





# WL Series Refrigerated Air Dryers

Aluminum Plate Heat Exchanger

# **Dry** and Clean Compressed Air

In one cubic meter of air, there will be millions of particles that are harmful to your machines and equipment. These particles are mainly composed of dust particles, bacteria, viruses, soot, hydrocarbons, water, oil and many other pollutants. They come from human life and industry chemical production. When the air is sucked into the air compressor and compressed to 8bar, the concentration of these particles is increased by 8 times, so that the harm of pollutants in the air is greatly increased.

Among these pollutants, about 80% of very tiny particles can easily pass through the air compressor's air intake filter and used in the process and production gas field. At the same time, compressed air will be contaminated by lubricating oil and mechanical wear particles during the compression process. The contaminated compressed air has adverse effects on equipment and products.

Clean, dry, and contaminant-free compressed air is essential to safe, efficient and energy-saving equipment operation. Pollutants in compressed air can cause equipment operation failure, damage, and even endanger human life and health. High-efficiency filtration and drying of compressed air are basic measures to save costs and ensure safety.

We have many years of production and application experience. We are familiar with air drying and filtration technology, advanced production equipment and testing equipment to ensure that every product produced meets the requirements of international standards.

From design, material selection, manufacturing to product inspection, we have our own unique production technology and testing methods.

### Focus on customer needs

Customer needs are at the core of our work.

Please provide us with your special requirements and we will serve you wholeheartedly. We provide OEM services to many well-known customers, including some world-famous brands.

### Introduction

### WL Series Energy Saving Refrigerated Air Dryer

Refrigeration compressed air dryers utilize the principle of refrigeration to cool compressed air and discharge condensate water to dry compressed air. The pressure dew point can be as low as +5°C.

A high efficient aluminum plate heat exchanger that integrated with pre-cooler, evaporator and separator to remove water from compressed air. Industrial grade refrigerant compressor with less power consumption.

Intelligent controller with dew point indication and alarm function.

### **Product Features**



At the same volume of processing, the air dryer's input power will be reduced by 15-50%.



The compressed air exchange heat evenly inside.



This device monitors temperature and pressure, displays the dew point temperature in real time, records cumulative operation time, has self-diagnosis capabilities, and displays



The use of environmental protection refrigerants such as R134A and R410A does not damage the environment.



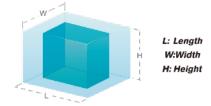
Set up a constant pressure expansion valve. During long-term use, automatically shut off the compressor's output and use the refrigeration capacity of aluminum plates to provide heat exchange.



A configuration can be tailored to meet your specific requirements, such as your logo, PLC, and modbus protocol.

# **Product Selection**

Model	Corresponding air comperssor powor	Flow rate m³/min	Inlet/ Outlet	Pressure Drop	Refrigerant	Power supply	Measurment (LxWxH mm)	
WL010	10P/7.5KW	1.2	G3/4"	<0.02Mpa	R134a	220-240VAC/50 Hz-60 Hz	500x360x550	
WL015	15P/11.5Kw	1.5	G3/4"	<0.02Mpa	R134a	220-240VAC/50 Hz~60 Hz	500x360x550	
WL020	20P/15KW 25P/18.5Kw	2.4	G3/4"	<0.02Mpa	R134a (R407c)	220-240VAC/50Hz 220- 240VAC/50Hz*60Hz	560x460x732	
WL030	25P/18.5Kw 30P/22KW	3.6	G1"	<0.02Mpa	R134a (R407c)	220-240VAC/50Hz 220~240VAC/50Hz~60Hz	560x460x732	
WL060	50P/37KW 60P/45KW	6.5	G1-1/2"	<0.02Mpa R410a		220*240VAC/50Hz 220- 240VAC/50Hz~60Hz	650x500x860	
WL080	60P/45Kw 75P/55KW	8.5	G1-1/2"	<0.02Mpa	R410a	220-240VAC/50Hz 220- 240VAC/50Hz-60Hz	650x600x910	
WL100	80P/55KW 90P/65KW	10.5	G2"	<0.02Mpa	R410a	220-240VAC/50Hz 220- 240VAC/50Hz-60Hz	750x550x1170	
WL125	90P/65KW 100P/75KW	12.5	G2"	<0.02Mpa	R410a	220*240VAC/50Hz 220~240VAC/50Hz~60Hz	750x550x1170	
WL150	100P/75KW 120P/90KW	15	DN50	<0.02Mpa	R410a	380-415VAC/50HZ 380- 415VAC/50Hz-60Hz	846x550x1170	
WL225	150P/110KW 175P/132KW	22.5	DN65	<0.02Mpa	R410a	380-415VAC/50Hz 380- 415VAC/50Hz*60Hz	1200x820x1500	
WL265	175P/132KW 200P/160KW	26.5	DN80	<0.02Mpa	R410a	380-415VAC/50Hz 380- 415VAC/50Hz*60Hz	1200x820x1500	



### **Correction Factor**

The air flow under different working conditions can be obtained by multiplying the nominal flow in the above table with the correction factor. (For example: actual dryer handling capacity = nominal flow rate x coefficient A x coefficient B x coefficient Cx coefficient D)

А	Working pressure	barg	3	4	5	6	7	8	9	10	11	12
	Correction factor		0.69	0.79	0.88	0.95	1	1.05	1.09	1.12	1.15	1.18
В	Inlet temperature	°C	30	35	40	42	45	50	55	60		
	Correction factor		1.48	1.29	1.08	1	0.9	0.75	0.63	0.52		
С	Embient temperature	°C	20	25	30	35	38	40	45	50		
	Correction factor		1.16	1.12	1.08	1.03	1	0.98	8.0	0.52		
D	Dew point	°C	3	5	7	10						
	Correction factor		0. 70	0. 80	0. 90	1.00						



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# **OEM Capabilities**

When you need a special filter for a unique application, Yun Air experts are ready to work with you. We can tailor a configuration to meet your special need from the wide variety of filter media available. In addition, with LEAN manufacturing, we can produce specials in reasonable quantities, in a reasonable amount of time, at a reasonable price. Not only will this enhance the performance of your product, but it will benefit you with aftermarket sales of replacement elements.

#### OUR RANGES OF PRODUCTS INCLUDE THE FOLLOWING:

- Compressed air dryers
- Compressed air filters
- Compressed air water separators
- Alternative air filter elements
- Condensate auto drain
- Compressed air accessories
- Portable mask