

CD+ 1-22

ATLAS COPCO QUALITY AIR SOLUTIONS

General Description

The CD+ adsorption dryer is a twin tower heatless regenerative desiccant dryer. The dryer is completely wired and equipped with all interconnecting pipe work and fittings



Working Principle

The general working principle of adsorption dryers is simple. Moist air flows over hygroscopic material (typical materials are silica gel, molecular sieves, activated alumina) and is thereby dried. The exchange of the water vapor in the moist compressed air into the hygroscopic material or “desiccant” to gradually be saturated with adsorbed water. Therefore, the desiccant needs to be regenerated regularly to regain its drying capacity, Adsorption dryers are typically built with two drying vessels for that purpose. Each tower switches the tasks when the other one is completely regenerated. Typical Pressure Dew Point (PDP) that can be achieved is -40C, which makes these dryers, suitable for providing very dry air for more critical applications.

CD is a purge regenerated adsorption dryers. The regeneration process takes place with the help of expanded compressed air and requires approximately 15-20% of the dryers nominal capacity at 7 bar € working pressure.

1. Drying Vessel
2. Regenerating Vessel
3. Purge
4. Control Valves

Scope of Supply



- One loose inlet filter (PD⁺)
- An after-filter integrated into the desiccant cartridges
- Spring loaded, anodized aluminum desiccant cartridges for easy service
- Molecular Sieve desiccant
- 40 degree F pressure dew point (-100F can be obtained as standard by de-rating)
- Electronic controls with a purge saver system and auto restart after power failure with cycle memory
- Remote alarm capability (connector supplied)
- Power cable
- Electronic panel protected to IP65/NEMA 4
- Flexible installation as the unit can be mounted vertically or horizontally and inlet/outlet reversed. As standard, unit can be floor mounted (sliding brackets in bottom part)

Features & Benefits

Energy Savings

- Pressure drop below 0.2bar/ 2.9psi
 - Drives down energy cost
- Dew point sensing and control
 - Adapts the energy consumption to real load of the dryer

Reliable operation

- Proven durable Valves
 - Design for multiple switching, that improves dryer lifetime
- Guaranteed dew point
 - -Robust and accurate pressure dew point sensors.

Easy set-up and use

- Ease of installation
 - Single point installation
 - Fork lift slots
- Low maintenance
 - All internal components are easily accessible
 - Excellent control and monitoring system
 - High grade desiccants and
 - Durable valve