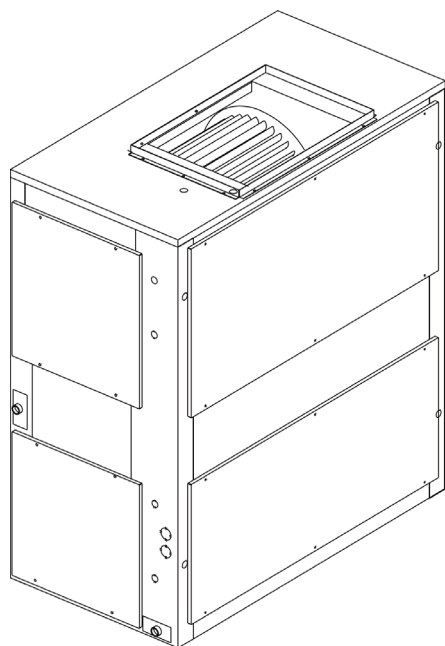


# Installation Operation Maintenance

---

## Split System Cooling or Heat Pump Air Handler

*5 - 20 Tons*



### **Models**

TWE060A\*\*\*E  
TWE060B\*\*\*E  
TWE090A\*\*\*E  
TWE090B\*\*\*E  
TWE120A\*\*\*F  
TWE120B\*\*\*E  
TWE180B\*\*\*E  
TWE240B\*\*\*F


TWE050AD\*\*E  
TWE075AD\*\*E  
TWE100AD\*\*E  
TWE100BD\*\*E  
TWE155BD\*\*E  
TWE200BD\*\*F


# Warnings, Cautions and Notices

**Warnings, Cautions and Notices.** Note that warnings, cautions and notices appear at appropriate intervals throughout this manual. Warnings are provide to alert installing contractors to potential hazards that could result in personal injury or death. Cautions are designed to alert personnel to hazardous situations that could result in personal injury, while notices indicate a situation that could result in equipment or property-damage-only accidents.

Your personal safety and the proper operation of this machine depend upon the strict observance of these precautions.

**ATTENTION:** Warnings, Cautions and Notices appear at appropriate sections throughout this literature. Read these carefully.

 **WARNING:** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

 **CAUTION:** Indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury. It could also be used to alert against unsafe practices.

**NOTICE:** Indicates a situation that could result in equipment or property-damage only accidents.

## Important Environmental Concerns!

Scientific research has shown that certain man-made chemicals can affect the earth's naturally occurring stratospheric ozone layer when released to the atmosphere. In particular, several of the identified chemicals that may affect the ozone layer are refrigerants that contain Chlorine, Fluorine and Carbon (CFCs) and those containing Hydrogen, Chlorine, Fluorine and Carbon (HCFCs). Not all refrigerants containing these compounds have the same potential impact to the environment. Trane advocates the responsible handling of all refrigerants-including industry replacements for CFCs such as HCFCs and HFCs.

## Responsible Refrigerant Practices!

Trane believes that responsible refrigerant practices are important to the environment, our customers, and the air conditioning industry. All technicians who handle refrigerants must be certified. The Federal Clean Air Act (Section 608) sets forth the requirements for handling, reclaiming, recovering and recycling of certain refrigerants and the equipment that is used in these service procedures. In addition, some states or municipalities may have additional requirements that must also be adhered to for responsible management of refrigerants. Know the applicable laws and follow them.

## **WARNING**

### **Contains Refrigerant!**

**System contains oil and refrigerant under high pressure. Recover refrigerant to relieve pressure before opening the system. See unit nameplate for refrigerant type. Do not use non-approved refrigerants, refrigerant substitutes, or refrigerant additives.**

**Failure to follow proper procedures or the use of non-approved refrigerants, refrigerant substitutes, or refrigerant additives could result in death or serious injury or equipment damage.**

**Important:** *DO NOT release refrigerant to the atmosphere! If adding or removing refrigerant is required, the service technician must comply with all federal, state, and local laws.*

**Important:** *One copy of this document ships inside the control panel of each unit and is customer property. It must be retained by the unit's maintenance personnel.*

This booklet describes proper installation, operation, and maintenance procedures for air cooled systems. By carefully reviewing the information within this manual and following the instructions, the risk of improper operation and/or component damage will be minimized.

It is important that periodic maintenance be performed to help assure trouble free operation. Should equipment failure occur, contact a qualified service organization with qualified, experienced HVAC technicians to properly diagnose and repair this equipment.

**Important:** *All phases of this installation must comply with the NATIONAL, STATE & LOCAL CODES. In addition to local codes, the installation must conform with National Electric Code -ANSI/NFPA NO. 70 LATEST REVISION.*

Any individual installing, maintaining, or servicing this equipment must be properly trained licensed and qualified.

# Table of Contents

Model Number Description .....	5
General Information .....	6
Installation Checklist .....	6
Unit Inspection .....	6
Initial Leak Test .....	6
Lifting Recommendations .....	7
Pre-Installation .....	8
Repositioning Drain Pan .....	8
Refrigerant Piping Preparation .....	9
Installations, Limitations and Recommendations .....	10
Dimensional Data .....	11
Installation .....	14
Horizontal Suspension .....	14
Refrigerant Piping .....	15
Condensate Piping .....	16
Filters .....	17
Duct Connections .....	17
Air Flow Settings .....	17
Electrical Connections .....	17
Checkout Procedure .....	18
Installation Checklist .....	19
Electrical Wiring .....	20
Field Wiring .....	22
Warranty .....	32
Central Air Conditioner .....	32
Commercial Equipment Rated 20 Tons and Larger and Related Accessories (Parts Only) .....	32
Wiring Diagram Matrix .....	34

# Model Number Description

<b>TWE</b>	<b>090</b>	<b>A</b>	<b>3</b>	<b>00</b>	<b>A</b>	<b>A</b>
<b>1 2 3</b>	<b>4 5 6</b>	<b>7</b>	<b>8</b>	<b>9 10</b>	<b>11</b>	<b>12</b>

## Model Number Description

All products are identified by a multiple-character model number that precisely identifies a particular type of unit. An explanation of the alphanumeric identification code is provided. Its use will enable the owner/operator, installing contractors, and service engineers to define the operation, specific components, and other options for any specific unit.

When ordering replacement parts or requesting service, be sure to refer to the specific model number, serial number, and DL number (if applicable) stamped on the unit nameplate.

### DIGITS 1-3: PRODUCT TYPE

TWE = Split System Heat Pump/Cooling Air Handler

### DIGITS 4-6: NOMINAL GROSS COOLING CAPACITY (MBh)

060 = 5 Tons  
090 = 7½ Tons  
120 = 10 Tons  
150 = 12½ Tons  
180 = 15 Tons  
240 = 20 Tons

### DIGIT 7: MAJOR DEVELOPMENT SEQUENCE

A = Single  
B = Dual

### DIGIT 8: ELECTRICAL CHARACTERISTICS

1 = 208-230/60/1  
3 = 208-230/60/3  
4 = 460/60/3  
W = 575/60/3  
D = 380-415/50/3  
K = 380/60/3

### DIGITS 9, 10: FACTORY INSTALLED OPTIONS

00 = Packed Stock

### DIGITS 11: MINOR DESIGN SEQUENCE

A = Current Design Sequence

### DIGITS 12: SERVICE DIGIT

A = Current Service Digit

# General Information

Installation procedures should be performed in the sequence that they appear in this manual. Do not destroy or remove the manual from the unit.

The manual should remain weather-protected with the unit until all installation procedures are complete.

**Note:** *It is not the intention of this manual to cover all possible variations in systems that may occur or to provide comprehensive information concerning every possible contingency that may be encountered during an installation. If additional information is required or if specific problems arise that are not fully discussed in this manual, contact your local sales office.*

This manual covers installation of the TWE050, 060, 075, 090, 100 and 120A single circuit air handlers and TWE060, 075, 090, 100, 120, 155, 180, 200 and 240B dual circuit air handlers. These air handler models incorporate a single slab coil assembly, improved application flexibility, servicing, maintenance accessibility and an improved accessory line. They are fully convertible, (vertical to horizontal discharge) without field removal or reorientation of the coil assembly. They are shipped ready for horizontal installation.

The TWE090A300C, TWE090B300C, TWE120A300D, TWE120B300D models are shipped from the factory wired for 208-230V/3ph/60 Hz, but may be field converted for 460V/3ph/60 Hz applications by changing voltage plug on the motor. For voltage change plug instructions, refer to [Figure 14, p. 19](#).

All units (both single and dual circuit), have one drain pan that can be installed in any one of four positions. This allows for vertical or horizontal applications and right or left exit.

**Important:** *The TWE060B, TWE090B, TWE100B, and TWE120B dual circuit air handlers have a split face coil. When they are installed in either position, the lower half of the coil is designated as "Circuit A" and should always wet first.*

The TWE155B, TWE180B, TWE200B dual circuit units have an intertwined face coil.

**Important:** *The TWE050, 060, 075, 090, 100 and 120 air handlers have structural provisions to allow 180 degree rotation of discharge panel/blower assembly at installation. A reversible discharge wiring kit, BAYWRKT001A is available with instructions.*

## Installation Checklist

An "Installation Checklist" is provided at the end of the installation section of this manual. Use the checklist to verify that all necessary installation procedures have been completed. Do not use the checklist as a substitute for reading the information contained in the manual. Read the entire manual before beginning installation procedures.

## Unit Inspection

Inspect material carefully for any shipping damage. If damaged, it must be reported to, and claims made against the transportation company. Compare the information that appears on the unit nameplate with ordering and submittal data to ensure the proper unit was shipped. Available power supply must be compatible with electrical characteristics specified on component nameplates. Replace damaged parts with authorized parts only.

## Initial Leak Test

All TWE units are shipped with a holding charge of nitrogen in each circuit. Remove the access panel(s) shown in [Figure 4, p. 11](#) and [Figure 5, p. 13](#). Locate the liquid line or suction line access valve for each circuit. Install gauges to determine if the circuits are still pressurized. If not, the charge has escaped. Repair as required to obtain a leak-free circuit.

## Lifting Recommendations

### **WARNING** **Improper Unit Lift!**

Test lift unit approximately 24 inches to verify proper center of gravity lift point. To avoid dropping of unit, reposition lifting point if unit is not level. Failure to properly lift unit could result in unit dropping which could result in death or serious injury and possible equipment or property-only damage.

Before preparing the unit for lifting, estimate the approximate center of gravity for lifting safety. Because of placement of internal components, the unit weight may be unevenly distributed. Approximate unit weights are given in [Table 1](#) and [Table 2](#).

**Table 1. 50 Hz Unit and Corner Weights – lb (kg)**

Unit Model No.	Shipping Maximum	Net Maximum	Corner Weights – Vertical				Corner Weights – Horizontal			
			1	2	3	4	A	B	C	D
TWE050A	298 (135.2)	232 (105.2)	59 (26.8)	59 (26.8)	59 (26.8)	59 (26.8)	54 (24.5)	64 (29.0)	64 (29.0)	54 (24.5)
TWE075A	388 (176.0)	317 (143.8)	79 (35.8)	79 (35.8)	79 (35.8)	79 (35.8)	73 (33.1)	81 (36.7)	84 (38.1)	77 (34.9)
TWE100A, TWE100B	439 (199.1)	392 (177.8)	98 (44.5)	98 (44.5)	98 (44.5)	98 (44.5)	95 (43.1)	101 (45.8)	101 (45.8)	95 (43.1)
TWE155B	754 (342.0)	692 (313.9)	173 (78.5)	173 (78.5)	173 (78.5)	173 (78.5)	156 (70.8)	174 (78.9)	190 (86.2)	170 (77.1)
TWE200B	886	816	204 (92.5)	204 (92.5)	204 (92.5)	204 (92.5)	179 (81.2)	221 (100.2)	228 (103.4)	185 (83.9)
TWE200E	857 (390)	787 (357)	109 (50)	262 (119)	154 (70)	262 (119)	192 (87)	229 (104)	130 (59)	236 (107)

**Note:** If application requires steam or hot water heating coils, field supplied isolators must be utilized.

**Table 2. 60 Hz Unit and Corner Weights (lbs.)**

Tons	Unit Model No.	Shipping Maximum (lbs)	Net Maximum (lbs)	Corner Weights – Vertical				Corner Weights – Horizontal			
				1	2	3	4	A	B	C	D
5	TWE060A, B	298	232	59	59	59	59	54	64	64	54
7½	TWE090A, B	388	317	79	79	79	79	73	81	84	77
10	TWE120A, B	439	392	98	98	98	98	95	101	101	95
15	TWE180B	754	692	173	173	173	173	156	174	190	170
20	TWE240B	886	816	204	204	204	204	179	221	228	185

**Note:** If application requires steam or hot water heating coils, field supplied isolators must be utilized.

The crated unit can be moved using a forklift of suitable capacity. For lifting the unit into an elevated mounting position, run lifting straps or slings under the unit and attach securely to the lifting device. Use spreader bars to protect the unit casing from damage. Test lift the unit to determine proper balance and stability.

### **NOTICE** **Equipment Damage!**

Use spreader bars to prevent straps from damaging the unit. Install the bars between lifting straps, both underneath the unit and above the unit. This will prevent the straps from crushing the unit cabinet or damaging the unit finish.

# Pre-Installation

The final position for the air handler must be dictated by required service access to it, weight distribution over structural supports, and by the locations of electrical, refrigerant and condensate drainage connections. After this is determined, the following preparations should be made.

## Repositioning Drain Pan

These air handlers come with one drain pan that can be installed in any one of four positions; this allows for vertical or horizontal application and right or left condensate line connection. The drain pan can also be easily removed for periodic cleaning.

**Note:** Important! All air handlers are shipped with the drain pan installed in the horizontal position and the connection on the left side (as shown in [Figure 1](#)). If an alternate position is required, the drain pan should be repositioned before setting the air handler.

**Figure 1. Drain Pan Location**

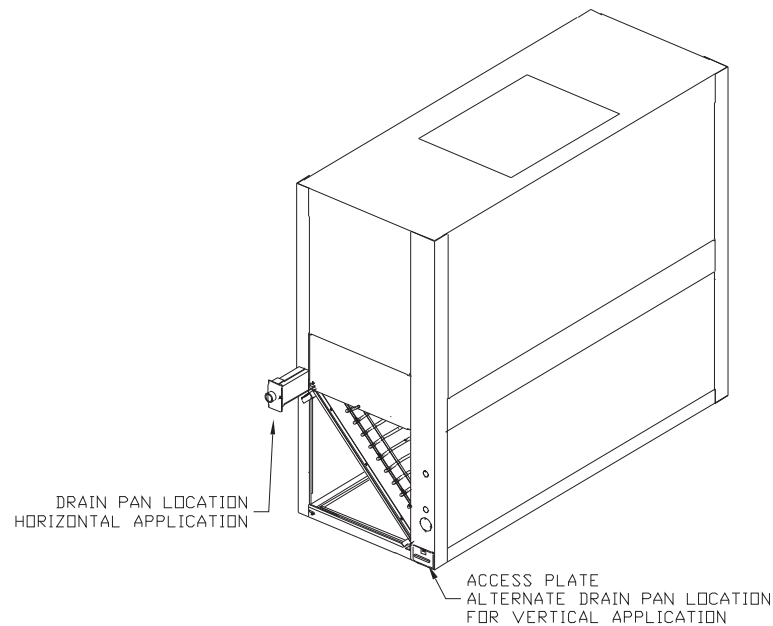
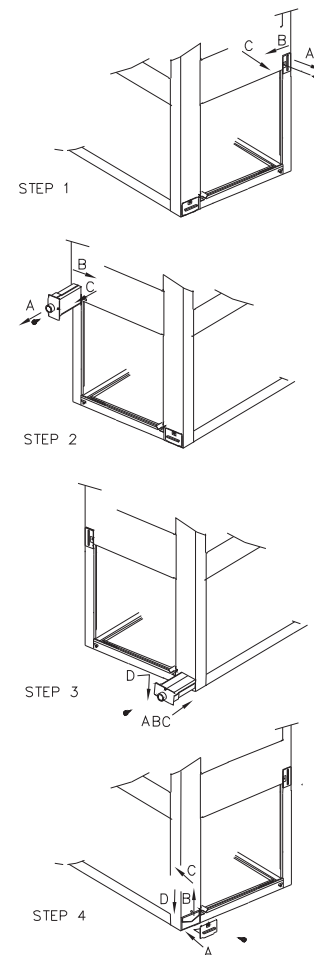


Figure 2.

**Process for Drain Pan Relocation**

1. Remove the access plate at the opposite end of the drain connection. This plate secures and lifts the back end of the drain pan for sloping. It must be removed before the drain pan can be removed. This is done as follows:
  - a. Remove the screw
  - b. Lift the access plate up
  - c. Pull the plate out. If the drain pan is to be moved to the vertical position also remove the other two access plates.
2. Remove the screw securing the drain pan.
  - a. Lift the pan up
  - b. Slide the pan out
3. Install the drain pan into the new position.
  - a. Slide the drain pan into the opening
  - b. Lift the drain pan up
  - c. Push it in all the way
  - d. Drop it down over the lip of the opening, secure with screw
4. Install the access plate on the opposite end of the drain pan.
  - a. Slide the edge of the access plate under the drain pan
  - b. Lift the access plate and drain pan up
  - c. Push the access plate in
  - d. Drop the access plate down over the lip of the opening, secure with screw. If the drain pan is being moved to the vertical position, install the other access plates over the horizontal position opening.

Figure 3. Drain Pan Relocation

**NOTICE****System Component Damage!**

These air handlers are shipped with a dry nitrogen holding charge in the coil. Depress or remove the access valve core to bleed off the nitrogen prior to brazing. Temporarily cap off tubes if the refrigerant line connections are to be made later.

**Refrigerant Piping Preparation**

The air handler is designed so that refrigerant piping can enter from either the right or left hand side. It is shipped with the intent that the refrigerant lines will enter from the left hand side. To convert to right hand entry, unbrazed the elbow on the suction line and rotate 180° and rebraze.

**Important:** Access to refrigerant lines is limited in all horizontal and some vertical applications. Therefore, refrigerant lines should be stubbed out and temporarily capped prior to setting the air handler. Protect adjacent surfaces from heat damage when brazing in and around the air handler.

### Installations, Limitations and Recommendations

#### **NOTICE**

#### **System Component Damage!**

**Properly insulate all refrigerant gas piping to prevent possible water damage due to condensation and to prevent capacity loss and possible compressor damage.**

The general location of the air handler is normally selected by the architect, contractor and/or buyer. For proper installation the following items must be considered.

- Available power supply must agree with electrical data on component nameplate.
- Some air handlers are shipped wired for 208-230 volt applications can be converted for 460 volt by rewiring the blower motor (Figure 14, p. 19).
- If external accessories are installed on the unit, additional clearances must be provided.
- All duct work should be properly insulated to prevent condensation and heat loss.
- Refrigerant gas piping must be insulated.

It is recommended that the outline drawings (Figure 4, p. 11 - Figure 5, p. 13) be studied and dimensions properly noted and checked against the 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.

**Important:** *When installing these units "free standing" with discharge grills and isolators, a top support with isolator should be added to prevent tipping. Support and isolator can be attached to a wall or other appropriate structure.*

**Important:** *If adding external accessories to the unit, additional clearances must be considered for the overall space needed.*

For installation of accessories available for this air handler, follow the instructions packed with each accessory.



## Dimensional Data

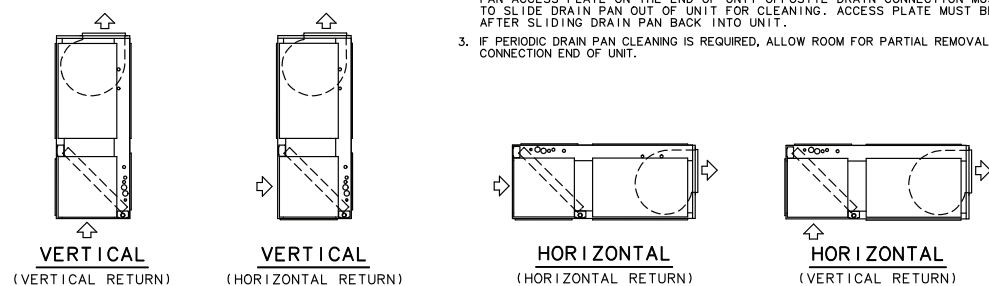
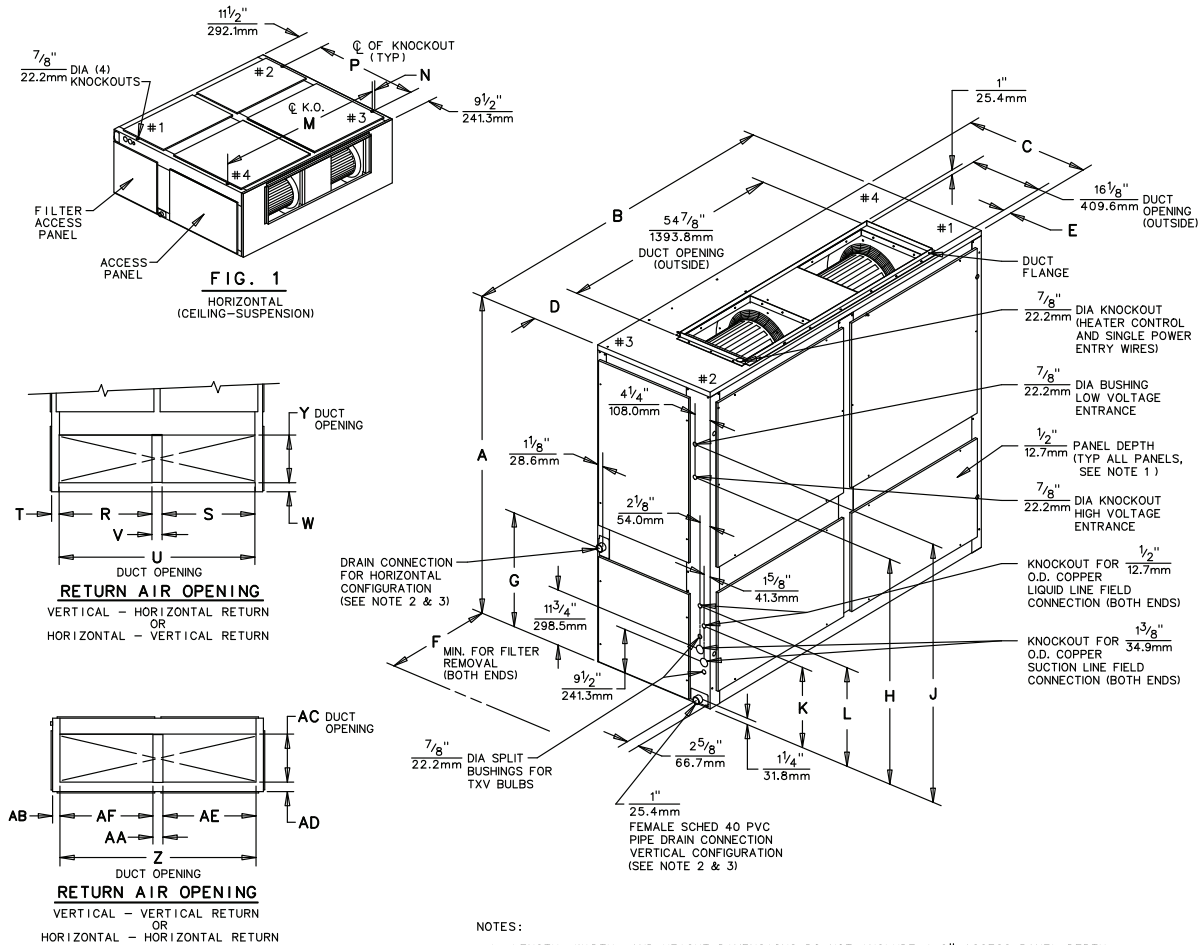
Figure 4. (continued from previous page) TWE050-120 Dimensional Data

MODEL	A	B	C	D	E	F	G	H	J	K	L	M
TWE050 & 060A	48" 1219.2mm	38" 965.2mm	22" 558.8mm	8" 203.2mm	19 1/2" 495.3mm	26" 660.4mm	15 7/8" 403.2mm	14 1/8" 358.8mm	1 7/8" 47.63mm	42 1/8" 1070mm	34 5/8" 879.5mm	2 7/8" 73.03mm
TWE050 & 060B	48" 1219.2mm	38" 965.2mm	22" 558.8mm	8" 203.2mm	19 1/2" 495.3mm	26" 660.4mm	16 1/4" 412.8mm	13 1/4" 336.6mm	1 1/8" 28.58mm	42 1/8" 1070mm	34 5/8" 879.5mm	2 7/8" 73.03mm
TWE075 & 090A	54" 1371.6mm	47 1/2" 1206.5mm	25" 635mm	11 3/4" 298.5mm	22 3/8" 568.3mm	22" 558.8mm	X	17 3/4" 450.6mm	4" 101.9mm	45 1/4" 1149mm	36 7/8" 936.6mm	6 5/8" 168.3mm
TWE090B	54" 1371.6mm	47 1/2" 1206.5mm	25" 635mm	11 3/4" 298.5mm	22 3/8" 568.3mm	22" 558.8mm	20 9/16" 521.9mm	16" 407.6mm	2 1/8" 54.10mm	45 1/4" 1149mm	36 7/8" 936.6mm	6 5/8" 168.3mm
TWE100 & 120A	54" 1371.6mm	63 1/2" 1612.9mm	25" 635mm	19 3/4" 501.7mm	22 3/8" 568.3mm	22" 558.8mm	X	17 3/4" 450.6mm	4" 101.9mm	45 1/4" 1149mm	36 7/8" 936.6mm	6 5/8" 168.3mm
TWE100 & 120B	54" 1371.6mm	63 1/2" 1612.9mm	25" 635mm	19 3/4" 501.7mm	22 3/8" 568.3mm	22" 558.8mm	20 9/16" 521.9mm	16" 407.6mm	2 1/8" 54.10mm	45 1/4" 1149mm	36 7/8" 936.6mm	6 5/8" 168.3mm

MODEL	N	P	Q	R	S	T	V	W	X	Y	Z	AA
TWE050 & 060A	35 5/8" 904.9mm	12 1/4" 311.15mm	34 7/8" 885.8mm	32 1/4" 819.2mm	3/8" 9.525mm	12 1/2" 317.5mm	X	X	7 5/8" 193.7mm	1 1/8" 28.58mm	2" 50.8mm	1 7/8" 47.63mm
TWE050 & 060B	35 5/8" 904.9mm	12 1/4" 311.15mm	34 7/8" 885.8mm	32 1/4" 819.2mm	5/16" 7.938mm	12 1/2" 317.5mm	14 3/4" 374.7mm	11 1/8" 282.6mm	7 5/8" 193.7mm	3/4" 19.05mm	2" 50.8mm	2" 50.8mm
TWE075 & 090A	45 1/8" 1146.2mm	16 1/8" 409.6mm	38 1/8" 968.4mm	41 3/4" 1060mm	1/2" 12.7mm	16 1/4" 412.8mm	X	15" 382.2mm	6 7/8" 174.6mm	1 3/8" 34.93mm	1 3/4" 44.45mm	2" 51.05mm
TWE090B	45 1/8" 1146.2mm	16 1/8" 409.6mm	38 1/8" 968.4mm	41 3/4" 1060mm	3/8" 9.525mm	16 1/4" 412.8mm	18 3/4" 477.5mm	14" 356.8mm	6 7/8" 174.6mm	1 1/8" 28.58mm	1 3/4" 44.45mm	2 1/8" 54.10mm
TWE100 & 120A	61 1/8" 1552.6mm	16 1/8" 409.6mm	38 1/8" 968.4mm	57 3/4" 1467mm	1/2" 12.7mm	16 1/4" 412.8mm	X	15" 382.2mm	6 7/8" 174.6mm	1 3/8" 34.93mm	1 3/4" 44.45mm	2" 51.05mm
TWE100 & 120B	61 1/8" 1552.6mm	16 1/8" 409.6mm	38 1/8" 968.4mm	57 3/4" 1467mm	3/8" 9.525mm	16 1/4" 412.8mm	18 3/4" 477.5mm	14" 356.8mm	6 7/8" 174.6mm	1 1/8" 28.58mm	1 3/4" 44.45mm	2 1/8" 54.10mm

PRINTED FROM D669508

Figure 5. TWE155-240 Dimensional Data



MODEL	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R
TWE155 & 180B	69" 1752.6mm	79 1/2" 2019.3mm	27 5/8" 701.7mm	12 3/4" 314.3mm	1 5/8" 41.3mm	26" 660.4mm	25 1/8" 638.2mm	49 1/4" 1247.8mm	56 1/2" 1428.8mm	15 1/2" 393.7mm	19 1/2" 495.3mm	77 1/2" 1962.2mm	1 1/2" 31.8mm	48" 1219.2mm	35" 889.0mm

MODEL	S	T	U	V	W	Y	Z	AA	AB	AC	AD	AE	AF
TWE155 & 180B	35" 889.0mm	27 1/4" 73.0mm	73 3/8" 1876.4mm	3 3/4" 95.3mm	3 3/8" 85.7mm	18" 457.2mm	73 3/8" 1876.4mm	3 3/4" 95.3mm	2 7/8" 73.0mm	18" 457.2mm	3 5/8" 92.1mm	35" 889.0mm	48" 889.0mm

# Installation

## Horizontal Suspension

### **WARNING**

#### **Risk of Unit Dropping!**

**Do not use mounting legs for ceiling suspension, external isolation, or unit support during module placement. Mounting legs are designed only to secure the unit to the floor, housekeeping pad, or platform. Improper use of the mounting legs as described above could result in unit dropping which could result in death or serious injury, and equipment damage.**

If the air handler will be suspended, use a suspension mounting kit to isolate the unit from the structure. This is usually accomplished through the use of spring or rubber isolators, which are offered as an accessory. Mounting rods must be field supplied. Isolator selection is dependent upon total unit weight including accessories. Approximate unit weights are provided in [Table 1](#) and [Table 2, p. 7](#).

### **NOTICE**

#### **Equipment Damage!**

**Before hanging the unit on suspension rods, reinforce the cabinet around the knockouts by using a large washer inside the cabinet. Washers should be between the skin of the air handler and the nut on the suspension rod.**

Align holes (knockouts) in the cabinet with structural supports and secure suspension rods to the structure, then to the air handler cabinet. If knockout locations do not permit proper alignment with existing structure, it may be necessary to field fabricate cross members on existing structural beams.

**Note:** *When other than bottom return is to be used, side panel removed for return duct installation must be secured over the bottom opening.*

### **Leveling**

This air handler has a double sloped drain pan. In order to assure proper drainage along the length of the drain pan, it is important to have the unit properly leveled. Be sure the air handler is level or slightly sloped in the direction of the condensate connection.

### **Auxiliary Drain Pan**

A field fabricated, auxiliary drain pan should be installed under the unit for all horizontal applications and when air handlers are installed above ceilings or in other locations where condensate overflow may cause damage. This drain pan will eliminate any excess condensation that may be due to extreme humidity or an obstructed drain in the primary drain pan. Drain lines from this pan must be installed, but should not be connected to the primary drain line from the unit. Isolate the auxiliary drain pan from both the air handler and the structure.

### **WARNING**

#### **Fiberglass Wool!**

**Product contains fiberglass wool. Disturbing the insulation in this product during installation, maintenance or repair will expose you to airborne particles of glass wool fibers and ceramic fibers known to the state of California to cause cancer through inhalation. Glass wool 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 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.***

## Refrigerant Piping

Installation, brazing, leak testing and evacuation of refrigerant lines are covered in this the installation instructions packaged with the outdoor unit. Read the instructions before beginning installation of refrigerant lines.

Locate cloth bag(s) attached to the refrigerant tube of the coil that contains two (2) brass clamps (straps) and cork impregnated insulation material approximately 9" long by 4" wide. This is for attaching and insulating the expansion valve bulb (s) to the suction line(s).

On air handlers that will have refrigerant lines entering the cabinet from the left side, remove the split rubber grommet from the knockout in the end of the air handler. Uncoil the cap tube with the bulb attached at the expansion valve and place the grommet on the cap tube. With the grommet around the tube, push the bulb through the hole and position the grommet back into it's original position (one bulb and cap tube on single circuit units and two bulbs and cap tubes on dual circuit units).

Attach the bulb(s) on a horizontal section of tube where the entire length of the bulb is in contact with the tube, (see [Figure 7, p. 16](#)) approximately 45 degrees off vertical (a 4 or 8 o'clock position), 10 to 12 inches outside of the air handler.

On air handlers that will have refrigerant lines entering the cabinet from the right side, the bulb(s) should be attached to the suction tube(s) inside the cabinet in the same manner as above, approximately 10" from the right end of the unit.

After attaching to the suction line(s), either inside or outside of the cabinet, wrap the cork impregnated insulation around the bulb(s) and suction tube(s). Refrigerant piping should be insulated.

## Installation

Figure 6.

Figure 7. Remote Bulb Installation

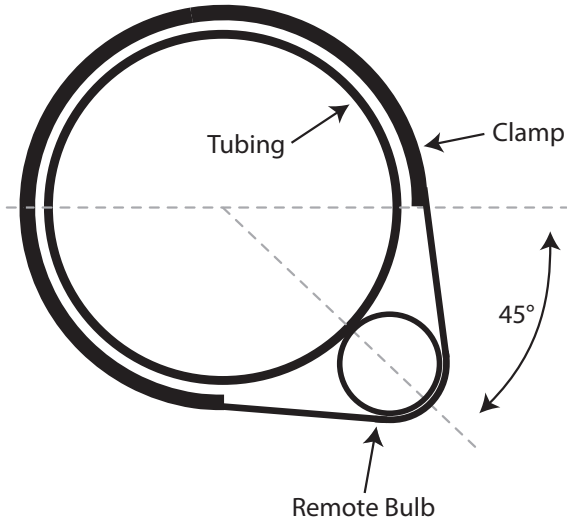
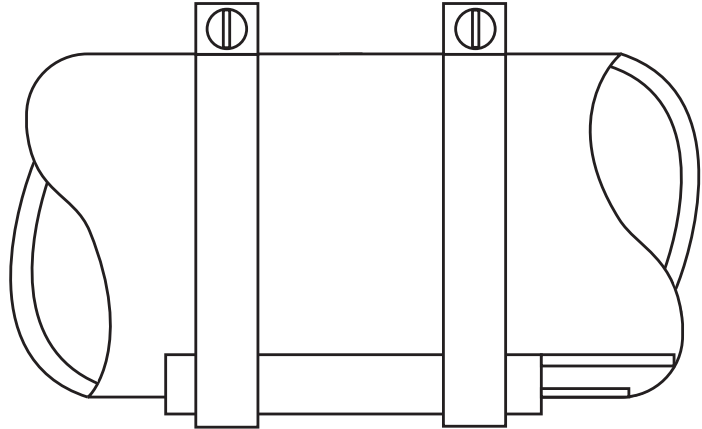


Figure 8. Remote Bulb (Side View)



### **NOTICE** Equipment Damage!

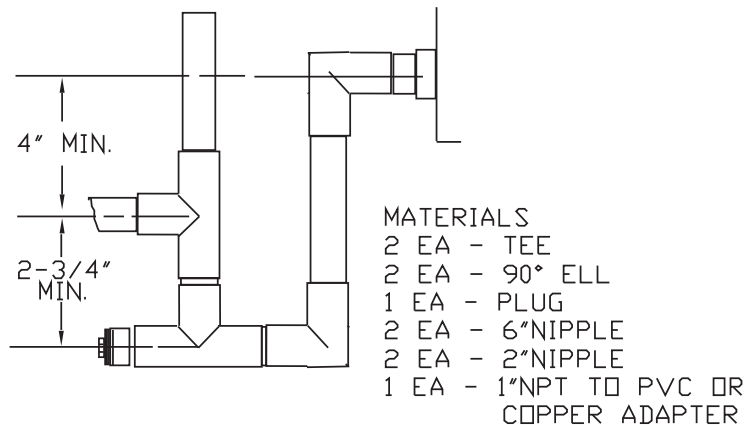
Ensure that the refrigerant lines passing through the cabinet are not resting on sharp sheet metal edges.

## Condensate Piping

The drain pan condensate connection is a female slip joint type for 1" Schedule 40 PVC pipe. Use PVC cement and tubing as required (field supplied) to construct a trap. A union or flexible tubing and clamps may be installed if the drain pan is to be removed periodically for cleaning.

**Important:** When air handler is installed in the vertical position and close proximity trapping of condensate is required, use of a subbase accessory to raise the air handler for clearance of the drain trap is recommended. See [Figure 9](#) for a typical drain trap assembly.

Figure 9. Typical Drain Trap Assembly



## Filters

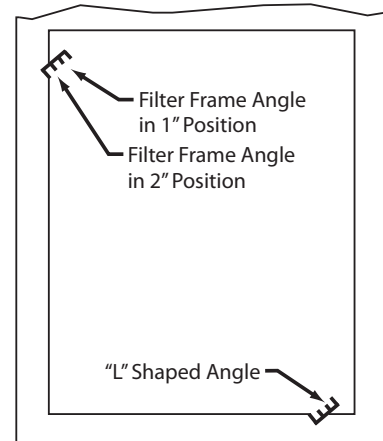
**Figure 10.**

Air handlers are shipped with throwaway filters installed. For replacement filters consult the air handler service facts for correct size and number.

To replace filters from the end of the unit, remove lower access panel (either end) and slide old filters out and replace with new ones. To replace from the front of the unit, remove one "L" shaped angle. Remove and replace filters and reinstall "L" shaped angle. See [Figure 11](#).

To convert from 1" filter to a 2" filter on units so equipped, remove lower access panels from both ends of the air handler. Remove screws and reposition the "L" shaped angles from both the top and bottom of the filter track to increase the width of the filter opening.

**Figure 11. Filter Replacement**



## Duct Connections

The supply and return ducts should be connected to the unit with flame retardant duct connectors to reduce vibration transmission. The return duct should be sized to the same dimensions as the return inlet of the unit.

**Important:** *Duct flanges are provided for attachment of the duct work. On TWE060, 090, and 120 the flanges are not installed but are shipped inside the air handler. While facing the air handler with the control box to your left, remove the upper access panel. The duct flanges will be attached to the belly band of the air handler nearest you. Remove the screws securing flanges in place. Position the four flanges around the supply opening. Secure with field supplied screws, using the predrilled holes. On TWE180 and 240, the duct flanges are packaged on the outside of the cabinet.*

## Air Flow Settings

Unit is shipped for nominal airflow with nominal static pressure. Please refer to fan performance table in either the product catalog or unit service facts and select the proper drive package for each application. Failure to do so could result in improper airflow causing coil frosting or condensate management problems. Condensate management problems such as water drip off or water blow off could be the result of too great of air face velocity across the coil.

**Note:** *For additional information regarding the safe discharge of capacitors, see PROD-SVB06A-EN.*

## Electrical Connections

### WARNING

#### Hazardous Voltage w/Capacitors!

Disconnect all electric power, including remote disconnects and discharge all motor start/run capacitors before servicing. Follow proper lockout/tagout procedures to ensure the power cannot be inadvertently energized. Verify with an appropriate voltmeter that all capacitors have discharged. Failure to disconnect power and discharge capacitors before servicing could result in death or serious injury.

**⚠️ WARNING**  
**Ground Wire!**

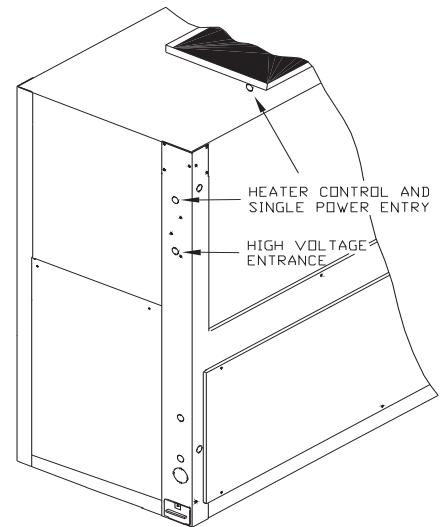
All field-installed wiring must be completed by qualified personnel. All field-installed wiring must comply with NEC and applicable local codes. Failure to follow this instruction could result in death or serious injuries.

**Figure 12.**

1. All electrical lines, sizing, protection, and grounding must be in accordance with the National Electric Code and local codes.
2. If conduit is used, isolate whenever vibration transmission may cause a noise problem within the building structure.
3. Ensure all connections are tight and no wires exposed.
4. All accessories must be installed and wired according to the instructions packaged with that accessory.

For air handler power entry only, or for dual power entry (power entry for air handler and power entry for electric heats), the electrical connections are made in the fan control box located in the left side of the air handler and electric heater respectively. Wiring entrance is through holes provided in the end of the air handler cabinet, [Figure 13](#). Breaker or fuse size can be selected using the nameplates attached to the unit and electric heater. See [p. 20](#) through [p. 31](#) for typical interconnecting wiring diagrams.

**Figure 13. Electrical Entries**



**Table 3. Recommended t'stat wire size**

Wire Size (Gauge)	Maximum Wire Length Physical distance between Unit & T'stat
22	30 Feet
20	50 Feet
18	75 Feet
16	125 Feet
14	200 Feet

**Checkout Procedure**

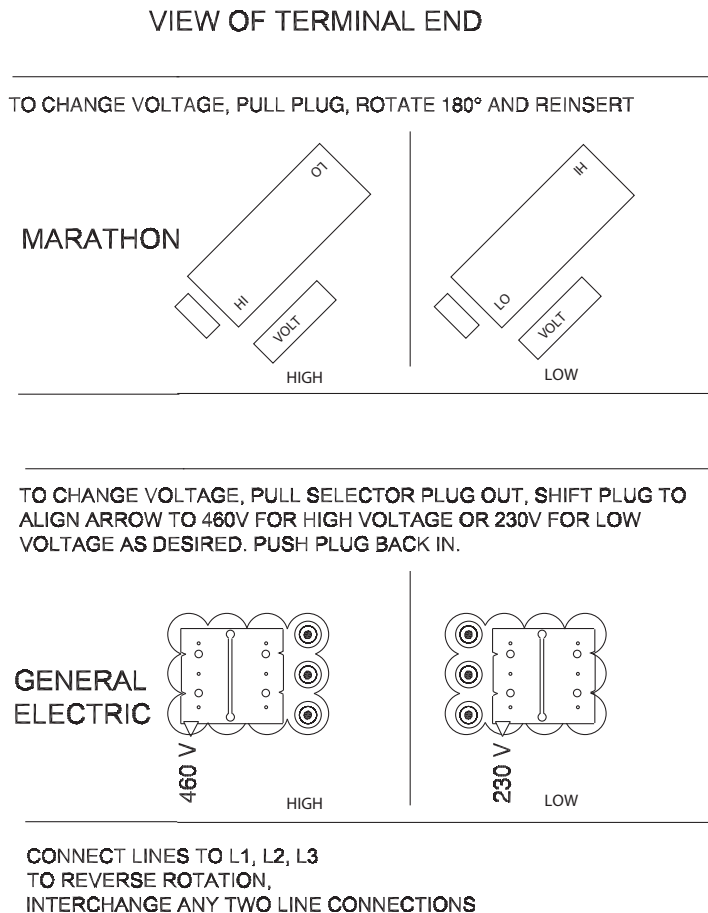
Complete the following "installation checklist" once installation of field wiring connections is complete. All operational checks (unit running) must be made after the outdoor unit is installed and system interconnection is complete.

## Installation Checklist

Complete this checklist once the unit is installed to verify that all recommended procedures have been accomplished before the system is started. Operational checks cannot be performed until the outdoor unit is installed and system interconnection is complete.

1. Verify that the unit electrical power is disconnected.
2. Inspect all field wiring connections. All connections should be clean and tight.
3. Inspect unit ground connection(s). Ground must comply with all applicable codes.
4. Inspect unit suspension arrangement (if used). Unit position must be secure. Remove any tools or debris found in or near the unit.
5. Inspect duct outlets. Outlets must be open and unrestricted.
6. Inspect unit drain lines. Pipe connections must be tight and drain line unrestricted.
7. Inspect fan assembly to insure all moving parts move freely.
8. If unit is horizontally mounted, make sure secondary drain pan has been installed.
9. Inspect unit for proper filters, securely installed. All cabinet panels must be secure.
10. Instruct owner/operator on proper system operating and maintenance procedure.

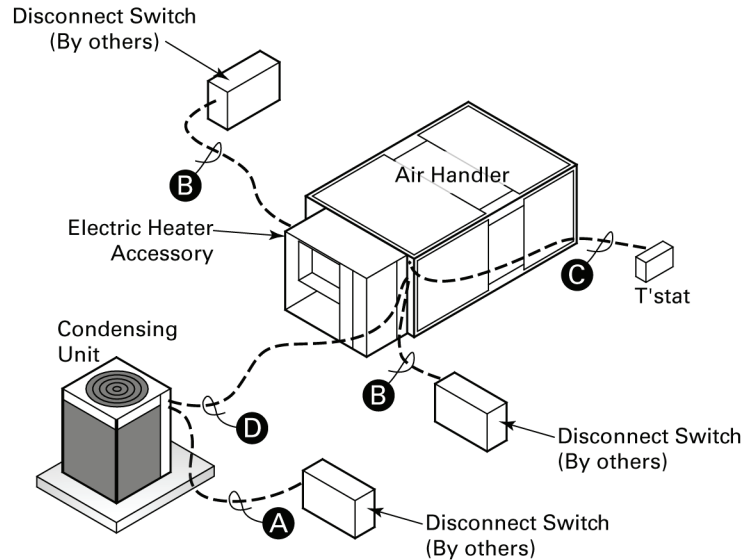
**Figure 14. Voltage Change Plug**



## Electrical Wiring

### Thermostat and Control Connections

Figure 15. Field Wiring



**Notes:**

1. Wiring shown with dashed lines is to be furnished and installed by the customer. All customer supplied wiring must be copper only and must conform to NEC and local electrical codes. Codes may require line of sight between disconnect switch and unit.
2. When electric heater accessory is used, single point or dual point power entry is optional, since single point power option is through electric heater only.

### **⚠️ WARNING**

#### **Hazardous Voltage w/Capacitors!**

**Disconnect all electric power, including remote disconnects and discharge all motor start/run capacitors before servicing. Follow proper lockout/tagout procedures to ensure the power cannot be inadvertently energized. For variable frequency drives or other energy storing components provided by Trane or others, refer to the appropriate manufacturer's literature for allowable waiting periods for discharge of capacitors. Verify with an appropriate voltmeter that all capacitors have discharged. Failure to disconnect power and discharge capacitors before servicing could result in death or serious injury.**

### **⚠️ WARNING**

#### **Ground Required!**

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

1. Observe all notes on the diagrams.
2. Mount the thermostat in the desired location.
3. Install color coded low voltage cables between outdoor unit, indoor unit and thermostat.
4. Connect low voltage control wiring to the low voltage terminal board located on the side of the fan control box per the typical interconnecting wiring diagrams on [p. 20](#) - [p. 31](#).

**TTA090A/TWE090A, TTA120A/TWE120A**

**Field Wiring:**

- A. 3 power wires. Line voltage.
- B. 3 power wires. Line voltage for 3 phase; 2 wires for single phase.
- C. Cooling only thermostat: 3 wires, 24 volts.
  - a. One Stage Electric heat: add 1 additional wire, 24 volts.
  - b. Two Stage Electric heat: add 2 additional wires, 24 volts.
- D. 4 wires, 24 volts.

**TWA090A/TWE090A, TWA120A/TWE120A**

**Field Wiring:**

- A. 3 power wires. Line voltage.
- B. 3 power wires. Line voltage for 3 phase; 2 wires for single phase.
- C. Heat pump thermostat: 6 wires, 24 volts.
  - a. Electric heat: add 2 additional wire, 24 volts.
- D. 6 wires, 24 volts.
  - a. Outdoor thermostat; add 1 additional wire, 24 volts.
  - b. Electric heat: add 1 additional wires, 24 volts.

**TTA120B/TTE120B, TTA120C/TWE120C, TTA120B/TWE120B**

**Field Wiring:**

- A. 3 power wires. Line voltage.
- B. 3 power wires. Line voltage for 3 phase; 2 wires for single phase.
- C. Cooling only thermostat: 4 wires, 24 volts.
  - a. One Stage Electric heat: add 1 additional wire, 24 volts.
  - b. Two Stage Electric heat: add 2 additional wires, 24 volts.
- D. 5 wires, 24 volts.

**TT\_060/TWE060A**

**Field Wiring:**

- A. 3 power wires. Line voltage.
- B. 3 power wires. Line voltage for 3 phase; 2 wires for single phase.
- C. Cooling only thermostat: 3 wires, 24 volts.
  - a. One Stage Electric heat: add 1 additional wire, 24 volts.
  - b. Two Stage Electric heat: add 2 additional wires, 24 volts.
- D. 2 wires, 24 volts.

**TW\_060A/TWE060A**

**Field Wiring:**

- A. 3 power wires. Line voltage for 3 phase; 2 wires for single phase.
- B. 3 power wires. Line voltage for 3 phase; 2 wires for single phase.
- C. Heat pump thermostat: 6 wires, 24 volts.
  - a. Electric heat: add 2 additional wire, 24 volts.
- D. 2 wires, 24 volts.

# Installation

- a. Outdoor thermostat; add 1 additional wire, 24 volts.
- b. Electric heat: add 1 additional wires, 24 volts.

**(2) 2/4TT\_060/TWE120B, (2) 2/4TT\_030/TWE060B**

**Field Wiring:**

- A. 3 power wires. Line voltage for 3 phase; 2 wires for single phase.
- B. 3 power wires. Line voltage for 3 phase; 2 wires for single phase.
- C. Cooling only thermostat: 4 wires, 24 volts.
  - a. One Stage Electric heat: add 1 additional wire, 24 volts.
  - b. Two Stage Electric heat: add 2 additional wires, 24 volts.
- D. 2 wires, 24 volts to outdoor section A.
  - a. 2 wires, 24 volts to outdoor section B.

**(2) 2/4TW\_030/TWE060B, (2) 2/4TW\_060/TWE120B**

**Field Wiring:**

- A. 3 power wires. Line voltage for 3 phase; 2 wires for single phase.
- B. 3 power wires. Line voltage for 3 phase; 2 wires for single phase.
- C. Heat pump thermostat: 7 wires, 24 volts.
  - a. Electric heat: add 2 additional wire, 24 volts.
- D. 5 wires, 24 volts to outdoor section A.
  - a. 2 wires, 24 volts to outdoor section B.
  - b. 2 wires, 24 volts between outdoor sections A and B.
  - c. Outdoor thermostat; add 1 additional wire, 24 volts.
  - d. Electric heat: add 1 additional wires, 24 volts.

## Field Wiring

**Figure 16. TTA090A, 120A/TWE090A, 120A; TTA075A, 100A/TWE075A, 100A**

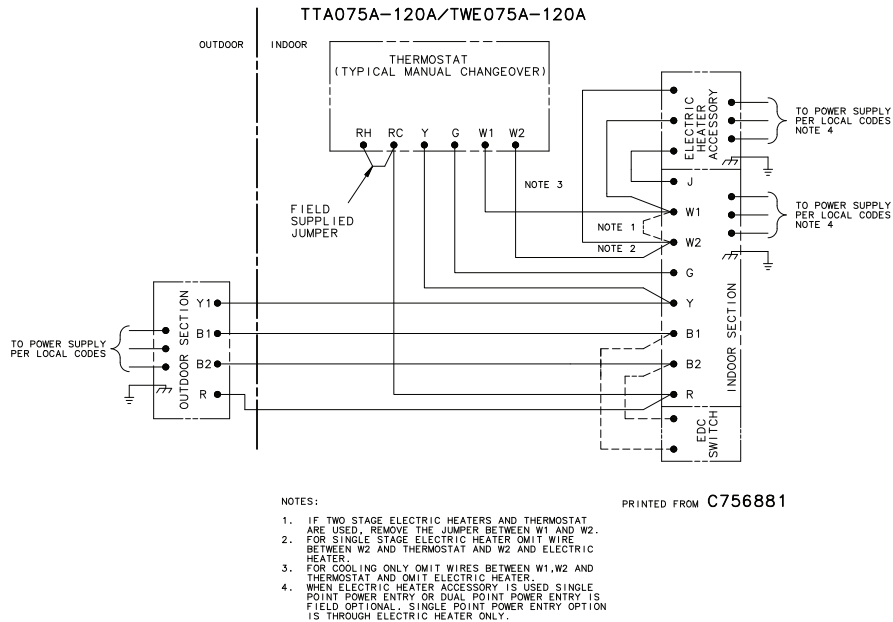


Figure 17. TTA120B/TWE120B, TTA120C/TWE120A, TTA100B/TWE100B, TTA100C/TWE100A

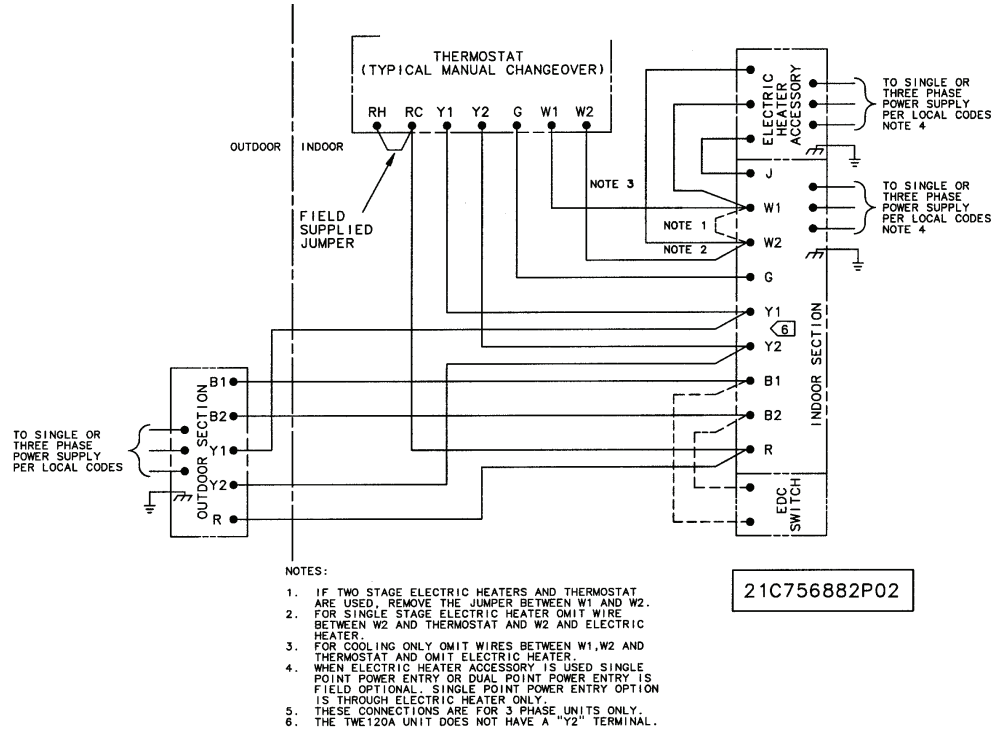


Figure 18. TWA090A, 120A/TWE090A, 120A; TWA075A, 100A/TWE075A, 100A

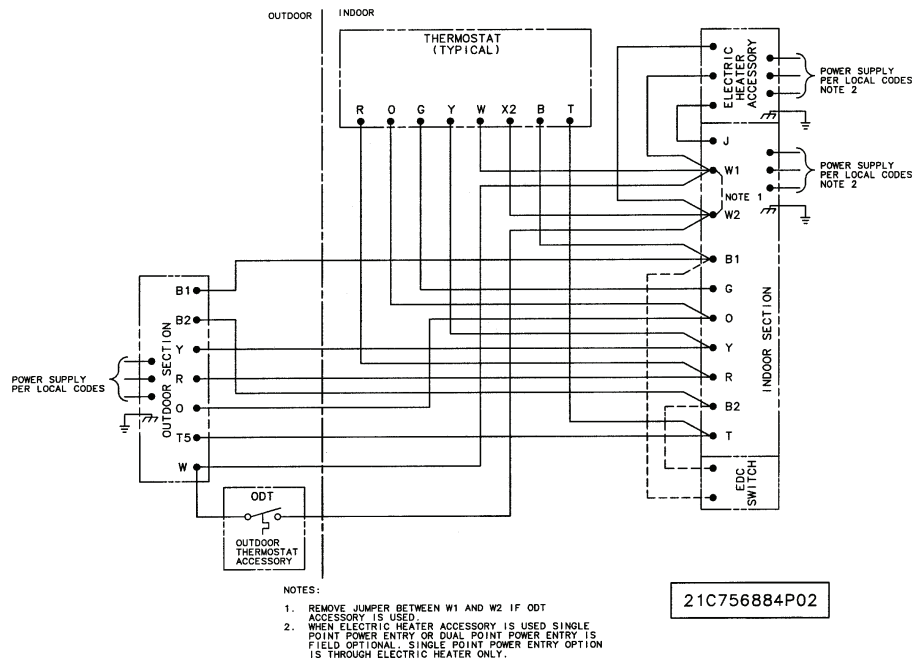


Figure 19. TTA120B/TWE120B; TTA120C/TWE120A; TTA100B/TWE100B; TTA100C/TWE100A

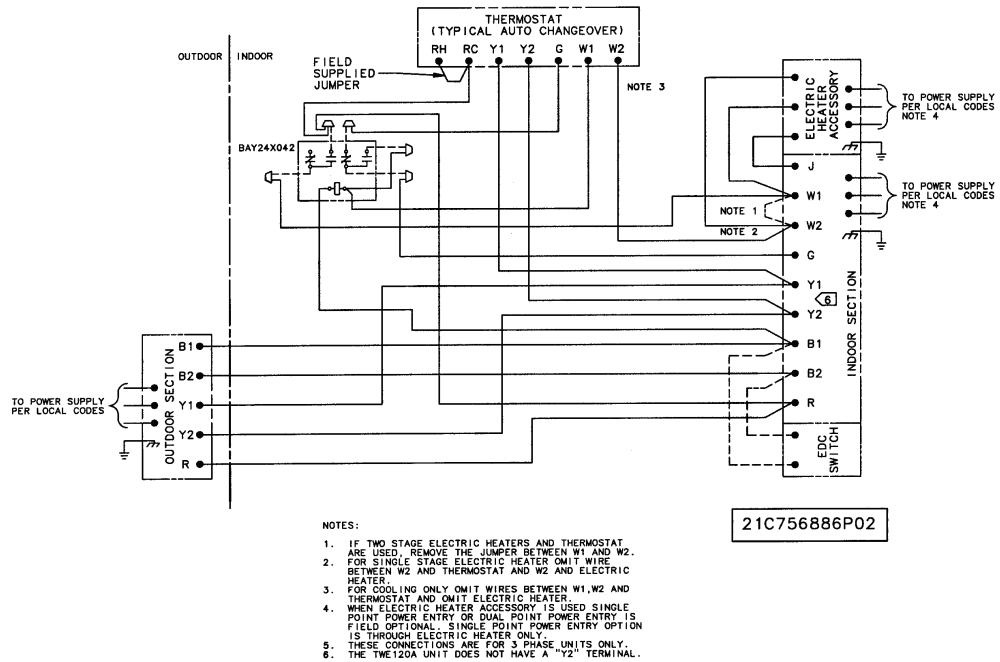


Figure 20. TTA090A, 120A/TWE090A, 120A; TTA075A, 100A/TWE075A, 100A

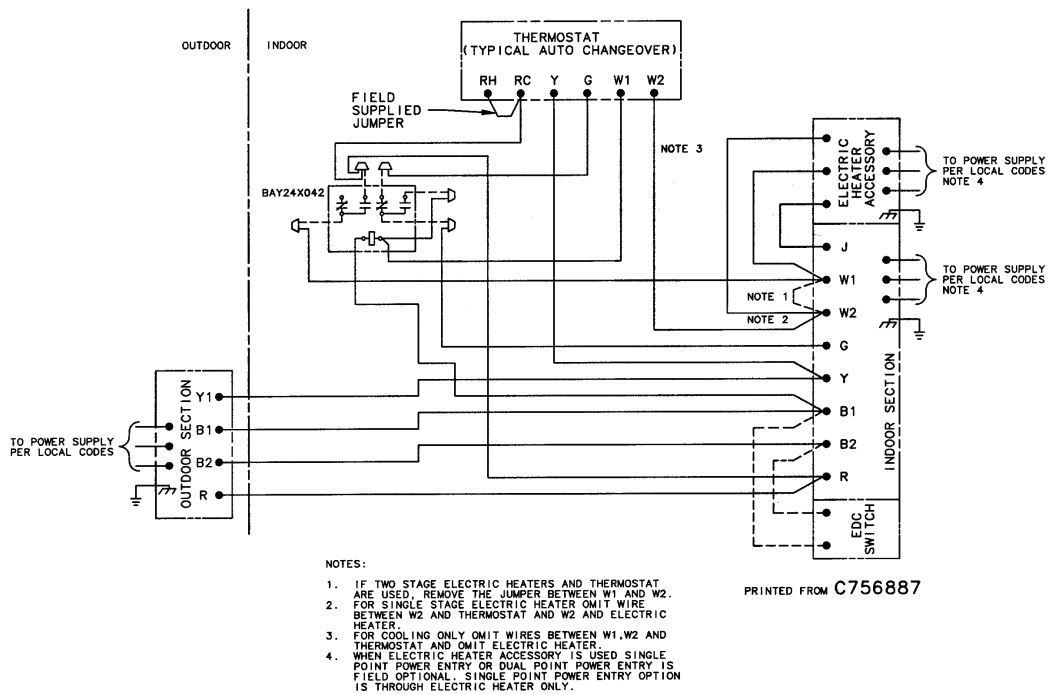


Figure 21. 2/4TT\_060/TWE060; 2/4TT\_050/TWE050

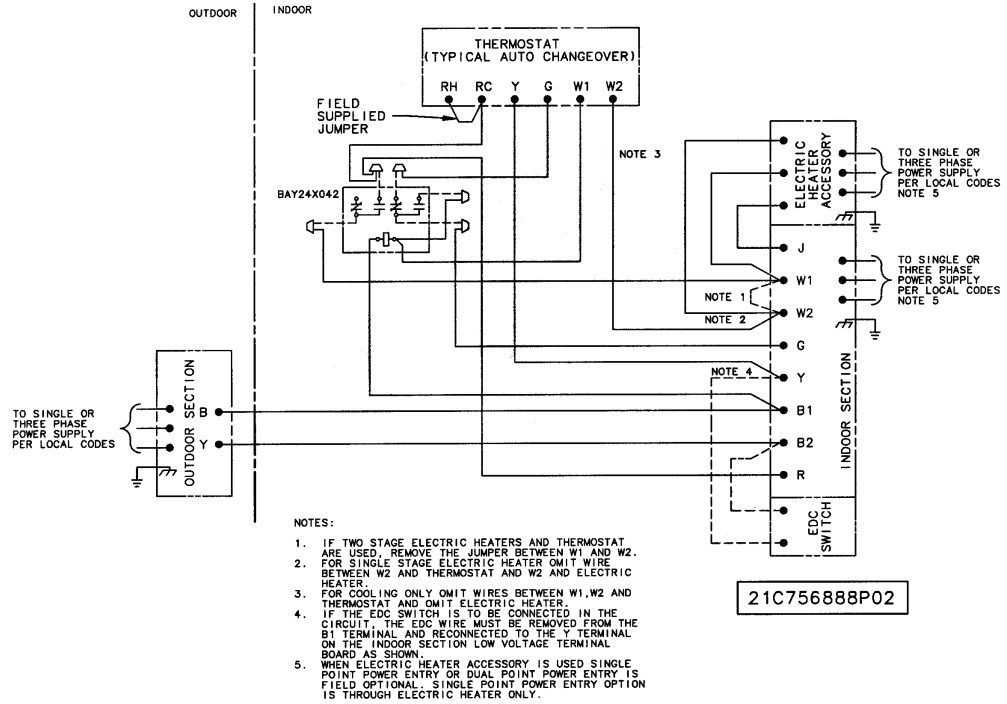


Figure 22. 2/4TT\_060/TWE060; 2/4TT\_050/TWE050

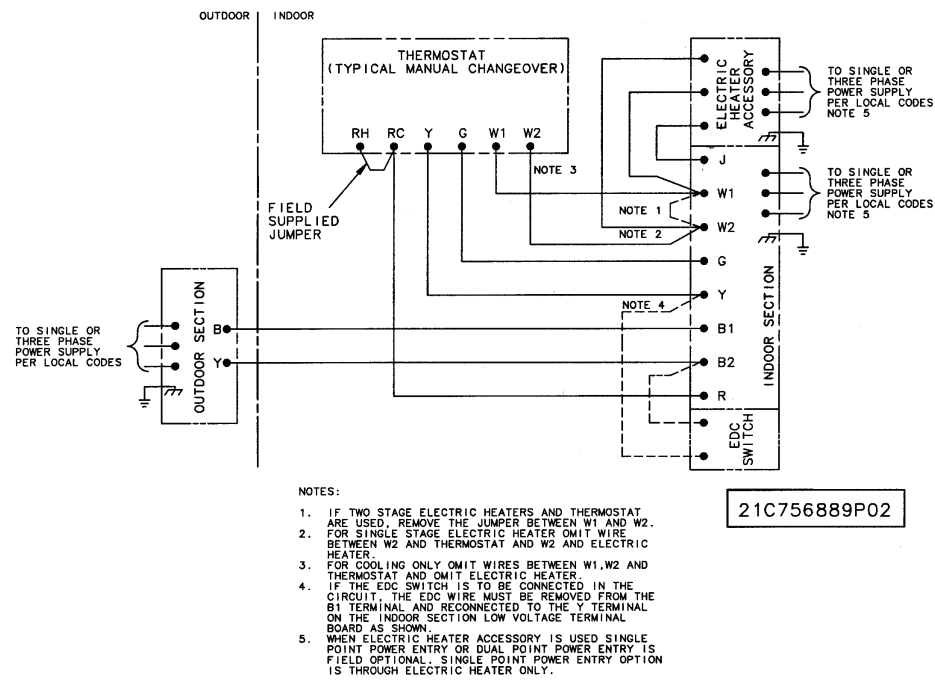


Figure 23. 2/4TT\_060/TWE060; 2/4TT\_050/TWE050

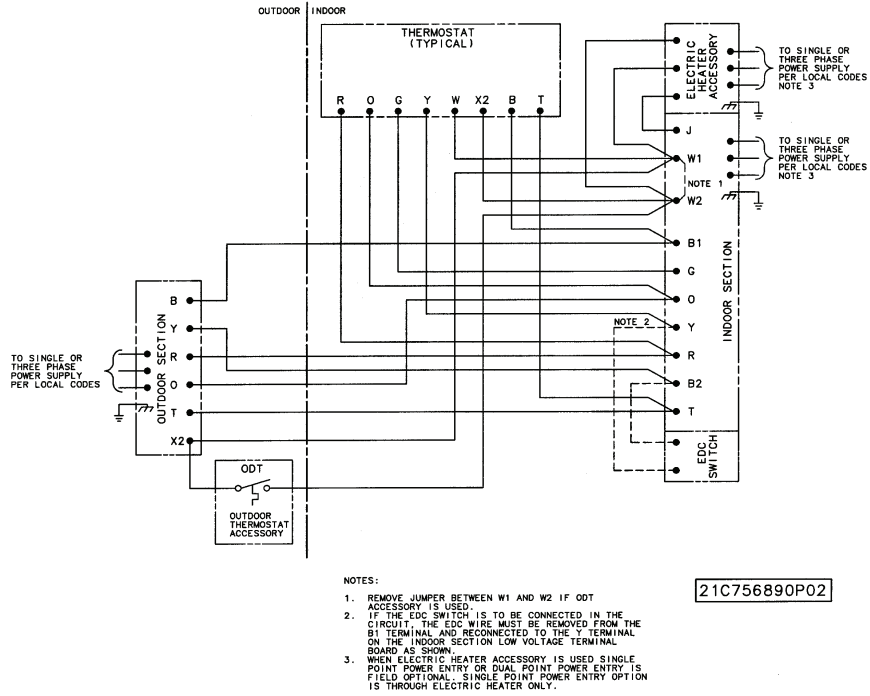


Figure 24. 2/4TW\_030/TWE060B; 2/4TW\_/TWE090B; 2/4TW\_060/TWE120B; 2/4TW\_050/TWE100B

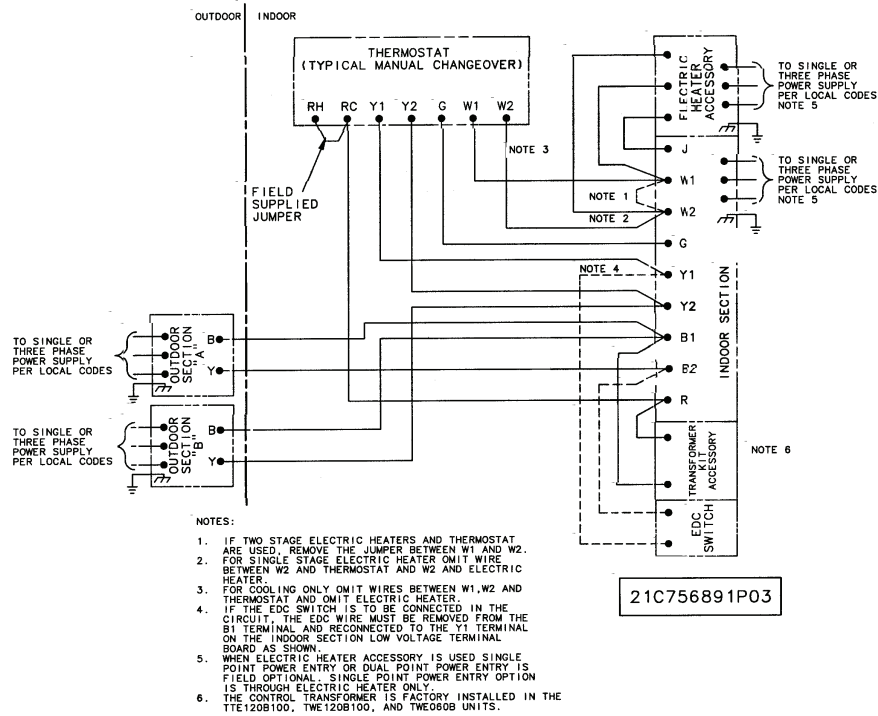


Figure 25. 2/4TW\_030/TWE060B; 2/4TW\_/TWE090B; 2/4TW\_060/TWE120B; 2/4TW\_050/TWE100B

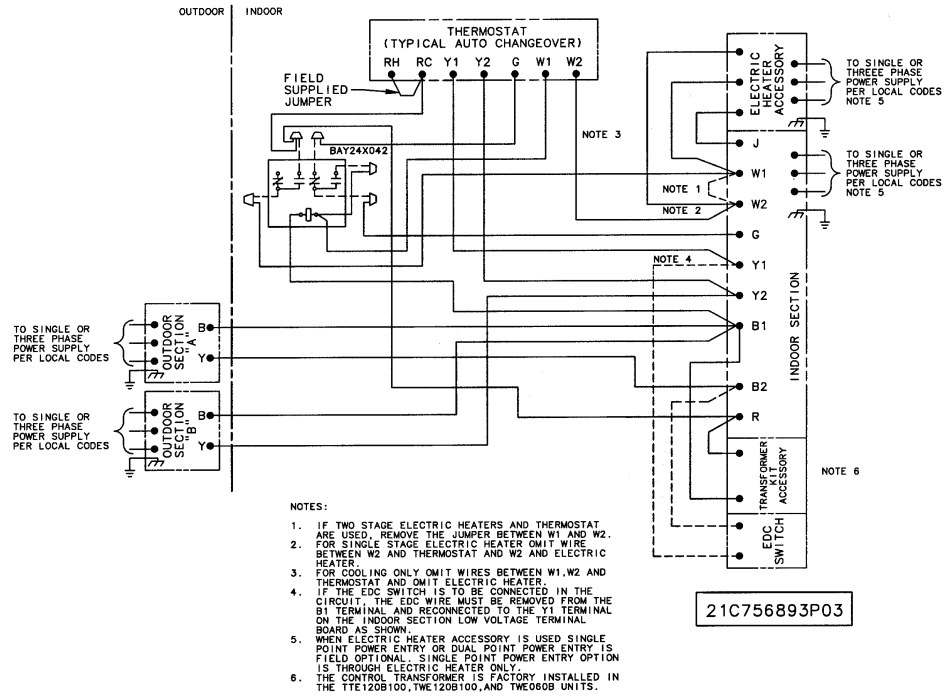
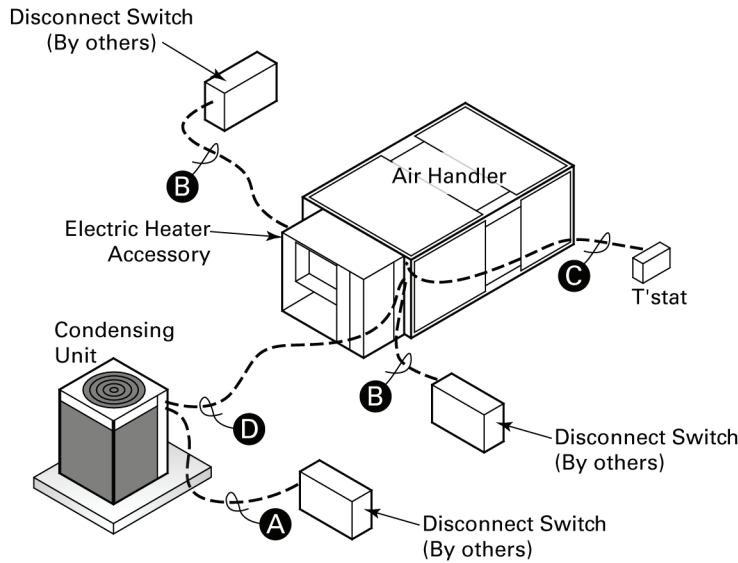


Figure 26. Field Wiring



**TTA150B/TWE150B, TTA180B/TWE180B, TTA240B/TWE240B, TTA180C/TWE180B**

**Field Wiring:**

- A. 3 power wires. Line voltage.
- B. 3 power wires. Line voltage for 3 phase; 2 wires for single phase.
- C. Cooling only thermostat: 4 wires, 24 volts.
  - a. One Stage Electric heat: add 1 additional wire, 24 volts.
  - b. Two Stage Electric heat: add 2 additional wires, 24 volts.
- D. 5 wires, 24 volts.

**TWA180B/TWE180B, TWA240B/TWE240B**

**Field Wiring:**

- A. 3 power wires. Line voltage.
- B. 3 power wires. Line voltage for 3 phase; 2 wires for single phase.
- C. Heat pump thermostat: 7 wires, 24 volts.
  - a. Electric heat: add 2 additional wire, 24 volts.
- D. 7 wires, 24 volts.
  - a. Outdoor thermostat; add 1 additional wire, 24 volts.
  - b. Electric heat: add 4 additional wires, 24 volts.

**TTA090A/TWE180B, TTA120A/TWE240B**

**Field Wiring:**

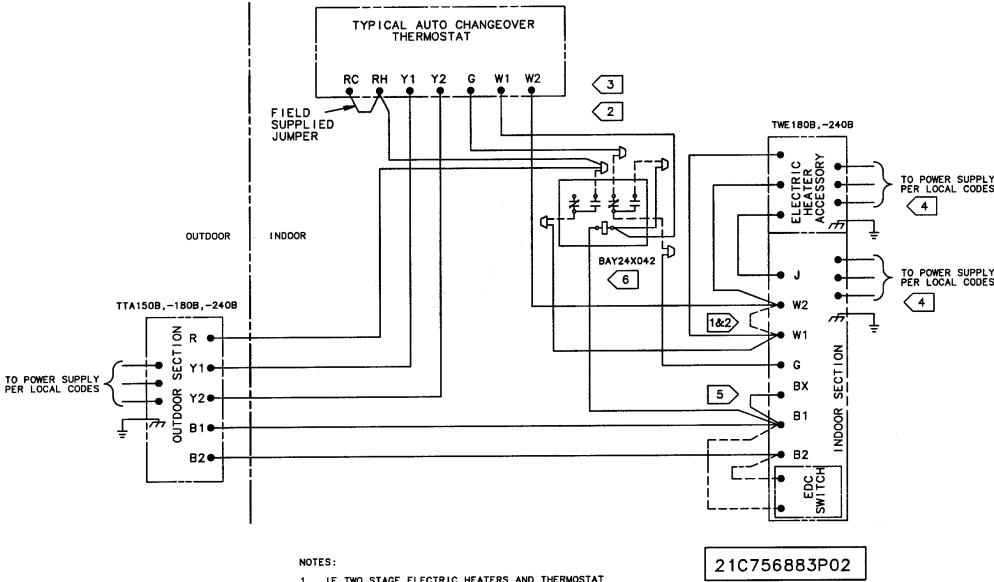
- A. 3 power wires. Line voltage.
- B. 3 power wires. Line voltage for
  - a. 3 phase; 2 wires for single phase.
- C. Cooling only thermostat: 4 wires, 24 volts.
  - a. One Stage Electric heat: add 1 additional wire, 24 volts.
  - b. Two Stage Electric heat: add 2 additional wires, 24 volts.
- D. 6 wires, 24 volts.

**(2) TWA090A/TWE180B, (2) TWA120A/TWE240B**

**Field Wiring:**

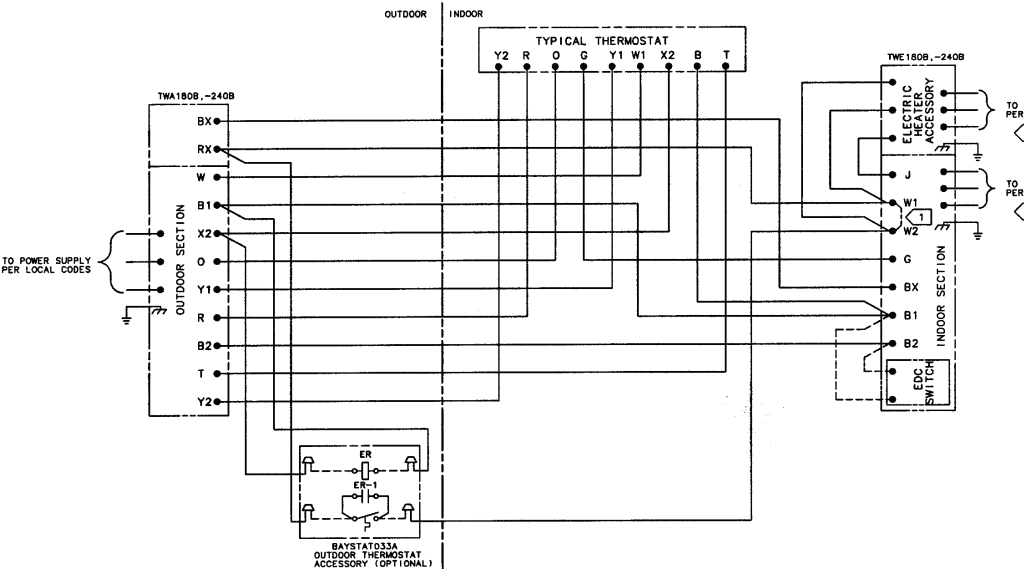
- A. 3 power wires. Line voltage.
- B. 3 power wires. Line voltage e.
- C. Heat pump thermostat: 7 wires, 24 volts.
  - a. Electric heat: add 2 additional wire, 24 volts.
- D. 9 wires, 24 volts.
  - a. Outdoor thermostat; add 3 additional wire, 24 volts.
  - b. Electric heat: add 2 additional wires, 24 volts.

Figure 27. TTA150B, 180B, 240B/TWE180B, 240B; TTA125B, 155B, 200B/TWE155B, 200B; TTA155C/TWE155B; TTA180C/TWE180B



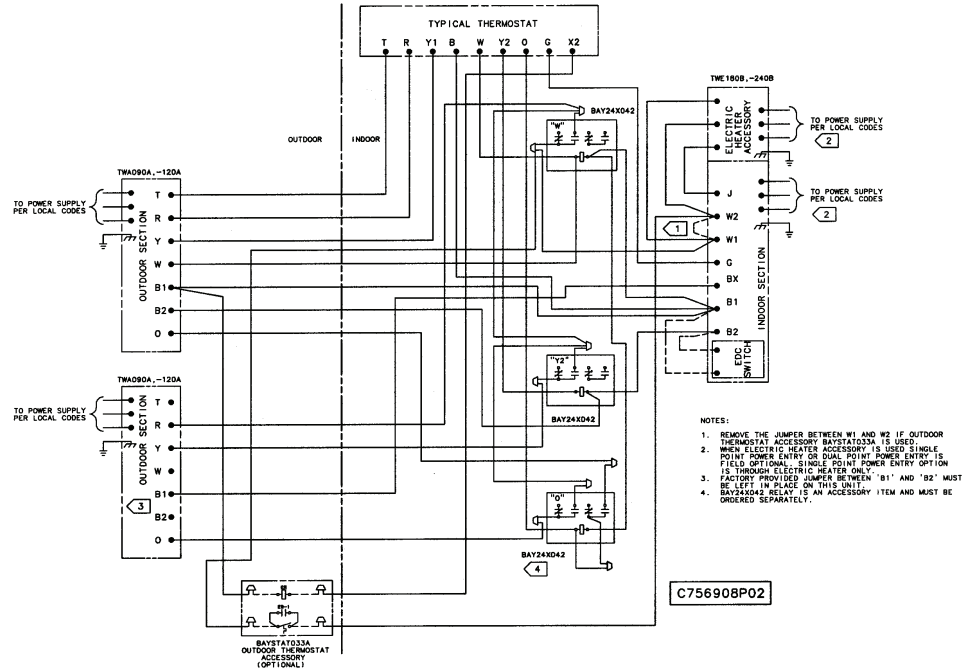
- NOTES:
1. IF TWO STAGE ELECTRIC HEATERS AND THERMOSTAT ARE USED, REMOVE THE JUMPER BETWEEN W1 AND W2. FOR SINGLE STAGE ELECTRIC HEATER OMIT WIRE BETWEEN W2 AND THERMOSTAT AND W2 AND ELECTRIC HEATER.
  2. FOR COOLING ONLY OMIT WIRES BETWEEN W1, W2 AND THERMOSTAT AND OMIT ELECTRIC HEATER.
  3. WHEN ELECTRIC HEATER ACCESSORY IS USED SINGLE POINT POWER ENTRY OR DUAL POINT POWER ENTRY IS FIELD OPTIONAL. SINGLE POINT POWER ENTRY OPTION IS THROUGH ELECTRIC HEATER ONLY.
  4. WHEN ELECTRIC HEATER ACCESSORY IS USED A FIELD SUPPLIED JUMPER MUST BE PLACED BETWEEN "B1" AND "BX" ON THE INDOOR SECTION LOW VOLTAGE TERMINAL BOARD.
  5. BAY24X042 RELAY IS AN ACCESSORY AND MUST BE ORDERED SEPARATELY.

Figure 28. TWA180B, 240B/TWE180B, 240B; TWA155B, 200B/TWE155B, 200B



- NOTES:
1. REMOVE JUMPER BETWEEN W1 AND W2 IF OUTDOOR THERMOSTAT ACCESSORY BAY24X033A IS USED.
  2. WHEN ELECTRIC HEATER ACCESSORY IS USED SINGLE POINT POWER ENTRY OR DUAL POINT POWER ENTRY IS FIELD OPTIONAL. SINGLE POINT ENTRY OPTION IS THROUGH ELECTRIC HEATER ONLY.

**Figure 29. TWA090A, 120A/TWE180B, 240B; TWA075A, 100A/TWE155B, 200B**



**Figure 30. TTA090A, 120A/TWE180B, 240B; TTA075A, 100A/TWE155B, 240B**

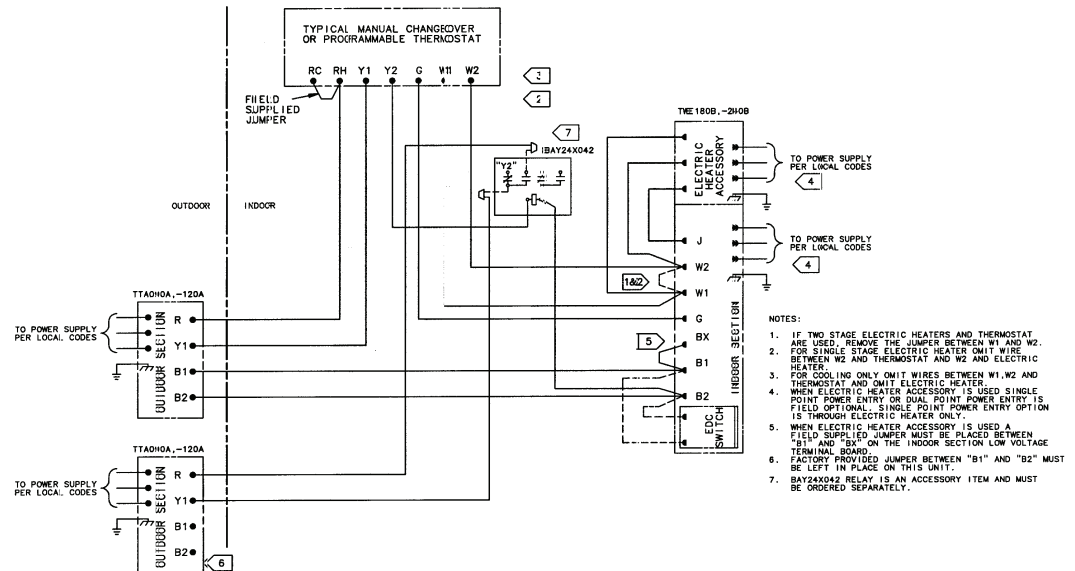


Figure 31. TTA090A, 120A/TWE180B, 240B; TTA075A, 100A/TWE155B, 200B

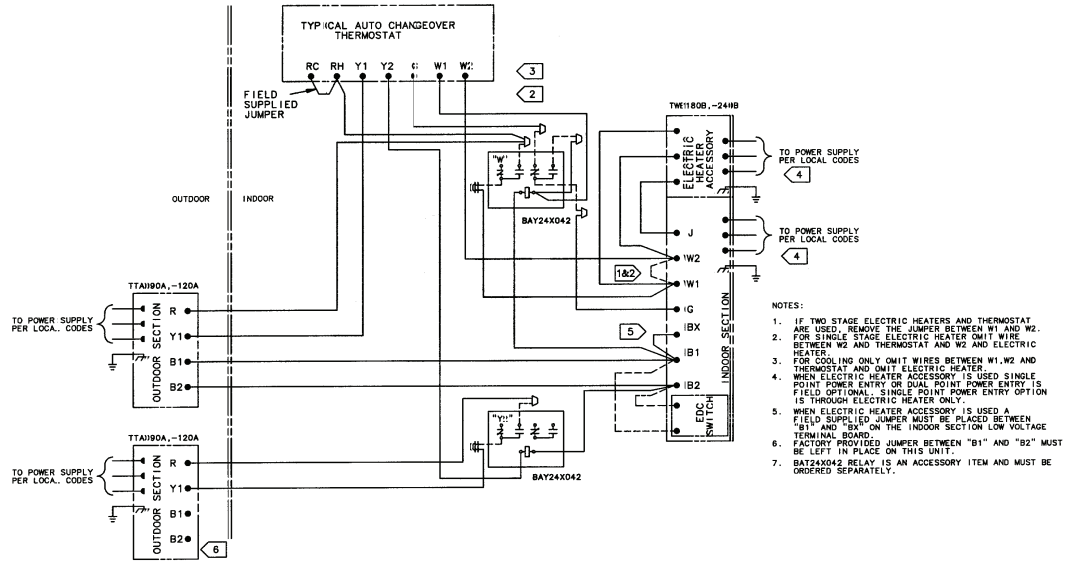
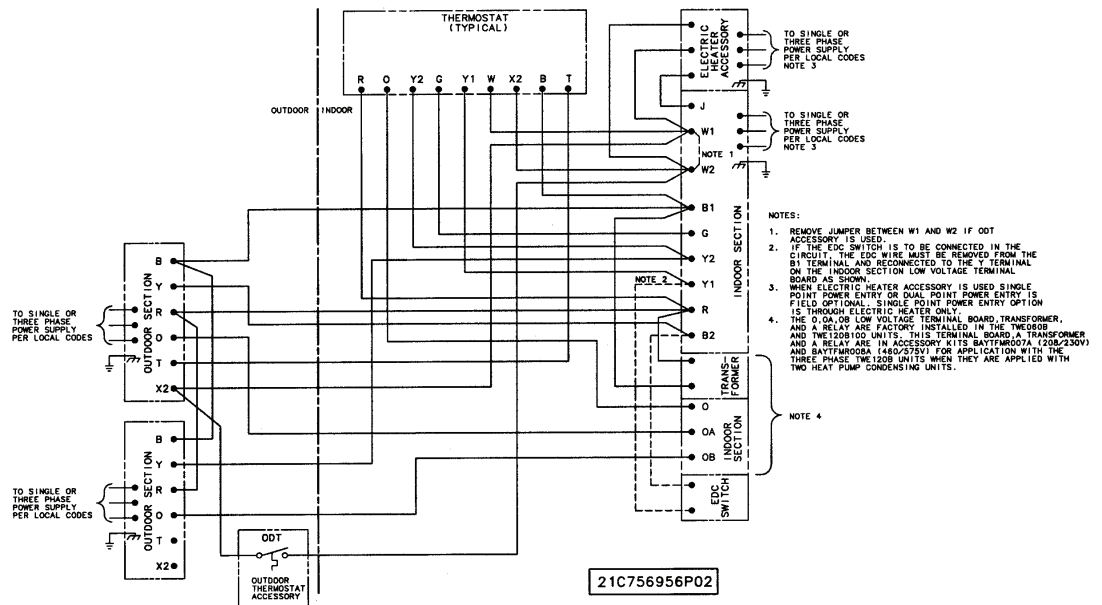


Figure 32. 2/4TW\_030A/TWE060B; 2/4TW\_/TWE090B; 2/4TW\_060/TWE120B; 2/4TW\_050/TWE100B



# Warranty

## Central Air Conditioner

TWE

This warranty is extended by Trane to the original purchaser and to any succeeding owner of the real property to which the Air Conditioner is originally affixed, and applies to products purchased and retained for use within the U.S.A. and Canada. There is no warranty against corrosion, erosion or deterioration.

If any part of your Air Conditioner fails because of a manufacturing defect within one year from the date of original purchase, Warrantor will furnish without charge the required replacement part.

In addition, if the sealed motor-compressor(s) fail(s) because of a manufacturing defect within the second through fifth year from the date of original purchase, Warrantor will furnish without charge a replacement compressor(s). Warrantor's obligations and liabilities under this warranty are limited to furnishing F.O.B. Warrantor factory or warehouse replacement parts for Warrantor's products covered under this warranty. Warrantor shall not be obligated to pay for the cost of lost refrigerant. No liability shall attach to Warrantor until products have been paid for and then liability shall be limited solely to the purchase price of the equipment under warranty shown to be defective.

THE WARRANTY AND LIABILITY SET FORTH HEREIN ARE IN LIEU OF ALL OTHER WARRANTIES AND LIABILITIES, WHETHER IN CONTRACT OR IN NEGLIGENCE, EXPRESS OR IMPLIED, IN LAW OR IN FACT, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR USE, AND IN NO EVENT SHALL WARRANTOR BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Some states do not allow limitations on how long an implied warranty lasts or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Trane, 2701 Wilma Rudolph Blvd., Clarksville, TN 37040-1008

Attention: Manager, Product Service

TW-338-0597

\* This warranty is for commercial usage of said equipment and not applicable when the equipment is used for a residential application. Commercial use is any application where the end purchaser uses the product for other than personal, family or household purposes.

## Commercial Equipment Rated 20 Tons and Larger and Related Accessories (Parts Only)

**PRODUCTS COVERED** — This warranty is extended by Trane and applies only to commercial equipment rated 20 tons and larger and related accessories purchased and retained for use within the U.S.A. and Canada.

Warrantor warrants for a period of 12 months from initial start-up or 18 months from date of shipment, whichever is less, that the products covered by this warranty (1) are free from defects in material and manufacture, and (2) have the capacities and ratings set forth in catalogs and bulletins; provided, that no warranty is made against corrosion, erosion or deterioration. Warrantor's obligations and liabilities under this warranty are limited to furnishing, F.O.B. factory replacement parts (or equipment at the option of Warrantor) for all Warrantor's products not conforming to this warranty. Warrantor shall not be obligated to pay for the cost of lost refrigerant. No liability whatever shall attach to Warrantor until said products have been paid for and then said liability shall be limited to the purchase price of the equipment shown to be defective.

THE WARRANTY AND LIABILITY SET FORTH HEREIN ARE IN LIEU OF ALL OTHER WARRANTIES AND LIABILITIES, WHETHER IN CONTRACT OR IN NEGLIGENCE, EXPRESS OR IMPLIED, IN LAW OR IN FACT, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR USE, AND IN NO EVENT SHALL WARRANTOR BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Some states do not allow limitations on how long an implied warranty lasts or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Trane — Warrantor, 2701 Wilma Rudolph Blvd., Clarksville, TN 37040

GW-598-4799

# Wiring Diagram Matrix

WIRING DIAGRAM NO.	DIAGRAM TYPE	UNIT MODEL NO'S
4367-0325	ElectroMechanical Connection and Schematic	TTA120B3, TTA120B4, TTA120BW, TTA100BD, TTA150B3, TTA150B4, TTA150BW, TTA125BD, TTA120BK, TTA150BK
4367-0326	ElectroMechanical Connection and Schematic	TTA100CD, TTA120C3, TTA120C4, TTA120CW
4367-0327	ElectroMechanical Connection and Schematic	TWA090A3, TWA090A4, TWA090AW, TWA120A4, TWA120AW, TWA075AD, TWA100AD
4367-0335	ElectroMechanical Connection and Schematic	TTA155BD, TTA180B3, TTA180B4, TTA180BW, TTA180BK, TTA200BD, TTA240B4, TTA240BW, TTA240BK
4367-0336	ElectroMechanical Connection and Schematic	TTA240B3
4367-0337	ElectroMechanical Connection and Schematic	TTA155CD, TTA180C3, TTA180C4, TTA180CW
4367-0338	ElectroMechanical Connection and Schematic	TWA200BD, TWA240B4, TWA240BW
4367-0339	ElectroMechanical Connection and Schematic	TWA155BD, TWA180B3, TWA180B4, TWA180BW
4367-0340	ElectroMechanical Connection and Schematic	TWA240B3
4367-0341	ElectroMechanical Connection and Schematic	TTA120A3
4367-0342	ElectroMechanical Connection and Schematic	TTA075AD, TTA085AD, TTA090A3, TTA090A4, TTA090AW, TTA090AK, TTA100AD, TTA120A4, TTA120AW, TTA120AK
4367-0343	ElectroMechanical Connection and Schematic	TWA090A3, TWA090A4, TWA090AW, TWA120A4, TWA120AW, TWA075AD, TWA100AD
4367-0344	ElectroMechanical Connection and Schematic	TWA120A3
4367-0345	ReliaTel Connection and Schematic	TTA240B3
4367-0346	ElectroMechanical Connection and Schematic	TWE060A3, TWE060C3
4367-0347	ElectroMechanical Connection and Schematic	TWE090A1, TWE120A1
4367-0349	ElectroMechanical Connection and Schematic	TWE155BD, TWE180BW, TWE180B3, TWE180B4, TWE180BK, TWE200BD, TWE240BW, TWE240B3, TWE240B4, TWE240BK, TWE155CD, TWE180CW, TWE180C3, TWE180C4, TWE180CK, TWE200CD, TWE240CW, TWE240C3, TWE240C4, TWE240CK
4367-0350	ElectroMechanical Connection and Schematic	TWE090B3, TWE120B3, TWE120BK
4367-0351	ElectroMechanical Connection and Schematic	TWE100BD, TWE120BW
4367-0352	ElectroMechanical Connection and Schematic	TWE060B1, TWE090B1, TWE120B1
4367-0353	ElectroMechanical Connection and Schematic	TWE060B3
4367-0354	ElectroMechanical Connection and Schematic	TWE060B4
4367-0355	ElectroMechanical Connection and Schematic	TWE090AK, TWE090A3, TWE090C3, TWE120AK, TWE120A3, TWE120C3
4367-0356	ElectroMechanical Connection and Schematic	TWE060A1, TWE060C1
4367-0357	ElectroMechanical Connection and Schematic	TWE050AD, TWE060AK, TWE060AW, TWE060A4, TWE060CW, TWE060C4
4367-0358	ElectroMechanical Connection and Schematic	TWE075AD, TWE090AW, TWE100AD, TWE120AW, TWE090CW, TWE120CW
4367-0359	ReliaTel Connection and Schematic	TTA155BD, TTA180B3, TTA180B4, TTA180BW, TTA180BK, TTA200BD, TTA240B4, TTA240BW, TTA240BK
4367-0360	ReliaTel Connection and Schematic	TTA155CD, TTA180C3, TTA180C4, TTA180CW
4367-0361	ReliaTel Connection and Schematic	TTA100CD, TTA120C3, TTA120C4, TTA120CW
4367-0362	ReliaTel Connection and Schematic	TTA120B3, TTA120B4, TTA120BW, TTA100BD, TTA150B3, TTA150B4, TTA150BW, TTA125BD, TTA120BK, TTA150BK
4367-0363	ReliaTel Connection and Schematic	TTA075AD, TTA085AD, TTA090A3, TTA090A4, TTA090AW, TTA090AK, TTA100AD, TTA120A4, TTA120AW, TTA120AK
4367-0364	ReliaTel Connection and Schematic	TTA120A3
4367-0444	ReliaTel Connection and Schematic	TTA200FD, TTA240F4, TTA240FW, and TTA240FK

**Notes:** Wiring diagrams are available via e-Library.



---

Literature Order Number      TWE-SVX03C-EN

---

Date      January 2009

---

Supersedes      TWE-SVX03C-EN (December 2007)

---

The manufacturer has a policy of continuous product and product data improvement and reserves the right to change design and specifications without notice. Only qualified technicians should perform the installation and servicing of equipment referred to in this literature.