

Compressed Air Treatment Equipment



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REFRIGERATED COMPRESSED AIR DRYER

Features and advantages

Energy Saving

High efficiency heat exchanging wings made of aluminum alloy plates, cross-flowing high efficiency heat exchanging and sufficient exchanging area, maximizing the cooling energy inside the machine. Pressure loss is less than 0.02Mpa.

Excellent Performance

Under nominal operation conditions, the outlet dew point is 3 °C lower than that of the conventional tube shell refrigerated compressed air dryer.

Compact

The high efficiency heat exchangers made of aluminum alloy plates are, under same flow capacity, 2/3 less in volume than that of the conventional tube shell exchangers. The layouts are more compact, significantly reducing the footprint of the equipments, further freeing customers' limited space.

Environmental Friendly

Aluminum-alloy-made heat exchangers never get rusted, strong anti-corrosion property, pollution reoccurrence free. Environmental cooling medium adopted across the series, keeping up with the international trends of environment protection.

Top Configuration

Whole series of refrigerated compressors are of first class brands.

Whole series of refrigeration control elements are of first class brands.

Whole series of air coolers adopt nanometer anti-corrosion coating on the surfaces.

Packed with Y-shape air inlet filters to effectively reduce pipe pollutants on the heat exchanging channel.

Working pressure: ≤13bar

Maximum air inlet temperature: 65 °C

Maximum ambient temperature: 50 °C

Minimum ambient temperature: 5 °C

Cooling method: air cooled



Type		DAD-0.3BNF	DAD-0.5BNF	DAD-1BNF	DAD-2BNF	DAD-3BNF	DAD-6BNF	DAD-10BNF	DAD-13BNF	DAD-15BNF
Capacity(N³/min)		0.3	0.5	1.2	2.4	3.8	6.5	10.7	13.5	17
Refrigerant		R134a	R134a	R134a	R134a	R134a	R410a	R410a	R410a	R410a
Voltage(V/Hz)		220/50	220/50	220/50	220/50	220/50	220/50	220/50	380/50	380/50
Compressor power(W)		0.21	0.21	0.32	0.6	0.9	1.65	2.71	4.65	4.65
Fan power(W)		23	53	53	53	110	150	240	240	240
Air inlet/outlet pipe diameter		Rc1/2"	Rc1"	Rc1"	Rc1"	Rc1"	Rc1-1/2"	Rc2"	Rc2"	Rc2"
Weight(Kg)		28	34	35	44	62	100	140	180	190
Dimensions	L(mm)	420	630	630	690	760	770	970	970	970
	W(mm)	297	347	347	347	407	570	640	700	700
	H(mm)	430	520	520	520	560	790	880	880	1020

Air cooling type

Inlet temperature: ≤ 80 C (45 C)
 Cooling method: Air-cooling
 Inlet pressure: 4 ~ 13bar
 Pressure drop: ≤ 0.3 bar
 Dew point: 2 ~ 10 C
 Refrigerant: R22/R410a/R134a/R407c



Items \ Type	DAD-1 HTF	DAD-2 HTF	DAD-3 HTF	DAD-6 HTF	DAD-8 HTF	DAD-10 HTF	DAD-13 HTF	DAD-15 HTF	DAD-20 HT(N)F	DAD-25 HT(N)F	DAD-30 HT(N)F	DAD-40 HT(N)F	DAD-50 HT(N)F	DAD-60 HT(N)F
Capacity (Nm ³ /min)	1.2	2.4	3.8	6.5	8.5	10.7	13.5	18	25	28	33	45	55	65
Voltage(V/Hz)	220/50	220/50	220/50	220/50	220/50	380/50	380/50	380/50	380/50	380/50	380/50	380/50	380/50	380/50
Compressor power(hp/kw)	1/0.85	1/0.85	1.25/0.9	1.5/1.1	2.5/1.8	3/2.5	3/2.5	3.6/3	5.0/4.0	6.0/4.5	7.5/6.5	10.5/8.8	12/10.2	15/13
Fan power(W)	90	90	140	180	180	2x140	2x140	2x140	4(2)x180	4(2)x220	6(3)x250	6(3)x250	6(3)x450	8(4)x180
Air inlet/outlet pipe diameter	ZG1	ZG1	ZG1.5	ZG1.5	ZG1.5	ZG2	ZG2	DN65	DN80	DN80	DN100	DN100	DN125	DN125
Weight(Kg)	50	80	105	150	160	240	260	310	400	450	780	820	900	1100
Dimensions	L (mm)	630	700	850	880	1180	1180	1360	1360	1650	1670	2000	2350	2550
	W (mm)	450	450	500	550	670	670	710	710	750	750	950	1050	1100
	H (mm)	640	830	920	1020	1020	1080	1080	1220	1220	1290	1575	1740	1910

Water cooling type

Inlet temperature: ≤ 80 C (≤ 45 C)
 Cooling method: Water-cooling
 Inlet pressure: 4 ~ 13bar
 Pressure drop: ≤ 0.3 bar
 Dew point: 2 ~ 10 C
 Cooling water inlet temperature: ≤ 32 C
 Refrigerant: R22/R410a/R134a/R407c
 Cooling water inlet pressure: 2 ~ 4bar



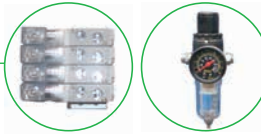
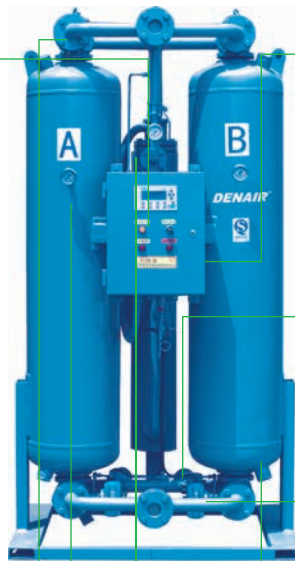
Items \ Type	DAD-10HT (N)W	DAD-20HT (N)W	DAD-30HT (N)W	DAD-40HT (N)W	DAD-50HT (N)W	DAD-60HT (N)W	DAD-80HT (N)W	DAD-100HT (N)W	DAD-150HT (N)W	DAD-200HT (N)W	DAD-300HT (N)W
Capacity(Nm ³ /min)	10.7	25	33	45	55	65	85	110	160	220	300
Voltage(V/Hz)	380/50	380/50	380/50	380/50	380/50	380/50	380/50	380/50	380/50	380/50	380/50
Compressor power(hp/kw)	3/2.5	5.0/4.0	7.5/6.1	10.5/8.0	12/9.0	15/11.3	20/16	25/19	36/27	50/38	80/60
Cooling circulating water capacity(m ³ /h)	3.0(1.8)	7.2(3.6)	11.2(5.9)	14.5(7.2)	19.5(9.2)	21.8(10.8)	25.5(12.4)	29.5(14.6)	38(18.6)	48.8(24.4)	72(36)
Air inlet/outlet pipe diameter	ZG2	DN80	DN100	DN100	DN125	DN125	DN150	DN150	DN200	DN200	DN250
Condenser water pipe diameter	ZG1	ZG1.5	ZG1.5	ZG1.5	ZG2	ZG2	ZG2	ZG2	ZG2.5	ZG2.5	ZG3
Weight(Kg)	260	430	860	980	1150	1250	1600	2200	3000	3200	4100
Dimensions	L (mm)	1180	1360	1650	1850	2100	2280	2420	2750	3108	3200
	W (mm)	670	710	950	850	920	1300	1340	1350	1400	1920
	H (mm)	1080	1220	1590	1630	1645	1880	1900	2004	2122	2122

DESICCANT AIR DRYER

Features and advantages



- The control system uses single-chip microcomputer program for automatic control, performance stable and reliable (PLC control can optional);
- With the valve switch automatic display function, friendly interface, Simple operation, easy routine maintenance;
- Automatic alarm system, intake air temperature too high alarm, the intake pressure too low alarm, the heating temperature alarm (micro heat regeneration type);
- According to the actual load and temperature, adjustable gas consumption proportion, to save gas consumption;
- Can choose cycle switch time, meet the requirements of dew point of the products.



- Imported electromagnetic valve performance is reliable, modular design, and with motion indication, simple maintenance.
- Pneumatic dust filter, prevent dust from entering the pneumatic control components, lower valve failure rate.



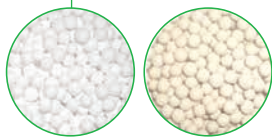
- The new muffler sound-absorbing glass with high temperature ultra-fine cotton and combined with the imported special treatment silencer filter and other material, the regeneration noise ≤ 72 dB (A).



- Compared with other electromagnetic control valve, pneumatic control valve's lifetime longer, to ensure long-term stable operation of the dryer.



- Stainless steel material diffuser, has stability, diffusion, filtering, and other functions of the airflow



- High quality adsorbent



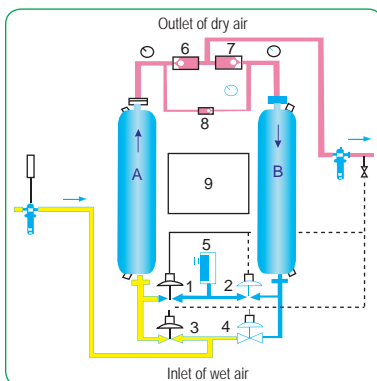
- Reliable performance no return valve



- Quality and efficient heater (use for heated purge desiccant air dryer)

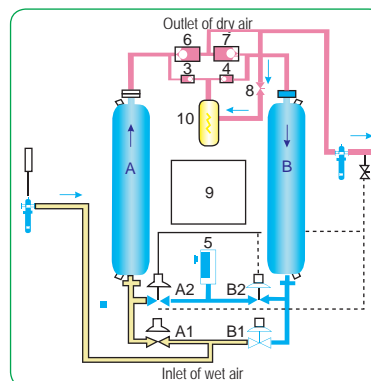
Flow chart

Heatless type



- A, B: Absorb tower
- 1, 2, 3, 4: Switch valve
- 5: Silencer
- 6, 7: Check valve
- 8: Throttle
- 9: Program controller

Externally Heated type



- A, B : Absorb tower
- A1, A2, B1, B2: Switch valve
- 5: Silencer
- 3, 4, 6, 7: Check valve
- 8: Throttle
- 9: Program controller
- 10: Heating element

Desiccant heatless type

Purge air: $\leq 12 \sim 15\%$
 Working pressure: 6 ~ 10bar
 Inlet oil content: $\leq 0.01\text{ppm}$
 Pressure dew point: $-20\text{ C} \sim -40\text{ C}$

Desiccant: Activated aluminum or Molecular sieze
 Working periods: T= 4 ~ 20 Minutes
 Inlet temperature: $0\text{ C} \sim 45\text{ C}$



Type	Items	Capacity (Nm ³ /min)	Air inlet/outlet pipe diameter	Dimensions(mm)			Weight(kg)
				L	W	H	
DAD-1WXF		1.2	ZG1	800	400	1376	120
DAD-2WXF		2.4	ZG1	800	400	1476	180
DAD-3WXF		3.8	ZG1.5	1000	450	1600	270
DAD-5WXF		5.5	ZG1.5	1000	450	1890	300
DAD-6WXF		6.5	ZG1.5	1200	500	1950	400
DAD-8WXF		8.5	ZG1.5	1400	600	2000	510
DAD-10WXF		10.7	ZG2	1400	600	2090	700
DAD-13WXF		13.5	ZG2	1400	600	2140	740
DAD-15WXF		18	DN65	1400	600	2200	780
DAD-20WXF		25	DN80	1670	650	2435	1180
DAD-30WXF		35	DN100	1670	650	2566	1760
DAD-40WXF		45	DN100	1750	750	2700	2200
DAD-50WXF		55	DN125	1800	750	2755	2600
DAD-60WXF		65	DN125	1900	700	3070	3100
DAD-80WXF		85	DN150	2620	1120	3070	4100
DAD-100WXF		110	DN150	3100	1650	3200	5200
DAD-160WXF		160	DN200	3240	1770	3190	6000

Externally heated type

Purge air: $\leq 4 \sim 6\%$
 Working pressure: 4 ~ 10bar
 Inlet oil content: $\leq 0.01\text{ppm}$
 Pressure dew point: $-20\text{ C} \sim -70\text{ C}$

Desiccant: Activated aluminum or Molecular sieze
 Working periods: T= 60 ~ 180 Minutes
 Inlet temperature: $0\text{ C} \sim 45\text{ C}$



Type	Items	Capacity (Nm ³ /min)	Heater power (kw)	Air inlet/outlet pipe diameter	Dimensions(mm)			Weight(kg)
					L	W	H	
DAD-1MXF		1.2	1.5	ZG1	800	480	1420	145
DAD-2MXF		2.4	1.5	ZG1	800	480	1520	200
DAD-3MXF		3.8	1.5	ZG1.5	1000	525	1600	330
DAD-5MXF		5.5	1.5	ZG1.5	1000	525	1890	350
DAD-6MXF		6.5	3	ZG1.5	1200	550	1950	430
DAD-8MXF		8.5	3	ZG1.5	1400	600	2000	550
DAD-10MXF		10.7	4.5	ZG2	1400	600	2090	750
DAD-13MXF		13.5	4.5	ZG2	1400	600	2140	790
DAD-15MXF		18	4.5	DN65	1400	650	2200	830
DAD-20MXF		25	6	DN80	1670	725	2435	1250
DAD-30MXF		35	8	DN100	1670	725	2566	1480
DAD-40MXF		45	8	DN100	1750	775	2700	1740
DAD-50MXF		55	15	DN125	1800	775	2755	2260
DAD-60MXF		65	15	DN125	1900	800	3070	2600
DAD-80MXF		85	20	DN150	2620	1120	3073	3380
DAD-100MXF		110	30	DN150	3100	1650	3200	4390
DAD-160MXF		160	50	DN200	3240	1770	3190	5800

COMBINED TYPE AIR DRYER

Refrigerated dryer + Desiccant dryer

Inlet pressure: 6 ~ 10bar
 Pressure dew point: -40 C ~ -70 C
 Cooling Water temperature: ≤32 C
 Inlet temperature: ≤45 C
 Purge air: ≤3~5%
 Pressure drop: ≤0.8bar



Type	Items	Capacity (Nm ³ /min)	Circulating cooling water capacity (m ³ /h)	Air inlet/outlet pipe diameter	Dimensions(mm)			Weight(kg)
					L	W	H	
DAD-1MZ *		1.2		ZG1	1020	710	1380	350
DAD-2MZ *		2.4		ZG1	1020	710	1480	450
DAD-3MZ *		3.8		ZG1.5	1100	980	1810	500
DAD-6MZ *		6.5		ZG1.5	1400	1050	1950	710
DAD-10MZ *		10.7	1.8	ZG2	1550	1350	2090	1100
DAD-13MZ *		13.5	1.8	ZG2	1570	1380	2140	1200
DAD-15MZ *		18	3	DN65	1600	1420	2145	1300
DAD-20MZ *		25	3.6	DN80	1750	1400	2410	1800
DAD-30MZ *		35	5.9	DN100	2100	1680	2600	2700
DAD-40MZ *		45	7.2	DN100	2290	1800	2710	3300
DAD-50MZ *		55	9.2	DN125	2430	1950	2755	3400
DAD-60MZ *		65	10.8	DN125	2490	2180	3070	3800

OIL REMOVER

Inlet pressure: 2 ~ 10bar
 Inlet temperature: ≤5 C ~ 80 C
 Initial pressure drop: ≤0.05bar

Filter route: 5μm
 Water removal rate: ≥99%
 Outlet air oil content: ≤0.01ppm

Type	Items	SFU-1	SFU-2	SFU-3	SFU-6	SFU-10	SFU-13	SFU-15	SFU-20	SFU-30	SFU-40	SFU-60
Capacity(Nm ³ /min)		1.2	2.4	3.8	6.5	10.7	13.5	17	25	33	45	65
Air inlet/outlet pipe diameter		ZG1	ZG1	ZG1.5	ZG1.5	ZG2	ZG2	DN65	DN80	DN100	DN100	DN125
Weight(kg)		24	27	30	35	65	75	90	105	136	150	182
Dimensions	Diameter(mm)	133	133	133	133	159	159	159	159	273	325	412
	Height(mm)	845	845	845	1030	1265	1139	1139	1630	1846	1990	2242

COMPRESSED AIR FILTERS

Liquid separator filter (C): 3 micro, 5ppm
 Particulate filter (T): 1micro,1ppm
 Oil removal filter (A): 0.01micro, 0.01ppm
 Oil removal extra fine filter (AA): 0.01micro, 0.001ppm
 Vapor filter (H): 0.01micro, 0.001ppm



Items	Model	Capacity (Nm ³ /min)	Air intake pipe diameter	Dimensions(mm)			Weight(kg)
				L	W	H	
C. T. A. AA. H-001		1.2	ZG1	105	76	250	2
C. T. A. AA. H-002		2.4	ZG1	105	78	310	3
C. T. A. AA. H-003		3.8	ZG1.5	137	99	400	4
C. T. A. AA. H-006		6.5	ZG1.5	137	99	425	5
C. T. A. AA. H-008		8	ZG1.5	137	99	620	5
C. T. A. AA. H-010		10.7	ZG2	137	99	620	5
C. T. A. AA. H-010		10.7	DN50	310	133	860	25
C. T. A. AA. H-013		14	ZG2	135	108	750	10
C. T. A. AA. H-013		14	DN50	310	133	860	25
C. T. A. AA. H-015		18	ZG2.5	148	125	920	13
C. T. A. AA. H-015		18	DN65	310	133	860	25
C. T. A. AA. H-020		22	ZG2.5	148	125	920	14
C. T. A. AA. H-020		25	DN80	379	159	1040	44
C. T. A. AA. H-025		28	DN80	379	159	1090	46
C. T. A. AA. H-030		35	DN100	465	219	1060	65
C. T. A. AA. H-040		45	DN100	470	219	1060	68
C. T. A. AA. H-054		54	DN125	513	273	1215	96
C. T. A. AA. H-066		60	DN125	513	273	1215	96
C. T. A. AA. H-088		88	DN150	615	325	1395	140
C. T. A. AA. H-110		110	DN150	615	377	1300	145
C. T. A. AA. H-132		132	DN150	615	416	1395	210
C. T. A. AA. H-150		150	DN200	615	462	1470	220
C. T. A. AA. H-180		180	DN200	615	462	1470	235
C. T. A. AA. H-200		200	DN200	615	516	1504	240
C. T. A. AA. H-230		230	DN200	615	466	1395	265
C. T. A. AA. H-250		250	DN250	870	566	1710	274
C. T. A. AA. H-300		300	DN250	920	616	1717	312
C. T. A. AA. H-350		350	DN300	970	666	1835	371
C. T. A. AA. H-400		400	DN300	1070	766	1915	427
C. T. A. AA. H-450		450	DN350	1070	766	1915	427
C. T. A. AA. H-500		500	DN350	1070	766	1915	427
C. T. A. AA. H-550		550	DN400	1116	816	2000	493
C. T. A. AA. H-600		600	DN400	1116	816	2000	493

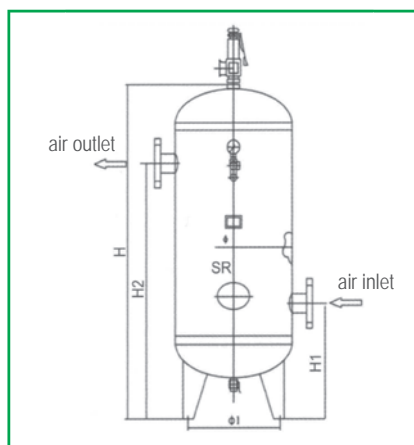
AIR RECEIVER TANK

0.3 ~ 10 m³ @ 8 ~16 bar(e)

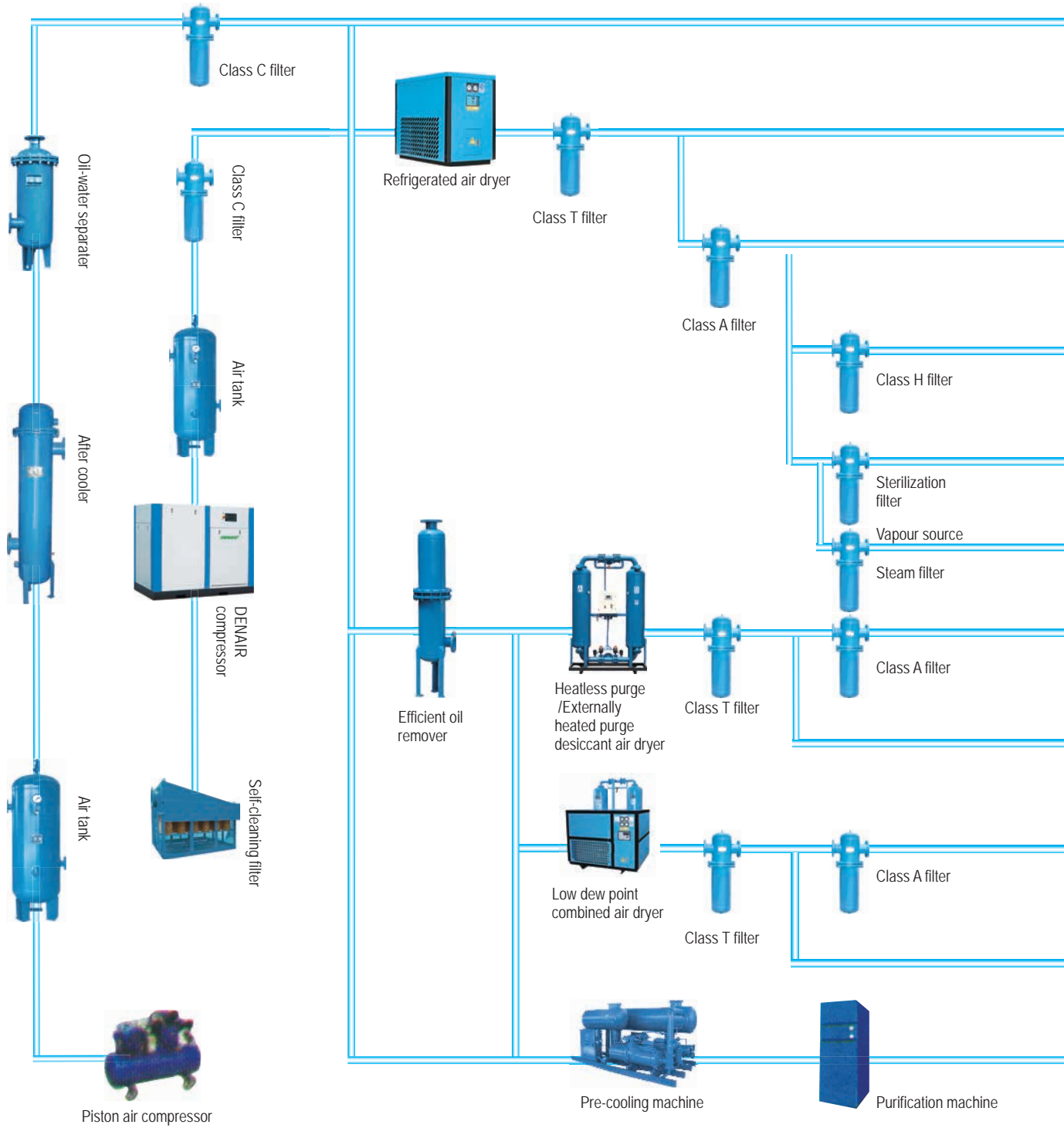
No.	Capacity(m ³)/ Pressure(Mpa)	Designed temperature	Height H1	Diameter Φ	Air inlet			Air outlet			Support		Safety valve nozzle	Drain valve nozzle
					H2	DN	Screw thread type	H3	DN	Screw thread type	D	d		
1	0.3/0.8	110	1594	550	642	50	Rp11/2	1242	50	Rp11/2	400	20	Rp3/4	R1/2
2	0.3/1.0		1594		642			1242						
3	0.3/1.3		1598	644	1244									
4	0.3/1.6		1598	644	1244									
5	0.6/0.8		1905	680	1550									
6	0.6/1.0		1907	681	1551									
7	0.6/1.3		1909	682	1552									
8	0.6/1.6		1907	681	1551									
9	1.0/0.8		2305	690	1920									
10	1.0/1.0		2307	691	1921									
11	1.0/1.3		2305	690	1920									
12	1.0/1.6		2307	691	1921									
13	1.5/0.8		2265	760	1810									
14	1.5/1.0		2265	760	1810									
15	1.5/1.3		2267	761	1811									
16	1.5/1.6		2566	753	2118									
17	2.0/0.8		2780	760	2320									
18	2.0/1.0		2780	760	2320									
19	2.0/1.3		2782	761	2321									
20	2.0/1.6		2786	763	2323									
21	2.5/0.8		3300	760	2840									
22	2.5/1.0		3300	760	2840									
23	2.5/1.3		3302	761	2841									
24	2.5/1.6		2836	788	2348									
25	3.0/0.8		2920	850	2410									
26	3.0/1.0		2922	851	2411									
27	3.0/1.3		2926	853	2413									
28	3.0/1.6		2926	853	2413									
29	4.0/0.8		3030	910	2470									
30	4.0/1.0		3032	911	2471									
31	4.0/1.3		3036	913	2473									
32	4.0/1.6		3040	915	2475									
33	5.0/0.8		3700	910	2990									
34	5.0/1.0		3702	911	2991									
35	5.0/1.3		3726	913	3013									
36	5.0/1.6		3730	915	3015									
37	6.0/0.8		4330	910	3620									
38	6.0/1.0		4332	911	3621									
39	6.0/1.3		4346	913	3633									
40	6.0/1.6		4350	915	3635									
41	8.0/0.8		3154	1082	2362									
42	8.0/1.0		3156	1083	2363									
43	8.0/1.3		3190	1100	2380									
44	8.0/1.6		3194	1102	2382									
45	10.0/0.8		3754	1082	2962									
46	10.0/1.0		3756	1083	2963									
47	10.0/1.3		3790	1100	2980									
48	10.0/1.6		3794	1102	2982									
49	12/0.8		4354	1082	3562									
50	12/1.0		4356	1083	3563									
51	12/1.3		4390	1100	3580									
52	12/1.6		4394	1102	3582									
53	15.0/0.8		4351	1208	3618									
54	15.0/1.0		4533	1209	3619									
55	15.0/1.3		4569	1227	3637									
56	15.0/1.6		4573	1229	3639									
57	20.0/0.8		5246	1348	4168									
58	20.0/1.0		5250	1350	4170									
59	20.0/1.3		5254	1352	4172									
60	20.0/1.6		5258	1354	4174									
61	25.0/0.8		6146	1348	5068									
62	25.0/1.0		6150	1350	5070									
63	25.0/1.3		6154	1352	5072									
64	25.0/1.6		6158	1354	5074									
65	30.0/0.8		6706	1373	5603									
66	30.0/1.0		6710	1375	5605									
67	30.0/1.3		6718	1379	5609									
68	30.0/1.6		6722	1381	5611									
69	40.0/0.8		8676	1373	7413									
70	40.0/1.0		8680	1375	7415									
71	40.0/1.3		8688	1379	7419									

0.3 ~ 10 m³ @ 25 ~40 bar(e)

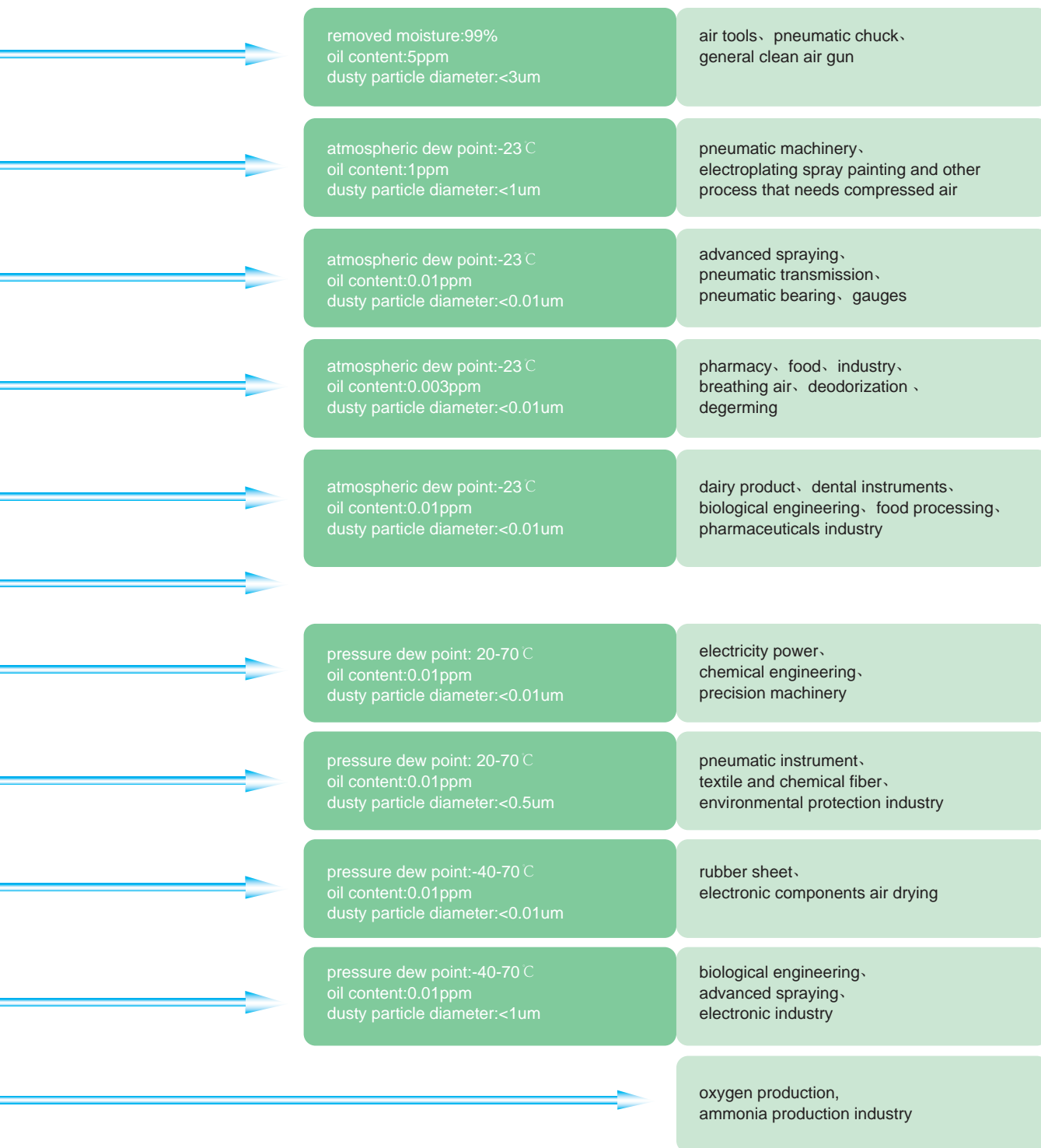
No.	Capacity(m ³)/ Pressure(Mpa)	Designed temperature	Height	Diameter	Air inlet			Air outlet			Support		Safety valve nozzle	Drain valve nozzle
					H2	DN	Screw thread type	H3	DN	Screw thread type	D	d		
1	0.3/2.5	110	1476	600	658		Rp11/2	1058		Rp11/2	420	20	Rp13/4	R1/2
2	0.3/3.0		1476		658			1058						
3	0.3/4.0		1480		660			1060						
6	0.6/2.5	110	1866	700	683		Rp11/2	1498		Rp11/2	490	24	Rp13/4	R1/2
7	0.6/3.0		1870		685			1500						
8	0.6/4.0		1874		687			1502						
9	1.0/2.5	110	2311	800	693	65	Rp11/2	1903	65	Rp11/2	560	24	Rp1	R1/2
10	1.0/3.0		2315		695			1905						
11	1.0/4.0		2319		697			1907						
13	1.5/2.5	110	2745	900	740	65	Rp2	2300	65	Rp2	630	24	Rp1	R1/2
14	1.5/3.0		2749		742			2302						
15	1.5/4.0		2753		744			2304						
17	2.0/2.5	110	2800	1000	765	80	Rp2	2325	80	Rp2	700	24	Rp11/4	R1/2
18	2.0/3.0		2804		767			2327						
19	2.0/4.0		2812		771			2331						
21	2.5/2.5	110	2854	1100	792	80		2352	80		770	24	Rp11/4	R1/2
22	2.5/3.0		2858		794			2354						
23	2.5/4.0		2866		798			2358						
25	3.0/2.5	110	2944	1200	857	80		2417	80		906	24	Rp11/2	R3/4
26	3.0/3.0		2948		859			2419						
27	3.0/4.0		2960		865			2425						
29	4.0/2.5	110	3058	1400	919	100		2479	100		1050	24	Rp11/2	R3/4
30	4.0/3.0		3062		921			2481						
33	5.0/2.5	110	3788	1400	919	100		3019	100		1050	24	DN50	R3/4
34	5.0/3.0		3792		921			3021						
35	6.0/2.5	110	4418	1400	939	125		3659	125		1050	24	DN50	R3/4
36	6.0/3.0		4422		941			3661						
35	8.0/2.5	110	3230	2000	1095	125		2375	125		1500	24	DN50	R3/4
36	8.0/3.0		3234		1097			2377						
35	10.0/2.5	110	3830	2000	1095	150		3005	150		1500	32	DN65	R3/4



Flow Chart of Compressed Air Purifying System



Note: the above chart for reference only, it can be adjusted according to the actual conditions.





P-DNR201802-01 Specifications are subject to change without prior notice.
Never use compressed air as breathing air without prior purification in accordance with local legislation and standards.



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