

# **HYAS** AIR POWER

**RHYAS THE PRODUCTS OF CHOICE**

**6L Oil-less Air Compressor 53103**



# Operating Instructions

**Please read and save these instructions before attempting to assemble, install, operate or maintain the product. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in injury and/or damage!**

## DESCRIPTION

Oil-less compressors are designed for DIY (do-it-yourselfers) for a variety of home uses and operate without oil. Compressed air units contain moisture, therefore ensure you install a water filter or air dryer if your application requires dry air.

## SAFETY GUIDELINES

This manual contains useful information for the safe use and maintenance of your compressor. Please observe any of the safety recommendations.

## UNPACKING

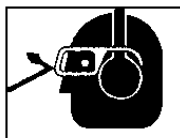
After unpacking the unit, carefully inspect it for any damage that may have occurred during transit. If you have any concerns please contact your supplier prior to use.

## GENERAL SAFETY INFO

Air compressors and tools (spray guns, filters, lubricators, hoses, etc.) produce and require compressed air for them to operate.

Ensure to:-

1. Read all tool manuals and be thoroughly familiar with the controls and the proper use of the equipment.
2. Keep visitors away and NEVER allow children in the work area.
3. Wear safety glasses and use ear protection..
4. Do not stand on or operate the unit whilst handheld from the handle.
5. Prior to each use inspect the air system and electrical components for signs of



damage, deterioration, weakness or leakage, Repair or replace defective items before using.

### 6. ▲ WARNING!

**Never operate or repair in or near a flammable gas or vapor. Never store flammable liquids or gases in the vicinity of the compressor.**



### 7. ▲ CAUTION!

**Compressor parts may be hot even if the unit is stopped.**



### 8. ▲ WARNING!

**Never remove or attempt to adjust the pressure release valve. Ensure it is kept clean and free from any contamination.**

### 9. ▲ DANGER!

**Never attempt to repair or modify a tank! Welding or any modification may weaken the tank resulting in damage, rupture or explosion. Always replace a worn or damaged tank.**



### 10. ▲ WARNING!

**Tanks rust from moisture build-up, which weakens the tank. Make sure to drain tank regularly and inspect periodically for unsafe conditions such as rust formation and corrosion.**

## 11. MAIN TECHNICAL DATA

Power	1100w/1.5HP
Voltage	220V/230V/240V
Frequency	50Hz
Speed	2850r/min
Displacement	161L/min 5.7CFM
Working Pressure	8 BAR 116 PSI
Net Weight	14kg
Dimensions	49 x 27 x 57cm

## 12. LOCATION

It is extremely important to install the compressor in a clean, well-ventilated area. The surrounding air temperature should not be more than 100°F.

A minimum clearance of 18 inches between the compressor, a wall or any other obstacle is required so as not to obstruct the airflow to the unit.

### 13. ▲ CAUTION!

**Never use an extension cord with this product.**

**Use additional air hose to reach your work area, this is to avoid power loss and possible motor damage; Use of an extension cord voids the warranty.**

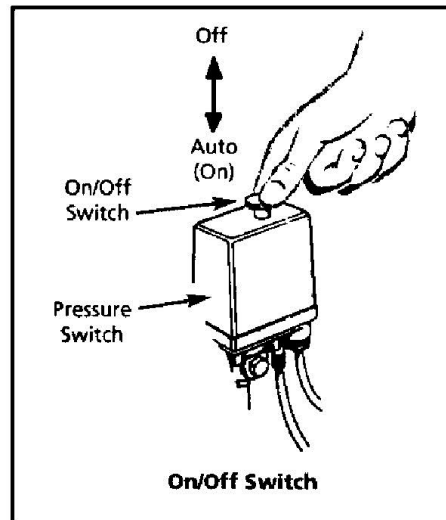


## 14. OPERATION

- The red button on top of the pressure switch is the main ON/OFF control. With the button pressed down the compressor will operate and fill the tank with air. Once it has reached capacity it will automatically switch off. In the position the compressor will automatically switch on and off to keep the tank filled with air. To switch OFF the compressor pull the red button in an upward direction.
- The regulator controls the amount of air pressure required. Turning the regulator

clockwise increases the pressure, anticlockwise decreases the pressure to the required level for the tool being used.

- The safety valve automatically releases air if the tank pressure exceeds the preset



maximum.

- Ensure the compressor has had time to fill the tank and warm up prior to initial use.
- The tank pressure gauge shows pressure level in the tank.

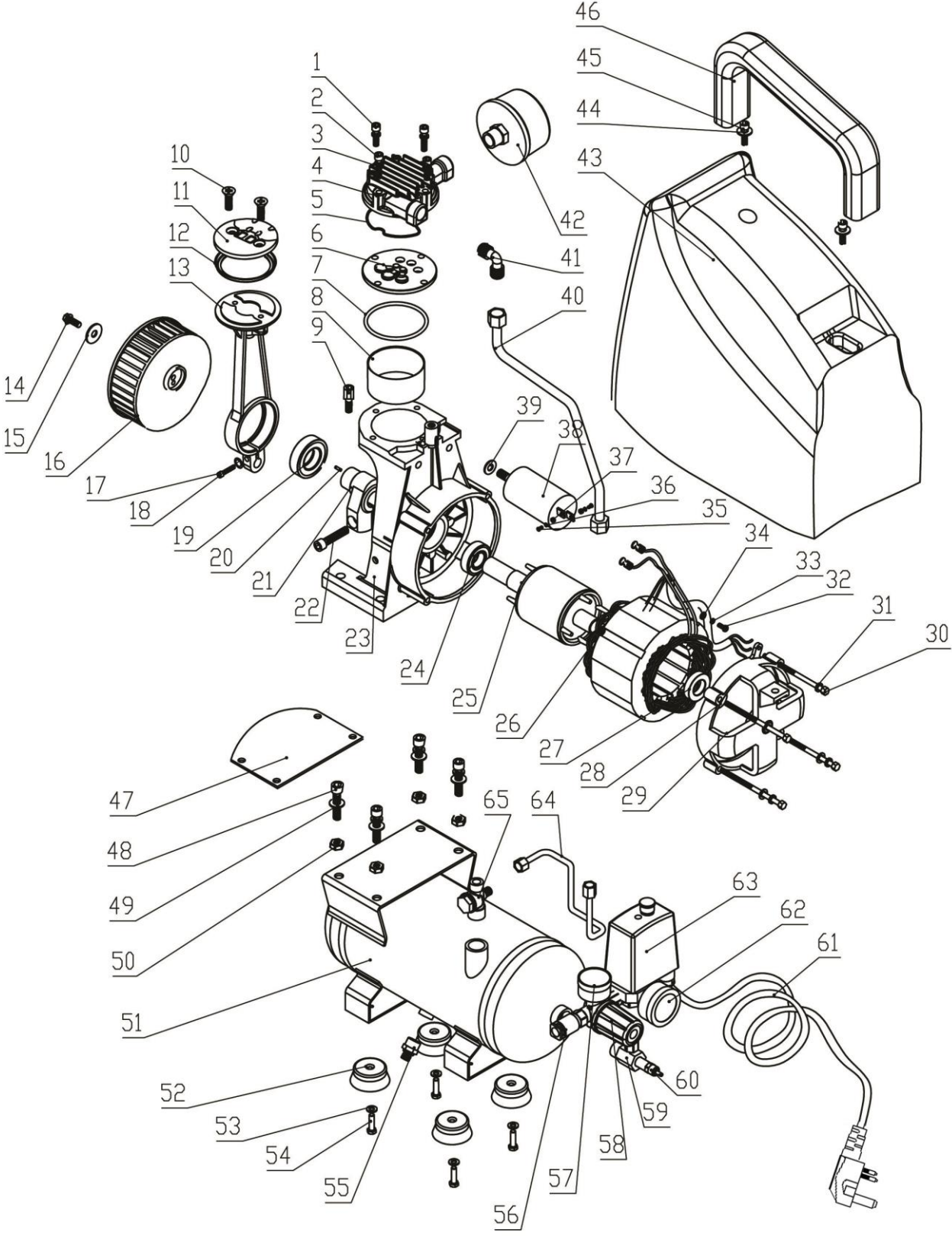
### f) ▲ CAUTION!

**The compressor is equipped with an automatic reset thermal overload protector; this will shut off the motor if it becomes overheated. If the thermal overload is activated turn off the compressor and unplug from the mains. The motor must be allowed to cool down before start-up is possible.**

# TROUBLESHOOTING CHART

Symptom	Possible Cause (s)	Corrective Action
Compressor will not run	<ol style="list-style-type: none"> <li>1. No electrical power</li> <li>2. Blown fuse</li> <li>3. Breaker open</li> <li>4. Thermal overload open</li> <li>5. Pressure switch bad</li> </ol>	<ol style="list-style-type: none"> <li>1. Plugged in? Check fuse/breaker or motor overload</li> <li>2. Replace blown fuse</li> <li>3. Reset, determine cause of problem</li> <li>4. Motor will restart when cool</li> <li>5. Replace</li> </ol>
Motor hums but cannot run or runs slowly	<ol style="list-style-type: none"> <li>1. Defective check valve or unloaded</li> <li>2. Poor contacts, line voltage low</li> </ol> <p>Shorted or open motor winding</p>	<ol style="list-style-type: none"> <li>1. Replace or repair</li> <li>2. Check connections, eliminate extension cord if used, check circuit with voltmeter</li> <li>3. Replace motor</li> </ol> <p><b>DANGER! Do not disassemble check valve with air in tank; bleed tank</b></p>
Fuses blow/circuit breaker trips repeatedly <b>CAUTION! Never use an extension cord with this product</b>	<ol style="list-style-type: none"> <li>1. Incorrect size fuse, circuit overloaded</li> <li>3. Defective check valve or unloaded</li> </ol>	<ol style="list-style-type: none"> <li>1. Check for proper fuse, use time-delay fuse. Disconnect other electrical appliances from circuit or operate compressor on its own branch circuit</li> <li>2. Replace or repair</li> </ol> <p><b>DANGER! Do not disassemble check valve with air in tank; bleed tank</b></p>
Thermal overload protector cuts out repeatedly	<ol style="list-style-type: none"> <li>1. Low voltage</li> <li>2. Clogged air filter</li> <li>3. Lack of proper ventilation/room temperature too high</li> <li>4. Check valve malfunction</li> <li>2. Compressor valves failed</li> </ol>	<ol style="list-style-type: none"> <li>1. Eliminate extension cord, check with voltmeter</li> <li>2. Clean filter (see Maintenance section)</li> <li>3. Move compressor to well-ventilated area</li> <li>4. Replace</li> <li>5. Replace valve assembly</li> </ol> <p><b>DANGER! Do not disassemble check valve with air in tank; bleed tank</b></p>
Knocks, rattles, excessive vibration	<ol style="list-style-type: none"> <li>1. Loose bolts, tank not level</li> <li>2. Defective bearing on eccentric or motor shaft</li> <li>5. Cylinder or piston ring is worn or scored</li> </ol>	<ol style="list-style-type: none"> <li>1. Tighten bolts, shim tank to level position</li> <li>2. Replace</li> </ol> <p>Replace or repair as necessary</p>
Tank pressure drops when compressor shuts off	<ol style="list-style-type: none"> <li>1. Loose drain cock</li> <li>2. Check valve leaking</li> <li>3. Loose connections at pressure switch or regulator</li> </ol>	<ol style="list-style-type: none"> <li>1. Tighten</li> <li>2. Disassemble check valve assembly, clean or replace</li> <li>3. Check all connections with soap and water solution and tighten</li> <li>3.</li> </ol>
Compressor runs continuously and air output is lower than normal/low discharge pressure	<ol style="list-style-type: none"> <li>1. Excessive air usage, compressor too small</li> <li>2. Clogged intake filter</li> <li>3. Air leaks in piping (on machine or in outside system)</li> <li>4. Broken inlet valves</li> </ol> <p>Piston ring worn</p>	<ol style="list-style-type: none"> <li>1. Decrease usage or purchase unit with higher air delivery (CFM)</li> <li>2. Clean or replace</li> <li>3. Replace leaking components or tighten as necessary</li> <li>4. Replace compressor valves</li> </ol> <p>Replace piston and cylinder</p>
Excessive moisture in discharge air	<ol style="list-style-type: none"> <li>1. Excessive water in tank</li> <li>3. High humidity</li> </ol>	<ol style="list-style-type: none"> <li>1. Drain tank</li> <li>2. Move to area of less humidity; use airline filter</li> </ol> <p>NOTE: Water condensation is not caused by compressor malfunction</p>
Compressor runs continuously and safety valve opens as pressure rises	<ol style="list-style-type: none"> <li>1. Defective pressure switch</li> <li>5. Defective safety valve</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace switch</li> <li>5. Replace safety valve with genuine replacement part</li> </ol>
Excessive starting and stopping (auto start)	<ol style="list-style-type: none"> <li>2. Excessive condensation in tank</li> </ol>	Drain more often
Air leaking from unloader on pressure switch	<ol style="list-style-type: none"> <li>2. Check valve stuck in an open position</li> </ol>	<ol style="list-style-type: none"> <li>Remove and replace check valve</li> <li>2. <b>DANGER! Do not disassemble check valve with air in tank; bleed tank</b></li> </ol>

# PARTS DIAGRAM



## PARTS LIST

NO	PART	QTY	NO	PART	QTY
1	bolt M6x25	2	34	tooth washer 4	1
2	bolt M6x35	2	35	screw M3x6	2
3	spring washer 6	4	36	spring washer 3	2
4	cylinder head	1	37	nut M3	2
5	O-ring	1	38	capacitor	1
6	valve plate subassembly	1	39	tooth washer 8	1
7	Cylinder seals	1	40	Discharge pipe D10mm	1
8	cylinder $\Phi$ 60	1	41	elbow connecter	1
9	Connection Stud	1	42	air filter	1
10	screw M5x16	2	43	fan cover	1
11	Connecting rod cover	1	44	big washer 8	2
12	piston ring	1	45	screw M 8 x12	2
13	connecting rod	1	46	handle	1
14	Bolt M6x16	1	47	base board	1
15	big washer 6	1	48	bolt M8x25	4
16	fan	1	49	washer 8	4
17	bolt M4x20	1	50	flange nut M8	1
18	spring washer 4	1	51	6L tank	1
19	bearing 6005-2RS	1	52	absorber	4
20	pin $\Phi$ 4x14	1	53	washer 5	4
21	crank	1	54	bolt M5x25	4
22	screw M8x35-left	1	55	drain valve 1/4 inch	1
23	crankcase	1	56	quick coupler	1
24	bearing 6204-RS	1	57	pressure gauge 40	1
25	rotor	1	58	regulate valve	1
26	stator subassembly	1	59	three way connecter	1
27	bearing 6202-RS	1	60	safety valve	1
28	corrugate washer 34	1	61	power cord	1
29	motor bracket	1	62	pressure gauge 50	1
30	bolt M5x105	4	63	pressure switch	1
31	spring washer 5	4	64	release pipe	1
32	screw M4x10	1	65	checking valve	1
33	spring washer 4	1			



**Customer care Line:- 01568 620444**

**GUARANTEE**

This product has been manufactured to high quality standards and is guaranteed against manufacturing faults for a period of 12 months from the date of purchase. Normal wear and tear, including accessory wear, is not covered under the guarantee. This guarantee is invalid if the compressor has been overloaded or subjected to neglect, improper use or an attempted repair other than by an authorised agent. This product is not sold for commercial, heavy duty, professional or hire use any such uses voids any guarantee.

**DECLARATION OF CONFORMITY**

**The following product is covered by this declaration:-**

Manufacturers model No:ZBW60-6 - Rhyas Product Code 53103

**Tested to EN 1012-1:1996 covering the following EU Directives:-**



EN 60204-1:2006 + A1:2009

LVD (2006/95/EC)

2006/42/EC - Machinery Directive

The documentation required to demonstrate the above are available for inspection.

**The CE mark was first applied in 2010.**

**Signed: A M Riga**

A handwritten signature in black ink, appearing to read 'A M Riga', written over a light grey background.

**Authority: Director**

**Date: April 2014**

Rhyas Products, Leominster. HR6 0QF. England.

**6L OIL-LESS COMPRESSOR 53103**



**RHYAS AIR**

UK. Subject to change.

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