

Desiccant Wheel Type Dehumidifiers

Our devices provide energy savings in humidity control when low humidity levels are required by utilizing a desiccant rotor. The silica gel rotor, with its channels on the drum, performs highly efficient adsorption, enabling precise humidity control. The silica gel rotor is long-lasting, retaining 90% of its moisture absorption capacity even after 8 years of operation.

Desiccant Rotor Dehumidifiers are powerful dehumidifiers suitable for all environments, featuring a long rotor lifespan, durable design, low energy consumption, and high drying capacity. They come equipped with an internal temperature sensor, humidity sensor, and a specially designed control panel for real-time monitoring.

The advanced technology uses controlled regeneration heat (below 140°C), which reduces power consumption by up to 30%. The air inlets and outlets of the dehumidifier comply with the ISO7807 duct connection standard, making air duct connections easy.

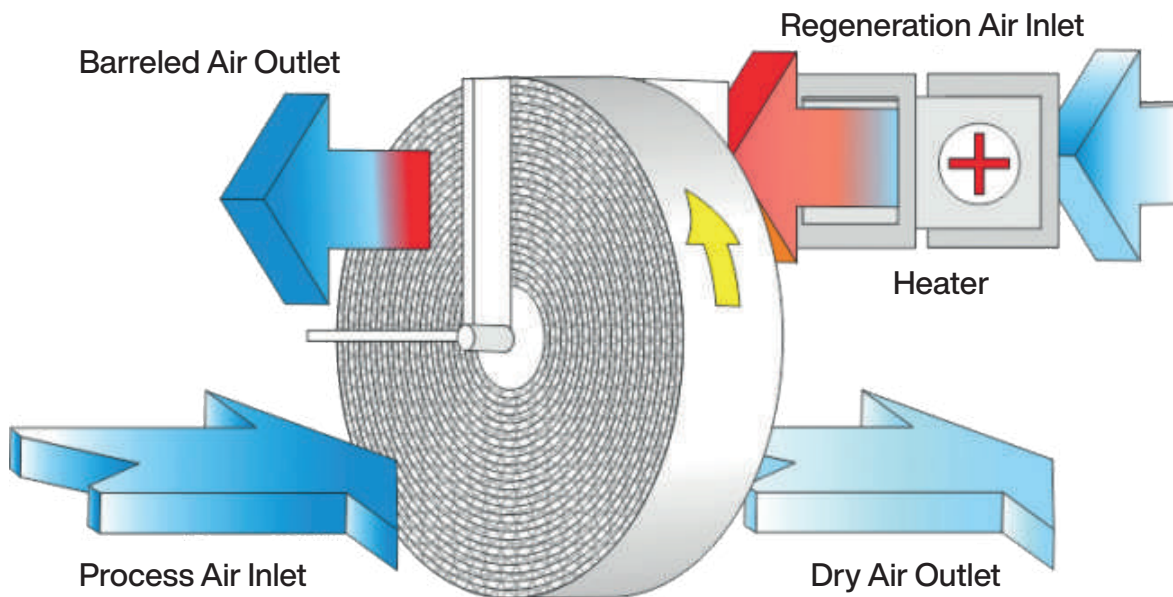


Operating Principle

Desiccant wheel type dehumidifiers work based on the adsorption theory. The desiccant wheel inside the unit absorbs moisture from the process air. While the desiccant adsorbs the moisture, it gradually returns it to the reactivation area.

Hot air passes through the desiccant wheel during reactivation, removing the moisture from the wheel. The wheel returns to the process air stream after reactivation to begin re-adsorption. Adsorption and reactivation occur continuously and simultaneously.

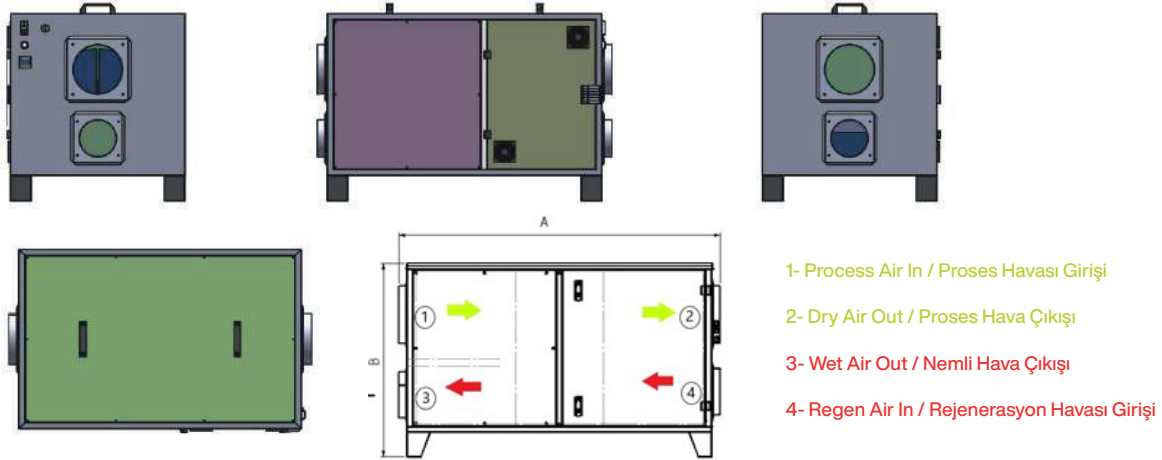
The two air streams are separated by a complete seal, which prevents them from mixing.



Features of **Desiccant Wheel Type Dehumidifier**

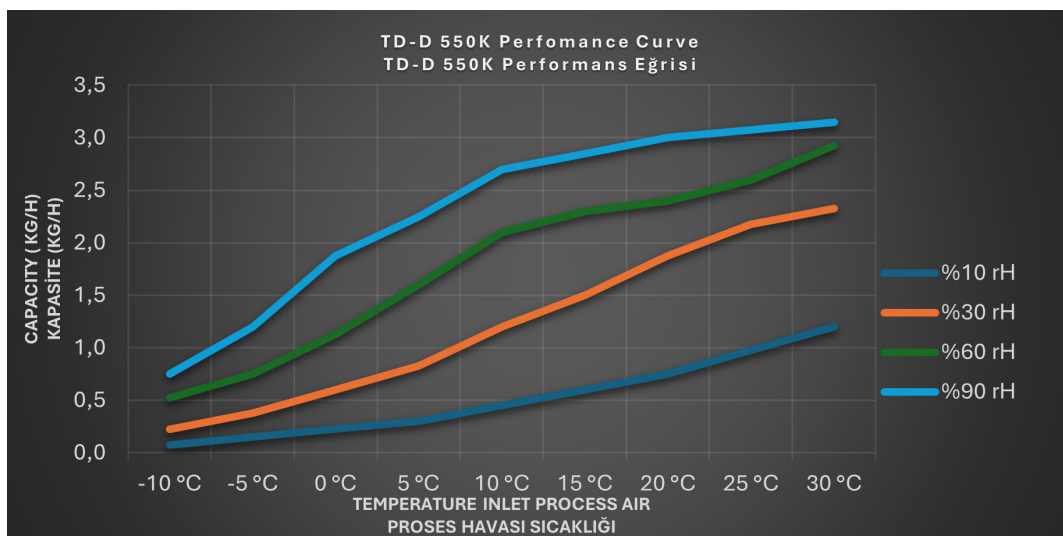
- A high-performance desiccant wheel with a large moisture capacity is used to ensure reliable performance and continuous operation. Under normal operating conditions, the desiccant wheel has a working life of 5-8 years. (non-corrosive environment and regeneration temperature below 140 ° C).
- It has an advanced touch control panel with built-in temperature and humidity sensors for real-time monitoring, easy to use and user friendly.
- Our dehumidifier is equipped with EC technology to operate with proportional speed control for the process air fan. Additionally, there is a separate fan for regeneration air.
- Simple and elegant design with a one-of-a-kind frame for improved sealing and insulation to minimize heat loss.
- With a body made of galvanized sheet and a powder coating, it offers greater abrasion resistance.
- It is made of high-quality electrical components from reputable manufacturers.
- Low operating cost and energy saving. Using PTC and SCR-made heating technology with advanced processor-controlled refresh temperature, our desiccant wheel type dehumidifier can save 20-30% on power consumption.
- It has a structure that makes installation and maintenance easy, with a G2 filter that can be replaced and a washable wheel. It is also produced in accordance with Fire Prevention Standards to ensure that the machine operates safely.
- To make air duct connection easier, the machine's inlet and outlet air meet the ISO 7807 duct connection standard.
- Devices and equipment comply with TUV, GS, ROHS and CE standards.

TD-D550K Desiccant Wheel Type Dehumidifier

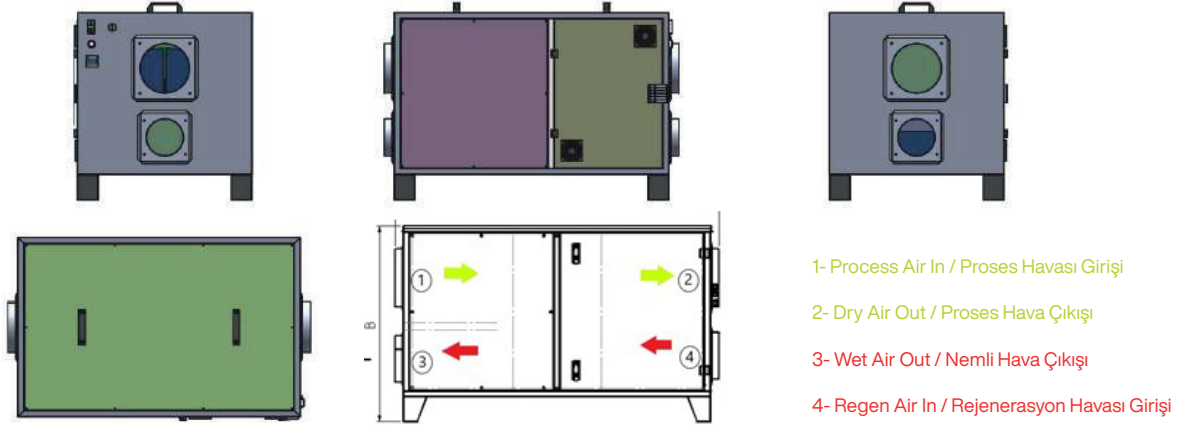


Capacity (20°C , %60 RH)	2,4 kg/h
Process Air Flow	600 m3/h - 350 Pa
Reactivation Air Flow	200 m3/h -250 Pa
Process Air Inlet & Outlet	200mm
Regeneration Air Inlet & Outlet	160mm
Heater Type	PTC
Heater Drive	Contactör
Maximum Power	5,5 kW

Rated Power	4,5 kW
Operation Current	19,5 A
Process Air In Filter	G2
Regeneration Air In Filter	G2
Controller Type	LCD+Display
Power Supply	230 VAC / 50 Hz
Weight	71 kg
Dimensions (AxBxC) mm	970x525x520 mm

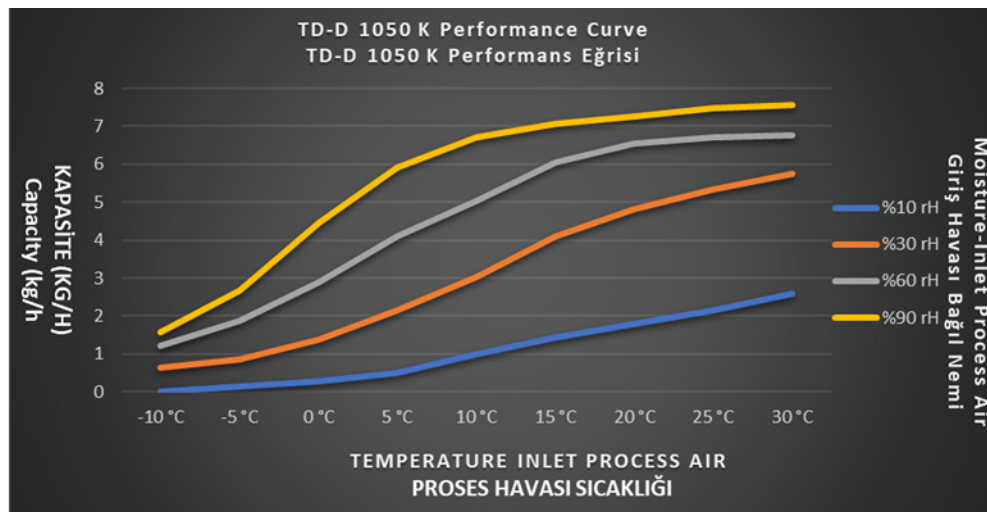


TD-D1050K Desiccant Wheel Type Dehumidifier

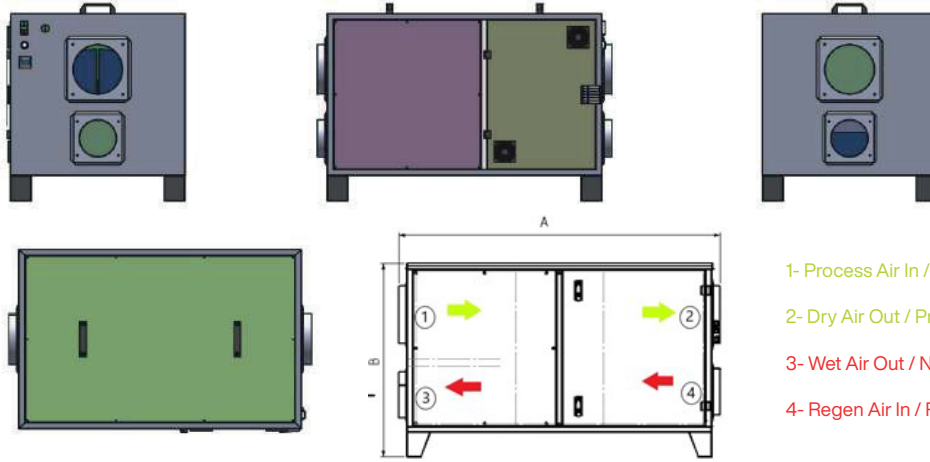


Capacity (20°C , %60 RH)	6,5 kg/h
Process Air Flow	1200 m ³ /h - 350 Pa
Reactivation Air Flow	300 m ³ /h -250 Pa
Process Air Inlet & Outlet	250mm
Regeneration Air Inlet & Outlet	200mm
Heater Type	PTC
Heater Drive	Contactör
Maximum Power	10,5 kW

Rated Power	9 kW
Operation Current	13,8 A
Process Air In Filter	G2
Regeneration Air In Filter	G2
Controller Type	LCD+Display
Power Supply	380 VAC / 50 Hz
Weight	150 kg
Dimensions (AxBxC) mm	1405x741x768 mm

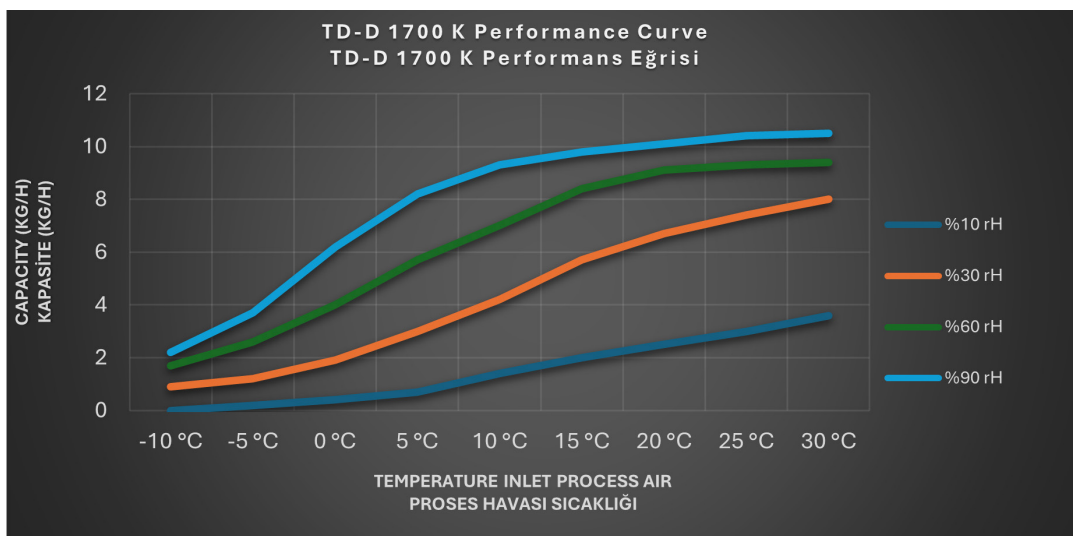


TD-D1700K Desiccant Wheel Type Dehumidifier

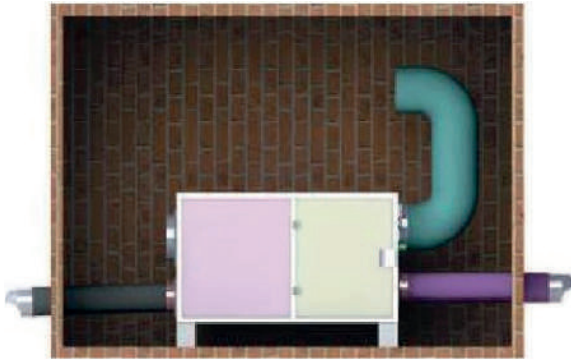


Capacity (20°C , %60 RH)	9,4 kg/h
Process Air Flow	1700 m3/h - 400 Pa
Reactivation Air Flow	450 m3/h -300 Pa
Process Air Inlet & Outlet	250mm
Regeneration Air Inlet & Outlet	200mm
Heater Type	PTC
Heater Drive	Contactör
Maximum Power	20 kW

Rated Power	17 kW
Operation Current	27,2 A
Process Air In Filter	G2
Regeneration Air In Filter	G2
Controller Type	LCD+Display
Power Supply	380 VAC / 50 Hz
Weight	150 kg
Dimensions (AxBxC) mm	1405x741x768 mm



Installation



Indoor
Device Installation



Outdoor
Device Installation

Indoors:

Regeneration air inlet and outlet are guided to the outside.

Factory:

Via inlet and outlet channels, process air is linked to the environment to be dehumidified. Via inlet and outlet channels, regeneration air is linked to the outside environment.

Outdoors:

By ducts, the process air inlet and outlet are connected to the environment to be dehumidified. For regeneration air inlet and outlet, there is no need for ducts.

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