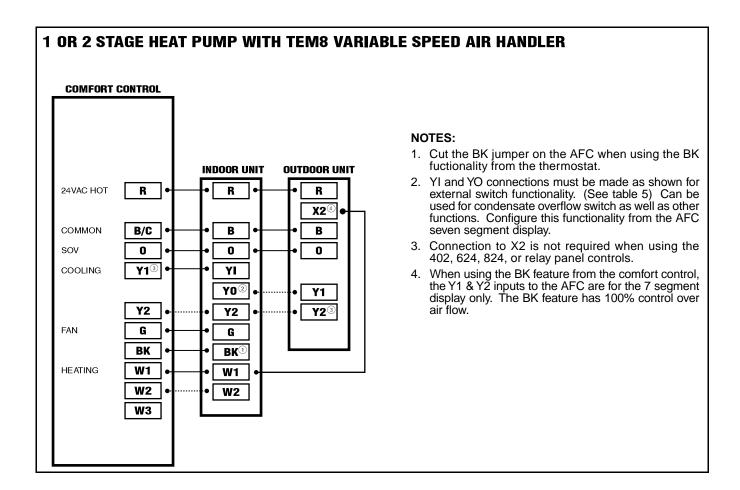


1 OR 2 STAGE COOLING WITH TEM8 MODEL VARIABLE SPEED AIR HANDLER

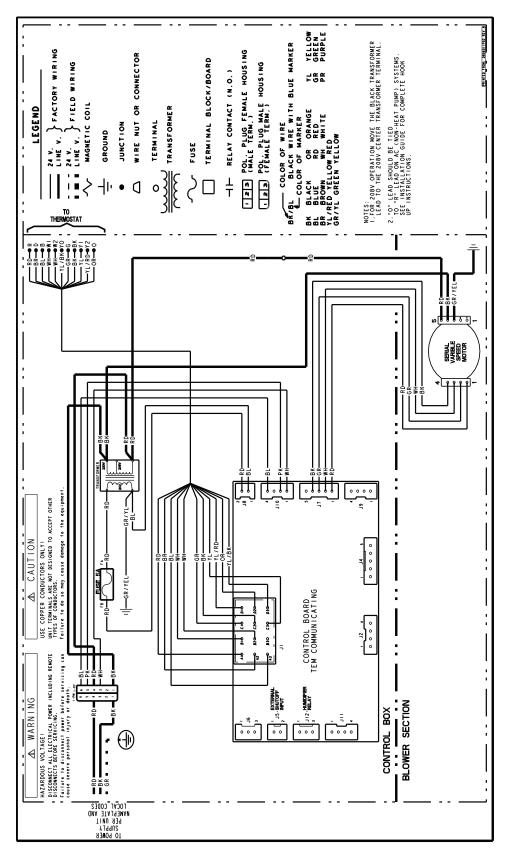


NOTES:

- Cut the BK jumper on the AFC when using the BK fuctionality from the thermostat.
- YI and YO connections must be made as shown for external switch functionality. (See table 5) Can be used for condensate overflow switch as well as other functions. Configure this functionality from the AFC seven segment display.
- When using the BK feature from the comfort control, the Y1 & Y2 inputs to the AFC are for the seven segment display only. The BK feature has 100% control over air flow.
- Y2 connections at outdoor unit at required only for two stage units.



Wiring D806011P02revA



Performance and Electrical Data

	TEM8A0B2	4V21DA &	TEM8A0B24V21DA & TEM8A0B30V31DA AIRFLOW PERFORMANCE	30V31DA A	IRFLOW PE	FORMAN		CONSTANT CFM MODE / CONSTANT TORQUE MODE	M MODE / (CONSTAN	T TORQU	IE MODE		
OUTDOOR MULTIPLIER	COOLING AIRFLOW	AIRFLOW	EXTERNA	EXTERNAL STATIC PRESSURE (Constant CFM / Constant Torque)	ESSURE (Cor Torque)	stant CFM /	Constant	HEATING AIRFLOW	AIRFLOW	E	EXTERNAL STATIC PRESSURE	STATIC PRE	SSURE	
(LONS)	SETTING	POWER	0.1	0.3	0.5	0.7	6.0	SETTING	POWER	0.1	0.3	0.5	0.7	6.0
	290 CFM/ton	CFM Watts	430 / 538 50 / 39	430 / 415 75 / 48	430 / 264 95 / 43	430 / NA 110 / NA	430 / NA 145 / NA	290 CFM/ton	CFM Watts	434 34	419 64	419 96	403 130	384 167
L	350 CFM/ton	CFM Watts	520 / 620 60 / 53	520 / 514 90 / 64	520 / 398 120 / 61	520 / NA 135 / NA	510 / NA 175 / NA	350 CFM/ton	CFM Watts	521 44	512 77	514	500 153	485 196
1.3 UNIS	400 CFM/ton	CFM Watts	29 / 98 29 / 98	590 / 593 105 / 80	590 / 493 140 / 80	590 / NA 160 / NA	590 / NA 205 / NA	400 CFM/ton	CFM Watts	595 56	589 91	595 127	584 173	573 222
	450 CFM/ton	CFM Watts	670/758 85/85	670 / 671 125 / 100	660 / 581 160 / 102	660 / NA 190 / NA	660 / NA 235 / NA	450 CFM/ton	CFM Watts	668	667	675 145	668 196	660 250
	290 CFM/ton	CFM Watts	570 / 670 60 / 63	570 / 573 90 / 76	570 / 469 125 / 75	570 / NA 165 / NA	568 / NA 215 / NA	290 CFM/ton	CFM Watts	575 53	569 87	573 123	561 167	549 215
ć	350 CFM/ton	CFM Watts	690 / 781 85 / 91	690 / 696 120 / 107	690 / 609	690 / 518 210 / 98	680 / NA 259 / NA	350 CFM/ton	CFM Watts	693 76	693	702 152	696 204	689
2 tons	400 CFM/ton	CFM Watts	790 / 875 110 / 122	790 / 798 150 / 140	790 / 720 195 / 145	780 / 639 250 / 137	780 / 555 301 / 115	400 CFM/ton	CFM Watts	791 103	795 143	805 184	803 240	798 301
	450 CFM/ton	CFM Watts	890 / 971 145 / 161	890 / 899 185 / 181	880 / 827 235 / 189	880 / 754 295 / 184	880 / 680 347 / 184	450 CFM/ton	CFM Watts	889 138	895 181	902 226	899 284	891 347
	290 CFM/ton	CFM Watts	720 / 823 90 / 104	720 / 741 140 / 120	710 / 659 170 / 124	710 / 573 220 / 115	710 / 481 260 / 91	290 CFM/ton	CFM Watts	717 82	718 120	728 159	723 212	717 269
	350 CFM/ton	CFM Watts	870 / 963 140 / 157	860 / 892 182 / 177	873 / 819 235 / 185	860 / 746 280 / 180	850 / 671 330 / 161	350 CFM/ton	CFM Watts	865 128	871 170	879 214	876 272	869 335
2.5 tons	400 CFM/ton	CFM Watts	990 / 1084 185 / 217	980 / 1018 240 / 236	980 / 951 290 / 250	980 / 884 345 / 248	970 / 817 395 / 233	400 CFM/ton	CFM Watts	988 181	993 229	989 279	979 337	961 397
	450 CFM/ton	CFM Watts	1110/ 1250 251/363	1110/ 1190 311/382	1100 / 1129 366 / 390	1070 / 756 417 / 208	850 / 650 325 / 155	450 CFM/ton	CFM Watts	1110	1109	1080 366	1048	1004
	290 CFM/ton	CFM Watts	860 / 976 140 / 149	860 / 904 185 / 171	850 / 832 225 / 182	850 / 758 280 / 180	970 / 683 400 / 164	290 CFM/ton	CFM Watts	860 127	866 168	874 212	872 270	865 332
	350 + CFM/ton	CFM Watts	1040 / 1155 205 / 235	1030 / 1091 260 / 262	1060 / 1027 315 / 278	1020 / 962 370 / 282	980 / 897 425 / 273	350 † CFM/ton	CFM Watts	1037 206	1040 258	1028 311	1011	985
3 tons +	400 CFM/ton	CFM Watts	1180 / 1281 270 / 314	1180 / 1221 365 / 344	1120 / 160 431 / 363	1065 / 1100 475 / 371	1000 / 677 520 / 161	400 CFM/ton	CFM Watts	1183 298	1176 365	1122 431	1068 475	1000 515
	450 CFM/ton	CFM Watts	1250 / 1281 343 / 314	1220 / 1221 417 / 344	1145 / 1160 490 / 363	1070 / 979 530 / 291	970 / 496 556 / 96	450 CFM/ton	CFM Watts	1242 343	1226 417	1149	1071 527	979 556
† Factory SettingStatus LED will bllower.	† Factory Setting Status LED will blink once per 100 CFM requested. In torque mode, actual airflow may be lower.	per 100 CFM	1 requested. 1	In torque mod	de, actual air	flow may be		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	uce airflow w fault to Const s are with we	hen static i: :ant CFM. t coil, no fill	s above ap ter	proximate	ily 0.3" wa	ter

	TEM8A(0C36V31D/	TEM8A0C36V31DA & TEM8A0C42V41DA AIRFLOW PERFORMANCE	C42V41DA 4	IRFLOW PE	RFORMANG		CONSTANT CFM MODE / CONSTANT TORQUE MODE	10DE / CON	STANT TO	DRQUE M	ODE		
OUTDOOR	COOLING	ATRFI OW	EXTERNAL 5	EXTERNAL STATIC PRESSURE (Constant CFM / Constant Torque)	URE (Constan	t CFM / Const	ant Torque)	HEATING	ATRFI OW	Е	XTERNAL S	EXTERNAL STATIC PRESSURE	SSURE	
 MULTIPLIER (TONS)	AIRFLOW SETTING	POWER	0.1	0.3	0.5	0.7	0.9	AIRFLOW SETTING	POWER	0.1	0.3	0.5	0.7	6.0
	290 CFM/ton	CFM	735 / 837 59 / 72	727 / 702 96 / 90	700 / 593 138 / 105	673 / 415 176 / 123	660 / 415 215 / 148	290 CFM/ton	CFM Watts	735	727 96	700	673 176	660
	350 CEM/ton	CFM	883/972	884 / 849	882/746	881/657	870 / 577	350 CEM/ton	CFM	883	884	882	881	870
2.5 tons	400 CEM/+55	CFM	1007 / 1084		1033 / 874	1020 / 788	1010 / 711	400 CEM (top	CFM	1007	1016	1033	1020	1010
	450	Walls	1133 / 1198		1176/1001	1140 / 919	1130 / 845	450	VALLS	1133	1146	1176	1140	1130
	CFM/ton	Watts	143/177	192/202	246 / 220	321 / 233	375 / 244	CFM/ton	Watts	143	192	246	321	375
	290 CFM/ton	CFM Watts	878 / 993 82 / 108	879 / 872 123 / 129	876 / 771 169 / 144	874 / 682 221 / 157	865 / 602 270 / 173	290 CFM/ton	CFM Watts	878 82	879 123	876 169	874 221	865 270
	350 CFM/ton	CFM Watts	1057 / 1154 122 / 160	1068 / 1045 168 / 184	1091 / 952 220 / 201	1070 / 869 289 / 213	1060 / 793 340 / 225	350 CFM/ton	CFM Watts	1057 122	1068 168	1091 220	1070	1060 340
3 tons	400 CFM/ton	CFM	1209 / 1289 168 / 216	1223 / 1190 219 / 243	1255 / 1102 277 / 262	1210 / 1024 355 / 276	1190 / 952 410 / 287	400 CFM/ton	CFM	1209	1223	1255	1210 355	1190
	450 CFM/ton	CFM Watts	1364 / 1426 230 / 287	1	1393 / 1253 350 / 339	1340 / 1179 429 / 355	1330 / 1110 480 / 367	450 CFM/ton	CFM Watts	1364	1375	1393 350	1340	1330 480
	290 CFM/ton	CFM Watts		1031/1012 158/172	1050 / 917 209 / 188	1030 / 832 275 / 201	1030 / 756 325 / 213	290 CFM/ton	CFM Watts	1022 113	1031 158	1050 209	1030 275	1030 325
1	350 CFM/ton	CFM Watts	1235 / 1312 178 / 227	1249 / 1214 229 / 254	1242 / 1128 288 / 274	1230 / 1050 367 / 288	1220 / 978 420 / 299	350 CFM/ton	CFM Watts	1235 178	1249 229	1242 288	1230 367	1220 420
S101 C.C	400 CFM/ton	CFM Watts	1416 /1471 254 / 314	1424 / 1383 313 / 263	1399 / 1303 378 / 368	1380 / 1230 455 / 385	1370 / 1163 510 / 398	400 CFM/ton	CFM Watts	1416 254	1424 313	1399 378	1303 455	1370 510
	450 CFM/ton	CFM Watts	1601 / 1618 356 / 420	1591 / 1536 423 / 454	1547 / 1462 497 / 480	1500 / 1394 553 / 500	1390 / 1330 520 / 514	450 CFM/ton	CFM Watts	1601 356	1591 423	1547 497	1500 553	1390 520
	290 CFM/ton	CFM Watts	1168 / 1276 155 / 209	1182/1175 204/235	1182 / 1087 260 / 254	1170 / 1007 337 / 268	1160 / 935 390 / 279	290 CFM/ton	CFM Watts	1168 155	1182 204	1182 260	1170 337	1160 390
4	350 † CFM/ton	CFM Watts	1416 / 1492 254 / 326	1424 / 1404 313 / 357	1399 / 1325 378 / 381	1380 / 1252 455 / 398	1370 / 1185 510 / 411	350 † CFM/ton	CFM Watts	1416 254	1424 313	1399 378	1380 455	1370 510
- siloj 4	400 CFM/ton	CFM Watts	1628 / 1616 373 / 435	1614 / 1535 441 / 468	1534 / 1461 517 / 492	1500 / 1393 568 / 510	1390 / 1329 520 / 524	400 CFM/ton	CFM Watts	1628 373	1614 441	1534 517	1500 568	1390 520
	450 CFM/ton	CFM Watts	1714 / 1605 431 / 435	1686 / 1525 505 / 468	1550 / 1452 584 / 492	1500 / 1385 617 / 510	1390 / 1321 520 / 570	450 CFM/ton	CFM Watts	1714 431	1686 505	1550 584	1500 617	1390 520
 † Factory Setting Status LED will bl	tting vill blink once p	oer 100 CFM r	† Factory Setting Status LED will blink once per 100 CFM requested. In torque mode, actual airflow may be	orane mode, a	actual airflow i	mav be	• Torque m column.	Torque mode will reduce airflow when static is above approximately 0.3" water column.	e airflow wher	static is al	oove appro	ximately (.3" water	
 lower.				· · · · · · · · · · · · · · · · · · ·			An neaun Cooling a	All heating modes derault to Constant CFM. Cooling airflow values are with wet coil, no filter	ult to constan are with wet co	t Crivi. oil, no filter				

		TEMBA	C48V41DA	TEM8A0C48V41DA & TEM8A0C60V51DA AIRFLOW PERFORMANCE	C60V51DA A	IRFLOW PI	ERFORMANC		TANT CFM N	CONSTANT CFM MODE / CONSTANT TORQUE MODE	STANT TO	JRQUE M	ODE		
0 :	OUTDOOR	COOLING	AIRFI OW	EXTERNAL:	STATIC PRESS	URE (Constar	EXTERNAL STATIC PRESSURE (Constant CFM / Constant Torque)	ant Torque)	HEATING	ATRFLOW	E	XTERNAL 9	EXTERNAL STATIC PRESSUR	ESSURE	
Ĕ	MULTIPLIER (TONS)	AIRFLOW SETTING	POWER	0.1	0.3	0.5	0.7	6.0	AIRFLOW SETTING	POWER	0.1	0.3	0.5	0.7	6.0
		290 CFM/ton	CFM	864 / 1015 80 / 96	856 / 883	851 / 772	850/676	820 / 590	290 CFM/ton	CFM	864 76	856	851 168	843	822
		350	CFM	1037 / 1179	10			1030 / 784	350	CFM	1037	1037	1040	1039	1032
	3 tons	CFM/ton	Watts	120 / 137			265/	334 /	CFM/ton	Watts	110	158	213	271	334
		400 CFM/ton	Watts	1184 / 131 / 160 / 180	1187 / 1207 215 / 209	1193 / 1110 275 / 233	1180/1024 325/251	1190 / 945 380 / 268	400 CFM/ton	CFM Watts	1184	200	1193 260	1196 324	393
		450	CFM	1334 / 1457	1336 / 1354	1343 / 1263	1340/	1340 / 1105	450	CFM	1334	1336	1343	1348	1353
		CFM/ton	Watts	205 / 232		335 / 290	395/310	460 / 327	CFM/ton	Watts	198	254	318	388	461
		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	290 CFM/ton	CFM Watts	1003 103	1002 149	1004 203	1002 260	992 322
		350	CFM	1210 / 1341	-	1210 / 1136	1210/1050	1210/971	350	CFM	1209	1212	1218	1222	1224
	3 5 tone	CFM/ton	Watts	165 / 188		280 / 241	332	395 / 277	CFM/ton	Watts	157	208	269	334	403
	51015	400	CFM	1380 / 1503	1380 / 1403	1390 / 1314	1	1390 / 1159	400	CFM	1384	1386	1393	1397	1402
		CFM/ton	Watts	195 / 252	285 / 286	355/312	_	485 / 349	CFM/ton	Watts	217	275	340	412	487
		450 CFM/ton	CFM	1560 / 1667	1560 / 1575 365 / 369	1570 / 1492 440 / 398	1570 / 1416 515 / 421	1579 / 1345 595 / 439	450 CFM/ton	CFM	1563	1563	1566	1566	1564 588
		290	CFM	1140 / 1304		1140 / 1095	1140/	1150	290	CFM	1144	1147	1152	1155	1154
		CFM/ton	Watts	145 / 175	200 / 204	255 / 227	310/	365 /	CFM/ton	Watts	138	188	247	309	376
		350	CFM	1380 / 1525	Į.	1390 / 1338	1390	1390 / 1183	320	CFM	1384	1386	1393	1397	1402
	4 tons	CFM/ton	Watts	220 / 262	285 / 295	355 / 322		485 / 360	CFM/ton	Watts	217	275	340	412	487
	2	400 CEM /ton	CFM	305 / 356	1590 / 1621 380 / 267	1590 / 1539 455 / 356	1590 / 1464 535 / 267	1600 / 1394	400 CEM/ton	CFM Watte	1589	1588 376	1591	1589	1585
		450	CEM	1790 / 1898	1		٢	1810 / 1604	450	N DEM	1800	1707	1701	1773	1775
		CFM/ton	Watts	410 / 474	4	585 / 548		760 / 597	CFM/ton	Watts	419	509	575	660	749
		290	CFM	1430 / 1571	1440 / 1475		1440/	1440 / 1236	290	CFM	1435	1436	1442	1446	1450
		CFM/ton	Watts	240 / 283	310/318	375 / 345		515 / 384	CFM/ton	Watts	237	297	364	437	514
		350 + CFM/ton	CFM	380 / 442	1740 / 1767	1750 / 1690	1750 / 1619 635 / 541	1760 / 1552	350 † CFM/ton	CFM	1747	1742	1740	1728	1707
	5 tons †	400	CFM	2000 / 2087	2000 / 2012		1980 /		400	CFM	2015	2007	1995	1951	1877
		CFM/ton	Watts	540 / 619	635 / 663	735 / 700		810/378	CFM/ton	Watts	559	629	739	810	810
		450	CFM	2260 / 2141	2210 / 2068		1980	1870/315	450	CFM	2125	2117	2100	2038	1932
		CFM/ton	Watts	745 / 686	810 / 729	810 / 766	810/359	810 / 405	CFM/ton	Watts	641	779	810	810	810
	+00	· · · · · · · · · · · · · · · · · · ·						 Torque m 	ode will reduc	Torque mode will reduce airflow when static is above approximately 0.3" water	n static is ak	oove appro	oximately (o.3" water	
• •	T Factory Setting Status LFD will bl	T Factory Setting Status LED will blink once per 100 CFM requested. In torque mode, actual airflow may be	er 100 CFM r	reallested. In t	orque mode.	ictual airflow	may be	column.	A-1						
_	lower.							All heatin Cooling a	g modes deta irflow values a	All heating modes derault to Constant CFM. Cooling airflow values are with wet coil, no filter	t CFM. oil, no filter				

		TEMBAC	1D48V41D	TEM8A0D48V41DA & TEM8A0D60V51DA AIRFLOW PERFORMANCE	D60V51DA	AIRFLOW P.	ERFORMAN		CONSTANT CFM MODE / CONSTANT TORQUE MODE	MODE / CON	ISTANT T	ORQUEM	IODE		
0	OUTDOOR	COOLING	AIRFI OW	EXTERNAL :	STATIC PRESS	URE (Constar	EXTERNAL STATIC PRESSURE (Constant CFM / Constant Torque)	ant Torque)	HEATING	ATRFLOW	E	EXTERNAL STATIC PRESSURE	STATIC PRE	SSURE	
É	MULI IPLIEK (TONS)	AIRFLOW SETTING	POWER	0.1	0.3	0.5	0.7	6.0	AIRFLOW SETTING	POWER	0.1	0.3	0.5	0.7	6.0
		290 CFM/ton	CFM	859 / 1010 73 / 92	880 / 880	868 / 771	862 / 675 200 / 141	857 / 588 248 / 159	290 CFM/ton	CFM	859	880	868	862	857 248
		350	CFM		1058 / 1056		1053/864		350	CFM	1042	1058	1054	1053	1047
	3 tons	CFM/ton	Watts	107/131	_	\			CFM/ton	Watts	107	148	194	246	298
		400 CFM/ton	CFM Watts	1214 / 1310 150 / 172	1215 / 1202 194 / 172	247 / 211 247 / 211	1225 / 1022 299 / 224	352 / 236	400 CFM/ton	Watts	1214	1215 194	1222 247	1225 299	352
		450	CFM	1350 / 1448	1338 / 1349	1360 / 1260	1363/1178	1361/1103	450	CFM	1350	1338	1360	1363	1361
		CFM/ton	Watts	188 / 223	239 / 247	292 / 265	349 / 279	409 / 291	CFM/ton	Watts	188	239	292	349	409
		290 CFM/ton	CFM Watts	1007 / 1141 99 / 122	1024 / 1022 140 / 122	1018/919 185/158	1017/827 236/171	1010 / 744 288 / 186	290 CFM/ton	CFM Watts	1007	1024 140	1018 185	1017 236	1010 288
		350 CEM/top	CFM	1222 / 1333	1225 / 1227	1232 / 1133	1235/1048	1230 / 970	350 CEM/top	CFM	1222	1225	1232	1235	1230
	3.5 tons	100/10	Valls	1721 / 1495	130/202	1430 / 1310	1437	1451 / 1157	400	Valls	1421	1420	1430	1437	1751
		CFM/ton	Watts	211 / 242	268 / 267		386/	454/311	CFM/ton	Watts	211	268	323	386	1431 454
		450	CFM	1583 / 1657	1519 / 1569	1592 / 1488	1588 / 1413	1586 / 1343	450 CEM/#22	CFM	1583	1519	1592	1588	1586
		CFIM/ton	Watts	320	334 / 346		45//383	1462	CFIM/ton	Watts	2/2	334	394	45/	524
		290 CFM/ton	Watts	1155 / 129 / 133 / 167	1164 / 1188 177 / 189	1166 / 1092 226 / 206	1168/1006 279/219	1162/92/ 334/231	290 CFM/ton	Watts	1155	1164	1166 226	1168 279	1162 334
		350	CFM	1431 / 1516		1408 / 1334	1402/1255	1408	350	CFM	1431	1421	1408	1402	1408
	4 tons	CFM/ton	Watts		264 / 276	313 / 295	369	435 / 321	CFM/ton	Watts	216	264	313	369	435
	2	400 CFM/ton	CFM Watts	1635 / 1700 302 / 343	1625 / 1614 360 / 259	1617 / 1534 418 / 391	1610 / 1461 479 / 407	1592 / 1392 535 / 420	400 CFM/ton	CFM Watts	1635 302	1625 360	1617 418	1610 479	1592 535
		450	CFM	1818 / 1886	1829 / 1808	_		1760/	450	СЕМ	1818	1650	1815	1787	1760
		CFM/ton	Watts	388 / 458	458 / 487	527 / 511	298/	675/	CFM/ton	Watts	388	458	527	298	675
		290 CFM/ton	CFM Watts	1453 / 1562 224 / 272	1466 / 1468 278 / 297	1463 / 1384 334 / 317	1465 / 1306 393 / 332	1464 / 1234 456 / 344	290 CFM/ton	CFM	1453 224	1423 278	1463 334	1465 393	1464 456
		350 +	CFM	1779 / 1840	1779 / 1759	1767 / 1684	1746	1729/	350 +	CFM	1766	1627	1767	1746	1729
	5 tons †	CFM/ton	Watts	360 / 427	428/	494 / 478	563/		CFM/ton	Watts	360	428	494	563	638
	!	400	CFM	2043 / 2074	2019 /	<u> </u>	1916/		400	CFM:	2043	2019	1982	1916	1822
		CFM/ton	Watts	537/600		<u> </u>	. II		CFM/ton	Watts	537	609	929	682	289
		450 CFM/ton	CFM Watts	2141 / 2112 584 / 658	2090 / 2041 673 / 688	2047 / 1975 760 / 712	1953/1207 851/417	1792 / 337 945 / 372	450 CFM/ton	CFM Watts	2141 584	1677 673	2047 760	1953 851	1792 945
								Torque m	Torque mode will reduce airflow when static is above approximately 0.3" water	e airflow wher	ı static is ak	oove appro	ximately (.3" water	
•	† Factory Setting	tting :::: 'slink onco'	. MEC 00	1000	9			column.	! : : :		!	L i		: :	
•	Status LED w lower.	Status LED Will Dlink once per 100 CFM requested. In torque mode, actual airriow may be lower.	Der Luu CFM	requested. 111	torque moue,	actual alriiow	may be	All heatinCooling a	All heating modes default to Constant CFM. Cooling airflow values are with wet coil, no filter	ult to Constan are with wet $lpha$	t CFM. oil, no filter				

Note: Heater size needs to be set in Configuration

Table 7. Electrical Data

				TEM8A0B2	4, TEM8A0B	30 HEATER I	DATA				
	No. of			240 \	/olt				208	Volt	
Heater Model No.	Circuits/	Capa	acity	Heater	Minimum	Maximum	Сар	acity	Heater	Minimum	Maximum
	Phases	kW	BTUH	Amps per Circuit	Circuit Ampacity	Overload Protection	kW	BTUH	Amps per Circuit	Circuit Ampacity	Overload Protection
No Heater				2.8 *	4	15			2.8 *	4	15
BAYHTR1504BRKC BAYHTR1504LUGB	1/1	3.84	13100	16.0	24	25	2.88	9800	13.8	21	25
BAYHTR1505BRKC BAYHTR1505LUGB	1/1	4.80	16400	20.0	29	30	3.60	12300	17.3	25	25
BAYHTR1508BRKC BAYHTR1508LUGB	1/1	7.68	26200	32.0	44	45	5.76	19700	27.7	38	40
BAYHTR1510BRKC BAYHTR1510LUGB	1/1	9.60	32800	40.0	54	60	7.20	24600	34.6	47	50
BAYHTR1516BRKA Circuit 1 (a)	2/1	9.60	32800	40.0	54	60	7.20	24600	34.6	47	50
BAYHTR1516BRKA Circuit 2	2/1	4.80	16400	20.0	25	25	3.60	12300	17.3	22	25
BAYHTR3510LUGC	1/3	9.60	32800	23.1	32	35	7.20	24600	20.0	28	30
BAYHTR3515LUGC	1/3	14.40	49100	34.6	46	50	10.80	36900	30.0	41	45
* = Motor Amps		•					•				

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

Table 8. Electrical Data

			Т	EM8A0C36	, TEM8A0C	42 HEATER	DATA				
	N6			240 \	/olt				208	Volt	
Heater Model No.	No. of Circuits/	Сара	acity	Heater	Minimum	Maximum	Cap	acity	Heater	Minimum	Maximum
	Phases	kW	BTUH	Amps per Circuit	Circuit Ampacity	Overload Protection	kW	BTUH	Amps per Circuit	Circuit Ampacity	Overload Protection
No Heater				4.3 *	5	15			4.3 *	5	15
BAYHTR1504BRKC BAYHTR1504LUGB	1/1	3.84	13100	16.0	25	25	2.88	9800	13.8	23	25
BAYHTR1505BRKC BAYHTR1505LUGB	1/1	4.80	16400	20.0	30	30	3.60	12300	17.3	27	30
BAYHTR1508BRKC BAYHTR1508LUGB	1/1	7.68	26200	32.0	45	45	5.76	19700	27.7	40	40
BAYHTR1510BRKC BAYHTR1510LUGB	1/1	9.60	32800	40.0	55	60	7.20	24600	34.6	49	50
BAYHTR1516BRKA Circuit 1 (a)	2/1	9.60	32800	40.0	55	60	7.20	24600	34.6	49	50
BAYHTR1516BRKA Circuit 2	2/1	4.80	16400	20.0	25	25	3.60	12300	17.3	22	25
BAYHTR1522BRKA Circuit 1	2/1	9.60	32800	40.0	55	60	7.20	24600	34.6	49	50
BAYHTR1522BRKA Circuit 2	2/1	9.60	32800	40.0	50	50	7.20	24600	34.6	43	45
BAYHTR3510LUGC	1/3	9.60	32800	23.1	34	35	7.20	24600	20.0	30	30
BAYHTR3515LUGC	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

Table 9. Electrical Data

			T	EM8A0C48	, TEM8A0C	60 HEATER	DATA				
	No. of			240 \	/olt				208	Volt	
Heater Model No.	Circuits/	Сара	acity	Heater	Minimum Circuit	Maximum	Сар	acity	Heater	Minimum Circuit	Maximum
	Phases	kW	BTUH	Amps per Circuit	Ampacity	Overload Protection	kW	BTUH	Amps per Circuit	Ampacity	Overload Protection
No Heater				5.6 *	7	15			5.6 *	7	15
BAYHTR1504BRKC BAYHTR1504LUGB	1/1	3.84	13100	16.0	27	30	2.88	9800	13.8	24	25
BAYHTR1505BRKC BAYHTR1505LUGB	1/1	4.80	16400	20.0	32	35	3.60	12300	17.3	29	30
BAYHTR1508BRKC BAYHTR1508LUGB	1/1	7.68	26200	32.0	47	50	5.76	19700	27.7	42	45
BAYHTR1510BRKC BAYHTR1510LUGB	1/1	9.60	32800	40.0	57	60	7.20	24600	34.6	50	50
BAYHTR1516BRKA Circuit 1 (a)	2/1	9.60	32800	40.0	57	60	7.20	24600	34.6	50	50
BAYHTR1516BRKA Circuit 2	2/1	4.80	16400	20.0	25	25	3.60	12300	17.3	22	25
BAYHTR1522BRKA Circuit 1	2/1	9.60	32800	40.0	57	60	7.20	24600	34.6	50	50
BAYHTR1522BRKA Circuit 2	2/1	9.60	32800	40.0	50	50	7.20	24600	34.6	43	45
BAYHTR1525BRKA Circuit 1		6.00	20500	25.0	38	40	4.50	15400	21.6	34	35
BAYHTR1525BRKA Circuit 2	4/1	6.00	20500	25.0	31	35	4.50	15400	21.6	27	30
BAYHTR1525BRKA Circuit 3	4/1	6.00	20500	25.0	31	35	4.50	15400	21.6	27	30
BAYHTR1525BRKA Circuit 4		6.00	20500	25.0	31	35	4.50	15400	21.6	27	30
BAYHTR3510LUGC	1/3	9.60	32800	23.1	35	35	7.20	24600	20.0	31	35
BAYHTR3515LUGC	1/3	14.40	49100	34.6	49	50	10.80	36900	30.0	44	45
* = Motor Amps	•	-	•			•	•				

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

Table 10. Electrical Data

			TI	EM8A0D48	B, TEM8AOD	60 HEATER	R DATA				
	No. of			240 V	/olt				208	Volt	
Heater Model No.	No. of Circuits/	Сара	acity	Heater	Minimum	Maximum	Сар	acity	Heater	Minimum	Maximum
	Phases	kW	втин	Amps per Circuit	Circuit Ampacity	Overload Protection	kW	BTUH	Amps per Circuit	Circuit Ampacity	Overload Protection
No Heater				5.0 *	6	15			5.0 *	6	15
BAYHTR1504BRKC BAYHTR1504LUGB	1/1	3.84	13100	16.0	26	30	2.88	9800	13.8	24	25
BAYHTR1505BRKC BAYHTR1505LUGB	1/1	4.80	16400	20.0	31	35	3.60	12300	17.3	28	30
BAYHTR1508BRKC BAYHTR1508LUGB	1/1	7.68	26200	32.0	46	50	5.76	19700	27.7	41	45
BAYHTR1510BRKC BAYHTR1510LUGB	1/1	9.60	32800	40.0	56	60	7.20	24600	34.6	50	50
BAYHTR1516BRKA Circuit 1 ^(a)	2/1	9.60	32800	40.0	56	60	7.20	24600	34.6	50	50
BAYHTR1516BRKA Circuit 2	2/1	4.80	16400	20.0	25	25	3.60	12300	17.3	22	25
BAYHTR1522BRKA Circuit 1	2/1	9.60	32800	40.0	56	60	7.20	24600	34.6	50	50
BAYHTR1522BRKA Circuit 2	2/1	9.60	32800	40.0	50	50	7.20	24600	34.6	43	45
BAYHTR1525BRKA Circuit 1		6.00	20500	25.0	38	40	4.50	15400	21.6	33	35
BAYHTR1525BRKA Circuit 2	4/1	6.00	20500	25.0	31	35	4.50	15400	21.6	27	30
BAYHTR1525BRKA Circuit 3	-4/1	6.00	20500	25.0	31	35	4.50	15400	21.6	27	30
BAYHTR1525BRKA Circuit 4		6.00	20500	25.0	31	35	4.50	15400	21.6	27	30
BAYHTR3510LUGC	1/3	9.60	32800	23.1	34	35	7.20	24600	20.0	31	35
BAYHTR3515LUGC	1/3	14.40	49100	34.6	49	50	10.80	36900	30.0	43	45
* = Motor Amps			•				•				

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

Minimum Airflow CFM

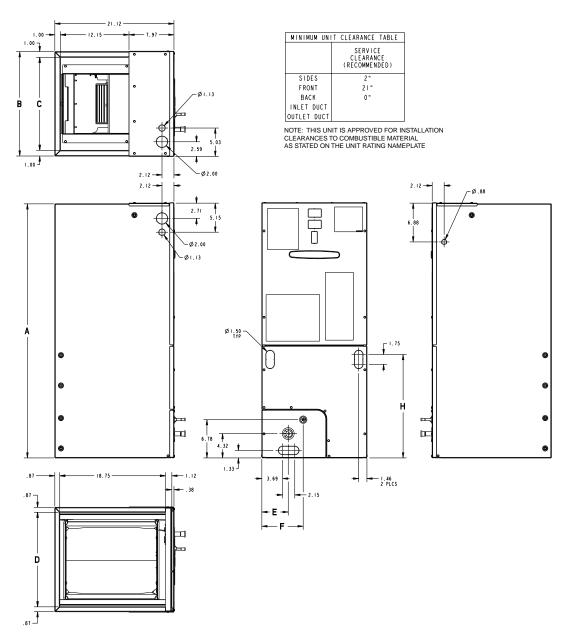
TEM	8A0B24V21D, TEM8A0B30V31D	
Heater	Minimum H	eater Airflow CFM
	With Heat Pump	Without Heat Pump
BAYHTR1504BRKC, BAYHTR1504LUGB BAYHTR1505BRKC, BAYHTR1505LUGB	550	600
BAYHTR1508BRKC, BAYHTR1508LUGB	800	600
BAYHTR1510BRKC, BAYHTR1510LUGB	825	700
BAYHTR1516BRKA	1050	850
BAYHTR3510LUGC	800	600
BAYHTR3515LUGC	900	850

TEM8A0C36V31D, TEM8A0C42V41D					
Heater	Minimum Heater Airflow CFM				
	With Heat Pump	Without Heat Pump			
BAYHTR1504BRKC, BAYHTR1504LUGB BAYHTR1505BRKC, BAYHTR1505LUGB	875	675			
BAYHTR1508BRKC, BAYHTR1508LUGB	875	675			
BAYHTR1510BRKC, BAYHTR1510LUGB	1225	825			
BAYHTR1516BRKA	1325	1150			
BAYHTR3510LUGC	875	675			
BAYHTR3515LUGC	1250	1150			
BAYHTR1522BRKA	1325	1150			

TEM8A0C48V41D, TEM8A0C60V51D					
Heater	eater Airflow CFM				
	With Heat Pump	Without Heat Pump			
BAYHTR1504BRKC, BAYHTR1504LUGB BAYHTR1505BRKC, BAYHTR1505LUGB	1200	975			
BAYHTR1508BRKC, BAYHTR1508LUGB	1200	975			
BAYHTR1510BRKC, BAYHTR1510LUGB	1200	975			
BAYHTR1516BRKA	1200	975			
BAYHTR3510LUGC	1200	975			
BAYHTR3515LUGC	1200	975			
BAYHTR1522BRKA	1350	1125			
BAYHTR1525BRKA	1500	1350			

TEM8A0D48V41D, TEM8A0D60V51D					
Heater	Heater Minimum Heater Airflow CFM				
	With Heat Pump	Without Heat Pump			
BAYHTR1504BRKC, BAYHTR1504LUGB BAYHTR1505BRKC, BAYHTR1505LUGB	1150	975			
BAYHTR1508BRKC, BAYHTR1508LUGB	1150	975			
BAYHTR1510BRKC, BAYHTR1510LUGB	1150	975			
BAYHTR1516BRKA	1325	1125			
BAYHTR3510LUGC	1150	975			
BAYHTR3515LUGC	1375	1125			
BAYHTR1522BRKA	1375	1125			
BAYHTR1525BRKA	1375	1125			

Outline Drawing



PRODUCT DIMENSIONS									
Air Handler Model	А	В	С	D	Е	F	н	Flow Control	Gas Line Braze
TEM8A0B24, 30	46.77	18.50	16.50	16.75	4.68	7.33	20.09	TXV	3/4
TEM8A0C36, 42	51.27	23.50	21.50	21.75	7.01	9.66	24.59	TXV	7/8
TEM8A0C48, 60	55.87	23.50	21.50	21.75	4.68	9.66	27.19	TXV	7/8
TEM8A0D48, 60	53.87	26.50	24.50	24.75	7.01	9.66	27.19	TXV	7/8
All dimensions are in inches									

Heater Pressure Drop Table

		Number of Racks				
Airflow CFM	1	2	3	4		
• • • • • • • • • • • • • • • • • • • •		Air Pressure Drop — Inches W.G.				
1800	0.02	0.04	0.06	0.14		
1700	0.02	0.04	0.06	0.14		
1600	0.02	0.04	0.06	0.13		
1500	0.02	0.04	0.06	0.12		
1400	0.02	0.04	0.06	0.12		
1300	0.02	0.04	0.05	0.11		
1200	0.01	0.04	0.05	0.10		
1100	0.01	0.03	0.05	0.09		
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				

Subcooling Adjustment

System Matched with:	Indoor Unit Model No.	Outdoor Model No.	Subcooling
16 SEER HP — 2 ton	TEM8A0C36V31	4TWR6024H1000A 4TWX6024H1000A 4A6H6024H1000A	13 Degrees
15 SEER HP — 2 ton	TEM8A0B24V21 TEM8A0B30V31	4TWR5024G1000A 4A6H5024G1000A	14 Degrees
15 SEER HP — 3 ton	TEM8A0B30V31 TEM8A0C36V31 TEM8A0C42V41	4TWR5036G1000A 4A6H5036G1000A	14 Degrees

Subcooling Adjustment for TEM8A0C48V41 & TEM8A0C60V51

Sub-Cooling Charge Specification For AHRI Rated Performance				
OD Equipment	Down Flow			
AC UNIT	OD Name Plate	OD Name Plate		
HP UNIT ≤ 3.5 Tons	OD Name Plate	OD Name Plate + 4 Degrees		
HP UNIT = 4 and 5 Tons	OD Name Plate	OD Name Plate		

Coil Conversion Instructions

Table 11. Downflow

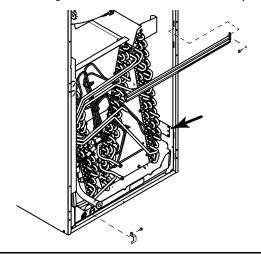
Follow the conversion steps when installing the air handler in downflow configuration.

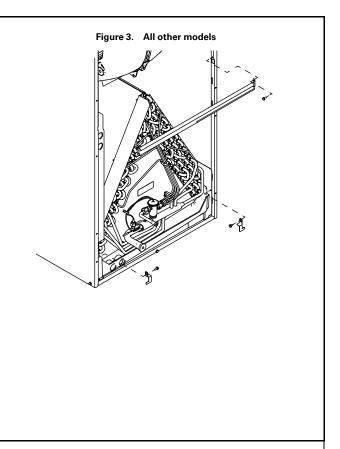
- 1. Remove the front panels from the air handler. The coil and line set panel do not need to be separated.
- 2. Remove the fasteners on both sides of the coil.

Note: The TEM8A0C48 and TEM8A0C60 will have a coil retaining bracket and a shipping bracket. All other coils will have two coil retaining brackets.

3. Remove the two screws holding the center horizontal bracket and rotate out of place. Retain parts.

Figure 2. TEM8A0C48 and TEM8A0C60 Only





4. For the TEM8A0C48 and TEM8A0C60, remove the drain pan support bracket at the top of the drain pan and discard.

Note: The drain pan support bracket should be removed to avoid tearing the cabinet insulation.

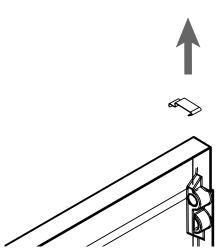
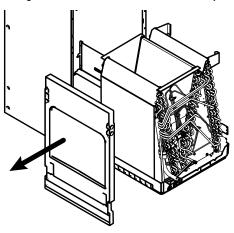
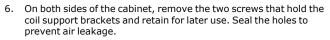


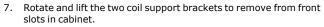
Table 11. Downflow (continued)

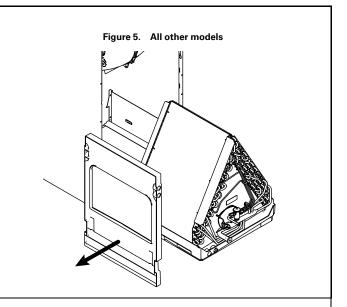
Slide the coil assembly out. Remove and discard the horizontal drain pan.

Figure 4. TEM8A0C48 and TEM8A0C60 Only









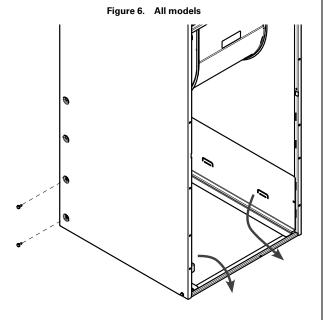
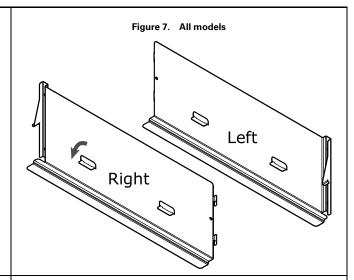


Table 11. Downflow (continued)

Bend the two tabs on each of the coil support brackets. Tabs should be bent inward so they are parallel to the bottom flange.



- 9. Rotate the unit into the downflow orientation.
- 10. Pre-drill four clearance holes in the cabinet at dimples located below the location the screws were removed for the coil support brackets. There are two holes per side. See location of holes
- 11. Replace the center horizontal bracket removed in Step 3. Use the screws retained from Step 3 to attach.
- 12. Place coil support brackets into the lower set of slots and rotate into place. Push downward to lock into place.
- 13. Secure each bracket with 2 screws that were previously removed.

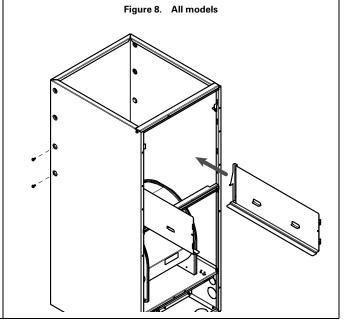
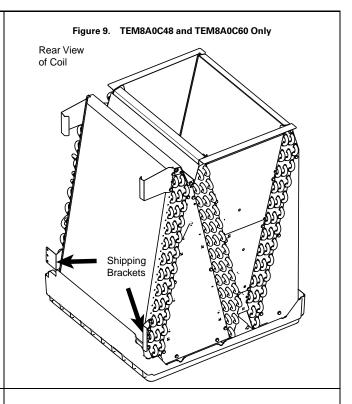


Table 11. Downflow (continued)

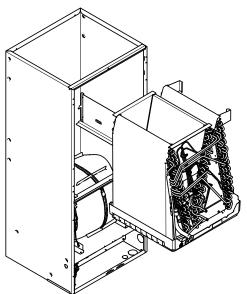
14. For the TEM8A0C48 and TEM8A0C60 models, remove the two shipping brackets from the coil and discard.



Note: It is recommended to remove the shipping brackets from the TEM8A0C48 and TEM8A0C60.

- 15. Slide the coil assembly back into the air handler cabinet as shown.
- 16. Remove the appropriate knock out for the condensate piping.

Figure 10. TEM8A0C48 and TEM8A0C60 Only



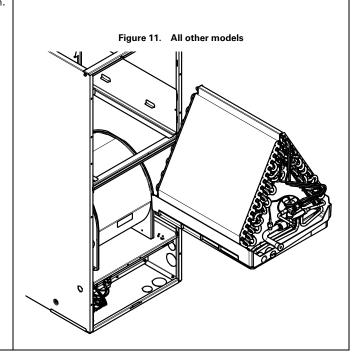


Table 11. Downflow (continued)

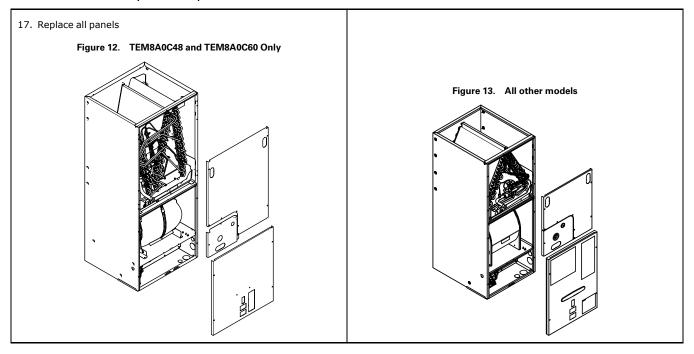


Table 12. Horizontal Right

Follow the conversion steps when installing the air handler in horizontal right configuration.

- 18. Remove the front panels from the air handler. The coil and line set panel do not need to be separated.
- 19. Remove the fasteners on both sides of the coil. Retain the coil retaining brackets and screws.

Note: The TEM8A0C48 and TEM8A0C60 will have a coil retaining bracket and a shipping bracket. All other coils will have two coil retaining brackets.

20. Remove the two screws holding the center horizontal bracket and rotate out of place. Retain parts.

Figure 14. TEM8A0C48 and TEM8A0C60 Only

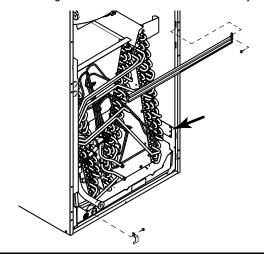


Figure 15. All other models

- 21. Make note of the horizontal drain pan orientation (up/down).
- 22. For the TEM8A0C48 and TEM8A0C60, remove the drain pan support bracket at the top of the drain pan and retain for later use.

Note: The drain pan support bracket should be removed to avoid tearing the cabinet insulation.

Figure 16. TEM8A0C48 and TEM8A0C60 Only

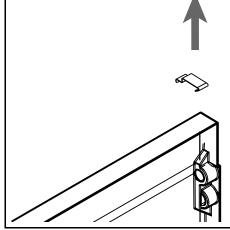


Table 12. Horizontal Right (continued)

23. Slide the coil assembly out.

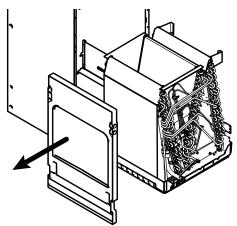
24. Change location of the front and rear water diverter brackets by removing the screws on the water diverter brackets that are located on the left side of the coil. Attach the water diverters to the right hand side of the coil using the same screws.

Important: The coil slabs are different and the mount hole locations will vary. See the illustrations on the following pages that correspond to the unit tonnage to see the correct mounting position of the water diverter bracket.

Important: The water diverter brackets are not symmetrical and will vary by tonnage.

Important: There is no change required for the TEM8A0C48 and TEM8A0C60 water diverters.

Figure 17. TEM8A0C48 and TEM8A0C60 Only



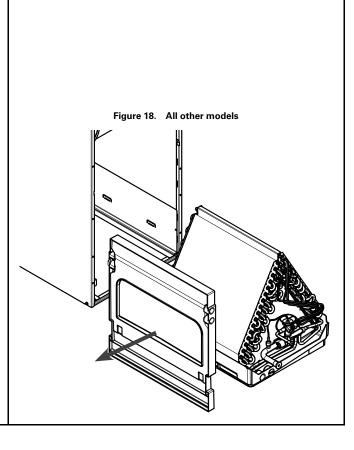


Table 12. Horizontal Right (continued)

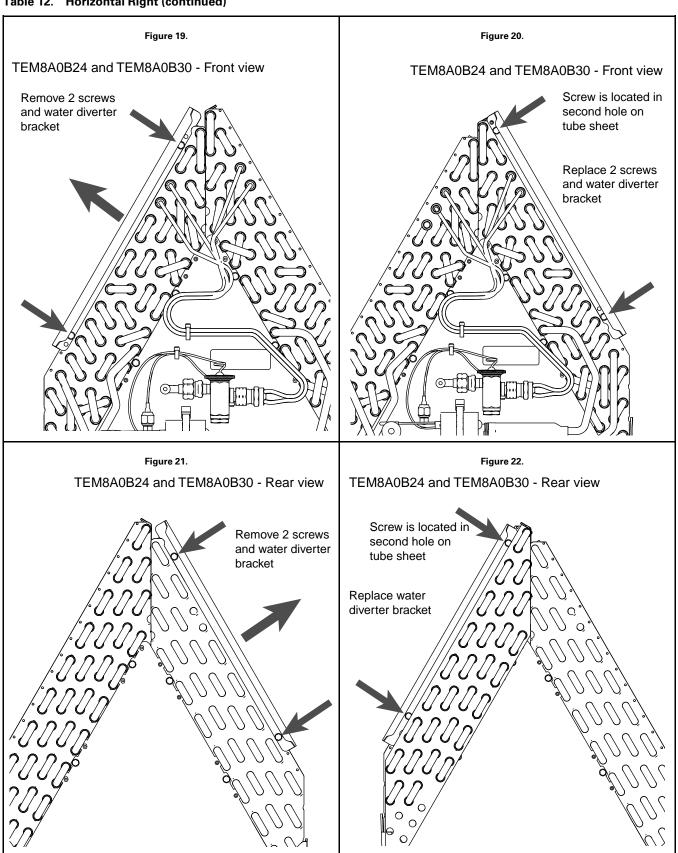


Table 12. Horizontal Right (continued)

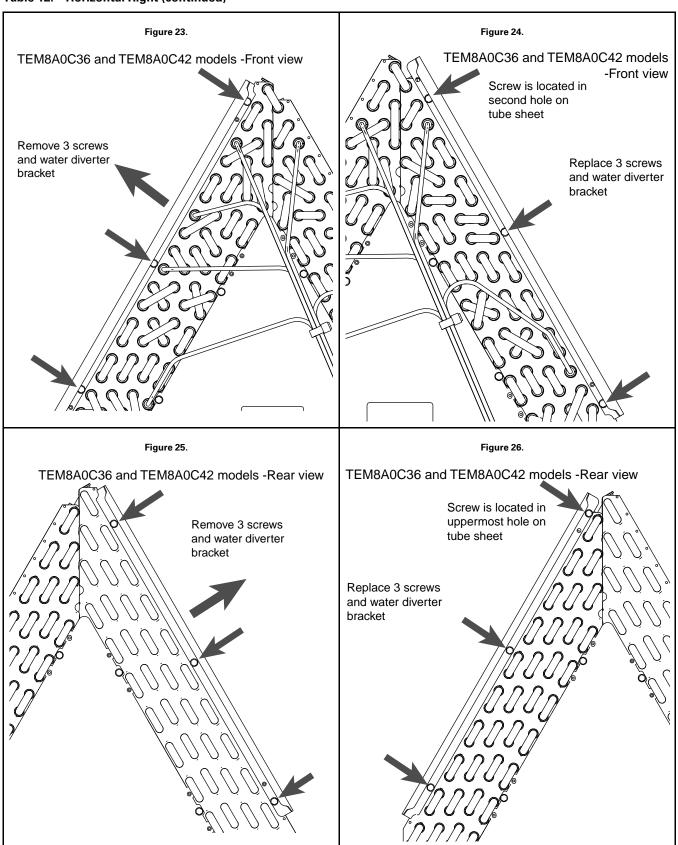


Table 12. Horizontal Right (continued)

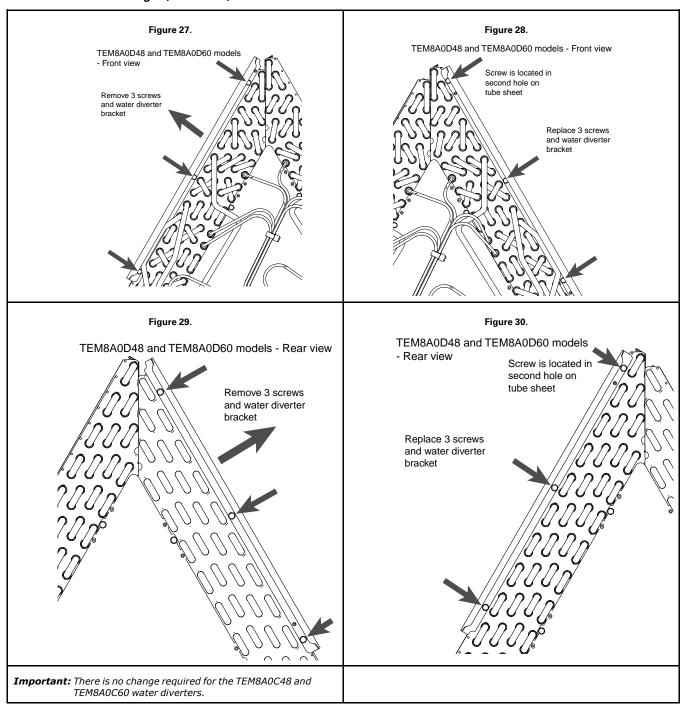
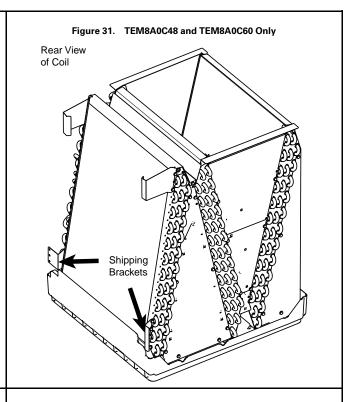


Table 12. Horizontal Right (continued)

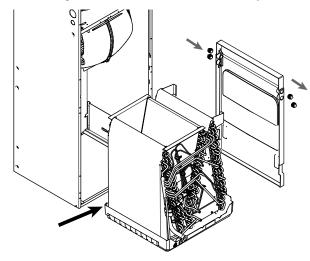
25. For the TEM8A0C48 and TEM8A0C60 models, remove the two shipping brackets from the coil and discard.



- 26. Relocate the horizontal drain pan from the left side of the coil to the right side.
- 27. Remove the two drain plugs and the drain pan support bracket from the front of the drain pan and insert them in the drains at the rear of the drain pan.

Note: For the TEM8A0C48 and TEM8A0C60, the drain pan support bracket should have been removed earlier.

Figure 32. TEM8A0C48 and TEM8A0C60 Only



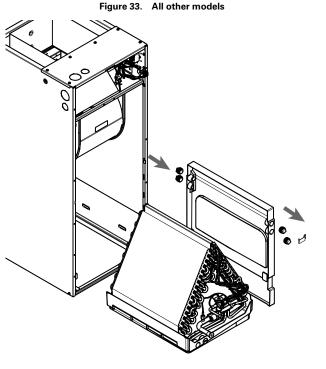
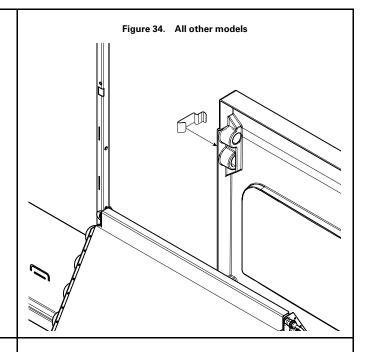


Table 12. Horizontal Right (continued)

28. Reinstall the drain pan support bracket. The bracket should be located between the two drain plugs as shown.

Note: For the TEM8A0C48 and TEM8A0C60 models only, to avoid tearing the interior insulation, the drain pan support bracket should be installed after the coil has been put into the unit.



29. Slide the coil assembly back into the air handler cabinet.

Important: Make sure that the coil corner locks in place under the tab in the side left bracket to support the coil weight in the horizontal right position.

30. For the TEM8A0C48 and TEM80C60 only, install the drain pan support bracket on the top of the drain pan opposite the drain ports and as close to the end as possible

Figure 35. TEM8A0C48 and TEM8A0C60 Only



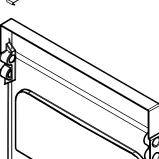
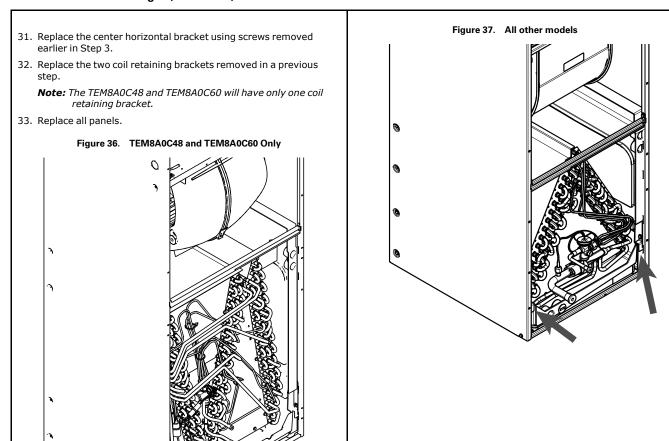


Table 12. Horizontal Right (continued)



Checkout Procedures

The final phase of the installation is the system Checkout Procedures. The following list represents the most common items covered in a Checkout Procedure. Confirm all requirements in this document have been met.

All wiring connections are tight and properly secured.		Supply registers and return grilles are open, unobstructed, and air filter is installed.
Voltage and running current are within limits.		Indoor blower and outdoor fan are operating smoothly and
All refrigerant lines (internal and external to equipment) are isolated, secure, and not in direct contact with each other or	_	without obstruction.
structure.		Indoor blower motor set on correct speed setting to deliver required CFM.
All braze connections have been checked for leaks. A vacuum of 350 microns provides confirmation that the refrigeration system is leak free and dry.		Cover panels are in place and properly tightened.
Final unit inspection to confirm factory tubing has not shifted during shipment. Adjust tubing if necessary so tubes do not rub		For gas heating systems, manifold pressure has been checked and all gas line connections are tight and leak free.
against each other or any component when unit runs.		For gas heating systems, flue gas is properly vented.
Ductwork is sealed and insulated.		System functions safely and properly in all modes.
All drain lines are clear with joints properly sealed. Pour water into drain pan to confirm proper drainage. Provide enough water to ensure drain trap is primed.		Owner has been instructed on use of system and given manual.
For TEM8 models, set the heater size in the Configuration Menu.		



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