

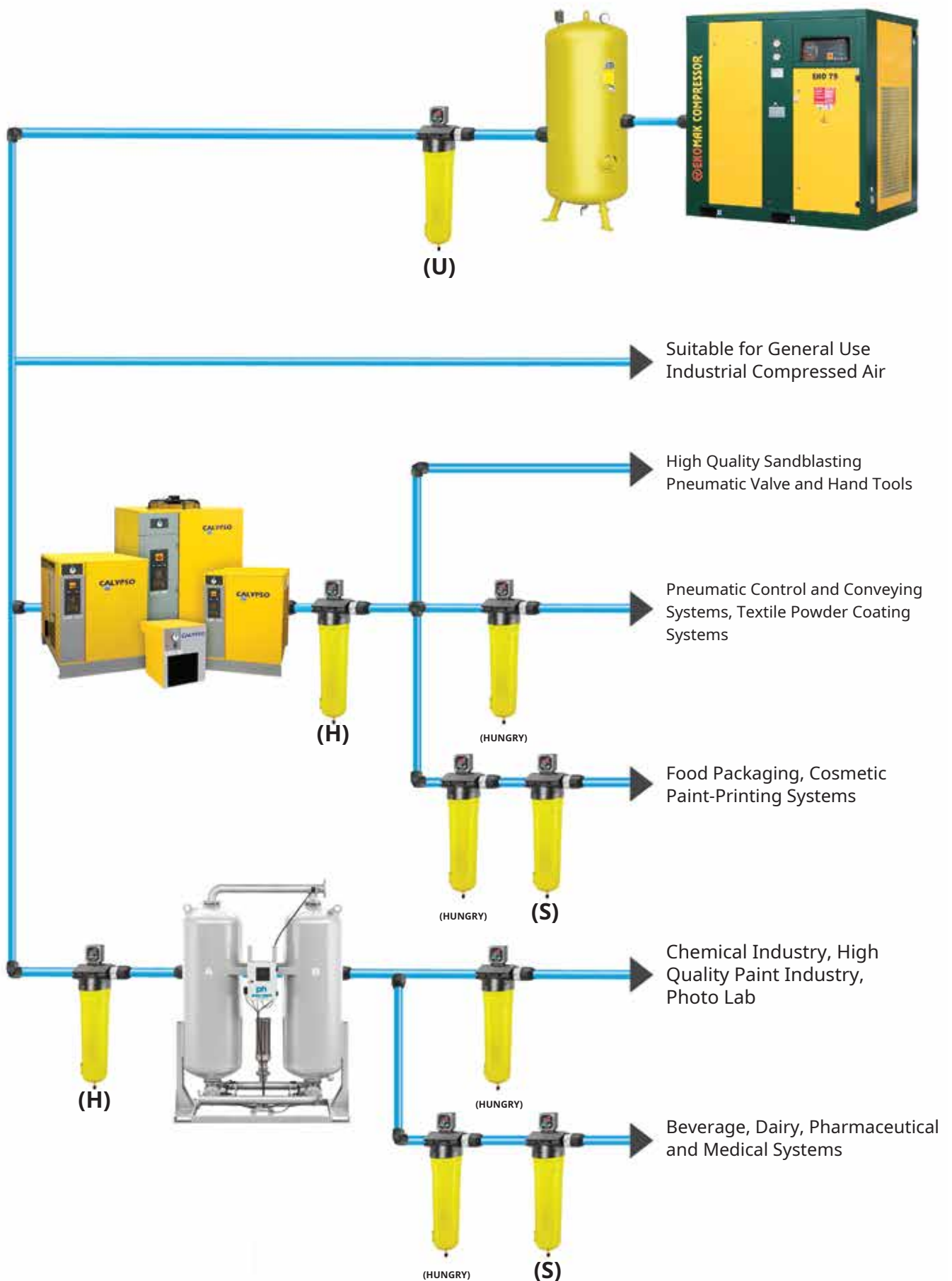


MORE THAN A COMPRESSOR



Dryer Brochure





Compressed Air Dryers

Where Does the Water Come From?

Atmospheric air entering the compressor contains water vapor. This water vapor, which condenses and becomes water with the effect of compression, creates problems in air lines and usage points. For example: With every 8000 m³ of air carrying 70% relative humidity at 20°C, around 100 liters of water enters the compressor. (This is the 10-hour capacity of a 75 kW compressor on average.) If the air in question is compressed up to 7 bar, 82% of this steam is activated as condensed water. (82 liters of water).

Dry Air; How Does It Reduce Operating Cost?

It reduces the cost of your air distribution system.

When dry air is used, you do not have to use drains or filters, U pipes, elbows, slopes at various points of the system, and you will not encounter pressure losses caused by these.

Increases power at the point of use.

Water causes corrosion in the pipes, resulting in air losses and, as a result, the pressure drops. Water causes air tools and motors to run slower.

Prevents workforce loss

There is no need for filter maintenance or evacuation of water traps. It saves the labor spent for malfunction and maintenance.

It reduces maintenance costs.

Water, which spoils the oil on air tools, motors and cylinders, shortens the life of these devices and causes frequent maintenance in these devices. The dryer prevents this.

It extends the time of accurate measurement of pneumatic measuring and control devices.

Controls non-functional events.

Clean and dry air prevents contamination of the surface in spray painting, damage to the product by the blowing air, deterioration of plastic parts by water, contamination and humidity of the products during transport, packaging or mixing with air.

It prevents breakdowns and failures of pneumatically controlled or operating devices. Dry air prevents clogging and deterioration of pneumatically operated devices and sandblasting equipment.

Water condensation in compressed air systems increases operating costs.

1st COOLING COMPRESSOR

Electric driven motor, overcurrent and temperature protected

2nd COOLER CONDENSER

Air-cooled, large surface designed for high temperatures

3 IP 54 PROTECTED FAN MOTOR

For condensate air cooling

4 AIR GAS EVAPORATOR

Low pressure loss and high heat transfer

5 CONDENS SEPARATOR

High Efficiency

6 AIR-AIR HEAT EXCHANGER

High heat transfer large surface providing

7 REFRIGERANT GAS SEPARATOR

High efficiency refrigerant

12 HOT GAS BYPASS VALVE

Freezing at low load inhibitor gas regulating valve

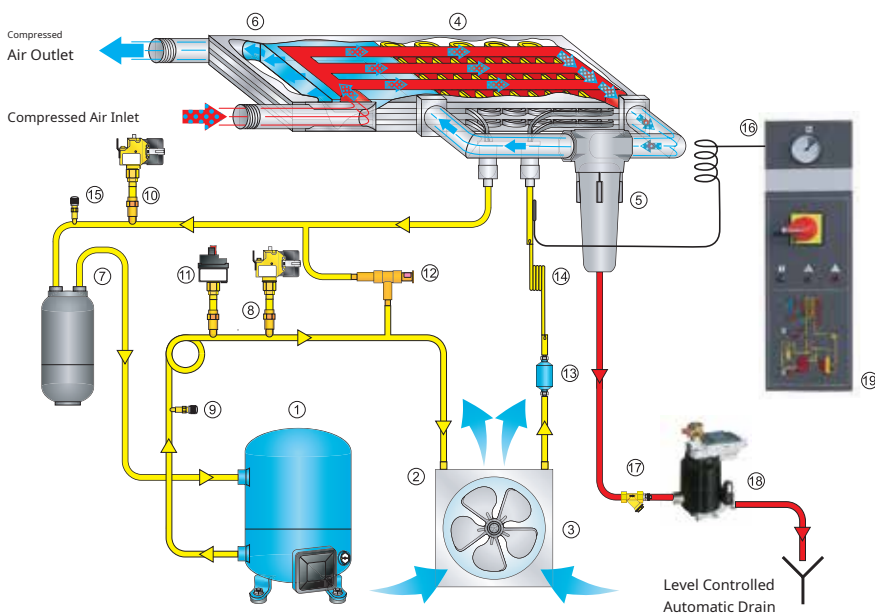
16/19 CONTROL BOARD

18 ELECTRONIC LEVEL CONTROLLED AUTOMATIC EVACUATION

condensate water only
It saves energy by evacuating.

17 COLLECTOR FILTER

13 REFRIGERANT GAS FILTER

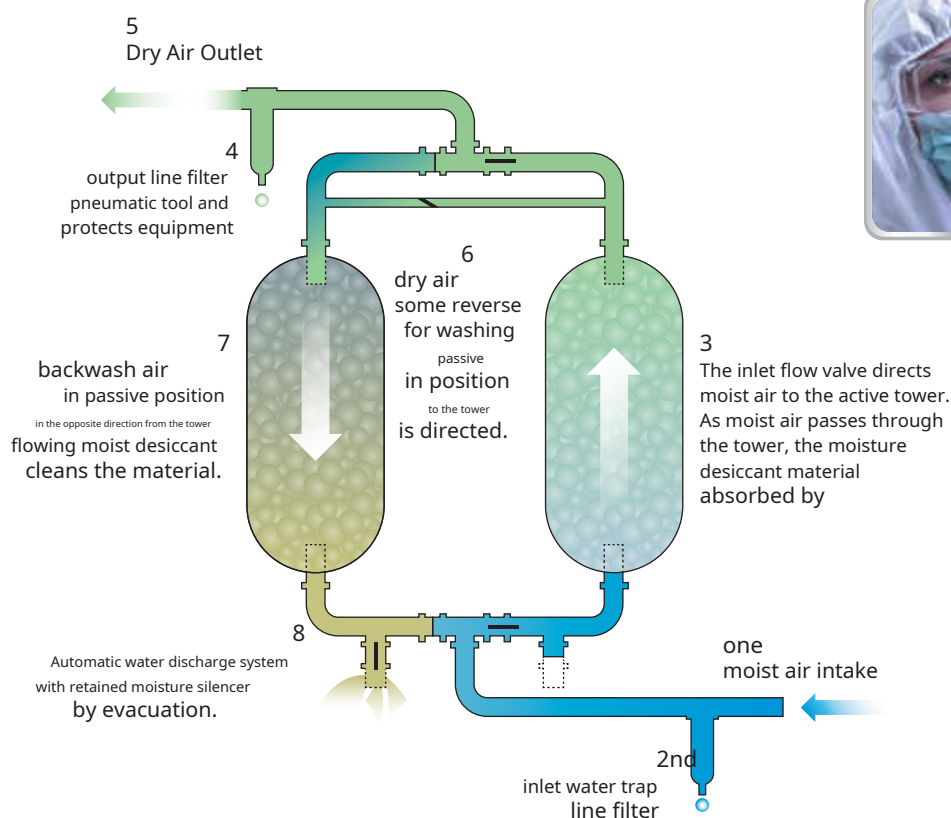


- 8 High Pressure Switch
- 9 Service Valve
- 10 Minimum Pressure Switch
- 11 Fan Control Pressure Switch
- 14 Capillary Tube
- 15 Gas Service Valve
- 16 Dew Point Thermometer

Ekomak Desiccant Air Dryers are designed for safe, efficient and long-lasting use. Ekomak Pneumatech Desiccant Dryers, produced for the supply of clean, oil-free and dry air needed by machinery and equipment, will extend the life of the pneumatic equipment you use in your business and increase your product quality with their performances at -40°C and -70°C .

It provides minimum energy and maximum performance with the lowest pressure loss in its class and the lowest regeneration air in its class, thanks to pipes, fittings and valves selected in optimum dimensions.

It increases the efficiency of your business with low maintenance costs and low operating costs, thanks to its delivery ready to work, minimum installation cost and long Desiccant material life (5 Years). Easily adaptable to different working conditions, at an ambient temperature of $+3^{\circ}\text{C}$ to $+50^{\circ}\text{C}$; with -40°C Ekomak Pneumatech CAD-D series Desiccant Dryers, which can operate at dew point temperatures between -70°C and pressures between 4 and 13 Bar, are designed for businesses that need high pressure air quality such as Cosmetics, Medical, Food, etc., with long life, high performance and low operating costs. It is the leading Desiccant Dryer in its class.



TECHNICAL SPECIFICATIONS OF CALYPSO DESICCANT DRYER

| Medicine | Capacity | | Connection Diameter of inch | Dimensions Width X Length X Height | Weight kg |
|------------|----------|------|-----------------------------------|---------------------------------------|--------------|
| | m3/min | m3/h | | | |
| CAD-D 7 | 0.42 | 25 | R 1/2" | 149 x 295 x 730 | 22 |
| CAD-D 10 | 0.60 | 36 | R 1/2" | 149 x 295 x 875 | 25 |
| CAD-D 17 | 1.02 | 61 | R 1/2" | 149 x 295 x 1270 | 35 |
| CAD-D 22 | 1.32 | 79 | R 1/2" | 149 x 295 x 1505 | 44 |
| CAD-D 25 | 1:50 | 90 | R 1/2" | 550 x 201 x 1233 | 50 |
| CAD-D 32 | 1.92 | 115 | R 1" | 550 x 242 x 1000 | 64 |
| CAD-D 45 | 2.70 | 162 | R 1" | 550 x 242 x 1243 | 78 |
| CAD-D 65 | 3.90 | 234 | R 1" | 550 x 242 x 1611 | 98 |
| CAD-D 90 | 5.40 | 324 | R 1" | 550 x 358 x 1243 | 158 |
| CAD-D 105 | 6.30 | 378 | R 1" | 550 x 358 x 1611 | 252 |
| CAD-D 130 | 7.80 | 468 | R 1" | 550 x 358 x 1611 | 258 |
| CAD-D 160 | 9.60 | 576 | R 1 1/2" | 550 x 520 x 1611 | 310 |
| CAD-D 190 | 11.40 | 684 | R 1 1/2" | 550 x 520 x 1611 | 310 |
| CAD-D 220 | 13.20 | 792 | R 1 1/2" | 1040 x 840 x 1760 | 445 |
| CAD-D 300 | 18.00 | 1080 | R2" | 1046 x 894 x 1876 | 600 |
| CAD-D 360 | 21.60 | 1296 | R2" | 1100 x 923 x 1914 | 650 |
| CAD-D 480 | 28.80 | 1728 | R 2 1/2" | 1776 x 988 x 2549 | 970 |
| CAD-D 630 | 37.80 | 2268 | R 2 1/2" | 1884 x 843 x 2604 | 1240 |
| CAD-D 970 | 58.20 | 3492 | R 3" | 2359 x 1039 x 2643 | 2010 |
| CAD-D 1260 | 75.60 | 4536 | R 3" | 2472 x 1039 x 2636 | 2470 |
| CAD-D 1600 | 96.00 | 5760 | R 6" | 2693 x 1428 x 2576 | 3560 |

| Dryer Introduction temperature (°C) | 20 | 25 | 30 | 35 | 40 | 45 | 50 |
|--|-----|-----|-----|-----|------|------|------|
| | one | one | one | one | 0.84 | 0.71 | 0.55 |

| Operating pressure (Bar) | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|-----------------------------|------|------|------|-----|------|------|------|-----|------|------|
| | 0.62 | 0.75 | 0.87 | one | 1.12 | 1.25 | 1.37 | 1.5 | 1.62 | 1.75 |



CALYPSO GAS COOLED DRYER TECHNICAL SPECIFICATIONS

| Medicine | Capacity | | Connection Diameter of inch | Strength kw | Study voltage V/Hz/Ph | Dimensions Width X Length X Height | Weight kg |
|----------------|--------------|------------|-----------------------------------|----------------|-----------------------------|---------------------------------------|--------------|
| | m3/min | m3/h | | | | | |
| CAD 11 | 0.66 | 39.6 | 1/2" | 0.25 | 230 / 50 / 1 | 350 x 500 x 450 | 19 |
| CAD 21 | 1.20 | 72 | 3/4" | 0.26 | 230 / 50 / 1 | 350 x 500 x 450 | 25 |
| CAD 30 | 1.83 | 110 | 3/4" | 0.28 | 230 / 50 / 1 | 350 x 500 x 450 | 27 |
| CAD 42 | 2.50 | 150 | one" | 0.6 | 230 / 50 / 1 | 370 x 500 x 764 | 44 |
| CAD 53 | 3.10 | 186 | one" | 0.67 | 230 / 50 / 1 | 370 x 500 x 764 | 44 |
| CAD 61 | 3.60 | 216 | 1½" | 0.79 | 230 / 50 / 1 | 460 x 560 x 789 | 53 |
| CAD 70 | 4.10 | 246 | 1½" | 0.87 | 230 / 50 / 1 | 460 x 560 x 789 | 60 |
| CAD 91 | 5.40 | 324 | 1½" | one | 230 / 50 / 1 | 460 x 560 x 789 | 65 |
| CAD 110 | 6.50 | 390 | 1½" | 1.2 | 230 / 50 / 1 | 580 x 590 x 899 | 80 |
| CAD 130 | 7.70 | 462 | 1½" | 1.44 | 230 / 50 / 1 | 580 x 590 x 899 | 80 |
| CAD 170 | 10.00 | 600 | 2nd" | 1.8 | 400 / 3 / 50 | 735 x 898 x 962 | 128 |
| CAD 200 | 12.00 | 720 | 2nd" | 2nd | 400 / 3 / 50 | 735 x 898 x 962 | 146 |
| CAD 250 | 15.00 | 900 | 2nd" | 2.6 | 400 / 3 / 50 | 735 x 898 x 962 | 158 |
| CAD 301 | 18.00 | 1,080 | 2nd" | 3.5 | 400 / 3 / 50 | 735 x 898 x 962 | 165 |
| CAD 401 | 24.00 | 1.440 | 3" | 3.9 | 400 / 3 / 50 | 735 x 898 x 962 | 325 |
| CAD 500 | 30.00 | 1,800 | 3" | 4.45 | 400 / 3 / 50 | 1020 x 1082 x 1535 | 335 |
| CAD 585 | 35.00 | 2,100 | 3" | 5.5 | 400 / 3 / 50 | 1020 x 1082 x 1535 | 350 |
| CAD 850 | 50.00 | 3,000 | DN 125 | 6.8 | 400 / 3 / 50 | 1020 x 1082 x 1535 | 550 |
| CAD 1150 | 70.00 | 4,200 | DN 125 | 10.2 | 400 / 3 / 50 | 1020 x 2099 x 1535 | 600 |
| CAD 1400 | 84.00 | 5,040 | DN 125 | 12.3 | 400 / 3 / 50 | 1020 x 2099 x 1535 | 650 |

LOT 5



| CORRECTION FACTOR | Environment temperature | °C | 25 | 30 | 35 | 40 | 45 | Inlet Air temperature | °C | 30 | 35 | 40 | 45 | 50 | 55 |
|----------------------|----------------------------|-----|------|------|------|------|------|--------------------------|------|------|------|------|------|------|------|
| | | A | 1.00 | 0.92 | 0.84 | 0.80 | 0.74 | | B | 1.24 | 1.00 | 0.82 | 0.69 | 0.58 | 0.45 |
| | Study pressure | bar | 5 | 6 | 7 | 8 | 9 | 10 | 11th | 12 | 13 | 14 | 15 | 16 | |
| | | C | 0.90 | 0.96 | 1.00 | 1.03 | 1.06 | 1.08 | 1.10 | 1.12 | 1.13 | 1.15 | 1.16 | 1.17 | |
| | | | 0.90 | 0.97 | 1.00 | 1.03 | 1.05 | 1.07 | 1.09 | 1.11 | 1.12 | | | | |





**PSA
Nitrogen Generators**



**PSA
Oxygen Generators**



Desiccant Dryers



Oil Free Compressor

