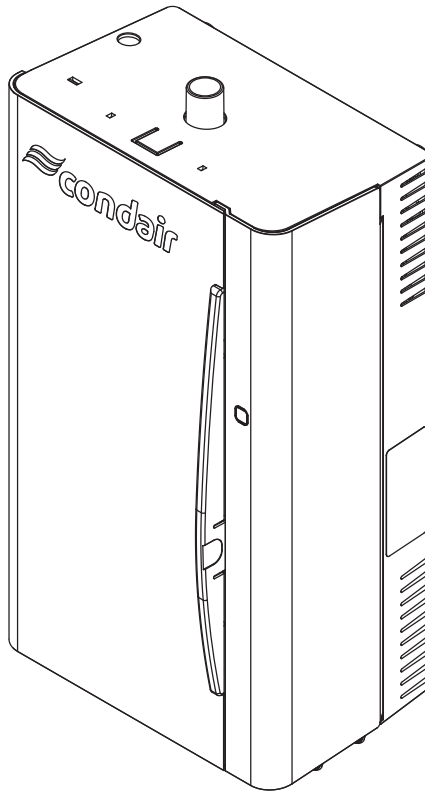




QUICK INSTALL GUIDE FOR PROFESSIONALS

Condair RH Connect
Whole-home Steam Humidifier (RH-NAP, 22)

Humidification, Dehumidification
and Evaporative Cooling

 **condair**

Thank you for choosing Condair

Cautions and Warnings



CAUTION: Servicing

- The unit is mains powered. Disconnect main power before any servicing.
- Electrical compartment contains high voltage components. Access should be limited to authorized personnel only.
- The unit is hot. Wait for the unit to drain and cool before servicing. During and following operation of the humidifier, the steam and components in contact with the steam such as the steam lines, steam distributors, and condensate lines can become hot and can burn if touched.
- Condair does not accept any liability for installations of humidity equipment installed by unqualified personnel, or the use of parts, components, or equipment that are not authorized or approved by Condair.



CAUTION: Electrical

- All electrical work should be done according to all applicable local and national codes.
- Electrical connection to be performed by a licensed electrician.



CAUTION: Plumbing

- (Recommended) Plumbing to be performed by a licensed plumber.
- Drain water from the humidifier can be very hot. Drain to an appropriate floor drain.
- All plumbing work should be done according to local plumbing code.



CAUTION: Installation

- **Do NOT** mount in area where freezing can occur.
- **Do NOT** mount on vibrating surface.
- **Do NOT** mount on the floor.
- **Do NOT** block the steam outlet.
- (Recommended) Install an air proving switch.
- Do install steam lines to prevent any restrictions that may cause back-pressure in the humidifier.
- Ensure furnace fan is operating while the humidifier is generating steam.
- Keep out of reach of children.

What's in the box?

- Condair RH Connect Steam Humidifier
- Quick Start Guide
- Steam Distributor & Gasket
- Humidity sensor (duct)
- Water (fill) hose, 20 ft (6 m)
- Steam hose, 5 ft (1.5 m)
- Drain hose, 10 ft (3 m)
- Fittings

Accessing the Condair RH manuals

To access all Condair RH manuals, including the French manuals, please scan the QR Code below.



What you'll need

Condair Connect App. Find the Condair Connect App in the App Store® (iPhone) or Google Play Store (Android). (required to finalize the installation)

Google Play (Android)



App Store (iOS)



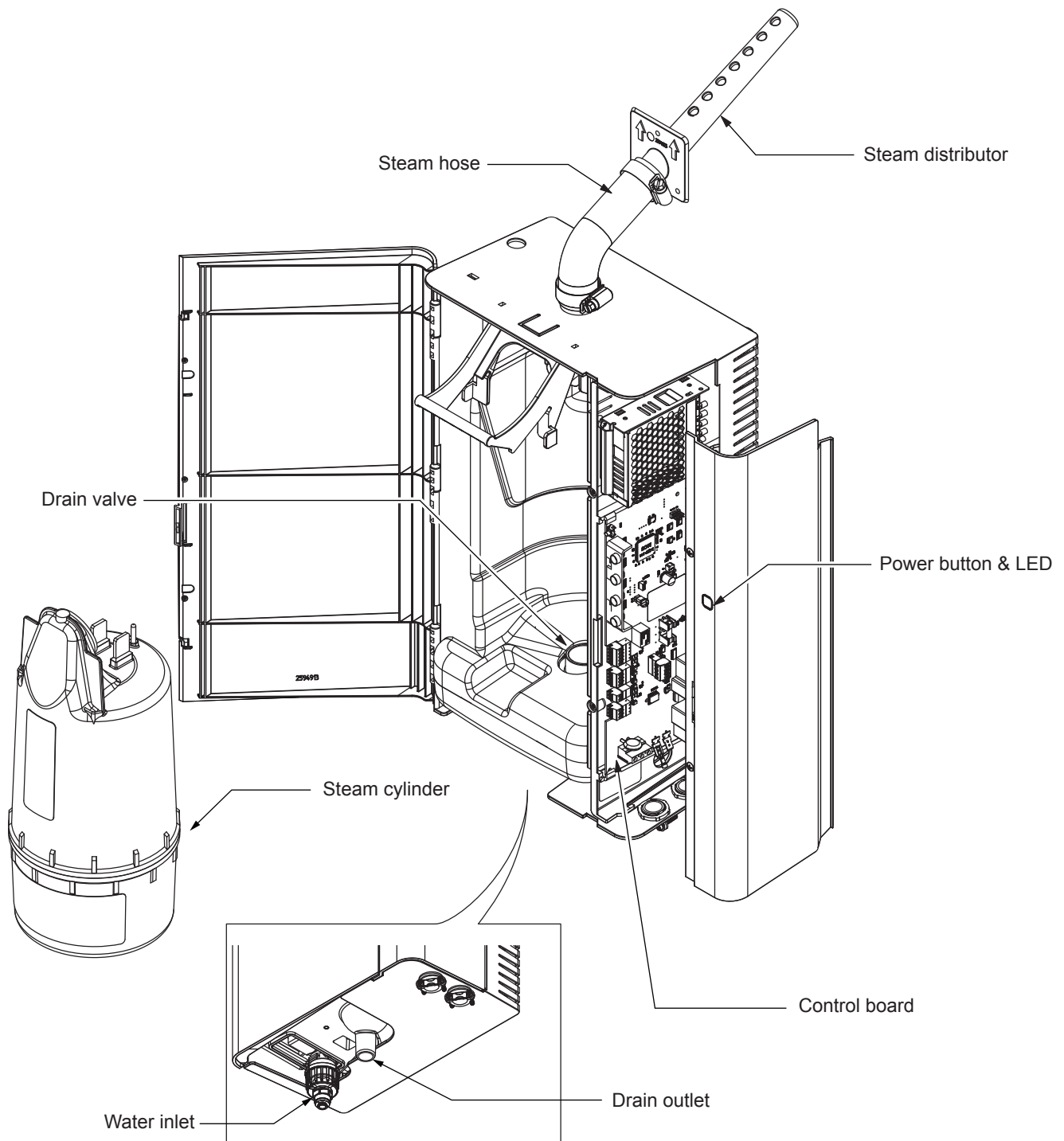
Access to:

- Drain
- Water supply
- Forced air ventilation system
- Wall studs (for wall mounted installations)

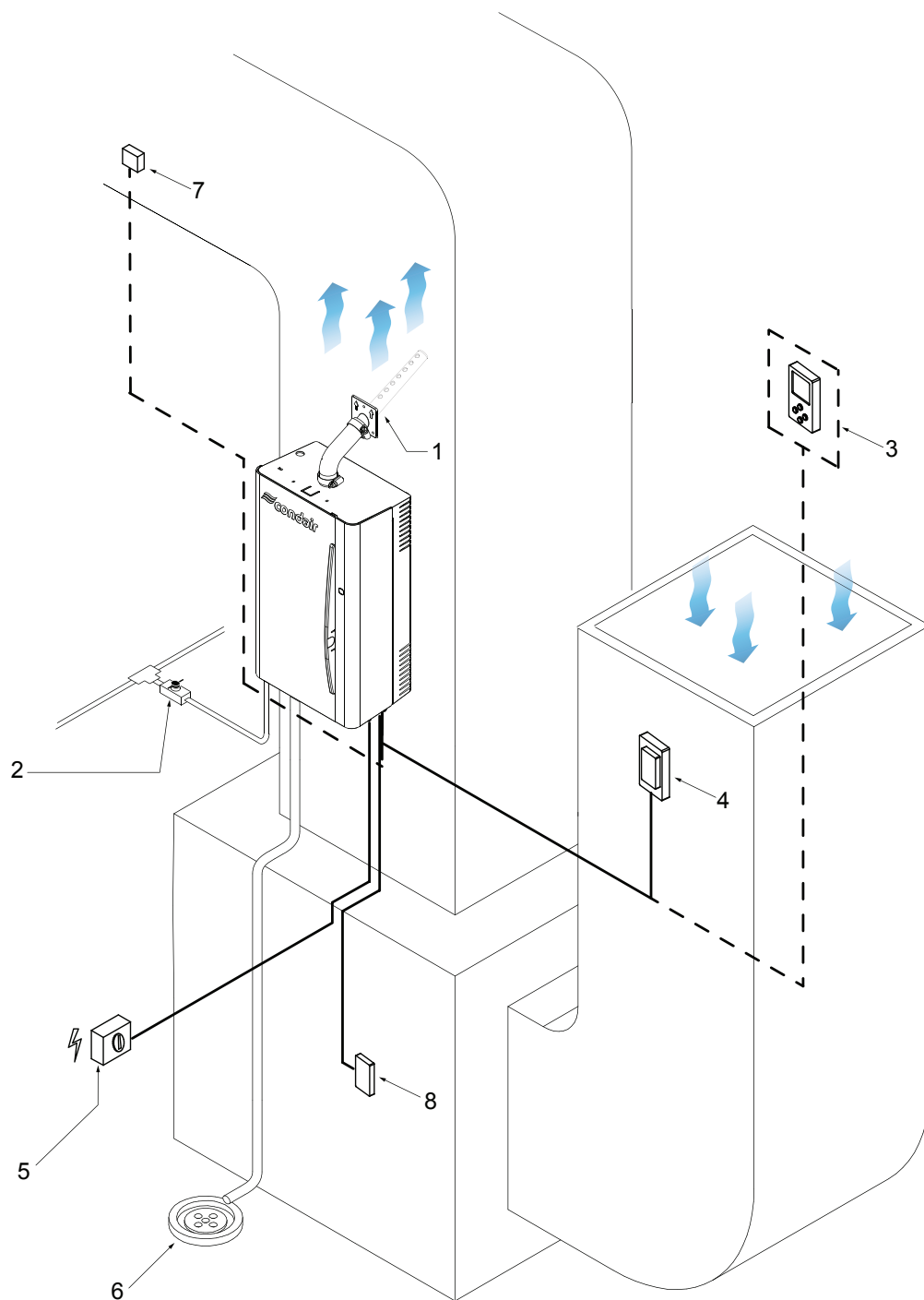
Tools:

- Phillips (+) screwdriver
- Flat-head (–) screwdriver
- Pliers
- Level
- Hole saw, 1.2 in (30 mm) & 5/8 in (16 mm)
- Drill and bits
- Box cutter (or other sharp knife)
- Wire cutter and wire stripper

Product Overview



Installation Overview (Furnace)



1 Steam distributor

2 Water shut off valve (not supplied)

3 On/Off wall humidistat *

4 Relative humidity (RH) duct sensor *

5 Electrical disconnect switch (not supplied)

6 Drain (not supplied)

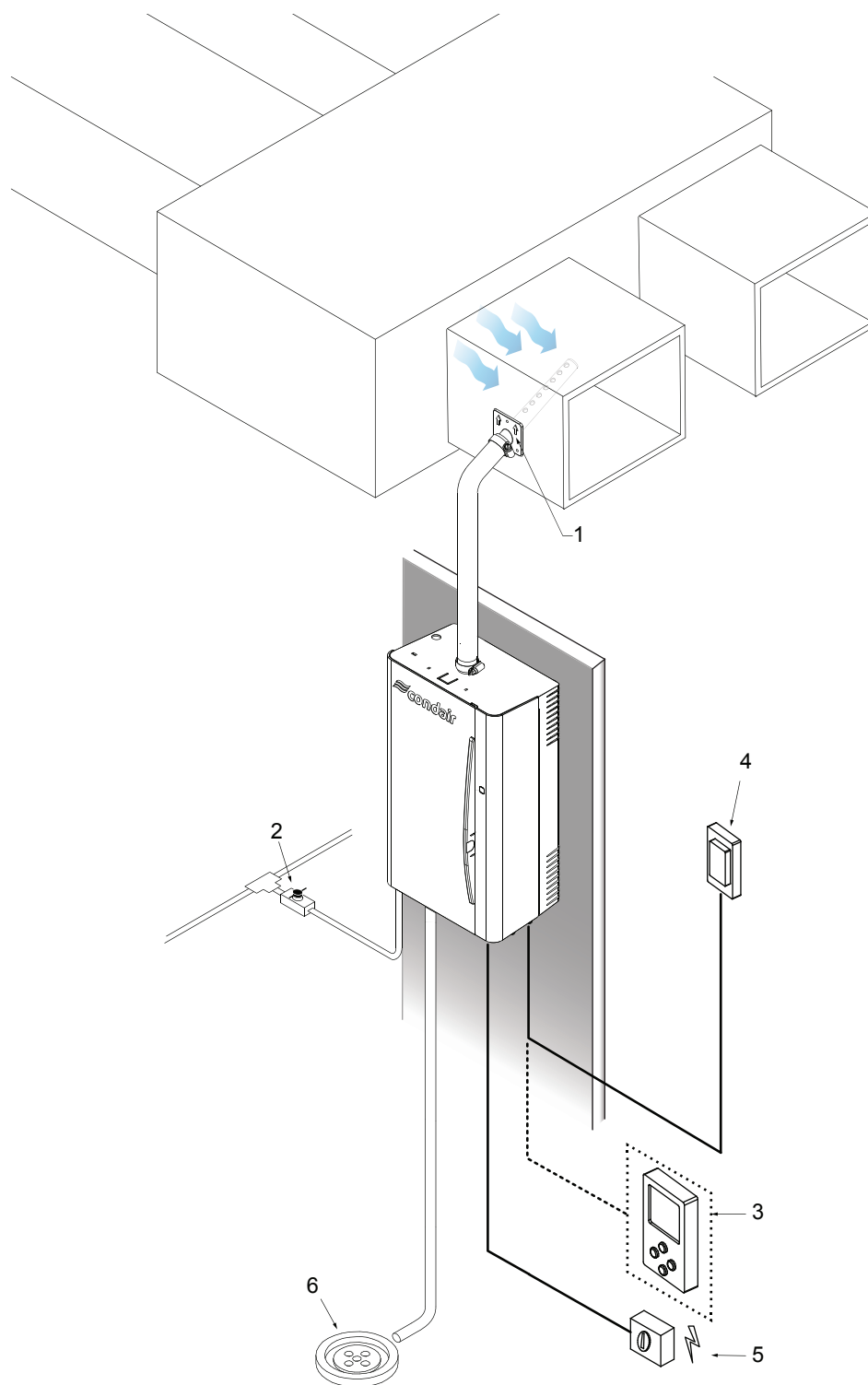
7 Safety devices: i.e high limit humidistat and air proving switch are recommended, installed in series on Terminal X3 (both are supplied)

8 Fan enable/activation

* only an on/off humidistat (not supplied) OR RH sensor (supplied) should be installed.

Note: It is required to install a high limit humidistat and an air proving switch for safety. In case they were required to be ordered as spare parts, the high limit humidistat can be ordered under PN# 2597935 and the air proving switch under PN# 2598427.

Installation Overview (HRV)



1 Steam distributor

2 Water shut off valve (not supplied)

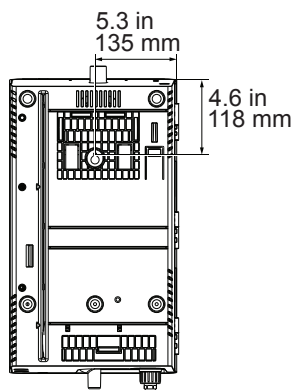
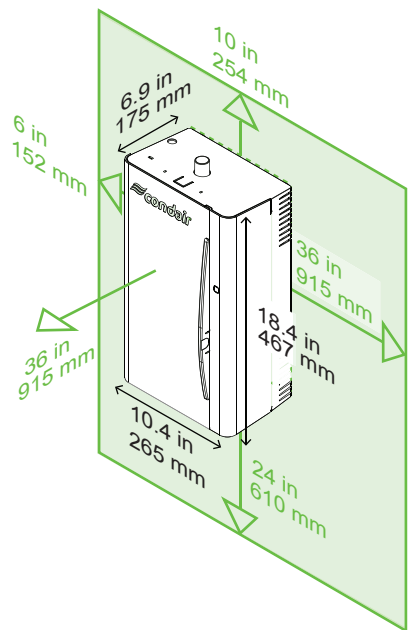
3 On/Off wall humidistat

4 Relative humidity (RH) duct sensor

5 Electrical disconnect switch (not supplied)

6 Drain (not supplied)

Location and Clearances



The Condair RH Connect may be installed on a wall and remotely connect to your ventilation system, or directly onto the ventilation duct.

When choosing the location for your humidifier, ensure there is enough clearance for servicing and maintenance, and for the installation of the steam line and steam distributor.

For remote installations, you will require a longer steam hose, so consider the steam line recommendations below for efficient humidification.

For installations on a wall, mount the unit on wall studs (2x4 or equivalent).

For installations directly on the duct, use the mounting template (supplied) to locate pilot holes for mounting the unit and installing the steam distributor.

(Recommended) Install the distributor first. The location of the distributor will define the location of the humidifier.

Net / Full Weight lb (kg)	Dimensions HxWxD in (mm)
19 / 26 lb (8.6 / 11.8 kg)	18.4 x 10.4 x 6.9 in (467 x 265 x 175 mm)

Clearance dimensions shown are for reference only and are the minimum required for maintenance of the humidifier. Consult local and national code before final location and installation.

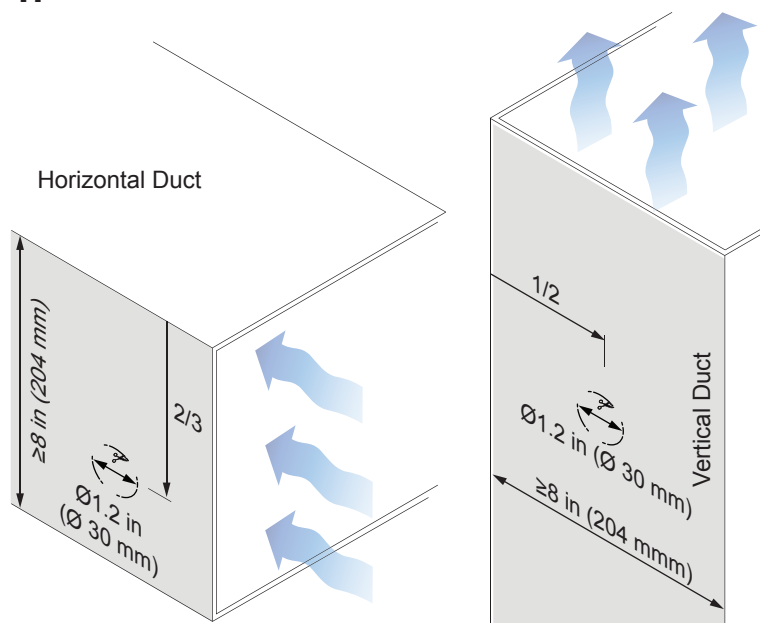
Condair does not accept responsibility for installation code violations.

Important Considerations for the Steam Line

- Install the humidifier below the steam distributor.
- Install support brackets (one supplied with the humidifier) to prevent sagging in the steam line. If sagging occurs, use additional support brackets.
- Install the humidifier as close as possible to the steam distributor. Short distances minimize condensate losses and reduces the possibility of back pressure in the steam line.
- Bend radius: 6 in (150 mm) minimum.
- Length: 15 ft (4.5 m) maximum.
- Slope: 15° min. (up-slope), 2° max. (down-slope).
Note: install condensate traps at low points if the steam line has any down-slope.
- Steam line material: Condair steam hose (supplied), or properly insulated stainless steel or copper, with max. surface temperature at 140 ° F (60 °C).
- Clamp torque: 12 in-lb (1.36 Nm) (max. at humidifier outlet).

Installing the Steam Distributor

1.

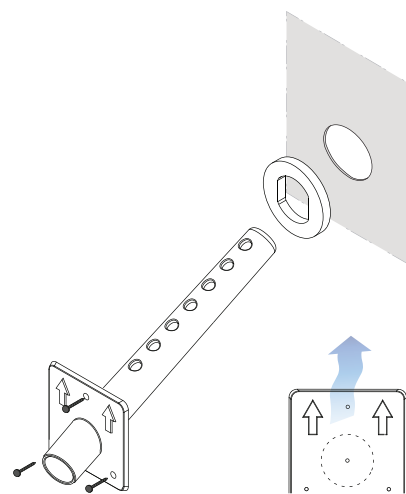


Create a 1.18 in (30 mm) hole in the duct. Install distributor on the supply duct, after the cooling coil, and before any bends or obstructions.

For horizontal ducts, cut the hole at roughly 2/3 of duct height, from the top.

For vertical ducts, cut the hole halfway between the two sides of the duct.

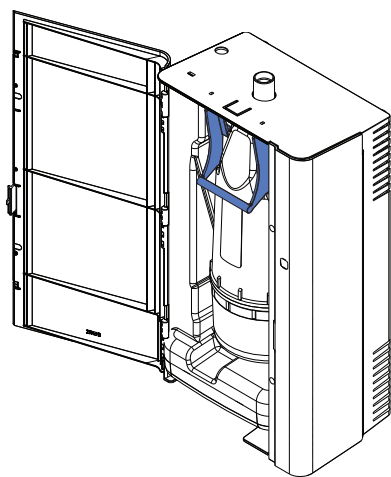
2.



Place a gasket over the steam distributor and insert the distributor into the duct. Ensure that the arrows on the distributor are pointing up. Secure the distributor to the duct with self-tapping screws.

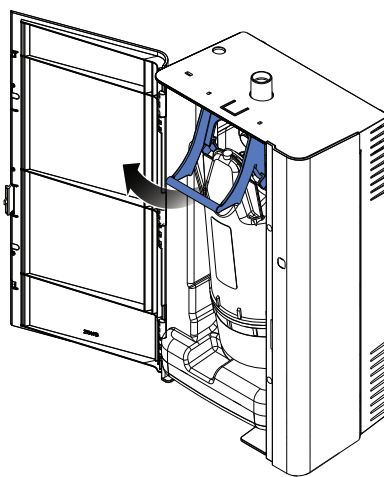
Removing the Steam Cylinder

1.



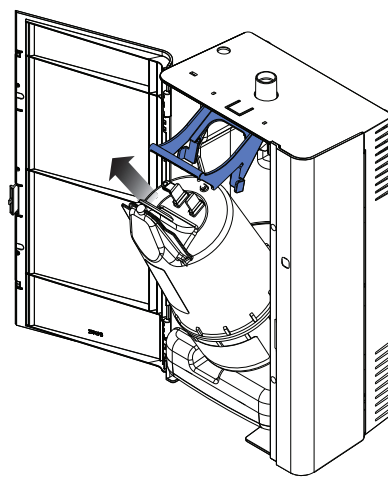
Open the door to the humidifier.

2.



Pull the lever upwards. The lever will push the cylinder out.

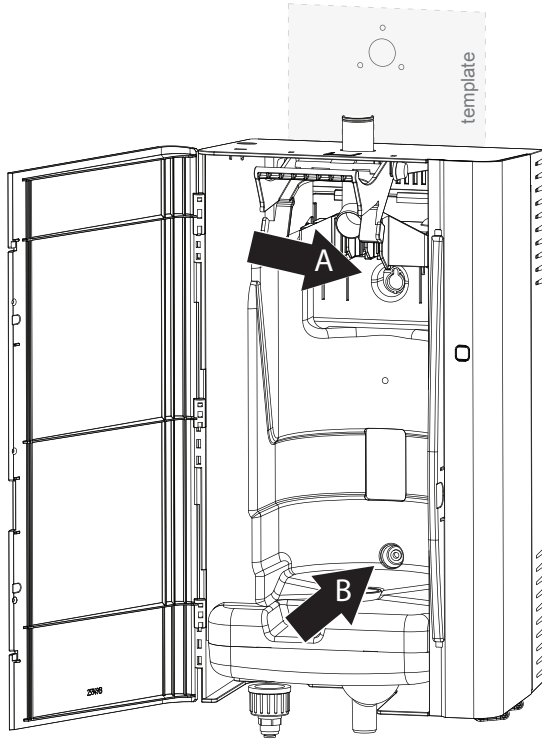
3.



Pull the cylinder out of the humidifier.

Mounting Your Humidifier

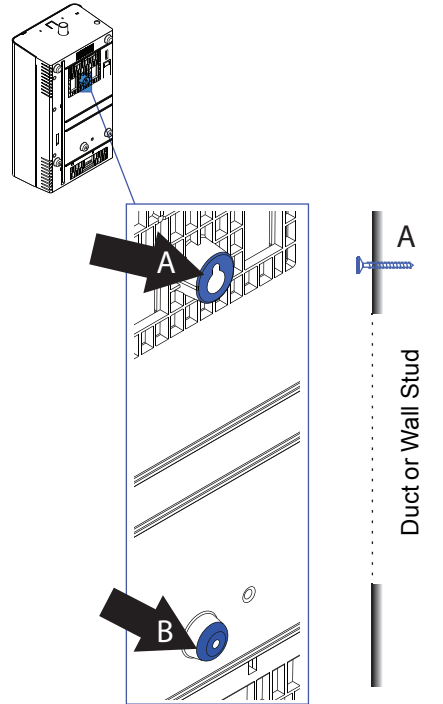
1.



Open the door to the humidifier. Remove the steam cylinder if it is installed.

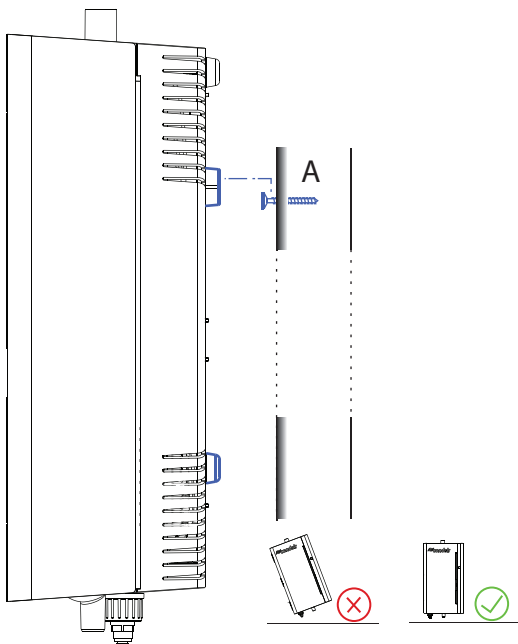
Tip: For installations directly on the duct, place the mounting template on the duct and secure with tape. The template will show you where to cut a hole for the distributor.

2.



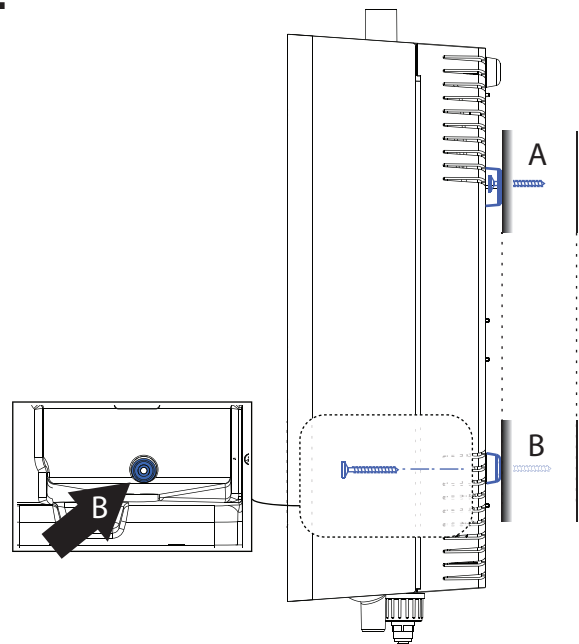
On the wall stud (2x4 or equivalent) or duct, mark the location for the key hole A (on the back of the humidifier). Insert a screw at A. Leave space on the screw to hang the humidifier.

3.



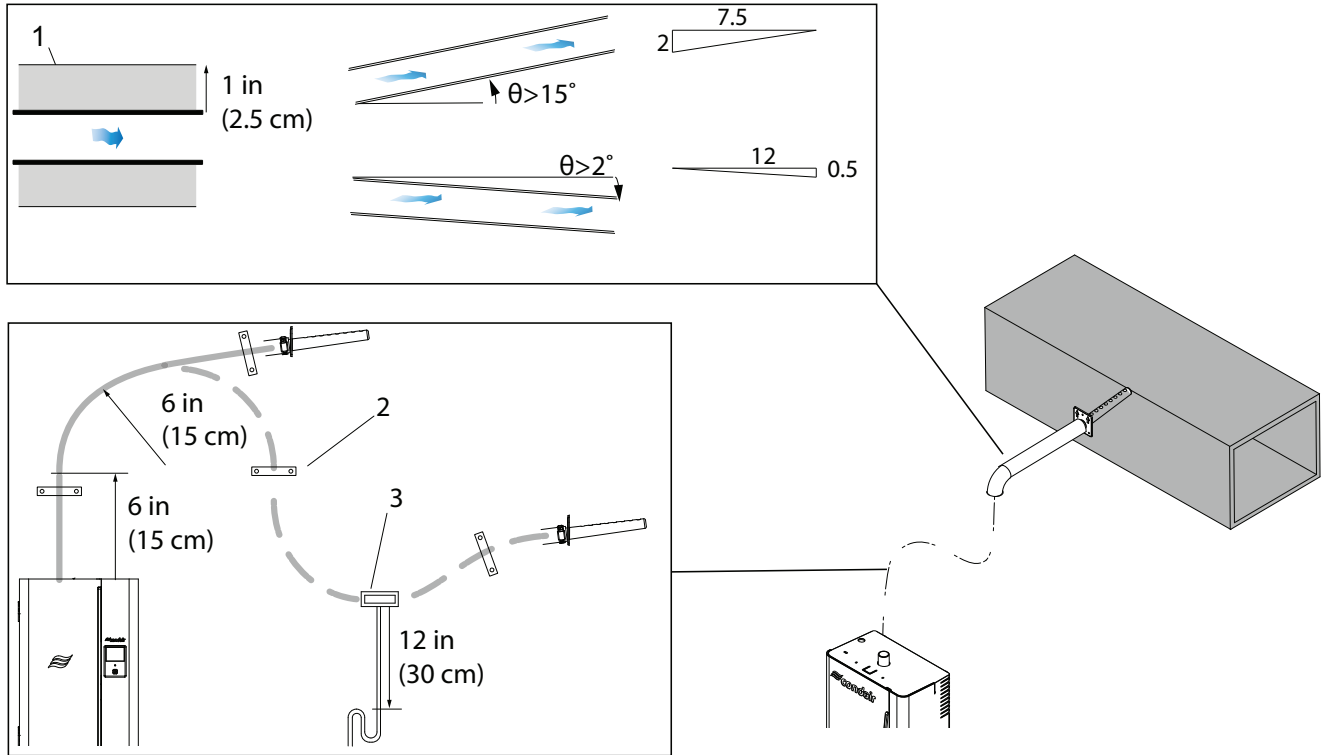
Raise and hang the humidifier on the screw A. Ensure the unit is level.

4.



Through the inside of the humidifier, insert and tighten a screw into the lower mounting hole B. Tighten the top screw at A.

Installing the Steam Line

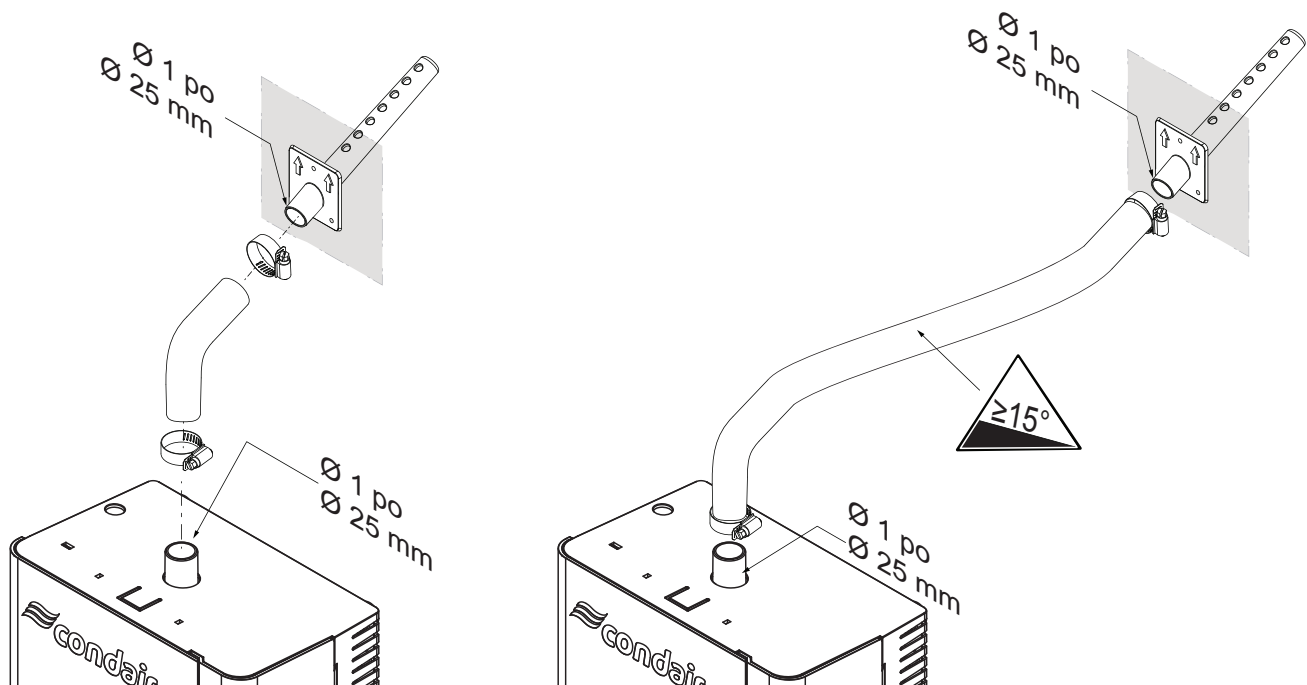


Remote Mounted Installation with Steam Distributor (horizontal duct shown)

1 Insulation (recommended)

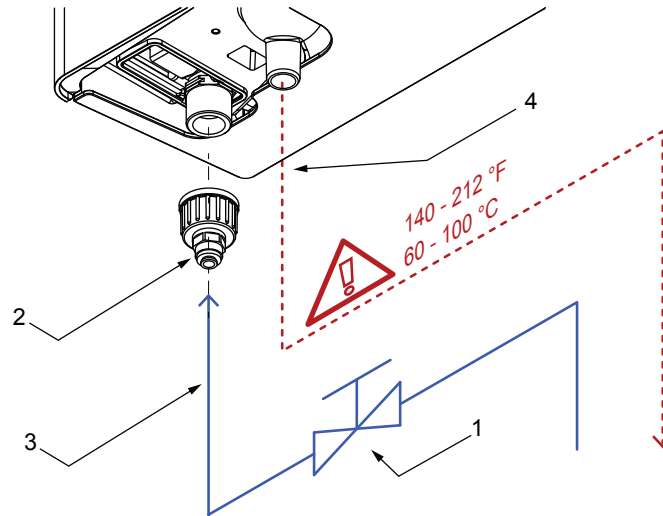
2 Brackets, support (supplied by others)

3 T-connector, condensate trap (supplied by others)



Installation de la conduite et du distributeur de vapeur

Water Supply and Drain Connections



Water Supply and Drain Connection

- 1 Water shut off valve 3 Inlet water line, 1/4 in (6.4 mm) (supplied) 4 Drain line, 3/4 in (20 mm) I.D. (supplied)
2 Inlet, quick connect (supplied)

Water Supply Requirements

Quality	Potable water (do not use reverse osmosis or deionized water)
Pressure	30 - 80 psig (2 - 5.5 bar)
Temperature	39 - 86 °F (4 - 30 °C), cold water
Conductivity	125 - 1250 µS/cm
Other	- Water shut-off valve installed before the humidifier (for service). - Installed according to national and local plumbing code.

Drain Requirements

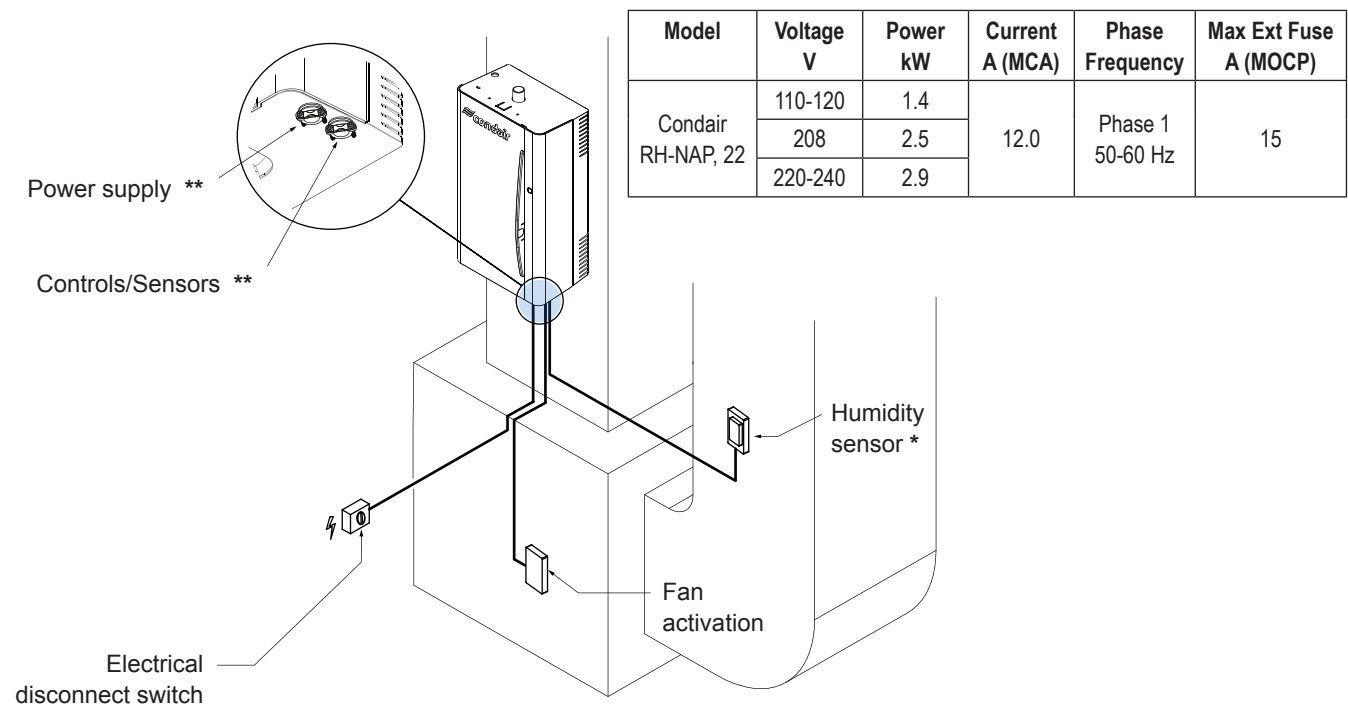
The Condair RH Connect produces hot water during operation. Upon normal drainage, the drain water is automatically cooled to 140 °F (60 °C).

IMPORTANT! Drain water may reach high temperatures 212 °F (100 °C) in cases where the supply water is not cold, or obstructed.

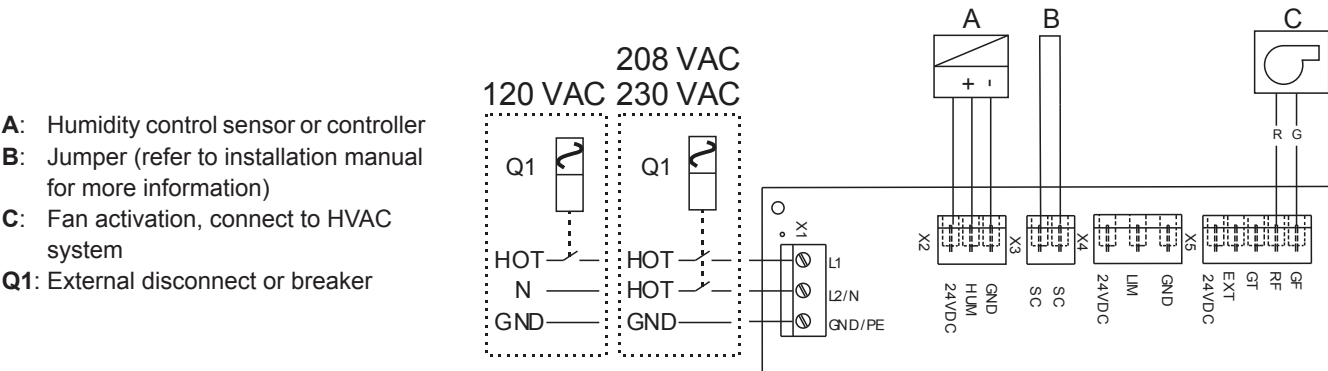
Considerations for the drain connection

- Ensure that drain line is made of a material rated to handle hot temperatures, 212 °F (100 °C).
- (Recommended) Use the drain line hose supplied with the humidifier. For longer runs, use copper pipe with the same inner diameter as the drain line hose supplied with the humidifier, inner diameter: 3/4 in (20 mm).
- Ensure that the internal diameter throughout the drain line is constant.
- Ensure that the drain line is adequately sized. A restricted drain line may result in higher mineral concentrations in the water and can result in poor performance.
- Ensure that the drain line is routed to a floor drain (or where plumbing codes permit). If the drain is far from the humidifier, use a condensate pump rated for hot drain water.
- Ensure that the drain line has a consistent, downward slope (1.2°) to the drain.

Installing the Electrical Connection and Controls

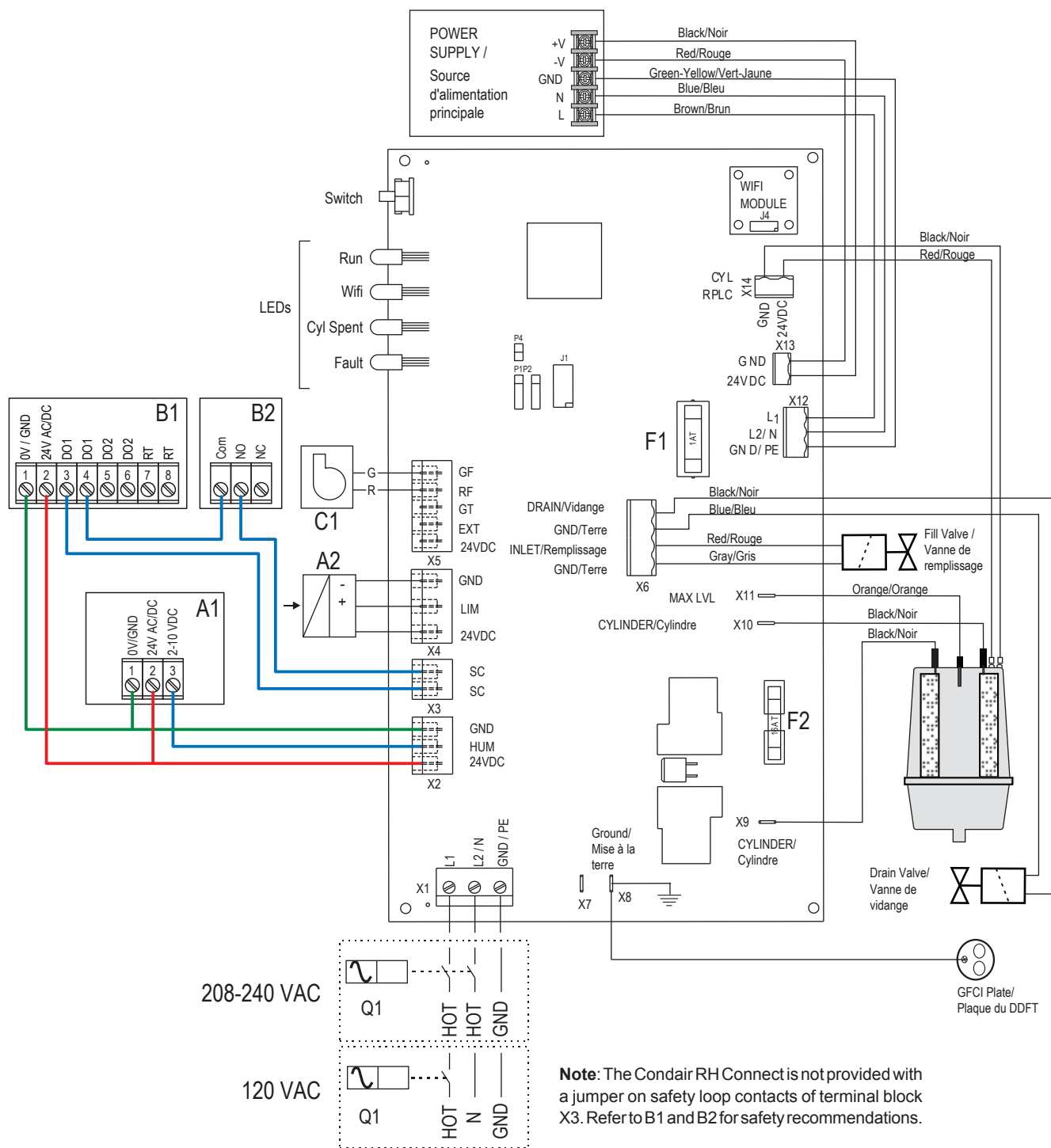


- * for other control devices, refer to installation manual.
- ** route cables and wires though strain relief clamps.



Consult the Installation Manual for electrical connection requirements and guidelines.

Electrical – Wiring Diagram (Using controls provided by Condair)



Wiring Diagram

- | | | | |
|-------|---|----|--|
| A1 | 2-10V humidity control sensor | C1 | Fan activation, connect to HVAC system |
| A2 | High limit control sensor or controller (reach out for Technical Support if this terminal is required to be used) | F1 | Fuse 1AT (5x20 mm) |
| B1/B2 | On/Off High Limit Humidistat "B1" and Air Proving Switch "B2" are required to be installed | F2 | Fuse 16AT, SPT (5x20 mm) |
| | | Q1 | External disconnect or breaker |

Different Condair RH Connect Configurations

Configuration 1: Contractor App Setup, No-WiFi Connection, External/Demand Controls

- The humidifier will operate according to the external controls
- The user will control the humidifier from the external controls
- The user will need to check the humidifier periodically to identify if the cylinder needs to be changed (Yellow Light)
- The cold-weather setback feature is unavailable (requires WiFi)

Configuration 2: Contractor App Setup, No-WiFi Connection, Sensor Controls

- The humidifier will operate according to the sensor signal and the default setpoint 40 % Relative humidity
- The user will not have control over the humidity
- The user will need to check the humidifier periodically to identify if the cylinder needs to be changed (yellow light)
- The cold-weather setback feature is unavailable (requires WiFi)

Configuration 3: WiFi Connection, External/Demand Controls

- The humidifier will operate according to the external controls
- The user will control the humidifier from the external controls
- The user will receive notifications via the Condair Connect App when the cylinder change is needed
- All features are available to the user (Note: Sensor settings must be changed if the homeowner wants to control the unit through the Condair Connect App instead)

Configuration 4: WiFi Connection, Sensor Controls

- The humidifier will operate according to the sensor controls
- The user will control the humidifier from the Condair Connect App
- The user will receive notifications via the Condair Connect App when the cylinder change is needed
- All features are available to the user

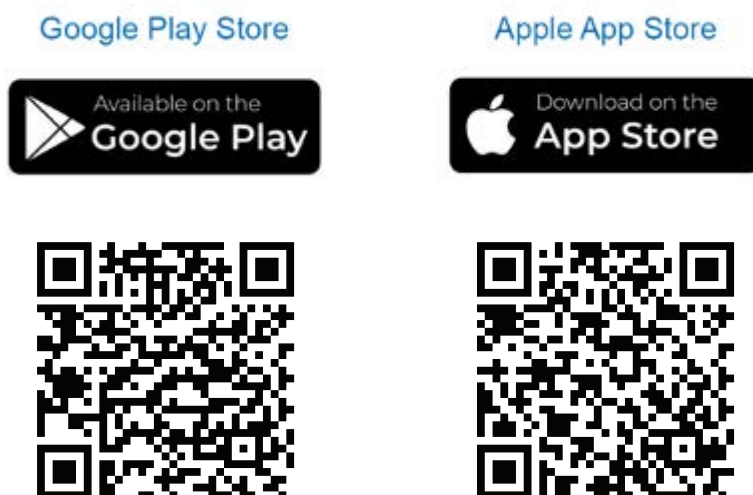
Operation Summary Table

To turn On/Off the humidifier:	Press and hold the power button for 2 seconds.
To reset the error/warning:	Double click the power button.
To connect the unit to your device:	Press and hold the power button until the WiFi LED flashes green (around 5 seconds)

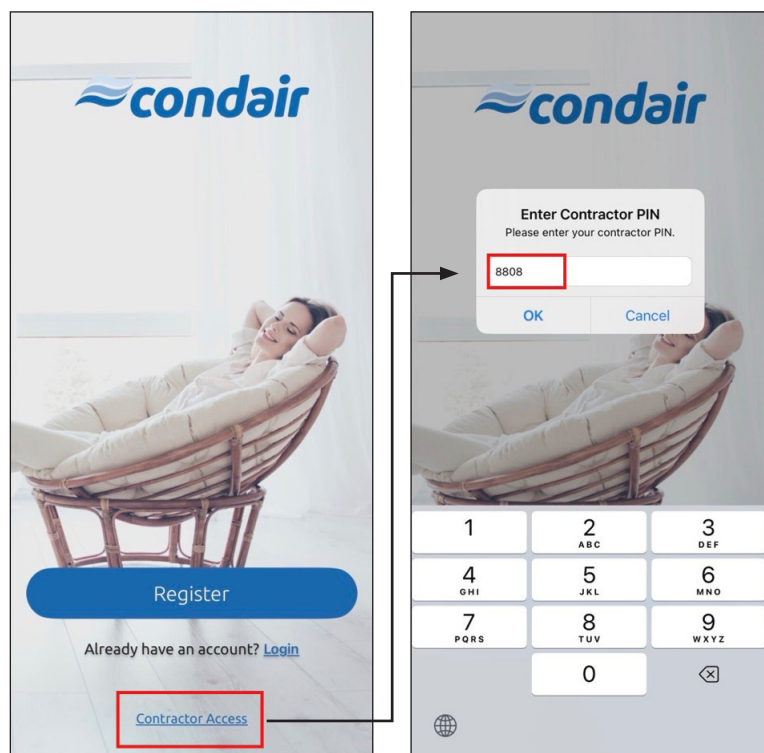
Note: If your humidifier software version is earlier than 4.1.1, you can clear/reset the error/warning by pressing and holding the power button for 3 seconds.

Download Condair Connect App

Download the Condair Connect App either from the "Google Play Store" or the "Apple App Store". The Condair Connect App can be found by searching "Condair Connect" or by using the following QR codes:



Commissioning with Condair Connect App in Professional Mode (for contractors/installers for quick connect and configuration)

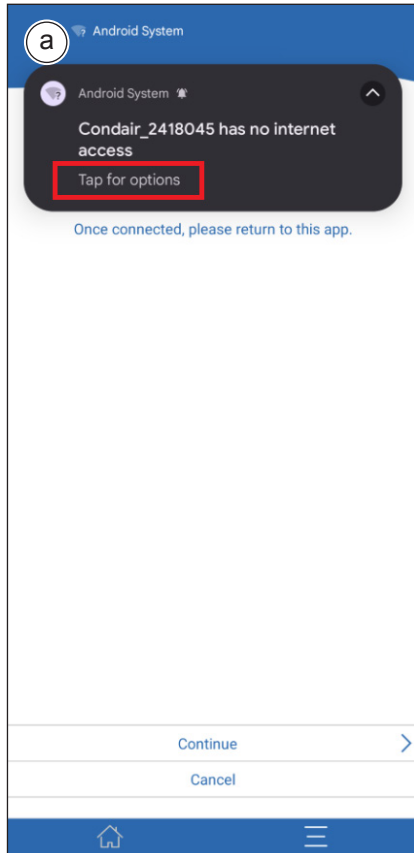


Go to "Settings" on your mobile phone and activate the WLAN function.

Start the Condair Connect App on your mobile device.

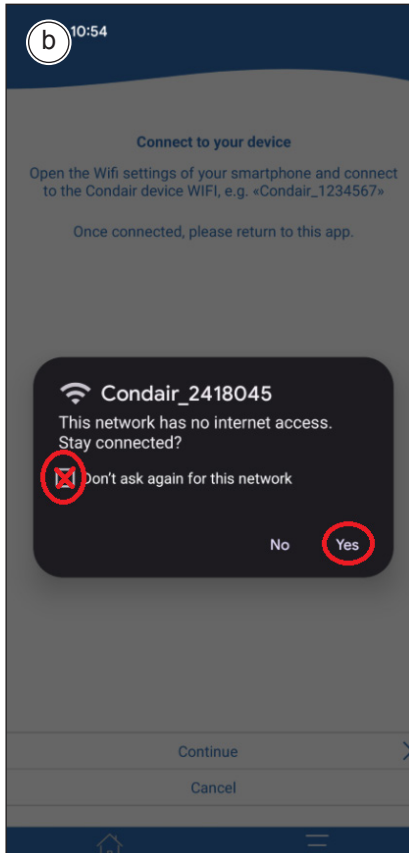
For contractors/installers: Press on "Contractor Access" located at the bottom and enter the password "8808". This will allow the installer to access and modify the settings while commissioning the humidifier only - This will NOT allow the contractor to have a permanent connection to the unit nor the Wi-Fi.

For Android users: For some Android users depending on their devices, please note the below steps:

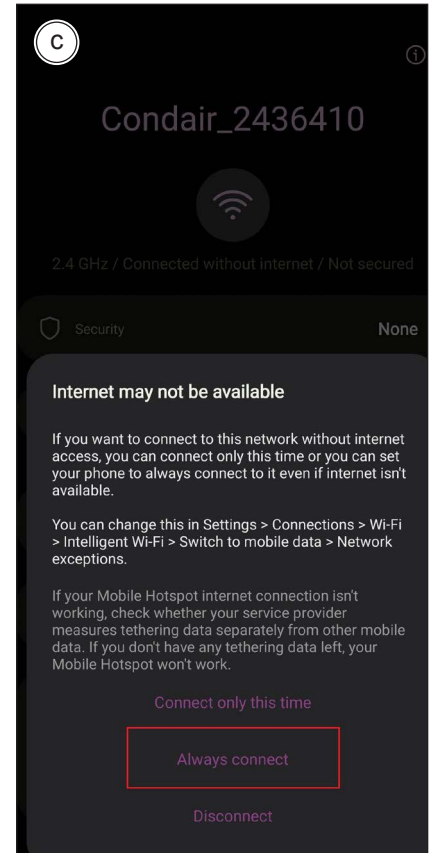


In some cases, a notification will pop up after few seconds of connecting to the unit. Please select "Tap for options".

Note: The notification layout might vary depending on your android device.



Tick the box and select "Yes", then go back to the app and press continue.

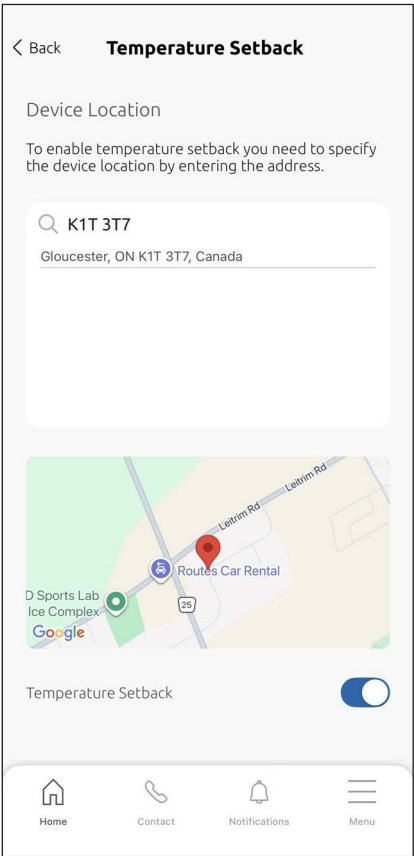


Select "Always connect", then go back to the app and press "Continue".

Note: When deciding where to install the unit, please make sure the unit is installed close enough to the WiFi router to receive proper WiFi signal. If this is not possible, a "Repeater" or a "Signal booster" may be required. Contact your internet provider for more information.

Temperature Setback Feature

The Temperature Setback Feature will allow the homeowner to set their humidifiers location. The feature will work similar to an outdoor temperature sensor, but the temperature is from the online weather data. To set your location, the Zip Code / Postal Code is sufficient to be entered.



Warnings and Remedies

Code	Warning		Description	
	LED unit	Indication App	Possible causes	Remedy
W1	 lights yellow	W1	Overcurrent detected. The measured heating current is greater than 115% (but less than 130%) of the permissible maximum current over a certain period of time. The heating circuit is deactivated. After a set time, the Condair RH will restart and return to normal operation.	
			Humidity demand dropped too quickly.	Automatic adjustment of the working point.
			Drain valve defective.	Check/replace drain valve.
			Drain obstructed in the steam cylinder.	Replace steam cylinder.
			Used cylinder not recognized.	Replace steam cylinder.
			Steam cylinder fills too fast.	Check/replace inlet valve.
W2	 blinks blue	W2	External safety loop open. The Condair RH is stopped. The Condair RH automatically returns to normal operation as soon as the external safety loop is closed, there is no system error and the unit is switched on again via the Condair Connect App.	
			Ventilation switched off.	Check/switch on ventilation.
			High limit humidistat or air flow monitor has responded.	Check the setting of the high limit humidistat or the flow monitor.
			Wiring to the high limit humidistat interrupted or incorrectly wired.	Check the wiring of the high limit humidistat.
			High limit humidistat defective.	Check/replace high limit humidistat.
			Wiring to the air flow monitor interrupted or incorrectly wired.	Check the wiring of the air flow monitor.
W3	 lights yellow	W3	No signal from the humidity sensor.	
			Wiring to the humidity sensor interrupted or incorrectly wired.	Check the wiring of the humidity sensor.
			Humidity sensor defective.	Check/replace humidity sensor.
W4	 lights yellow	W4	No signal from the limiter sensor.	
			Wiring to the limiter sensor interrupted or incorrectly wired.	Check the wiring of the limiter sensor.
			Limiter sensor defective.	Check/replace limiter sensor (humidity sensor in the supply air duct).
W5	 lights yellow	W5	The end of service life of the steam cylinder is soon reached. The steam cylinder has to be replaced in the near future.	
W6	 lights red	—	No WiFi signal	
			WiFi signal interrupted.	Disconnect the device from the power supply and reconnect. Reconnect unit.

Errors and Remedies

Code	Error		Description	
	LED unit	Indication App	Possible causes	Remedy
E1	 lights red	E1	Overcurrent detected. The measured heating current is greater than 130% of the permissible maximum current over a certain period of time. The Condair RH is stopped.	
			Humidity demand dropped too quickly	Automatic adjustment of the working point.
			Drain valve defective.	Check/replace drain valve.
			Drain obstructed in the steam cylinder.	Replace steam cylinder.
			Used cylinder not recognized.	Replace steam cylinder.
			Steam cylinder fills too fast.	Check/replace inlet valve.
E2	 lights red	E2	Problem with inlet or drain. No heating current was measured for 30 minutes, although there is a humidity demand present.	
			Water supply interrupted (shut-off valve closed) or obstructed.	Check water supply (open shut-off valve, check water pressure).
			Strainer in the inlet valve clogged or inlet valve defective.	Check/clean the strainer in the inlet valve or replace the valve.
			Drain valve leaking or defective.	Check/clean or replace the drain valve.
			Fuses on the driver board defective.	Check/replace fuses on the driver board.
			Heating cable harness defective.	Check/replace heating cable harness.
			Loss of water in the water system (via fill cup overflow) due to excessive back pressure in the steam line.	Check steam installation: steam line not too long, not kinked, no condensate pocket.
E3	 lights red	E3	No heating current detected. No heating current was detected, although the max. level sensor has been activated.	
			Inlet valve not closing or leaking.	Check whether inlet valve is closing, e.g. in standby mode. Replace valve if required.
			Max. level sensor not working properly.	Check max. level sensor state when cylinder is empty.
			Heating cable harness defective.	Check/replace heating cable harness.
E4	 lights red	E4	Unexpected heating current detected: The control measures a heating current although there is no humidity demand. The Condair RH is stopped.	
			Fuse of the heating circuit on the driver board is defective	Check/replace fuse.
			Driver board defective.	Replace driver board.
E5	 lights red  lights red	E5	End of life of the steam cylinder reached. The steam cylinder must be replaced. The Condair RH is stopped.	
E6	 lights red  lights red	E6	Invalid cylinder installed.	
			Cylinder not installed correctly (contact cylinder fuse bad).	Install cylinder correctly.
			The controller cannot verify the newly installed cylinder.	Contact your Condair representative.

Notes

Notes

Notes

Disclaimer

This Quick Start Guide (the "QSG") provides basic product and installation overview of the Condaire RH Connect Humidifier and is for general information purposes only. The general installation guidelines contained herein do not purport to cover all details of the Condaire RH Connect Humidifier nor do they provide for every contingency met in connection with installation. Please consult the complete Installation Manual and Operation Manual for a more comprehensive installation guide and for general operation, maintenance, and troubleshooting information, including Condaire's suggested storage, packaging, and transportation guidelines. The Installation Manual and Operation Manual contain specific system, accessories, and components. Copies of the complete Installation Manual and Operation Manual can be found at: www.condaire.com/residential . Please read all Cautions and Warnings before installing and using the Condaire RH Connect Humidifier.

All electrical connections must be installed in accordance with local and national electrical code requirements by a licensed electrician.

All water supply and drain line connections must be installed in accordance with local plumbing codes by a licensed plumber.

Condaire does not accept any liability for installations of humidity equipment installed by unqualified personnel or the use of parts/components/equipment that are not authorized or approved by Condaire.

Compliance

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Warranty

Condaire Inc. or Condaire Ltd. (depending on the entity that supplied the product, and hereinafter collectively referred to as CONDAIRE) warrant for a period of two years after installation or 30 months from the manufacturer's ship date, whichever date is earlier, that CONDAIRE's manufactured and assembled products, not otherwise expressly warranted, are free from defects in materials and workmanship. Notwithstanding the foregoing, the products listed below have an alternate warranty period:

- GS/GSTC Series heat exchanger(s) are warranted to be free from defects in materials and workmanship for a period of 3 years from installation or 40 months from the manufacturer's ship date, whichever is earlier.
- SAM-e Short Absorption Manifolds, except for the coupling seals, are warranted to be free from defects in materials and workmanship for a total period of 10 years from the manufacturer's ship date.
- Condaire RH Connect and Condaire RH Classic humidifiers are warranted to be free from defects in materials and workmanship for a period of 5 years from the manufacturer's ship date.
- Spare Parts used for repairs are warranted for the balance of the term of the warranty on the original humidifier or 90 days, whichever is longer.
- No warranty is made against corrosion, deterioration, or suitability of substituted materials used as a result of compliance with government regulations.

CONDAIRE's obligations and liabilities under this warranty are limited to furnishing replacement parts to the customer, F.O.B. CONDAIRE's factory. The replacement parts are warranted for the balance of the term of the warranty on the original humidifier or 90 days, whichever is longer. Procedure:

1. Customer Requests Warranty as per instructions on the CONDAIRE Warranty Form.
2. CONDAIRE reviews the warranty claim and will respond in one of two ways:
 - a. Warranty Accepted – Replacement Part or credit granted.
 - b. Warranty Declined – Response with justification will be provided to the customer.
3. In some cases, CONDAIRE may request the part to be returned, freight prepaid by the customer, as part of the warranty acceptance or warranty determination process. Some reasons include:
 - a. Part must be analyzed to determine the root cause of failure.
 - b. Part must be returned to the supplier for claim/investigation.

When parts are requested to be returned, replacement parts will be sent by CONDAIRE to the customer against an invoice from CONDAIRE paid by the customer. The cost of the replacement parts will be reimbursed to the customer with a credit note after the parts are received and analyzed by CONDAIRE, if the warranty is accepted.

The warranties set forth herein are in lieu of all other warranties expressed or implied by law. No liability whatsoever shall be attached to CONDAIRE until said products have been paid for in full and then said liability shall be limited to the original purchase price for the product. Any further warranty, with the exception of a purchased extended warranty described below, must be in writing, and signed by an officer of CONDAIRE.

CONDAIRE makes no warranty and assumes no liability unless the equipment is installed in strict accordance with the installation manual in effect at the date of purchase, and by properly qualified and licensed professionals capable of installing such equipment.

CONDAIRE makes no warranty and assumes no liability whatsoever for consequential damage or damage resulting directly from misapplication, incorrect sizing, or lack of proper maintenance of the equipment.

CONDAIRE makes no warranty and assumes no liability whatsoever for damage to the products, humidifier, supply lines, drain lines, steam distribution systems, or the building as a whole caused by freezing.

CONDAIRE reserves the right to change the design, specifications, and performance criteria of its products without notice or obligation.

Extended Warranty

Extended warranties are available to purchase under the conditions listed above. Extended warranties must be purchased at the time of the original equipment order.



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