



Heat-Pump DeAir Dehumidifier

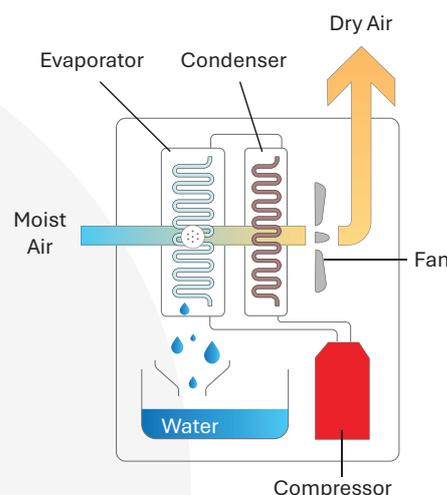


Impact of high humidity on production and preservation of goods:

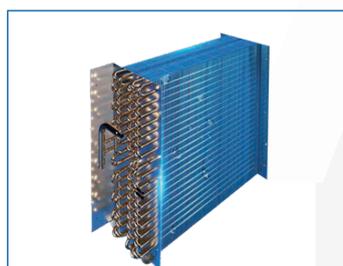
- In production: Reduced quality (mold, rust, deformation, slow drying), process interruption (electronic errors), increased costs (error handling, extended time).
- In storage: Damage to goods (bacteria, mold, insects), reduced storage time, affected packaging (mold, rot).

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.



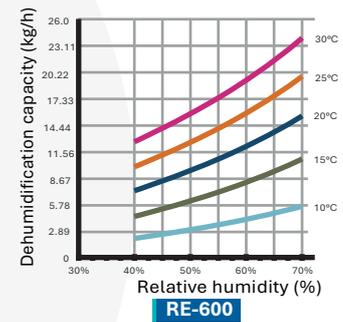
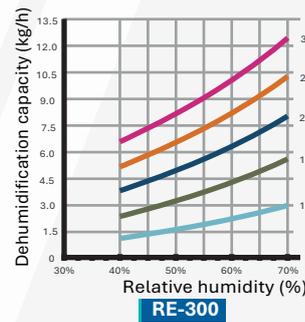
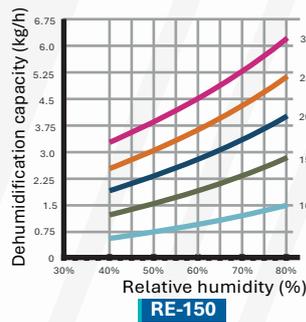
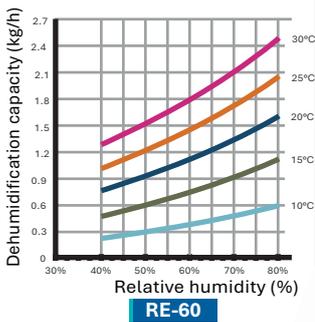
DeAir.RE Single-Phase Heat-Pump Dehumidifier



Model	Dehumidification Capacity
DeAir.RE-60	60 kg/day
DeAir.RE-100	100 kg/day
DeAir.RE-150	150 kg/day
DeAir.RE-300	300 kg/day
DeAir.RE-600	600 kg/day



Technical Specifications



Model		DeAir.RE-60	DeAir.RE-100	DeAir.RE-150	DeAir.RE-300	DeAir.RE-600
Operating Temperature	°C	15-40	15-40	15-40	15-60	15-60
Dehumidification Capacity @30°C/80%	kg/day	60	100	150	300	600
Airflow	CMH	400	1,200	1,500	3,000	6,000
Noise Level	dBA	55	55	55	59	65
Refrigerant Type		R410A				
Refrigerant Charge	kg	0.8	1.3	1.9	1.9	4.3
Power Supply	V/Ph/Hz	220/1/50				
Power Consumption	kW	0.86	1.495	1.495	4.6	9.2
Dimensions (W x D x H)	mm	390x335x680	690x530x985	690x530x985	780x480x1,650	1,250x600x1,800
Weight	kg	40	45	45	160	250

* The nominal condition of DeAir.RE-300 and DeAir.RE-600 is 30°C/70%

* 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.

The Heat-Pump technology in DeAir.RE dehumidifier is superior to conventional condensers by taking advantage of the heat from the condensation process to reheat the dehumidified air.

Advantages: energy saving, good moisture absorption at low temperature, little change in ambient temperature.