# COMPANY PROFİLE

SEZER


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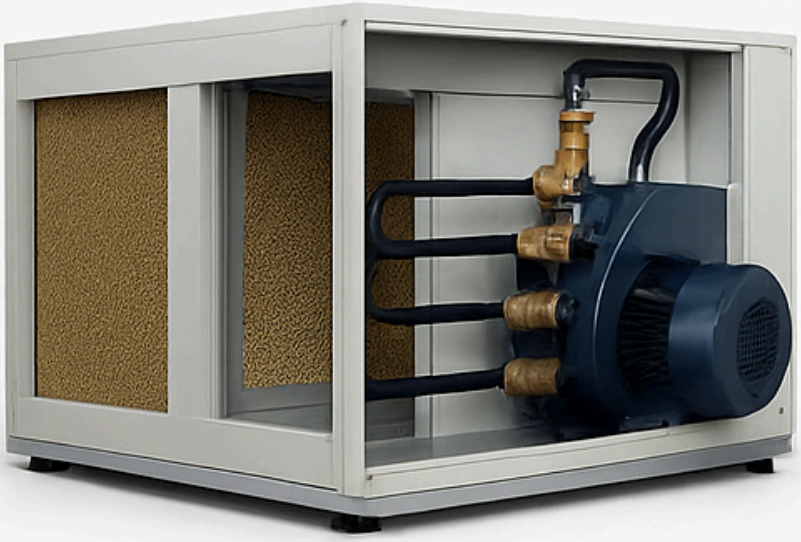
# Evaporative & Desiccant Dehumidification Technologies

## Evaporative Pad Humidification Unit



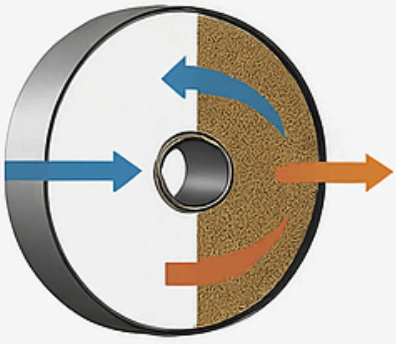
SEZER evaporative humidification units, adding moisture and cooli-ng mad through.

- Natral evapc tive eulication:
- Low enargy consumption  quier
- Quiet fan operation
- Modular design with ew mintenannce
- Pad heights rang 1500-2600 mm


## Desiccant Rotary Dehumidifier

SEZER desiccant dehumidifiers re engineered for stringent humidity control utilizing silica gel rotor technology.

- Long-fasting performance
- Integrated temperature & nenses sȯrs
- ISO 7807 rated duct connections
- High efficiency EC motor and PTC




## Key-ftican Feolkers

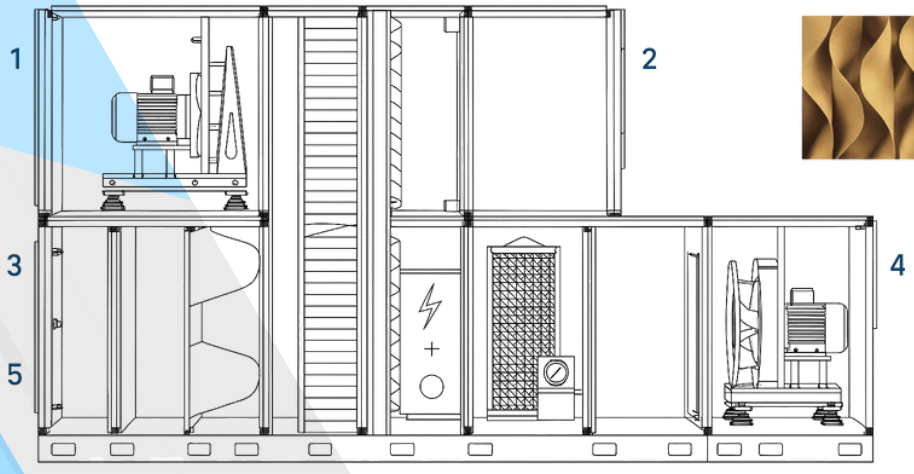
- Natural evaporative cooling & humidification
- Low energy consumumition
- Quiet fan operation
  Standard Height: 1500’ – 200 mm

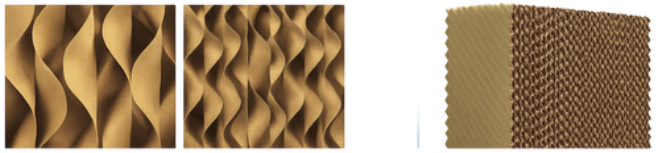
**Thank you for your interest in SEZER HVAC Solutions.**

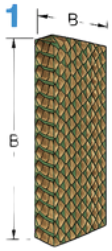
# Evaporative Pad Humidification Unit

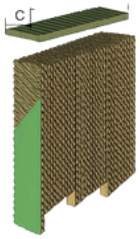


Evaporative humidification and cooling is, in general, the process of reducing heat, adding humidity, and lowering ambient temperature by bringing hot and dry air into contact with water.
Evaporative humidifiers and coolers feature large-surface cooling and humidifying pads. Water continuously flows through these pads, keeping them moist. As the hot and dry air drawn in by a powerful and quiet fan passes through the wet pads, it comes into contact with the water. During this airflow, heat transfer occurs between the air and the water. The cooled and humidified air is then delivered into the space to be conditioned.
This natural evaporation process creates a fresh and cool airflow, ensuring a comfortable working environment.





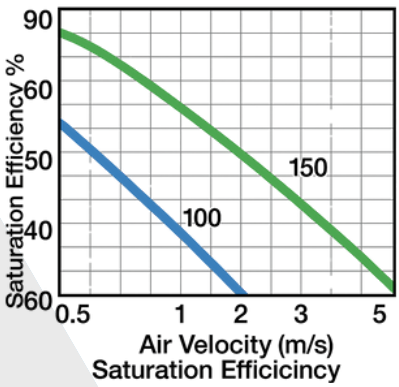

- Room Air Exhaust
- Room Air Return
- Fresh Air Intake
- Room Air Supply
- Rotary Heat Recovery Unit
- Heating Coil
- Evaporative Cooling

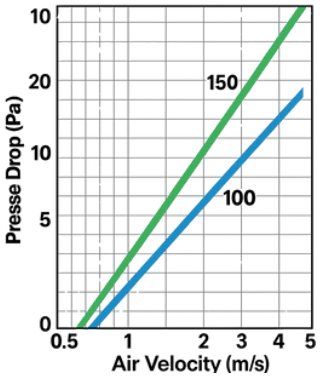
## 1. Evaporative Heat Exchanger

- Standard Height: 1500 mm – 2000 mm
- Standard Width: 600 mm
- Standard Depth: 100 mm – 150 mm

## 2. Water Distribution Pad

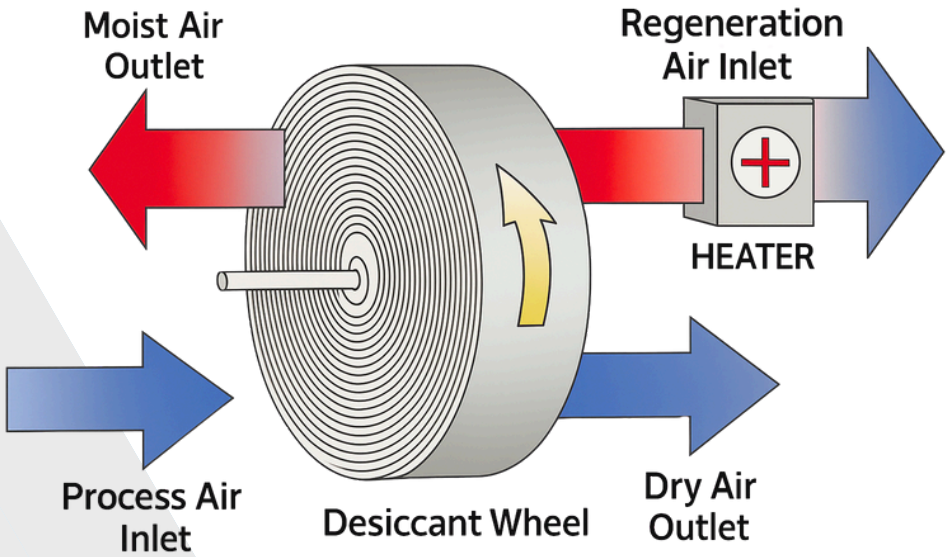
- Standard Height: 30 mm
- Standard Width: 600 mm
- Standard Depth: 100 mm – 150 mm



# Evaporative Pad Humidification Unit


Desiccant rotary dehumidifiers are engineered for environments requiring low humidity levels, offering high energy efficiency through advanced silica gel rotor technology. These rotors provide precise moisture control with superior adsorption performance and maintain up to 90% of their original capacity even after 8 years of operation. The units are equipped with integrated temperature and humidity sensors, along with a custom-designed control panel for real-time system monitoring. With regeneration heat maintained below 140°C, the system delivers up to 30% energy savings. All air inlet and outlet ports are designed in accordance with ISO 7807 duct connection standards, ensuring seamless integration into HVAC systems.




**Working Principle of Desiccant Rotor Dehumidifiers**

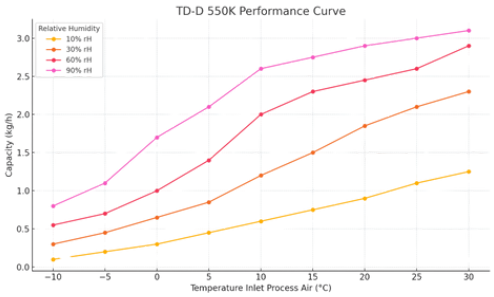
These systems use a rotating desiccant wheel to remove moisture from the air through adsorption. Humid process air passes through the wheel, where moisture is captured. As the wheel turns, the saturated section enters a regeneration zone where heated air removes the moisture. The dry section then returns to continue the process. Adsorption and regeneration occur continuously, and airtight separation prevents airflow mixing.

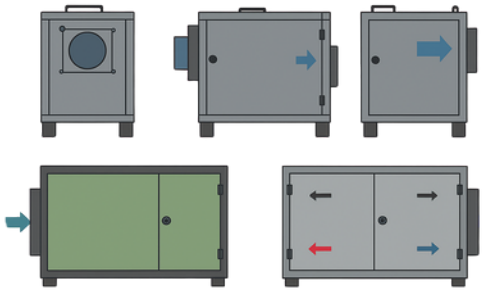
# Technical Specifications

## Features of Desiccant Rotor Dehumidifier

- Operating Principle: Clear explanation of moisture removal using a rotor and the regeneration cycle.
- Ease of Use: Touchscreen and sensors are specified.
- Energy Efficiency: Emphasis on savings with EC motor and PTC heater.
- Durability: Material quality, long-lasting rotor, and insulation features are described.
- Maintenance: Filter and rotor are cleanable; easy installation is mentioned.
- Compatibility: Compliance with standards and duct connections are also included.

### SZR-DR-550K Desiccant Rotor Dehumidifier

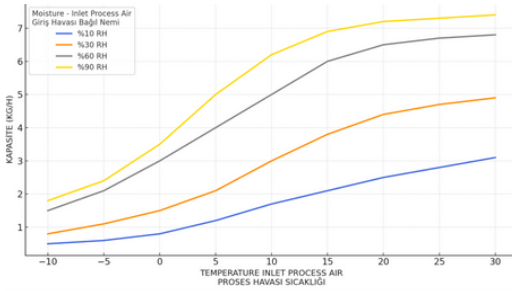


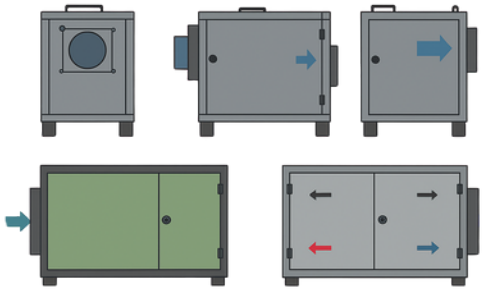



| Parameter | Value |
|---|---|
| Nominal Power | 4.5 kW |
| Nominal Current | 19.5 A |
| Process Air Filter | G2 |
| Regeneration Air Filter | G2 |
| Controller Type | LCD + Display |
| Power Supply | 230 VAC / 50 Hz |
| Weight | 71 kg |
| Dimensions (LxWxH) | 970 x 525 x 520 mm |

| Parameter | Value |
|---|---|
| Capacity (20°C, 60% RH) | 2.4 kg/h |
| Process Airflow | 600 m³/h - 350 Pa |
| Reactivation Airflow | 200 m³/h - 250 Pa |
| Process Air Inlet & Outlet | 200 mm |
| Regeneration Air Inlet & Outlet | 160 mm |
| Heater Type | PTC |
| Heater Driver | Contactor |
| Maximum Power | 5.5 kW |

### SEZ-DR-1050K Desiccant Rotor Dehumidifier

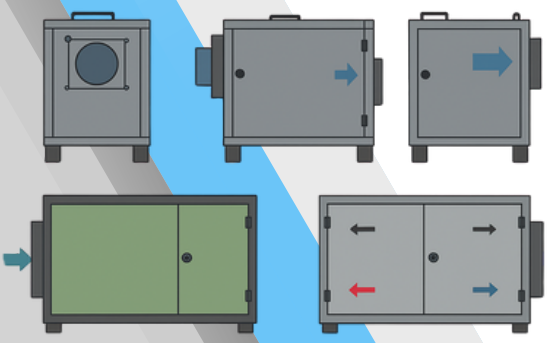


| Parameter | Value |
|---|---|
| Capacity (20°C, 60% RH) | 9.4 kg/h |
| Process Airflow | 1700 m³/h – 400 Pa |
| Reactivation Airflow | 450 m³/h – 300 Pa |
| Process Air Inlet & Outlet | 250 mm |
| Regeneration Air Inlet & Outlet | 200 mm |
| Heater Type | PTC |
| Heater Driver | Contactor |
| Maximum Power | 20 kW |

| Parameter | Value |
|---|---|
| Nominal Power | 17 kW |
| Nominal Current | 27.2 A |
| Process Air Filter | G2 |
| Regeneration Air Filter | G2 |
| Controller Type | LCD + Display |
| Power Supply | 380 VAC / 50 Hz |
| Weight | 150 kg |
| Dimensions (LxWxH) | 1405 x 741 x 768 mm |

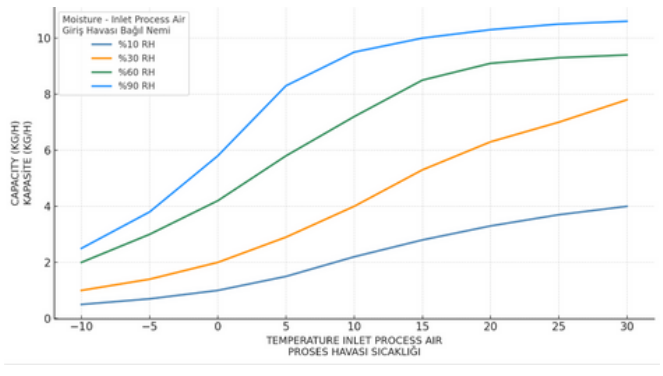
### SEZ-DR-1700K Desiccant Rotor Dehumidifier




| Parameter | Value |
|---|---|
| Capacity (20°C, 60% RH) | 9.4 kg/h |
| Process Airflow | 1700 m³/h – 400 Pa |
| Reactivation Airflow | 450 m³/h – 300 Pa |
| Process Air Inlet & Outlet | 250 mm |
| Regeneration Air Inlet & Outlet | 200 mm |
| Heater Type | PTC |
| Heater Driver | Contactor |
| Maximum Power | 20 kW |

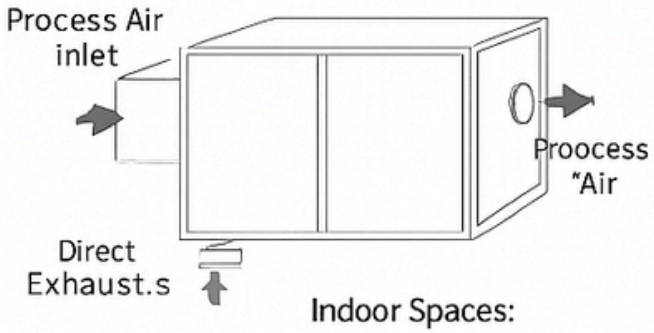


| Parameter | Value |
|---|---|
| Nominal Power | 17 kW |
| Nominal Current | 27.2 A |
| Process Air Filter | G2 |
| Regeneration Air Filter | G2 |
| Controller Type | LCD + Display |
| Power Supply | 380 VAC / 50 Hz |
| Weight | 150 kg |
| Dimensions (LxWxH) | 1405 x 741 x 768 mm |

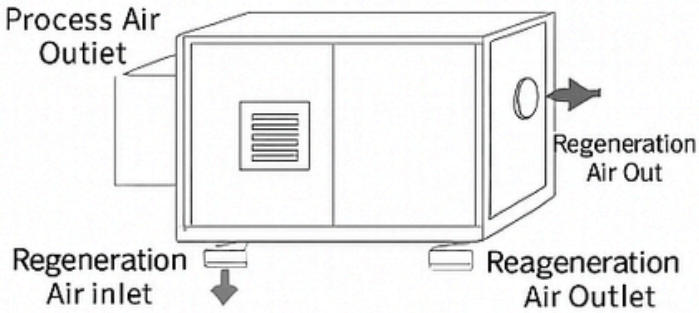



# Desiccant Rotary Dehumidifiers

## Indoor Unit Installation




## Outdoor Unit Installation



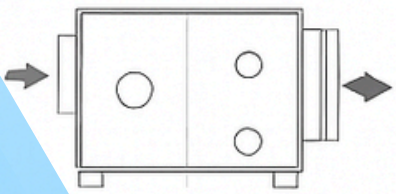

The regeneration air inlet and outlet are directed outdoors.

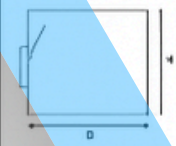
Indoode spacces:

Factory.
The process air air inlet and outlet are connected to the area to be dehumidifierd via lucrts.
The regeneration air inlet and outlet are connected to outdoor environment through ducts.

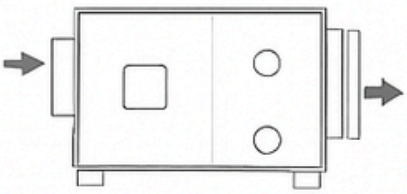
Outdoor Spaces:
The process air air inlet and outlet are connected to the area to bedenumidified Via ducts.
A duct is not required for the regeneration air inlet. However, a duct must be. Installed on the regeneration air outlet, and it must be longer than the return duct of the process air inlet to prevent the hot regenerati

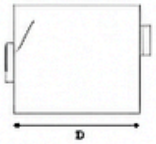
## SEZ-DR-550K



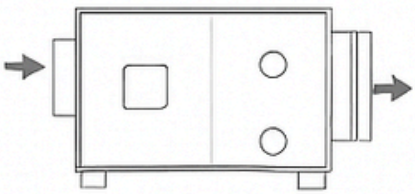
| | |
|---|---|
| Dehumidification Capacity | 0.55 kg/h |
| Air Flow | 200 m⁰/h |
| Electric Heater Power | 1.2 kV//PTC |
| Motor Type | 31W / EC |
| Dimensions | 600 mm x Profile |
| Dimensions |  |

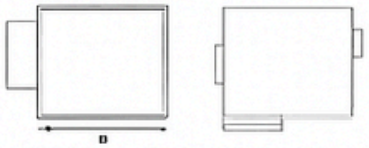
## SEZ-DR-1050K



| | |
|---|---|
| Dehumidification Capacity | 1.05 kg/h |
| Air Flow | 350 m⁰/h |
| Electric Heater Power | 1.8 kW//PTC |
| Motor Type | 70W / EC |
| Dimensions | 600 mm x Profile |
| Dimensions |  |

## SEZ-DR-1700K



| | |
|---|---|
| Dehumidification Capacity | 1.70 kg/h |
| Air Flow | 450 m⁰/h |
| Electric Heater Power | 2.4 kW/PTC |
| Motor Type | 120W / EC |
| Dimensions | 600 mm x Profile |
| |  |

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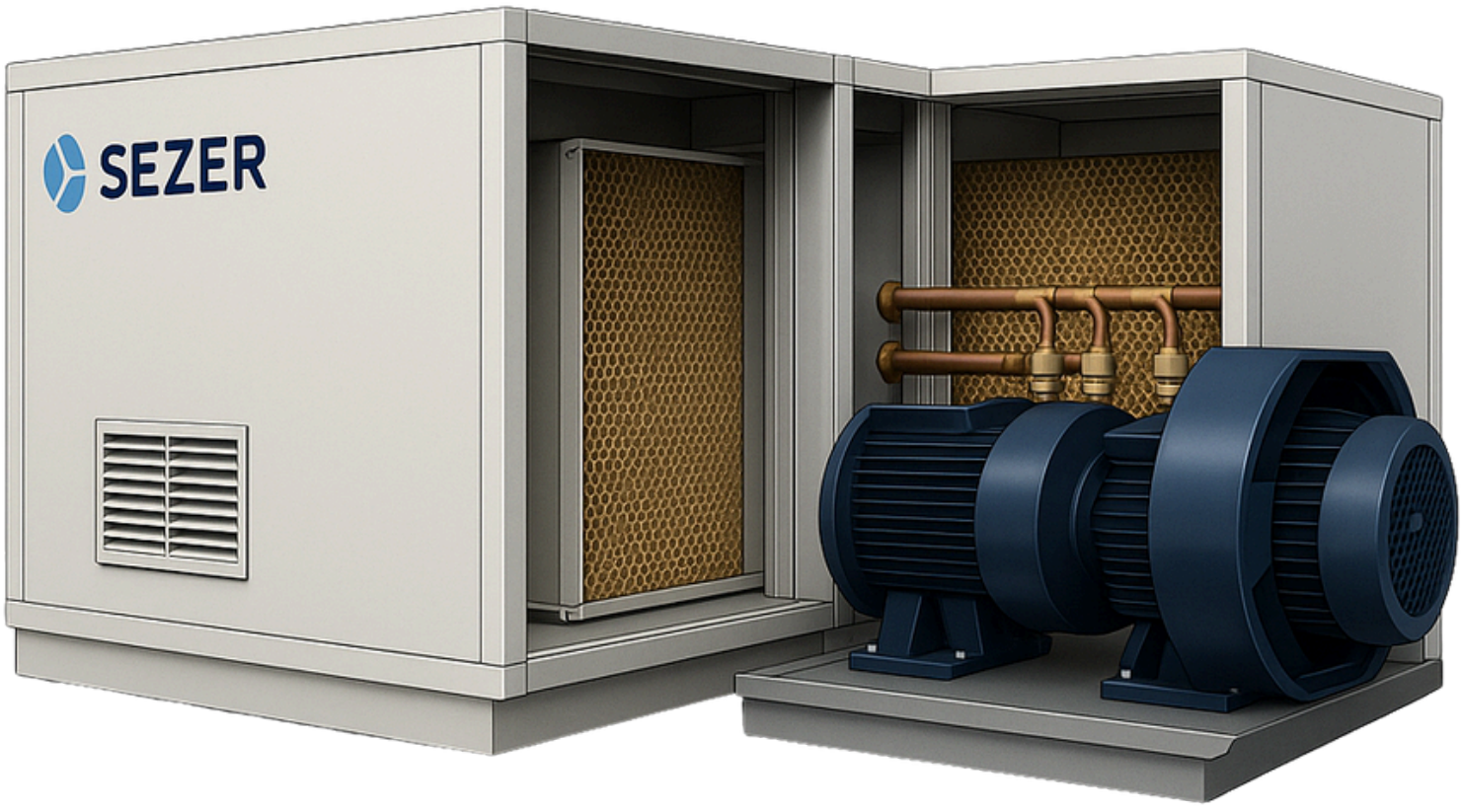


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