

AIR TREATMENT AUXILIARY EQUIPMENT

Copyright © UNITED COMPRESSOR SYSTEMS

UNITED COMPRESSOR SYSTEMS reserves the rights to change any interpretation
in this brochure without notice.



SHANGHAI UNITED COMPRESSOR CO., LTD.

Ph: +86-183 5240 2674

Email: info@united-compressor.com

Web: www.united-compressor.com

Headquarters: 201 Jiamei Road, Jiading District, Shanghai, China, 201802

2022/A

HIGH ENERGY-EFFICIENCY
AIR COMPRESSOR MANUFACTURER

CATALOGUE

01/02
ABOUT UCS

03/14
COMPRESSED AIR FILTER AND ACCESSORIES

15/28
COMPRESSED DESIOCCANT AIR DRYER

29/42
COMPRESSED REFRIGERATED DRYER



Founded in 2002, Shanghai United Compressor Co., Ltd. is a vigorous company dedicated to developing and manufacturing industrial high-efficiency compressors under United OSD and United Compressor Systems (UCS) brands. The company is committed to becoming the world's leading compressed air solutions provider.

In 2013, UCS Group entered a joint venture with the World's Top 500 Enterprises - HITACHI Group (Japan). A well-known enterprise established in 1910 with a compressor production history of more than 100 years. The J/V cooperation not only complements each other's product vacancy but also enhances each other's ability to design, production, quality control and service.

UCS adheres to the research and development for "energy-saving, environmental protection" products. Successively launched a series of products of One-stage screw compression,Two-stage screw compressor, Low-pressure compressor, Vacuum pump, Oil-free screw compressor, Oil-free screw blower, Oil-free scroll compressor, Magnetic suspension centrifugal blower and others. On top of that, UCS also design and produce customised compressors to satisfy the diverse needs of industries, including shield tunnelling machine, shotcrete manipulator machine, Rock drill compressor,nitrogen compressor, field service compressor,vinyl chloride compressor, and others.



UCS & Airthink Wuxi Production Plant Phase I
(Skid Intelligent Air Station, Centrifugal Compressor)



Shanghai United Compressor
(Headquarters, R&D)



United OSD & Hitachi ISC Joint Production Phase I
(Screw & Scroll Compressor)

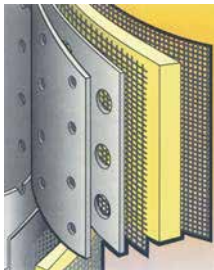
COMPRESSED AIR FILTER AND ACCESSORIES

03/04



CLASS-C MAIN PIPE OIL/WATER FILTER

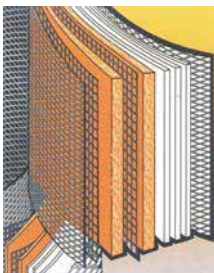
Applicable to filter out mass of liquid and condensation product >3μm (5ppm w/w Maximum residual oil content).
Two-stage filtration
Stage 1 Two stainless steel perforated pipe for 10μm mechanical separation.
Stage 2 Deep fiber media was filtered to remove 3μm of solid and liquid particles.



C

CLASS-T MAIN PIPE DUST FILTER

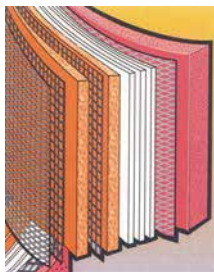
Applicable to filter out liquid water and oil, il can be filterd to remove 1 micron solid particles (1 ppm w/w Maximum residual oil content).
*Inside and outside the filter are anti-corrosion
Two-stage filtration
Stage 1 the fibrous media and the filter are alternately laminated to remove larger particles
Stage 2 Multi-layer epoxy resin bonding mixture and fiber medium, coalescence oil mist and filter solid particles.



T

CLASS-A HIGH EFFICIENCY OIL REMOVAL FILTER

Suitable for coalescence of small water vapor and oil mist, it can be filtered to remove 0.01 micron solid particles (0.01 ppm w/w Maximum residual oil content)
*Inside and outside the filter are anli-corrosion
Two-stage filtration
Stage 1 the fibrous media and the filter are alternately laminated to remove larger particles
Stage 2 Multi-layer epoxy resin bonding mixture and fiber medium, coalescence oil mist and filter solid particles.



A

CLASS-F HIGH EFFICIENCY OIL REMOVAL FILTER

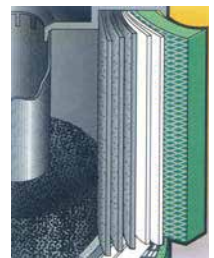
Suitable for coalescence of small water vapor and oil mist, it can be filtered to remove 0.01 micron solid particles (0.001 ppm w/w Maximum residual oil content)
*Inside and outside the filter are anti-corrosion
Two-stage filtration
Stage 1 Coating Closed foam sleeve Pre-filtration and air dispersion
Stage 2 the multilayer matrix mixed fiber media for remove Very fine condensation product.
*Outside coating closed foam sleeve



F

CLASS-H ACTIAVTED CARBON OIL/WATER FILTER

Applicable to filter out the oil vapor and hydrocarbon vapor that the activated carbon can absorb (0.003ppm w/w Maximum residual oil content)
*Inside and outside the filter are anti-corrosion
Two-stage filtration
Stage 1 Extremely fine active carbon powder stabilizing layer, remove Most of the oil steam
Stage 2 Multilayer fiber media, Adhesive micro-fine activated carbon powder, remove Residual oil vapor.
*Multilayer fine media to prevent contaminants from wandering.
*Outside coating closed foam sleeve Prevent fiber wandering.



H

CLASS035-800 COMPRESSED AIR FILTER

KL compressed air filter is hot sales to more than 20 countries, popular use for compressed air system, with high oil,water,dust remove efficiently . can help the user to get the high quality & clean compressed air.



KL FITER ELEMENT—HIGH PERFORMANCE FILTER MEDIUM

1. KL compressed air filter element is adopted of aeronautic diversion technology, the air inlet is designed to a smooth 90"elbow which can greatly reduce lhe turbulence and pressure loss.
2. Adding a cone-shaped flow diffuser at the bottom of filter element, flow diffusion increases the filtering area.
3. Adopting bayonet type installation, easy to replace the filter element.
4. Imported high performance glass fiber materials
5. Adopting large inlet connection for 800above filter element, which reduces the resistance of filter element, and easier to install.
KL Filter shell.



KL FITER SHELL—INTERNATIOAL ADVANCED DESIG CONCEPT

1. KL compressed air filter is composed of three segments, it can be disassembled without tool, asy to replace filter element and clean the built-in drainer.
2. Interior shell is treated with antioxidant preservative treatment, guaranteeing shell's lifetime, avoiding secondary pollution.
3. Precise electronic DP displayer, it good can display differential pressure and working time precisely, remind the user to change the new element.
4. High preference drainer, long lifetime, high ficiency, not easy to plug

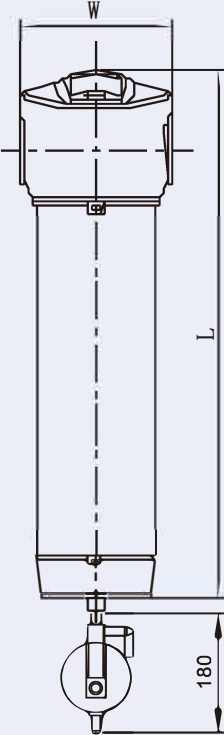


COMPRESSED AIR FILTER
AND ACCESSORIES

07/08

PARAMETER TABLE

- CLASS C MAIN PIPE OIL/WALER FLITER 3MICRON 3PPM
- CLASS T MAIN PIPE DUSL ILLER 1MICRON1PPM
- CLASS AHIGH EFFICIENT OIL REMOVEL FILERL 0.01MICRON0.01PPM
- CLASS F HIGH EFFICIENT OIL REMOVEL FILTER0.01 MICRON 0.001PPM
- CLASS H ACLIAVLED CARBON OLLWATER FLER 0.01 MICRON0.003PPM

MODEL	Capacity m³/min	CONNECTION	LX W (MM)	ELEMENT		Weight (kg)	SIZE
				MODEL	QTY		
CLASS-35	1.6	RC1"	260X107	CLASS-35E-03	1	1.4KG	
CLASS-70	2.6	RC1"	305X107	CLASS-70E-03	1	1.6KG	
CLASS-100	3.8	RC1"	365X107	CLASS-100E-03	1	2.0KG	
CLASS-200	7.0	RC1 1/2"	555X135	CLASS-200E-03	1	3.5KG	
CLASS-300	8.5	RC1 1/2"	635*135	CLASS-300E-03	1	4.0KG	
CLASS-350	11.5	RC2"	735X135	CLASS-350E-03	1	4.5KG	
CLASS-400	13.5	RC2"	760*170	CLASS-400E-03	1	7.8KG	
CLASS-600	17	RC2 1/2"	820*170	CLASS-600E-03	1	8.2KG	
CLASS-800	23	RC2 1/2"	1060*170	CLASS-800E-03	1	9.7KG	

1. Five classes for your choose. (C,T,A,F,H)
- 2、Working pressure: 0.2-1.0MPa, We can provide the filter which pressure above 1.0MPa.
- 3、Option: different pressure indicator.

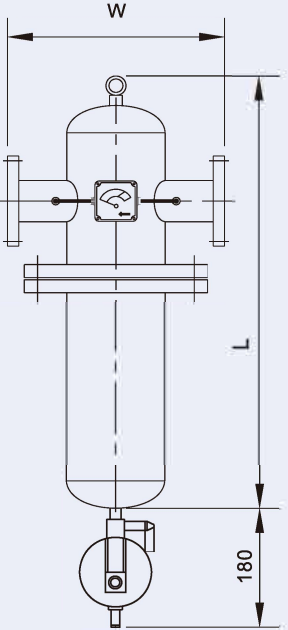
- ELECTRICAL DRAINER
- INSIDE DRAINER
- AUTO-DRAIER
- DIFFERENT PRESSURE IDICATOR



CLASS-600-17500 COMPRESSED AIR FILTER



PARAMETER TABLE

Model	Capacity m³/min	Connection	L×W (mm)	Element		Weight (kg)	Size
				Model	QTY		
Class-600	17	DN65FL	1114×320	Class-600E	1	23	
Class-800	23	DN65FL	1266×230	Class-800E	1	28	
Class-900	27	DN80FL	1143×430	Class-400E	2	79	
Class-1200	34	DN80FL	1143×430	Class-600E	2	85	
Class-1600	45	DN100FL	1320×430	Class-800E	2	115	
Class-2000	55	DN100FL	1189×540	Class-600E	3	128	
Class-2400	65	DN125FL	1438×540	Class-800E	3	135	
Class-3000	87	DN150FL	1485×600	Class-800E	4	155	
Class-4000	110	DN150FL	1415×600	Class-800E	5	158	
Class-4800	130	DN150FL	1445×600	Class-800E	6	170	
Class-5600	160	DN200FL	1555×740	Class-800E	8	245	
Class-7000	210	DN200FL	1630×750	Class-800E	10	270	
Class-8000	260	DN250FL	1610×900	Class-800E	12	320	
Class-10500	320	DN250FL	1830×930	Class-800E	14	450	
Class-12500	360	DN300FL	1750×960	Class-800E	16	420	
Class-14000	410	DN300FL	1670×985	Class-800E	19	435	
Class-17500	510	DN350FL	1991×1140	Class-800E	24	500	

1. Five classes for your choose, (C,T,A,F,H) 2. Working pressure: 0.2-1.0MPa. We can provide the filter which pressure above 1.0MPa.
3. Option: different pressure indicator.

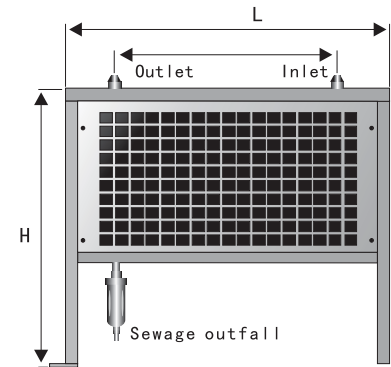
Please choose the right modle according to the flow rate and pressure, not by the filter connection											
Pressure	1.4	2.1	2.8	4.2	5.6	7.0	8.5	10.6	14.1	17.6	21.1
Coefficient	0.30	0.39	0.48	0.65	0.82	1.00	1.17	1.43	1.87	2.31	2.74

COMPRESSED AIR FILTER
AND ACCESSORIES

09/10

INTRODUCTION

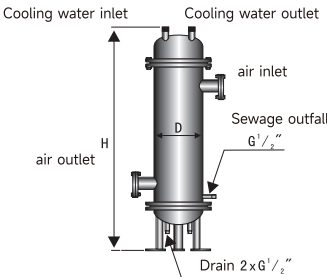
KL series after cooler with high efficiency, small size, no need foundation installation, low running cost and long service life. We have air cooling and water cooling two type cooler, customer can according to the site status such like ambient temperature, RH, compressed air temperature to choose the best one for their compressed air system.



PARAMETER TABLE

Parameter table	KLF-	1N	2N	3N	6N	10N	12N	15N	20N	25N	30N	40N
capacity m³/min		1.6	2.6	3.8	7	11.5	13.5	17	23	27	34	45
power V/Ph/Hz		220V/1/50						380V/3/50				
Long(mm)		600	650	650	800	1180	1180	1500	1500	1670	1800	1800
Width(mm)		200	200	250	270	270	270	340	340	340	400	400
High(mm)		700	700	700	800	850	1000	1075	1090	1100	1230	1330
Motor Power W		50	110	110	140	220	280	360	360	500	900	900
Inlet and outlet diameter		ZG1"	ZG1"	ZG1"	ZG1 1/2"	ZG2"	ZG2"	DN65	DN65	DN80	DN80	DN100

Working pressure	0.4/1.0MPa
Design pressure	0.6/1.0MPa
Maximum intake air temperature	≤120°C (water cooled) ≤90°C (AIR COOLED)
Outlet temperature	≤42°C
Water inlet temperature	≤32°C
Drain temperature	≤40°C
Maximun ambient temperature	≤40°C (AIR COOLED)



Parameter table	KLF-	1N	2N	3N	6N	8N	10N	12N	15N	20N	25N	30N	40N	50N	60N	80N	100N
capacity m³/min		1.6	2.6	3.8	7.0	8.5	11.5	13	17	23	27	34	45	55	65	87	110
Tube diameter D(mm)		φ133	φ159	φ159	φ159	φ159	φ159	φ219	φ219	φ273	φ273	φ273	φ325	φ325	φ325	φ377	φ377
H(mm)		1350	1320	1320	1507	1507	1507	1620	1875	1875	1870	1453	1926	1950	2065	2156	2390
Import and export		G1"	G1"	G1"	G1 1/2"	G1 1/2"	G2"	G2"	DN65	DN65	DN80	DN80	DN100	DN100	DN125	DN150	DN150
Cooling water inlet/outlet		1/2"	3/4"	3/4"	1"	1"	1 1/4"	1 1/4"	1 1/2"	2"	2"	2"	2 1/2"	2 1/2"	3"	3"	4"
Water Consumption (m³/h)		0.45	0.96	1.0	2.6	2.63	4.3	5.2	7.3	9.9	11.6	14.6	19.5	23.7	28	37.5	47.5

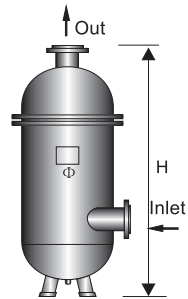
OIL-WATER SEPARATOR

INTRODUCTION

Our company combines domestic and foreign advanced technology research and development the Oil-water separator. Its internal use of direct interception, inertia collision, bronze diffusion and cohesion and other mechanisms Effectively remove the air in the water, oil mist, dust, Internal stainless steel wire can be cleaned. long service life.

FEATURES

- Reasonable design, easy maintenance and repair
 - Filter pore size: 5µm
 - Pressure loss: 0.005MPa
- Oil filtering accuracy: 10ppm
 - Operating temperature: 5~65°C
- The filter element has a long service life
 - Working pressure: 0.2~1Mpa
 - Water Removal rate(liquid): ≥99%



PARAMETER TABLE

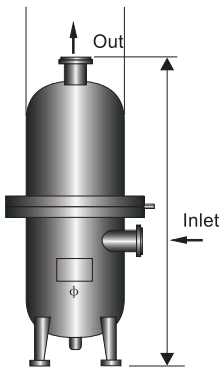
KWF- Model	1N	2N	3N	6N	8N	10N	12N	15N	20N	25N	30N	40N	50N	60N	80N	100N	120N	150N	200N	250N	300N	350N	400N	500N
Capacity Nm³/min	1.6	2.6	3.8	7	8.5	11.5	13	17	23	27	34	45	55	65	87	110	130	160	210	260	320	360	410	510
Hogh/H (mm)	720	940	1000	1120	1140	1170	1170	1345	1365	1607	1613	1610	1615	1615	1715	1750	1765	1864	1781	2017	2100	2200	2200	2300
diameter φ(mm)	159	159	159	159	159	159	159	159	159	219	219	219	273	273	325	377	377	426	426	600	600	650	650	700
import and export size	ZG1"	ZG1"	ZG1"	ZG1 1/2"	ZG1 1/2"	ZG2"	ZG2"	DN65	DN65	DN80	DN80	DN100	DN100	DN125	DN150	DN150	DN150	DN200	DN200	DN250	DN250	DN300	DN300	DN350
Weighe (kg)	35	40	45	50	55	60	60	75	80	90	105	110	135	140	195	220	225	245	260	380	380	450	380	550

HIGH EFFICIENCY OIL REMOVER

INTRODUCTION

This series based on ultra fine glass fiber as the main filter material, Cyclone separation, pre filter and agglomeration type fine filtration are used for three stage filtration, The oil content can be lower than the precision of the oil-free lubricating air compressor, When matching with oil lubrication compressor. Widely used in pneumatic control, pneumatic instruments, pneumatic components, chemicals, light industry, telecommunications, oil, medicine, textiles, metallurgy, food, rubber and other industries.

- Reasonable design, easy maintenance and repair
- The filter element has a long service life
- Working pressure: 0.2~1MPa
 - Inlet temperature: 5~65°C
- Initial pressure drop: 0.025MPa
 - Outgassing oil content: 0.1~0.01ppm



Model	1N	2N	3N	6N	8N	10N	12N	15N	20N	25N	30N	40N	50N	60N	80N	100N	120N	150N	200N	250N	300N	350N	400N	500N
Capacity Nm³/min	1.6	2.6	3.8	7	8.5	11.5	13	17	23	27	34	45	55	65	87	110	130	160	210	260	320	360	410	510
High/H(mm)	740	880	993	1300	1530	1600	1700	1980	1625	1765	2110	2320	2050	2350	2350	2420	2422	2420	2334	2380	2380	2500	2500	2500
Diameter φ(mm)	159	159	159	159	159	159	219	219	325	325	325	325	377	377	377	426	426	550	550	550	550	600	600	600
Import and export size	ZG1"	ZG1"	ZG1"	ZG1 1/2"	ZG1 1/2"	ZG2"	ZG2"	DN65	DN65	DN80	DN80	DN100	DN100	DN125	DN150	DN150	DN150	DN200	DN200	DN250	DN250	DN300	DN300	DN350
Weight (kg)	55	60	85	100	110	115	120	135	155	210	215	236	270	300	315	360	400	410	470	540	550	650	650	750

COMPRESSED AIR FILTER
AND ACCESSORIES

11/12

STERILIZATION FILTER

ELECTRICAL DRAINER

PVDF Folding filter element is a new type of air and liquid filter element, the enhanced polyvinylidene fluoride two microporous filter membrane is used as filter medium, Used for precise filtration of air and various solvents.

FEATURES

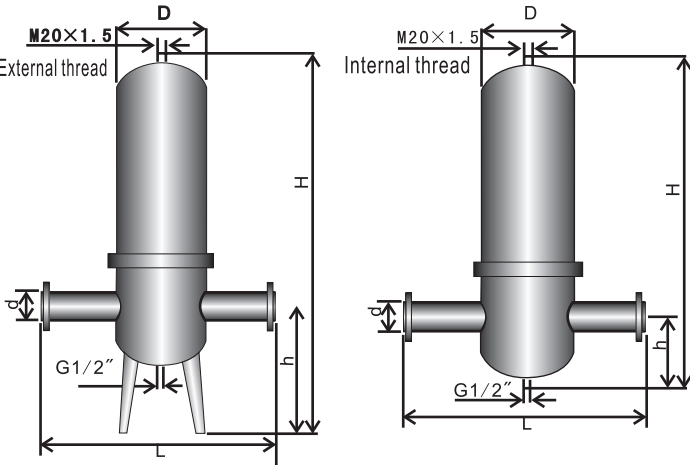
- The enhanced polyvinylidene fluoride two microporous filter membrane is used as filter medium
- Suitable for precise sterilization filtration of air and various solvents
- Wide range of chemical compatibility
- Good temperature resistance, can be repeated steam sterilization
- Filter 100% integrity test

FILTRATION ACCURACY

- Filtration accuracy: 0.01μm
- Filtration efficiency: 99.9999%
- Flux: ≥5Nm3/ min (0.1MPa pressure, 0.1MPa pressure difference, 10")
- Steam sterilization: 125±2°C, 30min/ times, 1 60times
- Pressure: 0.2MPa (Positive pressure difference)
- Initial pressure drop: 0.005MPa
- Size: 125mm(5"), 250mm(10"), 500mm (20")
- Diameter: 70mm
- Diameter: 0.32mm(5"), 0.65mm(10"), 1. 3mm(20")
- Filter medium: PVDF membrane .
- Inner and outer support layer: Heat-resistant polypropylene
- Overcoat: Heat-resistant polypropylene
- Center post: Stainless steel net cylinder
- End cap: Heat-resistant polypropylene
- Seal ring: Fluorine rubber or silicone rubber

APPLICATION

- Aseptic filtration of air in pharmaceutical, biological engineering, brewing and other fields
- Breathing apparatus for a sterile liquid tank
- High temperature liquid filtration
- Sterilization of various solvents filtration



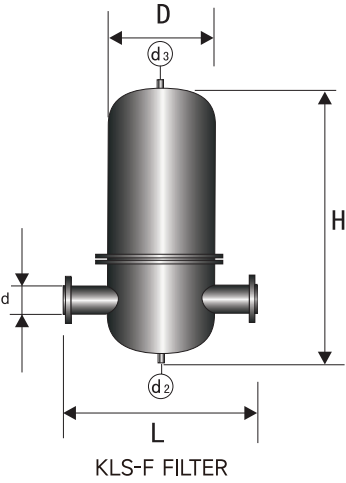
KPF Schematic diagram of filter Range of use: KPF-5

KPF Schematic diagram of filter Range of use: KPF-0.5, 2.4

STERILIZATION FILTER

Model	Capacity m³/min	Element QTY	Size (mm)				
			d	L	D	h	H
KPF-05	0.5	5"/1 pcs	DN25 PN1.0	234	Φ114	96	434
KPF-2	2	10"/1.pcs	DN25 PN1.0	234	Φ114	96	549
KPF-4	4	20"/1.pcs	DN25 PN1.0	234	Φ114	96	800
KPF-5	5	10"/3.pcs	DN50 PN1.0	324	Φ184	300	789
KPF-10	10	20"/3.pcs	DN65 PN1.0	324	Φ184	300	1046
KPF-15	15	20"/5.pcs	DN80 PN1.0	415	Φ235	300	1178
KPF-20	20	20"/5.pcs	DN100 PN1.0	415	Φ235	385	1193
KPF-30	30	20"/7.pcs	DN100 PN1.0s	475	Φ275	426	1251
KPF-40	40	20"/9.pcs	DN125 PN1.0	505	Φ305	438	1284
KPF-60	60	20"/12pcs	DN125 PN1.0	555	Φ355	438	1303
KPF-80	80	20"/15pcs	DN150 PN1.0	606	Φ406	450	1346
KPF-100	100	20"/19pcs	DN150 PN1.0	656	Φ456	450	1375
KPF-120	120	20"/25pcs	DN200 PN1.0	706	Φ506	505	1501
KPF-150	150	20"/30pcs	DN200 PN1.0	756	Φ556	505	1514

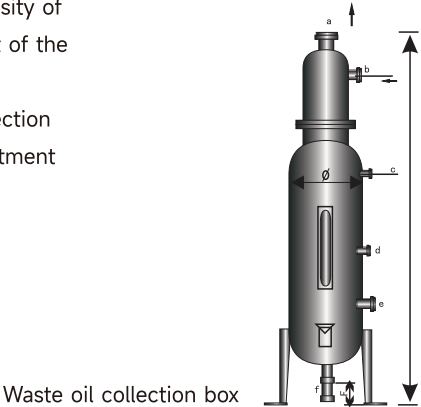
STEAM FILTER



Model	Capacity m³/min	Size (mm)				Weight (kg)	Range of use
		D	H	L	d		
KLS-F-035	0.35	Φ89	522	199	DN25	6	KPF-05~10
KLS-F-080	0.8	Φ114	530	224		7	KPF-15~40
KLS-F-1	1.0	Φ164	591	284		13	KPF-60~150

INTRODUCTION

It uses the principle of centrifugal separation and gravitational separation, depending on the density of oil and water, the waste oil and water are cut into the gas and liquid separator in the upper part of the box by tangential direction. Sink oil and water into the box by centrifugal action, start gravity separation after a period of rest. Then discharge out of the box periodically. Widely used in collection of waste water and oil discharged from air compressors at all levels of the cooler and other treatment equipment.



Waste oil collection box

PARAMETER TABLE

Model	Technical parameter				Nozzle dimension							
	Volume m³	Working pressure MPa	Working temperature °C	Weight kg	Exhaust port a	Waste water inlet b	Overflow c	Oil drain d	Drain e	Outfall f	High A	Diameter ø
KFS-0.3	0.3	< 0.3	125	240	DN65	ZG1 1/2"	ZG1 1/2"	ZG1"	ZG1 1/2"	ZG1"	2400	700
KFS-0.5	0.5	< 0.3	125	300	DN65	ZG1 1/2"	ZG1 1/2"	ZG1"	ZG1 1/2"	ZG1"	2850	800
KFS-1	1	< 0.3	125	400	DN65	ZG1 1/2"	ZG1 1/2"	ZG1"	ZG1 1/2"	ZG1"	3150	1000
KFS-2	2	< 0.3	125	550	DN65	ZG1 1/2"	ZG1 1/2"	ZG1"	ZG1 1/2"	ZG1"	3700	1200

COMPRESSED AIR FILTER
AND ACCESSORIES

13/14

KZCL SERIES SELF-CLEANING DUST FILTER



INTRODUCTION

To ensure that expensive air power equipment is protected from dust pollution, less trouble, normal operation, Minimize the number of shutdown times and maintenance workload, Reduce the dust content of the inhaled air, Avoid dust wear and corrosion inside the equipment, Therefore, air dust filter should be installed at the suction port of air powered mechanical equipment, This series is aimed at such problems. KZCL series combines the domestic and foreign advanced technology, is the customer's best choice.

APPLICATION (Particularly suitable for places that dust content >30mg/m³ and Dust storm area)

- Air compressor station
 - Raw air compressor of Oxygen station
 - Blast furnace blower of iron and steel works
 - Gas turbine
 - Long running diesel engine
 - Air conditioner blower for textile industry
 - Low dust content central air conditioning system(Computer room, central air conditioning control room, film industry, pharmaceutical industry, food industry, precision machining, electronic industry, semiconductor, fine chemical industry, etc.)

FEATURES

- Two stage filtration is adopted, High accuracy and low resistance loss, Long service life and low running cost ,it was only original 1/4 cost.
 - Primary filter uses frame plate strainer, Prevent rain and snow, dust storm enters High efficiency filter. It can be cleaned and used repeatedly, The effect is obvious and the dust removal efficiency is up to 30%
 - High efficiency filter Adopt high precision moisture resistant filter material.
 - Reasonable design, no elbow, reduce resistance 20-30pa
 - Pulse electromagnetic valve adopts imported equipment, special valve for dust removal, Use up to 1 million times
 - The filter element is made of Korean or American paper element. Electrical protection grade IP54 Withstand safe negative pressure -5kpa
 - Small flow is independent of the overall structure, Large flow is modular building block structure, Special Situation, according to customer needs design, Respond To The Needs.

STRUCTURE AND WORKING PRINCIPLE

- Frame plate strainer
 - HEPA filter cartridge
 - Venturi
 - Pulse valve
 - Blowpipe
 - Nozzle
 - Intelligent allocator
 - Clean gas chamber
 - Outlet pipe
- 1: Clean gas chamber, 2: Outlet pipe, 3: HEPA filter cartridge, 4: Pulse valve, 5: Venturi, 6: Frame plate strainer, 7: Intelligent allocator, 8: Blowpipe, 9: Nozzle
- Self-cleaning Process
Small particles of dust are absorbed onto the HEPA filter cartridge, The intelligent allocator distributor pulse valve self-cleaning and blowback to the HEPA filter cartridge, Blow off the surface dust Complete intelligent self-cleaning.
 - Remove dust process
The dusty air enters the primary filter, Large particles of dust, Small particles of dust are adsorbed on the surface of the cartridge and cleaned by reverse blow, After accumulating a certain amount of dust, it can be replaced by manual irrigation, The irrigation cycle is about half a year.
 - Filter process
Inhale dust from the atmosphere, After two-stage filtration, Due to gravity, inertia, diffusion, collision, contact and so on, The dust is absorbed onto the HEPA filter cartridge, Clean air passes through venturi into clean air chamber, Inhaled from the exhaust pipe by pneumatic machinery, Achieve the effect of efficient filtration.

PARAMETER TABLE

Project \ KZCL-		120	160	200	240	300	400	500	600	700	800	1000	1200	1600	2000	2400	2800	3200	3600	4200	4800	5400	6000	6600	7200	8000	
		120	160	200	240	300	400	500	600	700	800	1000	1200	1600	2000	2400	2800	3200	3600	4200	4800	5400	6000	6600	7200	8000	
Capacity Nm³/min		120	160	200	240	300	400	500	600	700	800	1000	1200	1600	2000	2400	2800	3200	3600	4200	4800	5400	6000	6600	7200	8000	
Structural style		Monolayer																	Double-deck								
Filtration accuracy		1um 99.99%																									
Initial resistance		<150Pa																									
Normal operation pressure loss		150~650Pa																									
Blowback pressure		0.4~0.7MPa																									
Reverse gas consumption		≤0.2m³/min																									
Power consumption																											
Inlet diameter of blowback		2"																									
Self-cleaning method		Timing, differential pressure, manual																									
Element QTY		6	8	9	12	16	20	25	30	35	40	50	60	84	102	120	144	160	180	210	240	270	300	330	360	400	
Noise									70bBa																		
Size	Long	1620	2280	1680	2100	2100	2580	2580	2850	3300	3750	4650	5550	6450	7800	6900	8250	8500	Design by actual size								
	Width	1350	1350	1830	1830	2310	2310	2800	2800	2800	2800	2800	3180	3180	4140	4140	4300										
	High	2900	2900	2900	3000	3000	3000	3000	3000	3000	3100	3100	3200	3500	3600	4000	4000	4000									

1.It is recommended that customers select 1.8-2 times according to the actual air filtration capacity or Consult with engineer
2.Installation of anchor screw for leveling cement ground

COMPRESSED DESIOCCANT AIR DRYER

15/16



COMPRESSED DESIOCCANT AIR DRYER

17/18



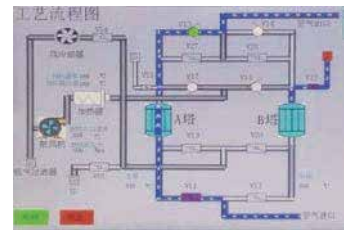
ELECTRICAL HEATER

Stainless steel material, simple structure
High mechanical strength, high efficiency and long service life.



AIR BLOWER

High mechanical efficiency, low noise, stable and reliable operation



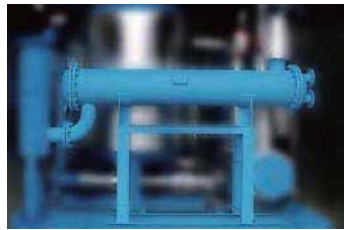
PLC PROGRAM CONTROLLER

With LCD touch screen display working process and easy for userto check and setting the parameter.
The PLC program can auto switch the valve With alarm, Interlocking function, effectively monitor the operatio process of the equipment, ensure reliable operation, convenient operation and maintenance.



ACTIVATED ALUMINA

Good adsorptio capacity, hgh water resistance, easy regeneration for system



AFTER-COOLER

Use the high efficiency red copper tube elements, with high heat exchanger coefficient, and high heat trasfer effect, meet the requirement working on different state



GAS LIQUID SEPARATOR

Adopt the principle of inertia separating and gravity, special gas liquid filtering net to intercept spray, with low pressure drop, high water remove capacity.



PNEUMATIC VALVE

Peumatic butterfly valve Big rotational torque
response quickly Long service life
With nice seal performance, the seal parts use PTEE material
With the feedback switch for the valve sigal.

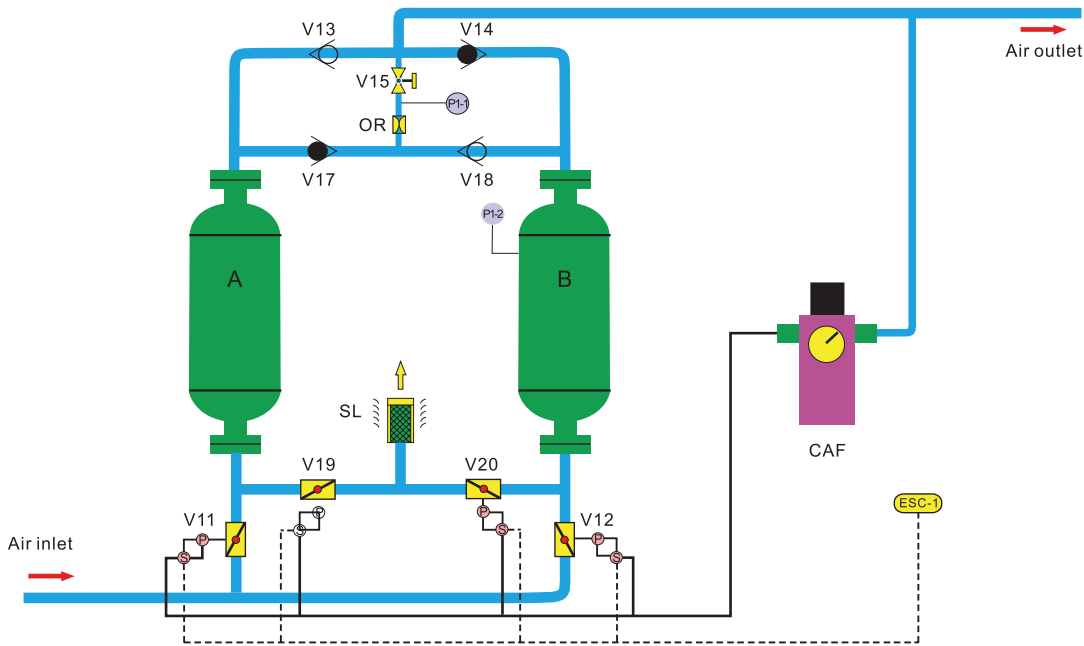
KXD SERIES HEATLESS DESICCANT AIR DRYER

DESCRIPTION

Heatless dryer adopt pressure swing adsorption technology--the desiccant with different adsord effect under the different working pressure. The desiccant adsorb the moisture under the working pressure, and desorption under the atmospheric pressure. The system with two tanks for the periodic auto switching, oe tank on adsorption, the other one on regeneration, simple structure and easy to maintenance.



SYSTEM FLOWCHART



MAIN PARTS

PLC controller



PLC controller



High quality pneumatic valve



High quality pneumatic valve



Reliable no leak check valve



Reliable no leak check valve



COMPRESSED DESIOCCANT
AIR DRYER

19/20

STANDARD CONDITION

- ◆ Working pressure

◆ Inlet temperature

◆ Ambient temperature

◆ Dew-point

◆ Air loss
- ◆ 7-10bar

◆ ≤45℃

◆ ≤45℃

◆ ≤-40℃

◆ ≤14.5%
- ◆ Inlet oil content

◆ Voltage

◆ Desiccant

◆ Switch time
- ◆ ≤0.1ppm(w)

◆ 220V/1PH/50Hz

◆ Activated alumina

◆ 5-10min

AFTER-COOLER

- ◆ -70℃ dew-point

◆ Remote, communication

◆ Dew-point meter

◆ PLC controller

◆ Different inlet/out connection
- ◆ Higher protect grade EP65

◆ High pressure

◆ Anti-explosion

◆ Molecular sieve & activated alumina

◆ Different dimension suit for container shipment.
- ◆ SS gas pipe & accessories

◆ SS pressure vessel

◆ ASME VESSEL

◆ Special painting

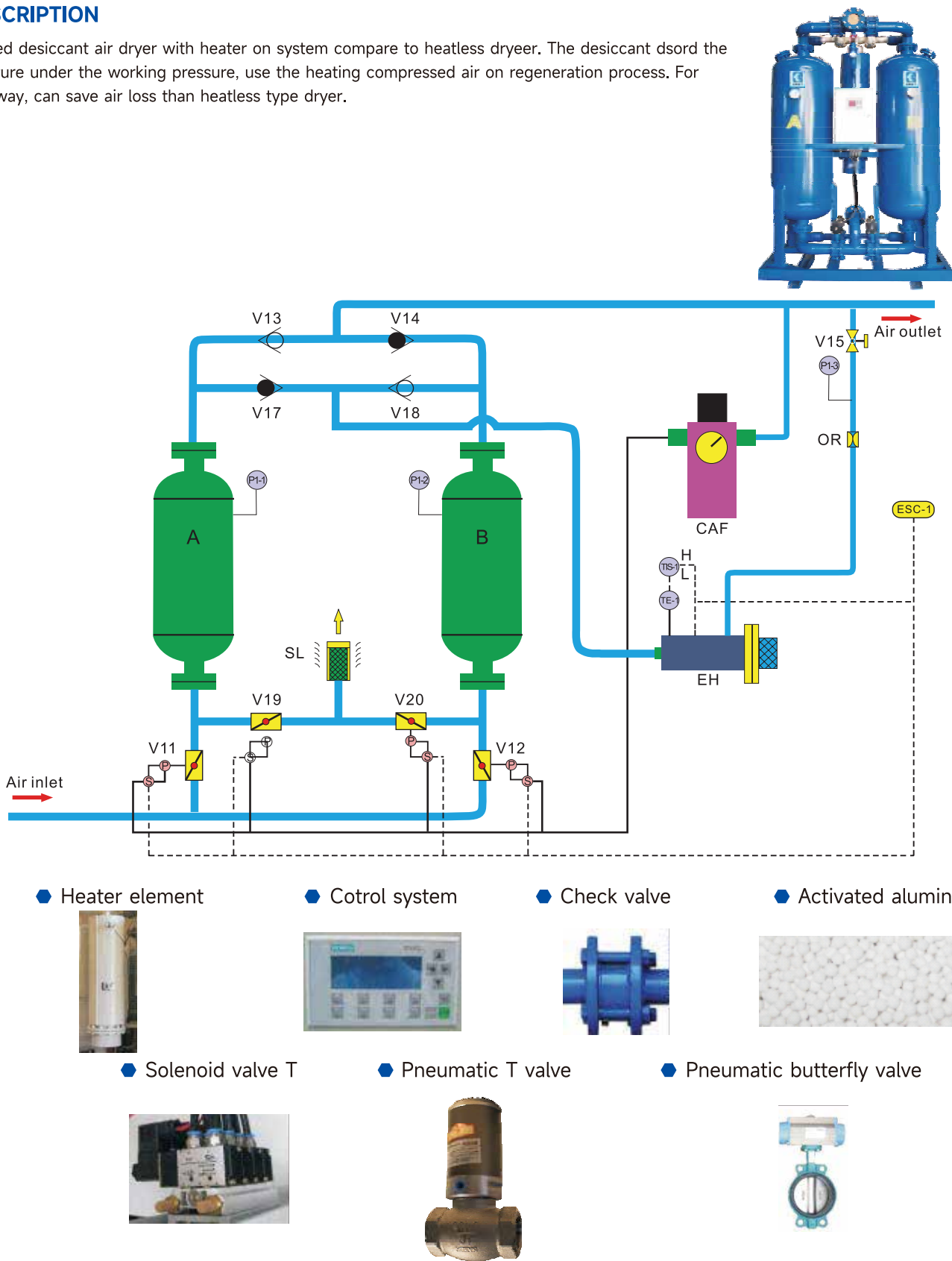
SPECIFICATION

Model	Flow rate				Dimension(mm)			Weight(kg)
	m³/min	m³/h	CFM		L	W	H	
UCD-5	0.7	42	25	1/2"	690	500	915	120
UCD-10	1.6	96	56	1"	690	500	1298	190
UCD-20	2.6	156	92	1"	780	500	1250	280
UCD-30	3.8	228	134	1"	860	540	1276	320
UCD-60	7.0	410	247	1 1/2"	1010	700	1588	480
UCD-75	8.5	520	300	1 1/2"	1010	700	1727	540
UCD-100	11.5	690	406	2"	1240	800	1958	650
UCD-120	13.5	810	476	2"	1060	660	2210	690
UCD-150	17	1020	600	DN65	1240	720	2203	780
UCD-200	23	1380	812	DN65	1280	720	2233	920
UCD-250	27	1620	953	DN80	1700	770	2362	1050
UCD-300	34	2040	1200	DN80	1750	800	2420	1200
UCD-400	45	2700	1588	DN100	1850	900	2405	1530
UCD-500	55	3300	1941	DN100	1900	1120	2730	1750
UCD-600	65	3900	2294	DN125	2160	1240	2784	2230
UCD-800	87	5200	3071	DN150	2416	1440	2827	2710
UCD-1000	110	6600	3883	DN150	2400	1400	3118	4130
UCD-1200	130	7800	4589	DN150	2600	1680	3128	4700
UCD-1500	160	9600	5648	DN200	2900	1800	3426	5800
UCD-2000	210	12600	7413	DN200	3140	2060	3480	7370
UCD-2500	260	15600	9178	DN250	3320	2060	3170	9020
UCD-3000	320	19200	11296	DN250	3740	2170	3190	11900
UCD-3500	360	21600	12708	DN300	4150	2310	3210	13100
UCD-4000	410	24600	14473	DN300	4810	2490	3300	14800
UCD-5000	510	30600	18003	DN350	5000	2700	3500	16000

KXD SERIES HEATLESS DESICCANT AIR DRYER

DESCRIPTION

Heated desiccant air dryer with heater on system compare to heatless dryer. The desiccant dsord the moisture under the working pressure, use the heating compressed air on regeneration process. For that way, can save air loss than heatless type dryer.



COMPRESSED DESIOCCANT
AIR DRYER

21/22

STANDARD CONDITION

- ◆ Working pressure

◆ Inlet temperature

◆ Ambient temperature

◆ Dew-point

◆ Air loss
- ◆ 5-10bar

◆ ≤45℃

◆ ≤45℃

◆ ≤-40℃

◆ 6%
- ◆ Switch time

◆ Pressure drop

◆ Desiccat

◆ Inlet oil content

◆ PLC control system
- ◆ 120min(w)

◆ ≤0.21bar

◆ Activated alumina

◆ ≤0.1ppm(w)

◆ PLC controller

- OPTION
- ◆ Special voltage

◆ Molecular sieve & activated alumina

◆ High pressure / anti-explosion

◆ High voltage series

◆ -70℃ dew-point
- ◆ Higher Inlet temperature 50℃

◆ Dew-point meter & PCL controller

◆ ASE/CE VESSEL

◆ SS ari pipe & accessories

SPECIFICATION

Model	Flow rate		Heated power (kw)	Inlet connection (BSP)	Dimension(mm)			Weight(kg)
	m³/min	CFM			L	W	H	
UCR-5	0.7	25	0.9	1/2"	690	500	915	150
UCR-10	1.6	56	0.9	1"	690	500	1298	210
UCR-20	2.6	92	1.5	1"	780	500	1324	300
UCR-30	3.8	134	1.5	1"	860	540	1350	390
UCR-60	7.0	247	2.4	1 1/2"	1010	700	1558	520
UCR-75	8.5	300	2.4	1 1/2"	1010	700	1785	580
UCR-100	11.5	406	4.5	2"	1240	800	2232	700
UCR-120	13.5	476	4.5	2"	1060	660	2210	740
UCR-150	17	600	5.4	DN65	1240	720	2203	845
UCR-200	23	812	7.5	DN65	1280	720	2233	995
UCR-250	27	953	9	DN80	1700	770	2362	1140
UCR-300	34	1200	10.8	DN80	1750	800	2420	1305
UCR-400	45	1588	15	DN100	1850	900	2405	1660
UCR-500	55	1941	18	DN100	1900	1120	2730	1860
UCR-600	65	2294	22.5	DN125	2160	1240	2784	2395
UCR-800	87	3071	28.8	DN150	2416	1440	2827	2905
UCR-1000	110	3883	37.5	DN150	2600	1730	3038	4870
UCR-1200	130	4589	45	DN150	2900	1780	3128	5460
UCR-1500	160	5648	56	DN200	3000	2330	3400	6820
UCR-2000	210	7413	72	DN200	3380	2520	3420	8630
UCR-2500	260	9178	90	DN250	3580	2720	3596	11200
UCR-3000	320	10943	112.5	DN250	3580	2970	3606	12900
UCR-3500	360	12708	124.8	DN300	3720	3220	3720	13800
UCR-4000	410	14473	145.8	DN300	3910	3370	3910	14700
UCR-5000	510	18003	170	DN350	4200	3600	4200	16200

BLOWER PURGE DESICCANT AIR DRYER



- SALE POINT
- ◆ 4hours cycle switching time, with nice comprehensive performance.

◆ Complete regeneration process , make the desiccant has the perfectad-sorption capacity, make sure the dew-point.

◆ Suction the ambient air into the heater, use the heating ambient airtio regeneration, energy saving design,

◆ Multiple interlocking protection, alarm protection,the devicesecurity and reliability.

◆ The Dew-point can meet customer 's requirement.

◆ On all-in-one skid mounted design, convenient installation.

Working pressure	0.4MPa~1.0 MPa
Dew-point	≤ -40℃（PDP）
Air loss	≤ 2%
Switch time	4h
Pressure drop	≤ 0.021 MPa
Adsorbent	Activated alumina
Inlet oil content	≤ 0.1ppm(w)
Voltage	380V/3PH/50Hz

WORKING PRINCIPLE

Blower purge desiccant air dryer is a kind of energy-saving compressed air treatment product. When the incoming wet compressed air flows into adsorption tower from bottom to top, the water will be adsorbed by desiccant, the dried air will flow into subsequent process. Within switch time, when one tower is adsorbing, the other one is regenerating. The regeneration process mainly consists of depressurization, heating, blowing-cold and pressurization. The system use the heating ambient air for regeneration, the regeneration gas with moisture release through muffle, then use the system compressed air for cooling process. All the steps are controlled by PLC for automatic switching,and can show the process on touch screen.

BLOWER PURGE DESICCANT AIR DRYER

Model	KSC	200	250	300	400	500	600	800	1000	1200	1500	2000	2500	3000	3500	4000	5000
Flow rate Nm³/min		23	27	34	45	55	65	87	110	130	160	210	260	320	360	410	510
Heater power KW		15	18	24	32.4	42	48	64.8	81	95.4	119.7	162	205.2	240	285	318	398
Air blower power KW		3.3	4.2	5.5	7.2	8.8	10.8	13.8	17.5	20.8	25.8	34.5	43.2	51.8	59. 2	67. 8	78. 2
Dimension (mm)	L	1560	1870	2090	2530	2750	2920	3040	3210	3380	3520	3680	3720	3820	3950	4520	5380
	W	1630	1830	1990	2180	2390	2510	2780	2920	3080	3180	3320	3400	3480	3560	3720	3980
	H	2780	2880	3070	2920	3100	3080	3120	3200	3280	3410	3560	3640	3720	3810	3890	3970
Connection		DN65	DN80	DN80	DN100	DN100	DN125	DN150	DN150	DN150	DN200	DN200	DN250	DN250	DN300	DN300	DN350
Weight (kg)		1380	1720	2060	2750	3430	4120	5500	6300	7810	9200	11300	14000	14900	16200	17900	19200

The above data are for our standard model, we can design the special one as customer's order.

COMPRESSED DESIOCCANT AIR DRYER

23/24

HEAT OF COMPRESSION AIR DRYER



SALE POINT

- 4hours cycle switching time, with nice comprehensive performance.
- Use the high temperature compressed air to regeneration, make the desiccant has the Complete regeneration,
- Without heater on system, no power consume, very energy saving.
- With cooling process, can make sure the dew-point meet customer 's requirement.
- On all-in-one skid mounted design, convenient installation.

SPECIFICATION

Working pressure	0.4MPa ~1.0 MPa
Inlet temperature	120~170℃
Dew-point	-20℃/-40℃ (PDP)
Air loss	1.6%
Switch time	2h/ 4h
Pressure drop	≤ 0. 04
Desiccant	activated alumina
Inlet oil content	≤ 0.01ppm
Power consume	< 100 W

WORKING PRINCIPLE

Heat of compression dryer is one kind of heated regeneration dryer,full use of high temperature compressed air toregeneration.The high temperature compressed air direct into tank, desorption and bring the moisture out through themuffier. Then parts of compressed air go through the cooler to cooling the desiccant. Compare to blower purge dryer,heat of compression dryer with simple technology flowchart and more energy saving by the power consume only 100w.

TECHNICAL DATA

KSC		200	250	300	400	500	600	800	1000	1200	1500	2000	2500	3000	3500	4000	5000
Model																	
Flow rate Nm³/min		23	27	34	45	55	65	87	110	130	160	210	260	320	360	410	510
Cooling water flow rate t/h		8.6	10.8	12.8	17.2	21.4	26.5	34.5	43.1	52.3	65	90	108	132	161	200	250
Dimension (mm)	L	2070	2410	2740	2900	3050	3190	3300	3520	3700	3900	4680	5400	6900	7540	8210	9100
	W	1030	1200	1350	1510	1690	1810	1920	2100	2330	2450	2750	3000	3300	3470	3580	3620
	H	2310	2430	2650	2780	2830	2880	2910	2990	3170	3200	3510	3720	3940	3920	3850	3860
Connection		DN65	DN80	DN80	DN100	DN100	DN125	DN150	DN150	DN150	DN200	DN200	DN250	DN250	DN300	DN300	DN350
Weight (kg)		1480	1720	1980	2500	3130	3920	4650	5690	6530	7500	9230	12400	14300	15900	17200	19200

The above data are for our standard model, we can design the special one as customer's order.

NON-PURGE BLOWER DESICCANT AIR DRYER



STANDARD WORKING CONDITION

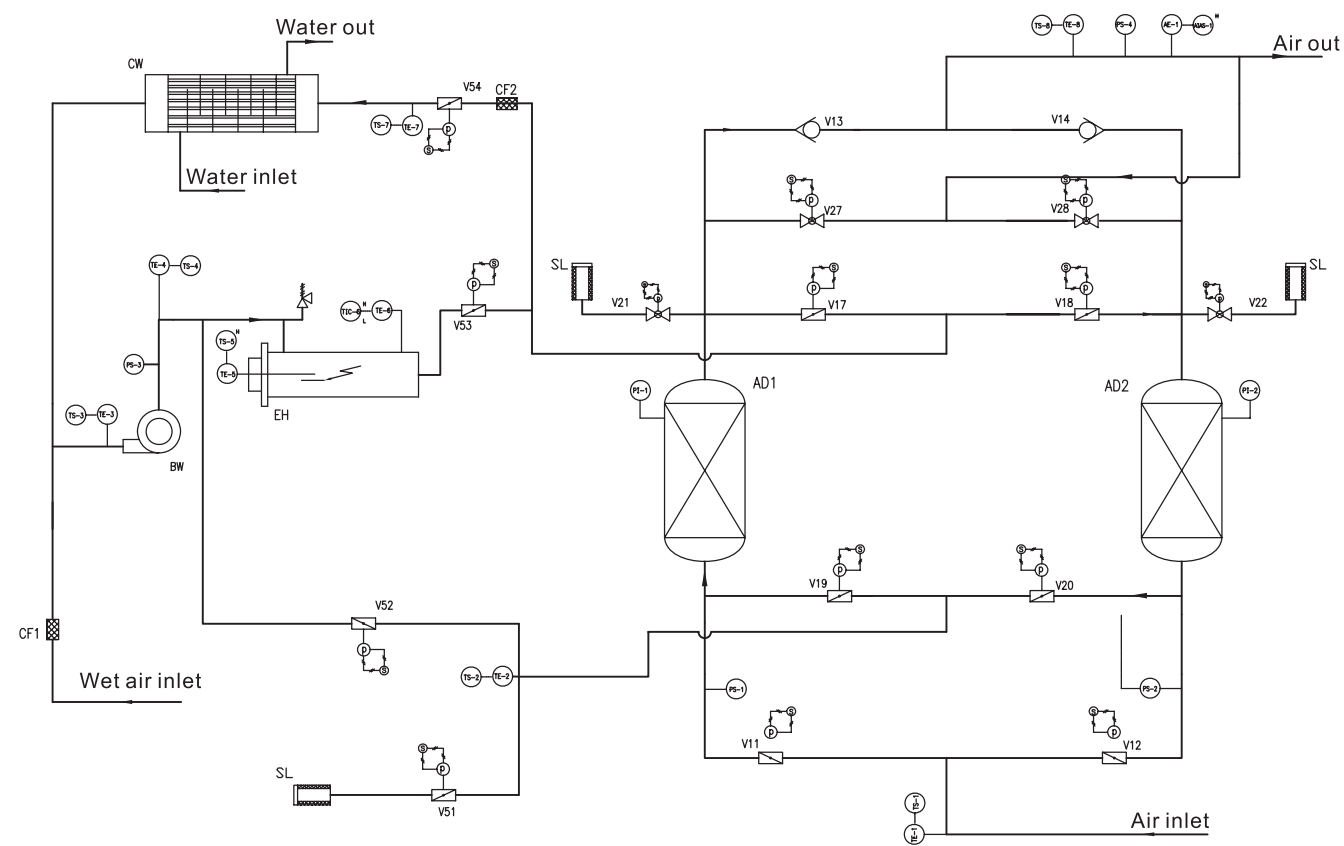
Working pressure	7-10bar	Dew-point lower than -40℃	Can add the filters with dryer together
Inlet temperature	≤40℃	With dew-point meter	Can update the protection grade
Ambient temperature	≤45℃	Adopt PLC controller	Design with different connection
Dew-point	≤-40℃	Special	Design the dimension good for container shipment
Air loss	0%	ASME vessel	Special gas medium
Inlet oil content\	≤0.1ppm (w)		
Voltage	380V/3PH/50Hz		
Desiccant	Activate alumina & molecular sieve		
Switch time:	5h		

Non-purge blower desiccant air dryer is a kind of energy-saving compressed air treatment product,composed of the followingcomponents:
Two adsorption towers, one electric heater, one air blower, one after-cooler ,one set of switching valves and one set of controllingsystem.
When the compressed air flows through the fixed bed layers of adsorption tower,the water will be adsorbed by desiccant, after thedesiccant get saturated, regenerate the desiccant by hot air to recover its adsorption capacity.
Use
the air blower suction the
ambient air to cooling the desiccant, full system without compressed air loss.

COMPRESSED DESIOCCANT AIR DRYER

25/26

SYSTEM FLOWCHART



SPECIFICATION

Model	Flow rate			Connection	Power consume kw(①)	Dimension (mm)		
	m ³ /min	m ³ /h	CFM			L	W	H
UCP-200	23	1380	812	DN65	23	1800	1400	2600
UCP-250	27	1620	853	DN80	28.5	2100	1500	2400
UCP-300	34	2040	1200	DN80	31.5	2200	1650	2720
UCP-400	45	2700	1588	DN100	45.75	2400	1650	2810
UCP-500	55	3300	1941	DN100	51	2500	1850	2985
UCP-600	65	3900	2294	DN125	55	2875	2200	3015
UCP-800	87	5200	3071	DN150	74.25	3300	2350	3050
UCP-1000	110	6600	3883	DN150	86.5	3600	2350	3150
UCP-1200	130	7800	4589	DN150	108.75	3900	2800	3250
UCP-1500	160	9600	5648	DN200	129.75	4300	3000	3300
UCP-2000	210	12600	7413	DN200	157.75	4700	3100	3500

The above data are for our standard model, we can design the special one as customer's order.

NON-PURGE HEAT OF COMPRSSION AIR DRYER



STADARD WORKING CONDITION

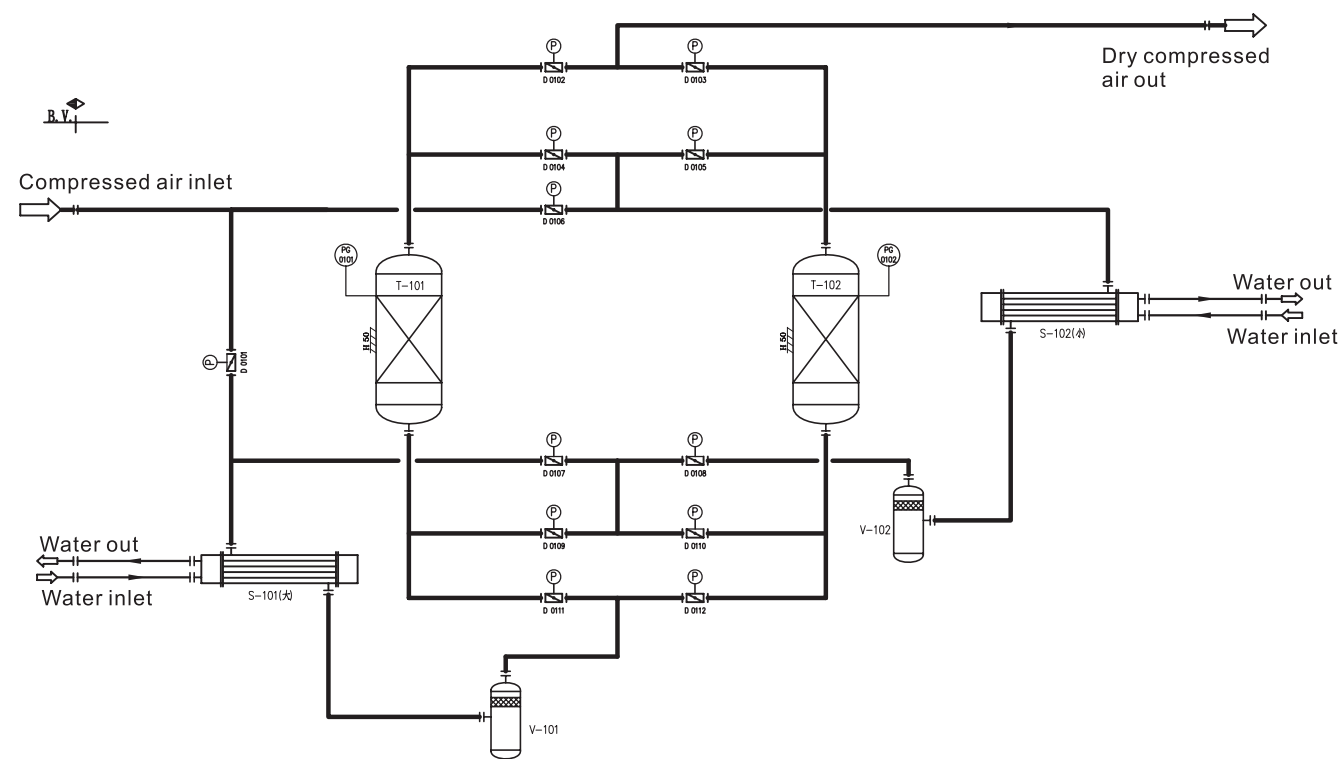
Working pressure	7-10bar	Dew-point lower than -40℃	Canadd the filters with dryer together
Inlet temperature	≥120℃	With dew-point meter	Can update the protection grade
Ambient temperature	≤45℃	Adopt PLC controller	Design with different connection
Dew-point	≤-40℃	Special painting	Design the dimension good for container shipment
Air loss	0%	ASME vessel	Specialgas medium
Cooling water temperature	32℃		
Inlet oil content\	≤0.1ppm (w)		
Voltage	220V/1PH/50Hz		
Desiccant	Activate alumina & molecular sieve		
switch time	5h		

Non-purge heat of compression air dryer is a kind of energy-saving compressed air reatment product,composed of the followingcomponents:
Two alternative-used adsorption towers, two after-cooler , two liquid/gas separator,one set of switct ing valves and one set of controlling system.
The compressed air into the adsorption tank, the desiccant adsorption the moisture and other tank for regeneration, the hightemperature compressed air into the tank to desorption, then use the cooling compressed air to cooling the desiccant.All the stepsare controlled by PLC for automatic switching. It can provide long-term reliable energy-saving operation

COMPRESSED DESIOCCANT AIR DRYER

27/28

SYSTEM FLOWCHART



SPECIFICATION

Model	Flow rate			Connection	Power consume	Dimension (mm)		
	m³/min	m³/h	CFM			L	W	H
UCP-500	55	3300	1941	DN100	0.2	2700	2350	2650
UCP-600	65	3900	2294	DN125	0.2	2875	2500	3015
UCP-800	87	5200	3071	DN150	0.2	4200	2700	3018
UCP-1000	110	6600	3883	DN150	0.25	4200	2700	3018
UCP-1200	130	7800	4589	DN150	0.25	3900	3100	3250
UCP-1500	160	9600	5648	DN200	0.25	4300	3500	3300
UCP-2000	210	12600	7413	DN200	0.25	4700	3800	3500
UCP-3000	310	18600	10943	DN250	0.25	5500	4000	3700
UCP-3500	360	21300	12708	DN250	0.25	5800	4000	3800
UCP-4000	410	24600	14473	DN300	0.25	6300	4000	3900
UCP-4500	460	27480	16238	DN350	0.25	6500	4100	3950
UCP-5000	510	30600	18003	DN350	0.25	7000	4300	4200

The above data are for our standard model, we can design the special one as customer's order.

NON-PURGE BLOWER DESICCANT AIR DRYER



SPECIFICATION

Working pressure	7-10bar	Dew-point lower than -40℃	Can add the filters with dryer together
Inlet temperature	≥90℃	With dew-point meter	Can update the protection grade
Ambient temperature	≤45℃	Adopt PLC controller	Design with different connection
Dew-point	≤-40℃	Special painting	Design the dimension good for container shipment
Air loss	0%	ASME vessel	Special gas medium
Inlet oil content	≤0.1ppm (w)		
Voltage	380V/3P/50HZ		
Desiccant	Activate alumina & molecular sieve		
Switch time	5h		

Non-purge blower heat of compression air dryer is a energy-saving product adopt the advantage of blower purge dryer and heat of compression dryer. It's composed of the following components:
Two alternative-used adsorption towers, one heater, two after-cooler, one set of switching valves and one set of controlling system. The high temperature air into the adsorption tank for regeneration, go through the cooler for liquid/gas separating process, then into the tank for adsorption to get the dry compressed air. After a period of time, the system use the blower regeneration mode to make the complete regeneration. Keep the desiccant with perfect adsorption effect, help the user to get the nice dew-point for a long time.

COMPRESSED REFRIGERATED DRYER

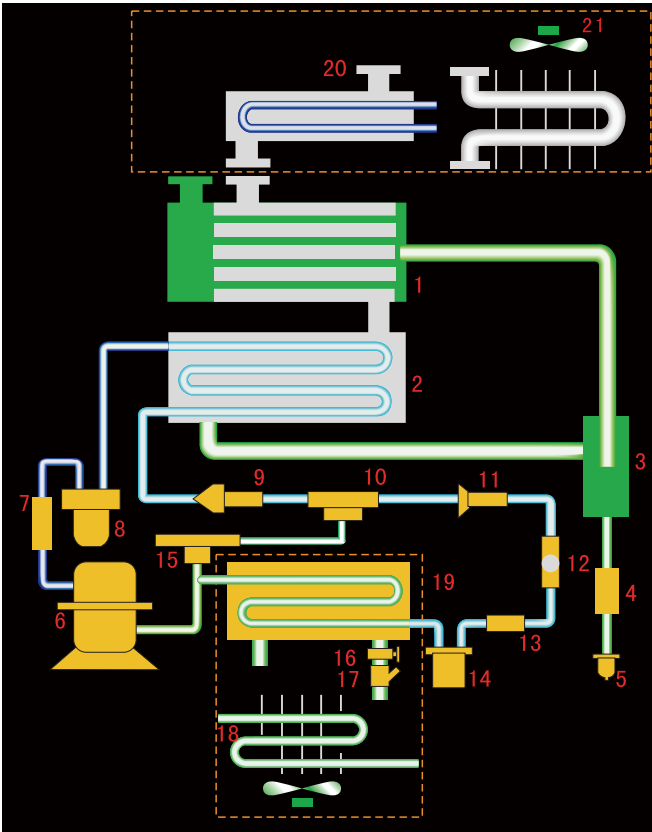
29/30



COMPRESSED REFRIGERATED DRYER

31/32

WORKING PRINCIPLE DIAGRAM



- 1.Pre-cooler
- 2.Evaporator
- 3.Gas-water Separator
- 4.Drain Wall Filter
- 5Automatic Drainer
- 6.Refrigerant Compressor
- 7.Suction Filter
- 8.Gas-liquid Separator
- 9.Liquid Separator Head
- 10.Gas-liquid Mixer
- 11.Thermostatic Expansion Valve
- 12.Mirror
- 13.Dry Filter
- 14.Accumulator
- 15.Hot Gas By-pass Valve
- 16.Water Adjust Valve
- 17.Water Filter
- 18.Condenser(Air cooled)
- 19.Condenser (Water cooled)
- 20.Pre-cooler (Water cooled)
- 21.Pre-cooler (Air cooled)



Based on the principle of refrigerated air dryer, KL series refrigerated air dryers cool the compressed air to a certain dew point by the cooling device and separates out the water. It separates the gas and liquid, then make the water out through the automatic water drain valve to ensure the dew point of the compressed air.

INTRODAUCTION

Plate heat exchanger is a new type of high efficiency heat exchanger that has a corrugated shape by a series of metal piece, it will make heat exchange by through the plate. Compared with the conventional shell and tube type heat exchanger, the heat transfer coefficient is much higher under the same rate of the flow resistance and pump power consumption under the same rate.



TECHNICAL UPGRADE

- Ambient temperature : $\leq 40^{\circ}\text{C}$
- Max. Pressure: 1.6 Mpa
- Inlet temperature: $\leq 55^{\circ}\text{C}$ or $\leq 80^{\circ}\text{C}$
- Dew point : $2-5^{\circ}\text{C}$
- Refrigerant: R407c, R134a
- Air loss: $< 0.02\text{Mpa}$

Attention
The installation site No-dust, No-oil. Site formation, 80cm far away from wall. According to the design of non-standard customized products.



Refrigerant
R134a,R407c



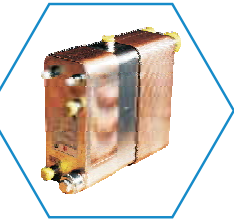
Electronic drain



Refrigeration
compressor



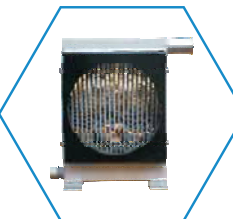
Pressure
controller



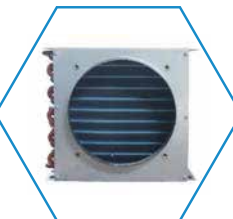
Triad plate heat
exchanger



Hot gas bypass valve



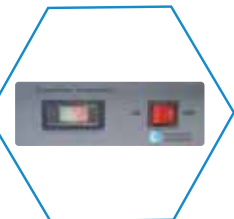
Pre cooler



Efficient finned
tube condenser



Dry filter



Button

COMPRESSED REFRIGERATED DRYER

33/34

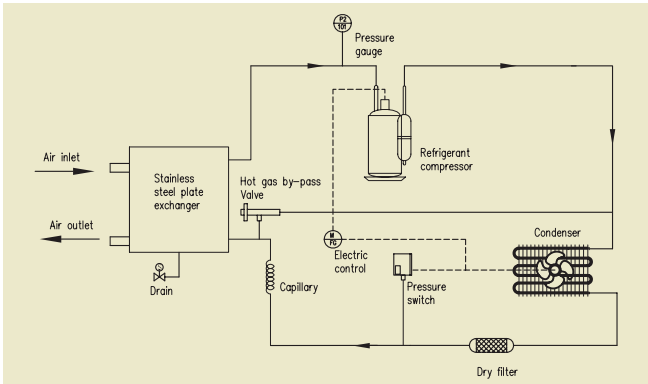
SYSTEM FLOWCHART

Parameter Model		Capacity		Working pressure	Power	Air Connect	Power	Dimensions	Net weight
B D L		M³	cfm		Kw	Inch	V/Hz	L*W*H/mm	KG
	5F	0.7	25	Working pressure 2-16bar Inlet temperature ≤55°C	0.45	G1/2	220V/50Hz	450*250*580	30
	10F	1.6	56		0.47	G1		450*250*580	40
	20F	2.6	92		0.85	G1		550*300*775	45
	30F	3.8	134		1.04	G1		550*300*775	55
	50F	6.0	212		1.65	G1		820*360*825	70
	60F	7.0	247		1.65	G1-1/2		820*360*825	75
	75F	8.5	300		1.80	G1-1/2		880*360*825	80
	100F	11.5	406		2.05	G2		1050*480*1200	95

B D H		M³	Cfm		Kw	Inch	V/Hz	L*W*H/mm	KG
	5F	0.7	25	Working pressure 2-16bar Inlet temperature ≤80℃	0.47	G1/2	220V/50Hz	650*300*775	35
	10F	1.6	56		0.53	G1		650*300*775	45
	20F	2.6	92		0.95	G1		700*360*900	50
	30F	3.8	134		1.16	G1		700*360*900	65
	50F	6.0	212		1.65	G1		820*360*825	80
	60F	7.0	247		1.65	G1-1/2		820*360*825	85
	75F	8.5	300		1.80	G1-1/2		880*360*825	90
	100F	11.5	406		2.30	G2		1050*480*1150	110

TECHNICAL UPGRADE

- 1 Compact structure, small size, good heat exchange effect, saving internal space less pressure loss, reduce pump.
- 2 Power, improve the utilization rate of small volume and easy installation Modular combination to improve the production.
- 3 Efficiency of energy saving and environmental protection energy saving 20%
- 4 Air quality is high, the Aluminum Alloy accessories do not rust, gas is not contaminated.



KD SERIES SMALL REFRIGERATED DRYER(0.7-13.5)m³/min

INTRODUCTION

KDL Inlet temperature <45°C
KDH Inlet temperature <80°C



COMPONENTS

● Plate heat exchanger

● Control panel

● Drain



Standard



Option



Standard



Option

B ALARM B

● Power

● Working

● Fan

● Drain

● Over current

● Over heat

● Alarm

● Dew point indicator

WORKING CONDITIONS

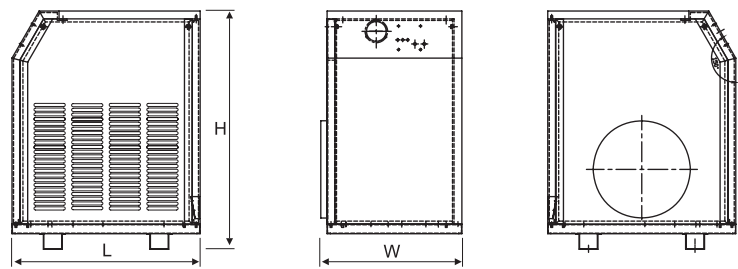
- Maximum inlet temperature 45 °C / 80 °C
- Maximum ambient temperature 40 °C
- Maximum working pressure 16 bar
- Dew point 2-10 °C
- Refrigerant R22
- Voltages 220V / 1PH / 50HZR

- R134a refrigerant
- Special voltages
- NPT connection

COMPRESSED REFRIGERATED DRYER

35/36

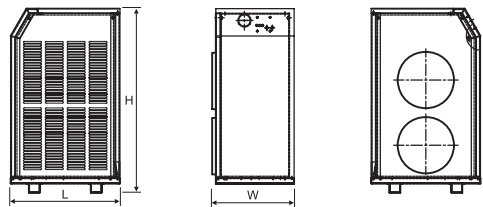
KDL SERIES (MAXIMUM INLET TEMPERATURE 45°C)



Specification Table

Model	Flow capacity			Power Con.kw	Conn.BSP	Dimensions(mm)			Weight (kg)
	m³/min	m³/h	CFM			L	W	H	
	0.7	42	25	0.45	1/2"	500	415	640	30
ULL-10F	1.6	96	56	0.47	1"	500	415	680	45
ULL-20F	2.6	156	92	0.85	1"	630	450	790	50
ULL-30F	3.8	228	134	1.04	1"	630	450	790	55
ULL-50F	6.0	360	212	1.65	1 1/2"	770	530	890	70
ULL-60F	7.0	420	247	1.65	1 1/2"	820	530	890	80
ULL-75F	8.5	510	300	1.67	1 1/2"	870	580	890	90
ULL-100F	11.5	690	406	2.05	2"	900	580	870	120
ULL-120F	13.5	810	476	2.30	2"	950	730	1130	140

Water cooled for option



Specification Table

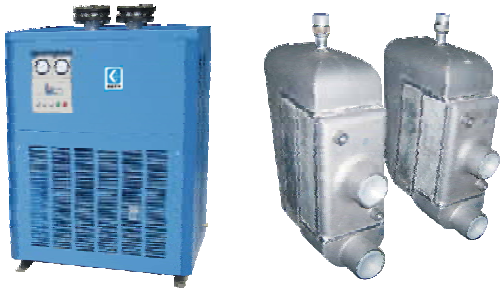
Model	Flow capacity			Power Con.kw	Conn.BSP	Dimensions(mm)			Weight (kg)
	m³/min	m³/h	CFM			L	W	H	
ULH-5F	0.7	42	25	0.47	1/2"	500	415	830	35
ULH-10F	1.6	96	56	0.53	1"	500	415	880	50
ULH-20F	2.6	156	92	0.95	1"	630	450	1010	55
ULH-30F	3.8	228	134	1.16	1"	630	450	1010	60
ULH-50F	6.0	360	212	1.65	1 1/2"	770	530	1070	70
ULH-60F	7.0	420	247	1.65	1 1/2"	820	530	1070	85
ULH-75F	8.5	510	300	1.80	1 1/2"	870	580	1180	110
ULH-100F	11.5	690	406	2.30	2"	1180	580	1110	150
ULH-120F	13.5	810	476	2.52	2"	1250	730	1230	190

Water cooled for option

KD SERIES SMALL REFRIGERATED DRYER(0.7-13.5)m³/min

INTRODUCTION

KDL series are energy saving and environment friendly type refrigerated air dryer. It adapts American API plate heat exchanger, mixed the pre-cooled regenerator, evaporator, gas-water separator into one. It improves 20% heat exchange efficient compared to other exchanger, then to reach 2-10°C dew point with less consumption.



KDL AIR COOLED (MAXIMUM INLET TEMPERATURE 45°C)

Specification Table

Model	Flow capacity m³/min	Power	Connection	Dimensions (mm)			Weight (kg)	Compressor power
				L	W	H		
ULL-150F	17	3.37	DN65	950	835	1240	175	3.1
ULL-200F	23	4	DN65	950	835	1240	210	3.6
ULL-250F	27	5	DN80	1180	885	1440	300	4.5
ULL-300F	34	6.0	DN80	1180	885	1440	380	5.4
ULL-400F	45	8	DN100	1200	985	1520	480	7.4
ULL-500F	55	8.8	DN100	1300	1035	1580	600	8.0
ULL-600F	65	10.5	DN125	1400	1135	1590	680	9.4
ULL-800F	87	11.6	DN150	1900	1250	1730	780	11.0
ULL-1000F	110	17	DN150	2100	1400	1850	980	15.0

KDL AIR COOLED (MAXIMUM INLET TEMPERATURE 80°C)

Specification Table

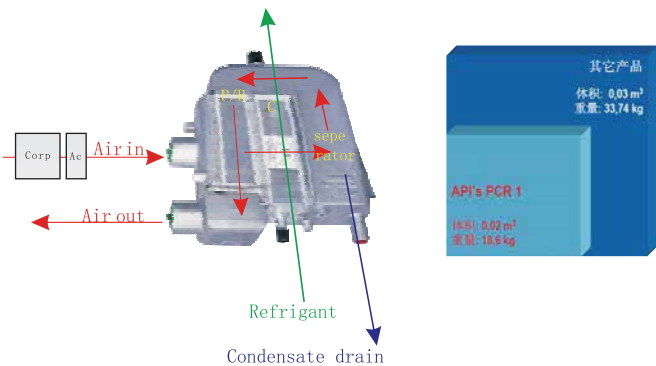
Model	Flow capacity m³/min	Power	Connection	Dimensions (mm)			Weight (kg)	Compressor power
				L	W	H		
ULH-150F	17	3.65	DN65	1350	830	1300	210	3.1
ULH-200F	23	4.4	DN65	1350	830	1300	260	3.6
ULH-250F	27	5.5	DN80	1600	980	1480	320	4.5
ULH-300F	34	6.45	DN80	1750	980	1480	460	5.4
ULH-400F	45	9.0	DN100	1750	1030	1530	550	7.4
ULH-500F	55	10.2	DN100	2250	1080	1530	640	8.0
ULH-600F	65	11.5	DN125	2250	1080	1530	760	9.4
ULH-800F	87	14.3	DN150	2540	2150	2600	870	11.0
ULH-1000F	110	19.2	DN150	2540	2150	2600	1200	15.0

COMPRESSED REFRIGERATED DRYER

WATER COOLED PLATE HEAT EXCHANGER REFRIGERATED AIR DRYER

INTRODUCTION

Plate heat exchanger is a new type of high-efficiency heat exchanger which is assembled layer upon layer by a series of corrugated sheet metal. Thin rectangular channels are formed in between the sheets, heat is exchanged through sheet. Compared to the traditional shell-tube heat exchanger, it's heat transfer coefficient is more higher under the same flow resistance and pumping power consumption. Currently, world-famous brands of dryers all adopt plate heat exchanger instead of shell tube type.



FEATURES

- Compact structure, adopted API plate heat exchanger
- Low pressure drop <0.02Mpa
- Easy to installation
- Energy saving, saves 20% of energy compared to traditional shell tube type
- Quality Aluminum fitting, adopted aluminum fitting, no rust, no air pollution

KDH WATER COOLED

Specification \ ULE-	150W	200W	250W	300W	400W	500W	600W	800W	1000W
Flow capacitym³/min	17	23	27	34	45	55	65	87	110
Working pressure	0.2-1.0MPa								
Voltage	3 φ 50Hz / 380V								
Pre-cooling water connection	ZG1 1/2"	ZG1 1/2"	ZG1 1/2"	ZG1 1/2"	ZG2"	ZG2"	ZG2"	ZG2"	ZG2 1/2"
Pre-cooling waterT/H	3	3.6	4	5.0	6.5	8.2	9.9	11.5	13
Compressor power(KW)	3.1	3.6	4.5	5.4	7.4	8.0	9.4	11.0	15.0
Cooling water inlet/outlet connection	RC1"	RC1"	RC1"	RC1 1/2"	RC1 1/2"	RC1 1/2"	RC1 1/2"	RC1 1/2"	RC2"
Cooling waterT/H	1.8	2.4	3	3.7	5.5	6	7	9	12
Air inlet/outlet connection	DN65	DN65	DN80	DN80	DN100	DN100	DN125	DN150	DN150
Length (mm)	700	750	750	850	850	1000	1400	1700	2100
Width (mm)	800	800	800	900	950	1100	900	1000	1800
Height (mm)	1240	1240	1240	1340	1490	1560	1640	1740	1850
Net Weight (kg)	210	260	320	460	550	640	760	870	1160

SPECIFICATION

- KDL inlet temperature≤ 45℃
- KDH inlet temperature≤ 80℃
- Ambient temperature ≤ 40℃
- Dew point 2℃ ~ 10℃
- Refrigerant: R22
- Site: No dust, no oil. 80cm far away from the wall.

KDL WATER COOLED

Specification \ ULL-	150W	200W	250W	300W	400W	500W	600W	800W	1000W
Flow capacitym³/min	17	23	27	34	45	55	65	87	110
Working pressure	0.2-1.0MPa								
Voltage	3 φ 50Hz / 380V								
Compressor power(KW)	3.1	3.6	4.5	5.4	7.4	8.0	9.4	11.0	15.0
Cooling water inlet/outlet connection	RC1"	RC1"	RC1"	RC1 1/2"	RC1 1/2"	RC1 1/2"	RC1 1/2"	RC1 1/2"	RC2"
Cooling waterT/H	1.8	2.4	3	3.7	5.5	6	7	9	12
Air inlet/outlet connection	DN65	DN65	DN80	DN80	DN100	DN100	DN125	DN150	DN150
Length (mm)	1300	1300	1550	1550	1700	2100	2120	2120	2100
Width (mm)	750	750	900	900	900	950	950	1600	1800
Height (mm)	1290	1290	1430	1430	1530	1640	1900	1670	18500
Net Weight (kg)	165	195	280	360	450	580	650	750	960

KD SERIES SMALL REFRIGERATED DRYER(0.7-13.5)m³/min

INTRODUCTION

ADL Inlet temperature <45 °C

ADH Inlet temperature <80 °C



FEATURES

- Flow adjustment
- Electrical protection
- High low pressure protection
- Drain leak protection
- Phase protection
- Dew point display

ADL SERIES (MAXIMUM INLET TEMPERATURE45℃)

Model	Flow capacity m³/min	Power (kw)	Air connection	Water connection	Dimensions (mm)
UAL-1200W	130	24	DN150	2 1/2"	2750×1400×2180
UAL-1500W	160	31	DN200	DN65	2750×1500×2324
UAL-2000W	210	38	DN200	DN80	3000×1600×2347
UAL-2500W	260	42	DN250	DN80	3340×1580×2332
UAL-3000W	310	55	DN250	DN80	3650×1700×2713
UAL-3500W	360	62	DN300	DN80	3800×1850×2596
UAL-4000W	410	72	DN300	DN100	4300×1800×2646
UAL-5000W	510	87	DN350	DN100	4200×2000×2940

Model	Flow capacity m³/min	Power (kw)	Air connection	Water connection	Dimensions (mm)
UAH-1200W	130	24	DN150	2 1/2"	2650×1500×2028
UAH-1500W	160	31	DN200	DN65	2750×1650×2187
UAH-2000W	210	38	DN200	DN80	3300×1650×2192
UAH-2500W	260	42	DN250	DN80	3500×2100×2602
UAH-3000W	310	55	DN250	DN80	4060×1850×2499
UAH-3500W	360	62	DN300	DN80	4200×2300×2680
UAH-4000W	410	72	DN300	DN100	4500×2320×2850
UAH-5000W	510	87	DN350	DN100	4650×2350×3000

COMPRESSED REFRIGERATED DRYER

39/40

KDL SERIES (MAXIMUM INLET TEMPERATURE 45°C)



INTRODUCTION

Air pre-cooling machine provides the low temperature dry air by cooling compressed air and remove the water of it. Mainly used in air separation industry. KL air pre-cooling machine adopted all the main components by importing from the famous brand. It is compact structure, automatic, stable and easy operating.

FEATURES

- The main components import from famous compressor, like Germany Bitzer, Taiwan Hanbell.
- They have long working lifetime, high efficient, stable running, small noise.
- The hot expansion valve, bypass valve, high-low pressure controller are all adopted Danfoss, American Sporlan.
- Imported automatic drainer.

WORKING CINDITIONS

- Working pressure1.0MPa
- Air inlet temperature: ≤45°C
- Air outlet temperature:5-8°C
- Cooling water inlet pr essure:0.2-0.4MPa
- Cooling water outlet pressure:≤32°C
- Power supply: 380V/3V/50HZ(220V/1/50HZ)

SPECIFICATION TABLE

Model YADL-	60	180	360	600	900	1200	1500	1800	2400	3600	4800	6000	7500	9000	12000	18000
Flow capacity Nm³/h	60	180	360	600	900	1200	1500	1800	2400	3600	4800	6000	7500	9000	12000	18000
Heat load KW	1.21	4.25	7.5	11.8	19.2	24.5	29.9	40.5	55.4	70	82	111.8	160	194.7	252	347
Compressor power KW	0.42	1.4	2.6	3.6	6	7.4	9.4	10.1	14	17.5	24	30.2	42	51	62	87
Air inlet/outlet connection	ZG1"	ZG1"	ZG1 1/2"	ZG2"	DN65	DN65	DN80	DN80	DN100	DN125	DN150	DN150	DN150	DN200	DN200	DN250
Cooling waterm3/h	Air cooled	Air cooled	Air cooled	3	4.8	6	7.5	9.6	13	16.5	20	27	38	47	60	82
Cooling water inlet /outlet connection	-	-	-	1"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	2"	2"	2 1/2"	DN65	DN80	DN80	DN100	DN100

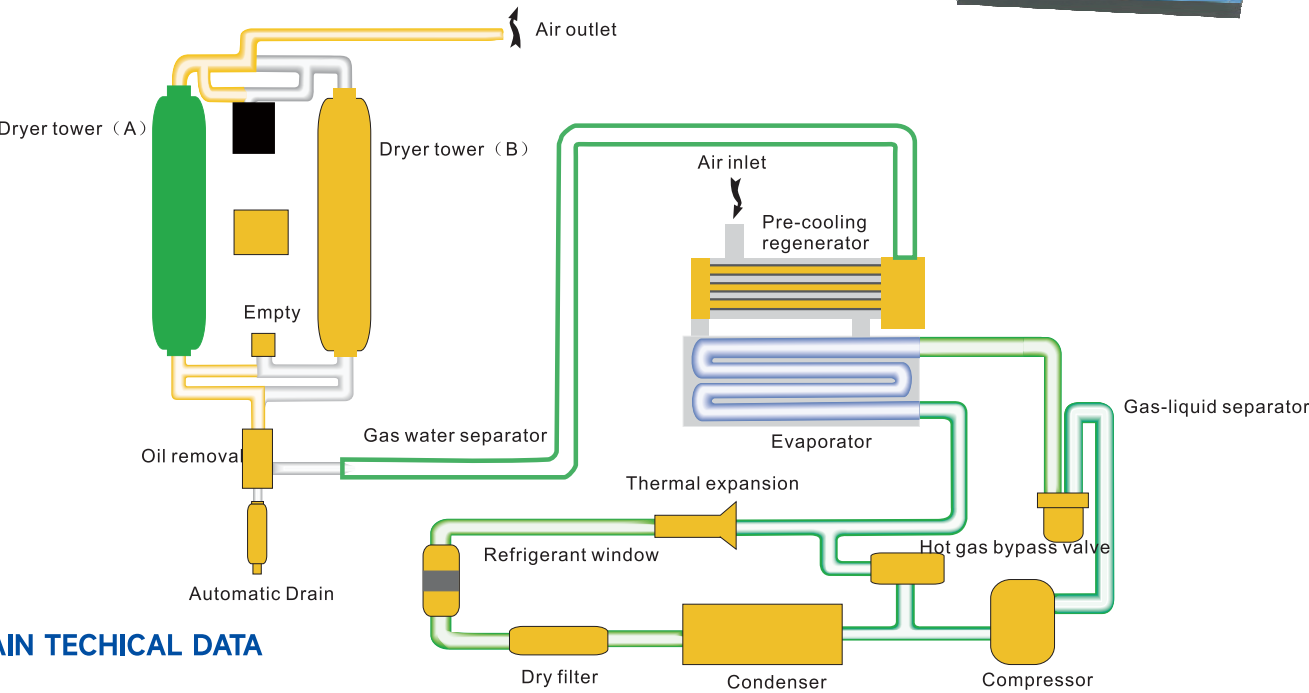
COMBINATION AIR DRYER

INTRODUCTION

Combination air dryer is a new kind of compressed air treatment product which consists of refrigeration and adsorption unit. The refrigeration unit can remove about 85% of moist air while the adsorption unit removes the other portion of moist water, the final dew point can reach to -70 °C.



SYSTEM FLOW CHART



MAIN TECHICAL DATA

- Working pressure 6-10bar
- Inlet temperature ≤45°C
- Ambient temperature ≤45°C
- Pressure dew point ≤40°C
- Purge loss 3%
- Switch time 15min
- Pressure drop ≤0.5bar
- Desiccant Activated alumina
- Control method PLC controller

OPTIONS

- Special voltages
- Molecular sieve desiccant
- Mounted air filters
- Dew point as low as -70°C
- Higher inlet temperature up to 80°C
- Dew point display
- Higher protection grade up to IP65
- Remote control
- ASME certificated pressure vessel
- Stainless steel pipes lines and fittings
- Stainless steel pressure vessel
- Different inlet/outlet connection

COMPRESSED REFRIGERATED DRYER

KDL SERIES (MAXIMUM INLET TEMPERATURE 45℃)

AIR COOLED

Model	Flow capacity		Voltage	Compressor power (kw)	Conn.BSP	Dimensions (mm)		H	Weight (kg)
	m³/min	CFM				L	W		
KLCF-5	0.7	25	220/1/50	0.42	1/2"	820	550	1046	180
KLCF-10	1.6	56	220/1/50	0.42	1"	920	550	1356	250
KLCF-20	2.6	92	220/1/50	0.75	1"	1020	600	1326	350
KLCF-30	3.8	134	220/1/50	0.92	1"	1100	600	1326	380
KLCF-60	7.0	247	220/1/50	1.5	1 1/2"	1300	800	1636	680
KLCF-75	8.5	300	220/1/50	1.5	1 1/2"	1400	900	1776	760
KLCF-100	11.5	406	220/1/50	1.85	2"	1350	1000	2030	1100
KLCF-120	13.5	476	220/1/50	2.04	2"	1600	1140	2275	1200
KLCF-150	17	600	380/3/50	3.6	DN65	1500	1510	2260	1300
KLCF-200	23	812	380/3/50	4.5	DN65	1550	1300	2413	1520
KLCF-250	27	953	380/3/50	5.4	DN80	1850	1830	2410	1750
KLCF-300	34	1200	380/3/50	6.0	DN80	1850	1820	2451	1850
KLCF-400	45	1588	380/3/50	8.0	DN100	2000	1940	2486	2500
KLCF-500	55	1941	380/3/50	11.0	DN100	2300	2240	2588	2690
KLCF-600	65	2294	380/3/50	13.0	DN125	2380	2340	2725	3530
KLCF-800	87	3071	380/3/50	15.0	DN150	2500	3000	2708	4310
KLCF-1000	110	3883	380/3/50	17.5	DN150	3100	3150	2960	6100

WATER COOLED

Model	Flow capacity		Voltage	Compressor power (kw)	Conn.BSP	Dimensions (mm)		H	Weight (kg)
	m³/min	CFM				L	W		
KLCW-150	17	600	380/3/50	3.6	DN65	1500	1510	2260	1300
KLCW-200	23	812	380/3/50	4.5	DN65	1550	1100	2415	1600
KLCW-250	27	953	380/3/50	5.4	DN80	1850	1730	2410	1850
KLCW-300	34	1200	380/3/50	6.0	DN80	1850	1770	2451	2100
KLCW-400	45	1588	380/3/50	8.0	DN100	2000	1550	2510	2750
KLCW-500	55	1941	380/3/50	11.0	DN100	2300	2240	2588	3500
KLCW-600	65	2294	380/3/50	11.0	DN125	2220	2340	2588	4000
KLCW-800	87	3071	380/3/50	15.0	DN150	2500	2540	2714	5200
KLCW-1000	110	3883	380/3/50	17.5	DN150	2650	2900	2968	7000
KLCW-1200	130	4589	380/3/50	24.0	DN150	2800	2860	2900	8500
KLCW-1500	160	5648	380/3/50	30.0	DN200	3230	3300	3165	9800
KLCW-2000	210	7413	380/3/50	37.0	DN200	3300	3480	3246	12000
KLCW-2500	260	9178	380/3/50	45.0	DN250	3990	3650	3350	13500
KLCW-3000	320	10943	380/3/50	60.0	DN250	4270	3800	3350	14800
KLCW-3500	360	12708	380/3/50	62.0	DN300	4350	4160	3300	16600
KLCW-4000	410	14473	380/3/50	70.0	DN300	4850	5300	3350	18600
KLCW-5000	510	18003	380/3/50	87.0	DN350	5100	5600	3550	20300

COMBINATION AIR DRYER

Each user can choose the compressed air system according to your different requirements about dew point, oil content, dust etc.

GB/T13277-1991 GENERAL USE GAS QUALITY GRADE

Application		Air stirring	Shoe machine	Glass making machine	Parts cleaning	Particulate product transport	Powder product transport	Foundry machinery	Food and drink processing	Power tools	Mining	Packaging and textile machinery	Photographic film processing	Public civil construction	Rock drill	Sand blasting	Painting	Welder
Typical quality grade	Fixed particles	3	4	4	4	2	2	4	2	4	4	4	1	4	4		3	4
	Water	5	6	6	6	6	3	6	6	3	5	3	1	5	5-2	3	3-2	6
	Oil	3	5	5	4	3	2	5	1	5	5	3-2	1	5	5	3	1	5

ATMOSPHERIC DEW POINT -----WATER CONTENT

Dew point℃	90	85	80	75	70	65	60	55	50	45	40	35	30	25	20	15	10
Water content (g/m³)	420.1	349.9	290.8	240.2	197.0	160.5	130.3	104.4	83.06	65.50	51.19	39.63	30.38	23.05	17.30	12.83	9.319
Dew point℃	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45	-50	-55	-60	-65	-70	-75
Water content (g/m³)	6.797	4.847	3.407	2.358	1.605	1.074	0.7047	0.4534	0.2856	0.1757	0.1055	0.0617	0.0343	0.0192	0.0099	0.0051	0.0009

HOW TO CHOOSE REFRIGERATED AIR DRYER

To choose a correct refrigerated air dryer should consider about the flow capacity, pressure, temperature, ambient temperature and required dew point. Handling capacity Qs=Qa×C1×C2, Qa is the actual compressed air flow capacity, C1 and C2 is correction factors.

For example

The inlet pressure of compressed air is 0.7Mpa, inlet temperature is 40℃, ambient temperature is 45℃, the actual compressed air flow rate Qa is 10Nm3/min, ask the dew point (P.D.P)for +2℃.

So the refrigerated handling capacity Qs= Qa×C1×C2, check sheet 1 and 2, C1=0.80,C2=1.22,

Qs=9.76. ADL-100F is the best choose.

ISO 8573-1 AIR QUALITY GRADE

Grade	Fixed particles μm	Water		Oil	
		g/m³	mg/m³	ppm	
1	0.1	-70	0.0003	0.01	0.008
2	1	-40	0.0116	0.1	0.08
3	5	-20	0.096	1	0.8
4	15	+3	0.709	5	4
5	40	+7	0.937	>5	>4
6	-	+10	1.15	-	-

SHEET 1 COMPRESSED AIR PRESSURE AND TEMPERATURE CORRECTIO FACTOR(C1)

Inlet temperature ℃	Inlet pressure(MPa)						
	0.4	0.5	0.6	0.7	0.8	0.9	1.0
25	0.49	0.43	0.40	0.37	0.35	0.33	0.32
30	0.57	0.50	0.46	0.42	0.40	0.37	0.36
35	0.84	0.77	0.71	0.65	0.62	0.59	0.57
40	0.99	0.91	0.85	0.80	0.77	0.74	0.72
45	1.20	1.11	1.05	1	0.97	0.94	0.92
50	1.37	1.30	1.24	1.18	1.14	1.10	1.07

SHEET 2 AMBIENT TEMPERATURE AND PRESSURE DEW POINT CORRECTION FACTOR(C2)

Ambient temperature ℃	pressure dew point	
	2℃	10℃
30	0.65	0.34
35	0.78	0.46
40	1	0.66
45	1.22	0.86

AFTER SERVICE

'BE OF SERVICE' ATTITUDE

- ▶▶ LEARN CUSTOMER'S NEEDS
- ▶▶ CAREFULLY DIAGNOSE FAULTS
- ▶▶ TROUBLESHOOTING BY HEART

