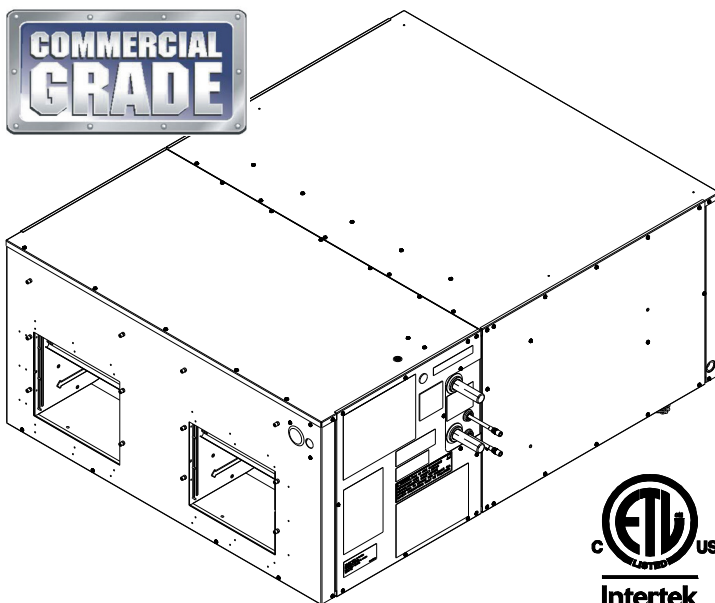


DAQ SERIES COMMERCIAL AIR HANDLERS

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IMPORTANT NOTE: DAQ MODELS ARE SUITABLE FOR UPFLOW AND HORIZONTAL INSTALLATIONS ONLY. DO NOT USE FOR DOWNFLOW INSTALLATIONS.

WARNING

ONLY PERSONNEL THAT HAVE BEEN TRAINED TO INSTALL, ADJUST, SERVICE, MAINTENANCE OR REPAIR (HEREINAFTER, "SERVICE") THE EQUIPMENT SPECIFIED IN THIS MANUAL SHOULD SERVICE THE EQUIPMENT.

THIS EQUIPMENT IS NOT INTENDED FOR USE BY PERSONS (INCLUDING CHILDREN) WITH REDUCED PHYSICAL, SENSORY OR MENTAL CAPACITIES, OR LACK OF EXPERIENCE AND KNOWLEDGE, UNLESS THEY HAVE BEEN GIVEN SUPERVISION OR INSTRUCTION CONCERNING USE OF THE APPLIANCE BY A PERSON RESPONSIBLE FOR THEIR SAFETY.

CHILDREN SHOULD BE SUPERVISED TO ENSURE THAT THEY DO NOT PLAY WITH THE EQUIPMENT.

THE MANUFACTURER WILL NOT BE RESPONSIBLE FOR ANY INJURY OR PROPERTY DAMAGE ARISING FROM IMPROPER SUPERVISION, SERVICE OR SERVICE PROCEDURES. IF YOU SERVICE THIS UNIT, YOU ASSUME RESPONSIBILITY FOR ANY INJURY OR PROPERTY DAMAGE WHICH MAY RESULT. IN ADDITION, IN JURISDICTIONS THAT REQUIRE ONE OR MORE LICENSES TO SERVICE THE EQUIPMENT SPECIFIED IN THIS MANUAL, ONLY LICENSED PERSONNEL SHOULD SERVICE THE EQUIPMENT. IMPROPER SUPERVISION, INSTALLATION, ADJUSTMENT, SERVICING, MAINTENANCE OR REPAIR OF THE EQUIPMENT SPECIFIED IN THIS MANUAL, OR ATTEMPTING TO INSTALL, ADJUST, SERVICE OR REPAIR THE EQUIPMENT SPECIFIED IN THIS MANUAL WITHOUT PROPER SUPERVISION OR TRAINING MAY RESULT IN PRODUCT DAMAGE, PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.

WARNING

DO NOT BYPASS SAFETY DEVICES.

Our continuing commitment to quality products may mean a change in specifications without notice.

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Important Safety Instructions

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

NOTE: This equipment is approved to use only with R-32 refrigerant.

 WARNING
<p>HIGH VOLTAGE DISCONNECT ALL POWER BEFORE SERVICING OR INSTALLING THIS UNIT. MULTIPLE POWER SOURCES MAY BE PRESENT. FAILURE TO DO SO MAY CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.</p> 


 WARNING
<p>TO AVOID PROPERTY DAMAGE, PERSONAL INJURY OR DEATH DUE TO ELECTRICAL SHOCK, THIS UNIT MUST HAVE AN UNINTERRUPTED, UNBROKEN ELECTRICAL GROUND. THE ELECTRICAL GROUND CIRCUIT MAY CONSIST OF AN APPROPRIATELY SIZED ELECTRICAL WIRE CONNECTING THE GROUND LUG IN THE UNIT CONTROL BOX TO THE BUILDING ELECTRICAL 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, ELECTRICAL GROUNDINGS IS TO BE IN ACCORDANCE WITH THE CANADIAN ELECTRICAL CODE (CSA) C22.1.</p>

 CAUTION
<p>WHEN INSTALLING OR SERVICING THIS EQUIPMENT, SAFETY CLOTHING, INCLUDING HAND AND EYE PROTECTION, IS STRONGLY RECOMMENDED. IF INSTALLING IN AN AREA THAT HAS SPECIAL SAFETY REQUIREMENTS (HARD HATS, ETC.), OBSERVE THESE REQUIREMENTS.</p>


 WARNING
<p>DO NOT CONNECT TO OR USE ANY DEVICE THAT IS NOT DESIGN-CERTIFIED BY THE MANUFACTURER FOR USE WITH THIS UNIT. SERIOUS PROPERTY DAMAGE, PERSONAL INJURY, REDUCED UNIT PERFORMANCE AND/OR HAZARDOUS CONDITIONS MAY RESULT FROM THE USE OF SUCH NON-APPROVED DEVICES.</p>

 WARNING
<p>TO PREVENT THE RISK OF PROPERTY DAMAGE, PERSONAL INJURY, OR DEATH, DO NOT STORE COMBUSTIBLE MATERIALS OR USE GASOLINE OR OTHER FLAMMABLE LIQUIDS OR VAPORS IN THE VICINITY OF THIS UNIT.</p>

 WARNING
<p>THIS AIR HANDLER IS DESIGNED FOR UPFLOW OR HORIZONTAL-LEFT APPLICATIONS. DO NOT INSTALL IN THE DOWNFLOW OR HORIZONTAL-RIGHT ORIENTATION.</p>

 WARNING
<p>DO NOT USE MEANS TO ACCELERATE DEFROSTING PROCESS OR TO CLEAN, OTHER THAN THOSE RECOMMENDED BY THE MANUFACTURER. THE APPLIANCE SHALL BE STORED IN A ROOM WITHOUT CONTINUOUSLY OPERATING IGNITION SOURCES (FOR EXAMPLE: OPEN FLAMES, AN OPERATING GAS APPLIANCE OR AN OPERATING ELECTRIC HEATER. DO NOT PIERCE OR BURN. BE AWARE THAT REFRIGERANTS MAY NOT CONTAIN AN ODOR.</p>

 WARNING
<p>ONLY AUXILIARY DEVICES APPROVED BY THE APPLIANCE MANUFACTURER OR DECLARED SUITABLE WITH THE REFRIGERANT SHALL BE INSTALLED IN CONNECTING DUCTWORK.</p>

 WARNING
<p>THIS UNIT IS EQUIPPED WITH ELECTRICALLY POWERED SAFETY MEASURES. TO BE EFFECTIVE, THE UNIT MUST BE ELECTRICALLY POWERED AT ALL TIMES AFTER INSTALLATION, OTHER THAN WHEN SERVICING.</p>

 WARNING
<p>LEAK DETECTION SYSTEM INSTALLED. UNIT MUST BE POWERED EXCEPT FOR SERVICE.</p>

QUALIFICATION OF WORKERS

Personnel must be certified to service, work, and/or repair units with FLAMMABLE REFRIGERANTS. A certificate should document the competence and qualification achieved through training that included the substance of the following:

- Information about the explosion potential of FLAMMABLE REFRIGERANTS to show that flammables may be dangerous when handled without care.
- Information about POTENTIAL IGNITION SOURCES, especially those that are not obvious, such as lighters, light switches, vacuum cleaners, electric heaters.
- Information about the different safety concepts, including ventilated and unventilated areas.

- Information about refrigerant detectors, including function, operation, and service measures.
- Information about the concept of sealed components and sealed enclosures according to IEC 60079-15:2010.
- Information about the correct working procedures, including commissioning, maintenance, repair, decommissioning, and disposal procedures.



WARNING

THE APPLIANCE SHALL BE INSTALLED, OPERATED AND STORED IN A ROOM WITH A FLOOR AREA NOT LESS THAN THE MINIMUM ROOM AREA.



$\geq 49.8 \text{ M}^2$
 536 ft^2

ALTITUDE ADJUSTMENT FACTOR TO CALCULATE MINIMUM ROOM AREA

The Indoor equipment mitigation requirements are calculated at sea level. For higher altitudes adjust the minimum room area specified on or near the Serial Plate or in the installation instruction manual by the corresponding altitude adjustment factor shown below. This table is provided as a reference.

Adjusted room area ($A_{min\ adj}$) is the product of the minimum room area specified in the serial plate and the adjustment factor AF, as shown in below formula

$$A_{min\ adj} = A_{min} (\text{serial plate}) * AF$$

Height in meters	Height in feet	Altitude Adjustment Factor (AF)
At sea level	At sea level	1.00
1~200	1~660	1.02
200~400	660~1320	1.03
400~600	1320~1970	1.05
600~800	1970~2630	1.07
800~1000	2630~3290	1.09
1000~1200	3290~3940	1.11
1200~1400	3940~4600	1.13
1400~1600	4600~5250	1.15
1600~1800	5250~5910	1.17
1800~2000	5910~6570	1.19
2000~2200	6570~7220	1.21
2200~2400	7220~7880	1.24
2400~2600	7880~8540	1.26
2600~2800	8540~9190	1.29
2800~3000	9190~9850	1.31
3000~3200	9850~10500	1.34

THE FOLLOWING INSTRUCTIONS ARE MANDATORY FOR A2L SYSTEMS AND SUPERSEDE OTHER INSTRUCTIONS

WARNING

ONLY BRAZING TECHNIQUES AND APPROVED MECHANICAL JOINTS SHOULD BE USED TO CONNECT REFRIGERANT TUBING CONNECTIONS. NON-APPROVED MECHANICAL CONNECTORS AND OTHER METHODS ARE NOT PERMITTED IN THIS SYSTEM CONTAINING A2L REFRIGERANT. APPROVED MECHANICAL JOINTS WILL BE DETAILED IN THE PRODUCT'S SPECIFICATION SHEETS.

STANDING PRESSURE TEST/ LEAK DETECTION METHOD

Using dry nitrogen or dry helium, pressurize the system to 450 PSIG. Allow the pressure to stabilize and hold for 15 Minutes (minimum). The system is considered leak-free if the pressure does not drop below 450 PSIG. If, after 15 Minutes, the pressure drops below 450 PSIG, it implies a leak in the system. Proceed with identifying and sealing the leak and repeating the Standing Pressure Test. Leak test the system using dry nitrogen or dry helium and soapy water to identify leaks. **No refrigerant shall be used for pressure testing to detect leaks.** Proceed to system evacuation using the Deep Vacuum Method.

DEEP VACUUM METHOD

The Deep Vacuum Method requires a vacuum pump rated for 500 microns or less. This method effectively and efficiently ensures the system is free of non-condensable air and moisture. The Triple Evacuation Method is detailed in the Service Manual for this product model as an alternative. To expedite the evacuation procedure, it is recommended that the Schrader Cores be removed from the service valves using a core-removal tool.

1. Connect the vacuum pump, micron gauge, and vacuum-rated hoses to both service valves. Evacuation must use both service valves to eliminate system mechanical seals.
2. Evacuate the system to less than 500 microns.
3. Isolate the pump from the system and hold the vacuum for 10 minutes (minimum). Typically, pressure will rise slowly during this period. If the pressure rises to less than 1000 microns and remains steady, the system is considered leak-free; proceed to system charging and startup.
4. If pressure rises above 1000 microns but holds steady below 2000 microns, non-condensable air or moisture may remain, or a small leak may be present. Return to step 2: If the same result is achieved, check for leaks and repair. Repeat the evacuation procedure.
5. If pressure rises above 2000 microns, a leak is present. Check for leaks and repair them. Then, repeat the evacuation procedure.

ACCESSORY INSTALLATION

WARNING

ALL ACCESSORIES THAT MAY BECOME A POTENTIAL IGNITION SOURCE IF INSTALLED, SUCH AS ELECTRONIC AIR CLEANERS, MUST ONLY BE POWERED THROUGH OUR ACCESSORY CONTROL BOARD KIT. IF AN ELECTRONIC AIR CLEANER IS ALREADY INSTALLED IN THE DUCT WORK AND NOT CONNECTED TO THE ACCESSORY CONTROL BOARD, IT WILL HAVE TO BE DISABLED OR REMOVED. ENSURE THAT ANY ADDITIONAL WIRING FROM THE INDOOR UNIT TO THE ACCESSORY CONTROL BOARD IS ROUTED AND PROTECTED FROM DAMAGE AND WEAR, AVOIDING THE FLUE PIPE AND ANY JOINTS THAT MAY NEED BRAZED OR DISCONNECTED FOR SERVICE. REFER TO THE PRODUCT SPECIFICATION SHEET FOR THE ACCESSORY CONTROL BOARD KIT PART NUMBER



WARNING

A TRIPPED CIRCUIT BREAKER OR BLOWN FUSE MAY INDICATE THAT AN ELECTRICAL PROBLEM EXISTS.
DO NOT RESET A CIRCUIT BREAKER OR REPLACE FUSES WITHOUT FIRST PERFORMING THOROUGH ELECTRICAL TROUBLESHOOTING AND TESTING PROCEDURES.

SYSTEM SERVICE AND DECOMMISSIONING

Should repairs requiring recovery of the refrigerant become necessary, special considerations must be made when breaking into systems with flammable refrigerants. These repairs shall only be performed by qualified service personnel and in compliance with local and national regulations.

The refrigerant charge shall only be recovered into a cylinder labeled for use with R-32. Ensure that the refrigerant cylinder(s) are capable of holding the total system charge. Cylinders shall be complete with a pressure-relief valve and associated shut-off valves in good working order. Empty recovery cylinders are evacuated and, if possible, cooled before recovery occurs. A set of calibrated weighing scales shall be available and in good working order. Hoses shall be complete with leak-free disconnect couplings and in good condition.

All best practices for refrigerant recovery must be followed, including use of a recovery machine designated safe for use with A2L refrigerants. Isolate the system electrically prior to recovery. Insure that all electric sources are disconnect and lockedout/tagout. Ensure that all personal protective equipment is being applied correctly. Ensure that the recovery process is supervised at all times by a qualified servicer. Situate the R-32 cylinder on the scale before recovery takes place. Start the recovery machine and operate in accordance with its instructions. Do not overfill cylinders by more than 80% volume of its allowed liquid charge.

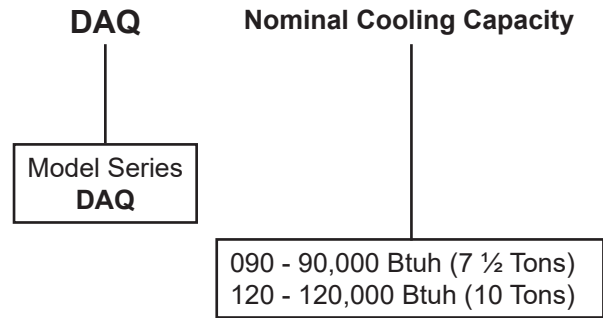
Markings and warnings on the unit shall continue to be visible and legible after installation and service. Correct any markings and warnings that are made illegible. When decommissioning a system, all previously mentioned precautions regarding safe refrigerant handling must be followed. Recovered refrigerant shall not be charged into another refrigerating system unless it has been cleaned and checked. Equipment must be labeled, dated, and signed stating that it has been decommissioned and emptied of refrigerant.



WARNING

PARTIAL UNITS SHALL ONLY BE CONNECTED TO APPLIANCE SUITABLE FOR THE SAME REFRIGERANT.

Product Identification



Product Description

When matched with DC6TE and DH6TE condensers, this system complies with the minimum efficiency requirements found in ASHRAE 90.1-2019. See the Daikin DC6TE and DH6TE specification sheets for details on these condensers. For other Daikin condenser(s) that can be matched with this air handler to obtain ASHRAE 90.1-2019 compliance, consult with your local distributor.

The DAQ series is intended for use with a room thermostat. This thermostat is not supplied with this equipment. Only thermostats that use 24 VAC control circuitry are to be used.

	DAQ0903	DAQ1203
Net Weight (Lbs.)	400	400
Shipping Weight (Lbs.)	430	430
Refrigerant	R-32	R-32
Blower Wheel (Dia x Width)	11x10	11x10
Blower Wheel Quantity	2	2
Motor Type	Direct Drive	Direct Drive
Motor Qty	2	2
Motor (HP)	1	1
Motor (RPM)	1200	1200
Evaporator Coil Material	Copper Tubes /Al Fins	
Face Area (Ft ²)	10.0	10.0
Number of Rows	4	4
Suction Line Quantity	2	2
Suction Line Connection (in)*	1 1/8	1 1/8
Liquid Line Quantity	2	2
Liquid Line Connection (in)*	3/8	3/8
Metering Device	Thermal Expansion Valve	
TXV Type	Adjustable (factory installed)	
TXV Quantity	2	2

***NOTE: CONSULT WITH THE CONDENSER SPECIFICATIONS FOR SUCTION AND LIQUID LINE SIZING.**

Unit Inspection

Upon delivery, the unit is to be inspected for damage. Any damage must be reported immediately to the carrier. Do not install this equipment if it is determined that the integrity or safety has been compromised by freight damage.

Using the table "Model Identification" section check the equipment model number and voltage to ensure the unit is appropriately sized for the condenser unit(s).

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 incorrect delivered units.

The evaporator coil contains a high-pressure inert gas holding charge.

Codes & Regulations

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

This unit DAQ090 or DAQ120 is a partial unit air conditioner, complying with partial unit requirements for international standard IEC 60335-2-40, and must be only connected to other units that have been confined as complying to corresponding partial unit requirements of international standard IEC 60335-2-40. The United States Environmental Protection Agency (EPA) has issued various regulations regarding the introduction and disposal of refrigerants. Failure to follow these regulations may harm the environment and can lead to the imposition of substantial fines. Should you have any questions please contact the local office of the EPA.

Replacement Parts

Shortages and damage should be reported to <https://www.goodmanmfg.com/logistics-feedback>, and/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. For the location of your nearest distributor consult the white business pages, the yellow page section of the local telephone book or contact:

EQUIPMENT SUPPORT
DAIKIN COMFORT TECHNOLOGIES
MANUFACTURING, L.P.
19001 KERMIER ROAD
WALLER, TEXAS 77484
855-770-5678

If replacing an air handler, the system must be manufacturer approved and Air-Conditioning, Heating, and Refrigeration Institute (AHRI) matched. **NOTE:** Installation of unmatched systems is strongly discouraged.

Pre-Installation Instructions

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.

Check that wiring will not be subject to wear, corrosion, excessive pressure, vibration, sharp edges or any other adverse environmental effects. The check shall also take into account the effects of aging or continual vibration from sources such as compressors or fans.

Under no circumstances shall potential sources of ignition be used in the searching for or detection of refrigerant leaks. A halide torch (or any other detector using a naked flame) shall not be used.

The following leak detection methods are deemed acceptable for all refrigerant systems. Electronic leak detectors may be used to detect refrigerant leaks but, in the case of FLAMMABLE REFRIGERANTS, the sensitivity may not be adequate, or may need recalibration. (Detection equipment shall be calibrated in a refrigerant-free area.) Ensure that the detector is not a potential source of ignition and is suitable for the refrigerant used.

Leak detection equipment shall be set at a percentage of the LFL of the refrigerant and shall be calibrated to the refrigerant employed, and the appropriate percentage of gas (25 % maximum) is confirmed.

Leak detection fluids are also suitable for use with most refrigerants but the use of detergents containing chlorine shall be avoided as the chlorine may react with the refrigerant and corrode the copper pipe-work.

If a leak is suspected, all naked flames shall be removed/ extinguished. If a leakage of refrigerant is found which requires brazing, all of the refrigerant shall be recovered from the system, or isolated (by means of shut off valves) in a part of the system remote from the leak.

Location

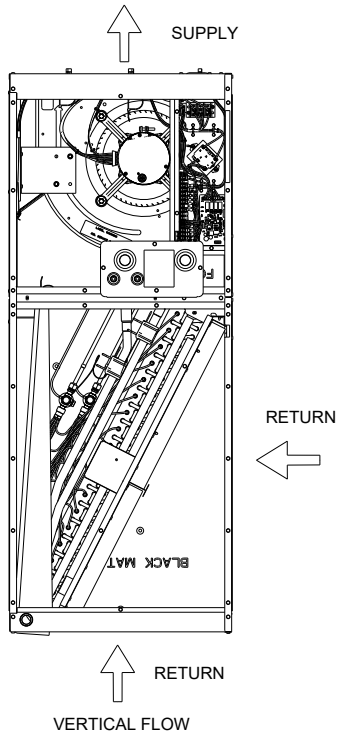
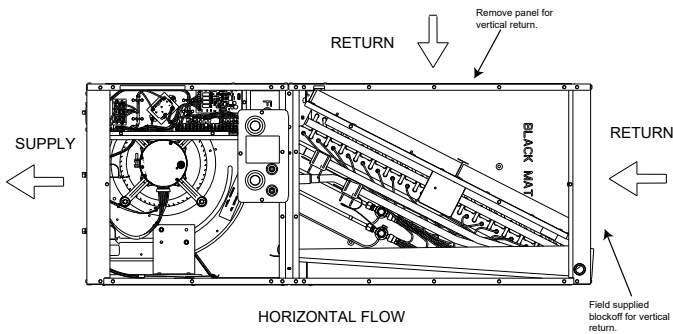
NOTE: AIR HANDLERS ARE DESIGNED FOR INDOOR INSTALLATION ONLY.

When installing this air handler in an enclosed area, such as a garage/parking area, as with any carbon monoxide producing device (i.e. and automobile, space heater, water heater, etc.), insure that the area is properly ventilated.

The DAQ air handler is suitable for installation in multiple locations including:

- Overhead (attic/mezzanine, etc.)

- Closet/mechanical room



When installing this air handler, consideration is to be given to minimize the length of refrigerant tubing. Refer to TP-111 Long Line Set Applications for further guidance. Also, do not install the air handler in a location either above or below the condenser that violates the instructions provided with the condenser.

The clearance from a combustible surface to the unit may be 0". However, service clearance is to take precedence. In addition allow a minimum of 36" in front of the unit for service clearance. Allow sufficient clearance to remove the heater elements for service or replacement in heat kits when utilized in application. Motor replacement requires 12" from the side. Blower housing removal requires 22" from the top in the horizontal position.

When installing in an area directly over a finished ceiling (such as an attic), an emergency drain pan is required directly under the unit. See local and state codes for additional requirements.

When installing this unit in an area that may become wet, elevate the unit with a sturdy, non-porous material.

In installations that may lead to physical damage (warehouse, industrial sites, etc.), it is advised to install a protective barrier to prevent such damage.

NOTE: The maximum altitude shall not exceed 8,000 ft under normal operating conditions.

Ductwork

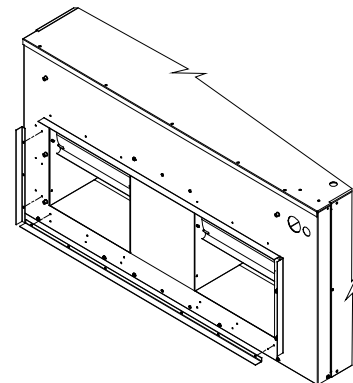
This DAQ air handler is designed for a complete supply and return ductwork system.

 CAUTION
DO NOT OPERATE THIS PRODUCT WITHOUT ALL THE DUCTWORK ATTACHED.

In order to ensure optimum system performance, it is recommended that the ductwork is to be sized to accommodate 375-425 CFM per ton of cooling with the total external static pressure not to exceed .5" WC. Inadequate duct work that restricts airflow can result in improper performance and compressor or heater failure. Ductwork is to be constructed in a manner that limits restrictions and maintains suitable air velocity. Ductwork is to be sealed to the unit in a manner that will prevent leakage.

SUPPLY DUCTWORK AND FLANGES

The supply ductwork flanges are shipped loose and required to be field installed. See the following sketch for further details: Dimensions are approximately 40" x 13-1/8".



RETURN DUCTWORK

DO NOT TERMINATE THE RETURN DUCTWORK IN AN AREA THAT CAN INTRODUCE TOXIC, OR OBJECTIONABLE FUMES/ODORS INTO THE DUCTWORK.

RETURN AIR FILTERS

Each installation must include a return air filter. This unit is factory equipped with disposable return air filters. To ensure optimum performance, frequent filter replacement is advised. See the following table for the factory installed filter sizes.

Model	Filter Size (in)	Qty.
DAQ090 and DAQ120	16 x 20 x 2	2
	20 x 20 x 2	2

Electric Heat

Refer to this manual in combination with the instructions provided with the heat kit for the correct installation procedure.

The electrical characteristics of the air handler, the electric heat kit, and the building power supply must agree. The air handlers listed in this manual do not have factory installed electric heat. Electric heat is available as an accessory. If installing this option, the **ONLY** heat kits that can be used are the AHKD series.

AHKD MODEL NUMBER	NOMINAL KW	ELECTRICAL CHARACTERISTICS	STAGES
AHKD15-3A	15	208-240/3/60	1
AHKD15-4A	15	480/3/60	1
AHKD20-3A	20	208-240/3/60	2
AHKD20-4A	20	480/3/60	2
AHKD30-3A	30	208-240/3/60	2
AHKD30-4A	30	480/3/60	2

For all supply voltages, use the correction factors in the following tables, multiplied by KW and (or) temperature rise to have corrected results.

KW Correction Factors (-3A Models)

Supply Voltage	240	230	220	210	208
Correction Factor	1	0.92	0.84	0.77	0.75

KW Correction Factors (-4A Models)

Supply Voltage	480	460	440	415	380
Correction Factor	1	0.92	0.84	0.75	0.63

The heating mode temperatures rise is dependent upon the system airflow, the supply voltage, and the heat kit size (KW) selected. Use the following table to determine the temperature rise (°F).

DAQ090 Temperature Rise Table (°F)

DAQ090 Temperature Rise Table (°F) - 7.5Ton				
KW	CFM	208	240	480
15	2800	12	16	16
15	2900	12	16	16
15	3000	11	15	15
15	3100	11	15	15
15	3200	10	14	14
20	2800	16	22	22
20	2900	16	21	21
20	3000	16	21	21
20	3100	16	20	20
20	3200	15	20	20
30	2800	24	32	32
30	2900	23	31	31
30	3000	23	30	30
30	3100	21	29	29
30	3200	21	29	29



DAQ120 Temperature Rise Table (°F)


DAQ120 Temperature Rise Table (°F) - 10Ton				
KW	CFM	208	240	480
15	3800	9	12	12
15	3900	9	12	12
15	4000	9	12	12
15	4100	9	12	12
15	4200	8	11	11
20	3800	12	17	17
20	3900	12	16	16
20	4000	12	16	16
20	4100	12	15	15
20	4200	11	15	15
30	3800	19	25	25
30	3900	18	24	24
30	4000	18	24	24
30	4100	17	23	23
30	4200	17	23	23

NOTE: TEMPERATURE RISE TABLES ARE CALCULATED WITH BOTH STAGES OF ELECTRIC HEAT ENGAGED (2 STAGE HEAT SYSTEMS).

Electrical Supply Wire and MOP

 CAUTION
FIRE HAZARD! TO AVOID THE RISK OF PROPERTY DAMAGE, PERSONAL INJURY OR FIRE, USE ONLY COPPER CONDUCTORS.

 WARNING	
HIGH VOLTAGE DISCONNECT ALL POWER BEFORE SERVICING OR INSTALLING THIS UNIT. MULTIPLE POWER SOURCES MAY BE PRESENT. FAILURE TO DO SO MAY CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.	

 WARNING
HIGH VOLTAGE! TO AVOID PROPERTY DAMAGE, PERSONAL INJURY OR DEATH DUE TO ELECTRICAL SHOCK, THIS UNIT MUST HAVE AN UNINTERRUPTED, UNBROKEN ELECTRICAL GROUND. THE ELECTRICAL GROUND CIRCUIT MAY CONSIST OF AN APPROPRIATELY SIZED ELECTRICAL WIRE CONNECTING THE GROUND LUG IN THE UNIT CONTROL BOX TO THE BUILDING ELECTRICAL 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, ELECTRICAL GROUNDINGS IS TO BE IN ACCORDANCE WITH THE CANADIAN ELECTRICAL CODE (CSA) C22.1.

BUILDING ELECTRICAL SERVICE INSPECTION

This unit is designed for 3-phase operation. DO NOT OPERATE ON A SINGLE PHASE POWER SUPPLY. SEE THE PRECEDING WARNING. 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 below:



Nominal Voltage	Minimum Supply Voltage	Maximum Supply Voltage
208 / 230	197	253
460	414	506

Voltage Balance: The supply voltage shall be unbalance (phase to phase) within 2%. To calculate the percentage of voltage unbalance use the following formula:

$$\text{Percentage Voltage Unbalance} = 100 \times \frac{\text{Max Voltage Deviation From Average}}{\text{Average Voltage}}$$

Example:

$$L1 - L2 = 220 \text{ V}$$

$$L2 - L3 = 216 \text{ V}$$

$$L1 - L3 = 213 \text{ V}$$

Avg. Voltage:

$$= \frac{(220+216+213)}{3}$$

$$= \frac{649}{3}$$

$$= 216$$

Max. Deviation from Avg. = 220 - 216 = 4

$$\% \text{ Voltage Unbalance} = 100 \times \frac{4}{216}$$

$$= \frac{400}{216}$$

$$= 1.8\%$$

Determine Wire Size: The selection of the appropriate supply wire size is important to the operation of the equipment. When selecting the wire size the following are important elements of the decision:

- The wire size is adequately sized to carry the Minimum Circuit Ampacity (MCA). Refer to the NEC (USA) or CSA (Canada) for wire sizing. The unit MCA for the air handler and the optional electric heat kit can be found on the equipment S&R plate and the following table.

Air handler	VOLTAGE	HEAT KIT	MCA
DAQ090 and DAQ120	208 / 230	None	15.5 / 15.5
		AHKD15-3A	54.8 / 60.6
		AHKD20-3A	67.3 / 75.0
		AHKD30-3A	92.3 / 104
DAQ090 and DAQ120	460	None	5.2
		AHKD15-4A	27.3
		AHKD20-4A	34.6
		AHKD30-4A	49.1

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).**
- Refer to the NEC (USA) or CSA (Canada) for wire sizing. The unit MCA for the air handler and the optional electric heat kit can be found on the unit Series and Rating Plate.
- 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 or in Canada the Canadian Electric Code 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 **this table** determine the voltage drop per foot of various conductors.

MAXIMUM ALLOWABLE LENGTH IN FEET TO LIMIT VOLTAGE DROP TO 2%

Wire Size (AWG)	Minimum Circuit Ampacity (MCA)							
	10	15	20	25	30	35	40	45
14	77	51	38	NR	NR	NR	NR	NR
12	122	81	61	49	NR	NR	NR	NR
10	193	129	97	77	64	55	NR	NR
8	307	205	154	123	103	88	77	68
6	489	326	244	195	163	140	122	109

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.

Full disconnection from the supply mains having contact separation in all poles equivalent to overvoltage III category must be installed in the fixed wiring in accordance with national wiring regulations.

Protection can be in the form of fusing or HACR style circuit breakers. The Series and Rating Plate can be used as a guide for selecting the MAXIMUM overcurrent device or reference the following table.

NOTE: FUSES OR CIRCUIT BREAKERS ARE TO BE SIZED LARGER THAN THE EQUIPMENT MCA BUT NOT TO EXCEED THE MOP.

Air handler	VOLTAGE	HEAT KIT	MOP
DAQ090 and DAQ120	208 / 230	None	20 / 20
		AHKD15-3A	60 / 70
		AHKD20-3A	70 / 80
		AHKD30-3A	100 / 110
	460	None	15
		AHKD15-4A	30
		AHKD20-4A	35
		AHKD30-4A	50

Electrical Connections

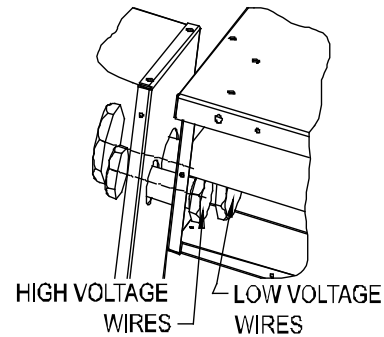
SUPPLY VOLTAGE

USE COPPER CONDUCTORS ONLY.

A single point supply voltage termination is provided in the air handler control box (non-heat kit models) or heat kit control box (heat kit models). This termination is common to both the air handler, and if equipped, heat kit. The wire is to be sized in accordance with the "Electrical Wire and MOP" section of this manual. Reference wiring diagram provided with the unit and this manual for supply voltage connections.

AIR HANDLER ONLY (NON-HEAT KIT MODELS)

Supply wire is to be routed through conduit from the service disconnect box to the unit. The air handler is equipped with a knockout suitable for 3/4" conduit. The following diagram illustrates the supply voltage hook-up.



HEATER KIT MODELS

When a heater kit is used the system uses a single point wiring hook-up. The supply wire is to be routed through conduit from the service disconnect box to the heater kit. The heat kit is equipped with a knockout suitable for 1/2" or 3/4" conduit dependent on the KW. The supply voltage is to be installed on the terminal block located in the heater kit control box.

The heater kit is factory equipped with the supply and low voltage wires for the air handler. The low voltage connection from the heater kit is provided through a multi-pin plug which connects to a mating plug in the air handler. The high voltage connections are to be made at the air handler contactor. These wires are to be routed through the pipe nipples supplied with the heater kit as shown in the illustration:



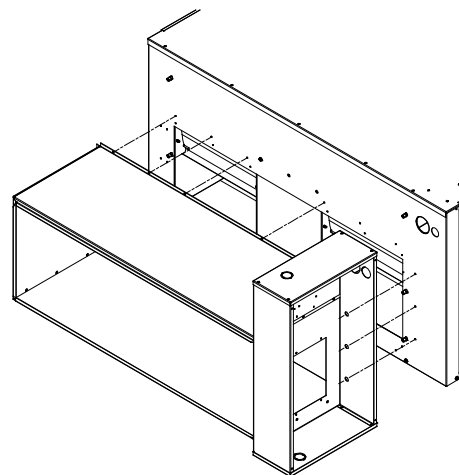
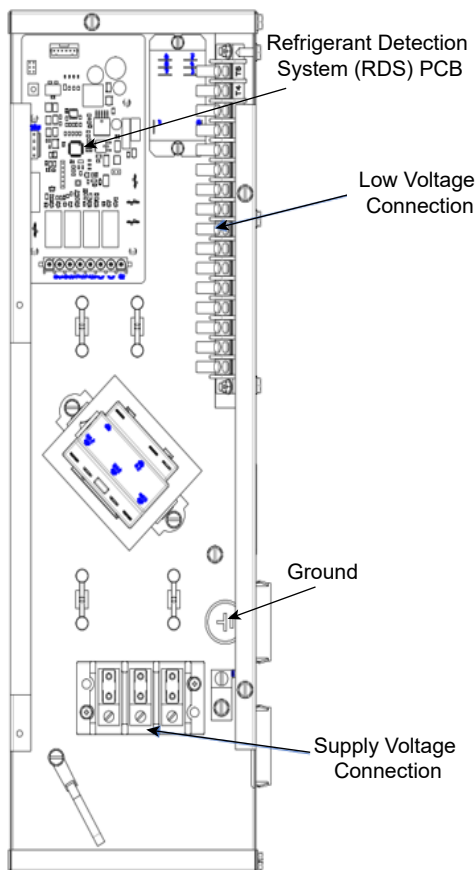
[symbol ISO 7000-0790 (2004-01)]

read operator's manual



[symbol IEC 60417-5180 (2003-02)]

Class III appliance



The wires from the heat kit are to be routed through the pipe nipple into the air handler electrical compartment. See the “Electrical Connection” section of this manual for wiring details.

Refrigerant Lines



WARNING

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



WARNING

A QUENCHING CLOTH IS STRONGLY RECOMMENDED TO PREVENT SCORCHING OR MARRING OF THE EQUIPMENT FINISH WHEN WELDING CLOSE TO THE PAINTED SURFACES. USE BRAZING ALLOY OF 5% MINIMUM SILVER CONTENT.

TUBING PREPARATION

All cut ends are to be round, burr free, and clean. Failure to follow this practice increases the chances for refrigerant leaks. The suction line is spun closed and requires pipe cutters to remove the closed end.

POST BRAZING

Quench all welded joints with water or a wet rag.

PIPING SIZE

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

The maximum allowable pressure shall be considered when connecting to a condenser or evaporator units.

The suction and liquid lines must be manifolded together. See the following sketches for additional details.

LOW VOLTAGE CONNECTIONS

The 24V-control voltage connects the air handler to the room thermostat and condenser. These models are designed for use with a two-stage thermostat. Low voltage wiring is to be copper conductors, and be a minimum of 18AWG. A provision on the cabinet side to accept the low voltage wiring is provided. See the system wiring diagram for typical low voltage connections.

Heat Kit Installation

Inspect for Shipping Damage. The heat kit is an optional accessory that is shipped separately from the air handler. Inspect the heat kit for damage and report any damage to the carrier and/or distributor. Do not install this accessory if it is determined that the integrity or safety has been compromised by freight damage.

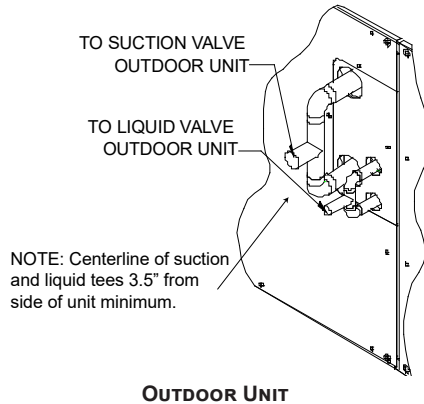
Check the Nameplate. From the heat kit nameplate check the following:

- The model number agrees with the approved models (see the “Electric Heat” section of this manual).
- The correct size (kW)
- Electric characteristics, voltage and phase, agree with the building electrical supply.
- Attaching the Heat Kit: The heat kit attaches directly to the top panel (when viewed in the upflow position) of the air handler. Do not screw the heat kit into the duct flanges. See the following drawing for details:



CAUTION

APPLYING TOO MUCH HEAT TO ANY TUBE CAN MELT THE TUBE. TORCH HEAT REQUIRED TO BRAZE TUBES OF VARIOUS SIZES MUST BE PROPORTIONAL TO THE SIZE OF THE TUBE. SERVICE PERSONNEL MUST USE THE APPROPRIATE HEAT LEVEL FOR THE SIZE OF THE TUBE BEING BRAZED.



NOTE: THE RESULTING MANIFOLDS ARE TO BE SIZED TO ACCEPT THE SUCTION AND LIQUID LINE DIAMETERS PRESCRIBED WITHIN THE CONDENSER INSTALLATION MANUAL.

CHARGING PROCEDURES

In addition to conventional charging procedures, the following requirements shall be followed.

- Ensure that contamination of different refrigerants does not occur when using charging equipment.
- Hoses or lines shall be as short as possible to minimize the amount of refrigerant contained in them.
- Cylinders shall be kept in an appropriate position according to the instructions.
- Ensure that the REFRIGERATING SYSTEM is grounded prior to charging the system with refrigerant.
- Extreme care shall be taken not to overfill the REFRIGERATING SYSTEM.

IMPORTANT NOTE: TORCH HEAT REQUIRED TO BRAZE TUBES OF VARIOUS SIZES IS PROPORTIONAL TO THE SIZE OF THE TUBE. TUBES OF SMALLER SIZE REQUIRE LESS HEAT TO BRING THE TUBE TO BRAZING TEMPERATURE BEFORE ADDING BRAZING ALLOY. APPLYING TOO MUCH HEAT TO ANY TUBE CAN MELT THE TUBE. SERVICE PERSONNEL MUST USE THE APPROPRIATE HEAT LEVEL FOR THE SIZE OF THE TUBE BEING BRAZED.

NOTE: THE USE OF A HEAT SHIELD WHEN BRAZING IS RECOMMENDED TO AVOID BURNING THE SERIAL PLATE OR THE FINISH ON THE UNIT. HEAT TRAP OR WET RAGS SHOULD BE USED TO PROTECT HEAT SENSITIVE COMPONENTS SUCH AS SERVICE VALVES AND TXV VALVES.

Check condensing unit / heat pump instructions for charging method.

Airflow

The blower motors are factory programmed with 5 torque settings, T1-T5. Both blowers operate at the same torque setting regardless of the unit's mode of operation. The unit is capable of operating at up to two independent torque settings depending on the mode of operation.

SPEED TAP	DESCRIPTION
1	AHRI RATING LOW SPEED COOLING (AC/HP) DEFAULT SPEED FOR G, Y1
2	AHRI RATING HIGH SPEED COOLING (AC/HP) DEFAULT SPEED FOR ALL, Y2
3	HIGH SPEED HEATING DEFAULT SPEED FOR HP, OR AC/HP WITH ELECTRIC HEAT
4	FAN ONLY
5	HIGH COOL, HIGHER SPEED

Prior to changing the torque settings, refer to airflow tables and heater kit CFM requirements to verify correct torque settings that satisfy the installation requirements. To change torque settings, turn the power off to the unit and move the yellow and/or brown wires to the desired torque tap (T1-T5). Refer to the wiring diagram provided with the unit for a visual aid.

Regular Maintenance

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.



WARNING

HIGH VOLTAGE
DISCONNECT ALL POWER BEFORE SERVICING OR
INSTALLING THIS UNIT. MULTIPLE POWER SOURCES
MAY BE PRESENT. FAILURE TO DO SO MAY CAUSE
PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.



Routine maintenance is essential for trouble free operation of this air handler. A few preseason checks can eliminate costly repairs and down time.

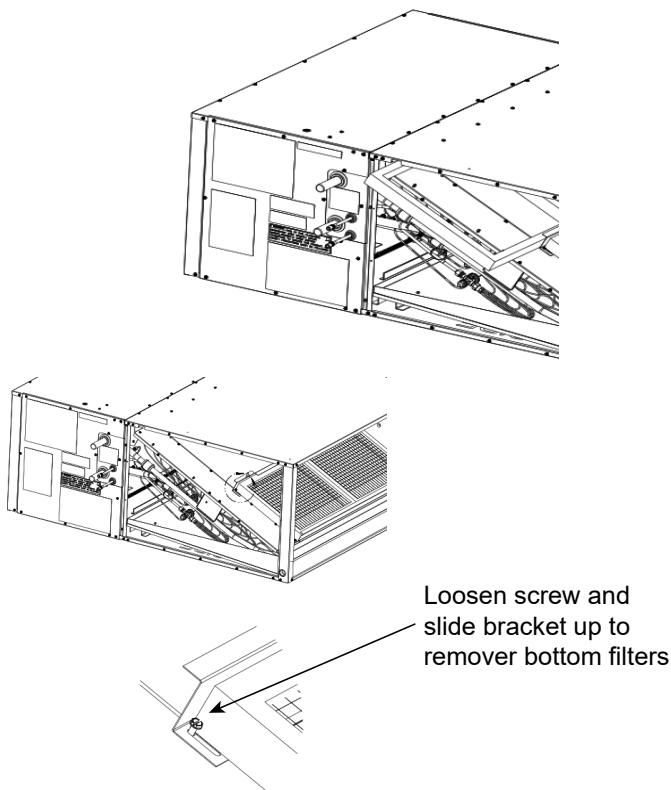
A certified service technician must perform all services mentioned below.

1. Check and change air filters as needed. See images below.
2. Clean the evaporator coil and check for duct leaks.
3. Check for proper charge and (or) for refrigerant leaks.

If these few precautions are observed and maintained, this air handler can provide years of trouble free service.

CLEAN INDOOR COIL (QUALIFIED SERVICER ONLY)

Before cleaning the indoor coil, A2L sensor must be removed from the unit to avoid damage and contamination. Air filters should also be removed before performing maintenance. The coil with the filtered air flowing over it should be inspected and cleaned as frequently as necessary to keep the finned areas free of debris. Any air blowing or water rinsing should be performed from inside-out (opposite operating airflow direction) to prevent damage to the tube, fin coil and any other components. Prior to resuming unit operation, ensure to reinstall the A2L sensor.



Refrigerant Detection System (RDS)

RDS FUNCTION

The mitigation system is a stationary device that detects the presence of R-32 refrigerant above 25% LFL using refrigerant sensors and then initiates mitigation actions. The mitigation system's primary function is to reduce the concentration of leaked R-32 refrigerant to prevent serious safety hazards. The mitigation actions are accomplished by halting HVAC operation and continuing indoor blower operation to provide airflow. Once refrigerant concentration reaches below a safe threshold, the unit will remain in mitigation mode for five minutes to evacuate any remaining R-32 refrigerant within the unit. Upon completion, the unit will resume its normal operation.

RDS OPERATION

The mitigation system is controlled by a refrigerant sensor(s), which is secured to a designated location(s) for active monitoring. If a leak is detected, HVAC operation is disabled and the indoor blower fan is activated, providing airflow at or above the minimum required airflow to evacuate excess concentration. If a Zone Control system is installed in the ductwork attached to this system, the Zone controller must be powered through a Daikin Zoning/Accessory PCB to ensure that the Zoning Dampers open during mitigation mode to provide ventilation throughout all ducting. If the unit is installed with a communicating thermostat, the thermostat will display relevant alerts/information concerning mitigation mode. Once sensors read concentration levels below a safe threshold, a five-minute timer will initiate. Once the time is over, the unit will resume its normal operation. If the sensors detect another concentration excess, the unit will go back into mitigation mode and will repeat the same process.

RECOVERY

When removing refrigerant from a system, either for servicing or decommissioning, it is recommended good practice that all refrigerants are removed safely. When transferring refrigerant into cylinders, ensure that only appropriate refrigerant recovery cylinders are employed. Ensure that the correct number of cylinders for holding the total system charge is available. All cylinders to be used are designated for the recovered refrigerant and labeled for that refrigerant (i.e. special cylinders for the recovery of refrigerant). Cylinders shall be complete with pressure-relief valve and associated shut-off valves in good working order. Empty recovery cylinders are evacuated and, if possible, cooled before recovery occurs.

The recovery equipment shall be in good working order with a set of instructions concerning the equipment that is at hand and shall be suitable for the recovery of the flammable refrigerant. If in doubt, the manufacturer should be consulted. In addition, a set of calibrated weighing scales shall be available and in good working order. Hoses shall be complete with leak-free disconnect couplings and in good condition. The recovered refrigerant shall be processed according to local legislation in the correct recovery cylinder, and the relevant waste transfer note arranged. Do not mix refrigerants in recovery units and especially not in cylinders. If compressors or compressor oils are to be removed, ensure that they have been evacuated to an acceptable level to make certain that flammable refrigerant does not remain within the lubricant. The compressor body shall not be heated by an open flame or other ignition sources to accelerate this process. When oil is drained from a system, it shall be carried out safely.

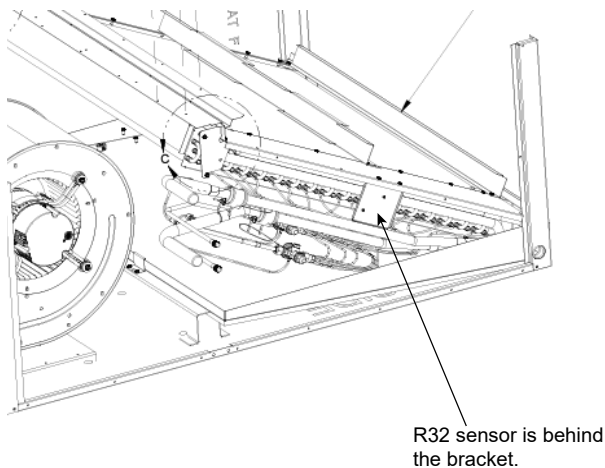
SERVICING MEASURES FOR THE REFRIGERANT DETECTION SYSTEM:

Before servicing, identify the mode of operation of the system by reading the LED flashing pattern through the view port in the cabinet panel and matching the LED flashing pattern with mode of operation in the REFRIGERANT DETECTION SYSTEM TROUBLESHOOTING GUIDE RDS PCB Fault Code table) After identifying the mode of operation, take recommended actions as specified in the Recommended Actions for PCB LED Flashing Codes table.

REFRIGERANT SENSORS for REFRIGERANT DETECTION SYSTEMS shall only be replaced with sensors specified by the manufacturer. If REFRIGERANT SENSOR requires replacement, please replace with Sensata R32 Sensor PN#RGD-00ML12 (Daikin PN#SER2A08012).

LED STATUS	
MODE	LED FLASHING PATTERN
NORMAL OPERATION	SLOW LED FLASHING PATTERN (2 SECONDS ON 2 SECONDS OFF)
R-32 LEAK ALARM	FAST LED FLASHING PATTERN
DELAY MODE	LED WILL BE ON CONTINUOUSLY
SYSTEM VERIFICATION MODE	FAST LED FLASHING PATTERN
CONTROL BOARD INTERNAL FAULT	LED WILL FLASH 2 TIMES AND THEN BE OFF FOR 5 SECONDS
R32 SENSOR COMMUNICATION FAULT	LED WILL FLASH 3 TIMES AND THEN BE OFF FOR 5 SECONDS
R32 SENSOR FAULT	LED WILL FLASH 4 TIMES AND THEN BE OFF FOR 5 SECONDS






RDS PCB FAULT CODE TABLE



TROUBLESHOOTING CODE

LED TROUBLESHOOT STATUS					
	MODE	DEFINITION	LED FLASHING PATTERN	RECOMMENDED ACTIONS	NOTES
1	Normal Operation	No faults to report.	Slow LED flashing pattern (2 seconds on and 2 seconds off)	No actions needed.	
2	R32 Leak Alarm	R32 leak is currently being detected.	Fast LED Flashing Pattern	A technician will need to find where the refrigerant leak and address it. Unit shall be thawed before servicing.	In terms of the controls, no action is needed. The controls and sensor are working fine.
3	Delay Mode	After R32 leak or alarm has been cleared, the unit will remain in alarm mode for 5 minutes before returning to normal operation.	LED will be on continuously	No action needed - If the system was previously experiencing an actual R32 Leak, the refrigerant can no longer be detected by the sensor meaning it's either gone and the system won't work anymore or there was a false alarm. If the system was experiencing a Fault, the fault is gone and the system will return to normal operation in 5 min.	After any alarm or fault, it is required to remain in R32 mitigation mode for 5 minutes.
4	System Verification Mode	Manual test run by contractor to simulate R32 Leak Alarm (test will last for 5 minutes max).	Fast LED Flashing Pattern	No actions needed.	To enter system verification test mode, press the button on the control 2 times within 5 seconds. The control will enter a simulated R32 Leak Alarm state and remain in that mode for 5 minutes. After 5 minutes, the control will return to Normal Operation automatically. If the contractor wants to end the test early they need to press the button one time.
5	Control Board Internal Fault	Control board has detected an issue with the R32 detection system.	LED will flash 2 times and then be off for 5 seconds, before repeating pattern	<ol style="list-style-type: none"> 1) Unplug and plug the R32 sensor back in. Cycle power to the system. 2) If the control is in "Normal Operation" or "Delay Mode", there is no more issue. If not, continue with diagnostics 3) Unplug R32 sensor and leave unplugged. Cycle power to the system 4) If the control still displays "Control Board Internal Fault" (2 flash pattern), replace the control. If the control now displays "R32 Sensor Communication Fault" (3 flash pattern), replace the sensor. 	This error could indicate an on board relay failure or a short with the sensor communications. A sensor communication short could occur on the board itself or external to the board. These steps will determine if the error is on the board or external to the board.
6	R32 Sensor Communication Fault	Control board does not have communications with R32 sensor.	LED will flash 3 times and then be off for 5 seconds, before repeating pattern	<ol style="list-style-type: none"> 1) Unplug and plug the R32 sensor back in. Cycle power to the system. 2) If control is in "Normal Operation" or "Delay Mode", there is no more issue. If not, continue with diagnostics. 3) If the control still displays "R32 Sensor Communication Fault" (3 flash pattern), replace both the sensor and the PCB. 	If the control cannot talk to the sensor there could be a problem with the sensor, a problem with the sensor harness or a problem internal to the control. The field will not be able to measure anything to reliably fix this error assuming the connector is properly secured to the control. Replacing both is the only option.
7	R32 Sensor Fault	R32 Sensor has reported an internal issue.	LED will flash 4 times and then be off for 5 seconds, before repeating pattern	Replace R32 sensor.	Communications to the sensor are perfectly fine. The sensor itself is reporting an internal fault.

RECOMMENDED ACTIONS FOR PCB LED FLASHING CODES TABLE

	warning; flammable materials
	service indicator; read technical manual
	operator's manual; operating instructions
	warning; low burning velocity material
	UN GHS flame symbol

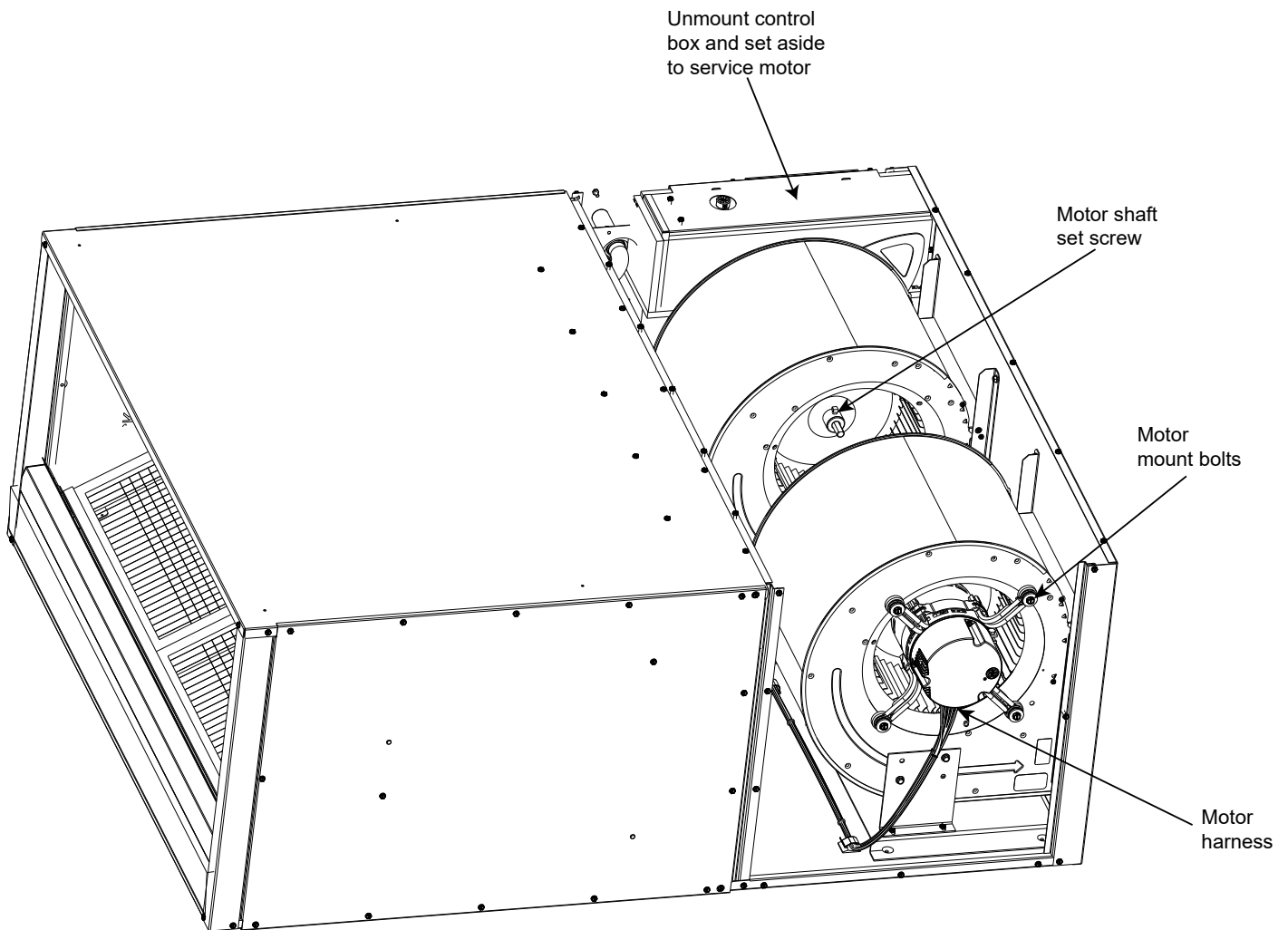
MARKING SYMBOL TABLE

MOTOR REMOVAL

NOTE: DISCONNECT AND LOCKOUT/TAGOUT ANY POWER SOURCE BEFORE PERFORMING MOTOR/BLOWER REPLACEMENT.

To service the motor:

1. Remove the split panel exposing the top of the blower housing.
2. Remove the panel on the side which the motor is being serviced.
3. Loosen the setscrew on the motor shaft. Center blower wheel in housing and torque setscrew to 170 in-lbs on reinstall.
4. Remove the four mounting bolts and harness plug. Torque to 40 in-lbs on reinstall.
5. Slide the motor out.
6. Reverse steps 5 through 6 with new motor.




BLOWER PERFORMANCE TABLES
7.5 Ton LC Indoor Split System
Models: DAQ090

BLOWER PERFORMANCE TABLES									
7.5 Ton LC Indoor Split System									
Models: DAQ09033, DAQ09034									
Up-Flow					Horizontal				
SPEED TAP	ESP (in H2O)	single fan			SPEED TAP	ESP (in H2O)	single fan		
		SCFM	RPM	BHP			SCFM	RPM	BHP
T1	0.1	1,941	536	0.09	T1	0.1	2,105	507	0.09
	0.2	1,794	587	0.10		0.2	1,898	563	0.10
	0.3	1,627	638	0.11		0.3	1,692	616	0.11
	0.4	1,446	687	0.12		0.4	1,494	668	0.12
	0.5	1,256	734	0.13		0.5	1,314	720	0.13
	0.6	1,078	781	0.14		0.6	1,140	770	0.13
	0.7					0.7			
	0.8					0.8			
T2	0.1	3,079	727	0.28	T2	0.1	3,094	700	0.27
	0.2	2,985	764	0.29		0.2	3,034	746	0.28
	0.3	2,877	801	0.30		0.3	2,951	785	0.30
	0.4	2,761	838	0.32		0.4	2,854	820	0.31
	0.5	2,642	875	0.33		0.5	2,745	853	0.32
	0.6	2,525	912	0.35		0.6	2,621	885	0.34
	0.7	2,406	948	0.36		0.7	2,498	919	0.35
	0.8	2,287	983	0.37		0.8	2,357	953	0.36
T3	0.1	3,079	727	0.28	T3	0.1	3,094	700	0.27
	0.2	2,985	764	0.29		0.2	3,034	746	0.28
	0.3	2,877	801	0.30		0.3	2,951	785	0.30
	0.4	2,761	838	0.32		0.4	2,854	820	0.31
	0.5	2,642	875	0.33		0.5	2,745	853	0.32
	0.6	2,525	912	0.35		0.6	2,621	885	0.34
	0.7	2,406	948	0.36		0.7	2,498	919	0.35
	0.8	2,287	983	0.37		0.8	2,357	953	0.36
T4	0.1	3,565	819	0.39	T4	0.1	3,493	776	0.37
	0.2	3,500	845	0.40		0.2	3,410	814	0.39
	0.3	3,425	871	0.41		0.3	3,324	848	0.40
	0.4	3,348	899	0.43		0.4	3,224	878	0.42
	0.5	3,253	927	0.44		0.5	3,127	908	0.43
	0.6	3,153	958	0.46		0.6	3,015	937	0.45
	0.7	3,037	990	0.47		0.7	2,899	967	0.46
	0.8	2,917	1,025	0.49		0.8	2,773	998	0.47

BLOWER PERFORMANCE TABLES
10 Ton LC Indoor Split System
Models: DAQ120

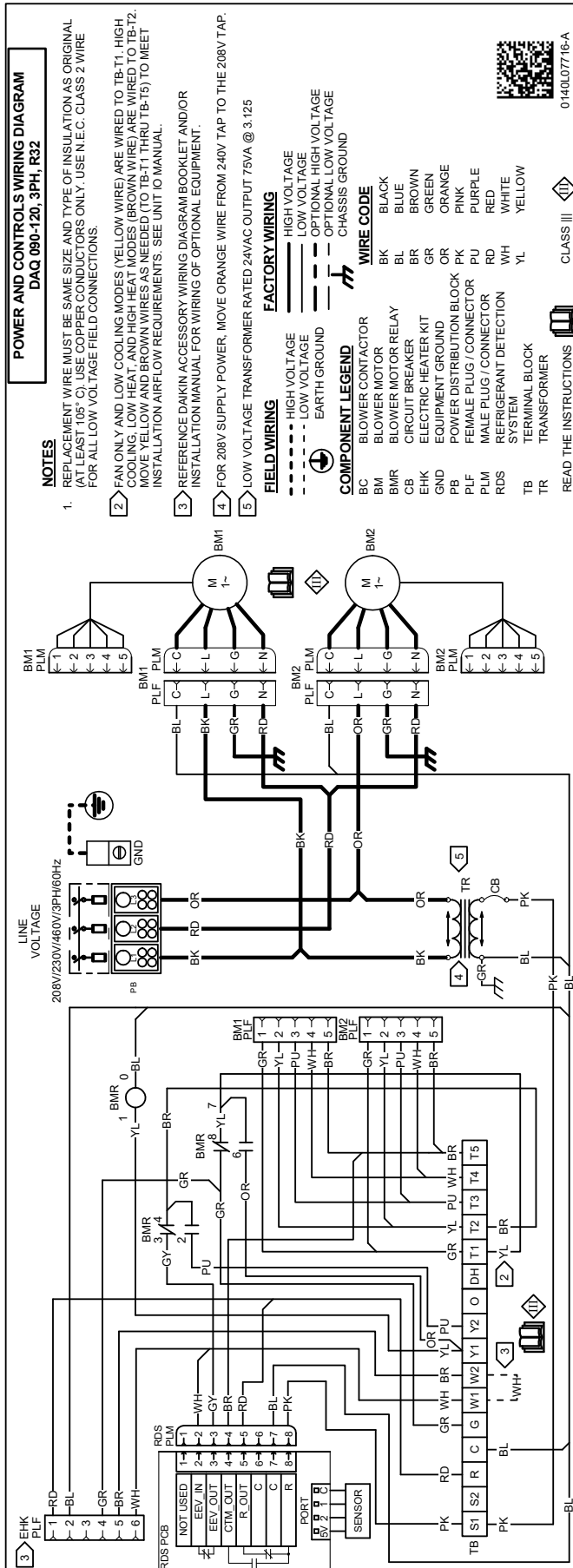
BLOWER PERFORMANCE TABLES									
10 Ton LC Indoor Split System									
Models: DAQ12033, DAQ12034									
Up-Flow					Horizontal				
SPEED TAP	ESP (in H2O)	SCFM	RPM	single fan BHP	SPEED TAP	ESP (in H2O)	SCFM	RPM	single fan BHP
T1	0.1	2,525	622	0.17	T1	0.1	2,581	619	0.17
	0.2	2,400	666	0.18		0.2	2,468	660	0.18
	0.3	2,269	710	0.19		0.3	2,340	703	0.19
	0.4	2,132	753	0.20		0.4	2,204	747	0.20
	0.5	1,984	794	0.21		0.5	2,061	791	0.21
	0.6	1,843	835	0.22		0.6	1,904	834	0.22
	0.7	1,706	875	0.24		0.7	1,740	876	0.24
	0.8	1,565	913	0.25		0.8	1,603	919	0.25
T2	0.1	4,012	890	0.56	T2	0.1	4,134	881	0.55
	0.2	3,930	921	0.58		0.2	4,061	912	0.57
	0.3	3,841	950	0.59		0.3	3,989	940	0.59
	0.4	3,752	979	0.61		0.4	3,915	966	0.60
	0.5	3,658	1,007	0.63		0.5	3,835	991	0.62
	0.6	3,566	1,036	0.65		0.6	3,760	1,017	0.64
	0.7	3,463	1,064	0.66		0.7	3,671	1,043	0.65
	0.8	3,360	1,093	0.68		0.8	3,587	1,071	0.67
T3	0.1	4,012	890	0.56	T3	0.1	4,134	881	0.55
	0.2	3,930	921	0.58		0.2	4,061	912	0.57
	0.3	3,841	950	0.59		0.3	3,989	940	0.59
	0.4	3,752	979	0.61		0.4	3,915	966	0.60
	0.5	3,658	1,007	0.63		0.5	3,835	991	0.62
	0.6	3,566	1,036	0.65		0.6	3,760	1,017	0.64
	0.7	3,463	1,064	0.66		0.7	3,671	1,043	0.65
	0.8	3,360	1,093	0.68		0.8	3,587	1,071	0.67
T4	0.1	4,482	973	0.74	T4	0.1	4,530	955	0.73
	0.2	4,387	997	0.76		0.2	4,454	982	0.75
	0.3	4,299	1,021	0.78		0.3	4,377	1,008	0.77
	0.4	4,218	1,045	0.79		0.4	4,299	1,033	0.79
	0.5	4,141	1,069	0.81		0.5	4,219	1,057	0.80
	0.6	4,066	1,093	0.83		0.6	4,142	1,081	0.82
	0.7	3,992	1,117	0.85		0.7	4,062	1,104	0.84
	0.8	3,916	1,141	0.87		0.8	3,982	1,127	0.86

WIRING DIAGRAM




WARNING

HIGH VOLTAGE!
 DISCONNECT ALL POWER BEFORE SERVICING OR INSTALLING THIS UNIT.
 MULTIPLE POWER SOURCES MAY BE PRESENT. FAILURE TO DO SO MAY
 CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.



Wiring is subject to change. Always refer to the wiring diagram on the unit for the most up-to-date wiring.


SPLITS LOW VOLTAGE DIAGRAM



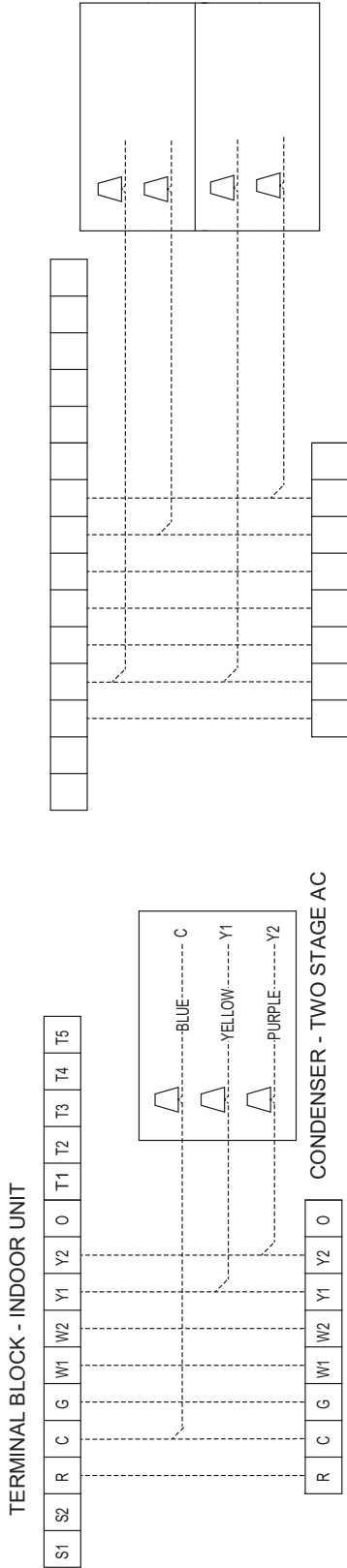
WARNING

HIGH VOLTAGE!

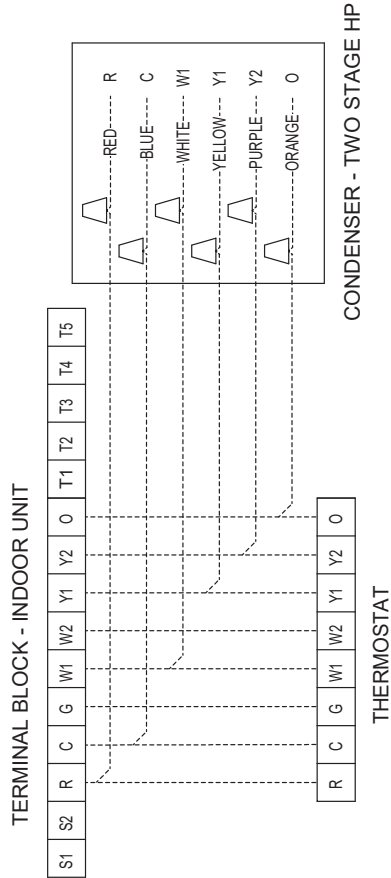
DISCONNECT ALL POWER BEFORE SERVICING OR INSTALLING THIS UNIT.
MULTIPLE POWER SOURCES MAY BE PRESENT. FAILURE TO DO SO MAY
CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.



1 TWO-STAGE CONDENSER UNIT



1 SINGLE-STAGE HEAT PUMP UNIT



**LOW VOLTAGE FIELD WIRING
DAQ 090-120, 3PH**

NOTE:
THIS IS A SYSTEM WIRING DIAGRAM SHOWING DAQ MODEL SERIES WITH FIELD CONNECTIONS. THIS DIAGRAM IS TO BE INCLUDED IN INSTALLATION INSTRUCTIONS. A SEPARATE WIRING DIAGRAM IS CONTAINED INSIDE THE CONTROL BOX FOR UNIT FACTORY WIRING.

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CUSTOMER FEEDBACK

Daikin is very interested in all product comments.

Please fill out the feedback form on the following link:

<https://daikincomfort.com/contact-us>

You can also scan the QR code on the right to be directed to the feedback page.



Our continuing commitment to quality products may mean a change in specifications without notice.

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