

## INDUSTRIAL DEHUMIDIFIERS



OS-150



OS-300



OS-500

**Olmas** industrial dehumidifiers, including the **OS-150, OS-180, OS-300, and OS-500 series**, offer an ideal solution for humidity and condensation control in medium-sized production environments with temperatures ranging from **15°C to 40°C**, all without the need for additional equipment.

These units are widely applied in: Storage warehouses, Food and pharmaceutical factories, Precision mechanical workshops, Museums and exhibition halls, Media centers.

### 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

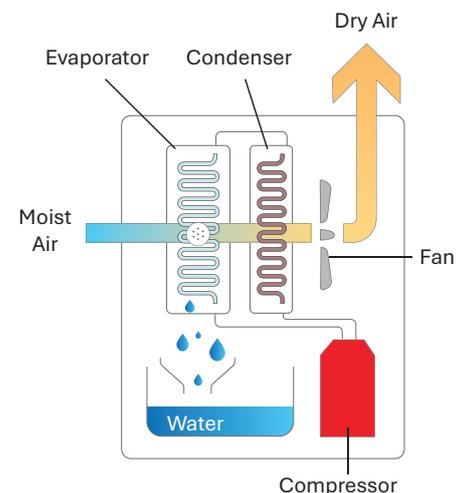


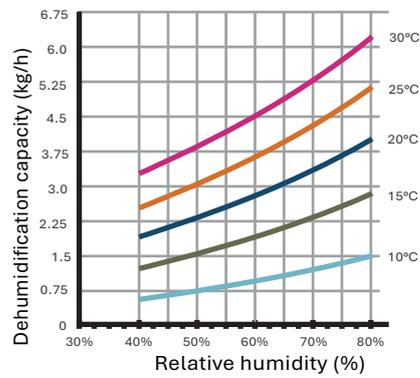
#### Humidity control panel

Automatic and energy-saving operation

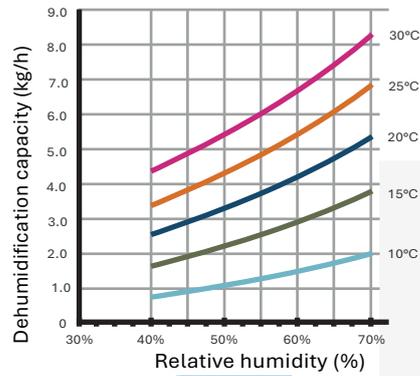
### Operating principle of condensing dehumidifier

- 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.

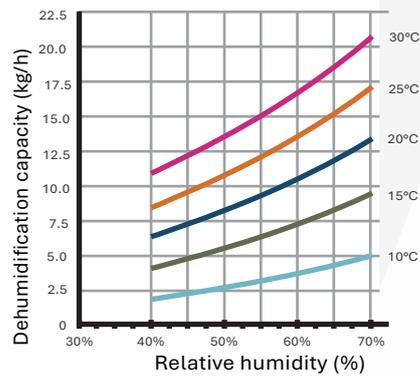




OS-150



OS-210



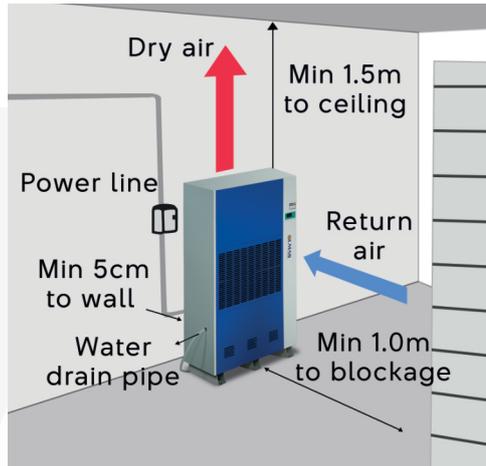
OS-500

## Proper Dehumidifier Sizing for Optimal Performance

Properly sizing your dehumidifier is crucial for optimizing moisture removal in a production environment. First, the moisture content of your project must be determined. Then, our design engineers will refer to the dehumidification chart (illustrated on the left) to select the appropriate unit based on the room's Relative Humidity (%RH).

Additionally, we assist customers in product selection through direct computer-aided programs or via our authorized local representatives. So, please contact your local distributor for support.

## Installation Guide



## Why Humidity Control is Essential in Manufacturing

High relative humidity, as reported, severely impacts manufacturing processes, leading to issues such as corrosion, product damage, condensation and dampness, mold growth, moisture generation, prolonged drying times, production halts, and an uncomfortable working environment.

Therefore, maintaining appropriate humidity levels not only creates a comfortable workspace but also enhances product durability and quality.

## Technical Specifications

Model		OS-150	OS-180	OS-300	OS-500	OS-720
Operating temperature range	°C	15-40	15-40	15-40	15-40	15-38
Dehumidification capacity (30°C, 70%)	kg/day	150 *	180	300	500	720
Airflow rate	CMH	1,500	1,800	2,500	5,000	7,500
Refrigerant	-	R407C/R410A/R134A/R32				
Refrigerant charge	kg	1.9	1.9	1.9	3.8	
Power source	V/Ph/Hz	220/1/50	220/1/50	380/3/50	380/3/50	380/3/50
Nominal power consumption	kW	1.495	3.5	4.0	11.0	12.5
Dimensions (Width x Depth x Height)	mm	690x530x985	605x405x1,620	750x470x1,615	1,200x500x1,820	1,580x574x1,920
Net weight	kg	45	125	128	220	360
Noise	dBA	≤55	≤58	≤58	≤58	≤65

\*The nominal condition for the OS-150 is 30°C/80%.

\* 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.