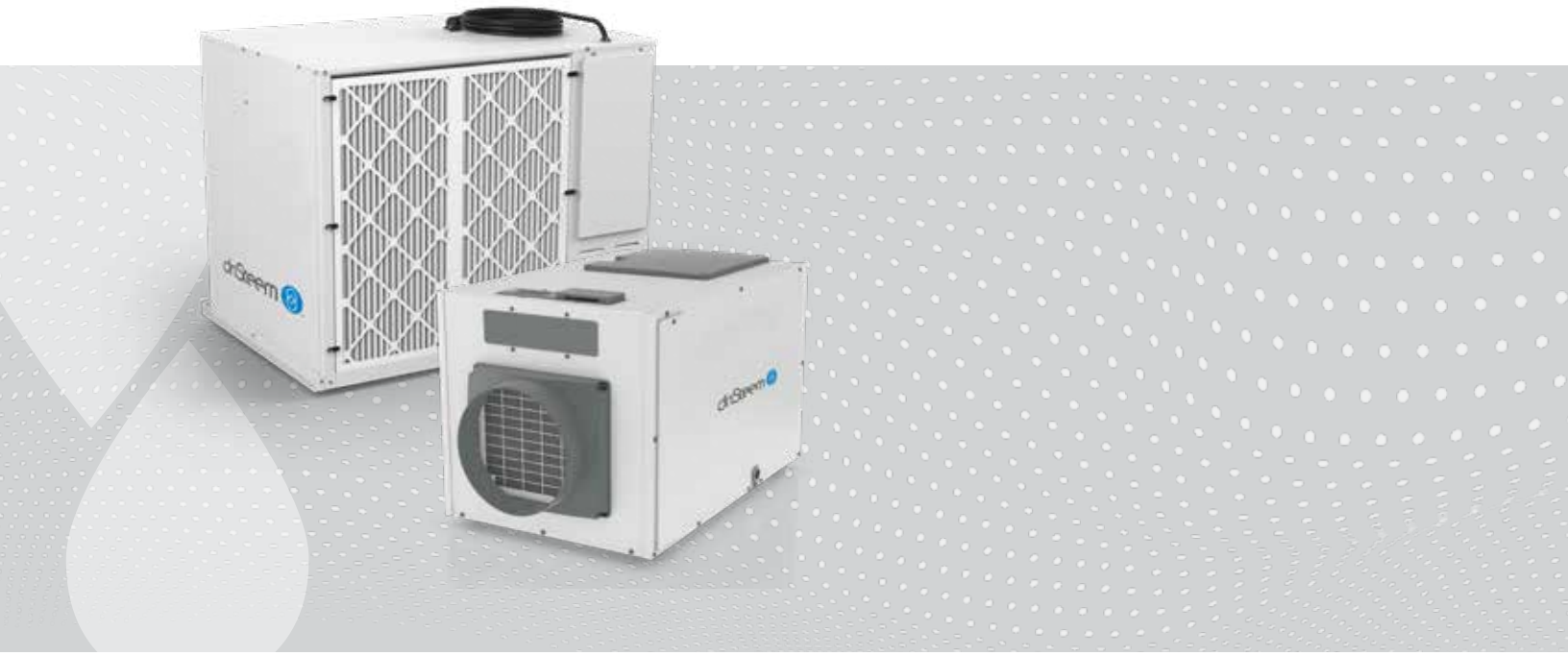
RL Series

DEHUMIDIFIER



Installation, Operation, and Maintenance Manual

Read and save these instructions

driSteem

Warnings and cautions

⚠ WARNING	CAUTION
Indicates a hazardous situation that could result in death or serious injury if instructions are not followed.	Indicates a hazardous situation that could result in damage to or destruction of property if instructions are not followed.

⚠ WARNING

- High voltage may cause serious injury from electric shock. Disconnect electrical power before starting installation or servicing. Leave power disconnected until installation/service is completed.
- Sharp edges may cause serious injury from cuts. Use care when cutting plenum openings and handling duct work.
- Dropping may cause personal injury or equipment damage. Handle with care and follow installation instructions.

⚠ CAUTION

- Read all instructions before beginning installation.
- 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. Children should be supervised to ensure that they do not play with the appliance.
- Do not use in pool applications. Pool chemicals can damage the dehumidifier.
- Do not use solvents or cleaners on or near the circuit board. Chemicals can damage circuit board components.
- Wait 24 hours before running the unit if it was not shipped or stored in the upright position.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- If hard wiring the appliance, install a disconnect within eyesight of the appliance which provides full disconnection under overvoltage category III conditions. Refer to local and national codes and full instructions on page 38.

Table of contents

ATTENTION INSTALLER
Read this manual before installing.
Leave manual with product owner.

DriSteem® Technical Support
800-328-4447

WHERE TO FIND MORE INFORMATION

Our web site:

The following documents are available on our web site: www.dristeem.com
- Dehumidifier Brochure
- Dehumidifier IOM

Call us at 800-328-4447

Obtaining documents from our web site is the quickest way to view our literature.

Product overview

FIGURE 4-1: DEHUMIDIFIER CONTROL

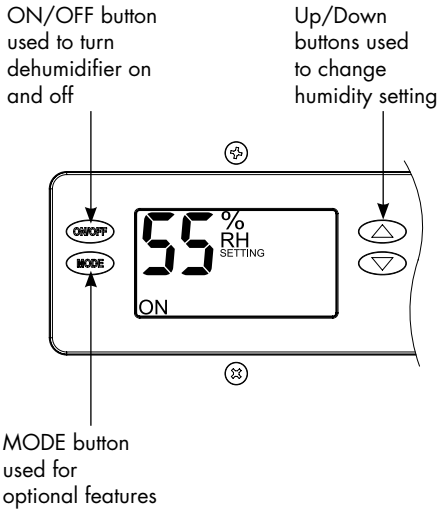


FIGURE 4-2: MODEL RL-3 DEHUMIDIFIER

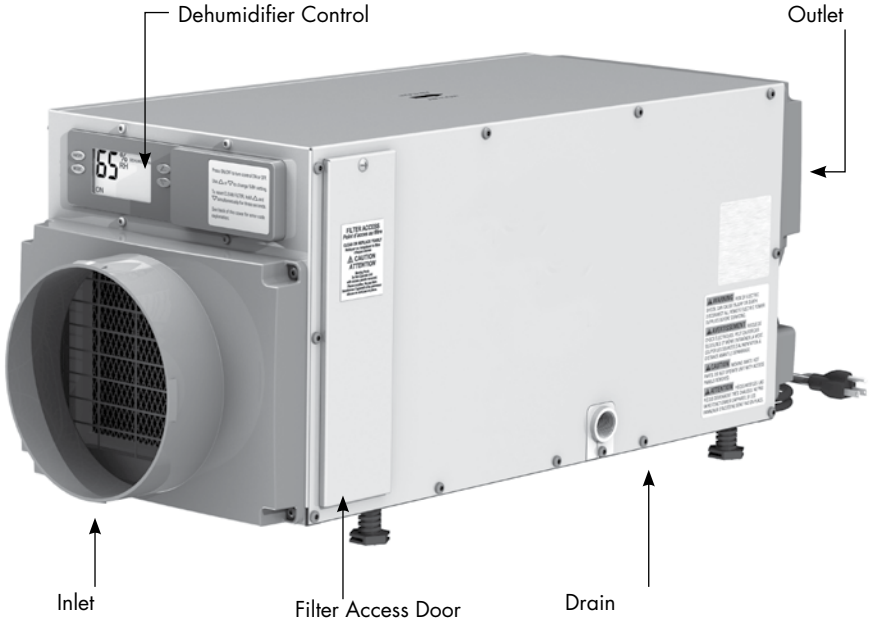
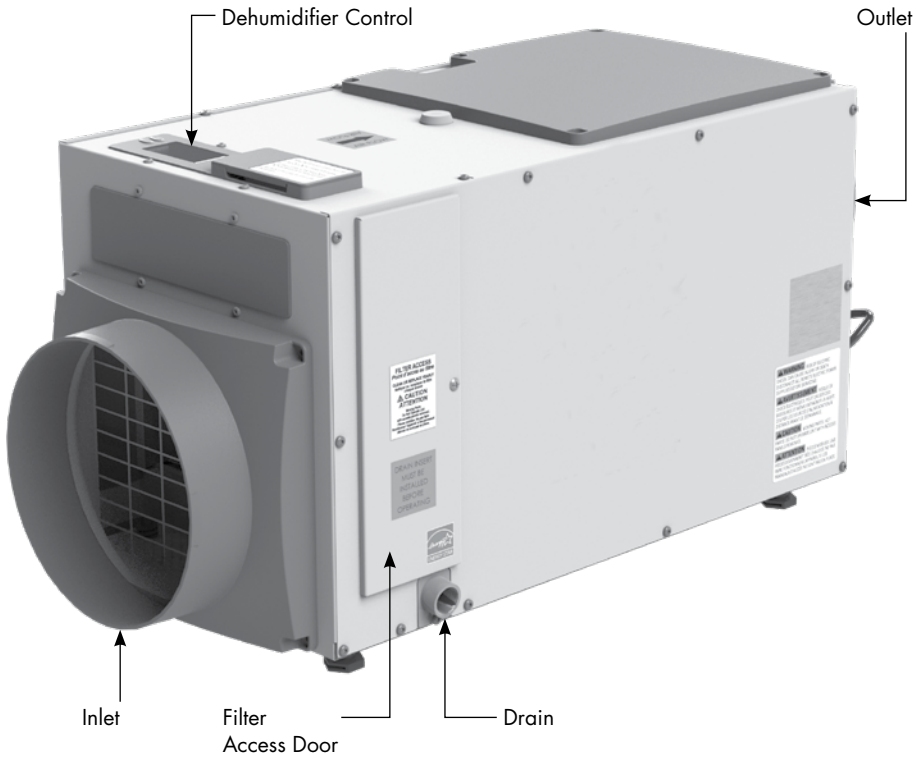
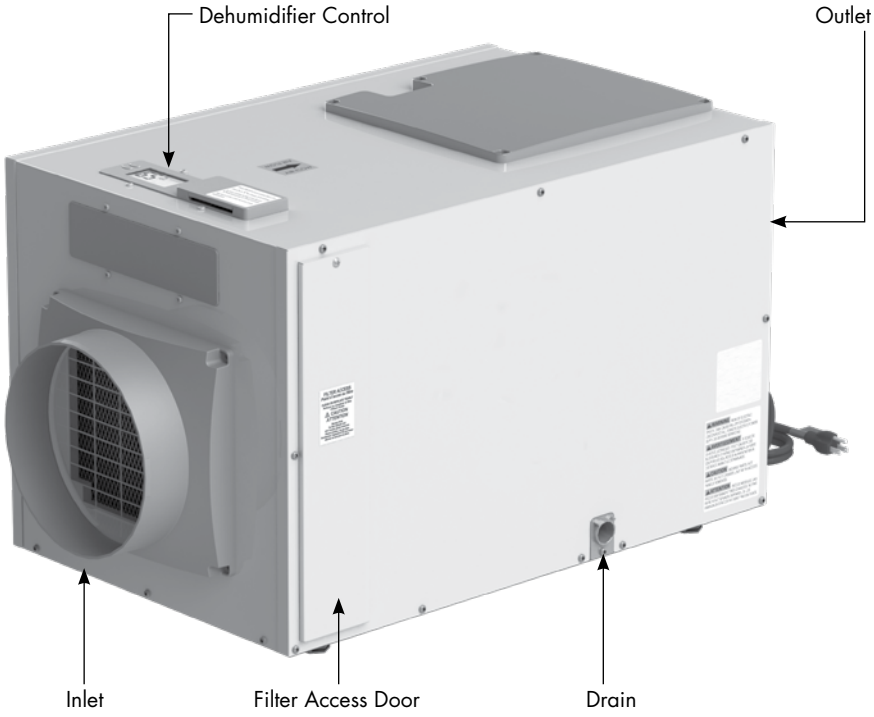


FIGURE 4-3: MODEL RL-4 DEHUMIDIFIER



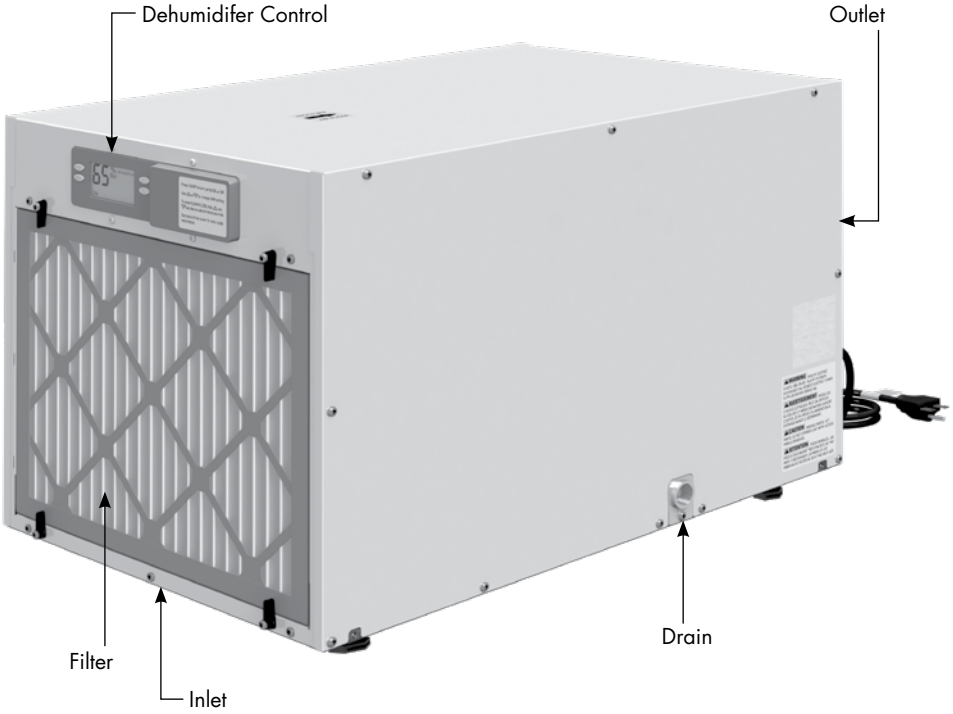
Product overview

FIGURE 5-1: MODEL RL-6 DEHUMIDIFIER



RL-6 angle

FIGURE 5-2: MODEL RL-9 DEHUMIDIFIER



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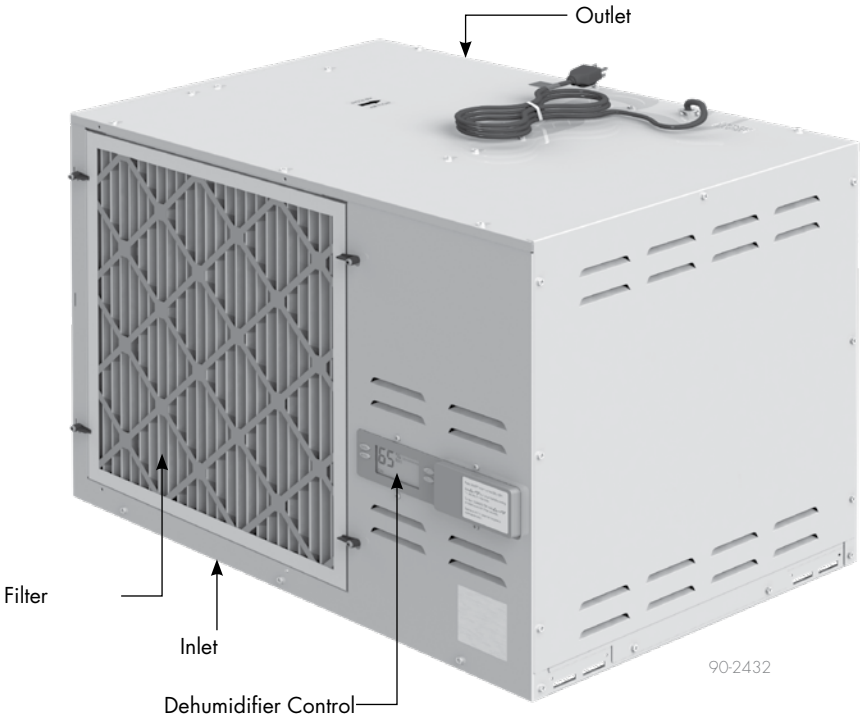
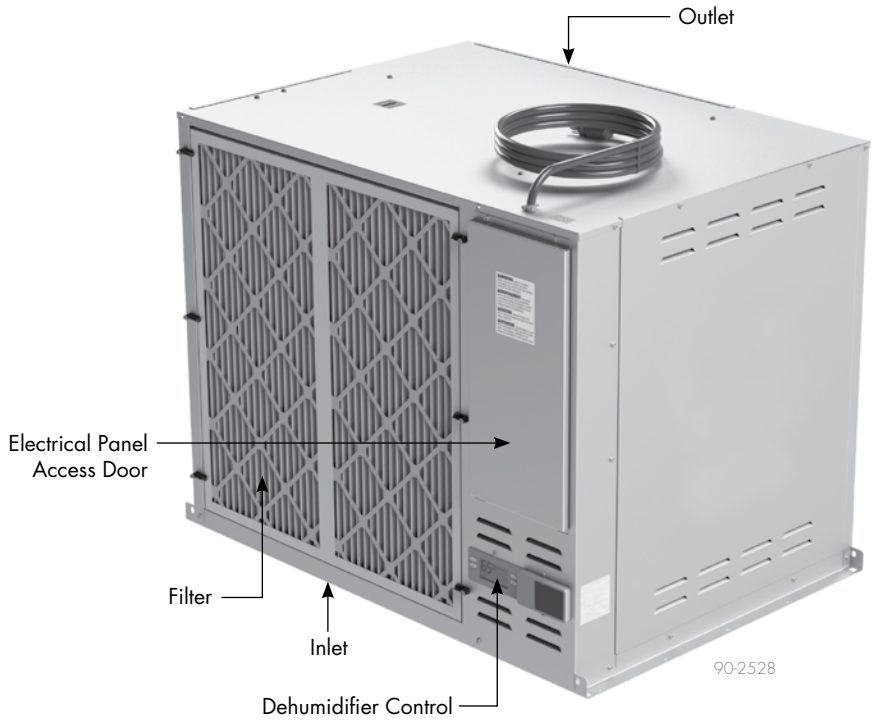
Product overview

FIGURE 6-1: MODEL RL-14 DEHUMIDIFIER



Product overview

FIGURE 7-1: MODEL RL-31 DEHUMIDIFIER



Unpacking the dehumidifier

UNPACKING THE DEHUMIDIFIER

Disassemble the carton, but leave the unit attached to the pallet for installing the unit with a forklift or scissors lift.

IMPORTANT:

- For Models RL-3, RL-4, RL-6, and RL-9, cut the strap securing the compressor shipping support bracket and remove the strap and shipping bracket. Reinstall screws for RL-6 and RL-9. See Figures 8-1 and 8-2.

FIGURE 8-1: MODELS RL-3 AND RL-4 REMOVE SHIPPING BRACKET

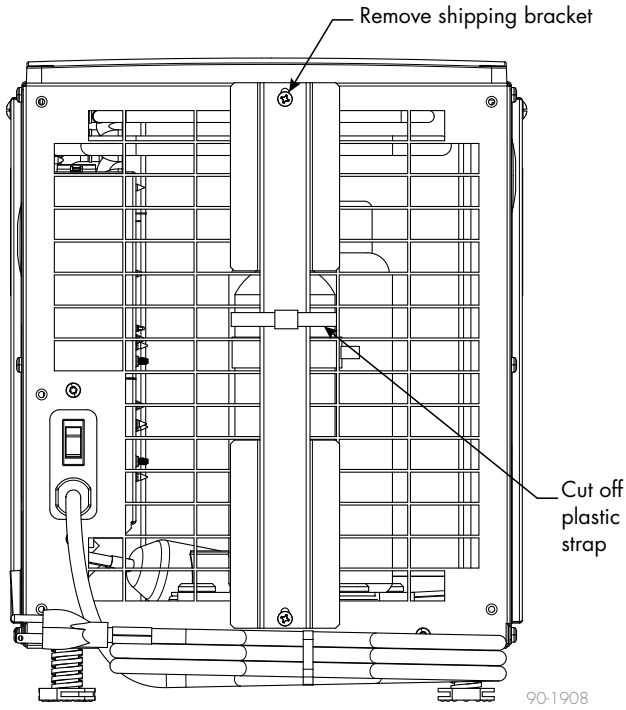
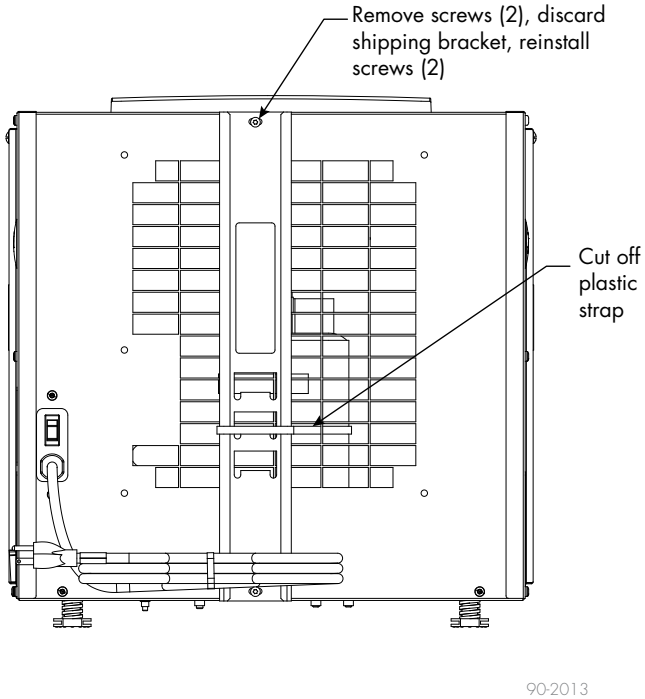


FIGURE 8-2: MODELS RL-6 AND RL-9 REMOVE SHIPPING BRACKET



Included in the shipping carton

Table 9-1:
Included in the shipping carton

	Model RL-3	Model RL-4	Model RL-6	Model RL-9	Model RL-14	Model RL-31
Dehumidifier	√	√	√	√	√	√
Installation Manual	√	√	√	√	√	√
Hanging brackets	-	-	-	√	√	√
3/4" (DN20) P-Trap	-	-	-	-	√	√
3/4" MNPT x 3/4" (DN20 x 20 mm) female pipe	-	-	-	-	√	√
3/4" MNPT x 3/4" (DN20 x 20 mm) hose barb fitting	√	√	√	√	-	-
3/4" x 3/4" x 3/4" (DN20 x DN20 x DN20) T-fitting	-	-	-	-	√	√
30' (9.2 m) of thermostat cable	-	-	-	√	√	√
MERV 11 disposable filter	√	√	√	√	√	√
Inlet/outlet duct collars	√	√	√	-	-	-
10' (3 m) of 3/4" (DN20) drain tube	√	√	√	√	-	-

Models, capacities, and electrical specifications

Table 10-1:
RL Series Specifications

	Model RL-3	Model RL-4	Model RL-6	Model RL-9	Model RL-14		Model RL-31	
Capacity[1]	70 pints/day (3 lb/hour)	100 pints/day (4 lb/hour)	130 pints/day (6 lb/hour)	210 pints/day (9 lb/hour)	320 pints/day (14 lb/hour)	340 pints/day (15 lb/hour)	710 pints/day (31 lb/hour)	
Voltage	120 VAC, 1 Phase, 60 HZ	120 VAC, 1 Phase, 60 HZ	120 VAC, 1 Phase, 60 HZ	208-240 VAC, 1 Phase, 60 HZ	208-240 VAC, 1Phase, 60 HZ	277 VAC, 1Phase, 60 HZ	208-240 VAC, 1 Phase, 60 HZ	277 VAC, 1Phase, 60 HZ
Operating Current [1]	5.8A 115 VAC	6.9A 115 VAC	8.3A 115 VAC	8.6A 240 VAC	11.1A 240 VAC	9.2A 277 VAC	19.6A 240 VAC	17.4A 277 VAC
Rated Current	-	-	-	-	20 amp breaker		24A (install on dedicated 30A circuit)	
Efficiency [1]	2.1 L/kWh (4.4 pints/kWh)	2.6 L/kWh (5.5 pints/kWh)	2.8 L/kWh (5.9 pints/kWh)	2.9 L/kWh (6.1 pints/kWh)	2.9 L/kWh (6.1 pints/kWh)	2.5 L/kWh (5.3 pints/kWh)	3.0 L/kWh (6.3 pints/kWh)	
Recommended Breaker Size	15A	15A	15A	15A	20A	20A	30A	30A
Recommended Wire Gauge	14 AWG, Copper	14 AWG, Copper	14 AWG, Copper	14 AWG, Copper	12 AWG, Copper	12 AWG, Copper	10 AWG, Copper	10 AWG, Copper
Maximum Fuse or Breaker Size (MOC)	-	-	-	19A	30A or lower	25A or lower	40A at 208V 35A at 240V	30A
Minimum Circuit Ampacity (MCA)	-	-	-	11A	21.9A at 208V	18.5A	28A at 208V 25A at 240V	21A
Operating Temperature Range	50°F to 104°F (10°C to 40°C), 60°F/40% RH to 85°F/80% RH (15.6°C/40% RH to 25.9°C/80% RH) (ideal conditions for unit to not go into defrost or shut down due to high pressure)							
Operating Dew Point Lower Limit	40°F (4°C)						36°F (2°C)	
Operating Weight	56 lbs (25 kg)	64 lbs (29 kg)	98 lbs (45 kg)	85 lbs (39 kg)	180 lbs (82 kg)		360 lbs (163 kg)	
Shipping Weight	84 lbs (38 kg)	87 lbs (40 kg)	129 lbs (59 kg)	118 lbs (54 kg)	214 lbs (97 kg)		385 lbs (175 kg)	
Drain Size	3/4" FNPT							
Filter (MERV 11)	8" x 11.75" x 1"	11.88" x 13.5" x 1"	14" x 19" x 1"	14" x 18" x 2"	20"x22"x2"		30" x 32" x 2"	
Airflow @0.0" ESP	200 CFM (340 m^3/h)	280 CFM (476 m^3/h)	310 CFM (527 m^3/h)	525 CFM (892 m^3/h)	830 CFM (1410 m^3/h)		1760 CFM (2990 m^3/h)	
Power cord	Units shipped with 8' (2.43 m) power cord			Units shipped with 10' (3.05 m) power cord or can be hard wired.				
Dehumidifier control	50°F and 104°F (10°C to 40°C) cut off							
External control	On/off dry contact							

[1] Rated capacity and energy factor test done and current draw measured in accordance with AHAM DH-1 2008 at 80°F (26.7°C), 60% RH inlet air at 0.0 ESP.

Specifications

Table 11-1:
RL Series Specifications

	Model RL-3	Model RL-4	Model RL-6	Model RL-9	Model RL-14	Model RL-31
Duct Kit	Included			Optional		
Feet	Attached				Optional	
Hanging Kit	Optional			Included		Built-in
Drain Trap	-				Included	
Air Discharge	End	Top or end		End		
Onboard Controller	Front	Field-interchangeable from top to front		Front		
D77 Controller	Optional					
BACnet Humidistat (Room) Controller	Optional					
BACnet Humidistat (Duct) Controller	Optional					

Dimensions

FIGURE 12-1: MODEL RL-3 DEHUMIDIFIER DIMENSIONS

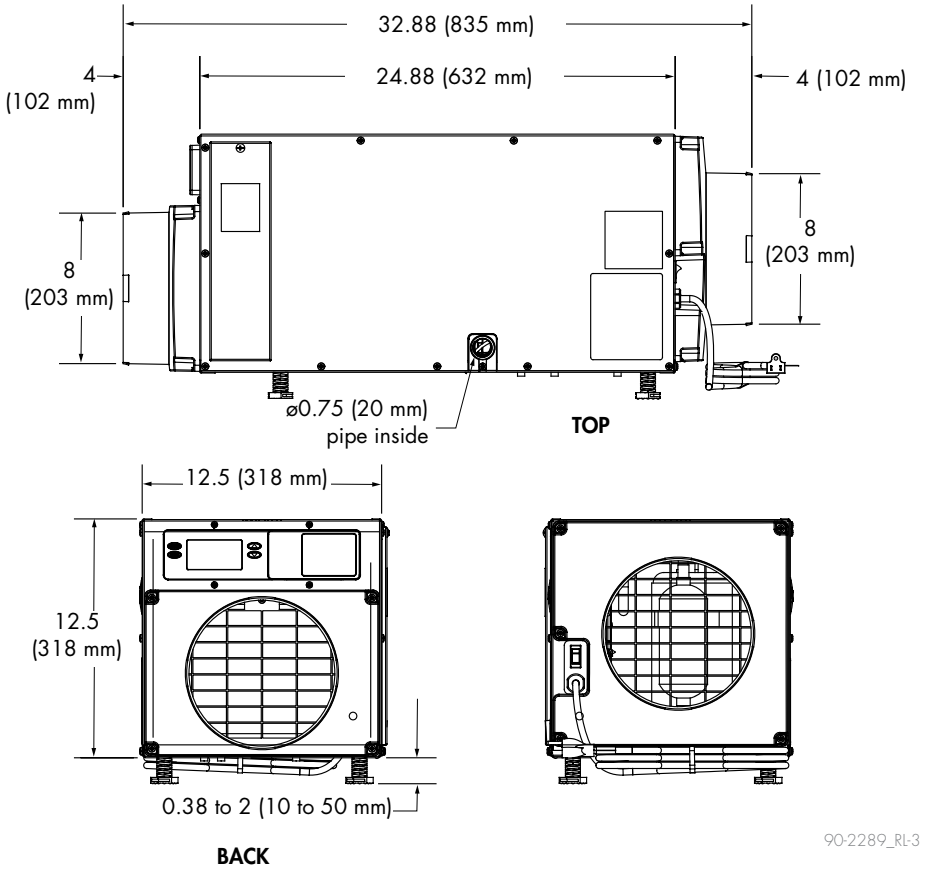
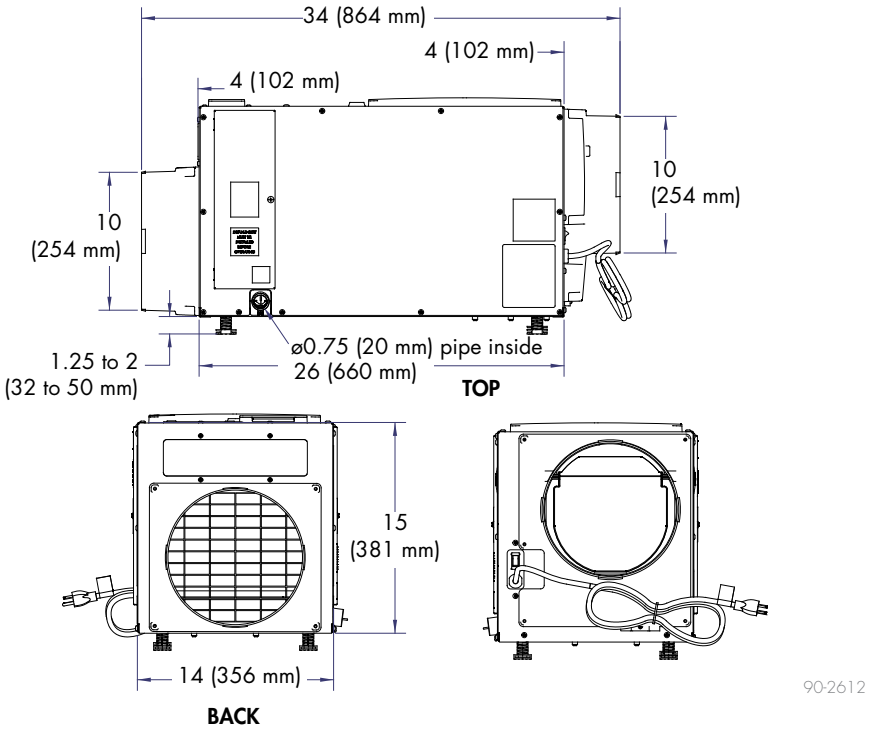


FIGURE 12-2: MODEL RL-4 DEHUMIDIFIER DIMENSIONS



Dimensions

FIGURE 13-1: MODEL RL-6 DEHUMIDIFIER DIMENSIONS

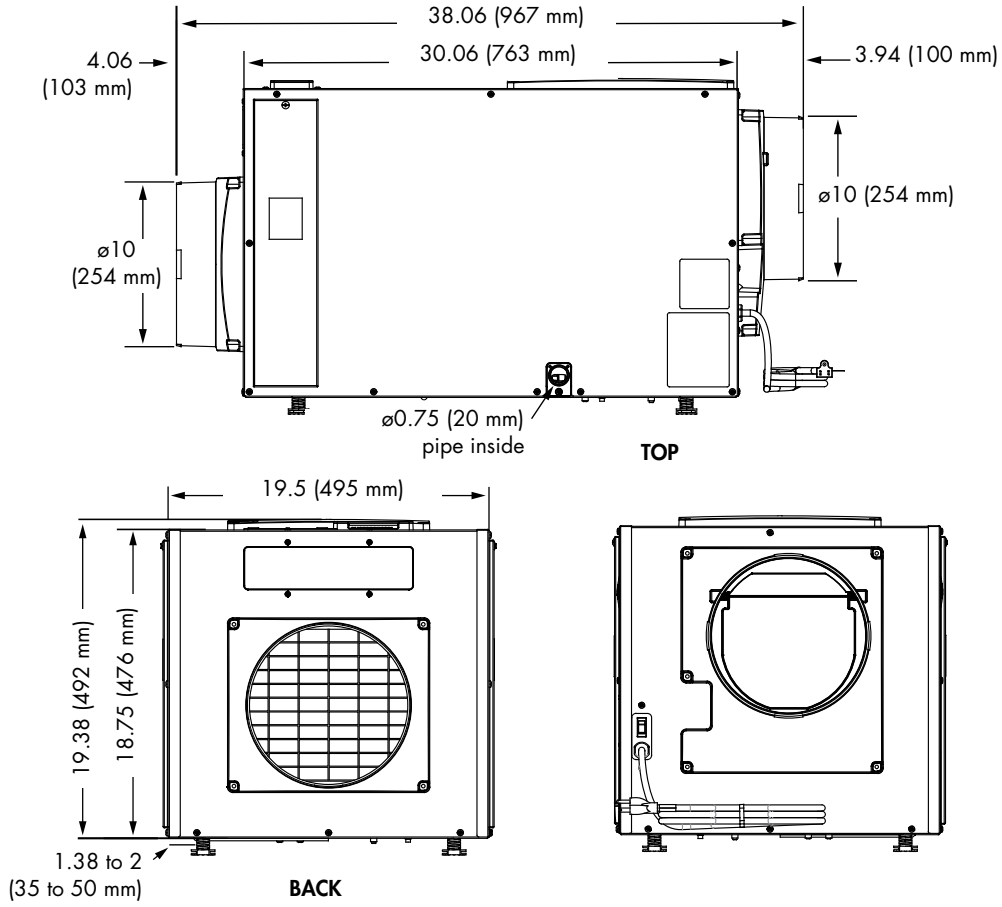
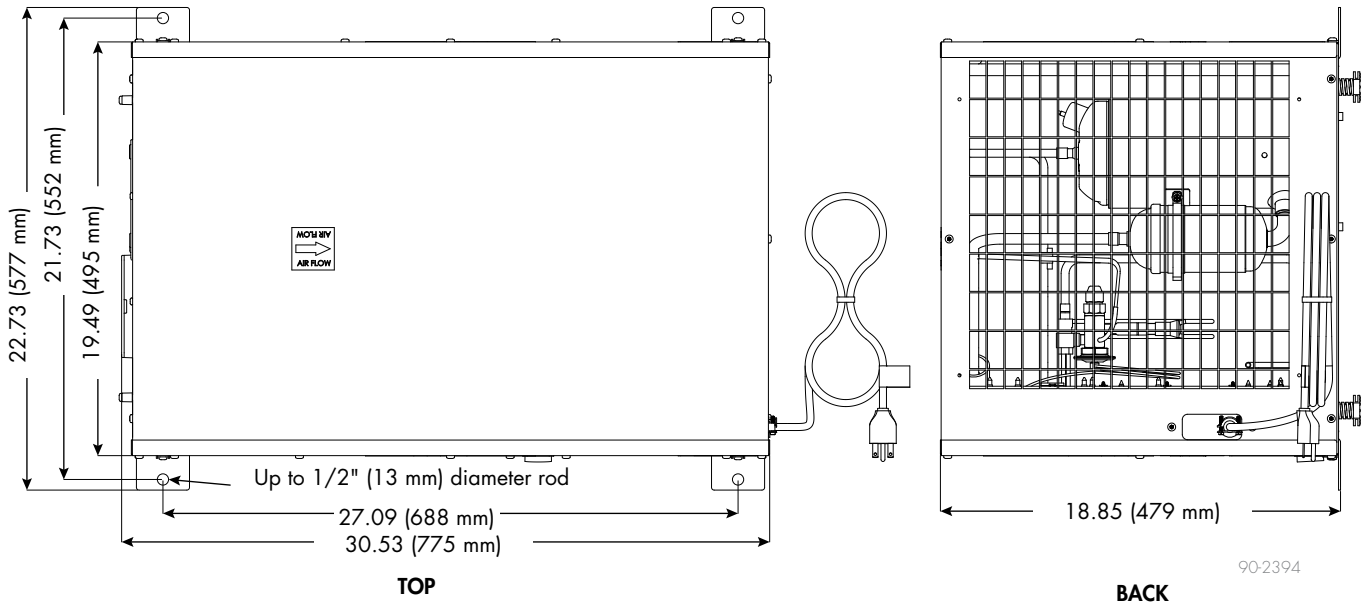


FIGURE 13-2: MODEL RL-9 DEHUMIDIFIER DIMENSIONS



Dimensions

FIGURE 14-1: MODEL RL-14 DEHUMIDIFIER DIMENSIONS

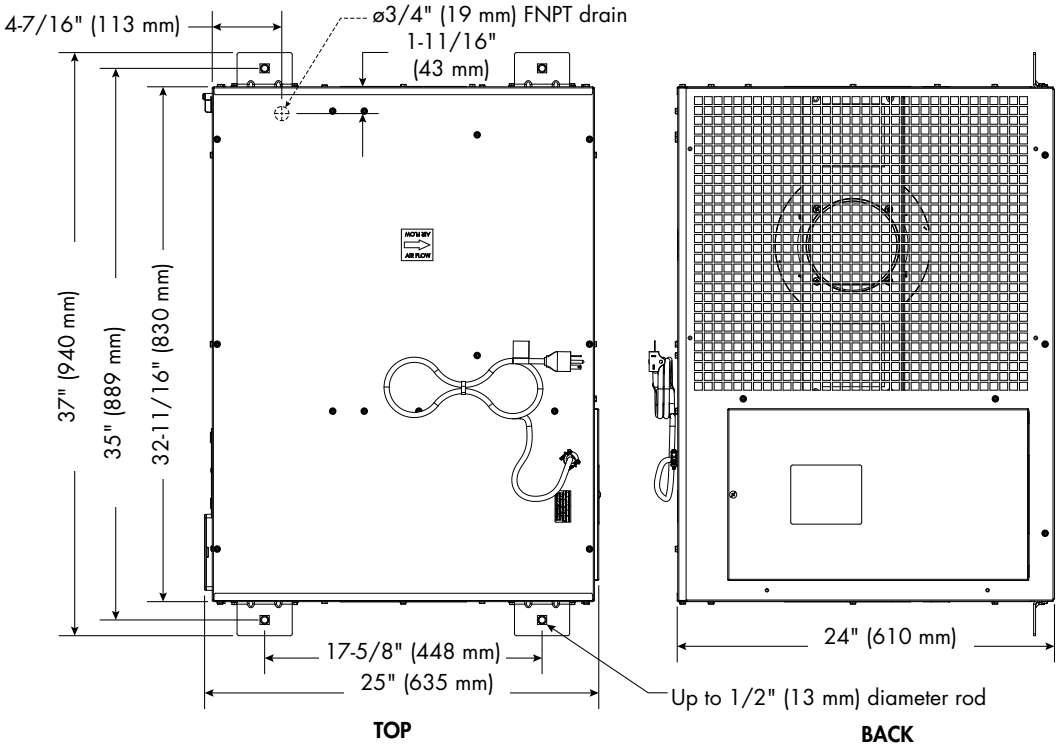
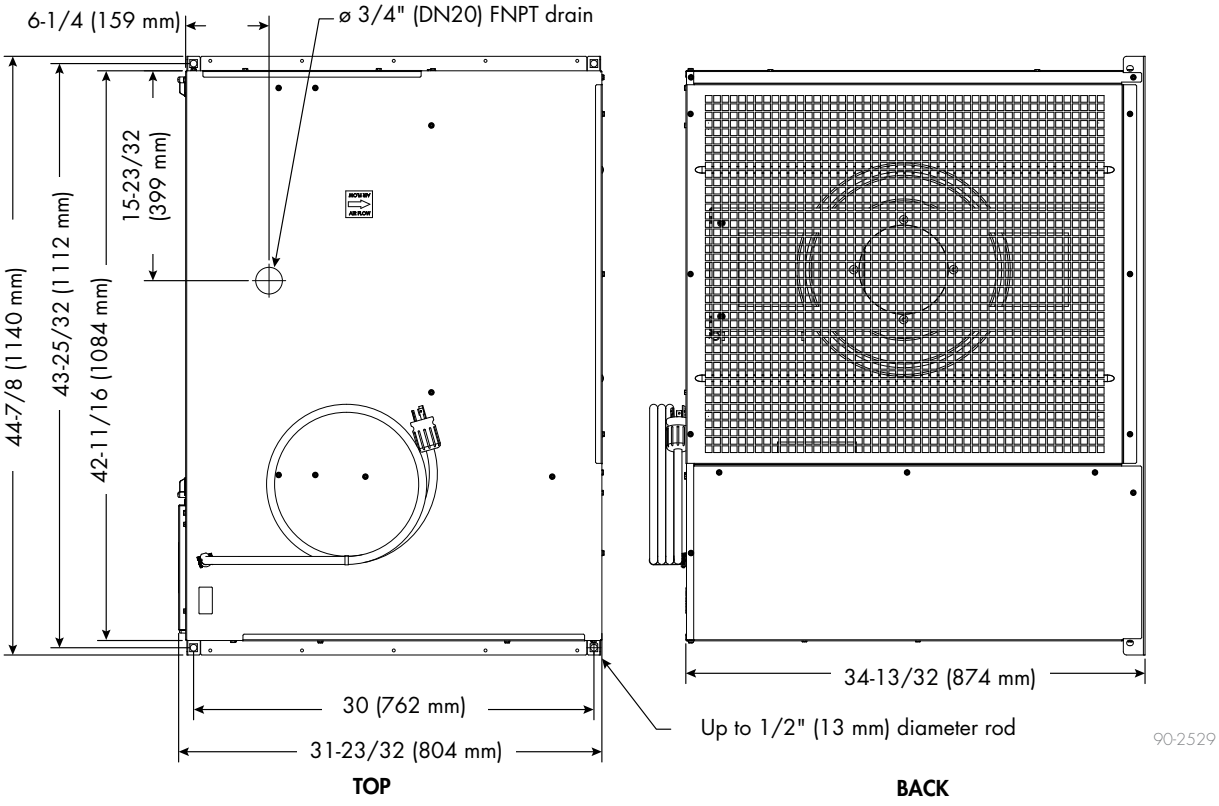


FIGURE 14-2: MODEL RL-31 DEHUMIDIFIER DIMENSIONS



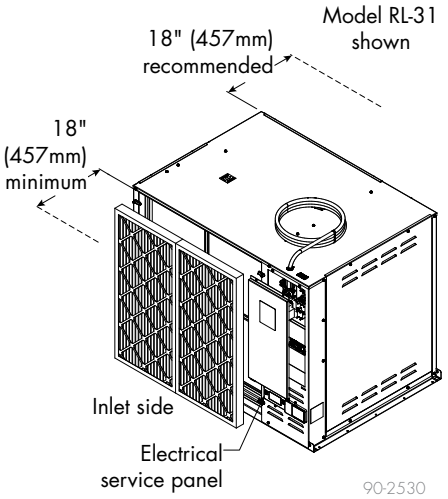
Selecting a location

LOCATION CONSIDERATIONS

This unit is not to be accessible to the general public. The dehumidifiers should be spaced evenly throughout the area to be dehumidified with the following recommendations:

1. Avoid placement where the discharge of one dehumidifier is pointing toward the inlet of another.
2. Avoid locating the dehumidifier inlet too near a supply register. Space is not usually available to totally avoid this, but minimizing the amount of cold air that is discharged to the dehumidifier inlet will improve moisture removal performance of the dehumidifier.
3. Account for handling dehumidifier condensate by considering drain or condensate pump locations.
4. Leave 18" (457 mm) minimum clearance on all sides for airflow and to allow for access to the user interface, electrical panel for service and filter for maintenance. Leave 20" (508 mm) for filter access (either side) on the Model RL-6.

FIGURE 15-1: SPACE CLEARANCES (ALL MODELS)

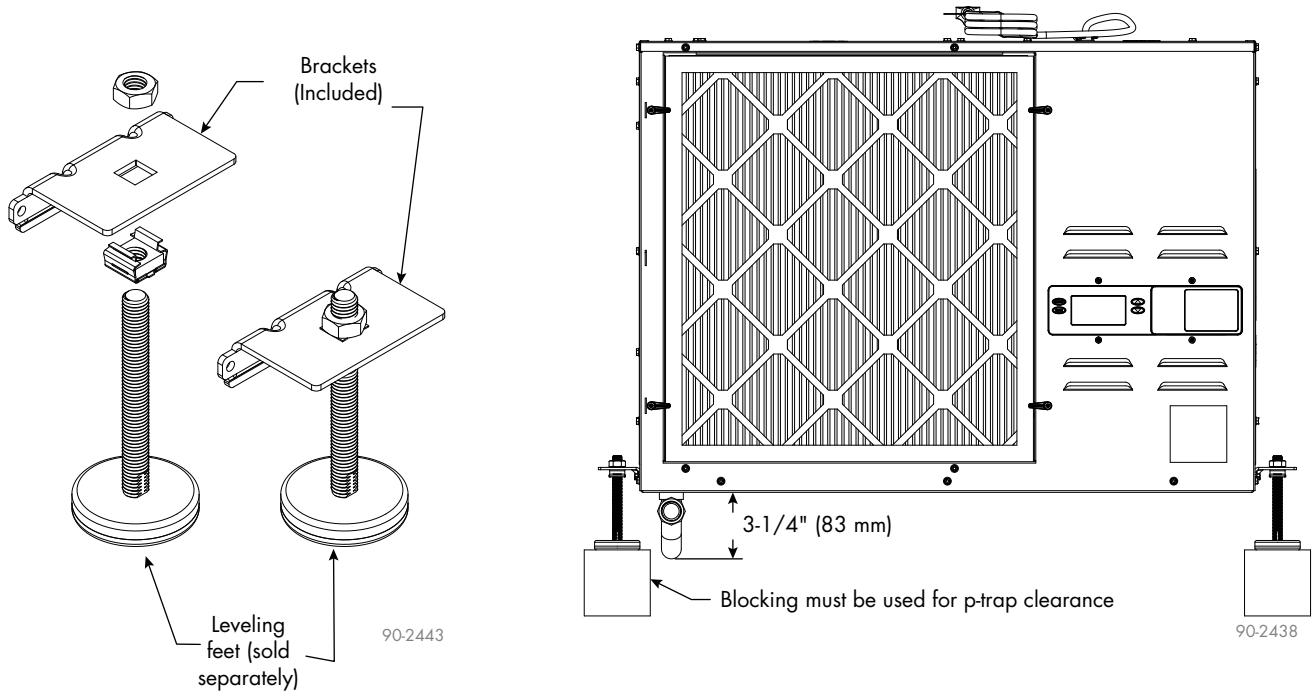


Mounting

FLOOR MOUNTING

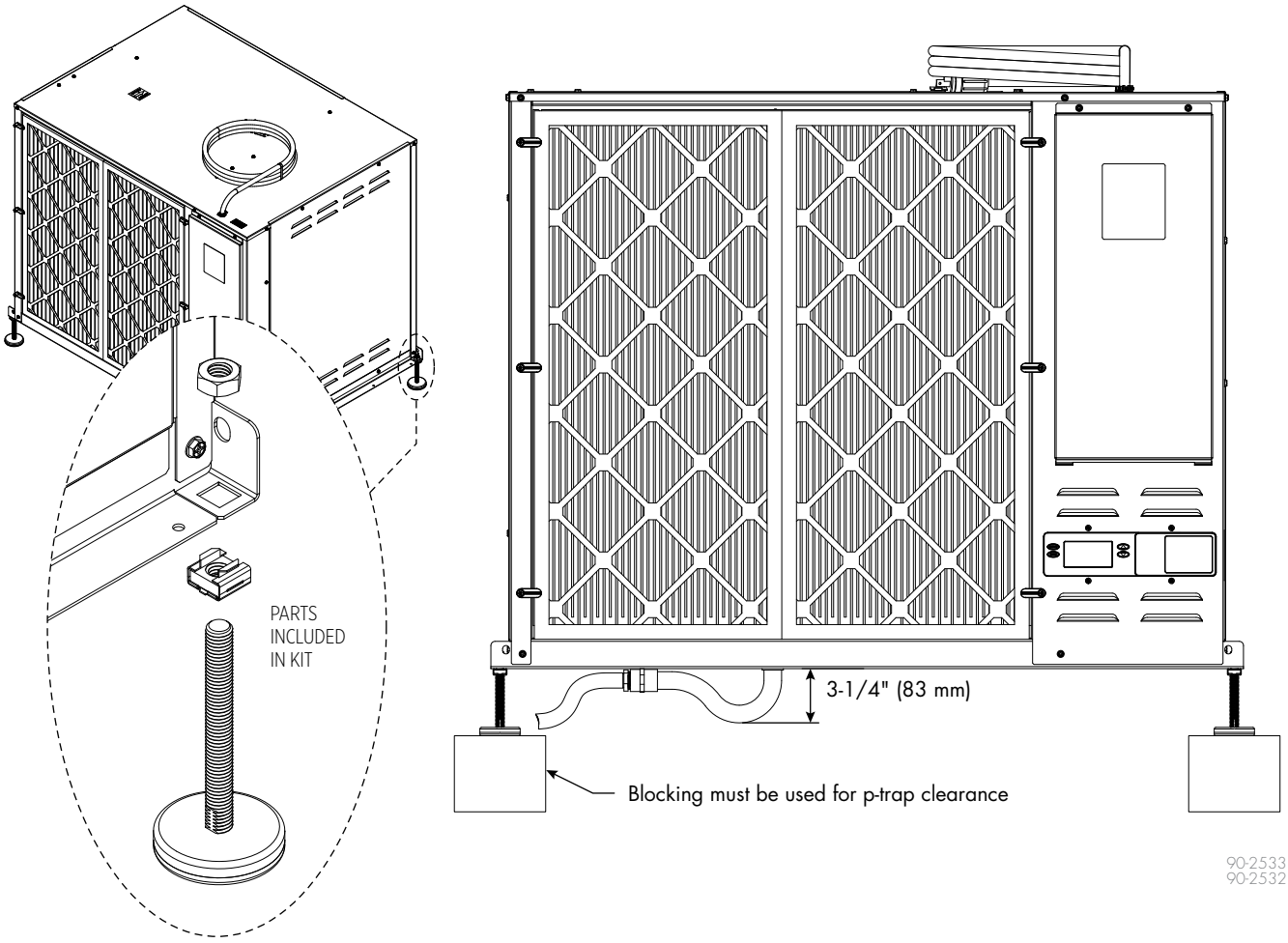
The leveling feet kit (if included) is required for floor mounting. The drain hose/ pipe must continuously slope downward toward the drain. Use solid supports as needed to elevate the unit enough to allow for continuous drain slope. Use the adjustable feet to level the unit right to left and front to back so that unit drains properly.

FIGURE 16-1: RL-14 FLOOR MOUNTING USE LEVEL FEET KIT (PART #601175)



Mounting

FIGURE 17-1: MODEL RL-31 FLOOR MOUNTING USING LEVELING FEET KIT (PART #: 601175)



RL-3, RL-4, and RL-6 mounting

CONTROL LOCATION

For floor mount installation, leave the control mounted to the top of the unit. For suspended installations, it will be easier to see if the control is relocated to the front of the unit.

To move the control:

1. Remove the front control panel cover.
2. Remove the filter access door and filter.
3. Detach the on-board control by removing the four (4) screws around the control. NOTE: Use one hand to support the bottom of the on-board control when removing.
4. Keep the control in the unit and relocate to the front access hole.
5. Secure the control with the same four screws used to attach the control to the top of the unit.
6. Secure the control panel cover to the top of the unit.

DUCT COLLARS

If suspending the unit, attach the inlet and outlet duct collars as shown in Figures 18-1 and 18-2; the outlet cover does not need to be moved. If placing the unit on the floor, remove the outlet cover and install the outlet collar to the top of the unit, relocate the cover to the end of the unit (see Figure 18-1), and attach the inlet duct collar.

FIGURE 18-1: RL-4 AND RL-6 CONTROL LOCATION

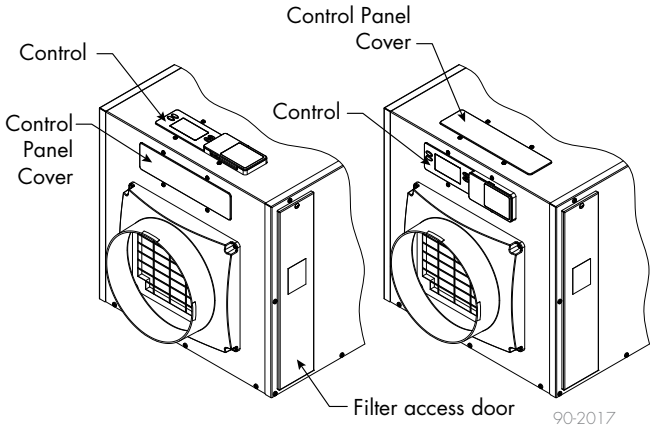


FIGURE 18-2: MODEL RL-3, RL-4 AND RL-6 HANGING INSTALL

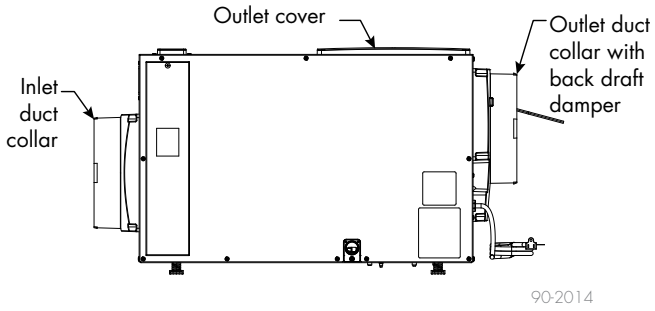
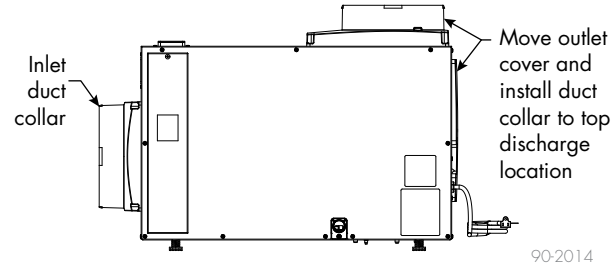


FIGURE 18-3: RL-4 AND RL-6 FLOOR MOUNT INSTALL

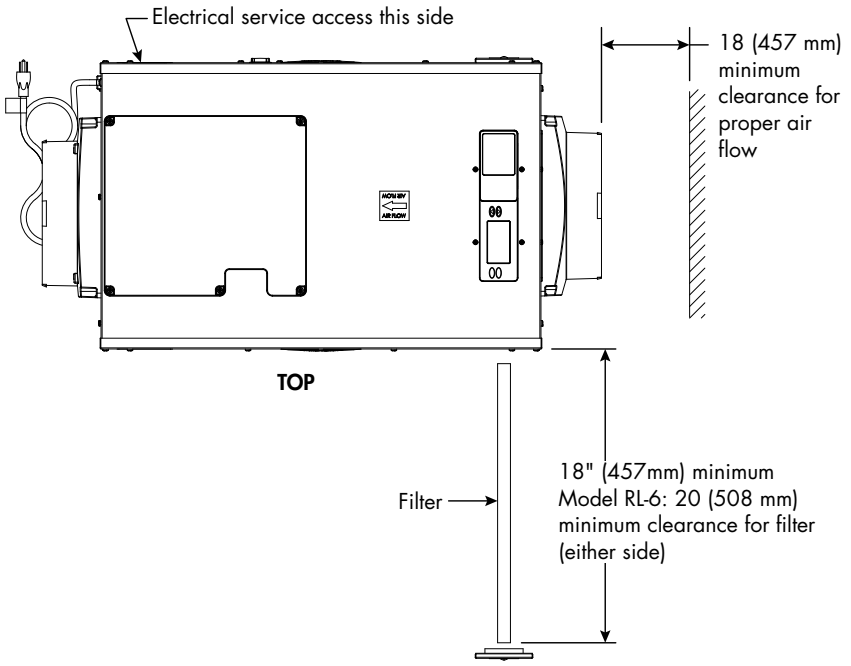


RL-3, RL-4, and RL-6 mounting

MODEL RL-3, RL-4 AND RL-6 LOCATION CONSIDERATIONS

- Allow sufficient clearance for filter removal and to prevent airflow obstruction
- Electrical service access will require the removal of the side panel shown. Allow sufficient space for service on this side of the unit.
- When suspending the unit, a condensate pan with float switch is recommended to prevent any leaks that may occur due to unforeseen drain line obstructions.

FIGURE 19-3: RL-3, RL-4 AND RL-6 FILTER ACCESS CLEARANCE



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RL-3, RL-4, and RL-6 trapeze mount

FIGURE 20-1: RL-3, RL-4 AND RL-6 TRAPEZE MOUNT

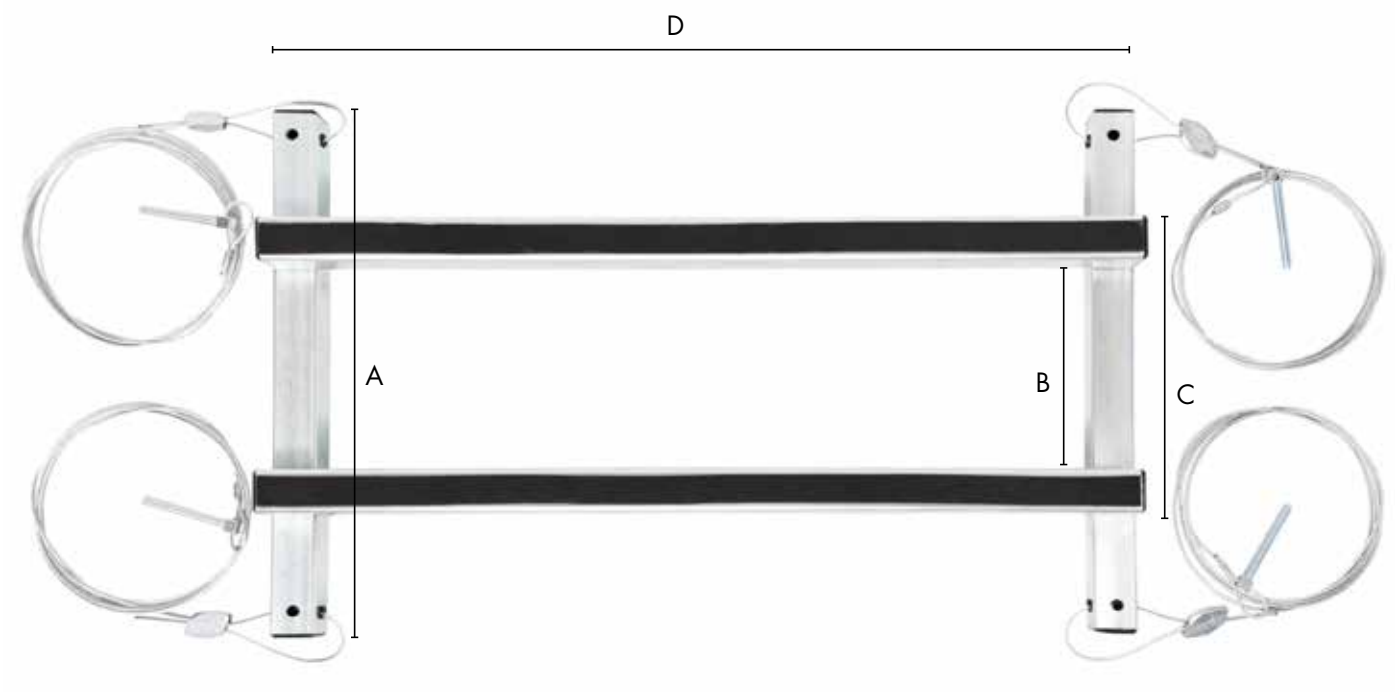


Table 20-1:
Trapeze mount dimensions

		601299	601300
A	Width	18" (457 mm)	27" (686 mm)
B	Inside Rail Width	5.75" (146 mm)	10.5" (267 mm)
C	Outside Rail Width	8.75" (222 mm)	13.5" (343 mm)
D	Length	29.88" (759 mm)	38" (965 mm)

Table 20-2:
Trapeze mount specifications

	601299	601300
Width	18" (457 mm)	27" (686 mm)
Height	3" (76 mm)	3" (76 mm)
Length	29.88" (759 mm)	38" (965 mm)
Weight	13 lbs. (5.9 kg)	18 lbs. (8.2 kg)
Operating weight (working load)	400 lbs. (181 kg)	400 lbs. (181 kg)
Shipping weight	14.6 lbs. (6.6 kg)	19.7 lbs. (8.9 kg)

RL-3, RL-4, and RL-6 trapeze mount

INSTALLING A DRISTEEM DEHUMIDIFIER USING A DRISTEEM HANGING KIT

1. Open box and remove the contents. Contents include:
   - Hanging bracket with cables and bolts
   - 8 nuts, 8 washers
   - Gripple key
   - Installation instructions
2. Unfold the hanging bracket so the support bars are perpendicular to the hanging bars (see Figure 21-1).
3. Use two washers and two nuts on each cable bolt when mounting the hanging bracket to a structure. Make sure the structure can support the weight of the hanging bracket and dehumidifier (see Figure 21-2).
4. Extend the dehumidifier feet approximately ¾" to 1" (19 to 25 mm) (see Figure 21-3).
5. With the feet extended, center the dehumidifier on the hanging bracket, with the feet outside of the support bars.
6. Adjust the height of the hanging bracket by either pulling on the cable or inserting the Gripple key to release tension (see Figure 21-4).

> **⚠ CAUTION**
>
> Bracket and dehumidifier must be supported when key is used to release the cable.

7. Set a level on top of the dehumidifier to make sure it is level in both directions.

FIGURE 21-1: RL-3, RL-4 AND RL-6 TRAPEZE MOUNT

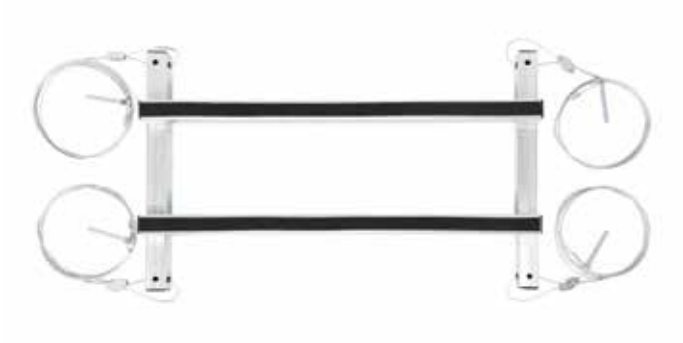


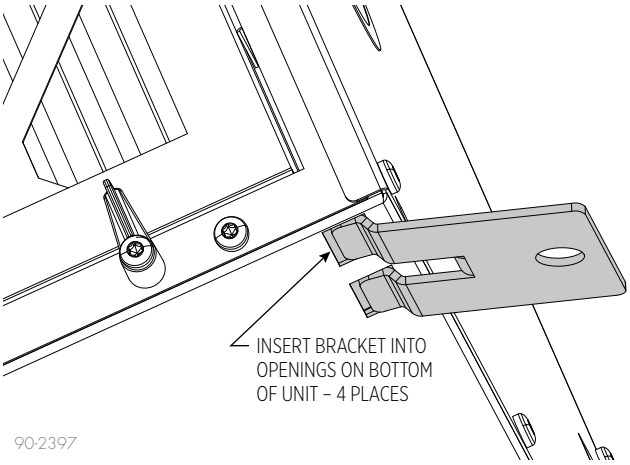
FIGURE 21-2: RL-3, RL-4 AND RL-6 TRAPEZE MOUNT

FIGURE 21-3: EXTEND FEET

FIGURE 21-4: ADJUST CABLE AND KEY

RL-9 mounting

FIGURE 22-1: RL-9 INSTALL AND SECURE MOUNTING BRACKET



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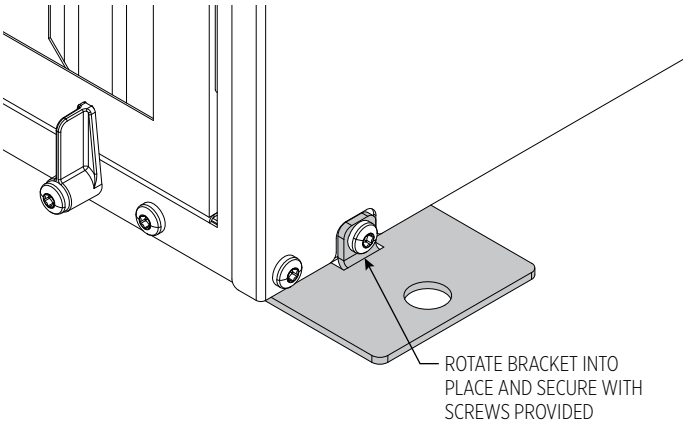

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RL-14 mounting

INSTALL BRACKETS FOR SUSPENDING UNIT

The brackets are designed to accommodate up to 1/2" (13mm) threaded rod.

1. Insert bracket into slots on the base. See Figure 23-1.
2. Rotate the bracket up toward the dehumidifier and secure the bracket to the side of the dehumidifier using #12 sheet metal screws (provided). This can be done with a 5/16" (8 mm) hex socket. See Figure 23-2.
3. Repeat for remaining three brackets.

FIGURE 23-1: INSTALL MOUNTING BRACKET IN BASE

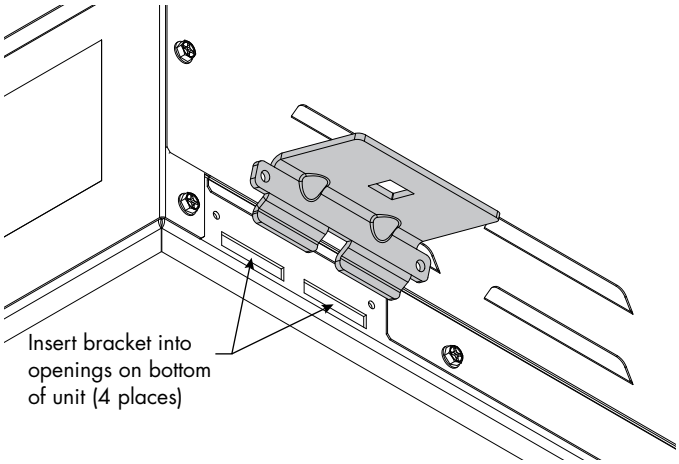
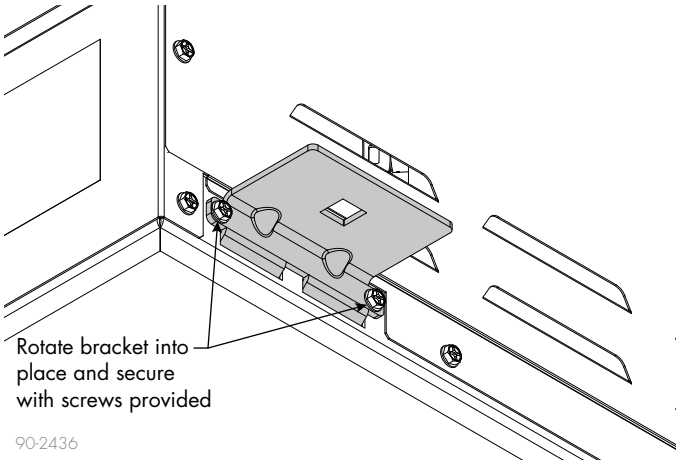


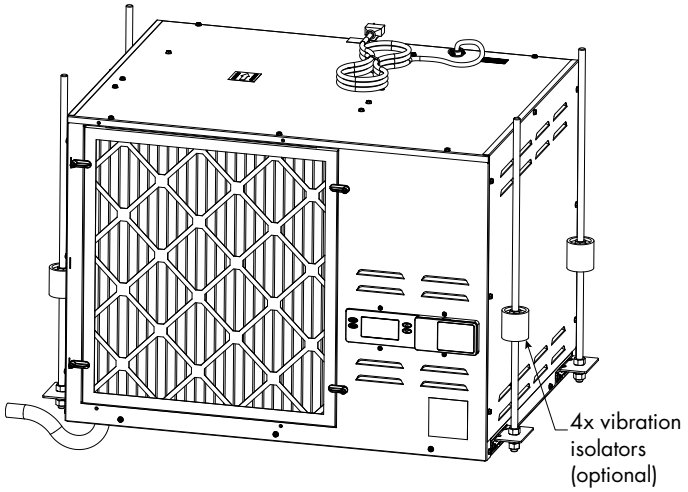
FIGURE 23-2: SECURE BRACKET TO DEHUMIDIFIER



HANGING THE RL-14 DEHUMIDIFIER

Use the threaded rod to suspend the unit from appropriate ceiling structure. See unit weights in Table 10-1. Install vibration isolators if located in an area where noise could be a concern. Level unit right to left and front to back so that unit drains properly. See Figure 23-3.

FIGURE 23-3: SUSPENSION



RL-31 mounting

HANGING THE RL-31 DEHUMIDIFIER

Use 3/8" (10 mm) or 1/2" (13 mm) threaded rod to suspend the unit from appropriate ceiling structure (see Figure 24-1). See unit weights in Table 10-1. Install vibration isolators if located in an area where noise could be a concern. Level unit right to left and front to back so that unit drains properly. **IMPORTANT: Install lock nuts to secure the dehumidifier to the threaded rod as shown in Figure 24-2.**

DUCTING

Use duct kit (Part #: 601177) for installing ductwork to the dehumidifier. Reference the instructions provided with the duct kit for installation details.

FIGURE 24-1: MODEL RL-31 SUSPENSION

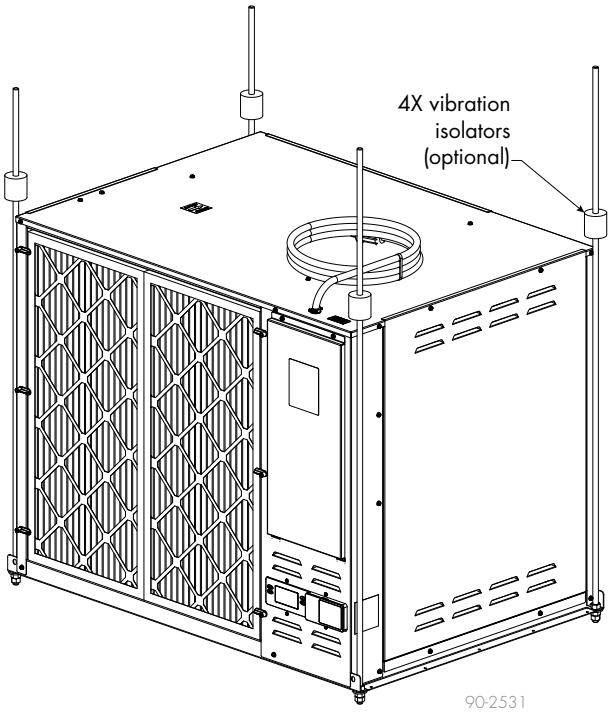
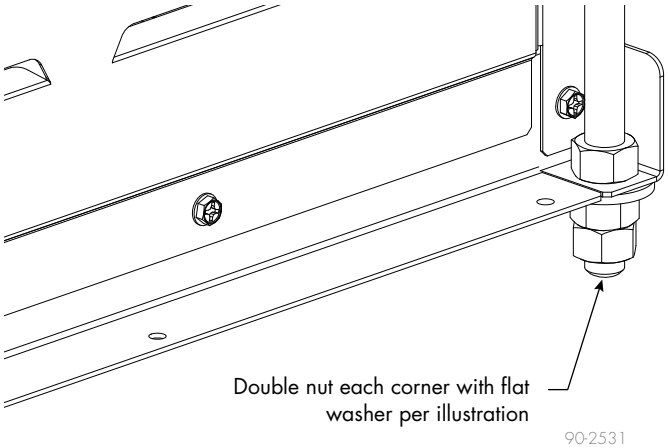


FIGURE 24-2: MODEL RL-31 SECURE BRACKET TO DEHUMIDIFIER

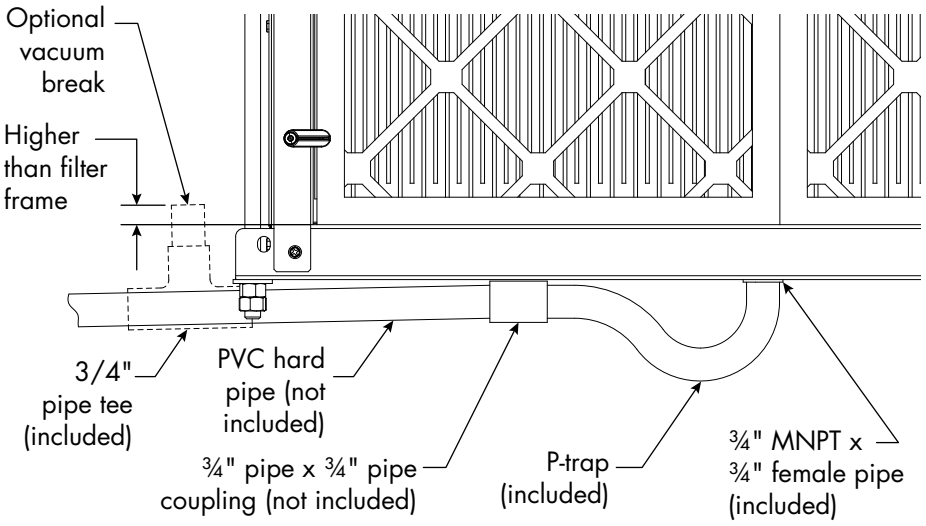


Drain installation (Models RL-14 and RL-31)

The blower draws air through the dehumidifier, putting the cabinet under negative pressure. As a result, the included P-trap is required for proper draining. The installed drain fitting on the dehumidifier is 3/4" (DN20) FNPT. Use the included fittings to trap and install the drain. See Figure 25-1. The drain tubing can be hard pipe or flexible tubing. **NOTE:** PTFE thread seal tape is recommended for the threaded connections and hand tighten only. Use PVC primer and cement for all slip fit connections to prevent leaks. After installing the drain connections, trap, and tubing, pour enough water, about 32 oz. (950 mL) into the dehumidifier drain pan to prime the trap.

If the drain tubing will be installed to a condensate pump, or if a common drain tube will serve multiple dehumidifiers or air conditioners, a vacuum breaker is recommended to prevent the p-trap from being unintentionally siphoned. Install a T-fitting with a short section of drain tubing pointed vertically and extending above the start of the filter (see Figure 25-1). Install the vacuum breaker after the P-trap.

FIGURE 25-1: RL-14 AND RL-31 DRAIN ASSEMBLY



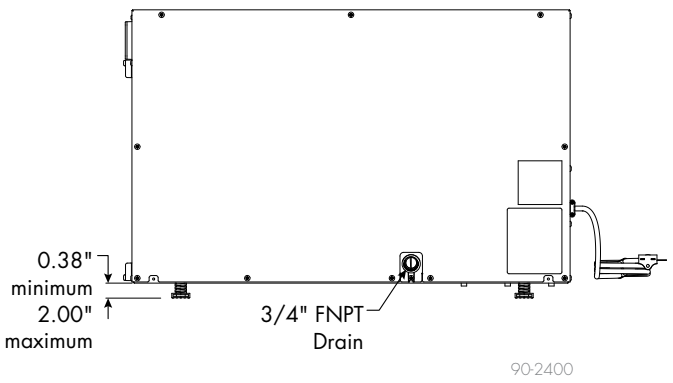
90-2534

Drain installation

LEVELING THE RL-3, RL-4, RL-6 AND RL-9 DEHUMIDIFIER

The feet can be adjusted to level the unit, and if required, to accommodate drain fittings and a secondary condensate pan. Leveling is required to ensure proper drainage from the dehumidifier. See Figure 26-1.

FIGURE 26-1: LEVEL THE UNIT



DRAIN INSTALLATION FOR THE MODELS RL-3, RL-4, RL-6 AND RL-9 DEHUMIDIFIERS

The drain outlet on the Model RL-3, RL-4, RL-6, and RL-9 humidifiers can be hard piped using a 3/4" PVC Slip x 3/4" MNPT fitting and 3/4" nominal drain tubing or the provided 3/4" MNPT x 3/4" hose barb fitting. 3/4" clear PVC tubing can be used to drain the dehumidifier. Always maintain a constant downward slope from the dehumidifier to the drain and do not allow soft tubing to curl up which may result in air lock.

NOTE: PTFE thread seal tape is recommended for the threaded connection and **hand tighten only**. If hard pipe is used, PVC primer and cement is recommended for the slip fit connection. Remove drain insert before priming and gluing in the PVC fitting. Replace drain insert after PVC glue has fully dried.

CAUTION

Do not damage the Model RL-4 drain insert. The drain insert is a critical feature of the dehumidifier drain management system.

⚠ WARNING

Running the Model RL-4 dehumidifier without the drain insert can lead to condensate leaks. See Figure 48-1.

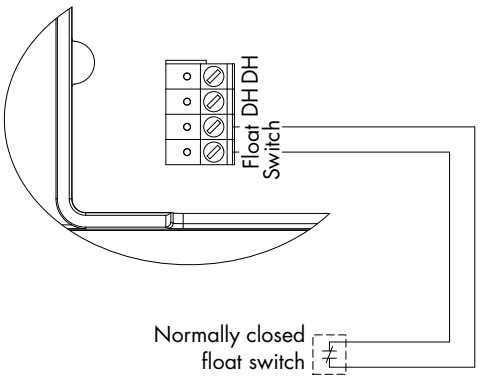
Drain installation

CONDENSATE PAN, CONDENSATE PUMP AND FLOAT SWITCH

A condensate pan is recommended when suspending the dehumidifier over finished areas or product. Adhere to local codes regarding draining of the condensate pan. If a condensate pump is needed, install it in the condensate pan (user provided) as well.

Install a condensate overflow safety switch (i.e. float switch) in the condensate pan (user provided), remove the factory installed jumper wire between the Float Switch terminals on the control and wire the float switch to the dehumidifier as shown in Figure 27-1. Overflow safety switches on condensate pumps can be wired to the Float Switch terminals in a similar fashion.

FIGURE 27-1: FLOAT SWITCH WIRING TO USER INTERFACE



90-1857

Duct installation

DUCT SIZING AND ROUTING

- Unit performance decreases as airflow decreases, the shortest possible duct lengths with minimal bends should be used.
- Max static pressure is 0.6" w.c. (149 Pa).
- Install the dehumidifier in location where filter door, service access panel, compressor side panel, and user interface are accessible.
- Do not install a bend in the ductwork within 2 feet (0.6 m) of the dehumidifier inlet or outlet.
- When selecting duct material, it is preferred to use metal ducting to maintain airflow. If flex duct is to be used, ensure it is extended out as much as possible to limit disruptions to the airflow. Note: Use only insulated ducting when the inlet side of the duct work is located outside of the conditioned space. In some instances when the dehumidifier is placed outside of the conditioned space, the cabinet of the dehumidifier may also need to be insulated to prevent condensation formation on the exterior of the unit.
- Do not duct more than one dehumidifier together. See Figure 28-1.

Table 28-1: Equivalent length of bends	
45° bend	5 feet (1.5 m)
90° bend	10 feet (3.0 m)
180° bend	30 feet (9.1 m)

- When locating registers and diffusers be aware of the following;
  - Relative to other dehumidifier inlets/outlets – must be a minimum 10 feet (3 m) apart and do not direct toward one another.
  - Relative to HVAC diffusers – ensure minimum 10 foot (3 m) distance from other HVAC diffusers.
  - For agriculture applications – do not directly vent onto plants.
- Ensure that the ductwork is supported within 2 feet (0.6 m) of inlet and outlet of the dehumidifier. Consult building codes and standards for duct support requirements beyond 2 feet (0.6 m) of the dehumidifier.

FIGURE 28-1: DO NOT DUCT MORE THAN ONE DEHUMIDIFIER IN SERIES (ALL MODELS)

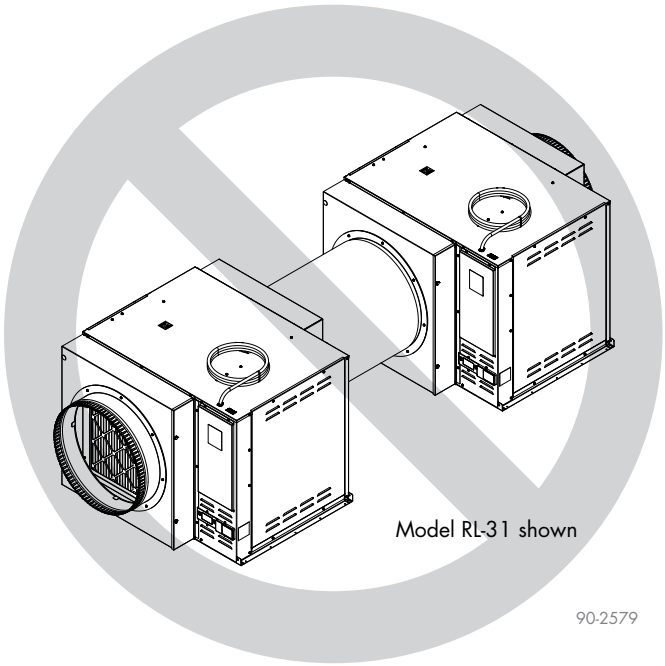
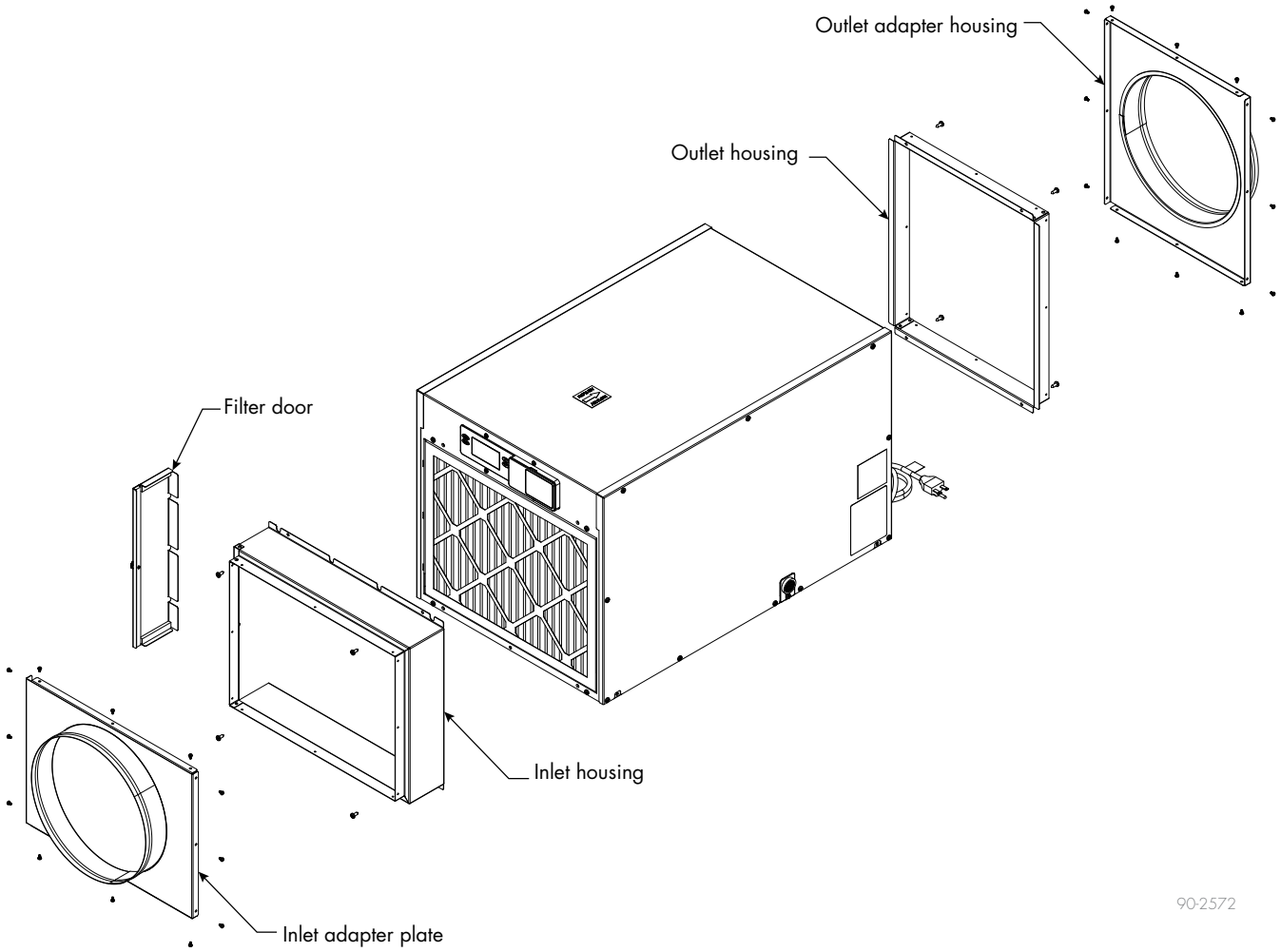


Table 28-2: Duct Sizing and Routing	RL-31	RL-14	RL-9
Inlet/Outlet Round Duct Collar Diameter	24" (610 mm)	18" (457 mm)	12" (305 mm)
Nominal Airflow through Dehumidifier	1760 CFM (2911 m^3/h)	830 CFM (1410 m^3/h)	525 CFM (892 m^3/h)
Minimum Total Open Area when using Registers and Diffusers	452 in^2 (0.3 m^2)	254 in^2 (1642 cm^2)	113 in^2 (730 cm^2)
Distance of Metal Duct Not to Exceed or Distance of Flex Duct Not to Exceed	1000' (305 m) 750' (229 m)	1000' (305 m) 750' (229 m)	400' (122 m) 300' (91 m)

Model RL-9 duct installation



⚠ CAUTION

Sharp edges may cause serious injury from cuts. Use care when cutting plenum openings and handling duct work.

NOTICE

- Failure to follow ducting guidelines may negatively impact unit performance.
- Minimize equivalent duct length to maximize unit capacity and efficiency.

AIRFLOW DELIVERY SPECIFICATIONS

- Nominal airflow through dehumidifier is 525 cfm (892 m^3/h).
- Airflow decreases as duct length and bends increase, therefore if the equivalent duct length is too long the dehumidifier will cease to function properly.

Model RL-9 duct installation

DUCT KIT INSTALLATION

1. Install the round adapter plates onto the inlet and outlet using the #6 (smaller) screws provided. See Figure 30-1.
2. Attach the assembled components to the dehumidifier using the #10 (larger) screws provided. The filter clips must be removed from the inlet side of the dehumidifier, the duct kit will attach using those holes. See Figure 30-2.
3. Install the filter access door and secure with the thumb screws. See Figure 30-3.

FIGURE 30-1: ALIGN TABS

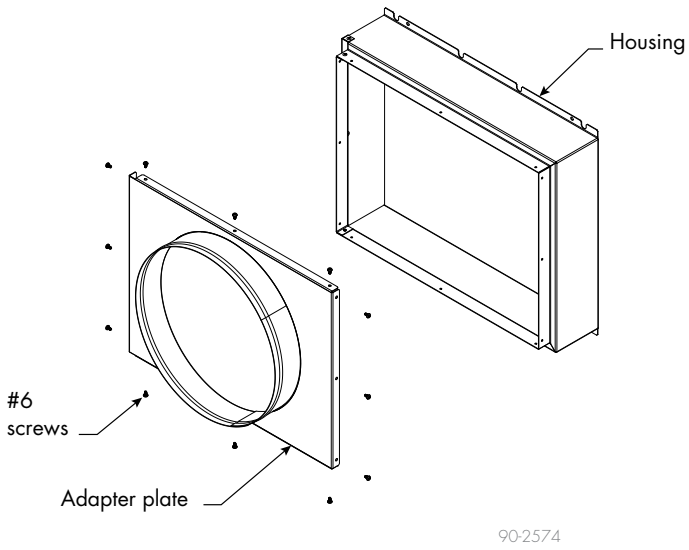


FIGURE 30-2: ATTACH ASSEMBLED DUCT HOUSING

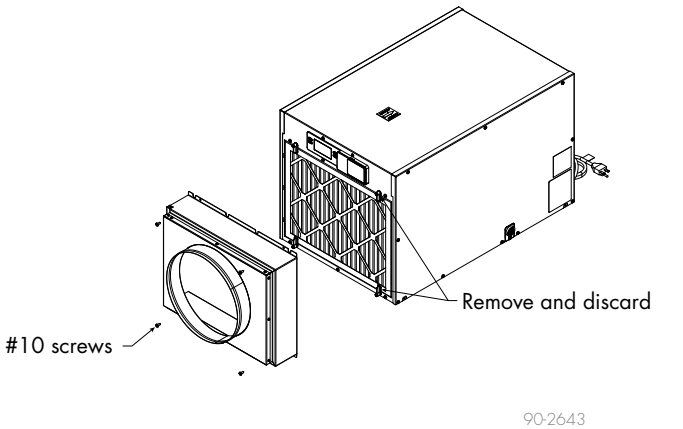
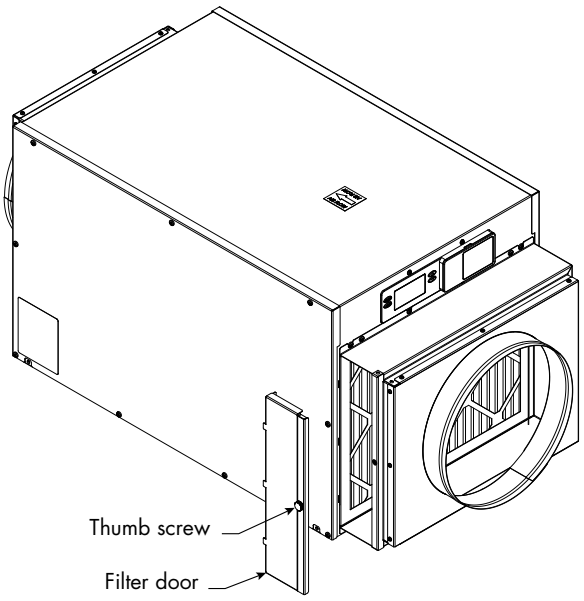


FIGURE 30-3: INSTALL

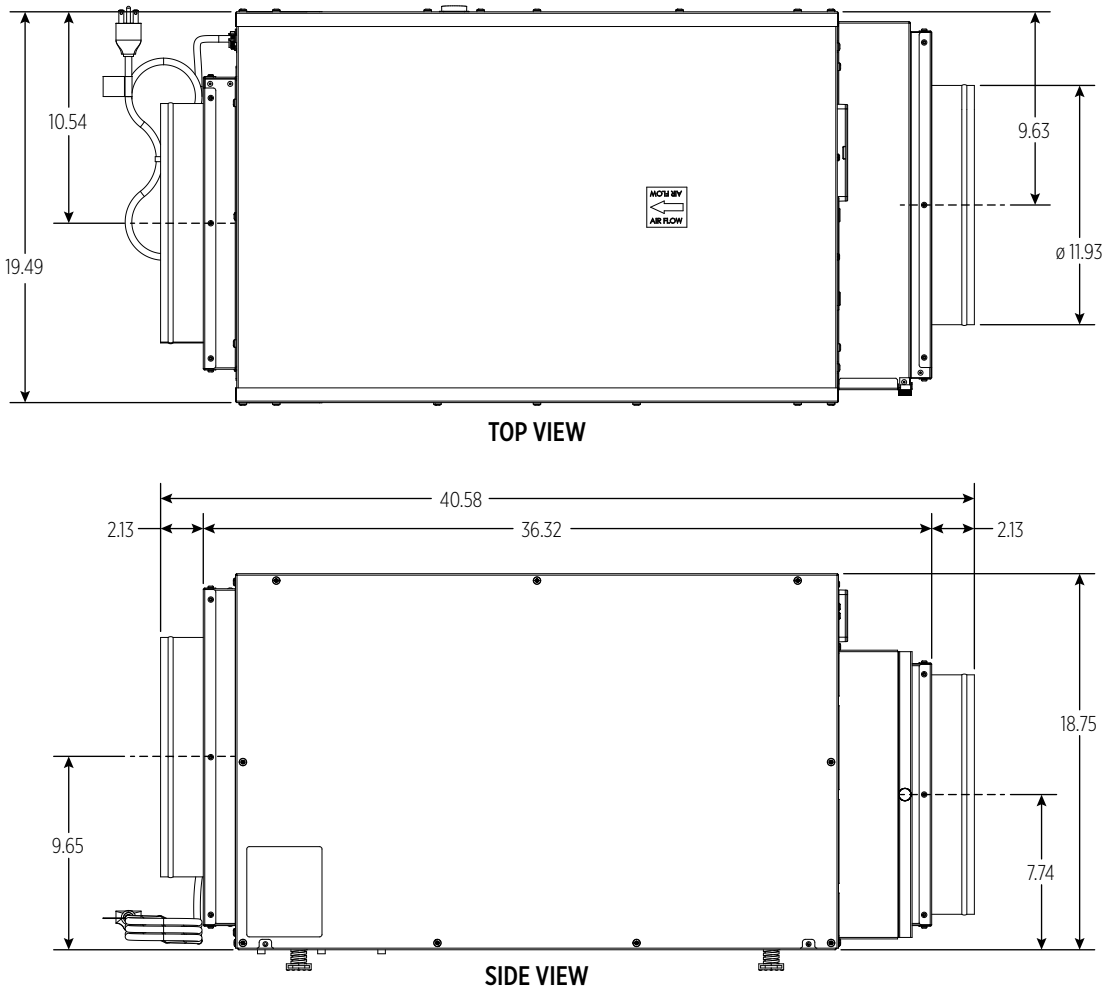


Model RL-9 duct installation

REPLACING THE FILTER

1. Loosen the thumb screws and remove the filter access door.
2. Pull the filter away from the unit, then out through the access opening.
3. Install the new filter in the same direction.
4. Reinstall the filter access door and tighten the thumb screws.

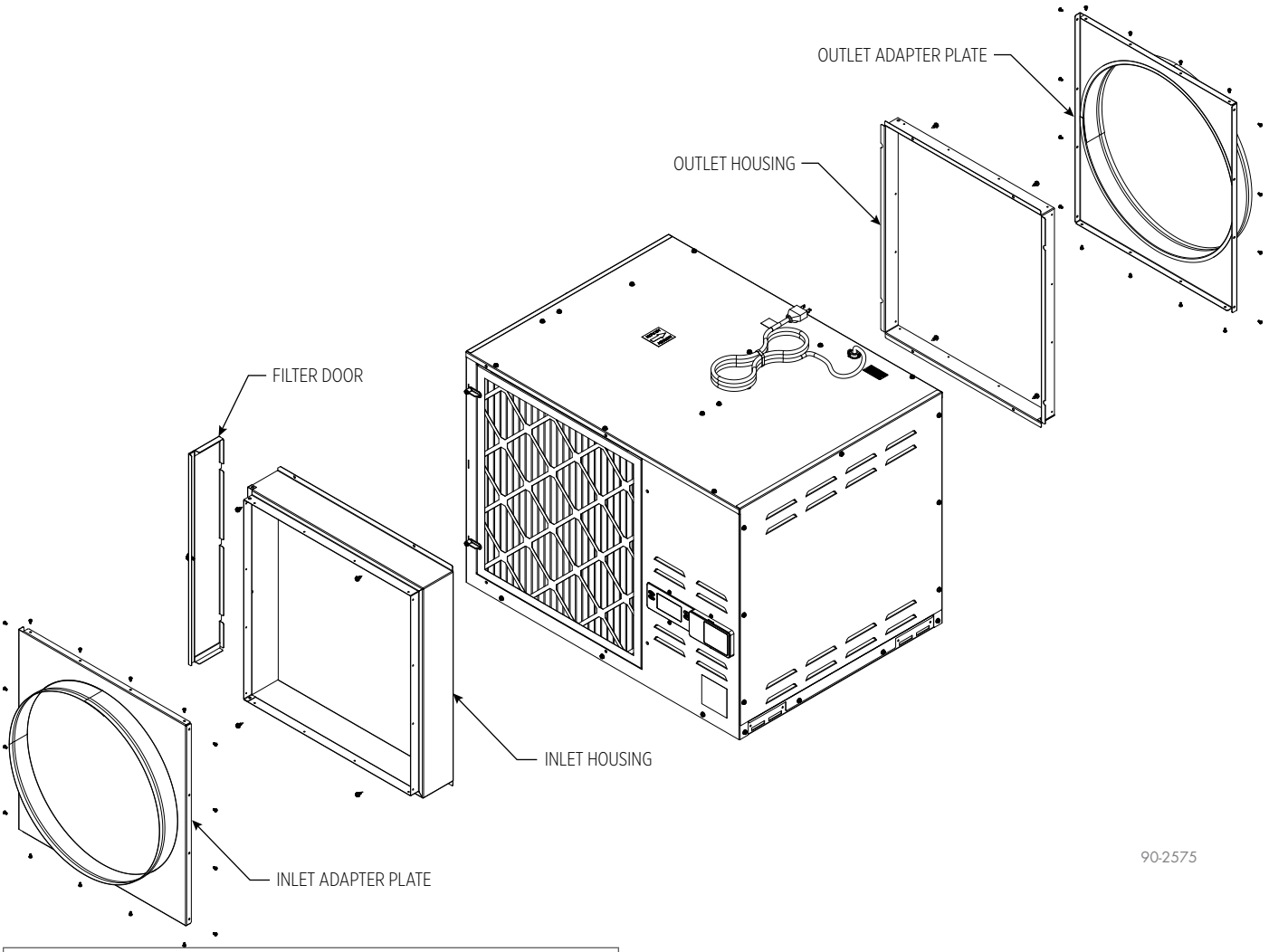
FIGURE 31-1: OVERALL DIMENSIONS WITH DUCT KIT (INCHES)



90-2645

Model RL-14 duct installation

FIGURE 32-1: DUCT ASSEMBLY



⚠ CAUTION

Sharp edges may cause serious injury from cuts. Use care when cutting plenum openings and handling duct work.

NOTICE

- Failure to follow ducting guidelines may negatively impact unit performance.
- Minimize equivalent duct length to maximize unit capacity and efficiency.

AIRFLOW DELIVERY SPECIFICATIONS

- Nominal airflow through dehumidifier is 830 cfm (1410 m^3/h).
- Airflow decreases as duct length and bends increase, therefore if the equivalent duct length is too long the dehumidifier will cease to function properly.

Model RL-14 duct installation

DUCT KIT INSTALLATION

1. Install the round adapter plates onto the inlet and outlet using the #6 (smaller) screws provided. See Figure 33-1.
2. Attach the assembled components to the dehumidifier using the #10 (larger) screws provided. The filter clips must be removed from the inlet side of the dehumidifier, the duct kit will attach using those holes. See Figure 33-2.
3. Install the filter access door and secure with the two thumb screws. See Figure 36-3.

FIGURE 33-1: ALIGN TABS

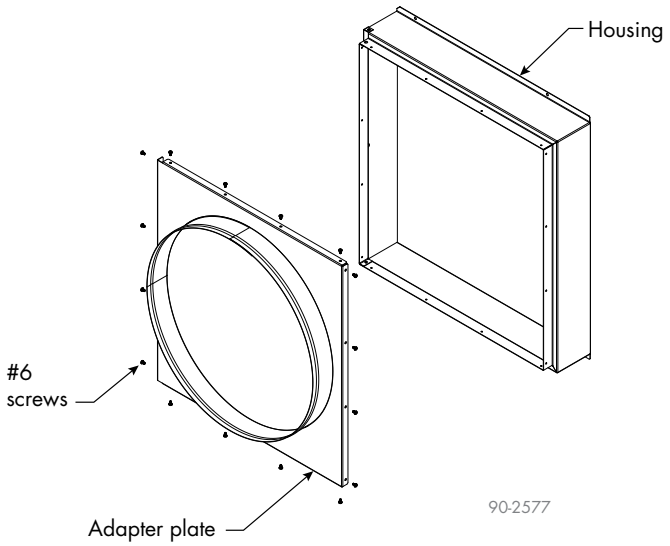


FIGURE 33-2: ATTACH ASSEMBLED DUCT HOUSING

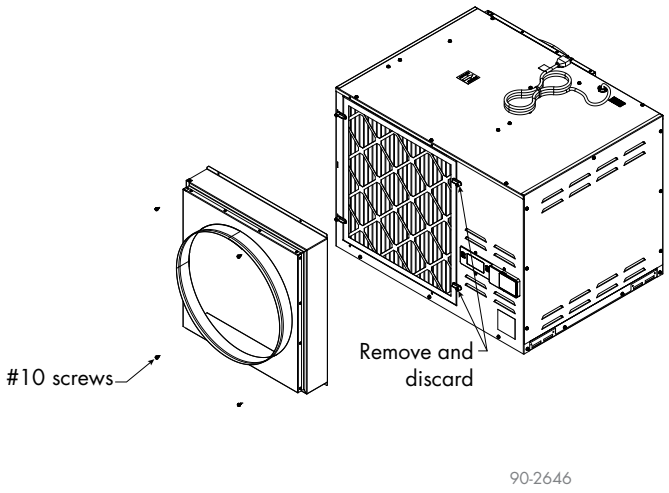
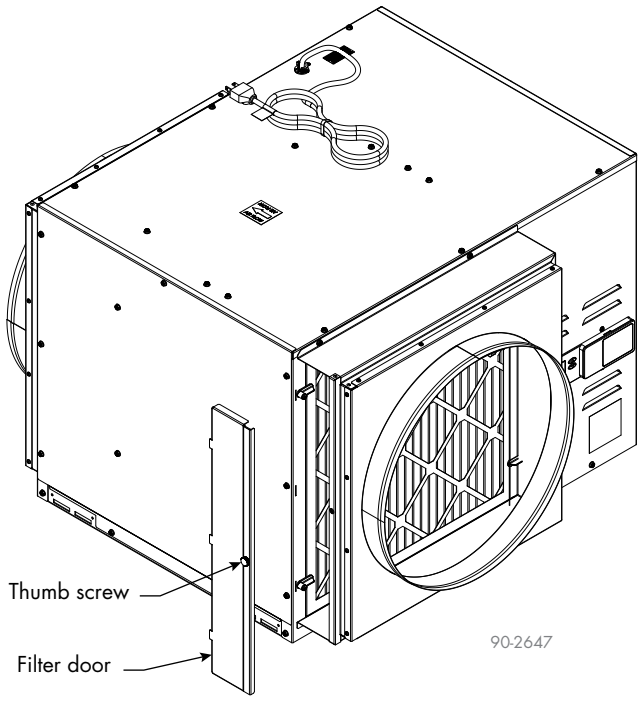


FIGURE 33-3: INSTALL

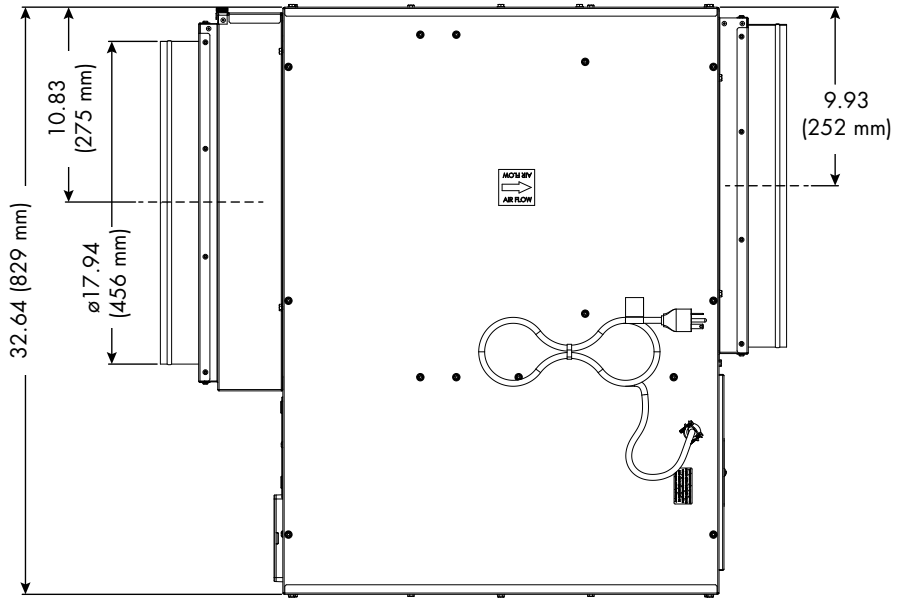


Model RL-14 duct installation

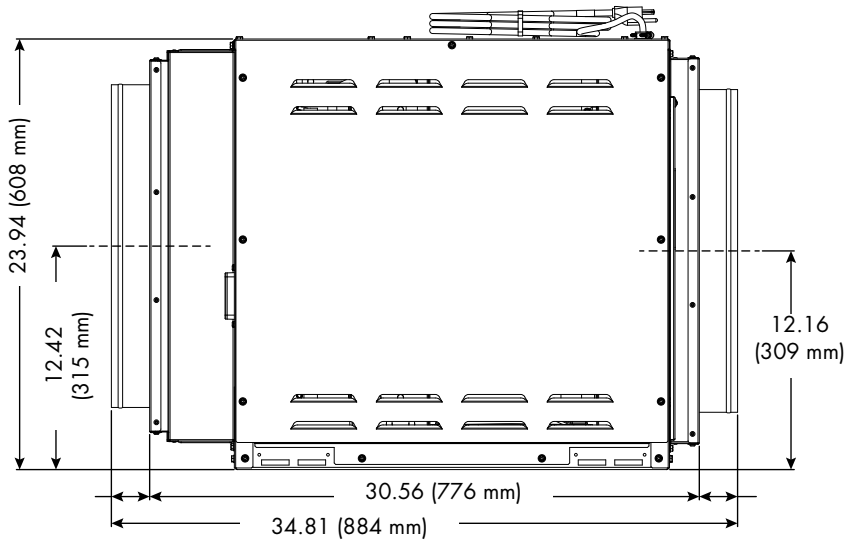
REPLACING THE FILTER

1. Loosen the two thumb screws and remove the filter access door.
2. Pull the filter away from the unit, then out through the access opening.
3. Install the new filter in the same direction.
4. Reinstall the filter access door and tighten the thumb screws.

FIGURE 34-1: OVERALL DIMENSIONS WITH DUCT KIT (INCHES)



TOP

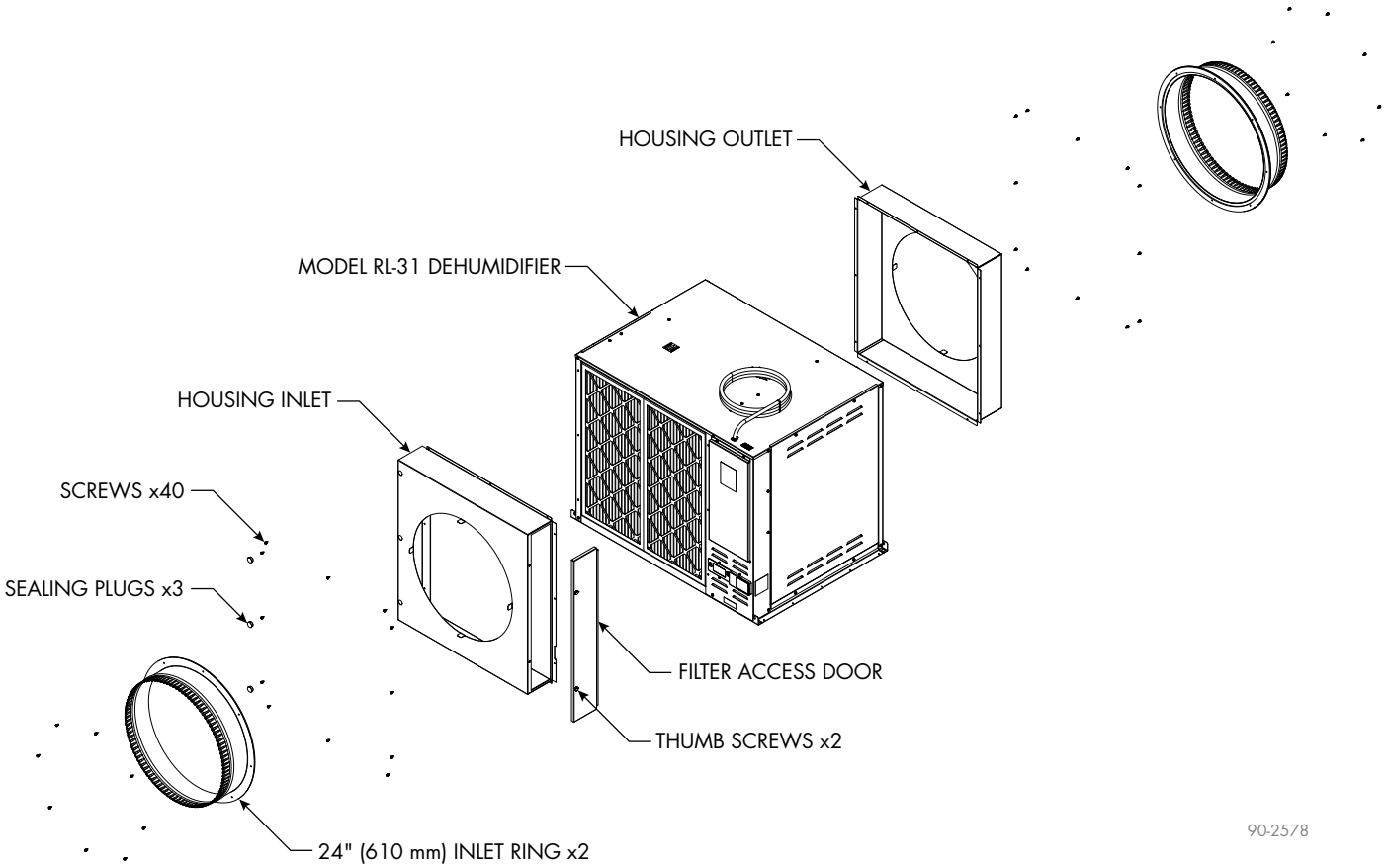


SIDE

90-2648

Model RL-31 duct installation

FIGURE 35-1: MODEL RL-31 DUCT ASSEMBLY



⚠ CAUTION

Sharp edges may cause serious injury from cuts. Use care when cutting plenum openings and handling duct work.

NOTICE

- Failure to follow ducting guidelines may negatively impact unit performance.
- Minimize equivalent duct length to maximize unit capacity and efficiency.

AIRFLOW DELIVERY SPECIFICATIONS

- Nominal airflow through dehumidifier is 1760 cfm (2911 m^3/h).
- Airflow decreases as duct length and bends increase, therefore if the equivalent duct length is too long the dehumidifier will cease to function properly.

Model RL-31 duct installation

DUCT KIT INSTALLATION

1. On each housing, bend the four alignment tabs so they are protruding out of the front as shown. These are to be used as alignment features for the 24" (610 mm) collar. See Figure 36-1.
2. Attach the assembled duct housing to the dehumidifier using screws provided. Additional holes will need to be made in the cabinet where holes did not previously exist. To properly seal the unit, use a 5/32" (4 mm) bit to pre-drill holes and use the screws provided. If you choose to use self drilling screws, make sure they are no longer than 1" (25 mm). To secure the 3 screws on the left side of the duct kit (opposite the filter access door), a bit extension of at least 6" (152 mm) is required. After securing all screws, insert the sealing plugs provided into the access holes on the left hand side. See Figure 36-2.
3. Install the filter access door and secure with the two thumb screws. See Figure 36-3.

FIGURE 36-1: ALIGN TABS

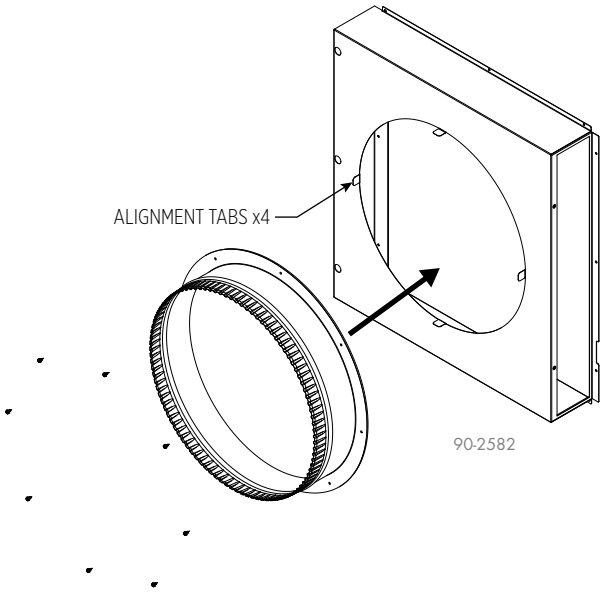


FIGURE 36-2: ATTACH ASSEMBLED DUCT HOUSING

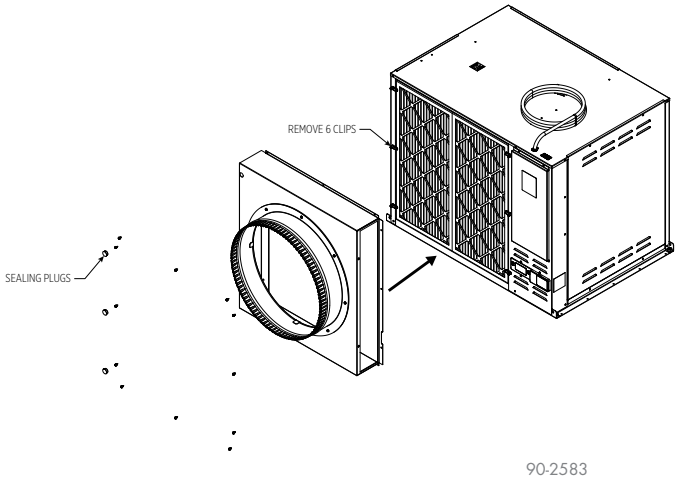
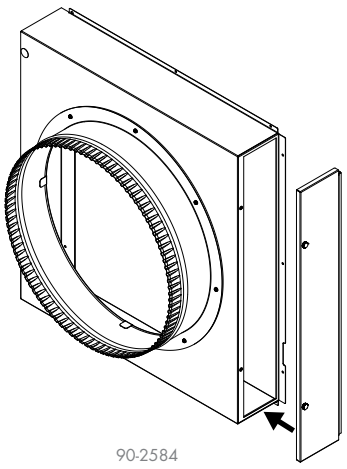


FIGURE 36-3: INSTALL

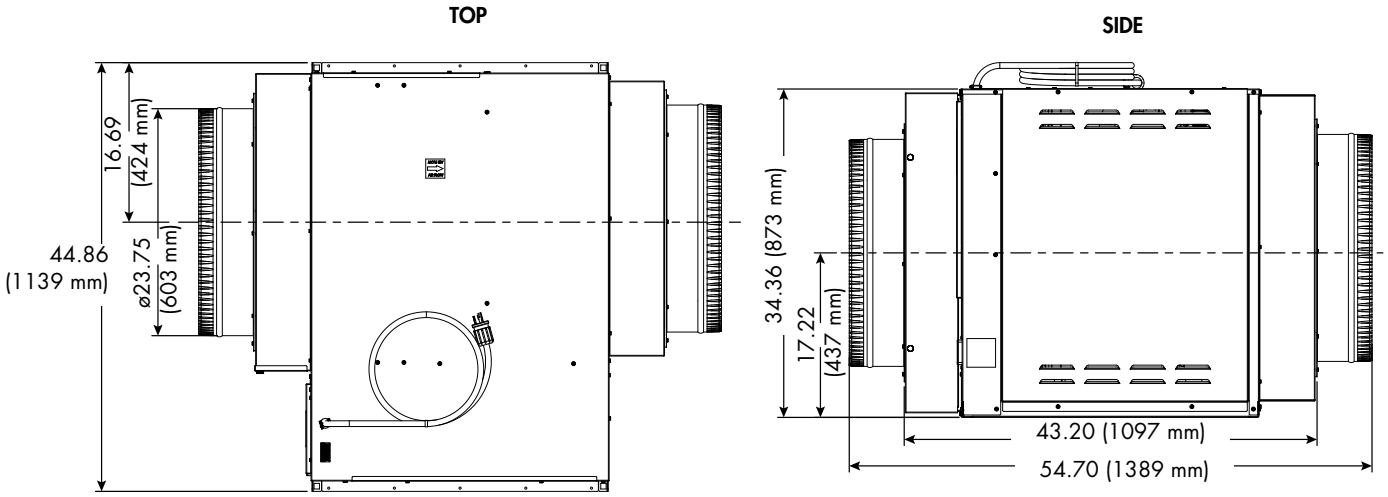


Model RL-31 duct installation

REPLACING THE FILTER

1. Loosen the two thumb screws and remove the filter access door.
2. Pull the filter away from the unit, then out through the access opening.
3. Install the new filter in the same direction.
4. Reinstall the filter access door and tighten the thumb screws.

FIGURE 37-1: MODEL RL-31 OVERALL DIMENSIONS WITH DUCT KIT (INCHES)



90-2580

Hard wire - line voltage (RL-9, RL-14, and RL-31 only)

United States Installation: Make all electrical connections in accordance with the current edition of the NEC ANSI/NFPA 70 and any local codes or ordinances that may apply.

Canada Installation: Make all electrical connections in accordance with the current edition of the Canadian Electrical Code CSA C22.1 and any local codes or ordinances that may apply.

The dehumidifier comes with a power cord that has a plug that can simply be plugged into a corresponding receptacle. The plug can be removed and replaced by hard-wired electrical service if desired. See Table 38 -1 for configuration.

1. Disconnect electrical service at the main fuse or circuit breaker.
2. Run electrical service to where the dehumidifier is to be installed following all required local and national codes and standards.
3. Remove the electrical service panel.
4. Depress the levers of the terminal blocks mounted on the MOV board to disconnect the black and white power cord wires.
5. Remove the screw securing the power cord ground wire to the cabinet.
6. Route the service wires through the opening in the dehumidifier and secure the cable or conduit to the opening in the dehumidifier using fittings/ clamps intended for the conduit/cable used.
7. Insert the black service wire into the L1 terminal and the white service wire into the L2 terminal. Release levers to lock into place.
8. Insert the ground wire (bare or green) of the electrical service into the ground lug and secure it in place by tightening the ground lug screw.
9. Reattach the electrical service panel to the dehumidifier.
10. Restore electrical service at the fuse or circuit breaker.

CAUTION

If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

Table 38-1:
Factory power cord

Model	Voltage	NEMA plug	NEMA receptacle
RL-31	208-240V	L6-30P	L6-30-R
	277V	L7-30P	L7-30R
RL-14	208-240V	6-20P	6-20R
	277V	L7-20P	L7-20R
RL-9	208-240V	6-15P	6-15R

Hard wire - line voltage (RL-9, RL-14, and RL-31 only)

FIGURE 39-1: RL-9 HARD WIRING TO REPLACE THE POWER CORD

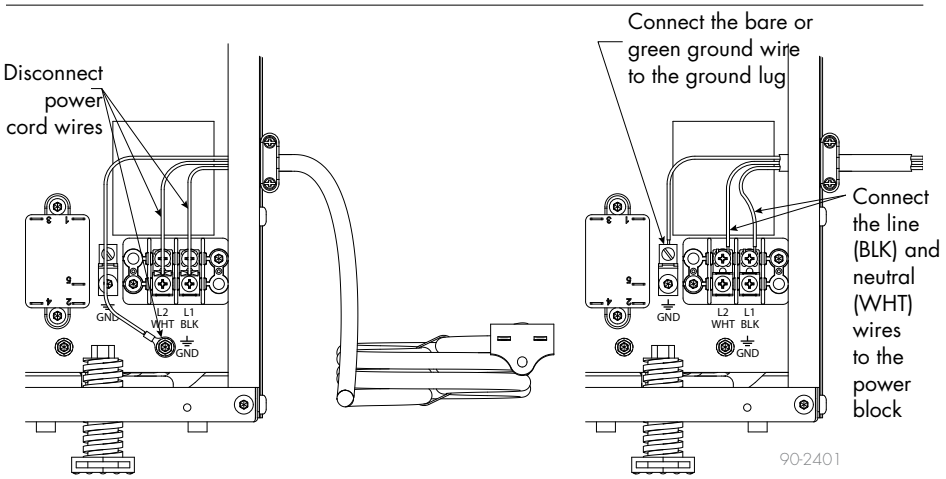


FIGURE 39-2: RL-14 POWER CORD WIRING

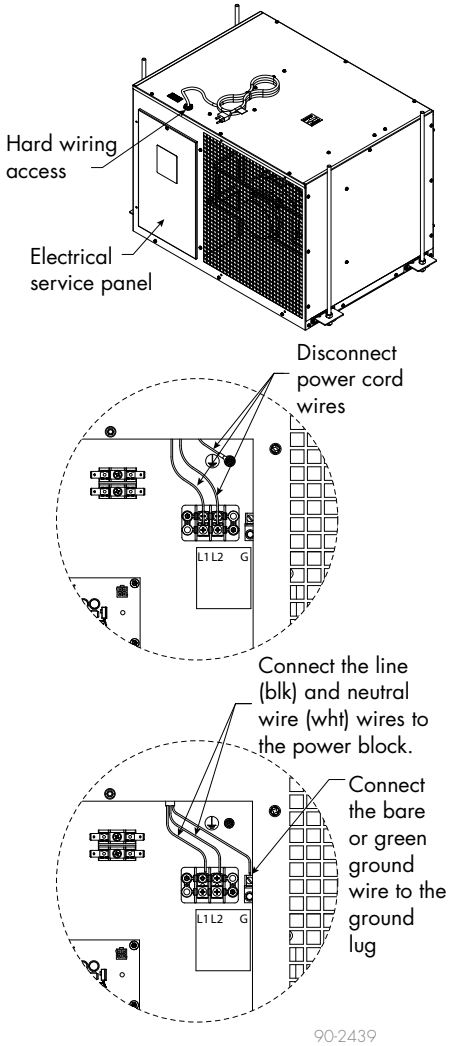
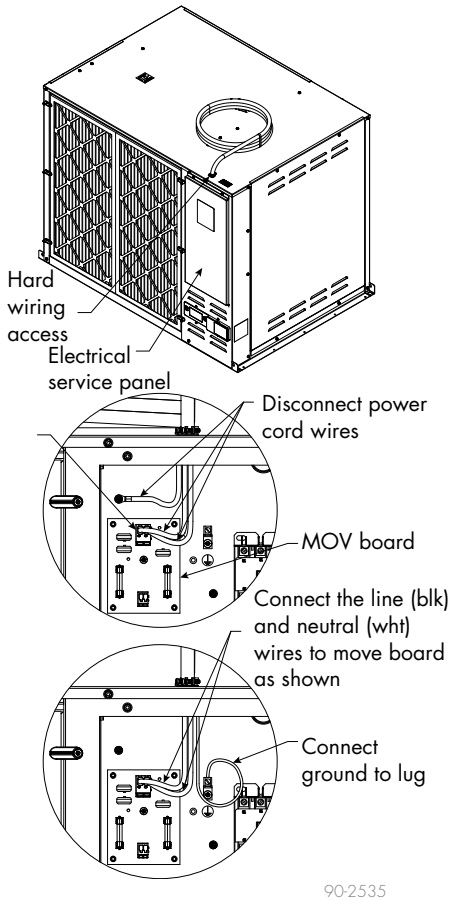


FIGURE 39-3: RL-31 HARD WIRING TO REPLACE THE POWER CORD



System set-up & checkout

INSTALLER TEST MODE

After wiring the power, the dehumidifier and all of the wired components will turn on and off during Installer Test Mode to demonstrate that all are properly operating. Installer Test Mode lasts for four (4) minutes. If the ON/OFF button is pressed during test mode, the dehumidifier will exit Installer Test Mode and return to the OFF screen.

1. If the dehumidifier is not already OFF, press the ON/OFF button to turn it off (see Figure 40-1).
2. Press and hold the ON/OFF button and MODE buttons for 3 seconds. The measured humidity, AIR SAMPLING and TEST will show on the display (see Figure 40-2).
3. After three (3) minutes the dehumidifier compressor will turn on and DEHUMIDIFYING will replace AIR SAMPLING on the control screen (see Figure 40-3).

After one minute of compressor operation, all outputs will turn off and DONE (Figure 40-4) will blink for 3 seconds and then return to the OFF screen (Figure 40-5).

FIGURE 40-1: DISPLAY SCREEN OFF

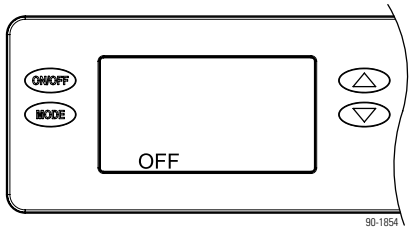


FIGURE 40-2: AIR SAMPLING TEST

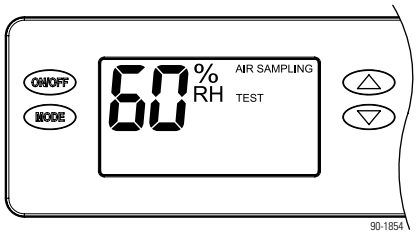


FIGURE 40-3: DEHUMIDIFYING

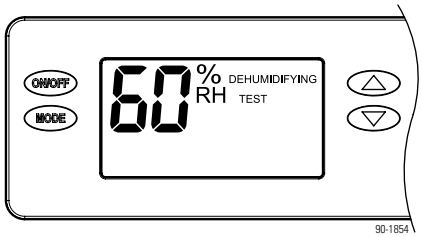


FIGURE 40-4: DISPLAY SCREEN DONE

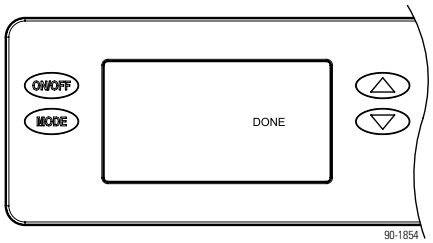
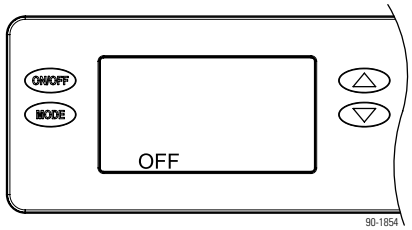


FIGURE 40-5: DISPLAY SCREEN OFF



System set-up & checkout

- A Model D77 or other external control is not going to be installed
- Changing the air sampling rate (see instructions below)
- Changing the RH offset (see instructions below)

1. Check all wiring.
2. Make sure the wire access cover has been snapped back onto the on-board control.
3. Plug unit in and turn power switch to ON.
4. The on-board control screen should display OFF (see Figure 41-1).

NOTE: If the display backlight is not on, the first button press (any button) will only turn on the backlight. Press the button a second time to achieve function.

5. Hold the MODE button on the on-board control for 3 seconds to enter the Installer Set-up Menu.
6. Navigate through the following screens to set up the dehumidifier for the installed application.

   Use the UP or DOWN arrows to select items and use MODE to switch to the next set-up option. To exit installer set-up, all options must be scrolled through using the MODE button.
7. After the installer set up options have been completed, DONE (see Figure 41-2) will blink for 3 seconds and the control will return to the OFF screen (see Figure 41-1).

   If remote control and external control are both disabled (default), the control will be by the on-board controller. Air sampling and RH Offset are MODE options only available with on-board control.

FIGURE 41-1: DISPLAY SCREEN OFF

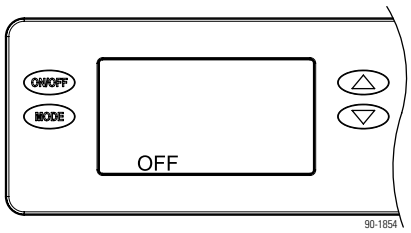


FIGURE 41-2: DISPLAY SCREEN DONE

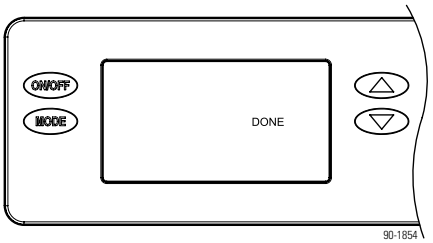


FIGURE 41-3: AIR SAMPLING

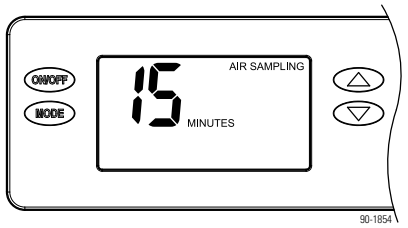
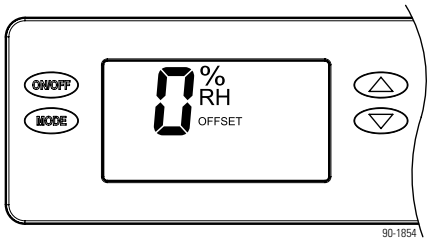


FIGURE 41-4: RH OFFSET



AIR SAMPLING

Use the UP or DOWN button to adjust how frequently the dehumidifier samples the air to determine whether or not to dehumidify. Fewer minutes means the dehumidifier will sample more frequently to minimize humidity swings, but increases cost to operate due to more frequent fan operation. Press MODE when done to move to the next screen (see Figure 41-3).

RH OFFSET

An offset can be applied to the on-board humidity reading to avoid discrepancies with other humidity measuring devices. Use the UP/DOWN arrows to select an offset from -5% to 5%. Press MODE to exit the installer set-up screens (see Figure 41-4).

Wiring and setup of the D77 controller

The Model D77 will measure the relative humidity and turn the dehumidifier on and off to control the humidity level to the desired setting. The humidity setting can be adjusted from the control, while the display allows easy access and monitoring of the humidity level in the space. Shield the Model D77 from direct exposure to HPS or LPS lighting.

NOTE: Use 18-22 AWG wire for control wiring.

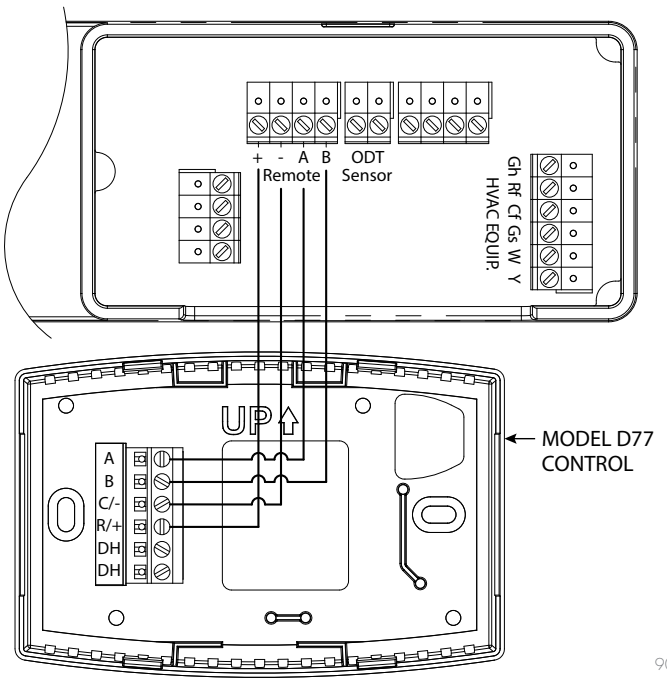
Humidity can be controlled using the internal dehumidifier control, a Model D77 control, or a different external control like a thermostat.

Installing an external control eliminates the need to run the dehumidifier blower for sampling, as the control is constantly measuring the humidity. When the humidity level rises above the setting, the dehumidifier is turned on. With internal control, the sampling rate can be set to 15,30,45, or 60 minutes.

TO INSTALL AND USE THE MODEL D77 CONTROL, COMPLETE ALL STEPS:

1. Unplug the dehumidifier or turn off power to the circuit at the breaker or fuse.
2. Run thermostat cable (use 18-22 AWG wire) from the Model D77 to the control of the dehumidifier.
3. Trim about 1/4" (6 mm) of insulation from the end of the wires on each end. Insert the wire into the terminals as shown in Figure 42-1.
4. Restore dehumidifier power.

FIGURE 42-1: MODEL D77 REMOTE CONTROL WIRING



Wiring and setup of the D77 controller

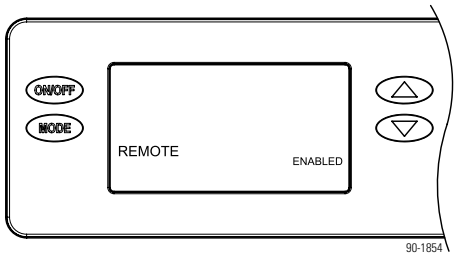
TO SET THE DEHUMIDIFIER TO USE THE MODEL D77 CONTROL, COMPLETE ALL STEPS:

1. With power to the dehumidifier, use the ON/OFF button to set the dehumidifier to the OFF position.

   NOTE: If the display backlight is not on, the first button press (any button) will only turn the backlight on. Press the button a second time to achieve the desired function.

2. Hold the MODE button on the on-board control for three seconds to enter the Installer Set-up Menu.
3. The display should now read REMOTE on the left and DISABLED on the right. Use the UP or DOWN arrow buttons to set this to ENABLED.
4. Once the display reads REMOTE ENABLED, press the MODE button to cycle through the other settings until the display blinks DONE for three seconds.
5. Use the ON/OFF button to turn the dehumidifier ON. The display on your unit should read REMOTE.
6. Locate the Model D77 that you just set up. On the Model D77, press the ON button and use the arrow buttons to set your preferred %RH setpoint. When setting up in REMOTE mode for the first time, your dehumidifier will wait three minutes before starting to dehumidify, regardless of ambient conditions.

FIGURE 43-1: MODEL D77 REMOTE CONTROL WIRING



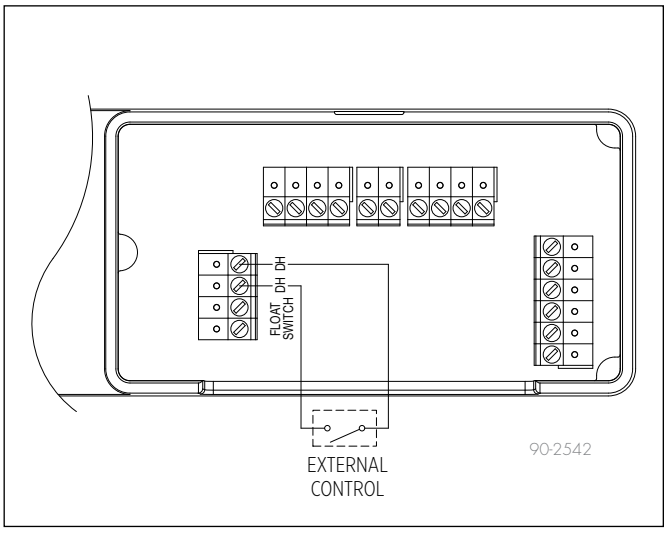
Alternative external control or DriSteem BACnet® humidistat

The DriSteem BACnet humidistat may be used to control the dehumidifier when set up as an external controller. Alternatively, use any other humidity control system as long as it has a dry contact, normally open output dedicated to controlling the dehumidifier. Reference the installation literature provided with the alternative control for wiring, set-up, and operating details.

TO INSTALL AND USE AN EXTERNAL CONTROL, COMPLETE ALL STEPS:

1. Unplug the dehumidifier or turn off power to the circuit at the breaker or fuse.
2. Run thermostat cable (use 18-22 AWG wire) from the alternative external control to the control of the dehumidifier.
3. Trim about 1/4" (6 mm) of insulation from the end of the wires on each end. Insert the wire into the terminals as shown in Figure 44-1.
4. Restore dehumidifier power.

FIGURE 44-1: EXTERNAL CONTROL WIRING

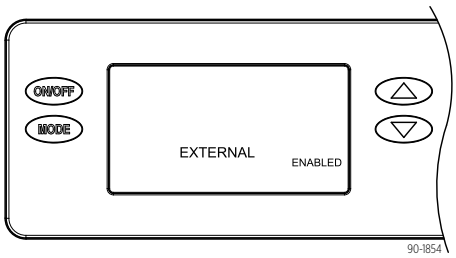


TO SET THE DEHUMIDIFIER TO USE THE ALTERNATIVE CONTROL, COMPLETE ALL STEPS:

1. With power to the dehumidifier, use the ON/OFF button to set the dehumidifier to the OFF position.

   NOTE: If the display backlight is not on, the first button press (any button) will only turn the backlight on. Press the button a second time to achieve the desired function.

2. Hold the MODE button on the on-board control for three seconds to enter the Installer Set-up Menu.
3. Press MODE again and the display should change to EXTERNAL in the center, and DISABLED on the right. Use the UP or DOWN arrow buttons to set this to ENABLED.



4. Once the display reads EXTERNAL ENABLED, press the MODE button to cycle through the other settings until the display blinks DONE for three seconds.
5. Use the ON/OFF button to turn the dehumidifier ON. The display on your unit should read external. Even if there is a demand for dehumidification according to your external control, the dehumidifier will wait three minutes before turning on for the first time only.

Daisy chain wiring

DriSteem dehumidifiers can be wired in a daisy chain application, allowing one Model D77 or alternate dry contact humidistat to control any number of dehumidifiers wired together.

MODEL D77 AS DRIVING CONTROL

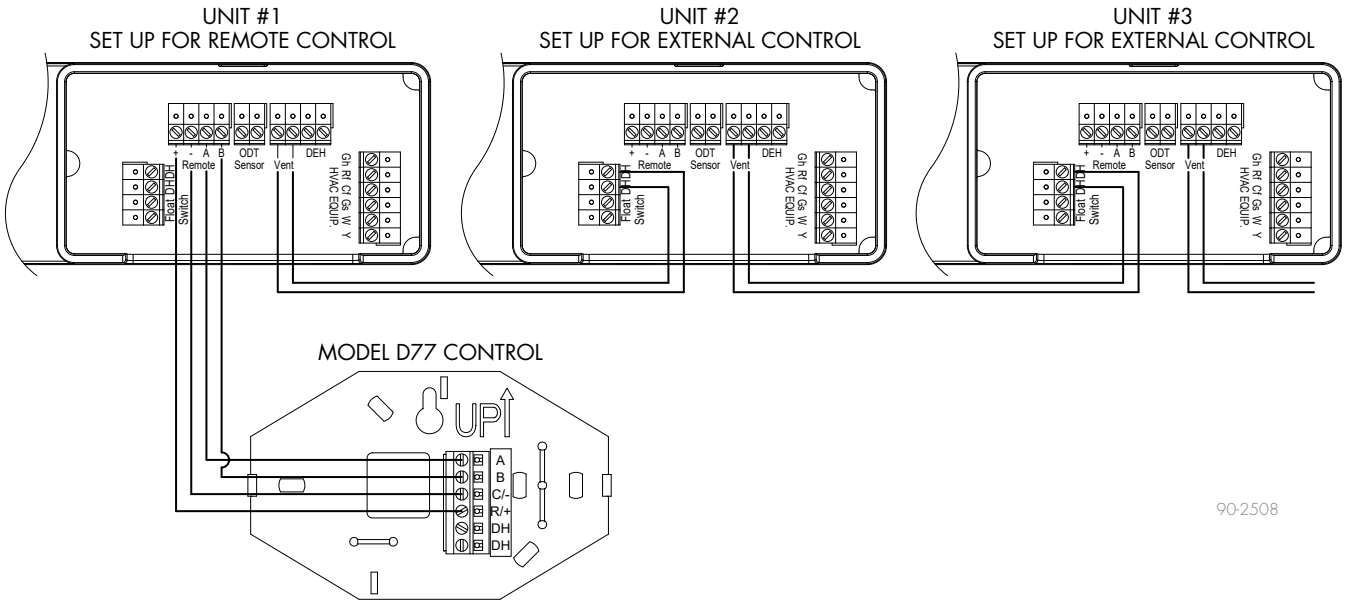
When a Model D77 is used to control the first dehumidifier, Unit #1 must be set to Remote Enabled in the set-up menu. All downstream units must be set up to External Enabled in each set-up menu. See pages 42 through 44 for set up details, and wire as shown in Figure 45-1.

SEQUENCE OF OPERATION

Each unit in the daisy chain responds to the first unit being controlled by the D77. When the humidity level rises above the humidity setting, all units will dehumidify until the humidity measured by the D77 falls below the setting.

IMPORTANT: If the D77 or first dehumidifier experiences a fault or loses power, all downstream dehumidifiers will also stop function. If any dehumidifier in the daisy chain other than Unit #1 experiences a fault, that unit will stop operation as determined by the fault but all other units will continue operating. If any dehumidifier loses power, all downstream units will stop operating.

FIGURE 45-1: WIRING WITH D77 CONTROL



Daisy chain wiring

ALTERNATE EXTERNAL OR DRISTEEM BACNET HUMIDISTAT DRY CONTACT CONTROL AS DRIVING CONTROL

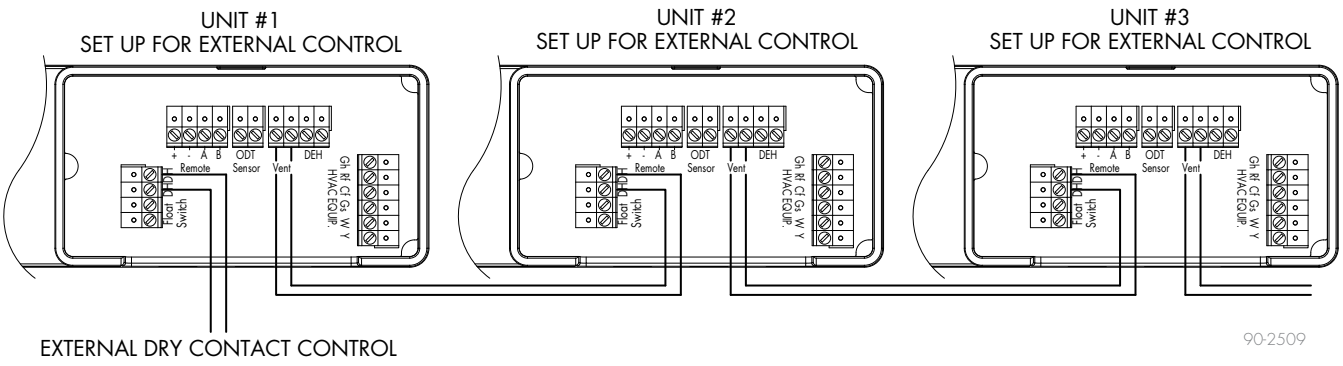
When a dry contact control is used to control the first dehumidifier, Unit #1 must be set to External Enabled in the set-up menu. All downstream units must be set up to External Enabled in each set-up menu. See page 44 for set up details and wire as shown in Figure 46.

SEQUENCE OF OPERATION

Each unit in the daisy chain responds to the first unit being controlled by the external control. When the humidity level rises above the humidity setting, all units will dehumidify until the humidity measured by the external control falls below the setting.

IMPORTANT: If the external control experiences a fault, all downstream dehumidifiers will also stop function. If any dehumidifier experiences a fault, that unit will stop operation as determined by the fault but all other units will continue operating. If any unit loses power, all downstream units will stop function.

FIGURE 46-1: WIRING WITH ALTERNATE EXTERNAL CONTROL



CODES (LOCATED ON BACK OF WIRE ACCESS COVER)

See the Installation Instructions for troubleshooting error codes. For additional assistance, call Technical Support at (800) 328-4447.

Contact Technical Support before replacing the unit or components and for additional troubleshooting.

Table 46-1:
Codes

Error Code	Failure Mode
E1	Internal %RH/Temperature Sensor Failure
E3	Model D77 Remote Control Communication Loss
E4	Insufficient Capacity
E5	High Temperature Thermistor Failure
E6	Low Temperature Thermistor Failure
E7	Float Switch Open
E8	Inlet Air Temperature Out of Range
E9	Fan or Compressor Fault

Maintenance

DRAIN AND DRAIN INSERT INSPECTION

The drain and drain insert should be checked annually to ensure there are no blockages or air lock in the drain system.

Note: The Model RL- 4 drain insert is a critical feature of the dehumidifier drain management system. This component is required for the dehumidifier to run properly. If the drain insert is not installed, you will not be able to reinstall the air filter. The air filter is equipped with a safety mechanism that prevents you from fully inserting the filter without the drain insert installed.

⚠ CAUTION

Do not use spray solvents or cleaners on or near the inlet side of the dehumidifier.
If desired, apply cleaner to a cloth and use to clean the cabinet.

⚠ WARNING

Running the dehumidifier without the drain insert can lead to condensate leaks.

Maintenance

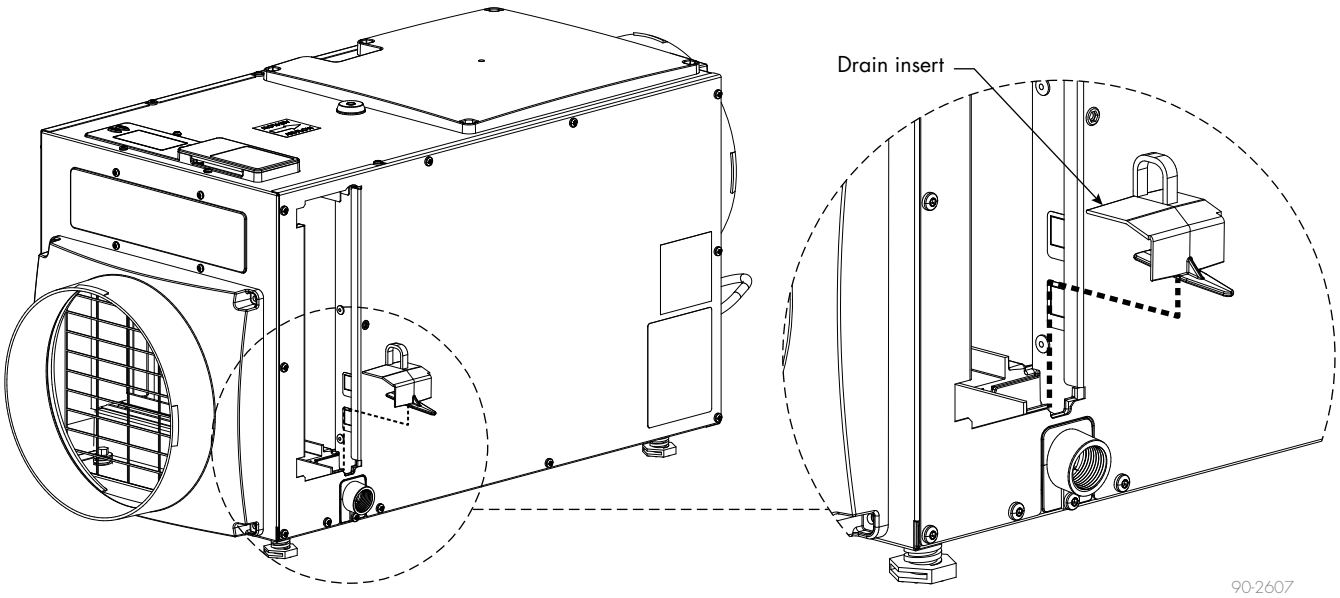
REMOVING THE MODEL RL-4 DRAIN INSERT

1. Turn the ON/OFF switch OFF.
2. Remove the filter access door from the drain side of the dehumidifier.
3. Remove the filter from the dehumidifier to access the drain insert.
4. Locate the drain insert which is located over the drain opening.
5. Remove the drain insert by hooking your finger into the finger loop and gently lifting the cover up and out of the drain pan.
6. Clean the drain insert with warm water and mild detergent solution.

REINSTALLING THE MODEL RL-4 DRAIN INSERT

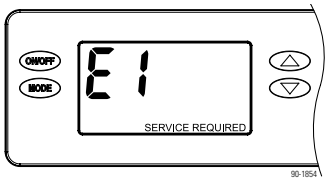
1. Reinstall the drain insert by inserting your forefinger into the finger loop and grasping the outer edge of the finger loop with your thumb.
2. Gently insert the drain insert tip into the drain opening and tilt the cover downwards into place.
3. Ensure the drain insert is seated properly by checking the top surface of the drain cover is the same surface height as the filter guide channel.
4. Turn the ON/OFF switch ON.
5. At the UI control, select the ON/OFF button and switch to ON mode.

FIGURE 48-1: MODEL RL-4 DRAIN INSERT



Troubleshooting

For assistance, call Technical Support at (800) 328-4447. Use the guides on the following pages to identify and correct system faults. Contact Technical Support before replacing the unit or any components and for additional troubleshooting.



DIAGNOSTIC CODES

When an error occurs, the Diagnostic Code along with SERVICE REQUIRED will be displayed on the control screen. If an Alert Light (part # 601176) is used, the light will turn on when an error occurs. The Alert Light output can also be wired to the DriSteem BACnet humidistat so that the BACnet humidistat displays a generic alarm when any error code is active.

Table 49-1:
Diagnostic Codes

Diagnostic Code	Failure Mode	Action	Reset
E1	Internal Humidity or Temperature Sensor Open or Shorted	If connection okay, replace User Interface.	Cycle Power
E3	Model D77 Remote Control Communication Loss	• Check connections between Model D77 and dehumidifier control board. Terminals should be fully inserted and secured in the control board and Model D77 control terminals. • If connections are correct and secure, turn off the dehumidifier and remove the Model D77. Use a short section of 4-wire cable to reconnect the Model D77 to the control board. Turn the dehumidifier back on and decrease the humidity setting below ambient conditions on the Model D77. If the dehumidifier turns on, the problem is with the wiring between the dehumidifier and control. • If the dehumidifier does not turn on, call Technical Support.	Self-Correcting
E4	Insufficient Capacity	• Check the frost sensor connection at the power board. Terminal should be fully seated on the power board pins. • Remove the side access panel and verify that the sensor is secured to the suction line. • If the sensor is connected and secured to the refrigeration line proceed to the next step. • Reset the fault by cycling power to the dehumidifier. • Turn the humidity setting down (below room/home humidity level) to make a dehumidification call. • Allow the fan and compressor to run for approximately 10-15 minutes and then enter diagnostic test mode by simultaneously pressing the UP ARROW and MODE buttons for 3 seconds. The LCD will display the temperature measured by the internal sensor while also displaying AIR SAMPLING and ON, the humidity measured by the internal sensor while also displaying %RH and ON, and the frost sensor temperature while also displaying ON. Scroll through these values by using the UP/DOWN arrow buttons. • Record values and call Technical Support.	Cycle Power

Troubleshooting

Table 50-1:
Diagnostic Codes (continued)

Diagnostic Code	Failure Mode	Action	Reset
E5	High Temperature Thermistor Failure	• Check the high temperature sensor connection at the power board. Terminal should be fully seated on the power board pins. • Remove the side access panel and verify the sensor is not damaged and connected to the refrigeration line coming from the compressor. • If the sensor is connected and secured to the refrigeration line, it may need to be replaced. Contact Technical Support to confirm.	Cycle Power
E6	Low Temperature Thermistor Failure	• Check the low temperature sensor connection at the power board. • Remove the side access panel and verify the sensor is not damaged and connected to the suction line. • Terminal should be fully seated on the power board pins. • If the sensor is connected and secured to the refrigeration line, it may need to be replaced. Contact Technical Support to confirm.	Self-Correcting
E7	Float Switch Open	• Empty the condensate pan. • Check the float switch connection at the control board. • If not using a float switch, verify jumper is between float switch terminals on dehumidifier control board. • If the problem persists, replace the float switch.	Self-Correcting
E8	Inlet Air Temperature Out of 50°F – 104°F (10°C - 40°C) Range or Dew Point Below 36°F (2.2°C) for RL-31 and below 40°F (4.4°C) for all other models.	• Verify all ductwork is properly sealed. • If no signs of leak points, contact Technical Support.	Self-Correcting
E9	Fan or Compressor Fault	• Cycle power. If problem persists, contact Technical Support.	Cycle Power

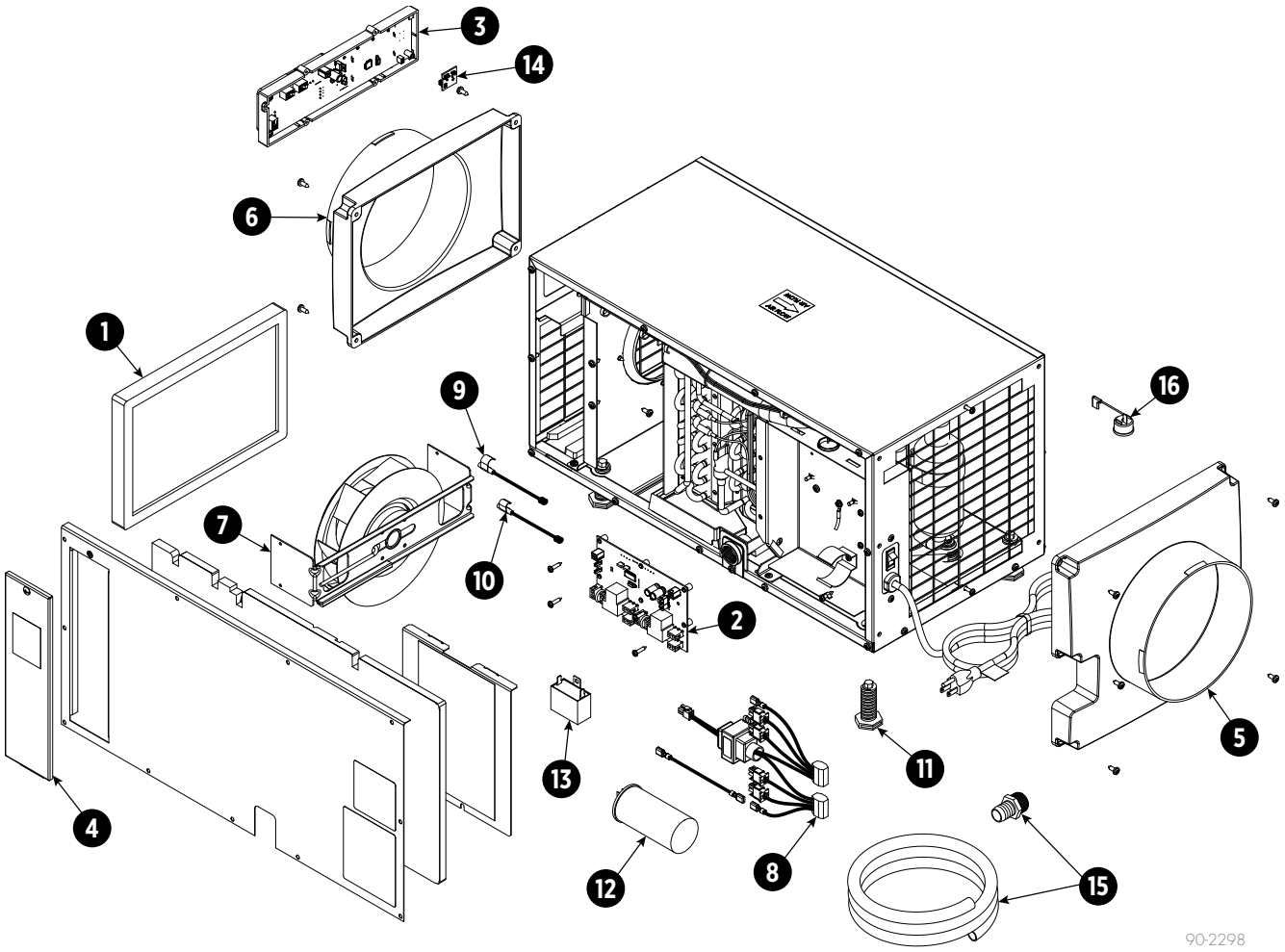
Troubleshooting

Table 51-1:
Troubleshooting

Symptom	Possible Reason	Troubleshooting Procedure
Dehumidifier does not turn on/run.	No power to unit.	• Check that the dehumidifier is plugged in. • Check that the power switch is turned ON. • Check that the control is turned ON. • Check that the circuit breaker has not tripped. • Check demand for dehumidification. Measured humidity must be greater than control setpoint.
Dehumidifier blower is running but with little or no airflow.	Pressure drop across dehumidifier is too high.	• Check dehumidifier air filter and replace if necessary. • Check for blocked duct work and clear.
Dehumidifier blower is running but compressor is not.	Float switch open.	• If float switch installed, check connections at control board and empty condensate pan. • If no float switch installed check that the jumper is installed at the float switch terminals on the control board.
	Coil frosting – defrost.	• Lack of or reduced airflow. Check dehumidifier air filter and replace if necessary. • Check for blocked duct work. • Inlet air conditions below 60°F (15.6°C). Increase the humidity setting.
	Inlet air temperature is outside of the 50°F – 104°F (10°C - 40°C) range or the dew point is below 36°F (2.2°C) and there is a demand for dehumidification.	• Verify all ductwork is properly sealed.
Dehumidifier is not draining properly.	Drain line blocked or unit not level.	• Verify that the unit is level. • Check the drain line blockages and for a continuous downward slope.
Dehumidifier is producing hot air.	Normal function.	• Air is reheated across the condenser coil, resulting in a temperature rise between inlet and outlet, this is normal.

Model RL-3

FIGURE 52-1: RL-3 DEHUMIDIFIER REPLACEMENT PARTS



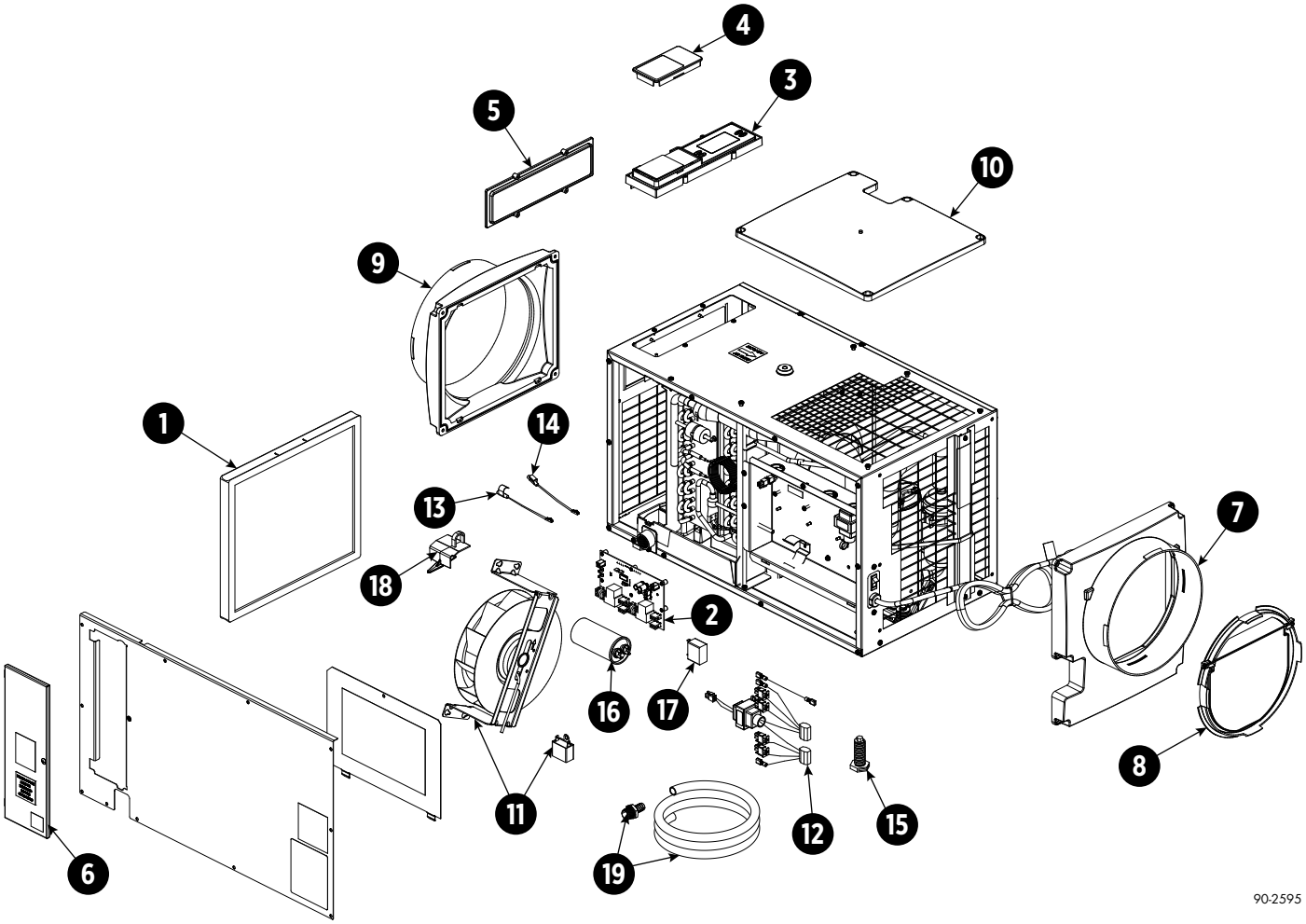
Model RL-3

Table 53-1:
Model RL-3 replacement parts and accessories

Part number	Part Description	Part No.
1	FILTER,MERV 11, RL-3	601250
2	INTERNAL POWER PCB, RL-14	601190
3	USER INTERFACE, RL-14	601197
4	DOOR,FILTER ACCESS,RL-3	601274
5	PANEL,OUTLET DUCT,RL-3	601276
6	PANEL,INLET DUCT,RL-3	601277
7	FAN W. CAP,RL-3	601273
8	WIRE HARNESS,POWER,RL-6-3	601260
9	SENSOR,LO TEMP,RL-9-6-4-3	601261
10	SENSOR,HI TEMP,RL-6-4-3	601262
11	LVL FEET KIT,RL-9-6-4-3	601263
12	CAPACITOR,CMPR RN,RL-14-3	601191
13	CAPACITOR,RL-3	601270
14	DRAIN W. FTG,RL-6-4-3	601272
15	SWITCH,COMPRESSOR OL,RL-3	601275
Not Shown		
D77 DIGITAL DEHUMIDIFIER CNTRL		601171
HUMIDISTAT DEHUM BACNET ROOM KIT		601180
HUMIDISTAT DEHUM BACNET DUCT KIT		601182
ALERT LIGHT, RL		601176
HANGING KIT,RL-4-3		601299
CONDENSATE PUMP KIT,RL		601288

Model RL-4

FIGURE 54-1: RL-4 DEHUMIDIFIER REPLACEMENT PARTS



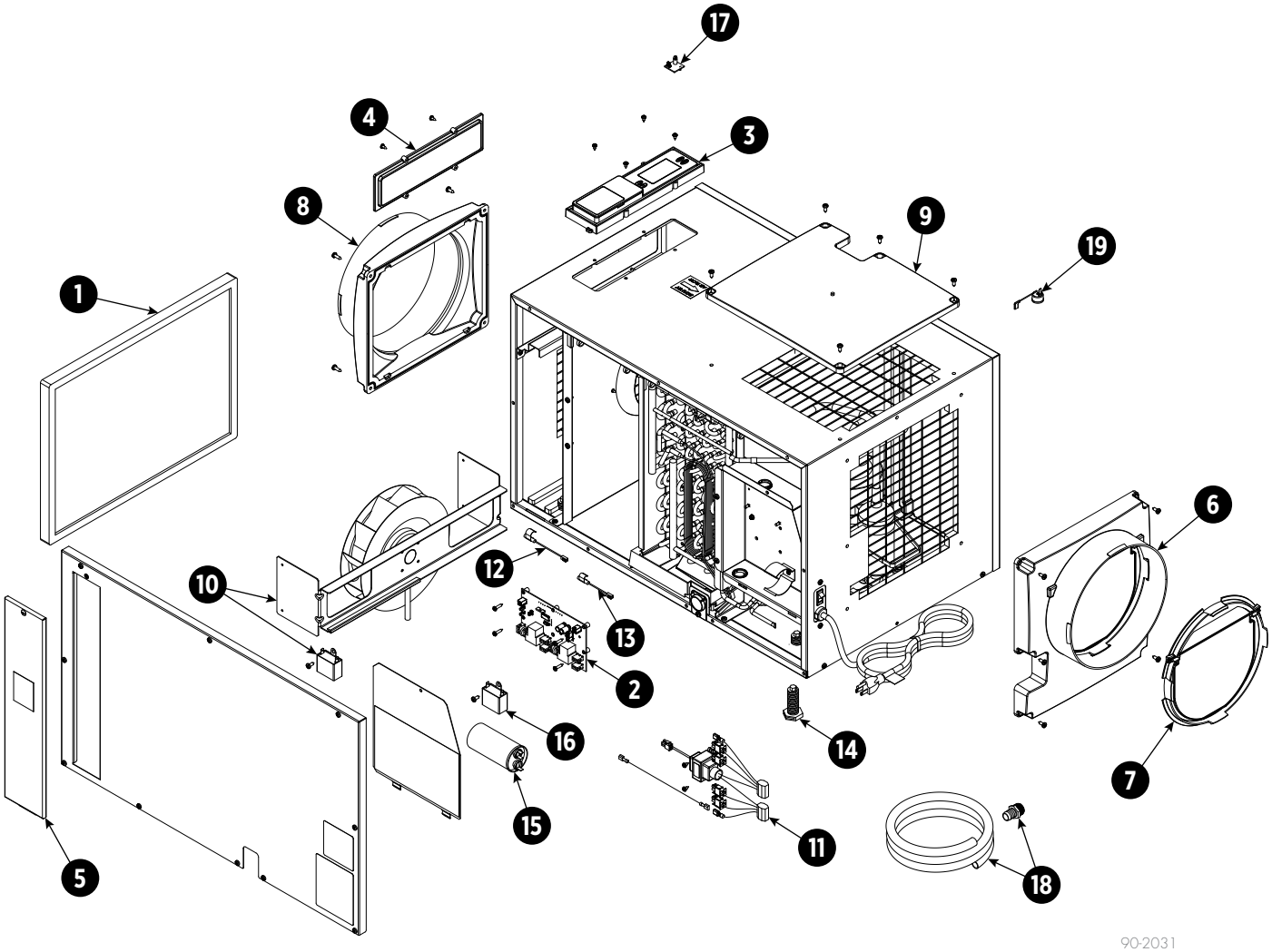
Model RL-4

Table 55-1:
Model RL-4 replacement parts and accessories

Part number	Part Description	Part No.
1	FILTER,MERV 11, RL-4	601253
2	CNTRL,PCB,RL-14-9-6-4-3	601190
3	UI,RL-14-9-6-4-3	601197
4	UI COVER,RL-14-9-6-4-3	601254
5	HOLE COVER,UI CTRL,RL-6-4	601255
6	DOOR,FILTER ACCESS,RL-4	601283
7	OUTLET DUCT PANEL,RL-6-4	601256
8	BACKFLOW DAMPER,RL-6-4	601257
9	INLET DUCT PANEL,RL-6-4	601258
10	COVER,OUTLET,RL-6-4	601259
11	FAN W. CAPACITOR,RL-4	601286
12	WIRE HARNESS,POWER,RL-4	601284
13	SENSOR,LO TEMP,RL-9-6-4-3	601261
14	SENSOR,HI TEMP,RL-6-4-3	601262
15	LVL FEET KIT,RL-9-6-4-3	601263
16	CAPACITOR,RUN,RL-4	601271
17	CAPACITOR,RL-4	601265
18	DRAIN INSERT,RL-4	601285
19	DRAIN W. FTG,RL-6-4-3	601272
Not Shown		
D77 DIGITAL DEHUMIDIFIER CNTRL		601171
HUMIDISTAT DEHUM BACNET ROOM KIT		601180
HUMIDISTAT DEHUM BACNET DUCT KIT		601182
ALERT LIGHT, RL		601176
HANGING KIT,RL-4-3		601299
CONDENSATE PUMP KIT,RL		601288

Model RL-6

FIGURE 56-1: RL-6 DEHUMIDIFIER REPLACEMENT PARTS



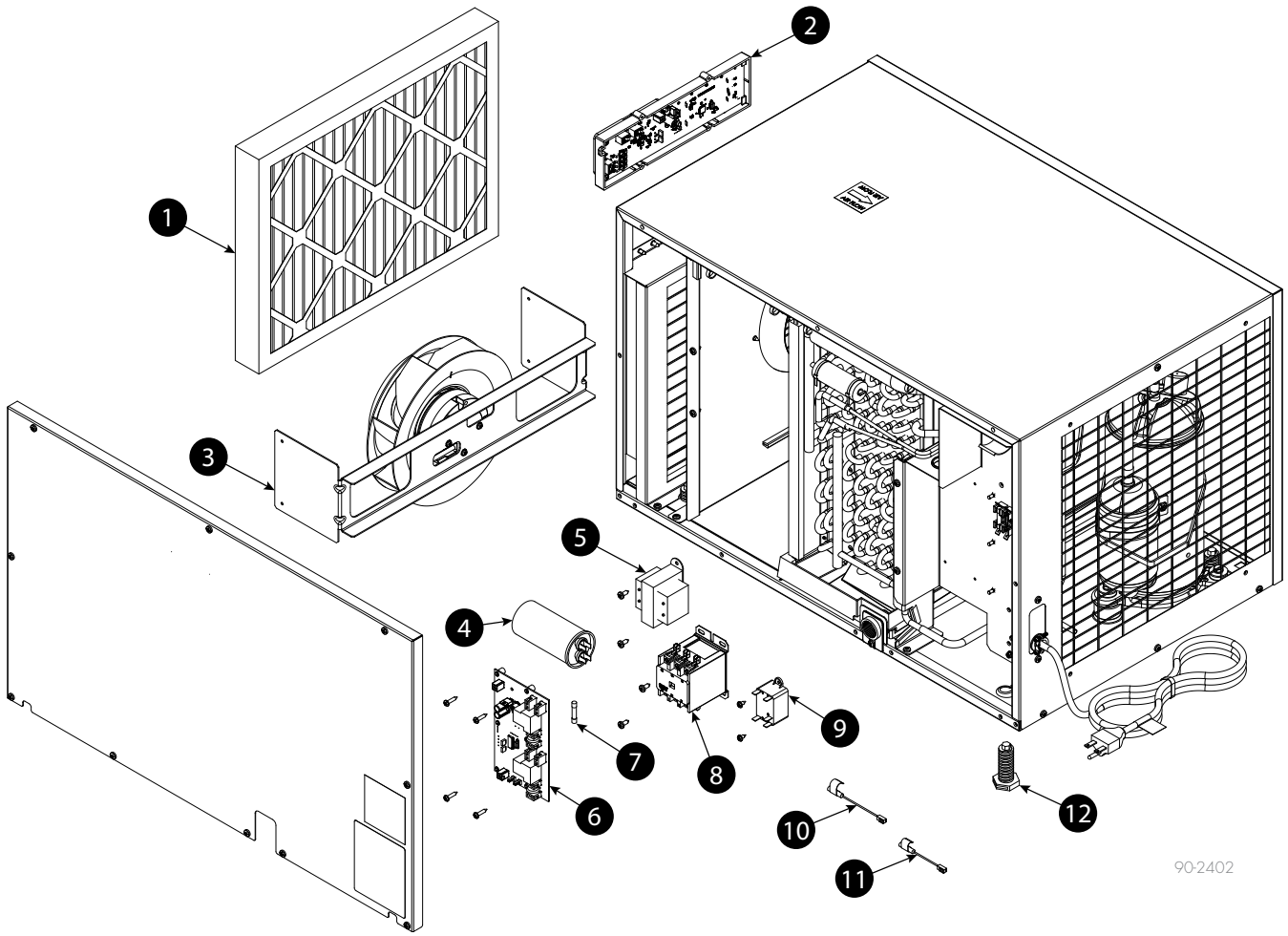
Model RL-6

Table 57-1:
Model RL-6 replacement parts and accessories

Part number	Part Description	Part No.
1	FILTER,MERV 11,RL-6	601249
2	CNTRL,PCB,RL-14-9-6-4-3	601190
3	UI,RL-14-9-6-4-3	601197
4	HOLE COVER,UI CTRL,RL-6-4	601255
5	DOOR, FILTER ACCESS,RL-6	601266
6	OUTLET DUCT PANEL,RL-6-4	601256
7	BACKFLOW DAMPER,RL-6-4	601257
8	INLET DUCT PANEL,RL-6-4	601258
9	COVER,OUTLET,RL-6-4	601259
10	FAN,W. CAPACITOR,RL-6	601267
11	WIRE HARNESS,POWER,RL-6-3	601260
12	SENSOR,LO TEMP,RL-9-6-4-3	601261
13	SENSOR,HI TEMP,RL-6-4-3	601262
14	LVL FEET KIT,RL-9-6-4-3	601263
15	CAPACITOR,CMPRSSR,RL-6	601287
16	CAPACITOR,RL-6	601268
17	DRAIN W. FTG,RL-6-4-3	601272
18	SWITCH,CMPRSSR OL,RL-6	601269
Not Shown		
D77 DIGITAL DEHUMIDIFIER CNTRL		601171
HUMIDISTAT DEHUM BACNET ROOM KIT		601180
HUMIDISTAT DEHUM BACNET DUCT KIT		601182
ALERT LIGHT, RL		601176
HANGING KIT,RL-6		601300
CONDENSATE PUMP KIT,RL		601288

Model RL-9

FIGURE 58-1: RL-9 DEHUMIDIFIER REPLACEMENT PARTS



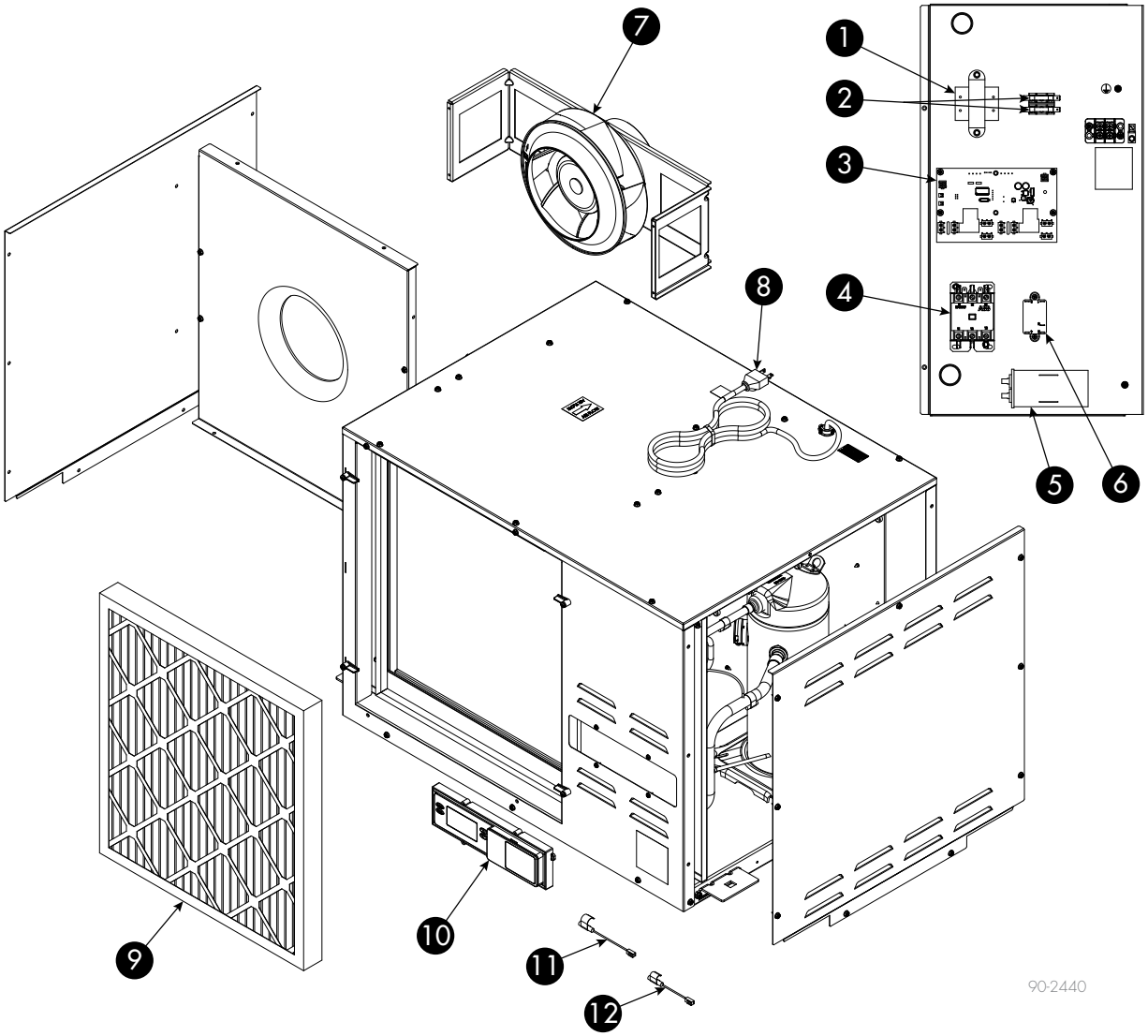
Model RL-9

Table 59-1:
Model RL-9 replacement parts and accessories

Part number	Part Description	Part No.
1	FILTER,MERV 11,RL-9	601251
2	UI,RL-14-9-6-4-3	601197
3	FAN WITH MTG BRKT,RL-9	601278
4	CAPACITOR,CMPRSSR RN,RL-9	601279
5	TRANSFORMER,RL-31-14-9	601156-001
6	CNTRL,PCB,RL-14-9-6-4-3	601190
7	FUSE,1A,SLOW-BLOW,RL-14-9	601189
8	CONTACTOR,CMPR,RL-31-14-9	601159
9	FAN RELAY,RL-31-14-9	601160
10	SENSOR,LO TEMP,RL-9-6-4-3	601261
11	SENSOR,HI TEMP,RL-9	601280
12	LVL FEET KIT,RL-9-6-4-3	601263
Not Shown		
D77 DIGITAL DEHUMIDIFIER CNTRL		601171
HUMIDISTAT DEHUM BACNET ROOM KIT		601180
HUMIDISTAT DEHUM BACNET DUCT KIT		601182
P-TRAP KIT, RL-31,RL-14		601172
PARTS BAG,RL-9		601282
TUBING,DRAIN,RL-31-14-9		601174
DUCT KIT, RL-9		601252
ALERT LIGHT, RL		601176
HANGING BRACKET KIT, RL-9		601281
CONDENSATE PUMP KIT,RL		601288

Model RL-14

FIGURE 60-1: RL-14 DEHUMIDIFIER REPLACEMENT PARTS



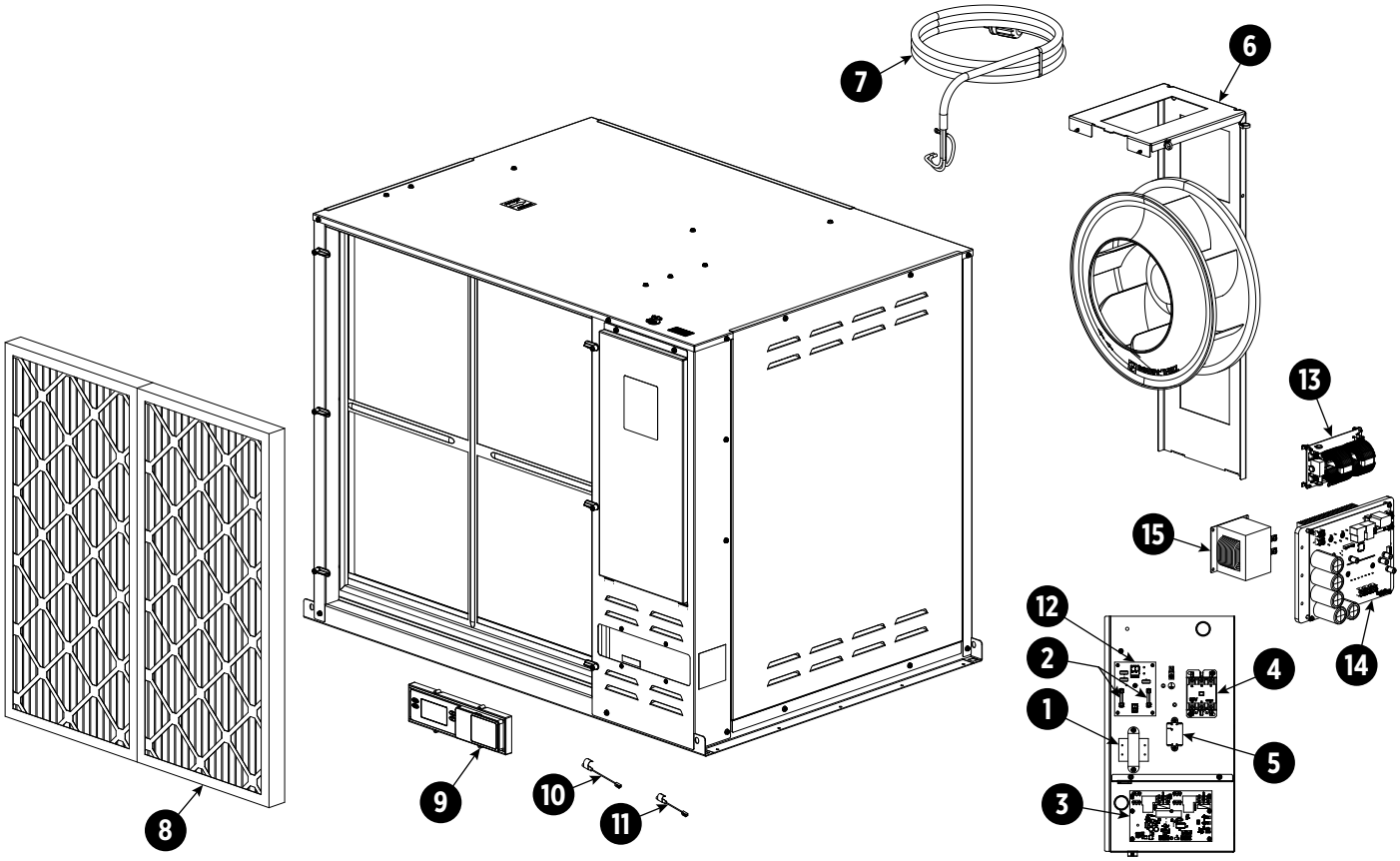
Model RL-14

Table 61-1:
Model RL-14 replacement parts and accessories

Part number	Part Description	Part No.
1	TRANSFORMER,RL-31-14-9	601156-001
	TRANSFORMER,40VA,RL,277	601156-002
2	FUSE,1A,SLOW-BLOW,RL-14-9	601189
3	CNTRL,PCB,RL-14-9-6-4-3	601190
4	CONTACTOR,CMPR,RL-31-14-9	601159
5	CAPACITOR,CMPR RN,RL-14-3	601191
	COMPRESSOR RUN CAP,RL-14,277	601192
6	FAN RELAY,RL-31-14-9	601160
7	FAN ASSEMBLY, RL-14	601193
8	CORD,SJT 12/3,6-20P,RL-14,208-240	601194
	CORD,SJT 12/3,L7-20P,RL-14,277	601195
9	FILTER, MERV 11, RL-14, QTY 6	601196
10	UI,RL-14-9-6-4-3	601197
11	SENSOR, HIGH TEMP, RL-14	601202
12	SENSOR, LOW TEMP, RL-14	601203
Not Shown		
D77 DIGITAL DEHUMIDIFIER CNTRL		601171
HUMIDISTAT DEHUM BACNET ROOM KIT		601180
HUMIDISTAT DEHUM BACNET DUCT KIT		601182
P-TRAP KIT, RL-31,RL-14		601172
FTG,3/4"MNPT X 3/4"BARB,PVC,RL		601173
TUBING,DRAIN,RL-31-14-9		601174
DUCT KIT, RL-14		601198
LEVELING FEET, RL		601175
ALERT LIGHT, RL		601176
HANGING BRACKET KIT, RL-14		601199
CONDENSATE PUMP KIT,RL		601288

Model RL-31

FIGURE 62-1: RL-31 DEHUMIDIFIER REPLACEMENT PARTS



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Model RL-31

Table 63-1:
Model RL-31 replacement parts and accessories

Part number	Part Description	Part No.
1	TRANSFORMER,RL-31-14-9	601156-001
	TRANSFORMER,40VA,RL,277	601156-002
2	FUSE,3AB,.4A 440V SLWBLW,RL-31	601157
3	INTERNAL POWER PCB, RL-31	601158
4	CONTACTOR,CMPR,RL-31-14-9	601159
5	FAN RELAY,RL-31-14-9	601160
6	FAN ASSEMBLY, RL-31	601161
7	CORD,SJT 10/3,L6-30P,RL-31,208-240	601162-001
	CORD,SJT 10/3,L7-30P,RL-31,277	601162-002
8	FILTER, MERV 11, RL-31 (QTY 6)	601163
9	USER INTERFACE, RL-31	601164
10	SENSOR, LOW TEMP, RL-31	601165
11	SENSOR, HIGH TEMP, RL-31	601166
12	MOV BOARD, RL-31, 204-240	601167-001
	MOV BOARD, RL-31, 277	601167-002
13	EMI FILTER BOARD,RL-31,208-240	601168-001
	EMI FILTER BOARD, RL-31,277	601168-002
14	COMP DRIVE BRD, RL-31,208-240	601169-001
	COMP DRIVE BRD, RL-31,277	601169-002
15	CHOKE-COMPRESSOR DRIVE, RL-31	601170
Not Shown		
D77 DIGITAL DEHUMIDIFIER CNTRL		601171
HUMIDISTAT DEHUM BACNET ROOM KIT		601180
HUMIDISTAT DEHUM BACNET DUCT KIT		601182
P-TRAP KIT, RL-31,RL-14		601172
FTG,3/4"MNPT X 3/4"BARB,PVC,RL		601173
TUBING,DRAIN,RL-31-14-9		601174
LEVELING FEET, RL		601175
ALERT LIGHT, RL		601176
DUCT KIT, RL-31		601177
CONDENSATE PUMP KIT,RL		601288

Expect quality from the industry leader

Since 1965, DriSteem has been leading the industry with creative and reliable humidification solutions. Our focus on quality is evident in the superior construction of DriSteem products. DriSteem also leads the industry with a Two-year Limited Warranty and optional extended warranty.

For more information
www.dristeem.com
sales@dristeem.com

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Eden Prairie, MN 55344
800-328-4447 or 952-949-2415
952-229-3200 (fax)

Continuous product improvement is a policy of DriSteem Corporation; therefore, product features and specifications are subject to change without notice.

Two-year Limited Warranty

Two-year Limited Warranty

DriSteem Corporation ("DriSteem") warrants to the original user that its products will be free from defects in materials and workmanship for a period of two (2) years after installation or twenty-seven (27) months from the date DriSteem ships such product, whichever date is the earlier.

If any DriSteem product is found to be defective in material or workmanship during the applicable warranty period, DriSteem's entire liability, and the purchaser's sole and exclusive remedy, shall be the repair or replacement of the defective product, or the refund of the purchase price, at DriSteem's election. DriSteem shall not be liable for any costs or expenses, whether direct or indirect, associated with the installation, removal or reinstallation of any defective product. The Limited Warranty does not include consumables, including but not limited to: cylinders, filters, membranes, nozzles, and piezoelectric transducer replacement.

DriSteem's Limited Warranty shall not be effective or actionable unless there is compliance with all installation and operating instructions furnished by DriSteem, or if the products have been modified or altered without the written consent of DriSteem, or if such products have been subject to accident, misuse, mishandling, tampering, negligence or improper maintenance. Any warranty claim must be submitted to DriSteem in writing within the stated warranty period. Defective parts may be required to be returned to DriSteem.

DriSteem's Limited Warranty is made in lieu of, and DriSteem disclaims all other warranties, whether express or implied, including but not limited to any IMPLIED WARRANTY OF MERCHANTABILITY, ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, any implied warranty arising out of a course of dealing or of performance, custom or usage of trade.

DRI-STEEM SHALL NOT, UNDER ANY CIRCUMSTANCES BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS, REVENUE OR BUSINESS) OR DAMAGE OR INJURY TO PERSONS OR PROPERTY IN ANY WAY RELATED TO THE MANUFACTURE OR THE USE OF ITS PRODUCTS. The exclusion applies regardless of whether such damages are sought based on breach of warranty, breach of contract, negligence, strict liability in tort, or any other legal theory, even if DriSteem has notice of the possibility of such damages.

By purchasing DriSteem's products, the purchaser agrees to the terms and conditions of this Limited Warranty.

Extended warranty

The original user may extend the term of the DriSteem Limited Warranty for a limited number of months past the initial applicable warranty period and term provided in the first paragraph of this Limited Warranty. All the terms and conditions of the Limited Warranty during the initial applicable warranty period and term shall apply during any extended term. An extended warranty term of an additional twelve (12) months, twenty four (24) months, or thirty-six (36) months[1] of coverage may be purchased. The extended warranty term may be purchased until eighteen (18) months after the product is shipped, after which time no extended warranties are available.

Any extension of the Limited Warranty under this program must be in writing, signed by DriSteem, and paid for in full by the purchaser.

[1] 36 month extended warranty automatically included for all DriSteem Dehumidifiers.

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