

Heat-Pump DeAir Dehumidifier

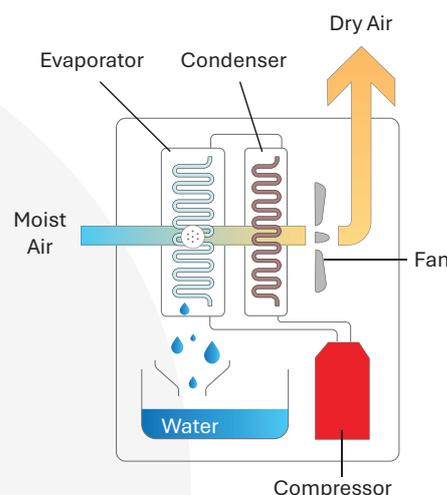


Impact of high humidity on production and preservation of goods:

- In production: Reduced quality (mold, rust, deformation, slow drying), process interruption (electronic errors), increased costs (error handling, extended time).
- In storage: Damage to goods (bacteria, mold, insects), reduced storage time, affected packaging (mold, rot).

Operating principle of condensing dehumidifier

- First, the centrifugal fan draws humid air into the unit. At the evaporator coil, the air is cooled below its dew point, causing moisture to condense and drain away. The now-cooled air then passes through the condenser coil to be reheated. Finally, the warm, dry air exits, enters the target area, and continues the dehumidification cycle.
- For enhanced efficiency and durability, integrate the following: a pre-filter before the evaporator to clean the air and prevent clogging; a defrost function to remove frost buildup on the coil in low temperatures; and an automatic humidity controller to self-regulate the dehumidifier and maintain the desired humidity.



Key Components



Hydrophilic E-coated evaporator coil

40% faster and more efficient dehumidification



High-performance compressor

Features internal circuit breaker and high/low pressure protection



Airtight centrifugal fan

Smooth, quiet, high-performance operation



Humidity control panel

Automatic and energy-saving operation

Energy-Saving Heat-Pump Technology in DeAir Dehumidifiers

The **Heat-Pump technology** in DeAir.RE dehumidifiers is a significant advancement over conventional condensing dehumidifiers. Instead of simply cooling to condense moisture, **Heat-Pump technology** utilizes the heat generated during condensation to warm the air after it has been dehumidified. This offers several benefits:

- **Higher Energy Efficiency:** Reusing heat reduces electricity consumption compared to standard dehumidifiers.
- **Better Low-Temperature Performance:** Heat-Pump dehumidifiers maintain stable dehumidifying efficiency even in low ambient temperatures.
- **Less Cooling of Surroundings:** Because the discharged air is gently warmed.



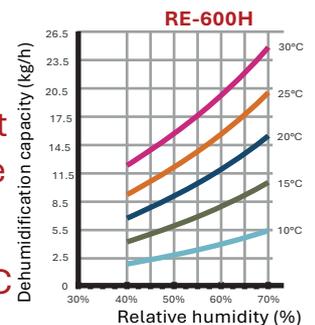
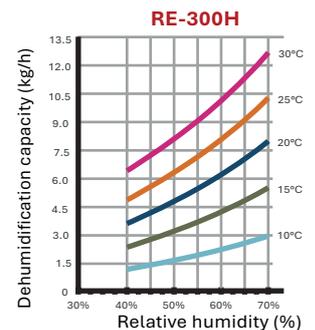
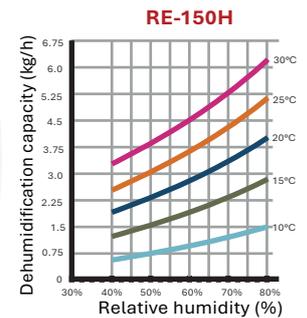
DeAir.RE-H Stainless Steel Heat-Pump Dehumidifier

Model	Dehumidification Capacity
DeAir.RE-150H	150 kg/day
DeAir.RE-300H	300 kg/day
DeAir.RE-600H	600 kg/day



Technical Specifications

Model		DeAir.RE-150H	DeAir.RE-300H	DeAir.RE-600H
Operating Temperature	°C	5-60	5-60	5-60
Dehumidification Capacity @30°C/70%	kg/day	150 @30°C/80%	300	600
Airflow	CMH	1,500	3,000	6,000
Noise Level	dBA	55	59	65
Refrigerant Type		R410A		
Refrigerant Charge	kg	1.9	1.9	4.3
Power Supply	V/Ph/Hz	220/1/50	380/3/50	
Power Consumption	kW	1.495	4.6	9.2
Power Consumption of Heater (Optional)	kW	none	4.5	8.4
Dimensions (W x D x H)	mm	460x405x975	780x480x1,650	1,250x600x1,800
Weight	kg	45	160	250



DeAir.RE-H stainless steel dehumidifiers incorporate Heat-Pump technology, which significantly boosts energy savings by reusing heat from the condensation process to reheat the dehumidified air.

Featuring a durable stainless steel casing, these dehumidifiers offer enhanced longevity and are ideal for environments demanding high hygiene standards or those with corrosive elements.

* For dehumidifiers with a capacity of less than 150L/day, the duct must be less than 3m. For dehumidifiers with a capacity of over 150L/day, the duct must be less than 5m.

* Industrial dehumidifiers operating in an environment between 15-18°C must be equipped with an additional defroster for the dehumidifier to work properly.