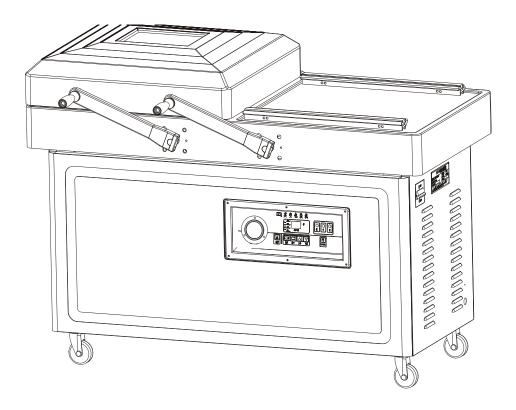
## DZ series Double Chamber Vacuum packing machine

# USER MANUAL



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#### I. Product description and usage

DZ series vacuum packing machine is used for removing air from the package and sealing the mouth of bag. Vacuum packing reduces atmospheric oxygen, limiting the growth of aerobic bacteria or fungi, and preventing the evaporation of volatile components.

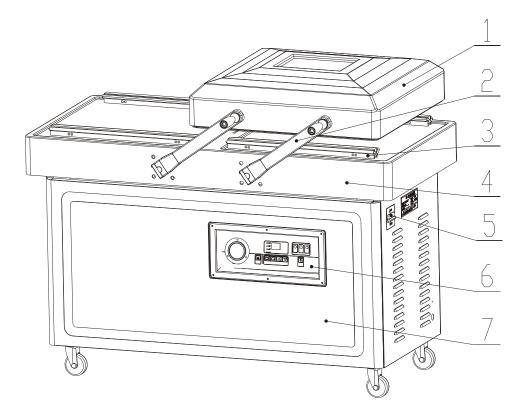
The 2 chambers work in turn: when one chamber is pumping and sealing, workers can place product to packing on the other chamber, so that it is more efficient than single chamber.

DZ series double chamber vacuum packing machine combine a sleekly built and functional design with optimal ease of use and a long service life. The clever design ensures compliance with the hygiene standards at all times.

II.Technical	parameters
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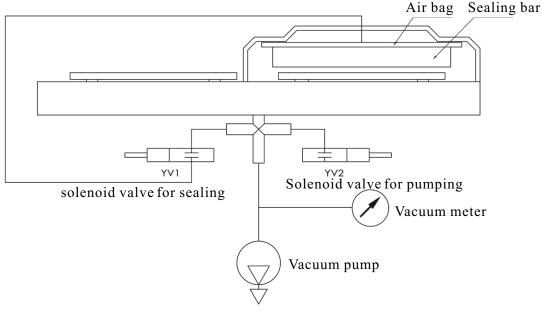
Model	Voltage	Power of motor	Power of heater	Barometric pressure	Speed of pump	Depth of chamber	Dimension	N.W
DZ-400/2SB	AC 220V/50HZ	0.9kw	0. 60kw	0.1hPa(mbar)	$20 \mathrm{m}^3/\mathrm{h}$	flat	990×610×950mm	129Kg
DZ-500/2SB	AC 380V/50HZ	0.75kw $ imes$ 2	0.80kw	0.1hPa(mbar)	$20m^3/h \times 2$	flat	1250×660×950mm	174Kg
DZ-600/2SB	AC 380V/50HZ	1.50kw	1.00kw	0.1hPa(mbar)	$40 \text{m}^3/\text{h}$	flat	1450×660×950mm	215Kg
DZ-400/2SA	AC 220V/50HZ	0.9kw	0. 60kw	0.1hPa(mbar)	20m <sup>3</sup> /h	40mm	995×615×960mm	131Kg
DZ-500/2SA	AC 380V/50HZ	0.75kw×2	0.80kw	0.1hPa(mbar)	$20m^3/h \times 2$	40mm	1250×660×960mm	182kg
DZ-600/2SA	AC 380V/50HZ	1.5kw	1.00kw	0.1hPa(mbar)	40m <sup>3</sup> /h	40mm	1450×660×960mm	220Kg
DZ-700/2SB	AC 380V/50HZ	1.5kw	1.20kw	0.1hPa(mbar)	$40 \mathrm{m}^3/\mathrm{h}$	flat	1650×720×960mm	267Kg
DZ-800/2SB	AC 380V/50HZ	2.2kw	1.40kw	0.1hPa(mbar)	$63 m^3/h$	flat	1850×765×960mm	300Kg

### III. Machine Overview





1.Lid2. parallel arms3. sealing bar4. vacuum chamber5. interrupter6. controlling panel7. Housing



#### IV. Working Principle

Fig. 2

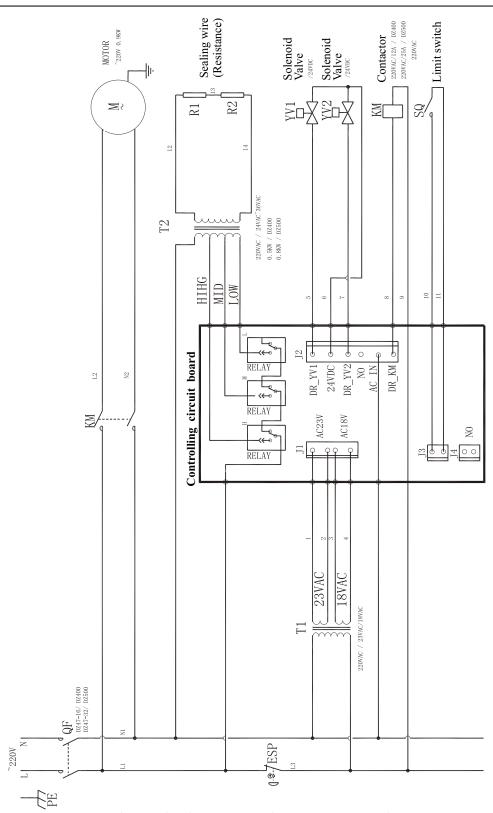
Step 1 vacuum. There is an air bag between sealing bar and lid. When the pump is working, the air in the air bags and vacuum chamber is vacuumed simultaneously, so that the sealing bars and silicon bars not close up.

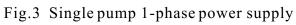
Step 2 thermal seal. When the vacuuming finished, to inflate the air bags the solenoid YV1 switches on , and the vacuum chamber keep vacuum.

Step 3 devacuum. To let air enter the chamber, the solenoid YV2 switches on, the chamber open, the entire process is finished.

#### V. Circuit Diagram

Normal input power: 1-phase 220V/50HZ or 3-phase 380V/50HZ, other voltages are also customizable.





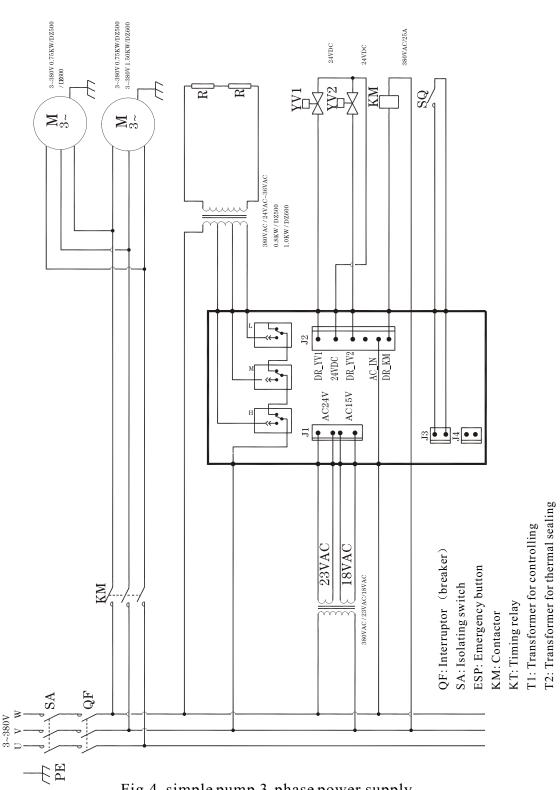


Fig.4 simple pump 3-phase power supply

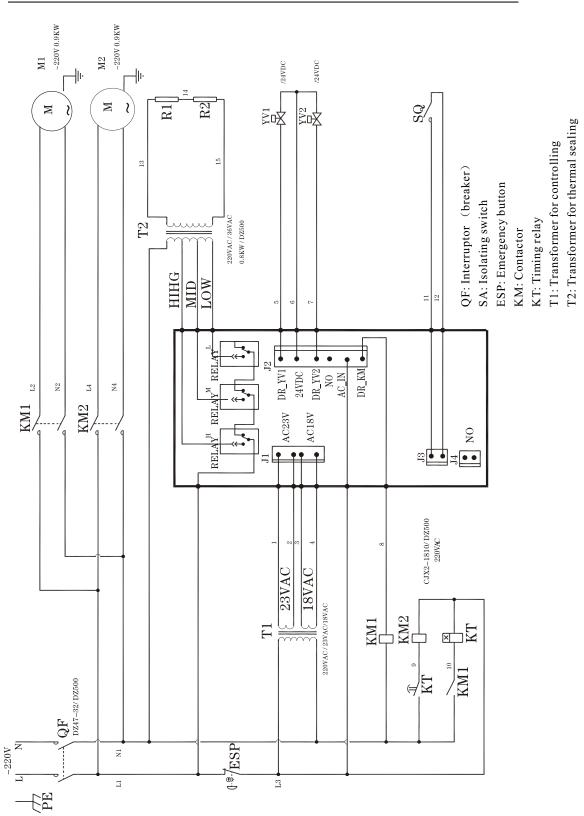
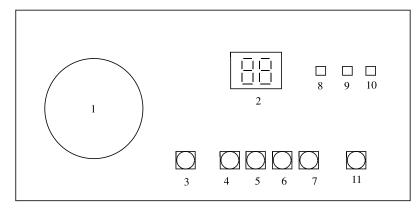


Fig.5 double pump 1-phase power supply

#### **VI.** Operation



1. Vacuum meter

2. Time and status indicator.

"——" indicates the machine is in start-up mode, in which power is connected and machine is not working yet. " $\Box$   $\Box$  " indicates devacuum, and number indicates the current value of the active function during the program cycle or the set value of the selected function when the machine is inactive.

3. STOP Press this button to cancel any process and back to start-up mode.

4. SETTINGS button Press this button on the start-up mode to select VACUUM, SEALING, COOLING and GASSING. Adjust each of them by pressing the "up" and "down". Press "OK" to confirm.

5. OK button Press "OK" to confirm your settings.

6. UP button This button is only active in vacuum time setting mode and sealing setting mode.

7. DOWN button This button is only active in vacuum time setting mode and sealing setting mode.

8. low heat indicator

9. medium heat indicator

10. high heat indicator

11. SEALING TEMP. button Press button to select the level of sealing temperature.

12. SETTINGS button Press this button on the start-up mode to select VACUUM, SEALING, COOLING and GASSING. Adjust each of them by pressing the "up" and "down". Press "OK" to confirm.

#### **VII.** Programming

1. Vacuum time range: 0 to 99 s.. (Normally 20 s., and for liquid, 25 s is recommended.)

2. Sealing time range: 0 to 3.5 s.. (normally 1.5 s., and for thick film or with aluminum layer, 3 s..)

3. Level of sealing temperature: low, medium, high.(for thick film or with aluminum layer, select 'high')

4. Cooling time (holding time): 2 s. by default. To prevent aluminum from wrinkle, 15 s. is recommended.

#### Instruction

Power on the machine, the indicator shows "——", that is the right state ready to work.

1. Vacuuming time setting

Press SETTINGS the corresponding indicator blinks, then press UP and DOWN to adjust the time, finally press OK to confirm.

2. Sealing time setting

Press SETTINGS the corresponding indicator blinks, then press UP and DOWN to adjust the time, finally press OK to confirm.

3. Temperature setting

Press SETING TEMP. to select the level of sealing temperature : low, medium, high and off in turn.

4. Stop button

If unusual situation occurs please press this button, to stop the work. This button can not power off the machine, but return to start-up mode.

5. Working operation

a. Power on the machine, according to precaution, then the machine enter start-up mode. Place plastic bag in the chamber, lift the metal stick to hold the mouth of the bag, close the lid of the chamber, the machine start the following programs: b. Vacuuming: this program beings at the same time, the timer counts down from the set value, then comes to the next program.

c. Sealing: this program beings, and the timer counts down from the set value, then comes to the next program.

d. Holding time:  $2\sim10$  s. Adjustable. The timer shows the set value of sealing. Then comes to the next program.

e. Devacuum: this time is fixed to 2 s. and the timer shows " $\square$   $\square$ ", then the entire operation is finished.

#### **VIII.** Cautions

1. This machine should be installed horizontally, with good ventilation and no corrosive materials around.

2. Make sure the power supply of this machine is properly earthed.

3. Make sure the volume of vacuum oil is between the 1/4 and 3/4 of the lens of oil.

4. If the vacuum pump rumbles and the vacuum meter do not move, that means the direction for motor is wrong. Please interchange any two phases of the 3-phase power.

5. Please set the suitable vacuuming time according to the product. The longer the vacuuming time, the higher the degree of vacuum.

6. Please set the suitable sealing time and the level of temperature according to the thickness and material of plastic film.

## IX. Assembly diagrams

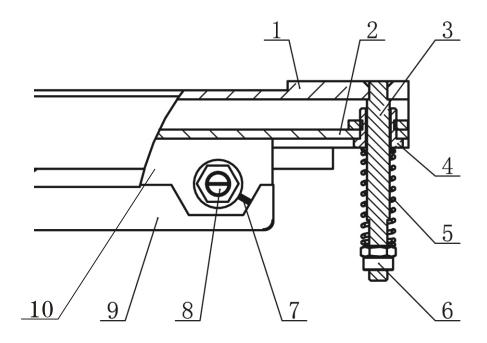


Fig.1 sealing parts

1	Container for air bag	6	Bolt M6
2	2 Container for sealing bar 7		Heating element (resistance)
3	Tube for spring	8	Copper bolt
4	Supporter for spring	9	Tefloncloth
5	Spring	10	Sealing bar

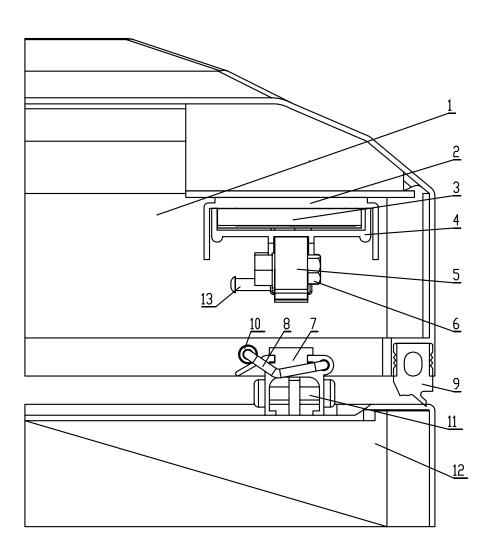


Fig.2 sealing parts

1	Lid of vacuum chamber	8	Stick for holding bag
2	Container of air bag	9	Gasket
3	Air bag	10	Rubber tube
4	Container of sealing bar	11	Bolt for fix silicone bar
5	Sealing bar	12	Plat of vacuum chamber
6	Copper bolt	13	Insulate tube
7	Silicone bar		

## X. Trouble-shooting

Trouble	Cause	Method
	Pump do not work	See From 3
	Lid is not tightly closed	Adjust bolts on the parallel arms
Not vacuum	Solenoid value is broken or short circuited	Check or change the solenoid value
	Circuit board is broken	Check or change the circuit board
	Air bag is is broken	Check or change the air bag
	Tube which connected solenoid valve leaks	Tight or change the tube
Not properly vacuum	Gasket is broken, aged or not finely sealed	Change it or flatten the plat of vacuum chamber with sandpaper.
	Solenoid valve leaks	Wash and clear the valve or change it
Cannot open lid of vacuum chamber	Solenoid valve for devacuum is broken or short circuited	See From 2
	The sealing bar may not repositions	Adjust the position of sealing bar
Vacuum system is	The gasket is contaminated	Clear the gasket
alright but still with air in bags	The gasket is not even	Even the gasket
	The gasket is broken	Charge the gasket

## Form 1 vacuum system

### Form 2 Solenoid valve

Trouble	Cause	Method
	The gasket is contaminated	Clean the gasket
Leaks air	The gasket is not even	Even the gasket
	The gasket is broken	Charge the gasket
	Wiring is wrong or not well contacted	Re-wire according to the diagram
	The fuse has blown	Change it
	The silicon diode rectifier is broken	Change it
Get stuck or can	The coil is blown	Change the entire valve
not start	Solenoid valve is contaminated	Clean it
	The spring is broken or get stuck	Change it
	The voltage is not stable	Contact the entire machine to a regulator

Trouble	Cause	Method
	Vacuum oil deteriorated	Check or change oil
Not sufficient	Insufficient vacuum oil	Add oil
vacuum	Pipe leaks air	Check or change pipe
	Filter get stuck	Clean or change the filter
	Wrong voltage	Check and connect the right power
Pump can not start	Fuse has blown	Change the fuse
	pump or motor get stuck	Try to find the object by rolling the motor manually
Pump cause	Too much oil or the type oil is wrong	Check, change or reduce the oil
overcurrent	The oil becames viscous in cold weather	Find other oil suitable for cold weather
	The filter is contanimated	Clean or change the filter
Pump cause high	Too much oil or not enough	reduce or add oil
tempareture	Insufficient cooling	Check and clear the cooling fan
Smoke or oil at	Too much oil	Reduct the oil
exhaust	Filter get stuck	Clean or change the filter

## Form 4. Heat sealing system

Trouble	Cause	Method
	Heating element is broken or shortcut.	Check and change the heating element.
Not seal the bag	Contactor is fail or broken	Check and change the contactor
	The sealing bar get stuck	Check and re-install it
Wrinkles at the bag	No enough holding time	Adjust the holding time
	The sealing bar get stuck	Check and re-install it
Bag is not firmly sealed	Solenoid valve problem	See Form 2
	Telfon cloth is aged	Change it
	Material of firm is not suible	Use other bag

#### XI. Maintenance

Regular maintenance is required for a long lifespan of the machine, to avoid problem and to achieve an optimal packaging result. If the machine is used intensively, please maintain more regularly. If there are doubts about the maintenance activities or if the machine fails to work correctly always contact the supplier.

The normal maintenance must be carried out as following .

Weekly	<ul> <li>Check thee oil level and replace or fill up oil when the oil is turbid or the oil level is too low.</li> <li>Inspect and replace Teflon tape or sealing wire if the seal quality is no longer sufficient.</li> <li>Inspect the lid gasket and replace it when the gasket is damaged.</li> </ul>
Every Six Months	<ul> <li>Replace oil, (if pump's running time is more than 120 hours, do it earlier)</li> <li>Replace rubber in the silicone holder</li> <li>Replace the air filter.</li> </ul>
Four-yearly	Replace springs of vacuum lid.

#### XII. List of accessories

Items	Specifications and model	Quantity	Remark
Handle		4 sets	
Letters and numbers		1 sets	
Heating element	10 mm of width	2 rolls	Length varies with models
Teflon cloth	50 mm of width	1 roll	Length varies with models
Screw driver		1 piece	Double use
Allen key	φ5, φ8, φ14	3 piece	Each size 1 piece
Hexagonal wrench	8-10, 12-14, 17-19	3 piece	Each size 1 piece