



SCREW AIR COMPRESSOR

ENERGY CONSERVATION INNOVATION SMART





AIR-END

1. Adopts the international top-level third-generation asymmetric wire twin-screw air end, adheres to the exquisite manufacturing process, adopts the peak high efficiency low-pressure, high-efficiency tooth shape and the axial air inlet design.
2. Optimized flow channel design, with a large rotor, low speed and high efficiency. Increased energy efficiency by 5% -15% compared to the second generation.
3. Uses Swedish SKF heavy-duty bearings, double-lip lip shaft seal, durable and reliable. The bearing design life is 80,000-100,000 hours and the air end design life is about 200,000 hours.



CONTROLLER

1. Adopts PLC multilanguage control system, beautiful and intuitive interface, easy to operate function, operators can quickly and easily adjust the compressor.
2. 14 protection functions such as overload protection, short circuit protection, reverse protection, low temperature protection, high voltage protection, etc. to fully protect the unit.
3. The advanced microcomputer control drive system realizes intelligent control, air volume variable speed control, automatic adjustment of load start and soft start. Intelligent dynamic control, dynamic display of the working status of each component of the compressor, visual pressure, temperature, current working curve, etc.
4. Large memory and equipped with printer interface; It can use computer remote monitoring or multiple linkage control between air compressors.



MOTOR

1. The motor uses high-performance motors of well-known brands. Permanent magnet synchronous motors (PM motors) use high-performance NdFeB permanent magnets which will not lose magnetism under 200 ° and its service life reaches as long as 15 years.
2. The stator coil uses the frequency converter special halo proof enameled wire, the insulation is outstanding and the service life is longer.
3. The motor has the function of temperature protection. It also has a wide range of motor speed regulation, high precision and wide range of volume regulation. The reliability is significantly improved with small size, low noise and large excess current.
4. Protection grade IP55, insulation grade F, effectively protects the motor and increases the service life of the motor, the efficiency is 5%-7% higher than similar products.



INVERTER

1. The standard is equipped with high frequency reactor, effectively reducing the frequency converter and the external magnetic field dry reactance.
2. Reliably reduces peak current when it is started, realizes stable starting.
3. With high-performance current vector technology, it can easily drive induction motors.
4. High performance, high quality and high power density design, as well as significant improvements in usability, maintainability, environmental protection, installation space, and design standards, can further optimize the user experience.
5. Independent air duct design, resistances to all kinds of severe environmental pollution.
6. Rapidly track the change of pressure and control pressure fluctuation within $\pm 0.01\text{Mpa}$, optimal power is used to accurately provide necessary air.



FAN

1. The fan uses a large fan design to effectively enhance the fan's heat dissipation effect. The motor adopts a special internal design to adapt to harsh working conditions.
2. The fan motor adopts special winding and high protection grade design to adapt to harsh working conditions.
3. The fan is controlled by the controller to realize the automatic start and stop function, which effectively maintains the normal working temperature of the air compressor lubricant.



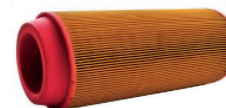
OIL FILTER

1. Adopts high-density filter material, the surface is treated with nano-electroplating.
2. The filter element has uniform pore size, small filter resistance, large flux, strong interception ability and long service life.
3. High filtration accuracy effectively filters impurities in lubricating oil, prolongs the service life of the equipment.



COOLER

1. The heat exchanger uses high-quality raw materials and a unique internal channel design, which increases the heat exchange area and can effectively dissipate heat for the air compressor.
2. The inner wall of the heat exchanger is treated with corrosion protection to increase the service life of the heat exchanger and increase the heat transfer effect.
3. The radiator has passed the strict factory test, and the quality is reliable, which effectively prevents the high temperature of the air compressor and increases the service life of the machine.



AIR FILTER

Adopting a design with high dust holding capacity and low flow resistance, which can filter out tiny fixed particles in the air. The dust removal effect can reach 99.5%, ensuring the normal operation of the components of the system and extending the service life.



INTAKE VALVE

1. Intake valve is the core component to control the air intake of the air compressor.
2. Adopting the world famous brand air intake valve, it can automatically adjust the air volume by 0-100% according to the requirement of the system air quantity. It promises small pressure loss, stable action and long life consequently reduced operating costs.



AIR-OIL SEPARATOR CORE

The high-quality air-oil separation element and gas-liquid filter element are equipped with advanced three-stage air-oil separation to keep the oil content below 3ppm to ensure the output of high-quality compressed air.



INTEGRATED AIR SOLUTION

FIXED SPEED SCREW AIR COMPRESSOR

- | | |
|---|---------------------------------------|
| 1. Advanced High Efficiency Air End | 2. Flexible Coupling Direct Drive |
| 3. Intelligent Microcomputer Control System | 4. Safe, Reliable and Efficient Motor |
| 5. Unique Heat Removal & Cooling System | |



FIXED SPEED SCREW AIR COMPRESSOR

- Advanced High Efficiency Air End
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FIXED SPEED SCREW AIR COMPRESSOR

1. Advanced High Efficiency Air End

Adopts industry-leading screw air end, high efficiency and low rotating speed. With the third generation tooth type of rotor, cutting-edge geometric design-stable, reliable, energy saving and long service life

2. Flexible Coupling Direct Driven

Adopts direct connection structure without any loss, transmission efficiency is 100%, maintenance cost is low, disassembly is convenient, greatly save the downtime. Easy maintenance air end maintenance only need to disassemble the air end, motor maintenance only need to disassemble motor, do not affect each other.

3. Intelligent Microcomputer Control System

Adopts intelligent control system to ensure fully automated intelligent operation, detect exhaust pressure, temperature and other field data, and control the exhaust pressure within the preset pressure range through the intake valve, so as to output stable pressure.

4. Safe, Reliable and Efficient Motor

Adopts unique low-speed motor, protection grade IP55, insulation grade F, suitable for bad working conditions. High balance precision, high speed running smoothly.

5. Unique Heat Removal & Cooling System

Adopts advanced design, harmonic radiator, effectively increase the heat dissipation area, run faster and smoother, and take away the heat of the machine in time. The heat exchange effect of the same area is 30% higher than that of the traditional cooler. Even in the Asia-Pacific region with high temperature and high humidity, the normal operation of the unit can be guaranteed.



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Fixed Speed Screw Air Compressor Specification 7.5kw-75kw

MODEL		RAI7.5A	RAI11A	RAI15A	RAI22A	RAI30A	RAI37A	RAI45A	RAI55A	RAI75A
Motor	Power (Kw)	7.5	11	15	22	30	37	45	55	75
	Horsepower	10	15	20	30	40	50	60	75	100
Air displacement Working pressure (m3/min) / Mpa	380V 50Hz	1.3 / 0.7	1.7 / 0.7	2.5 / 0.7	3.8 / 0.7	5.3 / 0.7	6.8 / 0.7	8.0 / 0.7	10.1 / 0.7	13.6 / 0.7
		1.2 / 0.8	1.6 / 0.8	2.3 / 0.8	3.6 / 0.8	5.0 / 0.8	6.2 / 0.8	7.3 / 0.8	9.5 / 0.8	12.8 / 0.8
		1.0 / 1.0	1.4 / 1.0	2.1 / 1.0	3.2 / 1.0	4.5 / 1.0	5.6 / 1.0	7.0 / 1.0	8.7 / 1.0	12.3 / 1.0
		0.8 / 1.3	1.2 / 1.3	1.9 / 1.3	2.8 / 1.3	4.0 / 1.3	5.0 / 1.2	5.9 / 1.3	7.8 / 1.3	10.2 / 1.3
Air outlet diameter		DN20	DN25	DN25	DN25	DN40	DN40	DN40	DN50	DN50
Lubricant oil volume (L)		10	16	18	18	30	30	30	65	65
Noise level dB(A)		60±2	62±2	62±2	64±2	66±2	66±2	68±2	70±2	70±2
Driven method		Direct driven	Direct driven	Direct driven	Direct driven	Direct driven	Direct driven	Direct driven	Direct driven	Direct driven
Start method		Y-Δ	Y-Δ	Y-Δ	Y-Δ	Y-Δ	Y-Δ	Y-Δ	Y-Δ	Y-Δ
Weigh (kg)		240	400	420	580	600	800	850	1660	1800
External dimension	Length (mm)	880	1080	1080	1280	1280	1400	1400	1800	1800
	Width (mm)	700	750	750	850	850	1000	1000	1230	1230
	Height (mm)	920	1000	1000	1160	1160	1290	1290	1570	1570



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Fixed Speed Screw Air Compressor Specification 90kw-355kw

MODEL		RAI90A	RAI110A	RAI132A	RAI160A	RAI185A	RAI220A	RAI250A	RAI315A	RAI355A
Motor	Power (Kw)	90	110	132	160	185	220	250	315	355
	Horsepower	125	150	175	215	250	300	350	400	450
Air displacement Working pressure (m3/min) / Mpa	380V 50Hz	16.2 / 0.7	21.2 / 0.7	24.5 / 0.7	28.8 / 0.7	32.5 / 0.7	36.0 / 0.7	43.0 / 0.7	52.0 / 0.7	64.0 / 0.7
		15.5 / 0.8	19.8 / 0.8	23.2 / 0.8	27.8 / 0.8	31.2 / 0.8	34.3 / 0.8	41.5 / 0.8	50.2 / 0.8	61.0 / 0.8
		14.0 / 1.0	17.8 / 1.0	20.5 / 1.0	25.0 / 1.0	28.0 / 1.0	30.5 / 1.0	38.2 / 1.0	44.5 / 1.0	56.5 / 1.0
		12.5 / 1.3	15.5 / 1.3	17.8 / 1.3	22.4 / 1.3	25.8 / 1.3	28.0 / 1.3	34.9 / 1.3	39.5 / 1.3	49.0 / 1.3
Air outlet diameter		DN50	DN65	DN65	DN65	DN65	DN80	DN80	DN80	DN80
Lubricant oil volume (L)		72	90	90	100	100	120	120	140	140
Noise level dB(A)		70±2	70±2	70±2	73±2	73±2	80±2	80±2	80±2	80±2
Driven method		Direct driven	Direct driven	Direct driven	Direct driven	Direct driven	Direct driven	Direct driven	Direct driven	Direct driven
Start method		Y-Δ	Y-Δ	Y-Δ	Y-Δ	Y-Δ	Y-Δ	Y-Δ	Y-Δ	Y-Δ
Weigth (kg)		1900	2500	2700	3000	3500	4000	4500	6000	6500
External dimension	Length (mm)	1800	2400	2400	2400	3150	3150	3150	3150	3150
	Width (mm)	1230	1470	1470	1470	1980	1980	1980	1980	1980
	Heigth (mm)	1570	1840	1840	1840	2150	2150	2150	2150	2150



INTEGRATED AIR SOLUTION

PM VSD SCREW AIR COMPRESSOR

1. Intelligent Control System
2. The Latest Generation High Efficiency Permanent Motor
3. The Latest Generation Super Stable Inverter
4. Wide Working Frequency Range To Save Energy
5. Small Start-up Impact
6. Low Noise



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PM VSD SCREW AIR COMPRESSOR

1. Intelligent Control System

Direct display of discharge temperature and pressure, operating frequency, current, power, operating state. Real time monitoring of discharge temperature and pressure, current, frequency fluctuations.

2. The Latest Generation High Efficiency Permanent Motor

Insulation grade F, protective grade IP55, suitable for the bad working conditions. No gearbox design, motor and main rotor through the coupling directly connected, high transmission efficiency. Wide range of speed regulation, high precision, wide range of air flow regulation. The efficiency of the permanent magnet motor is higher 3%-5% than regular motor, efficiency is constant, when the speed drops, still remain the high efficiency.

3. The Latest Generation Super Stable Inverter

Constant pressure air supply, air supply pressure is accurately controlled within 0.01Mpa. Constant temperature air supply, general constant temperature set at 85°C make the best oil lubrication effect and avoid high temperature to stop. No empty load, reduce energy consumption by 45%, eliminate excess pressure. For each 0.1mpa increase of air compressor pressure, energy consumption increases by 7%. Vector air supply, accurate calculation, to ensure that the air compressor production and customer system air demand at all times to maintain the same.

4. Wide Working Frequency Range To Save Energy

Frequency conversion ranges from 5% to 100%. When the user's gas fluctuation is large, the more obvious energy saving effect and the lower the low-frequency running noise, applicable to any place.

5. Small Start-up Impact

Use frequency conversion permanent magnet motor, start smooth and soft. When the motor starts, the current does not exceed the rated current, which does not affect the power grid and the mechanical wear of the main engine, greatly reduces the power failure and prolongs the service life of the main screw machine.

6. Low Noise

The inverter is a soft start device, the start-up impact very small, noise will be very low when start-up. At the same time, PM VSD compressor running frequency is less than the fixed speed compressor during stable operation, mechanical noise decreases very much.

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PM VSD Screw Air Compressor Specification 7.5kw-75kw

MODEL		RAI7PM	RAI11PM	RAI15PM	RAI22PM	RAI30PM	RAI37PM	RAI45PM	RAI55PM	RAI75PM
Motor	Power (Kw)	7.5	11	15	22	30	37	45	55	75
	Horsepower	10	15	20	30	40	50	60	75	100
Air displacement Working pressure (m3/min) / Mpa	380V 50Hz	1.3 / 0.7	1.7 / 0.7	2.5 / 0.7	3.8 / 0.7	5.3 / 0.7	6.8 / 0.7	8.0 / 0.7	10.1 / 0.7	13.6 / 0.7
		1.2 / 0.8	1.6 / 0.8	2.3 / 0.8	3.6 / 0.8	5.0 / 0.8	6.2 / 0.8	7.3 / 0.8	9.5 / 0.8	12.8 / 0.8
		1.0 / 1.0	1.4 / 1.0	2.1 / 1.0	3.2 / 1.0	4.5 / 1.0	5.6 / 1.0	7.0 / 1.0	8.7 / 1.0	12.3 / 1.0
		0.8 / 1.3	1.2 / 1.3	1.9 / 1.3	2.8 / 1.3	4.0 / 1.3	5.0 / 1.2	5.9 / 1.3	7.8 / 1.3	10.2 / 1.3
Air outlet diameter		DN20	DN25	DN25	DN25	DN40	DN40	DN40	DN50	DN50
Lubricant oil volume (L)		10	16	18	18	30	30	30	65	65
Noise level dB(A)		60±2	62±2	62±2	64±2	66±2	66±2	68±2	70±2	70±2
Driven method		Direct driven	Direct driven	Direct driven	Direct driven	Direct driven	Direct driven	Direct driven	Direct driven	Direct driven
Start method		PM VSD	PM VSD	PM VSD	PM VSD	PM VSD	PM VSD	PM VSD	PM VSD	PM VSD
Weigth (kg)		240	400	420	580	600	800	850	1660	1800
External dimension	Length (mm)	880	1080	1080	1280	1280	1400	1400	1800	1800
	Width (mm)	700	750	750	850	850	1000	1000	1230	1230
	Heigth (mm)	920	1000	1000	1160	1160	1290	1290	1570	1570



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PM VSD Screw Air Compressor Specification 90kw-355kw

MODEL		RAI90PM	RAI110PM	RAI132PM	RAI160PM	RAI185PM	RAI220PM	RAI250PM	RAI315	RAI355PM
Motor	Power (Kw)	90	110	132	160	185	220	250	315	355
	Horsepower	125	150	175	215	250	300	350	400	450
Air displacement Working pressure (m3/min) / Mpa	380V 50Hz	16.2 / 0.7	21.2 / 0.7	24.5 / 0.7	28.8 / 0.7	32.5 / 0.7	36.0 / 0.7	43.0 / 0.7	52.0 / 0.7	64.0 / 0.7
		15.5 / 0.8	19.8 / 0.8	23.2 / 0.8	27.8 / 0.8	31.2 / 0.8	34.3 / 0.8	41.5 / 0.8	50.2 / 0.8	61.0 / 0.8
		14.0 / 1.0	17.8 / 1.0	20.5 / 1.0	25.0 / 1.0	28.0 / 1.0	30.5 / 1.0	38.2 / 1.0	44.5 / 1.0	56.5 / 1.0
		12.5 / 1.3	15.5 / 1.3	17.8 / 1.3	22.4 / 1.3	25.8 / 1.3	28.0 / 1.3	34.9 / 1.3	39.5 / 1.3	49.0 / 1.3
Air outlet diameter		DN50	DN65	DN65	DN65	DN65	DN80	DN80	DN80	DN80
Lubricant oil volume (L)		72	90	90	100	100	120	120	140	140
Noise level dB(A)		70±2	70±2	70±2	73±2	73±2	80±2	80±2	80±2	80±2
Driven method		Direct driven	Direct driven	Direct driven	Direct driven	Direct driven	Direct driven	Direct driven	Direct driven	Direct driven
Start method		PM VSD	PM VSD	PM VSD	PM VSD	PM VSD	PM VSD	PM VSD	PM VSD	PM VSD
Weigth (kg)		1900	2500	2700	3000	3500	4000	4500	6000	6500
External dimension	Length (mm)	1800	2400	2400	2400	3150	3150	3150	3150	3150
	Width (mm)	1230	1470	1470	1470	1980	1980	1980	1980	1980
	Heigth (mm)	1570	1840	1840	1840	2150	2150	2150	2150	2150



INTEGRATED AIR SOLUTION

TWO-STAGE PM VSD SCREW AIR COMPRESSOR

- 1. More Energy Efficient
- 2. More Stable
- 3. More Efficient
- 4. More Comfortable
- 5. More Compact



FEATURES

- 1. Two-stage compression reduces the compression ratio of each stage, reduces internal leakage, improves volumetric efficiency, reduces bearing load, and increases the life of the air end.
- 2. Two-stage PM VSD replaces single-stage compression, and the displacement is increased by nearly 15%, which can achieve an additional 15% energy saving effect.
- 3. The rotor adopts the latest patented rotor UV profile, which has been refined by more than 20 procedures to ensure the accuracy, reliability, and effectiveness of the rotor profile.
- 4. Two-stage PM VSD air compressor mainframe is more efficient and more energy-saving. It can save up to 40% energy compared with ordinary industrial frequency machines. Calculated at 8000h/unit/year, it can save electricity costs 30,000 USD per year.

ADVANTAGES

1. More Energy Efficient

Two-stage PM VSD rotor is directly driven through the gears, and each stage of the rotor can obtain the best speed. The Air end is always running at the best energy-saving speed. The frequency conversion soft-start reduces the energy consumption of the air compressor during startup. By controlling the pressure between stages, the compressor always works at the best efficiency point under different working conditions. Compared with single-stage fixed speed air compressor, in principle, two-stage PM VSD air compressor can save 40% energy.

2. More Stable

There is no mechanical transmission failure, the motor, and the male rotor adopt an integrated shaft structure, and there is no need for coupling and gear transmission, eliminating the hidden danger of coupling and gear failure.

3. More Efficient

PM VSD motor+ no transmission efficiency loss.

PM VSD motor has the advantages of energy-saving and excellent performance.

The one-piece structure can reduce the efficiency loss of coupling and gear.

4. More Comfortable

Low noise and low vibration. No motor and bearing noise, no gear noise, no coupling noise.

5. More Compact

The PM VSD motor is small in size, and the integrated structure saves space.

TWO STAGE PM VSD Screw Air Compressor Specification

7.5kw-75kw

MODEL		RAI15II-PM	RAI18II-PM	RAI22II-PM	RAI30II-PM	RAI37II-PM	RAI45II-PM	RAI55II-PM	RAI75II-PM
Motor	Power (Kw)	15	18:05	22	30	37	45	55	75
	Horsepower	20	25	30	40	50	60	75	100
Air displacement Working pressure (m3/min) / Mpa	380V 50Hz	3.0 / 0.7	3.6 / 0.7	4.2 / 0.7	6.5 / 0.7	7.2 / 0.7	9.8 / 0.7	12.8 / 0.7	17.5 / 0.7
		2.9 / 0.8	3.5 / 0.8	4.1 / 0.8	6.4 / 0.8	7.1 / 0.8	9.7 / 0.8	12.5 / 0.8	16.5 / 0.8
		2.4 / 1.0	2.9 / 1.0	3.5 / 1.0	4.9 / 1.0	6.3 / 1.0	7.8 / 1.0	9.6 / 1.0	12.5 / 1.0
		2.2 / 1.3	2.5 / 1.3	3.2 / 1.3	4.2 / 1.3	5.4 / 1.2	6.5 / 1.3	8.6 / 1.3	11.2 / 1.3
Air outlet diameter		DN25	DN25	DN25	DN40	DN40	DN40	DN50	DN50
Lubricant oil volume (L)		18	16	18	30	30	30	65	65
Noise level dB(A)		62±2	62±2	64±2	66±2	66±2	68±2	70±2	70±2
Driven method		Direct driven	Direct driven	Direct driven	Direct driven	Direct driven	Direct driven	Direct driven	Direct driven
Start method		PM VSD	PM VSD	PM VSD	PM VSD	PM VSD	PM VSD	PM VSD	PM VSD
Weigh (kg)		780	800	820	1080	1100	1120	2080	2100
External dimension	Length (mm)	1480	1480-	1480	1720	1720	1720	21000	2100
	Width (mm)	850	850	850	1110	1110	1110	1350	1350
	Height (mm)	1180	1180	1180	1480	1480	1480	1720	1720

TWO STAGE PM VSD Screw Air Compressor Specification

90kw-355kw

MODEL		RAI90II-PM	RAI110II-PM	RAI132II-PM	RAI160II-PM	RAI185II-PM	RAI200II-PM	RAI220II-PM	RAI250II-PM	RAI355PM
Motor	Power (Kw)	90	110	132	160	185	200	220	250	355
	Horsepower	125	150	175	215	250	270	300	350	450
Air displacement Working pressure (m3/min) / Mpa	380V 50Hz	20.8 / 0.7	24.5 / 0.7	30.0 / 0.7	34.5 / 0.7	41.0 / 0.7	44.6 / 0.7	48.6 / 0.7	55.0 / 0.7	64.0 / 0.7
		19.8 / 0.8	23.5 / 0.8	28.0 / 0.8	33.6 / 0.8	38.4 / 0.8	43.0 / 0.8	47.0 / 0.8	54.0 / 0.8	61.0 / 0.8
		16.9 / 1.0	19.7 / 1.0	23.5 / 1.0	30.0 / 1.0	32.5 / 1.0	38.5 / 1.0	41.0 / 1.0	46.0 / 1.0	56.5 / 1.0
		14.3 / 1.3	17.6 / 1.3	19.8 / 1.3	23.8 / 1.3	28.6 / 1.3	32.8 / 1.3	38.0 / 1.3	40.0 / 1.3	49.0 / 1.3
Air outlet diameter		DN50	DN65	DN65	DN65	DN65	DN80	DN80	DN80	DN80
Lubricant oil volume (L)		72	90	90	100	100	120	120	140	140
Noise level dB(A)		70±2	70±2	73±2	73±2	73±2	80±2	80±2	80±2	80±2
Driven method		Direct driven	Direct driven	Direct driven	Direct driven	Direct driven	Direct driven	Direct driven	Direct driven	Direct driven
Start method		PM VSD	PM VSD	PM VSD	PM VSD	PM VSD	PM VSD	PM VSD	PM VSD	PM VSD
Weigth (kg)		3280	3480	3980	4280	5450	5600	6500	6600	6500
External dimension	Length (mm)	2460	2460	2900	2900	3800	3800	3800	3800	3150
	Width (mm)	1700	1700	1800	1800	1980	1980	1980	1980	1980
	Heigth (mm)	1900	1900	2020	2020	2150	2150	2150	2150	2150



INTEGRATED AIR SOLUTION

4-IN-1 AIR COMPRESSOR



WHY CHOOSE A 4-IN-1 AIR COMPRESSOR?

1. Two-stage compression reduces the compression ratio of each stage, reduces internal leakage, improves volumetric efficiency, reduces bearing load, and increases the life of the air end.
2. Two-stage PM VSD replaces single-stage compression, and the displacement is increased by nearly 15%, which can achieve an additional 15% energy saving effect.
3. The rotor adopts the latest patented rotor UV profile, which has been refined by more than 20 procedures to ensure the accuracy, reliability, and effectiveness of the rotor profile.
4. Two-stage PM VSD air compressor mainframe is more efficient and more energy-saving. It can save up to 40% energy compared with ordinary industrial frequency machines. Calculated at 8000h/unit/year, it can save electricity costs 30,000 USD per year.

INTEGRATED AIR SOLUTION

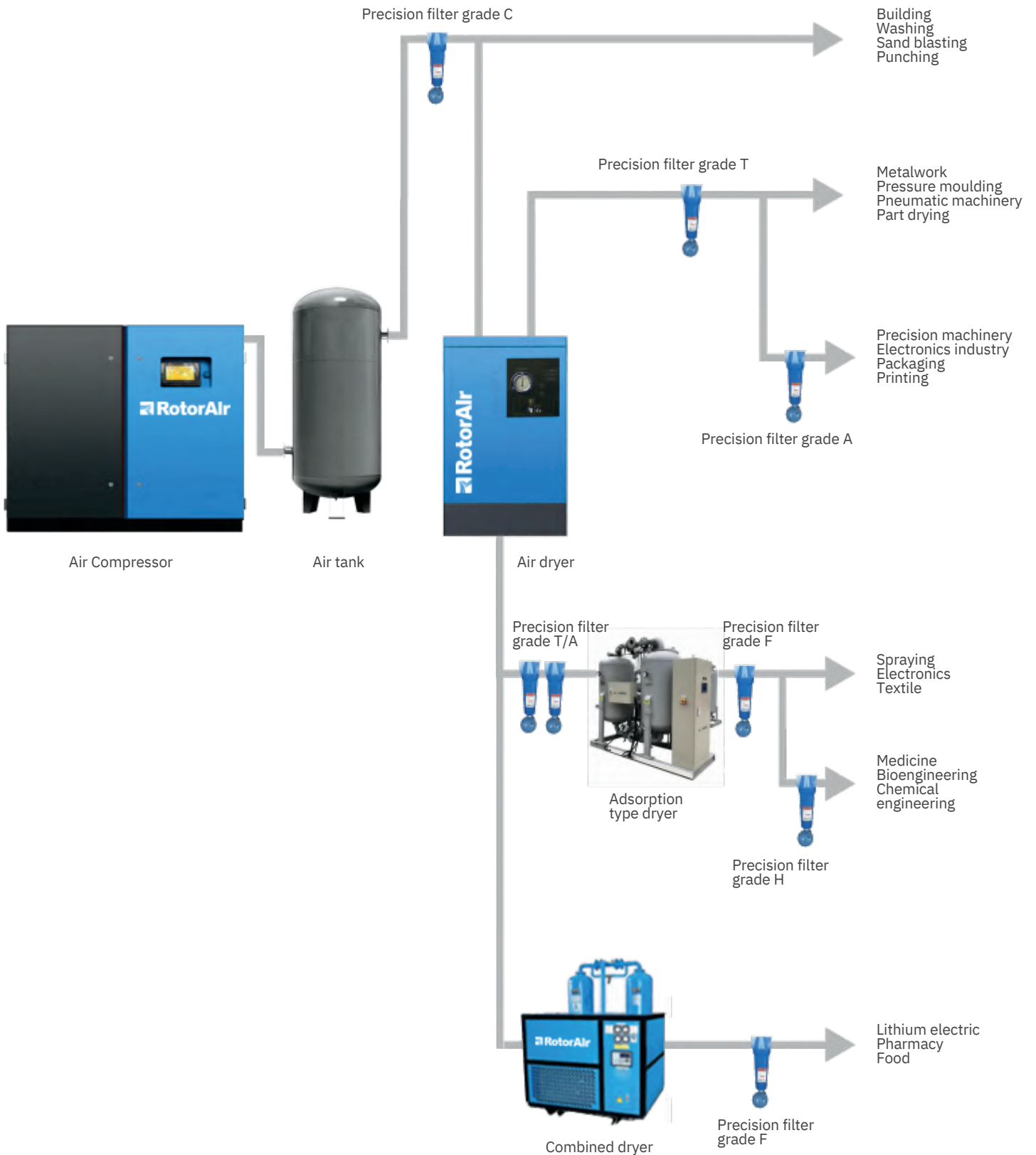
4-IN-1 AIR COMPRESSOR



4-IN-1 Screw Air Compressor Specification

MODEL		RAI7TM	RAI7TMPM	RAI11TM	RAI11TMPM	RAI15TM	RAI15TMPM	RAI18TM	RAI18TMPM	RAI22TM	RAI22TMPM
Motor	Power (Kw)	7.5	7.5	11	11	15	15	18.5	18.5	22	22
	Horsepower	10	10	15	15	20	20	25	25	30	30
Air displacement Working pressure (m3/min) / Mpa	380V 50Hz	1.3 / 0.7	1.3 / 0.7	1.7 / 0.7	1.7 / 0.7	2.5 / 0.7	2.5 / 0.7	3.2 / 0.7	3.2 / 0.7	3.8 / 0.7	3.8 / 0.7
		1.2 / 0.8	1.2 / 0.8	1.6 / 0.8	1.6 / 0.8	2.3 / 0.8	2.3 / 0.8	3.0 / 0.8	3.0 / 0.8	3.6 / 0.8	3.6 / 0.8
		1.0 / 1.0	1.0 / 1.0	1.4 / 1.0	1.4 / 1.0	2.1 / 1.0	2.1 / 1.0	2.7 / 1.0	2.7 / 1.0	3.2 / 1.0	3.2 / 1.0
		0.8 / 1.3	0.8 / 1.3	1.2 / 1.3	1.2 / 1.3	1.9 / 1.3	1.9 / 1.3	2.4 / 1.3	2.4 / 1.3	2.8 / 1.3	2.8 / 1.3
Air outlet diameter		DN20	DN20	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25
Lubricant oil volume (L)		10	10	16	16	18	18	18	18	18	18
Noise level dB(A)		60±2	60±2	62±2	62±2	62±2	62±2	66±2	66±2	66±2	66±2
Driven method		Direct driven	PM VSD	Direct driven	PM VSD	Direct driven	PM VSD	Direct driven	PM VSD	Direct driven	Direct driven
Start method		Y-Δ		Y-Δ		Y-Δ		Y-Δ		Y-Δ	
Weigh (kg)		400	400	550	550	560	560	690	690	720	720
External dimension		1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
	Length (mm)	700	700	750	750	750	750	850	850	850	850
	Width (mm)	700	700	750	750	750	750	850	850	850	850
	Height (mm)	1400	1400	1670	1670	1670	1670	1830	1830	1830	1830

COMPRESSED AIR PURIFICATION SYSTEM FLOW CHART



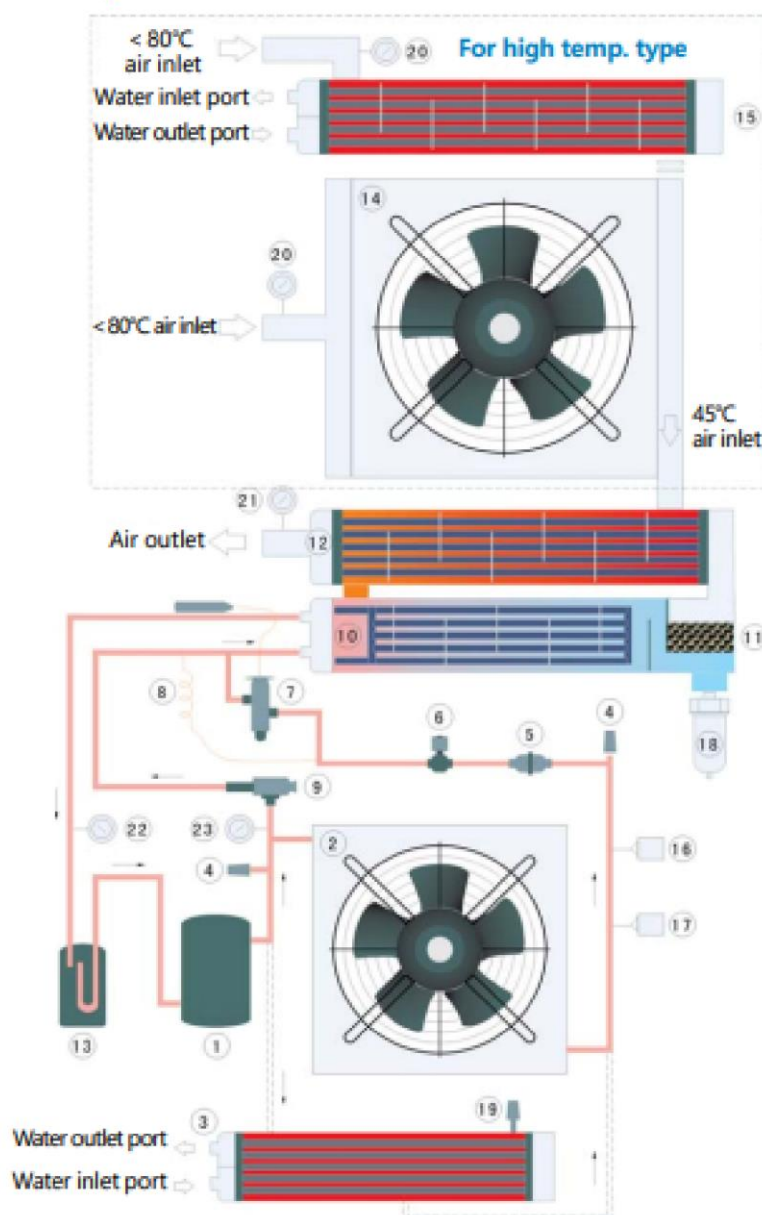
Refrigerated Air Dryer

Refrigerated air dryer is more popular and economical in compressor post treatment equipment field. Apureda air dryer is designed with top technology and processed with imported parts, which can be worked with any type air compressors to remove the water in compressed air. The pressure dew point is 2-10°C. When the temperature is dropped, the moisture content in compressed air is also dropped and then the vapour water will be converted into liquid water. This is the working principle of refrigeration air dryer. After the vapour water in compressed air becomes the liquid water, which will be separated by air/water separator and exhausted by drain valve, then dry compressed air will be sent to terminal.



- 1、Coolant compressor
- 2、Condensor(Air cooling type)
- 3、Condensor(Water cooling type)
- 4、Filling valve
- 5、Dry filter
- 6、Solenoid valve
- 7、Expansion valve
- 8、Capillary
- 9、Hot gas by-pass valve
- 10、Evaporator
- 11、Air water separator
- 12、Heat exchanger
- 13、Liquid gas separator
- 14、Pre cooler(Air cooling type)
- 15、Pre cooler(Water cooling type)
- 16、Over load trip switch
- 17、Pressure control switch
- 18、Automatic drain valve
- 19、Safety valve
- 20、Air inlet pressure gauge
- 21、Air outlet pressure gauge
- 22、Coolant low pressure gauge
- 23、Coolant high pressure gauge

Typical Process Flow:



High Temp. Air Cooling Refrigerated Air Dryer



Working Condition & Parameters

Air inlet temp.: 2 ~ 65°C
 Pressure dew point: 2 ~ 10°C
 Pressure drop: ≤5%P
 Ambient temp.: 2 ~ 40°C
 Air inlet pressure: 0.4 ~ 1.0MPa
 Cooling: Air cooled
 Standard working condition:
 Air inlet temp.: 55°C,
 Air inlet pressure: 0.7MPa (G)

SPECIFICATION

Model	Flow rate (m ³ /min)	Refrigeration Power(W)	Blower power (W)	Power supply	Dimension mm			Connection Port	Weight (kg)
					L	W	H		
CFKA-15M	2	0.63	125	220V 50Hz	750	470	715	R1	83
CFKA-30M	4	0.94	250		800	500	960	R1-1/2	105
CFKA-40M	5.5	1.05	250		850	500	960	R1-1/2	115
CFKA-50M	7	1.13	270		900	540	1065	R1-1/2	135
CFKA-60M	8.5	1.49	270		970	540	1115	R1-1/2	150
CFKA-75M	11	1.74	500		1100	690	1190	R2	195
CFKA-90M	13	1.97	540		1250	690	1190	R2	205
CFKA-100M	15	2.2	540		1250	690	1190	R2	215
CFKA-125M	18	3.14	540	380V 50Hz	1350	740	1315	DN65	305
CFKA-150M	23	3.8	760		1450	740	1315	DN65	385
CFKA-175M	28	5.5	760		1550	890	1515	DN80	445
CFKA-200M	33	5.8	760		1650	890	1515	DN80	525
CFKA-250M	38	7.5	920		1750	940	1665	DN100	650
CFKA-300M	45	8.2	920		1800	940	1665	DN100	780
CFKA-400M	55	8.82	1410		2100	975	1725	DN100	920
CFKA-500M	65	11.03	1950		2400	1200	1950	DN100	1230
CFKA-600M	75	11.25	2445		2500	1200	1965	DN125	1350
CFKA-700M	85	14.70	2910		2700	1200	2085	DN125	1700
CFKA-800M	110	18.37	3460		2900	1300	2265	DN150	2300
CFKA-900M	130	22.05	3850		3200	1300	2265	DN150	2470
CFKA-1000M	160	28.80	4800		3200	1600	2300	DN200	2595
CFKA-1200M	190	33.08	6400		3200	1600	2400	DN200	2890
CFKA-1500M	220	36.75	6800		3300	1600	2500	DN200	3290

Standard of screw is in accordance with GB/T7306

Any change of model, specification and color shall not be advised additionally, subject to the real products. Pls refer to the corresponding brochure if you order other models.

Heatless Regenerative Desiccant Air Dryer

The working principle of heatless regenerative desiccant air dryer is taking the theory of Pressure Change Adsorption. The desiccant absorbs moisture of compressed air under the pipe network's pressure, then adsorption under the atmosphere pressure. Retrieving some dry air from the outlet of dryer to dehydrate the desiccant, adsorption in one tank and desorption in the other tank, two tanks work alternately and re-cycle, so the clean and dry compressed air will be supplied continually.



Working Condition & Parameters

Air inlet Temp.: 2 ~ 4 5°C

Dew point pressure: -20 ~ -40°C

Working pressure: 0.6-0.95MPa

Regenerative air capacity: ≤14%

Inlet air oil content: ≤0.1PPM

Controls: computer-control

Desiccant: activated alumina

Installation method: indoor, anchor bolt installation

SPECIFICATION

Model	Flow rate (m³/min)	Dimension mm			Inlet/Outlet Size	Power Supply	Weight (kg)
		L	W	H			
CGDN-05	0.6	526	330	1016	R1/2	220V 50Hz SINGLE PHASE	50
CGDN-1	1.2	640	650	1632	Rc1		78
CGDN-2	2.3	659	650	1837	Rc1		150
CGDN-3	3.6	898	620	1606	R1		235
CGDN-5	5.2	976	620	1955	R1-1/2		275
CGDN-6	6.5	1048	620	1955	R1-1/2		336
CGDN-8	8.5	1096	650	1916	DN50		375
CGDN-10	11	1096	650	2066	DN50		420
CGDN-13	13.5	1201	650	2076	DN50		480
CGDN-15	17	1238	680	2203	DN65		560
CGDN-20	22	1280	680	2215	DN65		740
CGDN-25	27	1360	800	2510	DN80		855
CGDN-30	32	1456	800	2510	DN80		900
CGDN-35	37	1590	800	2538	DN80		1140
CGDN-40	45	1661	800	2611	DN100		1450
CGDN-50	55	1785	860	2653	DN100		1800
CGDN-60	65	1901	920	2779	DN125		2180
CGDN-85	85	1936	1440	2759	DN125		2500
CGDN-110	110	2440	1686	2912	DN150		3200
CGDN-130	130	2540	1700	2962	DN150		3500
CGDN-160	160	3026	1750	3112	DN150		4600
CGDN-190	190	3200	1750	3440	DN200		5500
CGDN-220	220	3400	1846	3200	DN200		6900

Heat Purge Regenerative Desiccant Air Dryer

Heat purge regenerative desiccant air dryer is designed on the base of heatless air dryer by adding a heater. The regenerative air will heat the desiccant after temperature raised. Thus reached better regeneration efficiency. Also reduced regenerative air consumption and achieved energy saving.



Working Condition & Parameters

Air inlet Temp.: 2 ~ 45°C

Dew point pressure: -20 ~ -40°C

Working pressure: 0.6-0.95MPa

Regenerative air capacity: ≤7%

Inlet air oil content: ≤0.1PPM

Controls: computer-control

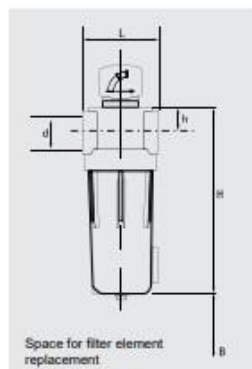
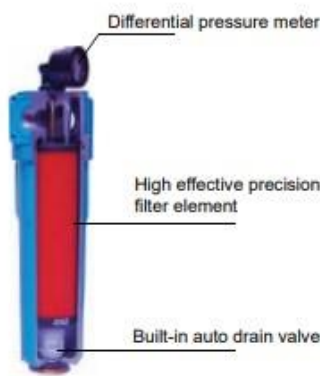
Desiccant: activated alumina

Installation method: indoor, anchor bolt installation

SPECIFICATION

Model	Flow rate (m³/min)	Dimension mm			Inlet/Outlet Size	Electrical Heating Power	Power Supply	Weight (kg)
		L	W	H				
CGDY-1	1.2	640	650	1632	Rc1	0.9	380V 50Hz Three Phases Four Wires	135
CGDY-2	2.3	659	650	1837	Rc1	1.2		180
CGDY-3	3.6	898	620	1606	R1	1.8		300
CGDY-5	5.2	976	620	1955	R1-1/2	3.6		410
CGDY-6	6.5	1048	620	1955	R1-1/2	3.6		500
CGDY-8	8.5	1096	650	1916	DN50	5.1		580
CGDY-10	11	1096	650	2066	DN50	5.1		655
CGDY-13	13.5	1201	650	2076	DN50	5.1		690
CGDY-15	17	1238	680	2203	DN65	9		840
CGDY-20	22	1280	680	2215	DN65	9		1130
CGDY-25	27	1360	800	2510	DN80	14.4		1245
CGDY-30	32	1456	800	2510	DN80	14.4		1345
CGDY-35	37	1590	800	2538	DN80	14.4		1510
CGDY-40	45	1661	800	2611	DN100	21.6		1820
CGDY-50	55	1785	860	2653	DN100	21.6		2200
CGDY-60	65	1901	920	2779	DN125	31.5		2790
CGDY-85	85	1936	1440	2759	DN125	31.5		3500
CGDY-110	110	2440	1686	2912	DN150	51		3840
CGDY-130	130	2540	1700	2962	DN150	57		4450
CGDY-160	160	3026	1750	3112	DN150	72		5200
CGDY-190	190	3200	1750	3440	DN200	87		6100
CGDY-220	220	3400	1846	3200	DN200	111		7600
CGDY-260	260	3626	2000	3425	DN250	132		9300

Pipeline Filter



Max working pressure: 1.6MPa

Working temperature: 1.5-65°C

Built-in auto drain valve

Grade V Pre-filter

For the removal of particles above 2 μ m, water separating efficiency $\geq$ 95%.
Residual oil content $\leq$ 2PPM w/w.
Prevent contamination effectively.
As pre-filter for A level precision filter and refrigerated driers.
Initial differential pressure: 0.01MPa
Differential pressure for element change: 0.07MPa

Grade A Precision filter

For the removal of particles above 1 μ m Residual oil content $\leq$ 0.1PPM w/w
As pre-filter for B level super-fine-filter
Initial differential pressure: 0.01MPa
Differential pressure for element change: 0.07MPa

Grade B Super-Fine-Filter

For the removal of particles above 0.01 μ m. Residual oil content $\leq$ 0.01PPM w/w
As pre-filter for activated carbon filter(C) and adsorption compressed air dryer
Initial differential pressure: 0.012MPa
Differential pressure for element change: 0.07MPa

Grade C Activated Carbon Filter

For the removal of oil vapor and hydrocarbon odor. Residual oil content $\leq$ 0.003PPM w/w
Initial differential pressure: 0.02MPa

Grade AR Dust Filter

Stainless steel box body
Block bacteria and bacteriophage efficiently from compressed air with steam at 12°C passing through regularly to sterilize
Times of recycle: 50

Model	Grade	Flow Rate	Dimension					Filter Element		Weight kg
			d	L	h	H	B	Qty	Code	
AM0060- * - #	V	1	Rp 1/2	89	26	231	126	1	M 010- *	0.95
AM0090- * - #		1.5	Rp 3/4	89	26	231	131	1	M 015- *	1.15
AM0216- * - #		3.6	Rp1	120	40	299	170	1	M 036- *	2.75
AM0288- * - #		4.8	Rp1 1/2	120	40	399	210	1	M 048- *	3.25
AM0432- * - #	A	7.2	Rp1 1/2	120	40	399	270	1	M 072- *	3.3
AM0522- * - #		8.7	Rp1 1/2	120	40	399	270	1	M 087- *	3.3
AM0720- * - #	B	12	Rp2	160	50	463	320	1	M 120- *	5.9
AM0960- * - #		16	Rp2	160	51	663	420	1	M 160- *	9.8
AM1200- * - #	C	20	Rp2	160	51	863	620	1	M 200- *	13
AM1440- * - #		24	Rp2 1/2	216	65	660	420	1	M 240- *	16.2
AM1920- * - #		32	Rp3	216	65	750	520	1	M 320- *	22
AM2400- * - #		40	Rp3	216	65	620	620	1	M 400- *	25

Notes: 1. * Stands for grades

3.Please contact us for information of sterile filters (Grade D)

2.Stainless steel cylinder for flow rate 16-40m³ filters

4.Dimensions subject to change without notice.



RotorAlr



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