



**KELTEC**  
Technolab

## KELTEC MODULAR DESICCANT AIR DRYERS (KMDAD SERIES)

Building upon the success of the KELTEC-Technolab Refrigerated Air Dryers, we are proud to introduce our range of **KMDAD range of Modular Desiccant Air Dryers**, for applications in which a lower dew point (-40°F) is required in order to achieve significantly reduced levels of moisture in an air system. The KELTEC-Technolab **Modular Desiccant Air Dryers** are offered in sizes of 3 to 240 cfm, and are modular, so that the units can be added together in order to achieve the desired air flow capacity. KELTEC-Technolab **KMDAD** series dryers are easy to install and maintain, being essentially automatic, and due to their compact size, can typically be installed at the point of use if required. Using the proven technology of moving compressed air through highly porous activated alumina desiccant, KELTEC-Technolab **KMDAD** dryers utilize a small amount of the compressed air to regenerate saturated desiccant, to achieve a typical pressure drop of 2 psi, when properly sized. Similar to KELTEC-Technolab Refrigerated Air Dryers (KRAD series).



## Technical Specifications

Model	Capacity (scfm)	Connection Size (NTP)	Max. Working Pressure (psi)	Voltage	Weight (lb/kg)	Dimensions (Inch)		
						Length	Width	Height
KMDAD - 3	3	1/2"	230	115/1/60Hz	37 / 17	13.2	12.6	22
KMDAD - 5	5	1/2"	230	115/1/60Hz	41 / 19	12.6	12.6	25
KMDAD - 10	10	1/2"	230	115/1/60Hz	59 / 27	12.6	12.6	35.5
KMDAD - 15	15	1/2"	230	115/1/60Hz	68 / 31	13.8	14.5	31.8
KMDAD - 20	20	1/2"	230	115/1/60Hz	92 / 42	13.8	14.5	43.6
KMDAD - 25	25	1/2"	230	115/1/60Hz	105 / 48	13.8	14.5	49.5
KMDAD - 30	30	1/2"	230	115/1/60Hz	118 / 54	13.8	14.5	59.4
KMDAD - 40	40	1-1/2"	230	115/1/60Hz	143 / 71	19.5	16.1	49.2
KMDAD - 50	50	1-1/2"	230	115/1/60Hz	156 / 78	19.5	16.1	55.1
KMDAD - 60	60	1-1/2"	230	115/1/60Hz	171 / 92	19.5	16.1	68.8
KMDAD - 75	75	1-1/2"	230	115/1/60Hz	202 / 120	24.5	17	51.1
KMDAD - 100	100	1-1/2"	230	115/1/60Hz	264 / 133	24.5	22	58
KMDAD - 120	120	1-1/2"	230	115/1/60Hz	292 / 152	24.5	25	68.8
KMDAD - 180	180	1-1/2"	230	115/1/60Hz	409 / 186	28.9	16.1	59
KMDAD - 240	240	1-1/2"	230	115/1/60Hz	517 / 235	35	16.1	59



KMDAD series dryers can be mounted to the floor or wall.

### PLC MONITOR

The mini PLC monitor shows the drying and regenerating cycle.

Pressure Dewpoint	-40°F
Normal Inlet Temperature	100°F
Normal Working Pressure	100 psi
Maximum Inlet Temperature	122°F
Maximum Working Pressure	230 psi
Maximum Ambient Temperature	122°F



### CORRECTION FACTOR

Pressure (psi)	50	60	70	80	90	100	110	120	130	140	150	175	200	225	250
Factor pressure F1	0.56	0.65	0.74	0.83	0.91	1	1.06	1.08	1.12	1.16	1.2	1.29	1.37	1.45	1.52
Inlet temp (°F)	70	80	90	100	105	110	115	120	-	-	-	-	-	-	-
Factor Inlet F2	1.12	1.09	1.06	1	0.93	0.86	0.8	0.75	-	-	-	-	-	-	-

**CORRECTION SAMPLE:** In order to properly size your dryer to the required task, you must take into account the specific conditions under which the dryer will be operating. Capacity of KMDAD series dryers assumes the following "standard conditions":

- 100 psi operating pressure
- 100°F operating temperature

By way of example, let's assume that your customer required a flow of 100 cfm at an operating pressure of 100 psi, with an inlet temperature of 110°F.

Pressure correction factor for 100 psi is 1

Inlet temperature correction factor for 100°F is .86

Required dryer capacity calculation is 100 cfm / 1 / .86 = 116 cfm, so that the correct dryer to select is model KMDAD-120.