

# C & R TESTING LTD

## Heatless Desiccant Air Dryers

Heatless desiccant dryers provide constant -40 °C pressure dew point.

Heatless desiccant dryers are designed to supply clean and very dry compressed air for critical applications.

Heatless desiccant Dryers feature a very reliable electronic controller to ensure that the dryer operated perfectly throughout the service-life of the dryer.

It is not necessary to use some water drains, filters, elbows and slopes that cause pressure drop.



### Correction Coefficient Of Inlet Temperature (F1)

Ambient Temperature (°C)	30 °C	35 °C	40 °C	50 °C	60 °C
Coefficient	1,29	1	0,92	0,65	0,45

### Correction Coefficient of Temperature (F2)

Inlet Temperature of Dryer (°C)	20 °C	25 °C	30 °C	35 °C	40 °C	50 °C
Coefficient	1,05	1	0,98	0,93	0,84	0,7

### Pressure Adjustment Factor (F3)

Working Pressure (Bar)	4	6	7	8	10	12	14	16
Coefficient	0,80	0,94	1	1,04	1,11	1,16	1,22	1,25

For example for choosing the correct dryer. If an air compressor delivers 100 m³/h at 7 bars and dry inlet temperature is 45 °C and ambient temperature is 35 °C. Please choose your dry as above.

Flow rate x F1 x F2 x F3 100 x 1 x 1,18 x 1,14 = 134,52 m³/sat

### High technology: Very low pressure drop

Designed to operate in harsh conditions

- Thanks to the environmentally friendly R134a gas and large selected condenser with a broad surface area, it is capable of operating at input temperatures of 60°C and ambient temperature of 55°C Compact Design: Each centimetre in the dryer has been used with utmost care and high efficiency.



C & R Testing Ltd.  
 Unit 1 Owenshaw Mills, Old Cawsey, Sowerby Bridge, Halifax.  
 HX6 2AF  
 Tel: +44 (0)1422 410466, Email: [info@candrtesting.co.uk](mailto:info@candrtesting.co.uk)

# C & R TESTING LTD

## Easy Access

Thanks to unscrewed couplings and plastic handles, it will take just a few seconds for you to access to the cooling circuit.

## Internal Ventilation

Thanks to the ventilation duct positioned for good measure in the internal part of the dryers of which condensers are installed to the upper part, hot air passing through the condenser is conveyed back to the interior of the dryer. Thus, maximum efficiency is achieved in the intra-machine ventilation.

## External Ventilation

In large dryers of which condensers are installed in the upper part, thanks to the specially designed bolts positioned in the top canopy plate, external ventilation ducts (to prevent overheating of the machine room or to use the emerging hot air to heat up other rooms) are easily installed and does not require any extra labour.

## Integrated Filters

Input and output filters installed in the canopy not only enhance the performance and quality but prevents extra plumbing which must be provided at the inlet and outlet of the dryer.

## Filter Alarms

Thanks to the system which alerts the customer by flashing or beeping when the filter is filled up, filter replacement may be carried out without causing any pressure drop in the customer's line. Liquid water drops coming from the line are separated and removed by the water separator, thus allowing the performance of the dryer to reach the optimum level.

## Insulation

In order to prevent any heat to be taken in from the external environment and to allow the performance to be at optimum levels, all the necessary components are coated with insulating material in sufficient thickness. Cooling circuit as well as the cold draining pipes and hoses have not been ignored here.

## Independent Electric Switchboard

Board is insulated from the cooling circuit. Having an outer cover, the switchboard provides quick access without opening the dryer canopies at the time of any electrical operation.



C & R Testing Ltd.  
Unit 1 Owenshaw Mills, Old Cawsey, Sowerby Bridge, Halifax.  
HX6 2AF  
Tel: +44 (0)1422 410466, Email: [info@candrtesting.co.uk](mailto:info@candrtesting.co.uk)

# C & R TESTING LTD

## Dryer Electric Connection

It is quite easy to connect electricity to the dryer. Electric line cables fastened by means of connectors provides direct access to the electric switchboard without entering the dryer.

## Hot Gas

Bypass Valve: Hot Gas Bypass Valves are quite large especially in large dryers. In large dryers, hot gas sent unintentionally to the line –even if at a small quantity– adversely affects the performance of the dryer. Therefore, we pay utmost attention not to use ordinary hot gas bypass valves in the large systems we design. While the valve used is pressure-controlled just as in ordinary HGBPVs, it fully closes the solenoid valve and optimises the performance whenever the dryer requires 100% cooling.



## Compressed Air Dryers



Type	Capacity (m <sup>3</sup> /min)	Dimensions (W x L x H)	Weight (kg.)	Out (inch)
TMP-HK 23	0,38	413*363*557	32	1/2
TMP-HK 38	0,63	413*363*557	32	1/2
TMP-HK 53	0,88	413*363*557	32	1/2
TMP-HK 100	1,66	473*453*832	51	3/4
TMP-HK 155	2,58	473*453*832	53	3/4
TMP-HK 190	3,16	473*453*832	55	3/4
TMP-HK 210	3,5	553*503*874	78	1- 1/2
TMP-HK 305	5	553*503*874	83	1- 1/2

C & R Testing Ltd.  
Unit 1 Owenshaw Mills, Old Cawsey, Sowerby Bridge, Halifax.  
HX6 2AF  
Tel: +44 (0)1422 410466, Email: [info@candrtesting.co.uk](mailto:info@candrtesting.co.uk)

## C & R TESTING LTD

TMP-HK 375	6,2	553*503*874	86	1 -1/2
TMP-HK 495	8,25	678*648*1157	160	2
TMP-HK 623	10,3	678*648*1157	165	2
TMP-HK 930	15,5	948*728*1370	220	2
TMP-HK 1200	20	948*728*1370	230	2
TMP-HK 1388	23	948*798*1460	270	3
TMP-HK 1800	30	948*798*1460	285	3
TMP-HK 2500	41,6	1163*778*1725	392	3
TMP-HK 2775	46	1163*778*1725	410	3

Please contact with our company dealing with larger models.

C & R Testing Ltd.  
Unit 1 Owenshaw Mills, Old Cawsey, Sowerby Bridge, Halifax.  
HX6 2AF  
Tel: +44 (0)1422 410466, Email: [info@candrtesting.co.uk](mailto:info@candrtesting.co.uk)