



ACC.No.1111204IN  
ISO 9001 : 2015



# Roteck

AIR COMPRESSOR



- Refrigerated Air Dryer
- Heatless Air Dryer
- Air Receiver Tank
- Air Filter

Optimize your  
compressed air  
requirements.

[www.rroteckcompressor.com](http://www.rroteckcompressor.com)

## Refrigerated Air Dryer



**Roteck** refrigerated dryer is technology and made by high quality component to the quality standards for air compression (ISO 8373.1) THE DRYER MADE has high efficiency, reliability, environmentally, friendly energy and visual display.

### HOW IT WORKS

Saturated compressed air enter the pre-cooler where it is cooled by exchange heat without going cooled air the inlet air is then reached.

When it passes back to the air to air heat exchanger and condenser supply low-temperature refrigerant to the evaporator.

Expansion device and hot gas by pass Valve match the operation of the compressed air cooling load in evaporated, heat is transferred from the compressed air into the refrigerant.

The process cools the air, reduce the capacity to hold the water vapour and regulating in moisture condensation the excess vapour condenses and is removed from the air steam by a separated and automatic drain by valve.



## Features of Refrigerated Dryer.

Pre cooler reduces the amount of heat rejection to the ambient air.

High Evaporated cooler controls the high temp. inside the evaporator.

The Specially Designed centrifugal and collecting type dual water separator can separate water with the efficiency higher than 99%.

It is adopted the world - class components, so has high quality and long service life.

Convenient to use, fully automatic drainage, Low Operation cost, reliable and continuous run.

Low & high pressure controller for refrigerated compressor.

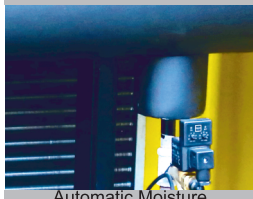
Low Pressure drops and steady DEW POINT.

Overload protection for electric operation.

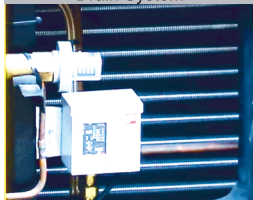
Single Phase protection.



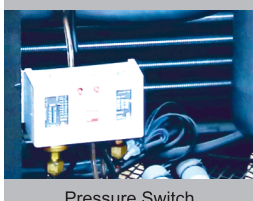
Refrigerant Compressor



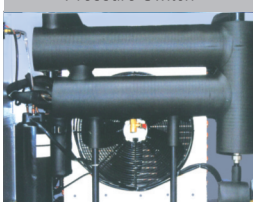
Automatic Moisture Drain System



Hot Air Bypass Valve



Pressure Switch



High Efficiency Cooling Technology

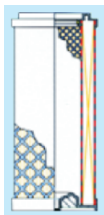
## Compressed Air Filter

Roteck has developed a comprehensive range of compressed air filter to cater the requirements of different application. Roteck filters are manufacturing with latest technology and advanced filtering system.

### Why required Air filter

Oil, dust, dirt and water, alone or in combination, these are enemies that attack any compressed air system, this can plug orifices of sensitive pneumatic instruments, wear out seals, erode system components, reduce efficiency of the air operated tools, damage finishing of the products, increased the rejection, lost of production time and increased maintenance cost although the best defense against oil and dust effective filtration, the fact is often overlooked until problem arise.

### Filters Grade



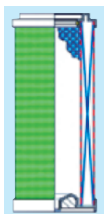
#### PRE FILTERS GRADE-Q

Coalescn filtration and dust removal  
Air flow through filter element-out to in



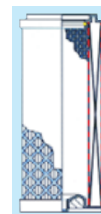
#### FINE FILTER GRADE-S

High efficiency  
Particle removal down to 0.01 micron.  
Maximum residual oil content down to 0.01 PPM.  
Air flow through filter element-in to out.



#### AFTER FILTER GRADE-P

General purpose protection  
Particle removal down to 1 micron.  
Maximum residual oil content down to 0.5PPM  
Air flow through filter element-in to out.

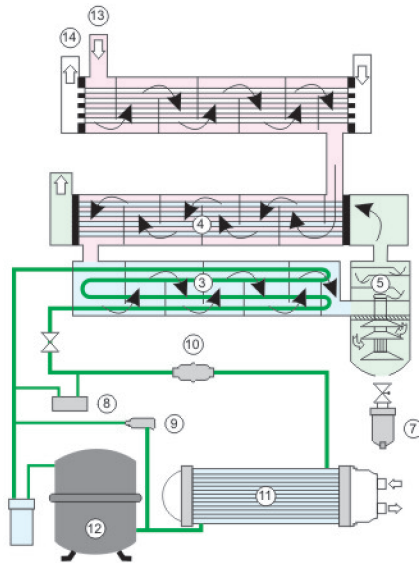


#### ACTIVATED CARBON FILTER GRADE-C

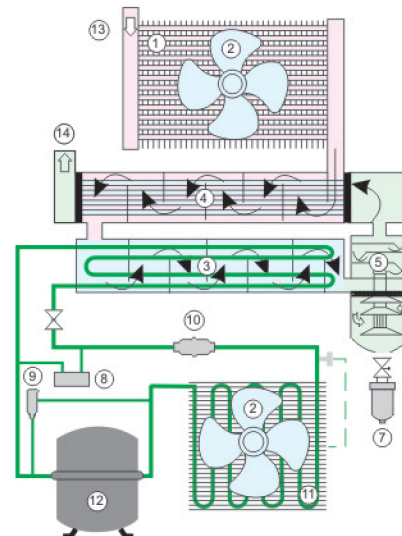
Oil vapour and removal  
Particle removal below 0.01 micron  
Maximum residual oil content down to 0.005 PPM.  
Air flow through filter element-in to out.

### Standard Specification

Grade	Application	Type	Material	Filtration Rating (Micron)	Oil Content (PPM)	Max. Temp. (°C)	Pressure Drope (kg/cm <sup>2</sup> )	Max. Differation Pressure (kg/cm <sup>2</sup> )
Q-grade	Recip. Compressor	Pre-Filter	Coalescing Filter Media	5	5	65	0.2	0.7
P-grade	Screw Compressor	After-Filter	Fiber Glass	1	0.5	65	0.17	0.7
C-grade	General Air Compressor	Oil-Filter	Activated Carban	0.003	0.003	65	0.07	0.7
S-grade	High Precision. Filtration	Fine Filter	Coalescing Filter Media	0.01	0.01	65	0.27	0.7



The water-cooling flow chart



The air-cooling flow chart

1. Back wind cooler
2. Fan Motor
3. Evaporator
4. Pre-cooler
5. Collecting mist separator
7. Drainage device

8. High and low pressure switch
9. Hot gas by-pass valve
10. Dryer Filter
11. Wind cooler condenser
12. Refrigerant Compressor
13. Air in
14. Air out

Model	RD-10 AC	RD-20 AC	RD-30 AC	RD-50 AC	RD-60 AC	RD-75 AC	RD-100 AC	RD-125 AC	RD-150 AC	RD-200 AC	RD-300 AC	RD-350 AC	RD-400 AC
Volume m <sup>3</sup> /min	1.5	2.8	4.0	7.0	9.0	12	15	20	25	30	40	50	60
Volume CFM	52	98	141	247	318	424	529	706	882	1060	1412	1765	2118
Air Adapt	PT1	PT1	PT1¼	PT1½	PT2	PT2	PT2	PT2	DN65	DN80	DN100	DN100	DN100
Refrigent	R22 / 407C / R134A												
Pressure Dew Point °C	2° C - 10 °C												
Inlet Temp. °C	5° C - 80 °C												
Inlet Pressure kg/cm <sup>2</sup> g	(7 - 10kg/cm <sup>2</sup> g)												
Power Supply	1 Ø 220V / 50 Hz						3 Ø 415V / 50 Hz						
Power Consumption (kwh)	0.62	0.7	1.0	1.4	2.1	2.5	3.1	3.9	4.2	5.2	8.2	10.7	14.5

\* Specification subject to change without notice in advance.



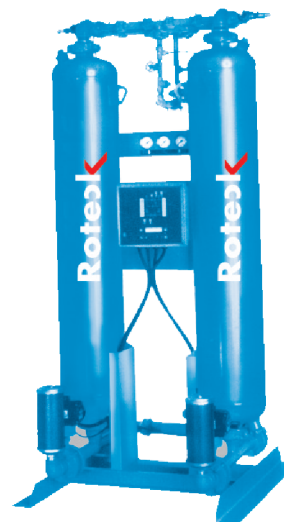
# Heatless Compressed Air Dryer

Heatless compressed air dryer is the simplest form of desiccant type (activated alumina / molecular sieves) air dryer for achieving a dew point of 40 °C or better for compressed air systems. It is the simplest design, which is virtually fully automatic and maintenance free.

In Heatless dryers, two vessels are filled with desiccant, which cycle automatically, producing dry air continuously. In these units, wet air enters the bottom of one vessel and passes upwards through the desiccant bed where the moisture is absorbed. The dry air comes out from the top.

A small portion of dry air is passed downward to that desiccant bed in the second vessels. Which is under regeneration. Then the moisture laden purge air is vented out to atmosphere. The purge loss is around 10-15% of the total air flow.

At preset interval, the vessels changeover automatically and dry air is available continuously, without any surge the purge air requirements is around 10-15%. If (-) 400 °C. dew point is needed from heatless type Air dryer.



## Salient Features :



Simple in operation and fully automatic, Maintenance free,



Pressure equalization-ensures dry supply is continuous and at constant pressure.



Electronic Timer-Highly precise and Fail - safe excellent repeatability.



Low Dew Point - Constant atmospheric dew point of 40 °C or below.



Desiccant life is around 3 Years.

Model	AIR FLOW	ELECTRICAL CONNECTION	Inlet / Outlet BSP	DIMENSION (mm)		
	SCFM			L	W	H
RH-50	50	230 V Single Phase 50 Hz	3/4"	730	450	1275
RH-100	100	230 V Single Phase 50 Hz	1"	750	450	1895
RH-250	250	230 V Single Phase 50 Hz	2"	1400	1000	2030
RH-300	300	230 V Single Phase 50 Hz	2 1/2"	1200	1200	2400
RH-400	400	230 V Single Phase 50 Hz	2 1/2"	1200	1200	2400
RH-500	500	230 V Single Phase 50 Hz	3"	1400	1400	2400
RH-600	600	230 V Single Phase 50 Hz	4"	1400	1400	2400
RH-750	750	230 V Single Phase 50 Hz	4"	1500	1500	2500
RH-1000	1000	230 V Single Phase 50 Hz	4"	1600	1600	2500

# AIR FILTER

*Special Features*



## Features

- Low pressure drop.
- High efficiency filter element.
- High quality aluminium housing and carbon steel body.
- Threaded / Flanged connection for easy installation with air flow indicator.
- Painted surface with epoxy resin for long service life.
- Differential pressure indicator to inform the best time for element replacement.
- Availability of different filtration grade element.
- Can be use with wide rang of accessories.

## Accessories

- Differential pressure gauge
- Pipe differential indicator.
- Level indicator.
- Electronic auto drain valve.
- External auto drain valve.
- Internal auto drain valve.

## Parameter & Specifications

Model	Connection size	Air Flow F.A.D 40° C		Max. pressure (bar)		Dimensions (mm)			Filter Cartridge
		m3/min	CFM			A	B	C	
RAF 015	G 1"	1	35	16	T H R E A D E D	267	243	89	1X004
RAF 035	G 1"	3.68	130	16		267	243	89	1X007
RAF 060	G 1 1/2"	7.36	260	16		267	243	89	1X015
RAF 090	G 2"	9	318	16		513.5	310	109	1X024
RAF 0120	G 2"	10.5	372	16		513.5	310	109	1X035
RAF 150	G 2 1/2"	16.2	574	16		513.5	450	109	1X060
RAF 240	G 2 1/2"	24	850	12		550	509	150	1X090
RAF 360	PN16D150	36	1271	12		928	887	150	1X120
RAF 450	PN16D150	45	1590	12		928	887	150	1X150
RAF 600	PN16D150	60	2120	12	FLANGED	1225.5	1133	275	2X120

Specifications subject to change without prior notice, due to constant improvement.



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