

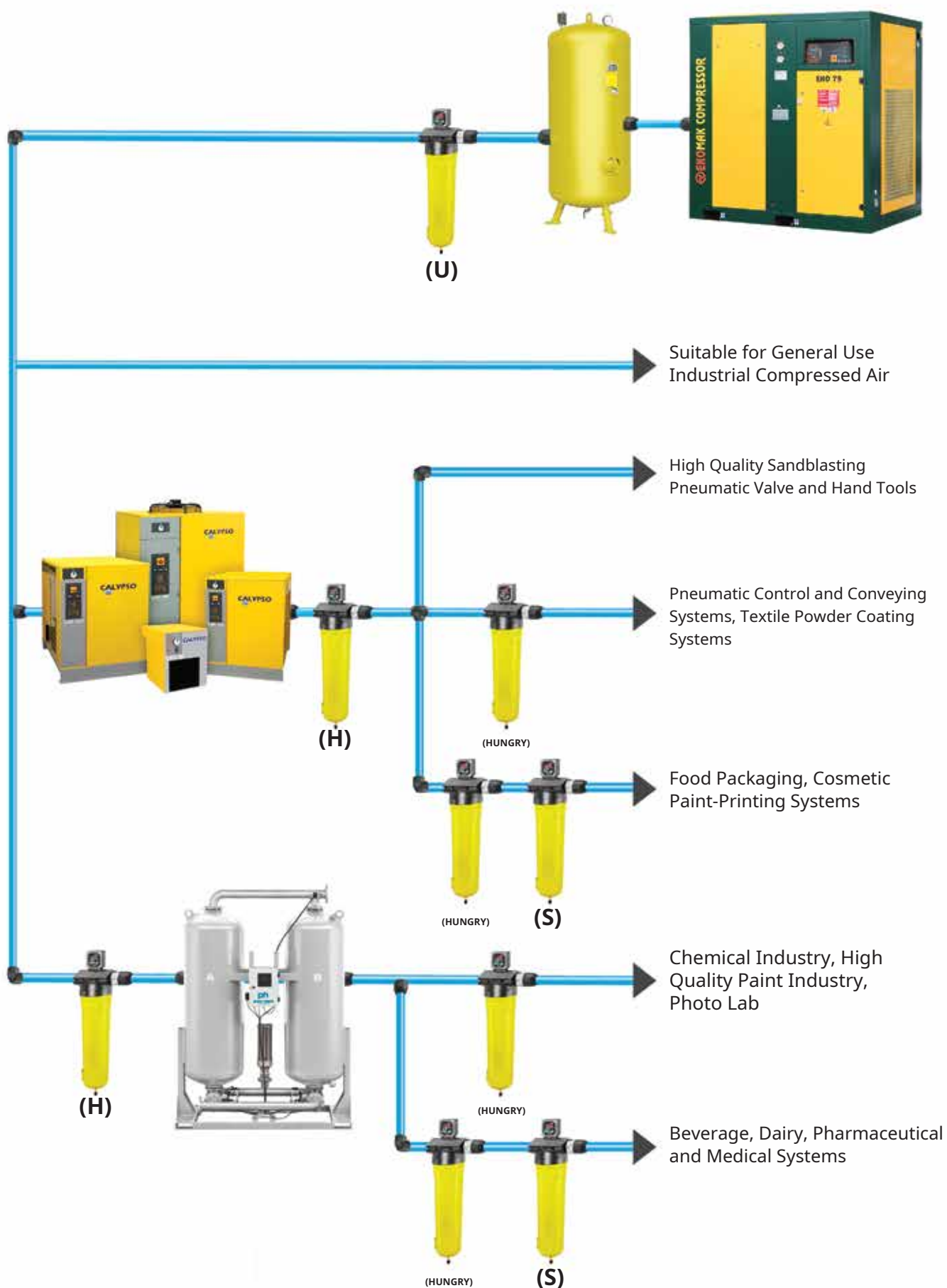


MORE THAN A COMPRESSOR



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 m<sup>3</sup> 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

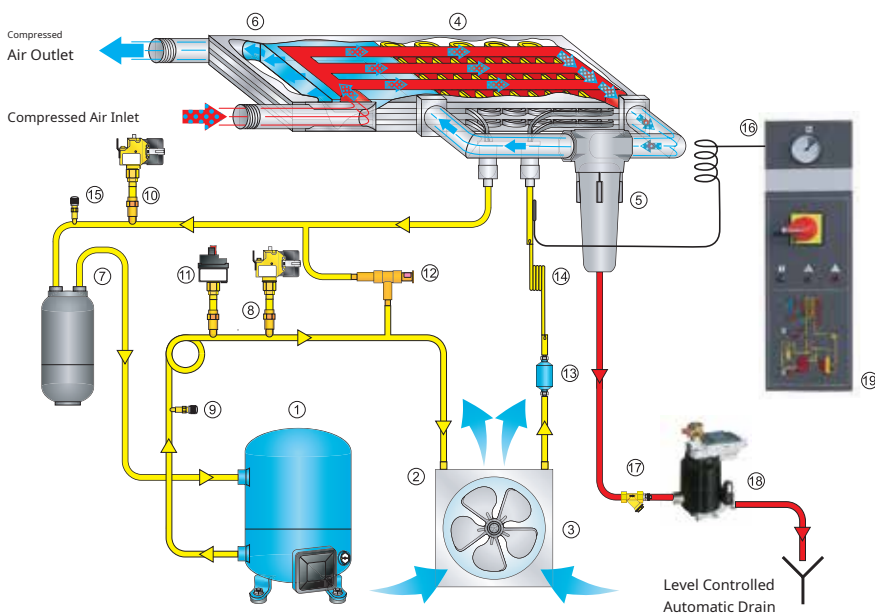
**16/19 CONTROL BOARD**

**18 ELECTRONIC LEVEL CONTROLLED AUTOMATIC EVACUATION**

condensate water only  
It saves energy by evacuating.

**17 COLLECTOR FILTER**

**13 REFRIGERANT GAS FILTER**

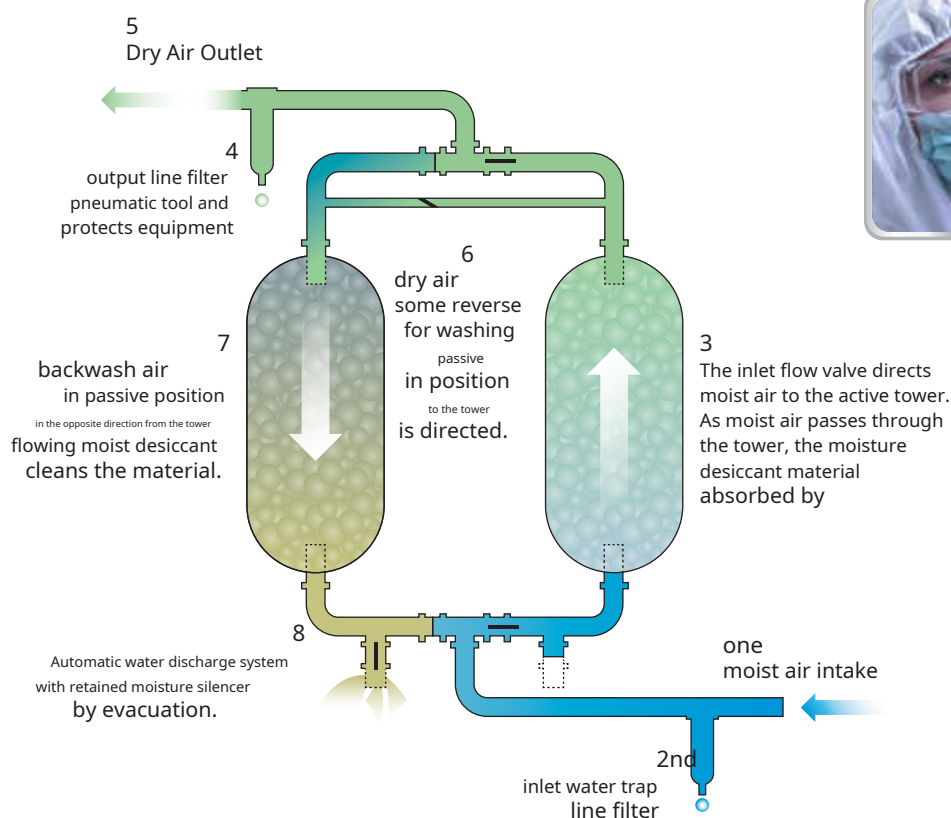


- 8 High Pressure Switch
- 9 Service Valve
- 10 Minimum Pressure Switch
- 11 Fan Control Pressure Switch
- 14 Capillary Tube
- 15 Gas Service Valve
- 16 Dew Point Thermometer

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  $-40^{\circ}\text{C}$  and  $-70^{\circ}\text{C}$ .

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  $-40^{\circ}\text{C}$  Ekomak Pneumatech CAD-D series Desiccant Dryers, which can operate at dew point temperatures between  $-70^{\circ}\text{C}$  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

Lot 3

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



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	





**PSA  
Nitrogen Generators**



**PSA  
Oxygen Generators**



**Desiccant Dryers**



**Oil Free Compressor**

