



**EU STANDARDS**

Equipment designed to comply with all the applicable EU directives and regulations



**MADE IN EUROPE**

All components made exclusively by European manufacturers



**VAST EXPERIENCE**

Practical experience in specialist desiccant dehumidification systems



TECHNICAL DATASHEET

# Desiccant dehumidifier DL35

## GENERAL INFORMATION

The DL Series has been designed for use across a wide range of process drying applications and rooms requiring precise humidity control. The compact design allows for ease of installation in spaces with restricted access. This advanced series features a user friendly touch screen HMI as standard, providing users an array of information on the health and performance of the unit. Units are low maintenance allowing for extending periods of continuous operation.

**In addition to the above mentioned applications, desiccant dehumidifiers are also irreplaceable in:**



Protecting against condensation



Reducing building construction drying



Flood damage building drying



Increasing shelf life of hygroscopic materials



Achieving product consistency and accelerated product drying



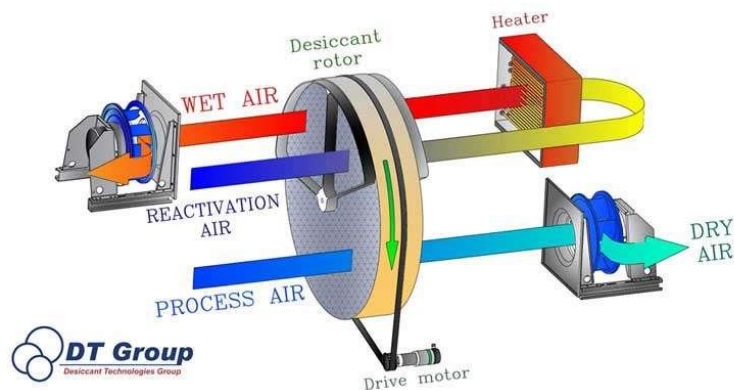
Humidity Control in storage facilities to maintain product and packaging quality



Reducing the growth of mould and bacteria

## METHOD OF OPERATION

Desiccant dehumidifiers operate by removing water vapour from the air via the process of adsorption. At the heart of the process is a high capacity, active silica gel rotor. As standard, the DL series also feature internal heat recovery as standard via a purge sector, this sector reclaims heat that would otherwise be transferred into the dry air stream. The water vapour is continuously removed via the “wet air” stream, allowing for continual drying operation. Precise drying is achieved through the regulation of the reactivation air heater. No desiccant carryover is experienced due to the unique composition of the rotor.



## CONSTRUCTIONAL AND UNIT FEATURES

- Stainless steel construction
- 20mm insulated panels
- Available in a range of casing materials (430SS, 304SS)
- Energy efficient EC fans.
- Single piece, compact design, allowing for rapid installation
- Pre and Post Treatment modules available
- Low maintenance design and long life seals
- High quality components made exclusively by European manufacturers
- User friendly touch screen HMI as standard

## TECHNICAL DATA (Standard unit, other configurations available)

Process air <small>(Dry)</small>		Control System	
Rated airflow	<b>3500 m³/h</b>	Controller	<b>SIEMENS</b>
Available static pressure	<b>400 Pa</b>	Display Type	<b>Touch Panel</b>
Reactivation air <small>(Wet)</small>		Communications <small>(Options)</small>	<b>MODBUS</b>
Rated airflow	<b>920 m³/h</b>		<b>BACNET</b>
Available static pressure	<b>400 Pa</b>		
Power Supply		Miscellaneous data	
(3x400V, 50 Hz)	<b>27.2 kW</b>	Weight <small>(Subject to final configuration)</small>	<b>498 kg</b>
Current	<b>40.0 A</b>	Operational temperature range	<b>-30/+40°Cdb</b>
Dehumidification Capacity		Panel Insulation	<b>20mm</b>
At 20.0°Cdb, 60% RH	<b>21.9 kg/h</b>	Filtration	<b>EU4</b>
		IEC protective class	<b>IP54</b>
		Max noise level <small>(without ductworks)</small>	<b>76 dBA</b>



## DEHUMIDIFICATION CAPACITY

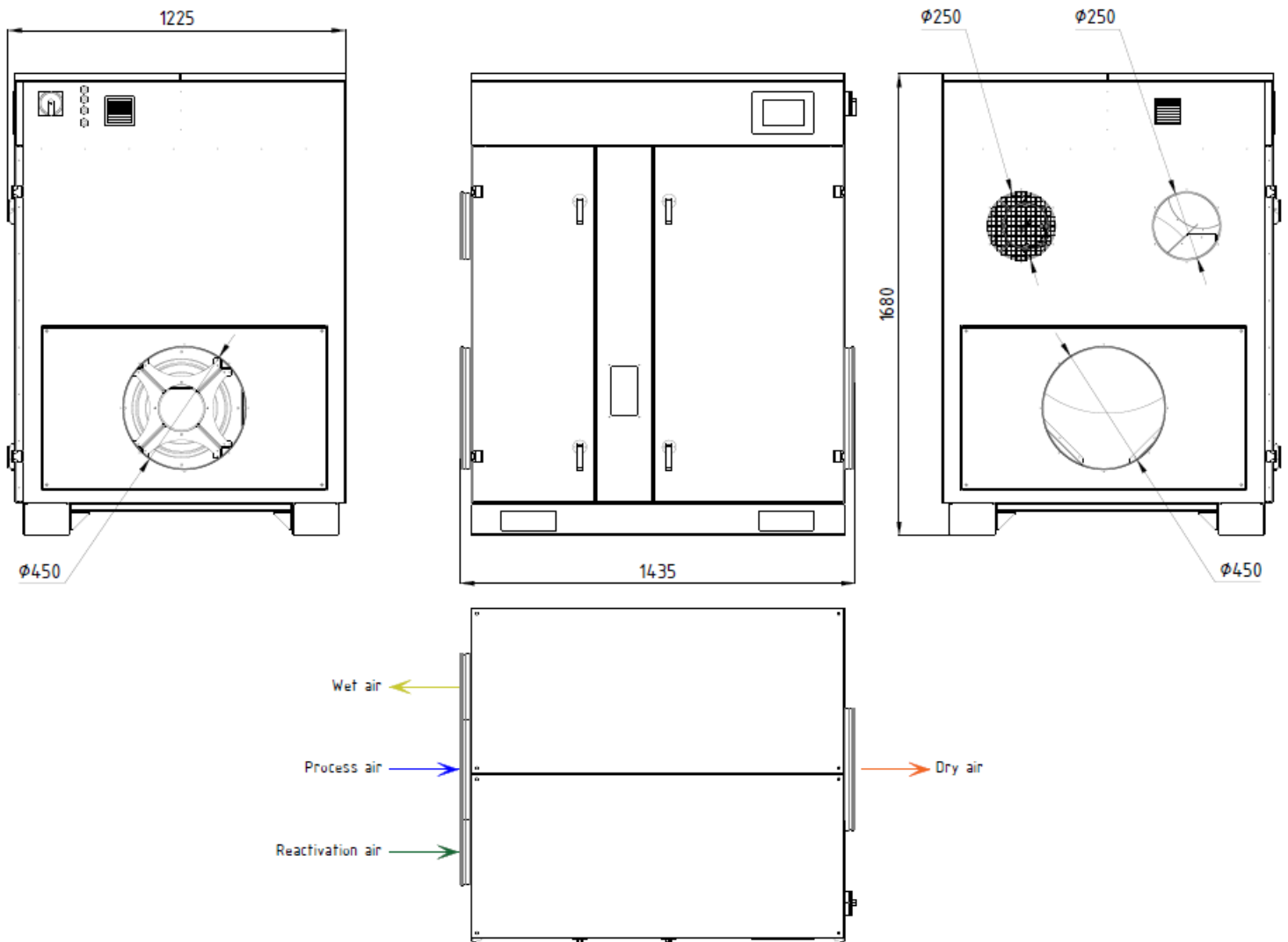
	50%	60%	70%	80%	90%
5.0°C	10.7	12.7	14.7	16.6	18.4
10.0°C	14.5	17.0	19.1	20.9	22.3
20.0°C	20.1	21.9	23.3	24.5	25.5
30.0°C	22.0	23.7	24.9	26.3	27.0

Approximate capacity in kg/h at different inlet process air relative humidity (%) and temperature (°Cdb): Reactivation air inlet +20.0°Cdb, 60% RH

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## Dimensions (Standard Unit)



Dimensions are approximate and are subject to final unit configuration.

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