

Thermokool

Industrial Air Dryer(Desiccant Dehumidifier)



Air dryer or we called desiccant dehumidifier, which is widely used in
Space and Aviation
Pharmaceutical Industry
Electronics Industry
Food Processing Industry
Lab & Chemical field

It working temperature $-10\sim 50^{\circ}\text{C}$, could control the relative humidity lowest below than 30% in high energy efficiency, popular in low temperature & low target humidity application.

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Industrial Air Dryer(Desiccant Dehumidifier)

CLR-200



CLR-400



CLR-600



CLR-750



| Model | CLR-200 | CLR-400 | CLR-600 | CLR-750 |
|----------------------------------|---------------|-------------|--------------|--------------|
| Dehumidifying capacity(20°C,60%) | 0.6kg/h | 2.5kg/hr | 3kg/hr | 3.5kg/hr |
| Process air flow (m3/h) | 200 | 420 | 580 | 750 |
| Inlet size (mm) | Φ100 | Φ100 | Φ125 | Φ200 |
| Reactivation air flow(m3/h) | 70 | 130 | 200 | 250 |
| Outlet size (mm) | Φ80 | Φ80 | Φ80 | Φ125 |
| Power(KW) | 1.2 | 2.0 | 3.8 | 5.5 |
| Current | 6A | 10A | 20A | 12A |
| Unit dimension | 750*400*465mm | 900*590*420 | 685*505*1040 | 1034*600*671 |
| Weight(kg) | 30 | 45 | 65 | 85 |
| Voltage | 220V/50HZ | 220V/50HZ | 220V/50HZ | 220V/50HZ |

- 1.High quality desiccant rotor,washable,5 years lifetime, warranty 1 year.
- 2.Equipped with an electric regeneration heating;
- 3.Strong and robust construction & nice design;
- 4.Access door design for easier maintenance and troubleshooting;
- 5.Customized filters, G4 efficiency;
- 6.Auto stop protection function for Rotor, delay time protection circuit & fault locater system;
- 7.ABB,OMRON and Schneider electrical accessories;

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Industrial Air Dryer(Desiccant Dehumidifier)

CLR-1000



CLR-1500/2500/3000



| Model | CLR-1000 | CLR-1500 | CLR-2500 | CLR-3000 |
|----------------------------------|----------------|----------------|-----------------|-----------------|
| Dehumidifying capacity(20°C,60%) | 7.5kg/hr | 10kg/hr | 15kg/hr | 19kg/hr |
| Process air flow (m3/h) | 1100 | 1550 | 2550 | 3000 |
| Inlet size (mm) | Φ200 | Φ250 | 400/488*222 | 400/488*222 |
| Reactivation air flow(m3/h) | 400 | 580 | 925 | 1100 |
| Outlet size (mm) | Φ125 | Φ160 | Φ200 | Φ200 |
| Power(KW) | 9 | 13 | 22 | 27 |
| Current | 18A | 26A | 50A | 60A |
| Unit dimension | 950*710*1200mm | 881*696*1234mm | 1295*880*1300mm | 1295*880*1300mm |
| Weight(kg) | 160 | 180 | 280 | 320 |
| Voltage | 380V/50Hz/3Ph | 380V/50Hz/3Ph | 380V/50Hz/3Ph | 380V/50Hz/3Ph |

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Industrial Air Dryer(Desiccant Dehumidifier)

CLR-3000/5000/7500

CLR-9000/18000/27000

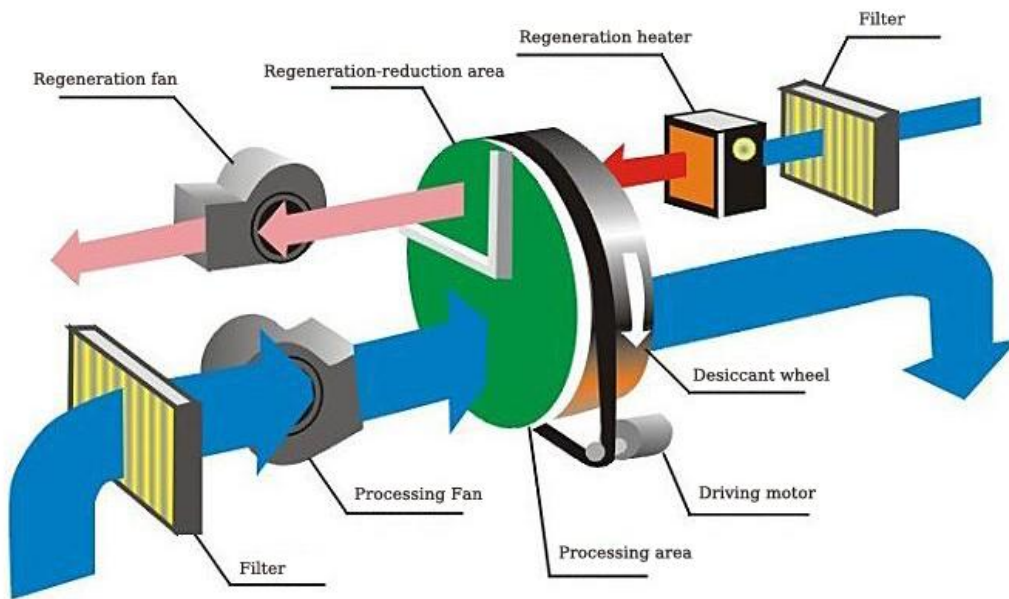


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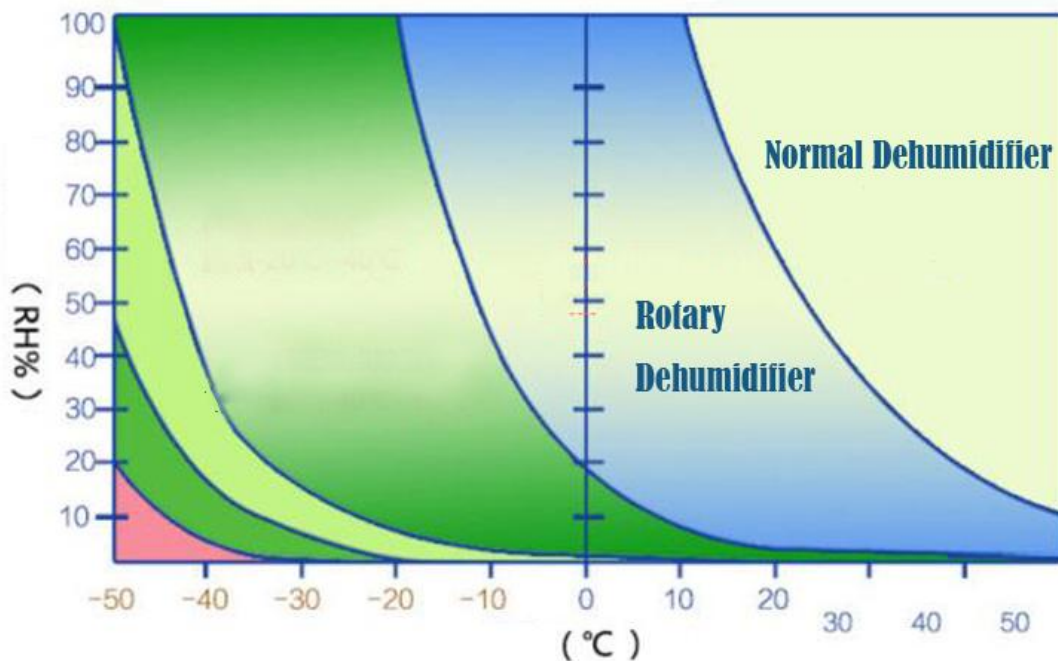
| Model | CLR-3000 | CLR-5000 | CLR-7500 | CLR-9000 | CLR-18000 | CLR-27000 | ... |
|----------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|-----|
| Dehumidifying capacity(20°C,60%) | 22kg/hr | 36kg/hr | 54kg/hr | 65kg/hr | 129kg/hr | 194kg/hr | |
| Desiccant wheel | Φ720*200 | Φ950*200 | Φ1050*200 | Φ1200*200 | Φ1780*200 | Φ2100*200 | |
| Process air flow (m3/h) | 3000 | 5000 | 7500 | 9000 | 18000 | 27000 | |
| Reactivation air flow(m3/h) | 1000 | 1700 | 2500 | 3000 | 6000 | 9000 | |
| Reactivation heating(°C) | 120±10 | 120±10 | 120±10 | 120±10 | 120±10 | 120±10 | |
| Reactivation heating power(KW/h) | 36 | 50 | 60 | 90 | 180 | 270 | |
| Processing blower power(KW) | 4.5 | 4 | 5.5 | 5.5 | 15 | 15 | |
| Reactivation blower power(KW) | 1.5 | 2.2 | 2.2 | 2.2 | 5.5 | 7.5 | |
| Desiccant Rotor motor power(KW) | 0.06 | 0.06 | 0.09 | 0.2 | 0.2 | 1 | |
| Max Power(KW) | 42 | 57 | 68 | 98 | 200 | 294 | |
| Unit Dimension (mm) | 1860*1150*1600 | 2500*1400*2000 | 2600*1523*2225 | 3000*1700*2200 | 6000*2200*2300 | 6000*2300*2300 | |
| Weight(kg) | 500 | 600 | 930 | 1400 | 2400 | 2800 | |
| Voltage | 380V/50Hz/3Ph | | | | | | |
| Applied Temperature | -10°C ~ 50°C | | | | | | |

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Air Dryer/Desiccant Dehumidifier Working Principle



Air Dryer & Refrigerant Dehumidifier Comparison

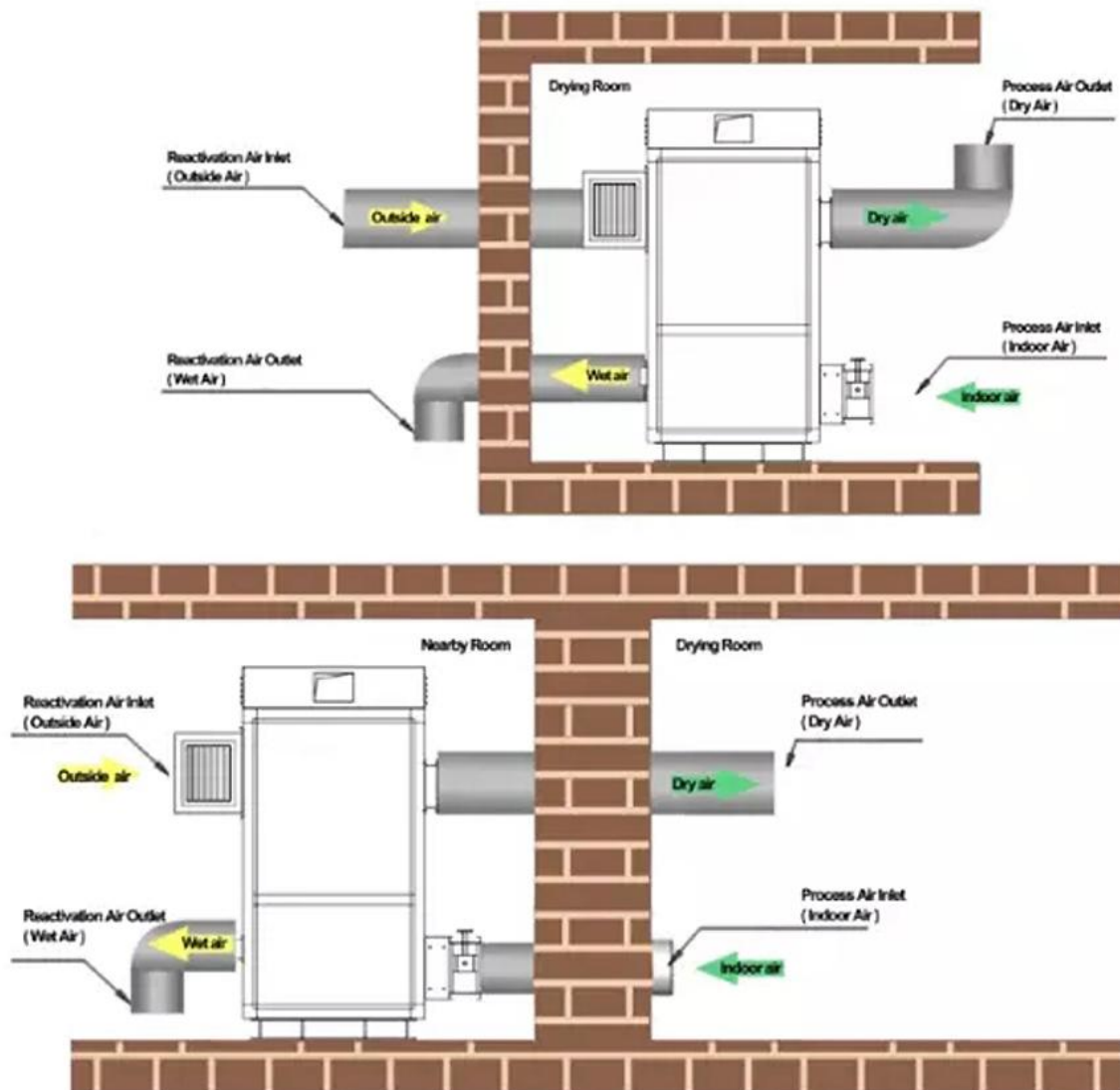


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Industrial Air Dryer(Desiccant Dehumidifier)

Installation Guidance of Desiccant Dehumidifiers

1. In the drying room:



Note: There should be a slope at the direction of reactivation air outlet to prevent dew backflow.

Note: Processing Air Outlet blow out the warm dry air, while Reactivation Air Outlet blow out the hot moisture air.