

# A compact and easy maintenance Air Dryer

The cost of bad quality air is well known to train services operators and maintenance shops. Polluted and wet air can involve high damage and costs to your air network and brake system. Our drying systems are providing a class-leading performance in order to protect your equipment and air brake network. Our portfolio covers the needs of every Mobility vehicle from tramways to locomotives with service proven and innovative solutions.

Our CDR desiccant air dryers remove moisture from compressed air in their own way to protect your compressor or equipment. Based on our patented Cerades™ desiccant blocks, our CDR offer high energy efficiency and extended maintenance cycles compared to desiccant beads. Our dryers are suitable for air deliveries from 900 to 3300 l/min.



## **Features and benefits**

## A more compact design and greater versatility

The lack of loose, bouncing beads also makes Cerades™ vibration-resistant, which allows it to be mounted horizontally and ensures continuous operation in rigorous applications, making it an ideal match for Railway and Mobility applications.

In addition, because it can handle inlet temperatures of up to 70°C, Cerades™ is the ideal desiccant for high ambient or inlet temperatures.

Desiccant dryers provide you with the clean, dry air you need to extend the life of your equipment and ensure the quality of your end product. All air dryers incorporate unique, patented technology and energy-saving options. They are available

- In a range of sizes
- With a pressure dewpoint as low as -40°C/-40°F
- From 900 to 3300 l/min
- In an IP65 protected cubicle

### Ingenious design

Instead of forcing the compressed air through thousands of beads, Cerades™ allows it to flow through straight, structured tubes. Because the air meets little resistance, the pressure drop is much lower and, as a result, a lot less energy is required to operate the dryer.

#### A better, safer dryer

When compressed air is pushed through traditional dryers, the desiccant beads bounce around and ultimately decompose. This creates a fine dust. If it is not filtered out, it can contaminate the air and downstream equipment. Filtering it out, on the other hand, results in higher operating costs and more waste. In addition, this dust is a health and environmental hazard because it circulates in the ambient air when the desiccant is replaced and can harm service technicians and the operating personnel alike. Cerades™ lasts much longer and eliminates the dust problem. This further reduces costs and delivers users ISO 8573-1:2010 Class 2 air purity for particles without any extra filtration.

## 5 reasons why a Cerades<sup>™</sup> dryer will improve your compressed air system performance

Some inventions change everything. Atlas Copco's Cerades™, a new desiccant for compressed air dryers, is such a revolutionary innovation. The first ever solid, ceramic desiccant, Cerades™ gives you better air quality, lower energy and service costs, and health and environmental benefits.

#### • You save big on energy costs.

Traditional adsorption dryers force compressed air through towers filled with thousands of loose desiccant beads. In Cerades™ dryers, the air flows straight through solid tubes for a no-resistance flow and significantly lower energy costs.

#### • You get better air quality.

Loose desiccant beads bounce around in the drying towers, which causes them to decompose over time. This can compromise your dew point. Cerades™ lasts longer to give you better air quality and extended service intervals.

#### No desiccant dust to deal with.

The decomposing beads of traditional dryers release a fine dust into your air system. This dust is not only a health and environmental hazard but also creates additional filtration and maintenance costs. Cerades  $^{\text{TM}}$  eliminates this dust issue altogether.

## You enjoy installation and operational flexibility.

Cerades™is vibration-resistant and can be mounted horizontally. This allows for easy installation and continuous operation in demanding applications such as the transportation industry.

#### You get more space.

Cerades<sup>™</sup> dryers are smaller because they can handle a higher airflow. This reduced footprint gives you more free space and flexibility in your compressor room.

### **Options**

Flexible orientation, either horizontal or vertical

Available in wide-spread control voltages: 24, 36, 48, 72 and 110VDC

## **Technical specifications**

| Type   | Pressure dewpoint |     | ISO 8573-1<br>Class | Max. inlet Capacity |      |     | Pressure drop<br>excluding filters |      | Connection size inlet / outlet |                | "Dimensions<br>(H x W x D)" |                    | Weight |     |
|--------|-------------------|-----|---------------------|---------------------|------|-----|------------------------------------|------|--------------------------------|----------------|-----------------------------|--------------------|--------|-----|
|        | °C                | °F  |                     | l/s                 | m3/h | cfm | Bar                                | psig | Inlet (G/NPT)                  | Outlet (G/NPT) | mm                          | inch               | kg     | lbs |
| CDR 30 | -40               | -40 | [-;2;-]             | 30                  | 108  | 64  | 0.23                               | 3    | 1"                             | 1"             | 500 x 495 x 385             | 19,7 x 19,5 x 15,2 | 50     | 110 |
| CDR 42 | -40               | -40 | [-;2;-]             | 42                  | 151  | 89  | 0.23                               | 3    | 1"                             | 1"             | 675 x 495 x 385             | 26,6 x 19,5 x 15,2 | 55     | 121 |
| CDR 55 | -40               | -40 | [-;2;-]             | 55                  | 198  | 117 | 0.23                               | 3    | 1"                             | 1"             | 800 x 495 x 385             | 31,5 x 19,5 x 15,2 | 62     | 137 |

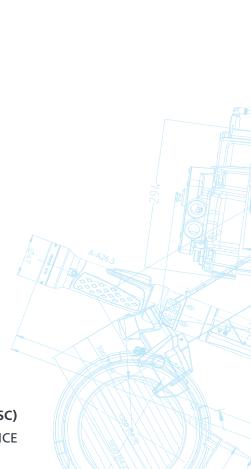
#### Reference conditions:

Dryer air inlet temperature : 35°C Inlet relative humidity : 100%





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