

## PRODUCT INTRODUCTION

As we all know, compressed air contains a lot of dust particles, oil and moisture. Therefore, we must remove them. The refrigerated dryer is such a device. It uses a series of refrigeration systems to make the compressed air reach the required dew point.

### HIGH INLET TEMPERATURE



## DESIGN FEATURES

- 1 With special design, the pressure difference is small. Energy & power saving.
- 2 The high-quality thick copper pipe can prevent it from being corroded and causing leakage.
- 3 Use high-performance heat exchanger.
- 4 The more design margin of 20% can ensure the stable operation of the dryer under severe working conditions.
- 5 Anti-rust paint prevents rusting of the heat exchanger system shell.
- 6 Use the high-quality spare parts, such as Panasonic refrigerant compressor, JORC drainage.
- 7 High-efficiency air/water separator and multiple drainage design ensure the quality of dew point.
- 8 Multiple protection devices ensure the service life of the dryer.

## CORRECTION COEFFICIENT (F1) OF AIR-COOLED DRYER UNDER DIFFERENT WORKING CONDITIONS

Mpa \ C	F1	Normal Temp	30	35	38	40	42	45
		High Temp	45	50	55	60	70	80
0.4			1.06	0.87	0.77	0.71	0.67	0.61
0.5			1.12	0.92	0.82	0.75	0.71	0.64
0.6			1.17	0.96	0.85	0.79	0.74	0.67
0.7			1.22	1.00	0.89	0.82	0.77	0.70
0.8			1.24	1.02	0.90	0.84	0.79	0.71
1.0			1.29	1.06	0.94	0.87	0.82	0.74

**Standard operating conditions:**  
 Inlet air pressure: 0.7MPa; Inlet air temperature: 50 C; Ambient temperature: 32 C; Max air capacity=standard air capacity\*F1\*F2  
 For example, the standard air capacity of LY-D120AH is 28.5m<sup>3</sup>/min. (Inlet pressure 0.8MPa, inlet temp. 55 C, ambient temp. 35 C)

## CORRECTION COEFFICIENT (F2) OF AMBIENT TEMPERATURE

Ambient temp( C) (normal temp / high temp. air cooled)	30	32	35	40
F2	1.03	1.00	0.96	0.90

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**Standard operating conditions:**  
 Design pressure: 1.0MPa; Pressure dew point: 2~10 C; Cooling water temperature: 2~34 C; Cooling water pressure: 0.2~0.6MPa; Max air capacity=standard air capacity/F1/F2  
 For example, the standard air capacity of LY-D120AH is 28.5m<sup>3</sup>/min. (working pressure 0.8MPa, inlet temp. 55 C, Cooling water temp. 32 C)

## CORRECTION COEFFICIENT (F2) OF AMBIENT TEMPERATURE

Cooling water temp. ( C)(normal temp. /high temp. water cooled)	30	32	34
F2	1.00	0.97	0.94

## AIR-COOLED REFRIGERATED AIR DRYER (AH SERIES)

### Operating conditions and technical requirements:

- Rated inlet air pressure: 0.7MPa (0.6MPa~1.0MPa suitable, others customizable);
- Rated inlet air temperature: 50 C (max 80 C);
- Pressure dew point: 2~10 C;
- Rated ambient temperature: 32 C (2 C~45 C);
- Pressure loss: ≤0.02MPa;
- Cooling type: air-cooled;
- Refrigerant: R407c, R134a, R410a;



**1.Oil Filled Manometer** Well sealed;  
Good pressure resistance;  
Good corrosion resistance.

**2.Pre-heat Exchanger**  
Effectively recover the cooling capacity  
and reduce the compressor load.

**3.Heat Exchange System**  
Calculate by senior engineers; Leaving  
more than 20% design margin .

**4.Compressor**  
Panasonic,Danfoss etc compressors;  
Strong and continuous;  
Long-term work capacity.

**5.Jorc Electronic Drainer**  
Condensate in compressed air system  
discharge time and interval time can  
be adjusted according to different needs.

**6.System Protection**  
High and low voltage protection  
of refrigerant system;  
phase sequence protection and  
built-in overload.

**7.Condenser**  
Composed of hydrophilic aluminum foil  
+high -quality copper tube heat transfer  
In high efficiency;  
It is not easy to block by dust.

**8.Gas-liquid Separator** 99%  
separation efficiency;  
Complete gas-liquid separation effect;  
Avoided the secondary evaporation of  
water;  
Effect of the cold dryer is ensured.

**9.Control Components**  
Use danfoss,emerson,sporlan,  
Enshen brand components,  
Afe, reliable stable in performnce.

**10.Cooling Fan**  
MaEr external rotor cooling fan  
Large cooling air volume,low noise and  
stable preation.

## TECHNICAL SPECIFICATION FOR AH SERIES AIR-COOLED REFRIGERATION AIR DRYER

Model	Capacity (Nm <sup>3</sup> /min)	Voltage (V/Hz)	Power (KW)	Inlet/Outlet	Weight (Kg)	Dimension (L*W*H)
SD-10AC	1.5	230/50	0.68	G1"	48	680*440*710
SD-20AC	2.5	230/50	0.83	G1"	58	800*440*800
SD-30AH	3.8	230/50	1.1	G1.5"	95	980*440*930
SD-50AH	6.5	230/50	1.5	G1.5"	110	1030*500*1000
SD-75AH	10.5	230/50	2.2	G2"	160	1240*650*1150
SD-100AH	13.5	415/50	3.1	G2.5"	225	1350*670*1300
SD-120AH	17.0	415/50	3.1	G2.5"	235	1350*670*1300
SD-150AH	21.5	415/50	5.2	DN80	295	1450*700*1510
SD-180AH	25.0	415/50	5.2	DN80	345	1450*700*1510
SD-200AH	28.5	415/50	5.5	DN80	430	1550*850*1595
SD-250AH	32.0	415/50	6.2	DN80	450	1550*850*1595
SD-300AH	37.0	415/50	7.8	DN100	550	1700*850*1740
SD-350AH	41.5	415/50	7.8	DN100	600	1700*850*1740
SD-400AH	45.0	415/50	10	DN100	630	1830*950*1840
SD-450AH	50.0	415/50	10	DN100	680	1830*950*1840
SD-500AH	55.0	415/50	11.7	DN125	780	2020*950*1850
SD-550AH	60.0	415/50	11.7	DN125	830	2020*950*1850
SD-600AH	65.0	415/50	11.9	DN125	950	2050*1330*1820
SD-700AH	75.0	415/50	13.9	DN125	1050	2390*1395*1850
SD-800AH	85.0	415/50	16.2	DN125	1200	2400*1420*1860
SD-900AH	95.0	415/50	16.7	DN150	1350	2450*1400*1900
SD-1100AH	110.0	415/50	18.3	DN150	1450	2450*1500*1980