

Heated Regenerative Blower Purge Desiccant Dryer



Application

The series DPR is new blower purge heat reactivated dual tower regenerative air dryer we design and produce for energy savings and consistent operation automatically controlled via PLC touch screen. It uses a high efficiency blower to take in ambient air required during the heat regeneration cycle to desorb moisture from the desiccant.

Comparing Heatless and Heated purge, the heated blower purge reduce the dry compressed air is used during the dry air cooling regeneration period for reduced heat and dew point spike at tower switchover. And the unique parallel cooling mode further reduces the heat and dew point spike prior to tower switchover.

DPR adopts early heat regeneration termination feature. This feature terminates the heat regeneration early and eliminates the unnecessary heater and blower on-time saving energy.

Features:

1. Reduces purge air and optimizes dryer performance by monitoring the dry air outlet dew point
2. Automatically adjusts the regeneration cycle maintaining dew point and extending the drying cycle
3. Switching is less frequent, reducing dryer maintenance and fully utilizing desiccant capacity
4. Bigger purge tower and lower airflow speed improve improve reliability and performance of purge.
5. Heating regeneration cycle takes in ambient air, no compressed air is used during this phase.
6. PLC programmable controlling system, NEMA 4steel enclosure, easy operation and easy reading.
7. Interlocked protective system, safety and reliable



Technical parameter:

Working pressure	5 -10 bar	Average process air use	1%
Pressure Dew point	-40°C ~ -70°C	Temperature of inlet air	≤45°C
Switchover	2-8hr	Ambient Air Temperature	≤45°C
Pressure drop	≤ 0.2 bar	Oil content in inlet air	<0.1mg/m ³
Control method	PLC	Protection grade	IP65
Desiccant	activated alumina and molecular sieve	Power supply	380V,50HZ,3Phase (or Customized)

Model Specification:

Model	Capacity (Nm ³ /min)	Connection (mm)	Heater (kW)	Blower (KW)	Weight (kg)	Dimensions (mm)		
						L	W	H
DPR-13	14.5	2"	4	2.2	1100	1600	1350	2250
DPR-15	17	DN80	6	2.2	1300	1700	1550	2500
DPR-20	23	DN80	7.5	3.3	1550	2000	1650	2500
DPR-30	35	DN80	10	4.0	2100	2200	1800	2500
DPR-40	45	DN100	12.5	5.7	2600	2500	1950	2850
DPR-50	55	DN100	16	7.5	3300	2700	2200	2850
DPR-60	65	DN125	20	11	4150	2900	2350	3300
DPR-80	80	DN125	24	15	5600	3100	2500	3300
DPR-90	90	DN125	27	15	6300	3250	2500	3300
DPR-100	110	DN150	32.5	20	7700	3400	2600	3450
DPR-120	140	DN150	42.5	25	8900	3600	2600	3450
DPR-150	160	DN150	43	30	11300	3800	2900	3450
DPR-200	210	DN200	68	40	14700	4200	3200	3650
DPR-250	260	DN200	73	50	16500	4400	3300	3650