Modular Heatless Desiccant Dryers 5-300 m3/h (3-176 SCFM)



Our innovative modular desiccant dryers are compact, fully integrated units ideal at point-of-use, so you only pay to dry the air required for your operation. The dryers deliver ISO Class 2 dew point performance, with optional ISO Class 1 to help prevent corrosion, minimize production disruptions and losses due to moisture or contamination. Easy on-site maintenance puts your production line back on line quickly.

FEATURES

High Air Quality: High-performance desiccant technology delivers ISO Class 2 or Class 1 pressure dew point air for critical applications; high efficiency pre-filter and general Purpose after-filter protect desiccant and downstream air from oil contamination and particulates.

Reliable Operation: High-strength desiccant, durable valves and components and long cycles extend equipment life.

Reduced Energy Use: Low pressure drop design saves on energy costs and provides an economical drying solution. Energy Management System option for further energy use reduction.

State-of-the-Art Control: Easy to use, advanced microprocessor with visual display showing data in real time to maintain dryer performance at optimum levels, providing preventative maintenance alerts as well as protection notifications for efficiency and connectivity.

Easy Installation and Maintenance: With a compact footprint and low noise operation, modular dryers are suitable to be quickly installed right in the work environment and easy maintained, with preventative maintenance alerts

Drying process

1. Compressed air stream with moisture enters the dryer from inlet valve, depending where the PLC sequence step is, this will be either the left or right column
2. The compressed air gets dried going upward in the column through the desiccant media that adsorb water vapor
3. From the exit valve, the dried air is delivered to the air system

Regenerating process

1. Simultaneously to drying the compressed air in the other column, a limited amount of dried air is passed from the upper outlet valve and expanded to atmospheric pressure through purge orifice housed within the valve, to the regenerating column
2. This regeneration air flows downwards through the saturated desiccant of the other column and regenerates the desiccant by adsorbing the moisture
3. The expanded regeneration air containing the adsorbed moisture is discharged through the exhaust solenoid valve and muffler
4. The sphere in the valve and its position, right or left, determines which column is drying and regenerating. The movement of the sphere is driven by the pressure difference between the columns (pressure for drying column and atmospheric pressure for regenerating column) driven by exhaust solenoid valves in the bottom part of the dryers

SPECIFICATION

CCN	Description	Capacity (m3/h/SCFM)	Max Operating Pressure BarG (psig)	Pressure Dew Point °C (°F)	Air in/out connection BSP (in)	Dimensions [W x D x H (mm) x Weight (kg)]	Power Supply (Volt/ph/Hz)	Desiccant per tower Kg (lb)
47675073001	DA5IM -40°F	5 (3)	14 (203)	-40 (-40)	(3/8")	238 x 212 x 423 x 11	115/1/60	0.7 (1.5)
47675074001	DA15IM -40°F	15 (9)	14 (203)	-40 (-40)	(3/8")	238 x 212 x 823 x 18	115/1/60	2.2 (4.7)
47675075001	DA25IM -40°F	25 (15)	14 (203)	-40 (-40)	(3/8")	238 x 212 x 1073 x 27	115/1/60	3.0 (6.6)
47675076001	DA40IM -40°F	40 (24)	14 (203)	-40 (-40)	(3/4")	475 x 405 x 968 x 44	115/1/60	6.4 (14.1)
47675077001	DA55IM -40°F	55 (32)	14 (203)	-40 (-40)	(3/4")	475 x 405 x 1118 x 50	115/1/60	8.4 (18.4)
47675078001	DA70IM -40°F	70 (41)	14 (203)	-40 (-40)	(3/4")	475 x 405 x 1318 x 60	115/1/60	10.9 (24.0)
47675079001	DA100IM -40°F	100 (59)	14 (203)	-40 (-40)	(1")	475 x 405 x 1673 x 73	115/1/60	15.4 (33.9)
47675080001	DA150IM -40°F	150 (88)	14 (203)	-40 (-40)	(1")	475 x 405 x 1873 x 90	115/1/60	18.0 (39.6)
47675081001	DA200IM -40°F	200 (118)	14 (203)	-40 (-40)	(1 1/2")	536 x 495 x 1705 x 177	115/1/60	30.8 (67.9)
47675082001	DA250IM -40°F	250 (147)	14 (203)	-40 (-40)	(1 1/2")	536 x 495 x 1905 x 180	115/1/60	35.9 (79.1)
47675083001	DA300IM -40°F	300 (177)	14 (203)	-40 (-40)	(1 1/2")	536 x 495 x 1905 x 188	115/1/60	35.9 (79.1)
47677658001	DA40IM -40°F EMS	40 (24)	14 (203)	-40 (-40)	(3/4")	475 x 405 x 968 x 44	115/1/60	6.4 (14.1)
47677659001	DA55IM -40°F EMS	55 (32)	14 (203)	-40 (-40)	(3/4")	475 x 405 x 1118 x 50	115/1/60	8.4 (18.4)
47677660001	DA70IM -40°F EMS	70 (41)	14 (203)	-40 (-40)	(3/4")	475 x 405 x 1318 x 60	115/1/60	10.9 (24.0)
47677661001	DA100IM -40°F EMS	100 (59)	14 (203)	-40 (-40)	(1")	475 x 405 x 1673 x 73	115/1/60	15.4 (33.9)
47677662001	DA150IM -40°F EMS	150 (88)	14 (203)	-40 (-40)	(1")	475 x 405 x 1873 x 90	115/1/60	18.0 (39.6)
47677663001	DA200IM -40°F EMS	200 (118)	14 (203)	-40 (-40)	(1 1/2")	536 x 495 x 1705 x 177	115/1/60	30.8 (67.9)
47677664001	DA250IM -40°F EMS	250 (147)	14 (203)	-40 (-40)	(1 1/2")	536 x 495 x 1905 x 180	115/1/60	35.9 (79.1)
47677665001	DA300IM -40°F EMS	300 (177)	14 (203)	-40 (-40)	(1 1/2")	536 x 495 x 1905 x 188	115/1/60	35.9 (79.1)
47759137001	DA5IM -100°F	4 (2)	14 (203)	-70(-100)	(3/8")	238 x 212 x 423 x 11	230/1/50-60	0.7 (1.5)
47759138001	DA15IM -100°F	12 (7)	14 (203)	-70(-100)	(3/8")	238 x 212 x 823 x 18	230/1/50-60	2.2 (4.7)
47759139001	DA25IM -100°F	20 (12)	14 (203)	-70(-100)	(3/8")	238 x 212 x 1073 x 27	230/1/50-60	3.0 (6.6)
47677702001	DA40IM -100°F	32 (19)	14 (203)	-70(-100)	(3/4")	475 x 405 x 968 x 44	115/1/60	6.4 (14.1)
47677703001	DA55IM -100°F	44 (26)	14 (203)	-70(-100)	(3/4")	475 x 405 x 1118 x 50	115/1/60	8.4 (18.4)
47677704001	DA70IM -100°F	56 (33)	14 (203)	-70(-100)	(3/4")	475 x 405 x 1318 x 60	115/1/60	10.9 (24.0)
47677705001	DA100IM -100°F	80 (47)	14 (203)	-70(-100)	(1")	475 x 405 x 1673 x 73	115/1/60	15.4 (33.9)
47677706001	DA150IM -100°F	120 (71)	14 (203)	-70(-100)	(1")	475 x 405 x 1873 x 90	115/1/60	18.0 (39.6)
47677707001	DA200IM -100°F	160 (94)	14 (203)	-70(-100)	(1 1/2")	536 x 495 x 1705 x 177	115/1/60	30.8 (67.9)
47677708001	DA250IM -100°F	200 (118)	14 (203)	-70(-100)	(1 1/2")	536 x 495 x 1905 x 180	115/1/60	35.9 (79.1)
47677709001	DA300IM -100°F	240 (141)	14 (203)	-70(-100)	(1 1/2")	536 x 495 x 1905 x 188	115/1/60	35.9 (79.1)