

# **INDUSTRIAL DEHUMIDIFIERS**



The Olmas floor-standing dehumidifiers package consists of three models including OS-150, OS-210, and OS-500. They can efficiently handle array of humidity and condensation problems at medium-size industrial ambience whose temperature ranges from 15°C to 40°C without resorting to multiple units. Likewise, they are widely utilised for industrial applications like warehouses, food and pharmaceutical factories, exact manufacturing plants, museums and galleries, and communication centres.

#### Main components



evaporator 40%more efficient and faster dehumidification



High-efficiency compressor Completion with internal cut-outs and high-low pressure protection



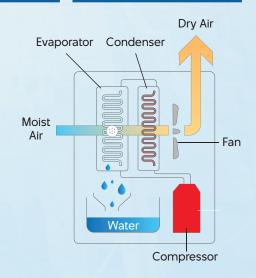
Airtight centrifugal fan Seamless working with low noise and high efficiency

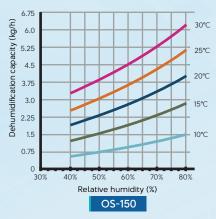


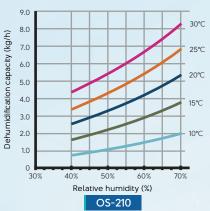
## Operating principle

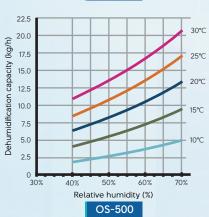
The humid air is drawn by centrifugal fans through the evaporator (cooling coils), which cools it down below its dewpoints so that the moisture condenses into water to be drained away. Simultaneously, cooled air discharges into the condenser (hot coils) to reheat. Finally, warm and dry air is released to the controlled space and continues dehumidification process.

Moreover, the following additional components are integrated for actual use to enhance smooth operations and service life, namely: the filter installed in front of the evaporator cleans air and protects evaporator coil from clogging; the defrost circuit defrosts coil under the low-temperature conditions; and the humidistat automatically controls dehumidifier.







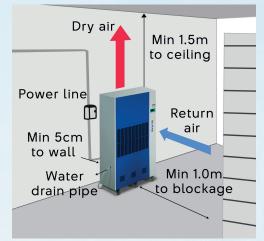


#### Pinpointing proper dehumidifier size

The proper choice of dehumidifier size aims to optimise performance of moisture removal in production. Initially, it is essential to estimate the moisture load (latent load) of the project. Then, design engineers can refer to the dehumidification charts illustrated on the left side to select the most suitable model based on room RH%.

Besides, we also support you by provision of the free computer-aided selection services directly or via our officially-trained representatives in your local area. Thus, please contact your local distributor for assistance.

### Installation guide





#### Why dehumidification?

It is reported that high relative humidity causes serious problems for production such as corrosion, product deterioration, condensation and dampness, mold growth and mildew, moisture recurrence, prolonged drying, manufacturing stagnation, and labour discomfort.

Hence, controlling appropriate moisture level not only facilitates a more comfortable working environment, but also fortifies product quality and durability.

#### **Specifications**

Model		OS-150	OS-210	OS-500
Operating temperature range	°C	5-40	5-40	5-40
Dehumidication capacity (30°C, 70%)	kg/day	150*	210	500
Airflow rate	СМН	1,500	2,000	5,000
Refrigerant	-	R407C/R410A/R134A		
Refrigerant charge	kg	1.9		3.8
Max suction pressure	MPa	1.0		
Max discharge pressure	MPa	2.5		
Power source	V/Ph/Hz	220/1/50	220/1/50 - 380/3/50	380/3/50
Nominal power consumption	kW	1.495	4.0	11.0
Dimensions (Width x Depth x Height)	mm	690x530x985	750x470x1,615	1,200x500x1,820
Net weight	kg	45	128	220
Noise	dBA	≤55 ≤58		

<sup>\*</sup> The nominal conditions of the OS-150 maintain 30°C/80%.