



DELTA

**Vogue Inspire Ultra Flex 18
26DE Inverter Series
Air Handler 18SEER**

INSTRUCTION MANUAL

WARNING!

Read and follow all safety precautions in Instruction Manual - improper use can cause serious injury.

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1. Specifications of the 26DE Series Air Handler

1.1 Physical Dimension

table 1

Unit: Inch

Model	A	B	C	D	E
26DE024J24	21"	21-5/16"	10-3/4"	11-5/16"	43-1/2"
26DE036J24	21"	21-5/16"	12-1/4"	11-5/16"	48-3/16"
26DE048J24	24-1/2"	21-5/16"	13-3/4"	11-1/2"	48-3/16"
26DE060J24	24-1/2"	21-5/16"	13-3/4"	11-1/2"	48-3/16"

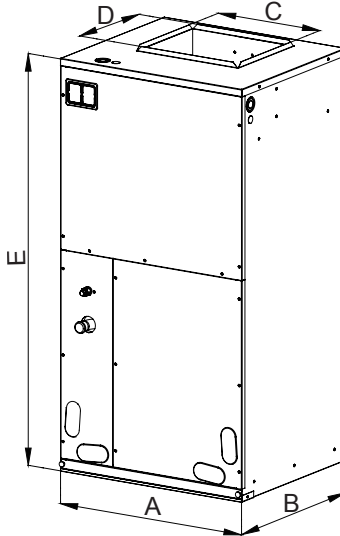


Figure 1

1.2 General Information

table 2

Model	Voltage	Blower (inch)	Nominal CFM 0.2ESP	Electric heat(kw) Kits available
26DE024J24	208-230V/1PH/60Hz	9.5×8	706	5, 8, 10
26DE036J24	208-230V/1PH/60Hz	10×10	1150	5, 8, 10, 15, 20
26DE048J24	208-230V/1PH/60Hz	11×11	1300	5, 8, 10, 15, 20
26DE060J24	208-230V/1PH/60Hz	11×11	1420	5, 8, 10, 15, 20

table 3

table 4

Filters	
Model	Filter size (inch)
26DE024J24	19-5/16"X21-1/8"X1"
26DE036J24	19-5/16"X21-1/8"X1"
26DE048J24	20-5/16"X23"X1"
26DE060J24	20-5/16"X23"X1"

Shipping Data		
Model	Net Wt/Gross Wt	Loading QTY(40' Container)
26DE024J24	126/135lb.	154
26DE036J24	139/152lb.	112
26DE048J24	163/178lb.	81
26DE060J24	163/178lb.	81

table 5

Model	Airflow Tonnage Range	Motor @ 230V 1Ph 60Hz		DD Blower Wheel (inch)
		HP	FLA	
26DE024J24	2.0	1/17	0.52	9.5×8
26DE036J24	3.0	1/2	3.6	10×10
26DE048J24	3.5	3/4	4.6	11×11
26DE060J24	4.0	3/4	4.6	11×11

The air flow of indoor unit

table 6






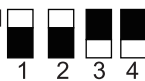
Model	26DE024J24	26DE036J24	26DE048J24	26DE060J24
ESP(in.wg)	Air volume(CFM)	Air volume(CFM)	Air volume(CFM)	Air volume(CFM)
0	808.4	1287.9	1377.4	1504.5
0.04	776.2	1250.8	1367.8	1483.8
0.08	742.1	1218.0	1339.6	1462.7
0.12	706.8	1181.2	1326.8	1441.6
0.16	666.6	1147	1300.4	1420.5
0.2	623.4	1113.1	1288.6	1400.6
0.24	576.4	1083.0	1271.4	1379.4
0.28	514.1	1055.8	1242.8	1357.8
0.32	452.3	1014.8	1214.3	1335.3
0.36	384.2	963.1	1208.1	1312.1
0.4	306.4	906.5	1182.5	1288.5

Notes:

- ① Based upon W/nominal tonnage, dry coil and filter should be installed.
- ② Use 0.96 as approximate CFM correction factor for wet coil.

See the following table for how to set the DIP switch of the unit 26DE036J24 and 26DE048J24:

table 7

Model/DIP Switch	COOL	HEAT
26DE024J24	/	/
26DE036J24	ON 	ON 
26DE048J24	ON 	ON 
26DE060J24	ON 	ON 

Note: The black part presents the switch rod.

2. Pre-Installation Instruction

2.1 Checking Product Received

After receiving the product, please check if there is any damage caused by transportation. Shipping damage is the responsibility of the carrier. Verify the model number, specifications and accessories are correct prior to installation. The distributor or manufacturer will not accept claims from dealers for transportation damage or installation of incorrectly shipped units.

2.2 Before Beginning Installation

Carefully read all instructions for the installation prior to installing product. Make sure each step or procedure is understood and any special considerations are taken into account before starting installation. Assemble all tools, hardware and supplies needed to complete the installation. Some items may need to be purchased locally. Make sure everything needed to install the product is on hand before starting.

2.3 Codes & Regulations



DANGER

IMMEDIATE HAZARDS WHICH **WILL** RESULT IN PROPERTY DAMAGE, PRODUCT DAMAGE, SEVERE PERSONAL INJURY OR DEATH.



WARNING

HAZARDS OR UNSAFE PRACTICES **COULD** RESULT IN PROPERTY DAMAGE, PRODUCT DAMAGE, SEVERE PERSONAL INJURY OR DEATH.



CAUTION

HAZARDS OR UNSAFE PRACTICES WHICH MAY RESULT IN PROPERTY DAMAGE, PRODUCT DAMAGE, SEVERE PERSONAL INJURY OR DEATH.



WARNING

BEFORE SERVING OR INSTALLING THIS EQUIPMENT.THE ELECTRICAL POWER TO THIS UNIT **MUST** BE IN THE "OFF" POSITION. CAUTION, MORE THAN ONE DISCONNECT MAY EXIST. FAILURE TO OBSERVE THIS WARNING MAY RESULT IN AN ELECTRICAL SHOCK THAT CAN CAUSE PERSONAL INJURY OR DEATH .



WARNING

THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ("EPA") HAS ISSUED VARIOUS REGULATIONS REGARDING THE INTRODUCTION AND DISPOSAL OF REFRIGERANTS INTRODUCED INTO THIS UNIT. FAILURE TO FOLLOW THESE REGULATIONS MAY HARM THE ENVIROMENT AND CAN LEAD TO THE IMPOSITION OF SUBSTANTIAL FINES. THESE REGULATIONS MAY VARY DUE TO THE PASSAGE OF LAWS. A CERTIFIED TECHNICIAN MUST PERFORM THE INSTALLATION AND SERVICE OF THIS PRODUCT. SHOULD QUESTIONS ARISE, CONTACT YOUR LOCAL EPA OFFICE.

 **WARNING**

DUE TO HIGH SYSTEM PRESSURE AND ELECTRICAL SHOCK IN POTENTIAL, INSTALLATION AND SERVICE WORK CAN BE DANGEROUS. ONLY TRAINED AND QUALIFIED PERSONNELS ARE PERMITTED TO INSTALL OR SERVICE THIS EQUIPMENT. OBSERVE ALL WARNINGS CONTAINED IN THIS MANUAL AND LABELS/TAGS ATTACHED TO THE EQUIPMENT.

 **WARNING**

THIS PRODUCT IS FACTORY SHIPPED FOR USE WITH A 208-230/1/60 ELECTRICAL POWER SUPPLY. THIS AIR HANDLER **MUST NOT** BE RECONFIGURED TO OPERATE WITH ANY OTHER POWER SUPPLY.

 **WARNING**

THE UNIT **MUST** HAVE AN UNINTERRUPTED, UNBROKEN ELECTRIC GROUNDING TO MINIMIZE THE POSSIBILITY OF PERSONAL INJURY IF AN ELECTRIC FAULT OCCURS. THE ELECTRIC GROUNDING CIRCUIT MAY CONSIST OF AN APPROPRIATE SIZED POWER CORD WHICH CONNECTED WITH THE GROUNDING PIECE LOCATED IN THE UNIT CONTROL BOX AND ALSO CONNECTING TO THE BUILDING ELECTRIC SERVICE PANEL. OTHER METHODS OF GROUNDING ARE PERMITTED IF PERFORMED IN ACCORDANCE WITH THE "NATIONAL ELECTRIC CODE" (NEC)/ "AMERICAN NATIONAL STANDARDS INSTITUTE" (ANSI)/ "NATIONAL FIRE PROTECTION ASSOCIATION" (NFPA) 70 AND LOCAL/STATE CODES. IN CANADA, ELECTRIC GROUDING CONFORMS TO THE CANADIAN ELECTRIC CODE CSA C22.1. FAILURE TO OBSERVE THIS WARNING CAN RESULT IN ELECTRICAL SHOCK THAT CAN CAUSE PERSONAL INJURY.

This product is designed and manufactured to comply with national codes. It is installer's responsibilities to install the product in accordance with such codes and/or any prevailing local codes/regulations. The manufacturer assumes no responsibilities for equipment installed in violation of any codes or regulations.

2.4 Replacement Parts

When reporting shortages or damages, or ordering repair parts, give the complete product model and serial numbers as stamped on the product. Replacement parts for this product are available through your contractor or local distributor.

3. Important Safety Instructions

3.1 Recognize Safety Symbols, Words, and Labels

The following symbols and labels are used throughout this manual to indicate immediate or potential hazards. It is the owner's responsibility to read and comply with all safety information and instructions accompanying these symbols. Failure to heed safety information increases the risk of serious personal injury or death, property damage and/or product damage.



CARBON MONOXIDE POISONING HAZARD

Special warning for installation of furnaces or air handling units in enclosed areas, such as garages, utility rooms or parking areas.

Carbon monoxide producing devices (such as an automobile, space heater, gas water heater, etc.) should not be operated in enclosed areas such as unventilated garages, utility rooms or parking areas because of the danger of carbon monoxide (CO) poisoning resulting from the exhaust emissions. If a furnace or air handler is installed in an enclosed area such as a garage, utility room or parking area and a carbon monoxide producing device is operated therein, there must be adequate ventilation directly to outside.

This ventilation is necessary to avoid the danger of CO poisoning which can occur if a carbon monoxide producing device continues to operate in the enclosed area. Carbon monoxide emission can be (re)circulated throughout the building if the furnace or air handler is operating in any mode.

CO can cause serious illness including permanent brain damage or death.

3.2 Unit Inspection

Upon delivery, inspect the unit for damage. Any damage must be reported immediately to the carrier. Do not install such an equipment damaged by freight which determines the integrity and safety of the unit.

Please check the equipment model number to ensure the unit is appropriately sized for the condensing unit.

If an incorrect unit is supplied, it must not be installed and it is to be returned to the supplier. The manufacturer assumes no responsibility for the installation of incorrectly delivered units. The evaporator coil contains high-pressure inert gas for holding charge.

4. Location



WARNING

THIS AIR HANDLER IS DESIGNED FOR INDOOR INSTALLATION ONLY. DO NOT INSTALL IT OUTDOORS.

When installing the air handler, minimize the length of refrigerant piping as short as possible. Do not install the air handler at a place either above or below the condensing unit, which violates

the installation instructions of the condensing unit. The clearance between a combustible surface and the unit is "0"; however, service clearance takes precedence. Allow a minimum of 24" in front of the unit for service clearance. When installing in an area directly over a finished ceiling (such as an attic), a drain pan for emergency is required. Check local and state codes for requirements. When installing this unit in an area that may become wet, elevate the unit with a firm and non-porous material. To avoid of personal injury during installation (i.e. in a garage), it is advised to install a protective barrier to prevent such damage.

5. Ductwork

This air handler is designed for a complete supply and return ductwork system.



WARNING

DO NOT OPERATE THE UNIT WITHOUT ALL DUCTWORK COMPLETED.

To ensure correct system performance, the ductwork is to be sized to accommodate 375-425 CFM per ton of cooling with the static pressure or less than 5" WC. Inadequate ductwork that restricts airflow may result in improper performance and compressor or heater failure. Ductwork is designed with less restrictions of airflow and maintains suitable airflow speed. And keep the ductwork sealed with good hermeticity.

Return Ductwork. Do not place the duct inlet at a place where is filled with toxic gas or harmful fume/odor. For upflow configuration, duct terminal connects to the bottom of the air handler.

Return Air Filters. Each installation must include a return air filter. This filtering may be performed at the air handler or externally such as a return air filter grille.

6. Electric Heat

The air handlers listed in this manual do not have factory installed electric heat. Electric heat is available as an accessory. The only heater kits that can be used are 29EH series. Please refer to installation instructions provided with heater kit for the correct installation procedure.



WARNING

REFER TO THE "INSTALLING ELECTRIC HEAT" SECTION OF THIS MANUAL AND THE INSTRUCTIONS PROVIDED WITH THE HEATER KIT FOR THE CORRECT INSTALLATION PROCEDURE.



WARNING

THE ELECTRICAL CHARACTERISTICS OF THE AIR HANDLER, THE ELECTRIC HEATER KIT, AND THE SUPPLY POWER MUST AGREE. THIS AIR HANDLER DOES NOT HAVE FACTORY INSTALLED ELECTRIC HEAT. ELECTRIC HEAT IS AVAILABLE AS AN ACCESSORY. IF INSTALLING THIS OPTITION, THE ONLY HEATER KITS THAT CAN BE USED ARE THE 29EHD SERIES AS INDICATED BELOW.

Air Handler

The heating mode temperature rise is dependent upon the system airflow, the supply voltage, and the heater kit size (KW) selected. Use Tables 8-10 to determine the temperature rise(°F).

table 8

CFM	HEATER KIT NOMINAL KW				
	5	8	10	15	20
600	28	41	56		
800	21	31	42		
1000	17	25	34	50	
1200	14	21	28	42	56
1400	12	18	24	36	48
1600	10	15	21	31	42
1800	9	14	19	28	37

230/1/60 Supply Voltage-Temperature Rise Table °F

table 9

CFM	HEATER KIT NOMINAL KW				
	5	8	10	15	20
600	27	39	52		
800	20	30	40		
1000	16	24	32	48	
1200	13	20	27	40	53
1400	11	17	23	34	46
1600	10	15	20	30	40
1800	9	13	18	27	36

220/1/60 Supply Voltage-Temperature Rise Table °F

table 10

CFM	HEATER KIT NOMINAL KW				
	5	8	10	15	20
600	25	37	50		
800	19	28	38		
1000	15	22	30	46	
1200	13	19	25	38	56
1400	11	16	22	33	48
1600	9	14	19	28	42
1800	8	12	17	25	37

208/1/60 Supply Voltage-Temperature Rise Table °F

Note: For installations not indicated above the following formula is to be used:

$$TR=(kW*3412)*(Voltage\ Correction)*1.08/CFM$$

Where:TR=Temperature Rise

KW=Heater Kit Actual kW

3412=Btu per kW

Voltage Correction= 0.96(230 Supply Volts)

0.92(220 Supply Volts)

0.87(208 Supply Volts)

1.08=Constant CFM=Measured Airflow

Note: The Temperature Rise Tables can also be used to determine the air handler airflow delivery. When using these tables for this purpose, set the room thermostat to maximum heat and allow the system to reach steady state conditions. Set two thermometers, one in the return air inlet and the other one in the supply air outlet.

6.1 “29EHD” Electric Heater Kits Available

table 11

SN.	Kit#	Description	Ref. Air Handler use
1	29EHDE052DB	Circuit Breaker, 5kw Heat Strip	24,36,48,60
2	29EHDE082DB	Circuit Breaker, 8kw Heat Strip	24,36,48,60
3	29EHDE102DB	Circuit Breaker, 10kw Heat Strip	24,36,48,60
4	29EHDE152DB	Circuit Breaker, 15kw Heat Strip	36,48,60
5	29EHDE202DB	Circuit Breaker, 20kw Heat Strip	36,48,60

6.2 “29EDH” Heater Kits Installation

CAUTIONS

- ENSURE THAT ALL POWER SUPPLY IS DISCONNECTED PRIOR TO INSTALLING THE HEATER KIT.
- A MEANS OF STRAIN RELIEF AND CONDUCTOR PROTECTION MUST BE PROVIDED AT THE SUPPLY WIRE ENTRANCE INTO CABINET.
- USE COPPER CONDUCTORS ONLY.
- INSTALLATION MUST FOLLOW NATIONAL ELECTRIC CODE AND OTHER APPLICABLE CODES.
- IF THIS APPLIANCE IS INSTALLED IN AN ENCLOSED AREA SUCH AS A GARAGE OR UTILITY ROOM WITH ANY CARBON MONOXIDE PRODUCING APPLIANCE, ENSURE THE AREA IS PROPERLY VENTILATED.

- 1) Refer to Table 11 for appropriate 29EHD heater kit.
- 2) Check any physical damage, do not install damaged heater kit.
- 3) Remove the upper access panel from air handler.
- 4) Remove cover plate from air handler.
- 5) Slide the heater kit in to the slot and secure element plate with previously removed screws.
- 6) Insert power leads into the circuit breaker lugs or stripped red and black wires (For heater kit without circuit breaker) and tighten.
- 7) Power leads must be routed through a means of strain reliefs they enter the air handler cabinet.
- 8) Connect ground wire to ground lug.
- 9) Break out appropriate area of the plastic circuit breaker cover on the access panel of the air handler.
- 10) Replace access panel and check operation.

7. Electrical Supply Wire and MOP

 **WARNING**

THE UNIT MUST HAVE AN UNINTERRUPTED, UNBROKEN ELECTRIC GROUNDING TO MINIMIZE THE POSSIBILITY OF PERSONAL INJURY IF AN ELECTRIC FAULT OCCURS. THE ELECTRIC GROUNDING CIRCUIT MAY CONSIST OF AN APPROPRIATE SIZED POWER CORD WHICH CONNECTED WITH THE GROUNDING PIECE LOCATED IN THE UNIT CONTROL BOX AND ALSO CONNECTING TO THE BUILDING ELECTRIC SERVICE PANEL. OTHER METHODS OF GROUNDING ARE PERMITTED IF PERFORMED IN ACCORDANCE WITH THE “NATIONAL ELECTRIC CODE” (NEC)/ “AMERICAN NATIONAL STANDARDS INSTITUTE” (ANSI)/ “NATIONAL FIRE PROTECTION ASSOCIATION” (NFPA) 70 AND LOCAL/STATE CODES. IN CANADA, ELECTRIC GROUDING CONFORMS TO THE CANADIAN ELECTRIC CODE CSA C22.1. FAILURE TO OBSERVE THIS WARNING CAN RESULT IN ELECTRICAL SHOCK THAT CAN CAUSE PERSONAL INJURY.

 **WARNING**

MORE THAN ONE DISCONNECT MAY EXIST. FAILURE TO OBSERVE THIS WARNING MAY RESULT IN AN ELECTRICAL SHOCK THAT CAN CAUSE PERSONAL INJURY OR DEATH.

 **WARNING**

TO AVOID THE RISK OF THE FIRE OR EQUIPMENT DAMAGE, ONLY USE COPPER CONDUCTORS. BEFORE SERVICING OR INSTALLING THIS EQUIPMENT, THE ELECTRICAL POWER TO THIS UNIT MUST BE IN “OFF” POSITION AND ALL POWER SUPPLIES SHOULD BE DISCONNECTED.

7.1 Inspection of the Building Electrical Service

This product is designed for single-phase electrical supply. DO NOT OPERATE ON A THREE-PHASE POWER SUPPLY. Measure the power supply to the unit. The supply voltage must be in agreement with the unit nameplate power requirements and within the range shown in table 12.

table 12

Nominal Input	Minimum Voltage	Maximum Voltage
208/230	187	254

7.2 Wire Sizing

Wire size is important to the operation of your equipment. Use the following check list when selecting the appropriate wire size for your unit.

- **Wire size must carry the Minimum Circuit Ampacity (MCA).**

table 13

Model	Nominal CFM	Nominal Capacity BTU/H	Electric Heat Kw		Min. Circuit Ampacity		Max. Fuse or Breaker (HACR) Ampacity	
			240V	208V	240V	208V	240V	208V
26DE024J24	706	24000	5	3.8	26.9	23.4	30	25
			8	6	42.5	36.9	45	40
			10	7.5	52.9	45.9	60	50
26DE036J24	1150	35000	5	3.8	28.0	24.4	30	25
			8	6	43.6	37.8	45	40
			10	7.5	54.0	47.0	60	50
			15	11.3	54.0/26.0	47.0/22.5	60/30	50/25
26DE048J24	1300	4100	5	3.8	28.1	24.6	30	25
			8	6	43.7	38.1	45	40
			10	7.5	54.2	47.1	60	50
			15	11.3	54.2/26.0	47.1/22.5	60/30	50/25
			20	15	54.2/52.1	47.1/45.1	60/60	50/50
26DE060J24	1420	48000	5	3.8	29.3	25.8	30	25
			8	6	44.9	39.3	45	40
			10	7.5	55.3	48.3	60	50
			15	11.3	55.3/26.0	48.3/22.5	60/30	50/25
			20	15	55.3/52.1	48.3/45.1	60/60	50/50

Wire size allows for no more than a 2% voltage drop from the building breaker/fuse panel to the unit.

Refer to the latest edition of the National Electric Code (NEC) in USA or the Canadian Electric Code (CSA) in Canada when determining the correct wire size. The following table shows the current carrying capabilities for copper conductors rated at 75°C with a 2% voltage drop. Use the Table 10 to determine the voltage drop per foot of various conductors.

table 14

Wire Size(AWG)	Maximum Allowable Length in Feet to Limit Voltage Drop to 2% *							
	Minimum Circuit Ampacity(MCA)							
	10	15	20	25	30	35	40	45
14	75	50	37					
12	118	79	59	47				
10	188	125	95	75	63	54		
8	301	201	150	120	100	86	75	68
6	471	314	235	188	157	134	118	110

*Based on NEC 1996

7.3 Maximum Overcurrent Protection (MOP)

Every installation must include an NEC (USA) or CEC (Canada) approved overcurrent protection device. Also, check with local or state codes for any special regional requirements.

This protection can be in the form of fusing or HACR style circuit breakers.

NOTE: Fuses or circuit breakers are to be sized larger than the equipment MCA but not to exceed the MOP.

7.4 Electric Connections-Supply Voltage

USE COPPER CONDUCTORS ONLY

A knockout is provided on the air handler top panel or side to allow for the entry of the supply voltage conductors. If the knockouts on the cabinet side are used for electrical conduit, an adapter ring must be used in order to meet UL 1995 safety requirements. An NEC or CEC approved strain relief is to be used at this entry point. **The wire needs to be sized in accordance with the "Wire Sizing and MOP" section of this manual.**

Air Handler Only (Non-Heater Kit Models)

The power cord connects to L1 and L2 terminal located on the electrical box in the air handler. Note to grounding well. The power cord adopts appropriately sized solderless connector or other NEC or CEC approved means. Check the unit wiring diagram attached for reference.

Air Handler with Heater Kits (Non-Circuit Breaker)

The power supply should be connected to the stripped black and red wires on the heater kit.

Air Handler with Heater Kits Containing Circuit Breaker

29EH models with a "B" suffix at last digit contain a circuit breaker(s). The air handler has a plastic cover on the access panel that will require either one or both sections to be removed to allow the heater kit circuit breaker(s) to be installed. See the 29EH Installation Instruction for further detail. The air handler wires and supply wires are installed directly onto the 29EH circuit breaker(s) as shown in the 29EHD Installation Manual and wiring diagram.

Low Voltage Connections

Several combinations of low voltage schemes are available, depending on the presence of a heater kit and whether the heater kit is single-stage or multi-stage. The low voltage connections are determined by whether the outdoor unit is a condenser or heat pump. The 24V-control voltage connects the air handler to the room thermostat and condenser. Low voltage wiring is to be copper conductors. A minimum of 18AWG must be used for installations up to 50' and 16AWG for installations over 50'. Low voltage wiring can be made through the top of the cabinet or through either side. See the "Thermostat Wiring" section of this manual for the 26DE models for typical low voltage wiring connections.

7.5 Schematic Wiring Diagram

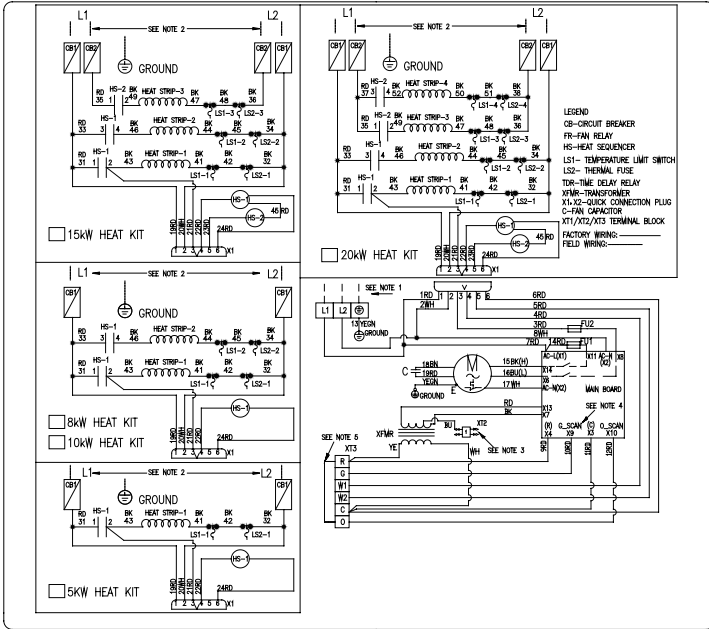


Figure 2 Wiring Diagram(26DE024J24)

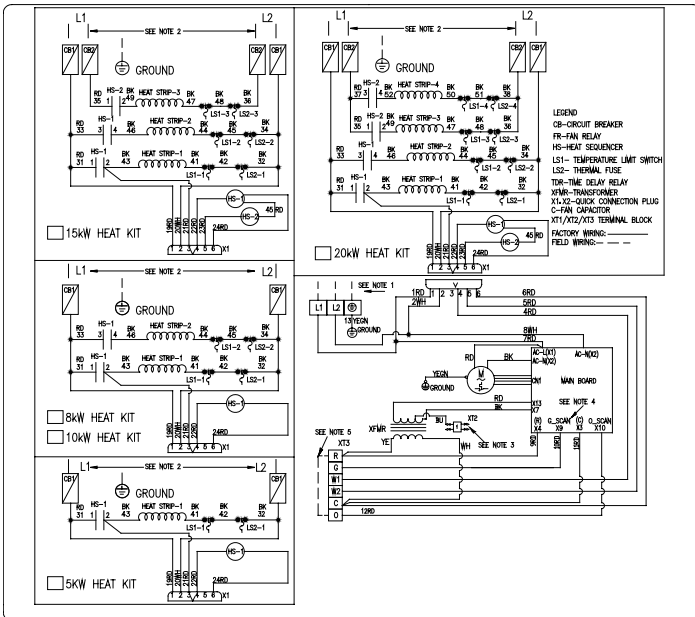


Figure 3 Wiring Diagram(26DE036J24/26DE048J24/26DE060J24)

Notes:

- 1) For air handler without installing electric heater, connect the power cord to "L1" and "L2" on terminal board.
- 2) For air handler with electric heater, connect the power cord to circuit breaker. If the heat kit without circuit breaker, connect the power cord to the stripped black and red wires.
- 3) Remove the black lead from "X7" terminal on the main board and then connect the blue lead to "X7" terminal for 208 volts, taping the unused black lead.
- 4) 90 seconds off delay when "G" is de-energized.
- 5) Jumper "R" and "O" together if working with cooling only condensing unit.

7.6 Thermostat Wiring

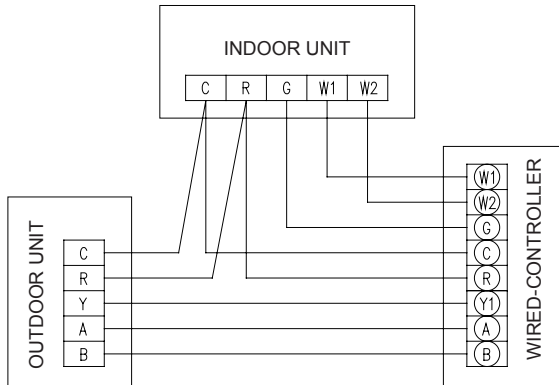


Figure 4

8. Refrigerant Pipe



WARNING

WHEN WELDING ON THE PAINTED SURFACES OF THE UNIT, QUENCHING CLOTH IS STRONGLY ADVISED TO PREVENT SCORCHING OR DAMAGING THE UNIT SURFACES. SOLDER WITH A MINIMUM OF 5% SILVER IS RECOMMENDED.



WARNING

THIS PRODUCT IS FACTORY-SHIPED UNDER PRESSURE. FOLLOW THESE INSTRUCTIONS TO PREVENT INJURY.

8.1 Piping Preparation

All cut ends are to be round, burr free, and cleaned. Failure to follow this practice increases the chances for refrigerant leakage.

After Brazing

Quench all welded joints with water or a wet rag.

Piping Size

For the correct piping size, follow the specification for the condenser/heat pump.

8.2 Special Instructions

This air handler comes with a plastic accessory bag which contains: tailpiece and white teflon seal.

⚠️ WARNING
THE COIL IS SHIPPED UNDER PRESSURE. RELEASE THE PRESSURE BEFORE INSTALLATION.

Evaporator Throttling Device

- 1.Remove 9/16 nut, then press the Schrader valve to release pressure, no gas indicates a possible leak.
- 2.After the gas has released, remove the 13/16 nut, Schrader valve and white teflon seal from the liquid line distributor.
- 3.Remove cap closure from suction line .
- 4.Take the tailpiece from the plastic accessory bag and slide the 13/16 nut into place.
- 5.Braze tailpiece to the line set liquid tube.
- 6.Insert the suction line into the connection, slide the rubber grommet at least 18" away from the braze joint. Braze suction line.
- 7.After the tailpiece has been cooled, confirm the position of white teflon seal and tighten the 13/16 nut manually.
- 8.Torque the 13/16 nut to 20-30 ft-lbs.
- 9.Replace suction line grommet.

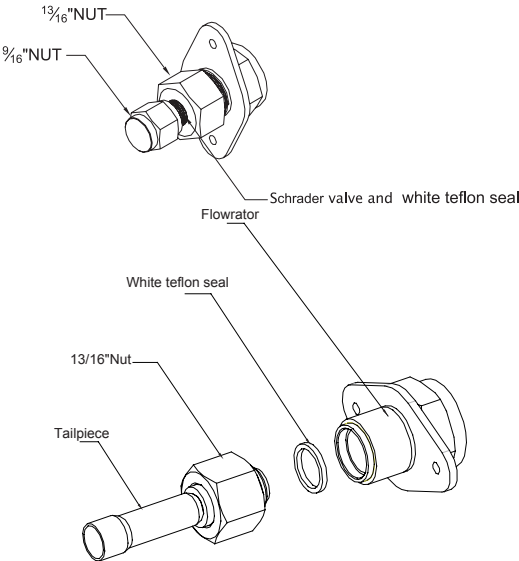


Figure 5

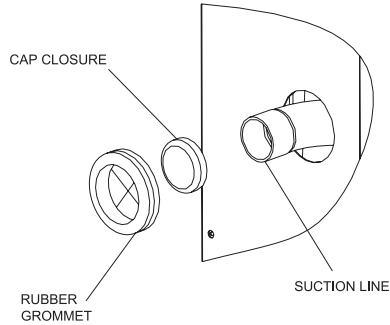


Figure 6

Note:

The tightening torque of the 13/16 screw nut shall not be more than 30N·m.

9. Drain Pan Refit

The following instruction shows how to refit the auxiliary drain pan from left to right side of the unit. As the auxiliary drain pan is universally used on both sides, only change the position of plastic drain pan cap for replacement.

As shown in Figure 7, it is recommended that the drain pan should be refit before installation and locate the air handler in an area that allows for access to all sides.

1. Disassemble the front panel.
2. Remove the “J” shaped hook that fixing the evaporator coil. Remove the fixed board that fixed under the drain pan.
3. Draw out the evaporator coil and the drain pan in horizontal.
4. Reset the drain pan in vertical at the right side of the evaporator coil. Note: Push the evaporator coil backwards and make sure that there is no gap between the drain pan and the fixed bracket.
5. Fix the evaporator coil by “J” shaped hook and reset the fixed board under the evaporator coils as before.
6. Assemble the disassembled front panel as per the reverse disassembly order mentioned above.

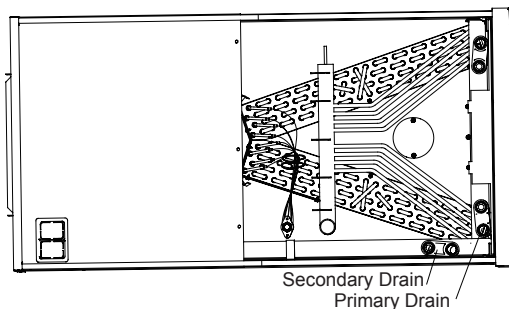


Figure 7

10. Condensate Removal

The drain pan has primary and secondary drain connection (Figure 7). Condensate water discharging is performed by attaching a 3/4" PVC pipe to the evaporator coil pan and terminated in accordance with local or state Plumbing/HVAC codes. The installation must include a "P" style trap that is located closely to the evaporator coil. Do not over-tighten the drain connection(s) in order to prevent possible damage to the evaporator drain pan. See Figure 8 for details of a typical condensate line "P" trap.

Installations that are above a finished ceiling may require a field supplied auxiliary drain pan. Consult local codes on this requirement.

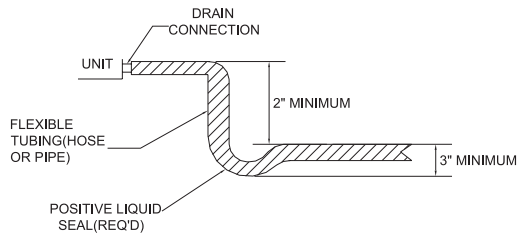


Figure 8

Use a condensate removal pump when necessary. If the discharging pipe is blocked, the condensate removal pump will be cut off to control voltage. A trap must be installed between the unit and the condensate removal pump.

11. Start-Up Procedure

- Prior to start-up, ensure that all electrical connections are properly sized and tightened.
- All panels must be in place and secured. For air tight application, rubber gasket must be positioned at prescribed locations to achieve 2% leakage.
- Tubing must be leak free.
- Unit should be elevated, trapped and pitched to allow for drainage.
- Low voltage wiring is connected.
- Auxiliary drain is installed when necessary and pitched to allow for drainage.
- Drain pan and drain tubing has been leak checked.
- Return and supply ducts are sealed.
- Unit is elevated when installed in a garage or where flammable vapors may be present.
- Return air is not obtained from many areas where there may be objectionable odors, flammable vapors or products of combustion such as carbon monoxide(CO), which may cause serious personal injury or death.

12. Regular Maintenance



WARNING

DISCONNECT ALL POWER SUPPLIES (MIGHT BE MORE THAN ONE POWER SUPPLY) BEFORE SERVICE. FAILURE TO OBSERVE THIS WARNING CAN RESULT IN ELECTRICAL SHOCK THAT CAN CAUSE PERSONAL INJURY OR DEATH.

The only item to be maintained on a regular basis by the user is the circulating air filter(s). Filter should be cleaned or replaced regularly. A certified service technician must perform all other services.



This product must not be disposed together with the domestic waste.
This product has to be disposed at an authorized place for recycling of electrical and electronic appliances.

Thank you for Choosing



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