OIL FREE AIR COMPRESSOR Manual



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1. Introduction

1.1 Working Principle, Performance Characteristics and Uses

Oil free air compressor [rated voltage 220VAC, 50Hz]. The single-phase motor drives crankshaft connecting rod directly, making the piston reciprocate in the cylinder compression. In this case, the exhaust valve will be open and close automatically. When the pressure of the compressed air down to the rated discharge pressure 0.7MPa, the switch qutomatically shutdown by one-way valve into the gas tank. When the pressure down to the certain value, the switch will be open automatically. As the compressor is sealed, the noise is reduced when operating.

The series of air compressor are with the features of low noise and fuel consumption, small vibration, small power consumption, stable performance, safety and reliability. It can be used in laboratories, tire inflation, pharmaceutical, food processing, airbrush painting, chemical analysis, ren sewing machines, shoe machines and dry cleaners, gas supply, and can also be used in instrumentation, printing machinery and other equipment in small air consumpation, electrical, plumbing and other maintenance of the ideal tool for cleaning dust. If the compressed air needed is relatively clean, please use the AW2000 regulator or a filter for filtering.

2. Technical Parameters

Model	Rated voltage (V)	Power (KW)	Exhaust Volume (L/min)	Working pressure (Mpa)	Storage volume (L)	Net weight (KG)
YM550-9L	220	0.55	110	0.8	9	16
YM550-25L	220	0.55	110	0.8	25	20
YM550-30L	220	0.55	110	0.8	30	22
YM550-2-50L	220	0.55×2=1.1	220	0.8	50	40
YM550-4-180L	220	0.55×4=2.2	450	0.8	180	105
YM750-50L	220	0.75	165	0.8	50	- 29

YM750-3-90L	220	$0.75 \times 3 = 2.2$	495	0.8	90	52
YM750-4-180L	220	0.75×4-3	660	0.8	180	110
YM1200-50L	220	1.2	200	0.8	50	30
YM1200-4-230L	220	1.2×4=4.8	900	0.8	230	170
YM1500-60L	220	1.5	1500	0.8	60	50
YM1500-3-180L	220	1.5×3=4.5	850	0.8	180	125
YM1500-4-180L	220	1.5×4=6	1120	0.8	180	175
YM1500-4-230L	220	1.5×4=6	1120	0.8	230	175
Ym1500-5-230L	220	1.5×5=7.5	1200	0.8	230	200

3. Quality Assurance

From the date of delivery, quality assurance period is six months. Due to the failure of manufacturing quality, the company will be in strictly accordance with the following warranty for the users.

- 3.1 1 Quality Assurance is only valid in the following circumstances:
 - 3.1.1 When operating and maintenance the produc, users are according to "Manual" normatively.
 - 3.1.2 manufacturing number, logo is without dismantling, forging.
 - 3.1.3 The product failures are not caused by improper use, as well as factors arising from force majeure.
 - 3.1.4 The user need to use the parts of the seller's when maintenance.
 - 3.1.5 This product is no need to add the oil, and the media of the product is air.
- 3.2 non-quality assurance requirements:
 - 3.2.1 The user makes bold to change the use, structure, and performance of the product.
 - 3.2.2 The Company will not take responsibility if improper use or loss caused to third parties.

4. Usage Claim

- 4.1 Please replace the oil stuff on the inlet side with the silencer which is attached on the manual before operating.
- 4.2 Workplace of air compressor should be dry, clean, well-ventilated.
- 4.3 Air Compressor can not touch water, can not be put in open-air place, can not be used in flammable, explosive, corrosive, and multi-dust environment.

- 4.4 Air compressor should be placed in vertical and hard ground.
- 4.5 The supply voltage should not lower than 190VAC, 50Hz or higher than 10% of rated voltage. For the sake of security, the air compressor should be grounding.
- 4.6 Please do not touch the components such as the host, the exhaust pipe, such as one-way valve in high temperature when revolving or after operating to prevent scalding.
- 4.7 The area of power cord should be not less than 1.5mm2, and cable is not more than 30 meters range.
- 4.8 The product is a gas source for the pneumatic tools and equipment, and it can not be exhausted to person and animals.
- 4.9 Before connecting to the power, please make sure that the machine is switched off. Please press the red switch not pull the plug directly when closing the machine.
- 4.10 Collision and inversion is strictly prohibited. Please take measures to prevent the air compressor to forces and the state of the mobile, or even safety-related incidents occurred.
- 4.1-1 In order to ensure continuous operation of air compressor, air compressor should install cooling fan to the host, the machine should not be running for more than two hours.

5. Maintenance

Special Note: All maintenances should be done after cuting off the power and d compressed air, or vulnerable to harm.

- 5.1 Please keep the clean of the air compressor by professional staff. The underground is prohibited to use the machine.
- 5.2 The sewage in the gas tank will be released, at least three times a day. The pressure within the tank should be less than 0.1MPa.
- 5.3 Please check the sensitive of safety valve regularly. When pressure inside the gas tank reaching 0.5 ~ 0.8MPa, please pull the ring on safety valve. If safety valve can easily exhaust, and the stem can be reset immediately. The safty valve is qualified.
- 5.4 Please replace the flutter of the silencer after operating 500 hours.
- 5.5 Gas tank pressure test shall be done every year. If there are serious rust, bumps or pressure test failed, the gas tank should be disposed.
- 5.6 Please discharge the air inside the gas tank before moving the air compressor.

6. Marks and Implications







Read the Manual



Please do not open the valve before



High-temperature Risk







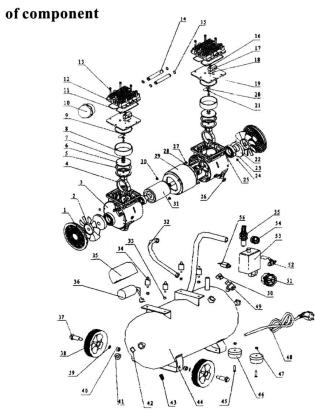
Open Power

7 Traublachapting

/. Iroubleshooting				
Trouble Phenomennon	Reason	Approach		
The machine can not work	 It is not electrified Fuse broken The switch is cut off Overload protector is in state of protection The switch is damaged or wire is broken off 	cool(waiting for 15 minutes)		
	Voltage is too low Motor is short circuit or open circuit Switch of one-way valveor air pressure is damaged			
Fuse and circuit breaker is broken repeaterdly. Note: do not make the wire too long.	The fuse is not proper, or current overloaded Switch of one-way valveor air pressure is damaged	not connect to the other electrical equipment, and		

0 1 1	1. Voltage is too low	1. Check the voltage, no lower than 200V
cut off the	2. Ventilation is poor, temperature	2. Put the air compressor in a well-ventilated place
electricity repeatedly	is high	
	1. Connecting is loose, leakage	1. Check and use seal gasket on the leakage place
The pressure drops	2. Drainage Valve is open	2. Tightening the drainage valve
when turnning off	3. One-way valvet is leakage	3. Removing and inspecting the one-way valve
the compressor		4. Warning! Please discharge the air within the gas
•		tank, then remove the one-way valve
	1. There is a lot of water in the gas	1. Discharge the water in the gas tank
The gas discharged	tank	2. Move the air compressor to a low temperature
contains a large	2. temperature or humidity is too	place, or use oil-water separator
number of water	high	
	1. The pressure switch is damaged	1. Replace the pressure switch
The air compressor	2. There is leakage	2. Check and Solve
keep running	3. There is dirty on the one-way	3. Clean the dirty
	valve	
	1. Fixed bolts loose.	1. Fix the bolts
The air Compressor	2. Rubber gasket is lost or	2. Replace the gasket
is vibrating	damaged	
	1. Drainage Valve is open	1. Tightening the drainage valve
	2. Inlet air filter is plugging	2. Cleaning or replacing the filter
	3. Connection of gas is leak	3. Fastening the bolts to connect the gas
Output pressure	4. Cylinder head gasket or valve	4. Replace of gasket
lower than normal	gaslet is damaged.	5. Replace the piston or cylinder
		o, and process of the second
	5. The piston or cylinder is worn	
	out	

8. exploded drawing of compressor head and name



number	name	quantity
1	wind cover	2
2	left fan	2
3	left case	1
4	connection rod	2
5	piston leather cup	2
6	pressing plate	2
7	Hexagon socket head cap screws M6X20	2
8	cylinder	2

number	name	quantity
9	cylinder sealing circle	2
10	silencer	1
11	cylinder head sealing circle	2
12	cylinder head	2
13	hexagon socket head cap screws M5X50	12
14	connection pipe	2
15	connection pipe sealing circle	2
16	pan head screws with cross recess M4X6	2
17	limiting stopper	2
18	air outlet calve clack	2
19	valve plate	2
20	air intake valve clack	2
21	metal gaset	2
22	crankshaft	2
23	bearing600-22	2
24	hexagon socket set screws withflat point M8*10	2
25	right case	1
26	lap hoop	1
27	hexagon socket head cap screwsM5*150	4
28	flat gasket	4
29	stator	i
30	holding screws	4
	rotor	1
31	high pressure soft tube	1
32	holding screws M6	4
33	shock-relief gasket	4
34	metal capacitor	1
35	capacitor	1
36		2
37	wheel axle	2
38	wheel	2
39	flate gasket	2
40	wheel axle holding screws	2
41	observing hole	2
42	O ring for observing hole	
43	drainage valve	1
44	air tank	1
45	washer holding screws	2
46	big foot washer	2
47	foot washer holdingscrew cap	2
48	power cable	1
49	check valve	1
50	magnetic valve	1
51	Y50 pressure gauge	1
52	ball valve	1
53	pressure switch	1
54	Y40 pressure gauge	1
55	pressure adjustable oil water separator	1
56	safety valve	1

9. Product Certificate

Product Certificate

This product was tested, the project meet the technical standards review, confirmed and qualified in the factory

MODEL NO.

POWER

VOLUME FLOW

SPEED

SAFETY VALVE SENSITIVITY

SERIE NO.

QC

INSPECTION DATE