



A **NIBE** GROUP MEMBER

AIR HANDLING UNIT

# INSTALLATION, OPERATION & MAINTENANCE MANUAL

Part#: I100-90068358 | IOM-100 | Revised: March 12, 2026

Model: AHY



Model:  
AHY

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It is the responsibility of the end user to properly characterize and dispose of all waste materials according to applicable regulatory and legal entities. Where reasonable, safe, and compliant with local regulatory and legal requirements, IEC encourages recycling materials when disposing of its products.

International Environmental Corporation (IEC) works continually to improve its products. As a result, the design and specifications of each product may be changed without notice and may not be as described herein. Please contact IEC for information regarding current design and product specifications. Statements and other information contained herein are not express warranties and do not form the basis of any bargain between the parties but are merely IEC's opinion or commendation of its products. Manufacturer's standard limited warranty applies. The latest version of this document is available at [www.iec-okc.com](http://www.iec-okc.com).

# Attentions, Cautions, and Warnings

**⚠ DANGER**

Danger indicates a hazardous situation, which will result in death or serious injury if not avoided.

**⚠ WARNING**

Warning indicates a potentially hazardous situation, which can result in property damage, personal injury, or death if not avoided.

**⚠ CAUTION**

Caution indicates a potentially hazardous situation, which can result in minor injury or equipment damage if not avoided.

## CONSIDER BEFORE OPERATION

**⚠ DANGER**

**Improper ground may result in severe injury or death.**

Check grounding nut tightness before connecting power to the external junction box.

**⚠ DANGER**

**LOCKOUT/TAGOUT** all power sources prior to service, pressurizing, depressurizing, or powering down the unit. Failure to follow this warning exactly can result in serious injury or death. Disconnect electrical power before servicing the equipment. More than one disconnect may be required to de-energize the unit. Make sure to read and understand the installation, operation, and service instructions in this manual.

**⚠ WARNING**

**Improper installation and maintenance can cause equipment damage or personal injury.**

Installation and maintenance must be performed by qualified personnel familiar with applicable codes and regulations, and experience with this type of equipment.

**⚠ WARNING**

Electric shock hazard. Improper handling of this equipment can cause personal injury or equipment damage. This equipment must be properly grounded. Connections to and service of the AHY unit must be performed only by personnel that are knowledgeable in the operation of the equipment being controlled.

**⚠ CAUTION**

For installation only in locations not accessible to the general public.

**⚠ CAUTION**

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

**⚠ CAUTION**

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

**NOTE: Indicates important details or clarifying statements for information presented in figures or tables.**

This manual provides installation, operation, and maintenance information for IEC Air Handling Units.

The system design and installation must follow accepted industry practice, such as described in the ASHRAE Handbook, the National Electric Code, and other applicable standards. The installation of this equipment must be in accordance with regulations of authorities having jurisdiction and all applicable codes. It is the responsibility of the installer to determine and follow the applicable codes.

# Section One - Receipt, Handling, and Placement

## PREFACE

International Environmental Corporation (IEC) Air Handling unit represent a prudent investment offering trouble-free operation and long service with proper installation, operation, and regular maintenance.

**Your equipment is initially protected under the manufacturer's standard warranty; however, this warranty is provided under the condition that the steps outlined in this manual for initial inspection, proper installation, regular periodic maintenance, and everyday operation of the equipment be followed in detail. Fully review this manual in advance before initial installation, startup, and any maintenance. If any questions arise, please contact your local sales representative or the factory BEFORE proceeding.**

The equipment covered by this manual is available with a variety of options and accessories meant for primarily indoor installation. Consult the approved unit submittals, order acknowledgment, and other manuals for details on unit options and accessories.

Always follow proper procedures related to safety, handling, installation, operation, and servicing of mechanical equipment. The manufacturer assumes no responsibility for personal injury or property damage resulting from improper or unsafe practices during the handling, installation, service, or operation of any equipment.

## UNPACKING AND INSPECTION

All shipments are made F.O.B. factory, and it is the responsibility of the receiving party to inspect the equipment upon arrival. Carefully check equipment against the bill of lading to ensure that all factory-provided parts, kits, controls, and/or packages are accounted for. If any discrepancy is found, notify the local sales representative immediately so proper action can be taken.

Before unloading any unit, check the nameplate to make sure the voltage complies with the power supply available. Inspect all units for damage upon arrival. Record any hidden damage or missing components and immediately report to the carrier and file a claim. If a claim for shipping damage is filed, retain the unit, shipping carton, and all packing material for physical inspection by the freight carrier.

All units are carefully inspected at the factory throughout the manufacturing process under a strict and detailed quality assurance program.

All fans are dynamically balanced before leaving the factory. Carefully inspect fans for rough handling that can cause damage.

When factory operations are required, the factory must be contacted for authorization to return equipment, and a Return Authorization Number will be issued. Unauthorized return shipments of equipment and shipments not marked with an authorization number will be refused. In addition, any claims for unauthorized expenses are not accepted by the manufacturer.

**NOTE: If any questions arise concerning warranty repairs, the factory must be notified BEFORE any corrective action is taken.**

## STORING THE UNIT

Store unit on a level surface. Store units indoors in a clean, dry environment on a level surface. Moisture, debris, and minerals can cause permanent damage to the cabinet and components. Do not allow coverings to trap moisture on the galvanized surface.

## Section One - Receipt, Handling, and Placement

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### HANDLING

#### **! DANGER**

Improper rigging, lifting, or moving of a unit can result in a unit damage, property damage, severe personal injury, or death. See the as-designed, certified dimensional drawings included in the job submittal for the weights of the units and individual modules.

Installation is to be performed only by qualified personnel who are familiar with local codes and regulations and experienced with this type of equipment. Lifting equipment and mechanisms must be suited for the load capacity. It is the customers' responsibility to consult a certified rigging contractor to rig, lift and move components and subcomponents properly and safely as needed.

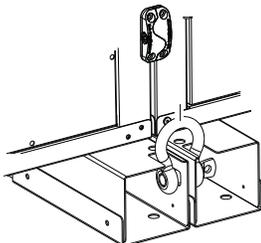
When transporting units or modules with forklifts, ensure that the forks extend the entire length of the unit to prevent damage to its underside and to assure that the unit is stable during transport. When lifting individual modules, ensure they are properly secured to the forklift to minimize the risk of tipping. Units or modules should only be lifted using the designated forklift pockets integrated into the base.

### RIGGING

AHY units are available for shipment either fully assembled or as individual modules. You must rig the equipment as it was shipped from the factory. Do not remove shipping skid or protective cover or piping connection protective caps until equipment is ready for final placement to prevent damage to the equipment.

Each module, regardless of unit size, is equipped with lifting points located on the integrated base rails as shown in the **Lift Anchor** figure. Only use factory-provided lifting holes integrated into the base. Never lift by the coil connections or headers.

**Figure 1: Lifting Anchor**

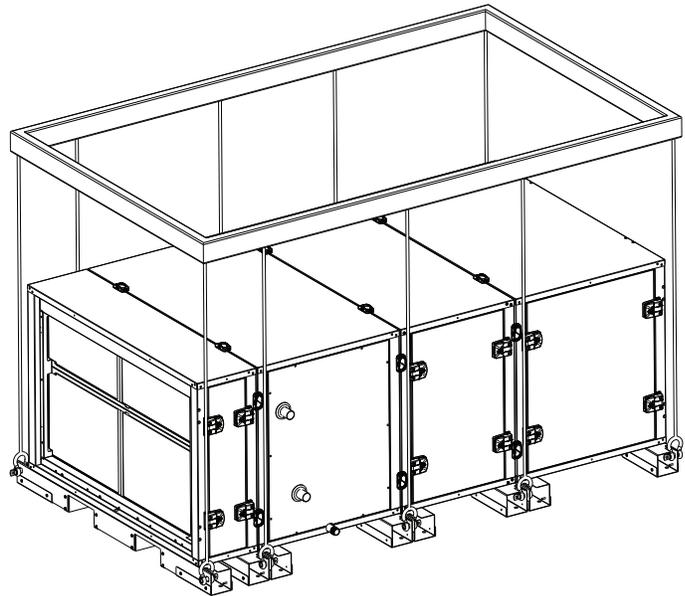


#### **! CAUTION**

Do not allow lifting mechanisms to touch any part of the unit except for the lifting holes located in base. Take special care when rigging to avoid damaging the control panels, handles, piping, or frame of the unit.

When lifting the unit, you must use all factory-installed lifting points as shown in the **Lift Points** figure. The unit must remain level throughout the entire lifting event. Spreader bars are recommended to prevent rigging from contacting the unit. Do not allow lifting mechanisms to touch any part except the lifting holes located in base.

**Figure 2: Lift Points**



#### **! WARNING**

Be aware that the center of gravity may not necessarily be in the geometric center of the unit. No additional items can be added to a lift with the unit as it may affect the center of gravity and cause unit damage, property damage, severe personal injury, or death.

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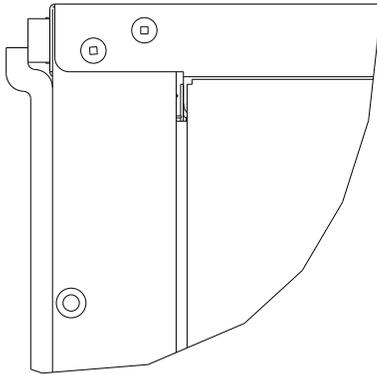
## Section Two - Installation

### ASSEMBLY AND INSTALLATION

AHY units can ship either as complete assemblies or as separate modules primarily for indoor applications. If delivered as individual modules, all necessary bolts, nuts, screws, and gasket materials for assembly are included. It is recommended to assemble modules at the final installation site.

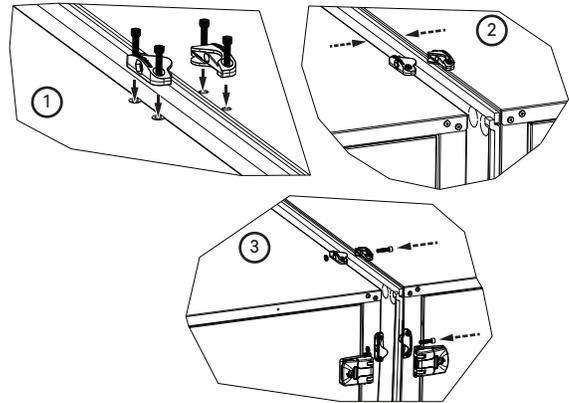
Begin assembly by placing the provided gasket around each module's edge. When joining sections, overlap the gasket by  $\frac{1}{8}$  inch to help prevent air leaks as shown in the **Gasket Installation** figure.

**Figure 3: Gasket Installation**



Separate the halves of the alignment bracket provided in the shipped loose envelop and attach each side with the supplied bolts into their designated holes on each module. For units AHY03-07 a total of six brackets are required for each module and unit sizes AHY08-10 require eight brackets per module. Pay close attention to the correct orientation of the brackets. After all brackets are attached, align and join the modules so that the brackets interlock. Finally, using the bolt and nut provided with the alignment brackets, insert the bolt through the alignment brackets and fasten the halves together using the nut to compress the gasket and securely connect the modules.

**Figure 4: Fasten and Secure Modules**



After all modules are assembled, connect the flex conduit between the modules to the corresponding junction boxes as shown in the Flex Conduit figure.

**Figure 5: Flex Conduit**



After all modules are assembled and wires and conduit connected, secure floor-mounted units firmly in place by using field-supplied lug screws through the specified holes in the built-in base.

### SUSPENDING UNITS

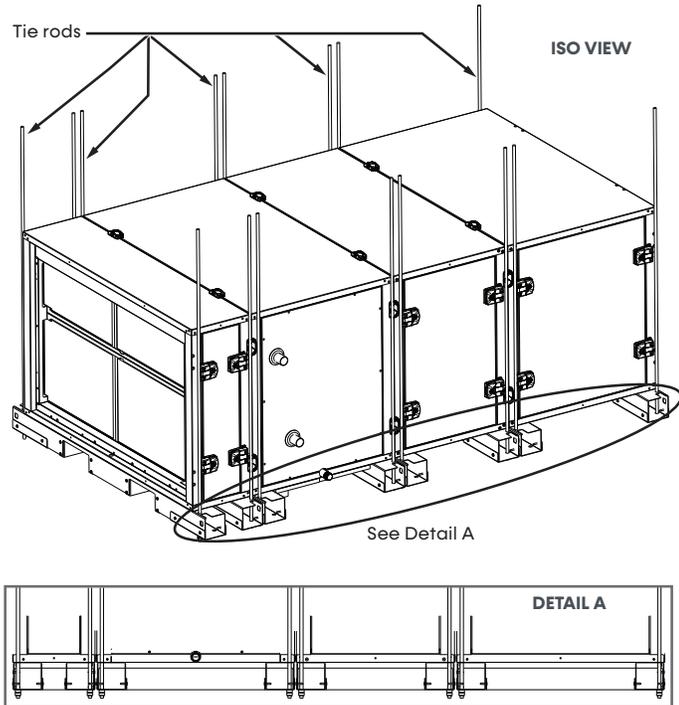
When suspending the unit from a ceiling, use the factory-installed integrated base rails. Ensure all assembly is complete before suspending the units. Each corner of the factory-installed base rails feature a  $\frac{5}{8}$ -inch diameter hole designed for hanger rods. To ensure proper support and to preserve the structural integrity of the equipment, you must install a hanger rod in every corner of each module. See the **Unit with Hanging Rods** figure for an example.

## Section Two - Installation

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**NOTE:** Install hanger rods so that they do not interfere with access panels.

**Figure 6: Unit with Hanging Rods**



### ACCESS DOORS

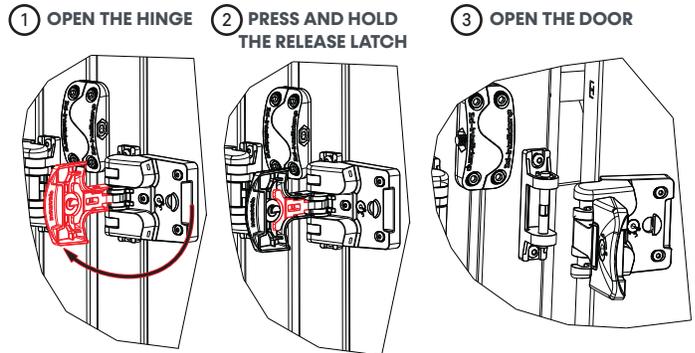
**⚠ WARNING**

Do not open doors while the unit is in operation as this could lead to severe injury.

The AHY unit is designed with access door hinges that allow for opening the access panels from either side or complete removal. The access door handles have an integrated lock and an intermediate safety catch feature. The intermediate safety catch prevents the door from swinging open immediately when opened.

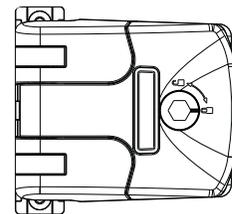
To open the door, first open the hinge handle until it stops. Press the release latch inside of the hinge handle, then pull directly out to disengage the hinge from the unit. Repeat this process for all hinges on the same side to open the door to a side. Repeat for all hinges to remove the access door. Ensure the door is supported when releasing last hinge to prevent the door from falling.

**Figure 7: Open Access Door**



To prevent unauthorized access to the unit, use the integrated lock to secure the fan section, particularly during operation. Use an Allen wrench to turn the lock to the right and ensure the unit is properly locked. See the **Door Lock** figure for an example.

**Figure 8: Door Lock**



### CLEARANCE AND ACCESS REQUIREMENTS

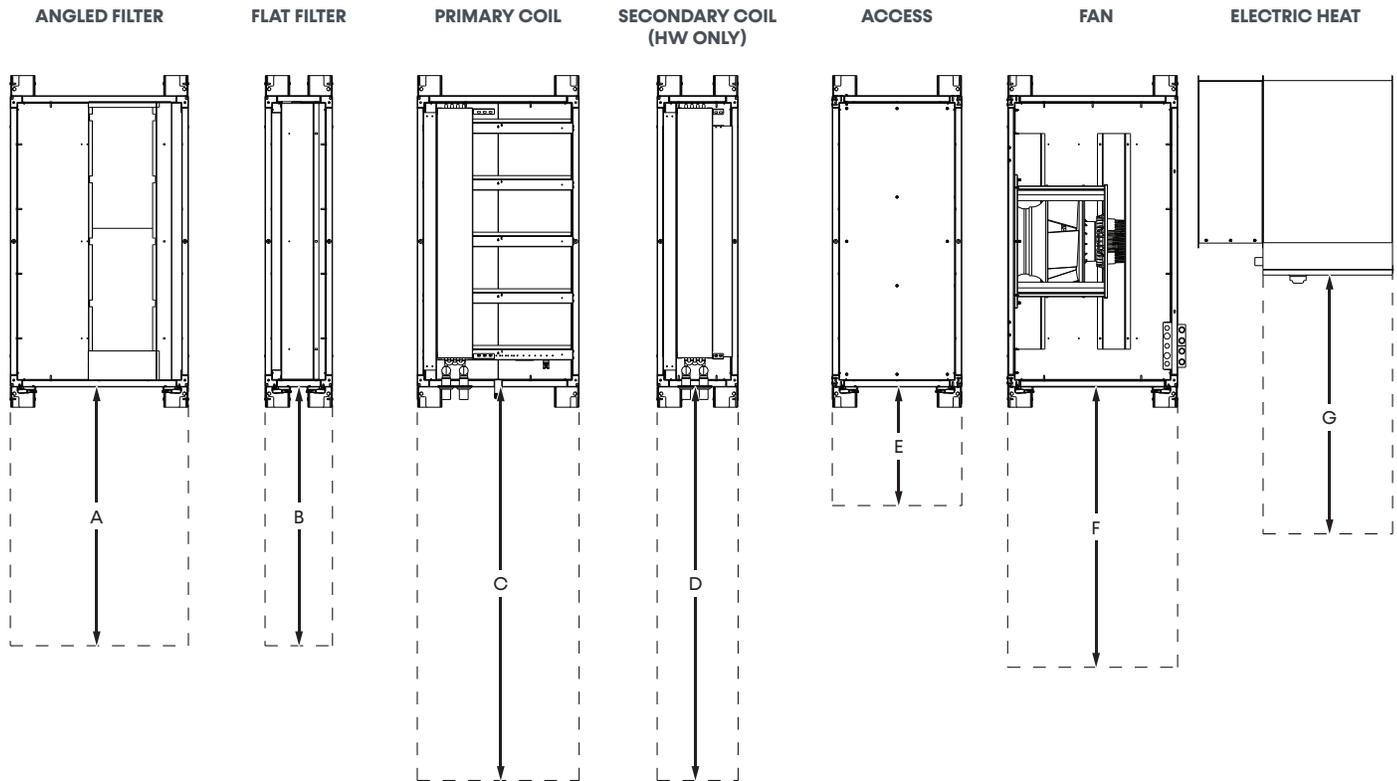
Access to at least one side of the unit is required for routine service, maintenance, and replacement. Allow sufficient space for filter replacement, coil removal, drain pan cleaning, and access to electrical panels. Always have access to at least one side of the unit for regular service and maintenance. Refer to images on the following pages for servicing space requirements. Routine maintenance includes filter replacement and drain pan and fan motor inspection/cleaning.

Allow sufficient space for service panel removal and to meet the service clearance requirement of the section it accesses. It is recommended to leave at least 12 inches of space between the unit and any wall or structure, and at least 24 inches from any combustible surface, while also complying with local code requirements.

A minimum service clearance of 48 inches is required for remote controls enclosure provided with the unit.

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## Section Two - Installation



**Table 1: Minimum Recommended Module Clearance (inches)**

Size	Angled Filter Module	Flat Filter Module	Primary Coil Module	Secondary Module (HW Only)	Access Module	Fan Module	Electric Heat Control Box
	A	B	C	D	E	F	G
AHY03	40	40	64	64	22	49	48
AHY05	50	50	73	73	22	52	48
AHY06	50	50	73	73	22	55	48
AHY07	50	50	73	73	22	55	48
AHY08	50	50	73	73	22	52	48
AHY10	60	60	80	80	22	52	48

### DUCT CONNECTIONS

Install all duct connections to the units in accordance with the standard of the National Fire Protections Association (NFPA).

- NFPA 90A for installing air conditioning and ventilating systems other than residence type
- NFPA 90B for residence-type warm air heating and air conditioning systems

Align the duct opening with the discharge opening and tape to prevent air leaks.

### GENERAL PIPING

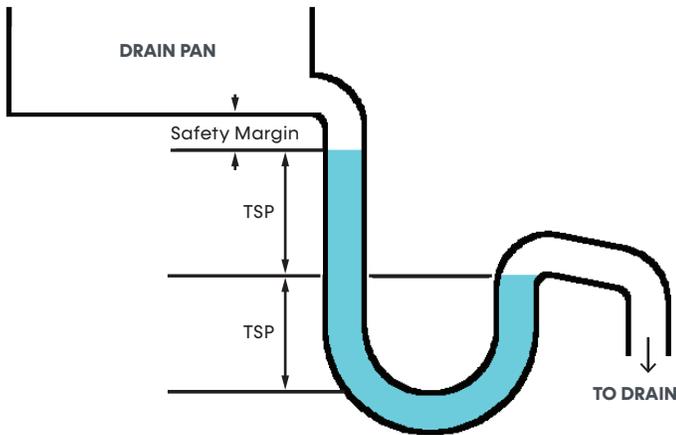
Support all pipe connections independently from the header. Failure to do so may cause cracking at the headers. All piping shall be in accordance with local codes and follow accepted industry standards.

Install a drain trap to prevent condensate buildup and/or overflow. Ensure that the drain U-trap is deep enough to offset maximum unit static pressure difference as shown in the **Condensate Drain U-trap** figure.

## Section Two - Installation

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**Figure 9: Condensate Drain U-trap**



### CONDENSATE OVERFLOW SWITCH

Field wire the optional condensate overflow switch to a field-supplied controller and field test to verify proper operation. To test, fill drain pan with water to within ¼ inch (6.35 mm) of top of pan and verify that a signal is received by the controller.

### WIRING

#### **WARNING**

**Proper field wiring and grounding required!** Failure to follow code could result in death or serious injury. All field wiring **MUST** be performed by qualified personnel. Improperly installed and grounded field wiring poses FIRE and Electrocutation hazards. To avoid these hazards, you **MUST** follow requirements for field wiring installation and grounding as described in NEC and your local/state/national electrical codes.

#### **WARNING**

**Electrical shock hazard!** Failure to follow instructions below could result in death or serious injury. Properly connect the system's oversized protective earthing (grounding) terminal(s).

Entrances are provided in each module for field-installation of low-voltage wiring through a pipe/conduit and junction box connection in the unit regardless of unit configuration.

### SUPPLY POWER WIRING

Prior to connecting any wiring to the motor, consult the provided wiring diagram and confirm that the motor's nameplate voltage aligns with the building's electrical service specifications.

Before installation, consider overall unit serviceability and accessibility before mounting, running wires (power), making penetrations, or mounting any components to the cabinet. Wiring to the air handler must be provided by the installer and must comply with all national and local codes. Below is a sample wiring diagram for single-motor units. Refer to the wiring diagram provided with the units for unit specific wiring details.

### REMOTE MOUNTED CONTROLS ENCLOSURE

A remote-mounted controls enclosure that houses the unit disconnect, fuse, and terminal block for landing a 0-10VDC signal for control of the fan is provided with the AHY unit. Mount the enclosure no more than 50 feet from the AHY unit.

For the unit power, connect power wiring from the disconnect switch terminals in the controls enclosure to the terminal block on the Fan module. Connect the factory-provided motor controls wiring located in the fan enclosure to the appropriate terminals in controls enclosure.

For dual point control when an electric heater is included with the unit, additional power wiring shall be connected to the disconnect switch terminals in the Electric heater control box.

### FUSE SIZES

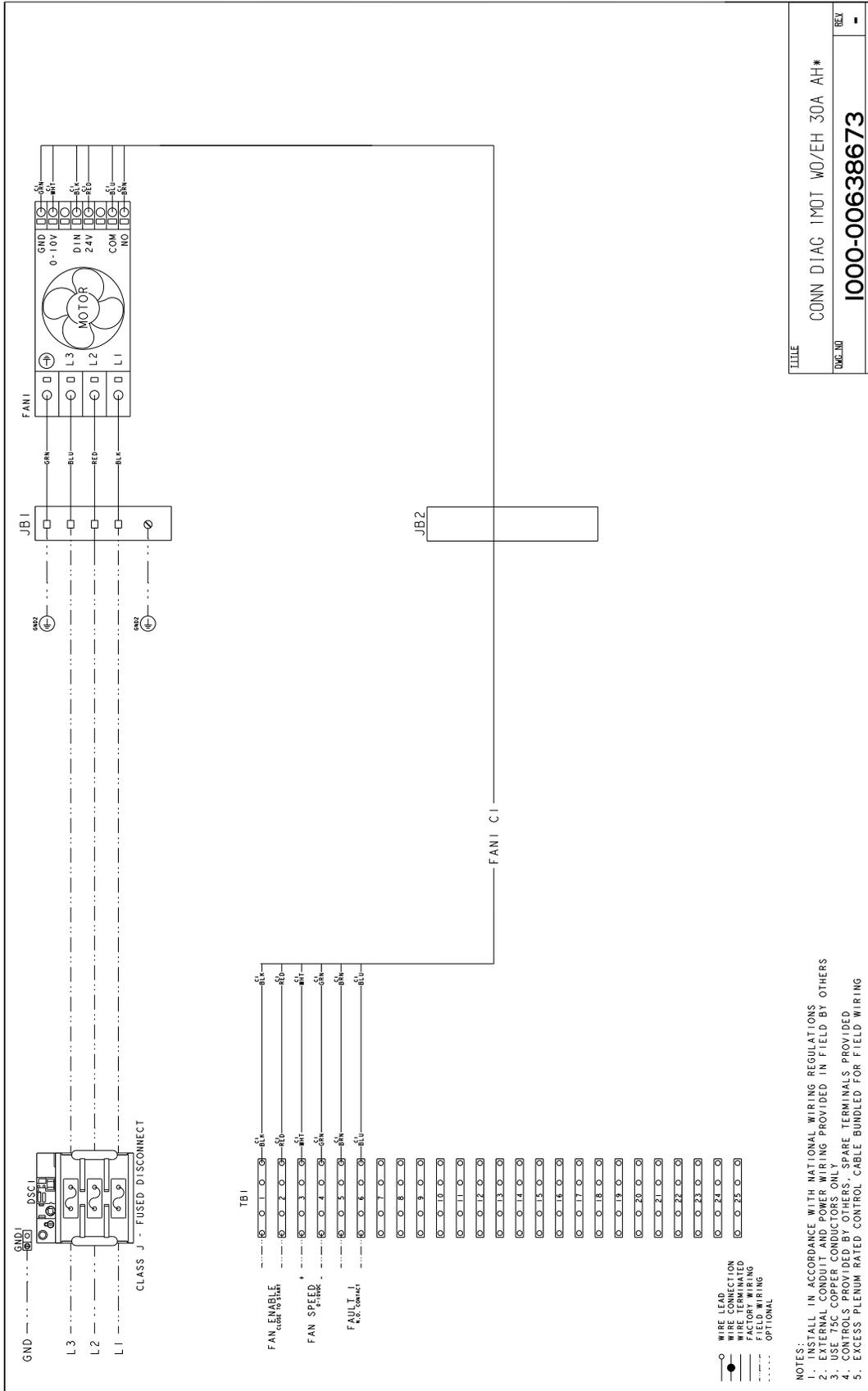
The standard ampere ratings for fuses and circuit breakers are listed **Fuse** table. The use of fuse and circuit breakers with non-standard ampere ratings shall be permitted provided the rating do not exceed the max fuse size defined on the unit plate.

**Table 2: Fuses**

Fuse Type	Amperage											
Fast Acting	5	10	15	20	25	30	35	40	45	50	60	
Dual Element	10	20	25	30	35	40	45	50	60	70	80	90

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# Section Two - Installation



TITLE	CONN DIAC IMOT WD/EH 30A AH*
DWG. NO	1000-00638673
REVISION	1.2
REV	-

## Section Two - Installation

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### ELECTRIC HEATER INSTALLATION

You can select a duct-style electric heater as an optional form of supplemental heating. This heater features a flange-style design and is shipped separately for installation in the field. Install the electric heater at the supply opening of the unit using the following the steps:

1. Apply a bead of RTV silicone rubber between mating surfaces and around all screw holes to minimize air leakage.
2. Secure the factory duct extension to the unit's discharge end with self-drilling screws through predrilled holes, ensuring both openings align.
3. Position the heater flanges so they align with the duct extension flange, then fasten the heater to the duct extension using sheet metal screws.
4. Apply insulation to the duct extension and electric heater exterior to reduce condensation.

#### **WARNING**

Failure to follow sealing instructions could result in short circuiting and sever hazard resulting in possible loss of life or major equipment damage.

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## Section Three - Startup, Service, and Maintenance

AHY units are not intended for temporary heat/cool or ventilation. Do not operate AHY units in dusty or construction environments. Operation in these conditions can result in damage to the equipment, building, or furnishings and voids all manufacturer warranty.

### BEFORE STARTUP CHECK

1. Ensure unit is powered off and all disconnect switches are in the off position.
2. Check that the unit is completed and properly installed with ductwork connected if necessary. Check all shipping materials, braces and construction debris are removed from the unit.
3. Verify that all electrical work is completed and properly terminated, ensuring all connections are secure and the correct voltage is supplied.
4. Replace all panels that were removed during installation.
5. Verify that clean filters are installed and secured.
6. Perform a leak test on the piping systems to confirm that all water connections and joints are secure. Ensure that a proper trap is installed in the condensate drain.
7. Manually rotate motor shaft to make sure it rotates freely.

### MOTOR STARTUP

1. Momentarily apply power to the motor and check direction of rotation of the fan. If motor rotation is wrong, power off the fan and change the motor lead connections. Verify rotation again before continuing.
2. Start the motor and verify that it operates smoothly, free from undue vibration or abnormal noise
3. A 0-10VDC signal from an external control system can be used to regulate EC motors.

#### CAUTION

Please be advised that opening an access door while the unit is operating poses a significant safety risk, as internal pressure may cause the door to open abruptly and forcefully.

### ELECTRIC HEAT STARTUP

Check all electrical connections in the heater, including both field and factory-made connections, for tightness before operating the heater. Visually inspect the heater for any physical damage prior to using the heater. Replace any damaged elements prior to startup.

#### CAUTION

Do not operate electric heat below the minimum airflow requirement. Minimum airflow requirement for blow through electric heaters is 70CFM/KW.

Ensure that all relevant control equipment is switched on. Switch on the main supply disconnect and adjust the control signal to activate the heater. This heater features both automatic and manual reset temperature limiters. If the heater does not function, check the manual reset by pressing the reset button to confirm it is working properly.

### OPERATING LIMITS

#### Environmental Limits

This equipment is designed for indoor installation only. Sheltered locations such as attics, garages, etc., do not provide sufficient protection against extremes in temperature and/or humidity, and equipment performance, reliability, and service life may be adversely affected.

The entering water temperature for hydronic coils must remain within the range of 40°F (4°C) to 200°F (93°C), as the coils are rated and tested up to 200°F in accordance with UL 0335-2-40 standards. Coils' operating pressure shall not exceed 450 psig.

#### Fan Speed and Airflow Limits

It is essential not to operate the unit above the maximum fan speed or unit airflow as specified in the unit fan curves. Exceeding the maximum fan speed can significantly motor life and may lead to catastrophic failure. Furthermore, operating the unit above the maximum allowable airflow during cooling mode can result in unsatisfactory performance due to moisture carryover from the coil. Additionally, running the unit at its maximum fan speed is typically not economical because it requires increased motor power. Maximum air temperature through the fan section should be 104°F (40°C).

## Section Three - Startup, Service, and Maintenance

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### Electric Heat Limits

Units equipped with electric heaters must not be operated below the specified minimum airflow. Maintaining adequate airflow is essential to prevent excessively high discharge air temperatures and to avoid unnecessary tripping of electric heat limit controls. Additionally, simultaneous operation of hydronic heat coils and electric heating elements should be avoided, as this may result in elevated discharge air temperatures and subsequent limit trips. Electric heating units are equipped with an automatic thermal switch and a manual reset switch, designed to deactivate the heater if the temperature within the electric heater section surpasses 120°F.

**Table 3: Tested ESP**

Unit	Range of ESP (in w.c.)	
	208V/230V	460V
AHY03	0 - 3.5	0 - 3.0
AHY05	0 - 3.5	0 - 5.0
AHY06	0 - 3.5	0 - 5.0
AHY07	0 - 2.5	0 - 5.0
AHY08	0 - 4.0	0 - 5.5
AHY10	0 - 3.0	0 - 5.0

- For maximum performance, the coil must be clean. Check once a year under normal operating conditions and use a soft brush or vacuum to remove loose dust and debris from the coil fins. For deeper cleaning, use a non-acidic, manufacturer-approved coil cleaner. Always follow the cleaner’s instructions and rinse thoroughly with water. Take care not to bend or damage the delicate coil fins during cleaning.
- Moisture commonly accumulates in drain pans of air conditioning units, creating conditions conducive to the growth of microorganisms from airborne spores and bacteria. To prevent blockages and potential overflow, it is essential to clean drain pans regularly. Maintaining clean drain pans also reduces the risk of disease transmission. Only qualified personnel should conduct cleaning procedures.
- Dirt and lint can clog the condensate drain, especially with dirty filters. Inspect twice a year to help avoid overflow.
- Inspect fan sections every six months at a minimum or more frequently if necessary. Clean accumulated dirt immediately.

### HYDRONIC COIL REMOVAL

#### Before You Begin:

- Disconnect all electrical power to the unit following all Lockout/Tagout procedures.
- Shut off and drain the hydronic system as needed to prevent water spillage.
- Allow the coil to cool if recently in operation.
- Ensure adequate clearance for coil removal. Refer to the **Minimum Recommended Module Clearance** table for recommended clearance dimensions.

#### Step-by-Step Removal:

1. Disconnect piping:
  - a. Label and disconnect all supply and return piping from the coil.
  - b. Use backup wrenches to prevent twisting or damaging the coil headers.
  - c. Cap or plug open piping to prevent contamination.

### MAINTENANCE

#### WARNING

Prior to servicing or shutting down the unit, ensure all power sources are properly locked out and tagged out. Non-compliance with these procedures may result in severe injury or fatality. Disconnect all electrical power before commencing service on the equipment; multiple disconnects may be necessary to fully de-energize the unit. Please carefully review and understand the installation, operation, and service instructions provided in this manual.

#### WARNING

Sharp edges and coil surfaces are a potential injury hazard. Avoid contact with them

#### WARNING

Clean drain pan regularly to prevent mold growth or water overflows causing property damage.

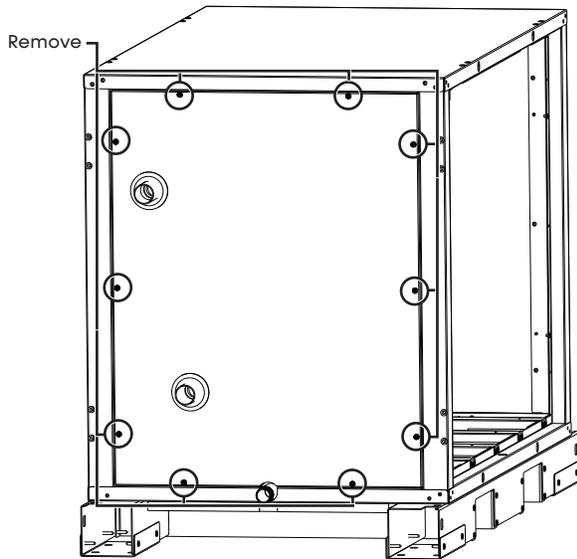
Model:  
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## Section Three - Startup, Service, and Maintenance

2. Access and remove the coil:

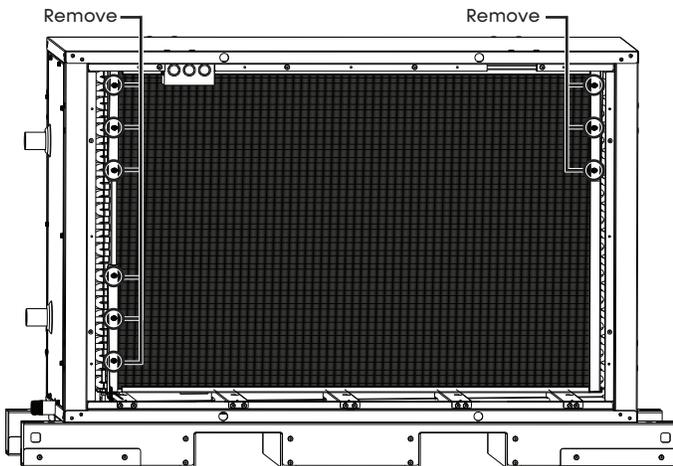
- a. Remove all the fasteners securing the wall panel to the unit. Remove wall panel to expose the coil being careful not to damage the coil headers.

**Figure 10: Remove Fasteners**



- b. Locate and remove all fasteners securing the coil to the unit frame. Retain all hardware for reinstallation.

**Figure 11: Remove Coil Fasteners**



- c. Carefully slide the coil out of the unit, supporting its weight to avoid bending the fins or damaging the headers. Due to the size of the coils, it is recommended to use a second person or lifting device as needed. Unit sizes 08 or larger are equipped with two vertically positioned coils. When removing them, it is advisable to take out the top coil first, ensuring the coil is properly supported during the process.

3. Inspect and Service:

- a. Once removed, inspect the coil for damage, corrosion, or blockages. Clean or repair as necessary before reinstalling or replacement.

**Reinstallation**

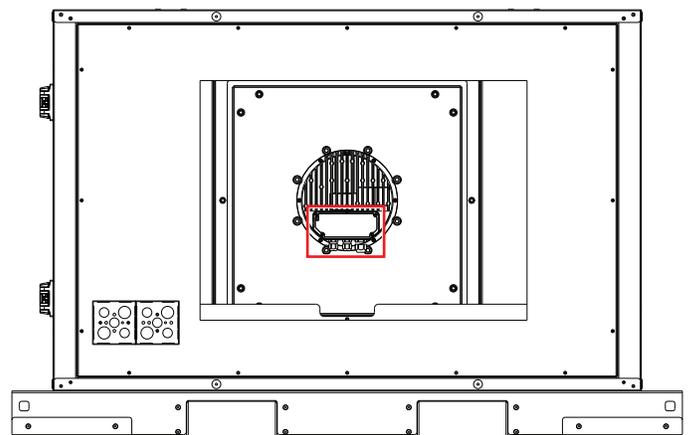
- Reverse the removal steps, ensuring all connections are tight and leak-free.
- Refill and purge the hydronic system, checking for leaks before restoring power

### FAN MOTOR REMOVAL

**Before You Begin:**

- Disconnect all electrical power to the unit ensuring all lockout/tagout procedures are observed, then allow the fan and motor to come to a complete stop.

**Figure 12: Motor Junction Box**



1. Disconnect Wiring:

- a. Label and disconnect all electrical wiring from the motor terminals and junction box and secure wiring away from moving parts.

## Section Three - Startup, Service, and Maintenance

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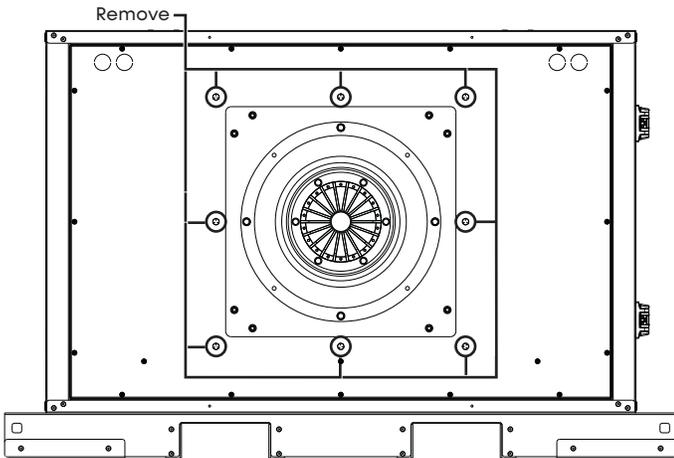
### 2. Access the Fan Section:

- a. Keep the access door open and secure it so it doesn't get in the way when removing the fan and motor. You can also take the access door off entirely if needed.
- b. Ensure sufficient clearance for safe removal. Refer to the **Minimum Recommended Module Clearance** table for recommended clearance dimensions.

### 3. Unbolt and remove the motor:

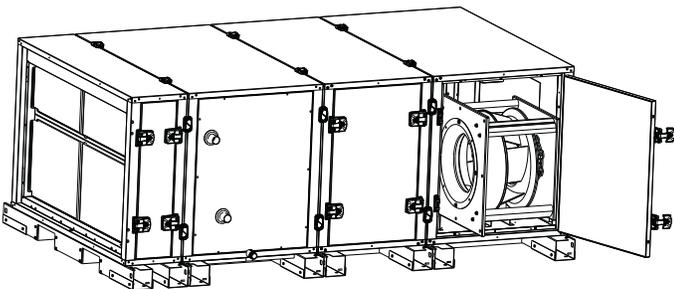
- a. Remove all mounting bolts or fasteners securing the motor to its base or mounting plate.

**Figure 13: Remove Mounting Bolts**

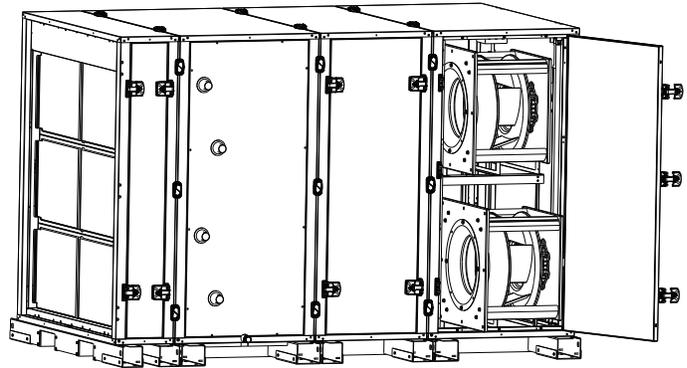


- b. Support the motor's weight during removal. Carefully slide the motor out of the unit. For larger motors, use appropriate lifting equipment or a second person. Unit sizes 08 or larger are equipped with two vertically positioned fans. When removing them, it is advisable to take out one fan at a time, ensuring each fan is properly supported during the process.

**Figure 14: Remove Fan (sizes 03-07)**



**Figure 15: Remove Fan (sizes 08-10)**



### 4. Inspection and Service:

- Inspect the motor for signs of overheating, bearing wear, or electrical issues.
- Clean the motor exterior and cooling vents.

### Reinstallation:

- When installing a new fan, make sure to move the mounting plate from the old fan to the new one before inserting the new motor into the unit.
- Reverse the removal steps, ensuring all wiring is correctly reconnected
- Check alignment and rotation direction before returning the unit to service.

### ADDITIONAL BEST PRACTICES

- Always use manufacturer-approved replacement parts.
- Document all maintenance and repairs in the unit's service log.
- If unsure about any procedure, consult the manufacturer or a qualified HVAC technician

Model:  
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## Equipment Startup Checklist

### RECEIVING AND INSPECTION

- Unit received undamaged
- Unit arrangement/hand correct
- Unit received complete as ordered
- Unit structural support complete and correct

### HANDLING AND INSTALLATION

- Unit mount level and square
- Proper electrical service provided
- Proper service switch/disconnect provided
- Proper chilled water line size to unit
- All services to unit in code compliance
- Proper access provided for unit and accessories
- Proper overcurrent protection provided
- Confirm no debris is left in the electric heat section
- Proper hot water line to unit
- All shipping screws and braces removed
- Damper linkage is tight and in the correct position
- Install per seismic IOM as required
- All shipped loose parts installed
- Installer has cleaned out interior
- Clean air filter installed

### COOLING/HEATING

- Protect valve package components from heat
- Connect field piping to unit
- Install drain line and traps as required
- Install condensate pan under piping as required
- Secure, support, and mount valve packages
- Pressure test all piping for leaks
- Insulate all piping as required

### DUCTWORK CONNECTIONS

- Install ductwork, fittings, and grills as required
- Control outside air for freeze protection
- Proper supply and return grille type and size used
- Insulate all ductwork as required

- Verify all ductwork is complete and that dampers and filters are installed prior to startup

### ELECTRICAL CONNECTIONS

- Refer to unit wiring diagram
- All field wiring in code compliance
- Connect incoming power service or services

### UNIT STARTUP

- General visual unit and system inspection
- Record ambient temperature
- Close all unit isolation valves
- Fill systems with water and refrigerant
- All ductwork and grilles in place
- Start fans
- Check all ductwork and units for air leaks
- Record all final settings for future use
- Check all dampers for proper operation
- Verify proper heating operation
- Check all piping for leaks
- Record electrical supply voltage
- Check all wiring for secure connections
- Flush water systems
- Vent water systems as required
- All unit panels and filters in place
- Check for overload condition of all units
- Balance air systems as required
- Check piping and ductwork for vibration
- Verify proper cooling operation
- Reinstall all covers and access panels
- Check the unit drain pan to confirm the trap is free to drain, and to verify that the unit drain pan does not hold water

### BLOWER/MOTOR

- Adjust blower speed as necessary for balancing airflow
- Fan wheel properly aligned, tight on shaft, and freely moving

**Notes**

Model:  
AHY

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## Notes

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**Notes**

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## Revision History

Date	Item	Action
03/12/26	All	Created



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