

CDS DEHUMIDIFIER

Commercial Dehumidifier System



RL Series:

- *Variable-speed*
- *Energy efficient*
- *Powerful circulation helps remove moisture from the air efficiently*
- *Flexible Installation*
- *Comprehensive control with a BACnet humidistat or the D77 controller*

SUSTAINED QUALITY AND DEPENDABILITY

RL SERIES DEHUMIDIFIERS

The DriSteem dehumidifiers are designed to dehumidify the air coming into the unit by passing the incoming air over an evaporator coil to drop the air temperature below the dew point of the air. Moisture is removed from the air and drained out of the unit to a common floor or waste drain. The air is then reheated in the condenser coil and exits the unit. Dehumidification occurs until the set point is reached, then shuts off until the control determines a need for operation.



Humidistat controllers

- Digital display of humidity and setpoint.
- Mount to wall or standard junction box.
- One universal input for a remote humidity sensor or use the on-board humidity sensor for control
- Input voltage of either 24VAC or 24VDC.
- One digital output for on/off control
- Basic BACnet® communications

WHY CHOOSE THE COMMERCIAL DEHUMIDIFICATION SYSTEM

Why dehumidify?

- Condensation and frost protection
- Moisture regain control
- Mold, mildew, fungus protection
- Preservation - storage, equipment, etc.
- Process control

Flexible

- The most water removal for your investment with 0.03 or 0.06 gallons per minute.
- Perfect for manufacturing, food processing, breweries, storage, etc. applications.
- Capacity from 40 to 89 gallons/day (13.9 lb/hr/320 pints per day or 31 lb/hr/710 pints per day) @ 80°F, 60% RH
- Can be suspended or installed on ground level
- Ducting allows you to separate the unit from the environment, saving space and increasing ease of access

Easy to maintain

- The RL-31 Series features a variable speed compressor that can modulate the number of BTUs supplied to the refrigeration system. The variable-speed, low grain refrigerant gives the RL-31 dehumidifiers a gas pedal as opposed to an on off switch.
- DriSteem dehumidifiers incorporate a more sophisticated refrigeration system logic that gives us the ability to monitor the temperature of the coil via suction line temp and regulate the BTU output of the compressor. This helps significantly delay going into defrost and allows the unit to continue removing moisture for as long as possible.
- The self-sealing, MERV 11 air filter protects the unit's vital components, plus it's easy to replace.

Learn More



COMPREHENSIVE CONTROL WITH THE D77 CONTROLLER

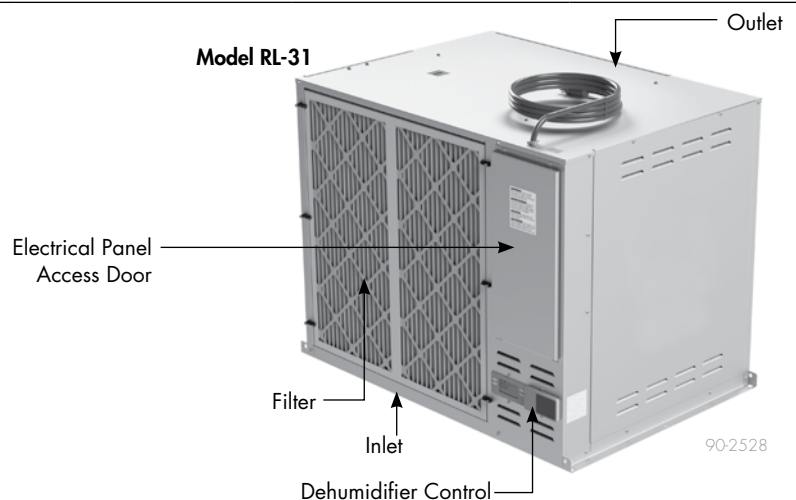
The D77 control allows the user to set and adjust the humidity setting and turn dehumidification on or off from a convenient location. In this application, the RL Series uses an onboard sensor to monitor the relative humidity (%RH) in the space in which it is located and displays the measured relative humidity on the digital display.



- Control range: 35% – 80% RH
- Accuracy: +/-5% RH

**Table 3-1:
RL Series Specifications**

	Model RL-31		Model RL-14	
Electrical				
Voltage	208-240 VAC, 1 Phase, 60 HZ	277 VAC, 1Phase, 60 HZ	208-240 VAC	277 VAC
Operating Current	19.6A @ 80°F (26.7°C), 60% RH, 240 VAC	17.4A @ 80°F (26.7°C), 60% RH, 277 VAC	11.1A @ 80°F (26.7°C), 60% RH, 240 VAC	9.2A @ 80°F (26.7°C), 60% RH, 277 VAC
Rated Current	24A (install on dedicated 30A circuit)		20 amp breaker	
Efficiency	3.0 L/kWh @ 80°F, 60% RH, 240 VAC		2.9 L/kWh	2.5 L/kWh
Environmental				
Operating Temperature Range	50°F to 104°F (10°C to 40°C), 60/40 to 85/80 (ideal conditions for unit to not go into defrost or shut down due to high pressure)		50°F to 104°F (10°C to 40°C), 60/50 to 85/80 (ideal conditions for unit to not go into defrost or shut down due to high pressure)	
Operating Dew Point Lower Limit	36°F (2°C)		40°F (4°C)	
Mechanical				
Dimensions	Width 44.88" (1140 mm) Height 34.41" (874 mm) Length 31.72" (806 mm)		Width: 32.63" (829 mm) Height: 24" (610 mm) Length: 24.25" (616 mm)	
Weight	360 lbs (163 kg) (without packaging)		180 lbs (82 kg) (without packaging)	
Drain Size	3/4" FNPT			
Capacity	89 gallons/day (31 lb/h/710 pints/day) @ 80°F (26.7°C), 60% RH		40 gallons/day (13.9 lb/h/320 pints/day) @ 80°F (26.7°C), 60% RH	42.5 gallons/day (14.7 lb/h/340 pints/day) @ 80°F (26.7°C), 60% RH
Filter	MERV 11 (30" x 32" x 2")		MERV 11 (20"x22"x2")	
Airflow	1760 CFM (free flow)		830 CFM (1410m³/h) (free flow)	
Power cord	Units shipped with 10' power cord or can be hard wired.			
Controls				
Dehumidifier control	50°F and 104°F (10°C to 40°C) cut off			
External control	On/off dry contact			



**DRI-STEEM Corporation**

a subsidiary of Research Products Corporation
DriSteem U.S. operations are
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Expect quality from the industry leader

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

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For the most recent product information visit our website:
www.dristeem.com