SMD-H Series

Mould Sweat Dehumidifier

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SHINI

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1. General Descriptionp

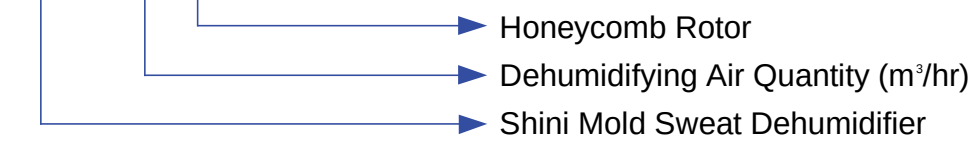
Read this manual carefully before operation to prevent damage of the machine or personal injuries.

SMD-H series mould sweat dehumidifiers are designed to remove the moisture sweat from condensing on the mould surface. Forming of moisture sweat on the mould surface is due to the use of chilled water for reducing the moulding cycle time, particularly while moulding of the PET preforms. To bring about the moisture sweat on the mould surface is because the mould surface temperature is lower than the dew-point temperature of surrounding air, thus the water vapor comes into being, then causes corrosion of mould and effects quality of moulding parts as well as production efficiencies. This series of machine uses honeycomb rotor to carry out dehumidifying function, which generates a dry airflow with dew-point ranging from +5℃~-10℃, and ensures the surrounding air of mould remaining in a low dew-point temperature. It provides constant low dewpoint surrounding air to the mould surface all year round without being influenced by the change of seasons.

Model: SMD-500H (Return air Collector is Optional)

1.1 Coding Principle

SMD -xxx H



Note *

D=Dew-point Monitor CE=Conformity

1.2 Feature

1) Standard configuration

- Accurate control and display of regenerative temp. by using P.I.D. control.
- Honeycomb rotor is used to ensure constant air dehumidifying effect.
- Microprocessor board is fitted to indicate machine running status and to diagnose malfunctions.
- Motor overload and phase reverse alarm functions are included.
- Return air cooling and filtering are included.
- Under normal state and atmospheric conditions, the humidity content of air can be controlled exactly all year round.
- Inhibits corrosion and prolongs service life of the mould, and yet reduces moulding cycle time.
- Air temperature generated by this series of machine is about 30℃, this ensures moisture condensation in the moulding area will not occur on the view window of the moulding machine.

2) Accessory option

- Return air collector is optional, a return air collector is used to collect return air from the moulding area back to this machine and to form a closed-loop air circulation, which is particularly practical in tropical climate.
- Dew-point monitor can be fitted as option to detect dry air quality.

All service work should be carried out by a person with technical training or corresponding professional experience. The manual contains instructions for both handling and servicing. Chapter 6, which contains service instructions intended for service engineers. Other chapters contain instructions for the daily operator.

Any modifications of the machine must be approved by SHINI in order to avoid personal injury and damage to machine. We shall not be liable for any damage caused by unauthorized change of the machine.

Our company provides excellent after-sales service. Should you have any problem during using the machine, please contact the company or the local vendor.

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1.3 Technical Specifications

1.3.1 Specifications

Table 1-1: Specifications

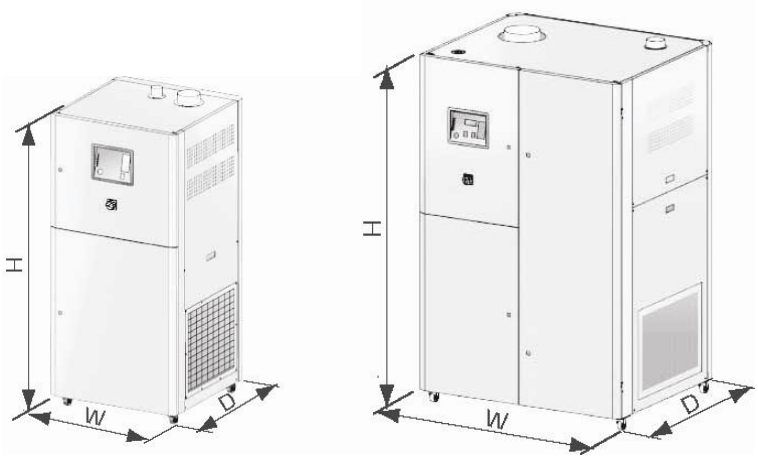
Model		SMD-500H	SMD-1000H		SMD-1500H	SMD-2000H	
Cavity Number		12	16	24	32	48	56
Cavity Array		(2×6)	(2×8)	(4×6)	(4×8)	(4×12)	(4×14)
Cavity Distance		Standard	Standard	Standard	Standard	Standard	Standard
Max. Shot Weight (kg/hr)		200	270	400	420	560	560
Dryer Model		SHD-1500U	SHD-2000U	SHD-3000U	SHD-3000U	SHD-4000U	SHD-4000U
Dehumidifier Model		SD-750H	SD-1000H	SD-1500H	SD-1500H	SD-2000H	SD-2000H
Hopper Loader Model		SAL-2HP-UG	SAL-2HP-UG	SAL-3.5HP-UG	SAL-3.5HP-UG	SAL-5HP-UG	SAL-5HP-UG
Chiller	Water-cooled	SIC-25W-HP	SIC-30W-HP		SIC-193SW-HP	SIC-223SW-HP	
	Air-cooled	SIC-25A-HP	SIC-30A-HP		SIC-180A-HP	SIC-210A-HP	

Model	Regen. Heater (kW)	Regen. Blower (kW) (50 / 60Hz)	Process Blower (kW) (50 / 60Hz)	Process Air Flow (M3/hr)	Process Pipe Diameter (inch)	Regen. Pipe Diameter (inch)	Water Connection	Ave. Process Air Temperature (℃)	Dew-point Temp (℃)	Process Air Pressure (Pa)	Cooling Water Flow (L/W)	Cooling Water Pressure (kgf / cm^2)	Dimensions (mm) (H×W×D)	Weight (kg)
SMD-500H	4	0.4 / 0.5	0.75 / 0.85	500	4”	2”	3/4”PT	30	-10-+5	3000	50	3~5	1730×650×700	260
SMD-1000H	7.2	0.75 / 0.85	1.5 / 1.8	1000	5”	2.5”	3/4”PT	30	-10-+5	3000	50	3~5	1780×800×805	335
SMD-1500H	15	2.2 / 2.6	1.5 / 1.8	1500	8”	4”	3/4”PT	30	-10-+5	1400	100	3~5	2040×1150×1075	350
SMD-2000H	24	2.2/ 2.6	1.5 / 1.8	2000	8”	4”	2”PT	30	-10-+5	1230	100	3~5	1940×1300×1075	450

Note: 1) Noise level is 85dB (A).
2) Condition for Open-loop application: Ambient dry bulb temp. ⩽ 30℃, relative moisture ⩽ 70%.
3) Cooling water required temp. 7-10℃.
4) Power supply: 3Φ, 230 / 400 / 460 / 575V, 50 / 60Hz.

We reserve the right to change specifications without prior notice.

1.3.2 Outline Drawing



SMD-500H~1000H SMD-1500H~2000H

Picture 1-1: Outline Drawing

1.4 Safety Regulations

Note!

Electrical installation should be done by qualified technician only. Before connecting of AC Power Source, turn power switch to OFF position. While AC power source is connected, make sure specifications and reliable. When the machine is under care or maintenance status, turn both power switch and automatic operation switch to off.

1.4.1 Safety Signs and Labels

Danger!

High voltage danger!

This label is attached on the control box.

Attention!

This label means that this area should be taken care!

Attention!

No need for regular inspection because all the electrical parts in the control unit are fixed tightly!

1.4.2 Safety Regulations for the Blower

1) The blower cover will be heated up during operation. Keep hands away high temperature blower cover to avoid hands burning.
2) Motor under load current will be varied with air pressure of the blower. Overload relay should be used and keep motor working current within full-load current to avoid motor burning out.
3) Air filter is used to keep off dirts, particles, fibres, and water drops. Clean the filter about once a week.
4) Clear up inside and outside of the blower regularly. If there are too much dirts accumulated on the blower, the function of the blower will be affected, such as temperature rising, reduced air volume and higher noise level due to vibration. All the above factors are liable to cause mechanical problems.
5) The bearing, seal ring and silencer are all consumable parts. They should be replaced after a period of time. And also the fans, covers, and metal grids need to be changed when necessary.
6) If the blower can not work properly or makes loud noises, please turn off the power supply to have a check.

Picture 1-2: Blower

1.4.3 Transportation and Storage of the Machine

Transportation

1) SMD-H series Mold Dehumidifier are packed in crates or plywood cases with wooden pallet at the bottom, suitable for quick positioning by fork lift.
2) Optional floor stand with castors can be used for ease of movement.
3) Do not rotate the machine and avoid collision with other objects during transportation to prevent improper functioning.
4) The structure of the machine is well-balanced, although it should also be handled with care when lifting the machine for fear of falling down.
5) The machine and its attached parts can be kept at a temperature from -25℃ to +55℃ for long distance transportation and for a short distance, it can be transported with temperature under +70℃.

Storage

1) SMD-H series Mold Dehumidifier should be stored indoors with temperature kept from 5℃ to 40℃ and humidity below 80%.
2) Disconnect all power supply and turn off main switch and control switch.
3) Keep the whole machine, especially the electrical components away from water to avoid potential troubles caused by the water.
4) Plastic film should be used to protect the machine from dust and rains.

Working environment
The machine should be operated
1) Indoors in a dry environment with max. temperature +45℃ and humidity no more than 80%.

Do not use the machine

1) If it is with a damaged cord.
2) On a wet floor or when it is exposed to rain to avoid electrical shock.
3) If it has been dropped or damaged until it is checked or fixed by a qualified serviceman.
4) This equipment works normally in the environment with altitude within 3000m.
5) At least a clearance of 1m surrounding the equipment is required during operation. Keep this equipment away from flammable sources at least two meters.
6) Avoid vibration, magnetic disturbance at the operation area.

Rejected parts disposal

When the equipment has run out its life time and can not be used any more, unplug the power supply and dispose of it properly according to local code.

Fire hazard

In case of fire, CO_2 dry powder fire extinguisher should be applied.

1.5 Exemption Clause

The following statements clarify the responsibilities and regulations born by any buyer or user who purchases products and accessories from Shini (including employees and agents).

Shini is exempted from liability for any costs, fees, claims and losses caused by reasons below:

1. Any careless or man-made installations, operation and maintenances upon machines without referring to the Manual prior to machine using.
2. Any incidents beyond human reasonable controls, which include man-made vicious or deliberate damages or abnormal power, and machine faults caused by irresistible natural disasters including fire, flood, storm and earthquake.
3. Any operational actions that are not authorized by Shini upon machine, including adding or replacing accessories, dismantling, delivering or repairing.
4. Employing consumables or oil media that are not appointed by Shini.

1.6 Maintenance Schedule

Maintenance Schedule

Item	CT
Check the temperature controller.	Daily
Clean the filter.	Daily
Check whether overheat protection is normal.	Daily
Check whether dew-point is normal.	Daily
Check whether the contactor is normal.	One year
Check whether air pipe is shed, leaked and loose.	Weekly
Check whether cooling water circulation and Y-type fitter are normal.	Daily
Check whether honey-comb rotor belt is damaged.	Semiyearly
Clean the cooler.	Semiyearly
PCB renewal.	Every 3 year exchange
No fuse breaker.	Every 3 year exchange

Note: Please refer to the Manual for detailed operations.

YP31115800100

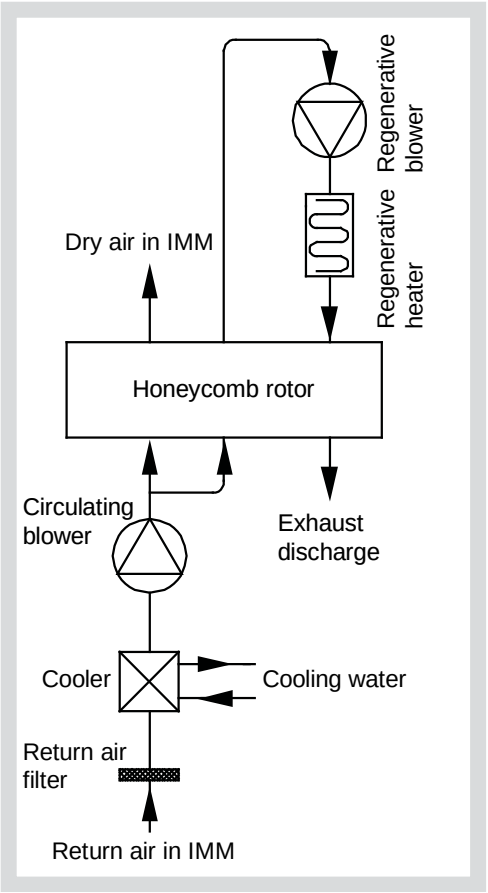
Picture 1-3: Maintenance Schedule

2. Structure Characteristics and Working Principle

2.1 Working Principle

The large amount of air created by centrifugal blower will directly blow to the models of IMM after being moisture absorbed by rotator honeycomb to form drying air with low dew-point. And then air discharges through air outlet of mold closing chamber and returns to mold sweat dehumidifier through return air pipe. In this way, a circle finished.

The air around mould is very dry with dew-point less than or equal to 5 ℃ . Environmental temperature drops fast during the mould rapid-cooling, but temp. would not fall to 5℃. Therefore, dewdrop would not come into being during mould rapid-cooling.



Picture 2-1: Working Principle

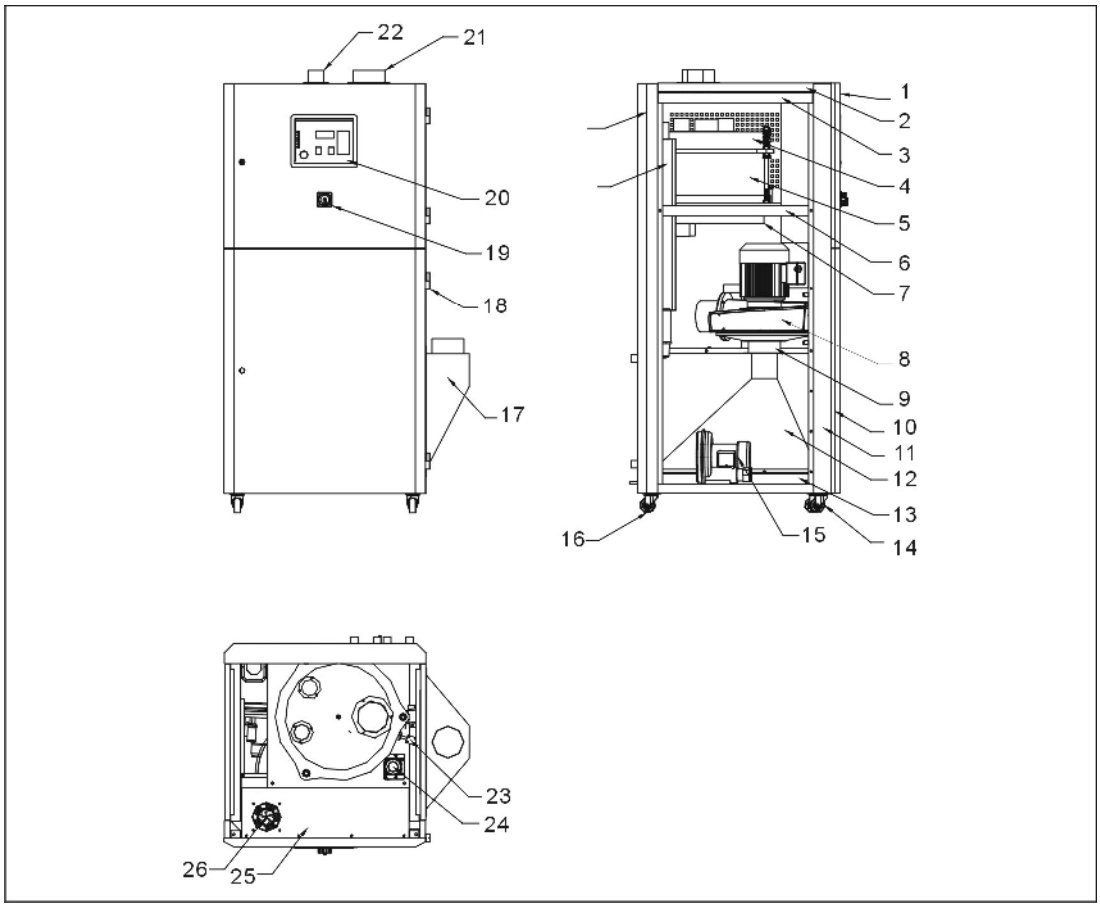
2.2 Relative Humidity and Dew Point

Relative humidity: Relative air humidity means real vapor content to saturated vapor at the same temperature in percentage.

Dew point: it means that temperature when the saturation vapor begins to dew. When the relative humidity is 100%, the ambient temperature is the dew point temperature. The lower of dew point temperature (than the ambient temperature) is, the less possible to dew, that also means the more drier the air is. The dew point will not be influenced by temperature, but influenced by pressure.

2.3 Drawing and Parts List

2.3.1 Structural Drawing

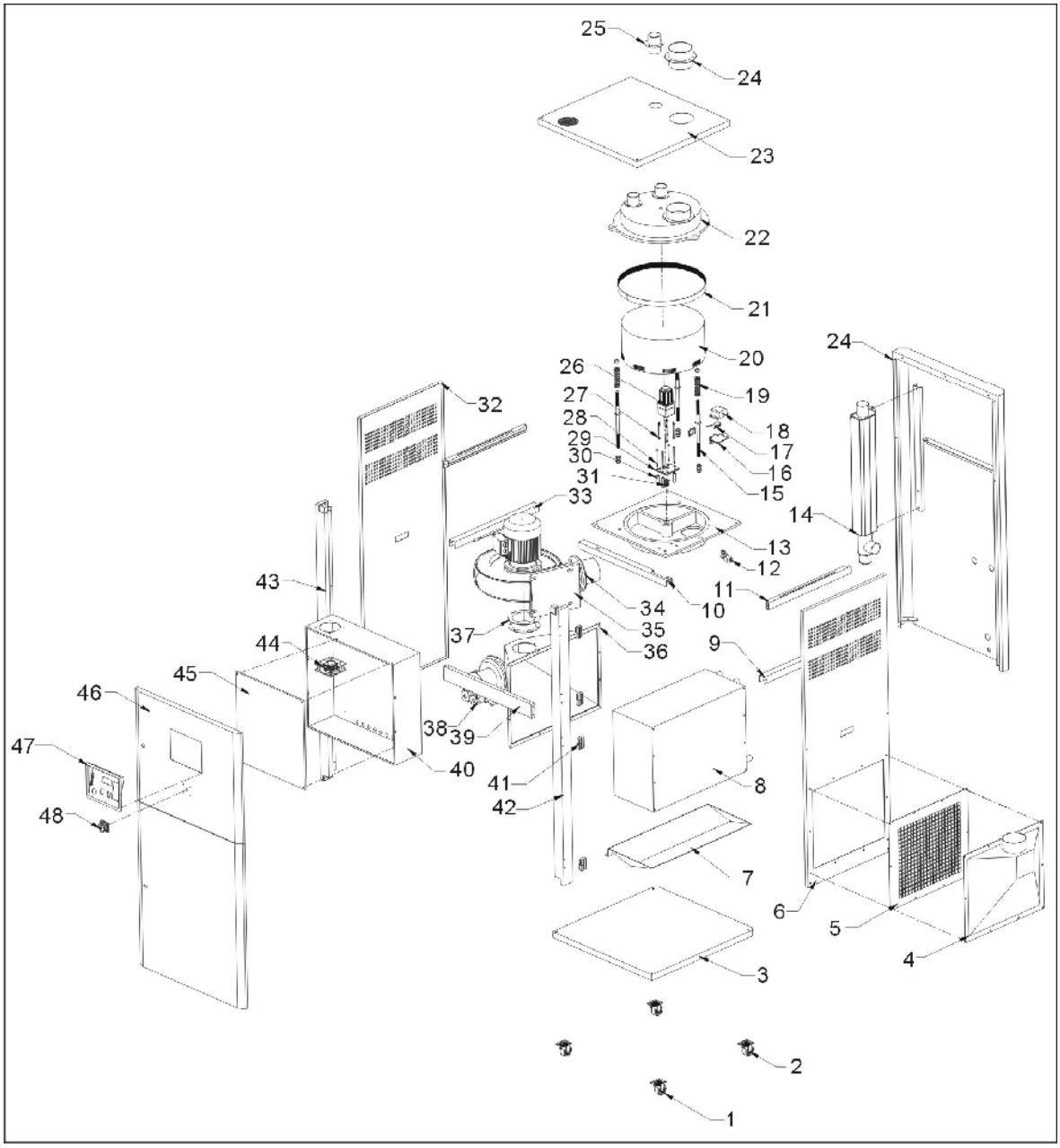


Parts name:

1. Upper door plate	2. Top board	3. Side fixed plate
4. Honey comb upper lid	5. Honeycomb	6. Left middle beam
7. Honey comb lower lid	8. Process blower	9. Circulation air inlet flange
10. Lower door plate	11. Front erect post	12. Air collection hood
13. Dew channel	14. Caster	15. Regeneration blower
16. Brake truckle	17. Backing air hood	18. Hinge
19. Main power supply switch	20. Control panel.	21. Drying air outlet
22. Regenerating air outlet	23. Belt adjustor	24. Decreasing motor
25. Control box	26. Air exhausting fan	

Picture 2-2: Structural Drawing

2.3.2 Assembly Drawing



Remarks: Please refer to material list 2.5.3 for specific explanation of the Arabic numbers in parts drawing.

Picture 2-3: Assembly Drawing

2.3.3 Parts List

Table 2-1: Parts List

No.	Description	Part No.			
		SMD-500H	SMD-1000H	SMD-1500H	SMD-2000H
1	Movable truckle	YW03000300200	YW03000300000	YW03000400200	YW03000400200
2	Brake truckle	YW03000300000	YW03000400000	YW03000400000	YW03000400000
3	Base plate	BL09050002020	BL09100002020	BL09150003520	BL09200003320
4	Return air cover	BL09050001420	BL09100001420	BL09150002220	BL09200001620
5	Outer cover of returning air filter**	BL09050001520	BL09100001520	BL09150002320	BL09200001720
6	Right side plate	BL09050000320	BL09100002720	BL09150001120	BL09200000420
7	Dew draining groove	BL09050001020	BL09100043320	BL09150001920	BL09200004320
8	Condenser	YW88050000000	YW88100000000	YW88150000000	YW88200001400
9	Right middle beam	BL09050000020	BL09100040820	BL09150001020	BL09200003420
10	Front beam	BL09050000820	BL09100003220	BL09150002920	BL09200000720
11	Side fixation beam	BL09050002220	BL09100002220	BL09150003720	BL09200001820
12	Belt adjustor	BH10005000040	BH10005000040	BH10005000040	-
13	Honeycomb base cover	BA40050000010	BA40100000110	BA40150050010	BH11200010110
14	Regeneration electric heater*	BH70150400050	BH70407200050	BH70154000650	BH70244000650
15	Two heads screw	BH10163500110	BH10163500110	BH10543000010	BH10543000010
16	Minitrim switch fixation seat (right bigger one)	YR40000100200	YR40000100200	YR40000100200	YR40000100200
17	Minitrim switch SM 1790*	YE14152400000	YE14152400000	YE14152400000	YE14152400000
18	SAL minitrim switch box	YR40000600600	YR40000600600	YR40000600600	YR40000600600
19	Spring	YW01180300000	YW01180300000	YW01180300000	YW01180300000
20	Honeycomb	YW71352000100	YW71442000100	YW71553000100	YW71650300000
21	Synchronic belt**	YR00204700000	YR00205800000	YR00305800000	YR00358600000
22	Top cover of honeycomb	BA40050000110	BA40100000310	BA40150000010	BH11200010410-
23	Top plate	BL09050001720	BL09100001720	BL09150002720	BL09200002420
24	Air outlet flange	BL09050002120	BL09100002120	BL09150002620	-
25	Regeneration air outlet	-	-	-	-
26	Decreasing motor	YM50512600000	YM50512600000	YM50512600000	-
27	Inner hexagon screw	-	-	-	-
28	Inner hexagon screw	-	-	-	-
29	Decreasing motor fixation plate	BL31000010120	BL31000010120	BL31000010120	BH10200003710
30	Localization pipe	BH13040003710	BH13040003710	BH13040003710	BH13200003610
31	Synchronic wheel	YR00103400000	YR00103400000	YW08001900000	BW08000700010
32	Left side plate	BL09050000120	BL09100040520	BL09150000120	-

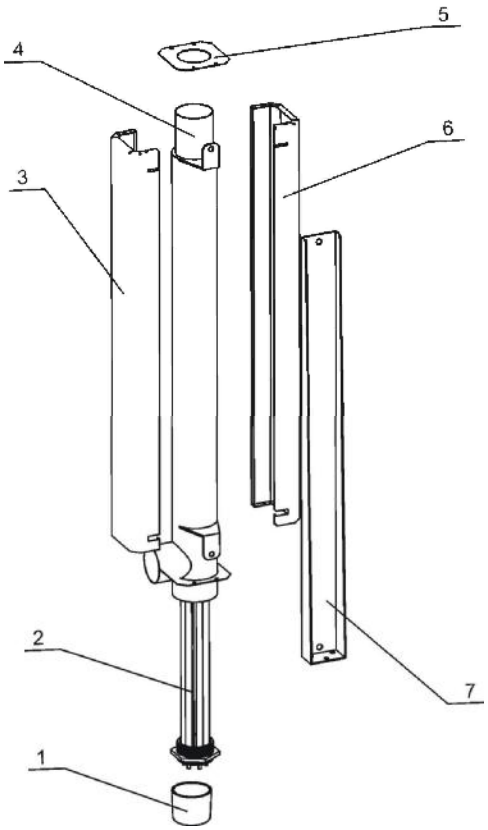
No.	Description	Part No.			
		SMD-500H	SMD-1000H	SMD-1500H	SMD-2000H
33	Left middle beam	BL09050000020	BL09100040820	BL09150000620	-
34	Circulation fan outlet flange	BL09050000520	BL09100002920	BL09150000820	BL09200003620
35	Dry fan*	YM30075000100	BM30152300050	BM30224000050	BM30224000050
36	Air collection hood	BL09050001320	BL09100001320	BL09150002120	BL09200001520
37	Circulation fan inlet flange	BL09050000420	BL09100002820	BL09150000920	BL09200003520
38	Regeneration fan*	BM30020500050	BM30031000150	YM30020000000	YM30230150000
39	Support beam	BL09050000220	BL09100002620	BL09150000720	BL09200000320
40	Control box	BL09050001120	BL09100003420	BL09150002020	BL09200001120
41	Hinge	YW06203100200	YW06203100200	YW06203100200	YW06203100200
42	Front erect post(right)	BL09050000920	BL09100041320	BL09150001820	BL09200000820
43	Front erect post(left)	BL09050000920	BL09100041220	BL09150001820	BL09200000820
44	Air exhausting fan*	YM60121200400	YM60121200400	YM60121200400	YM60121200400
45	Electric appliance installation board	BL09050001920	BL09100043720	BL09150002820	BL09200002620
46	Upper door plate	BL09050000720	BL09100040220	BL09150000220	BL09200000220
47	Control panel	YR40000400400	YR40000400400	YR40000400400	YR40000400400
48	Main power supply switch*	YE10200300000	YE10210300000	YE10250400000	YE10250400000

* means possible broken parts.

** means easy broken part. and spare backup is suggested.

Please confirm the version of manual before placing the purchase order to guarantee that the item number of the spare part is in accordance with the real object.

2.3.4 Pipe Heaters

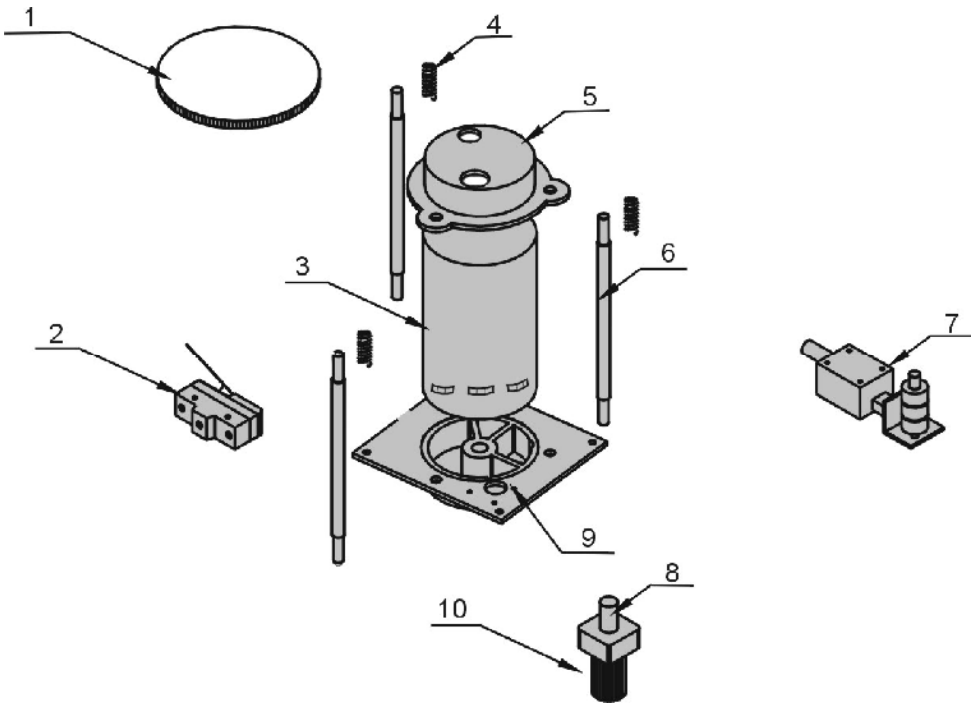


Parts name:

1. Electric wood cover
2. Pipe heater
3. Heater wrapper sheet 1
4. Heating tank
5. Heater cover plate
6. Heater wrapper sheet 2
7. Heater fixed seat

Picture 2-4: Pipe Heaters

2.3.5 Honeycomb



Parts name:

1. Transmission belt	2. Microswitch	3. Honeycomb	4. Spring
5. Honeycomb cap	6. Bolt with two heads	7. Belt adjuster	8. Wheel
9. Honeycomb bottom cap	10. Gear motor		

Picture 2-5: Honeycomb

2.4 Electrical Diagram

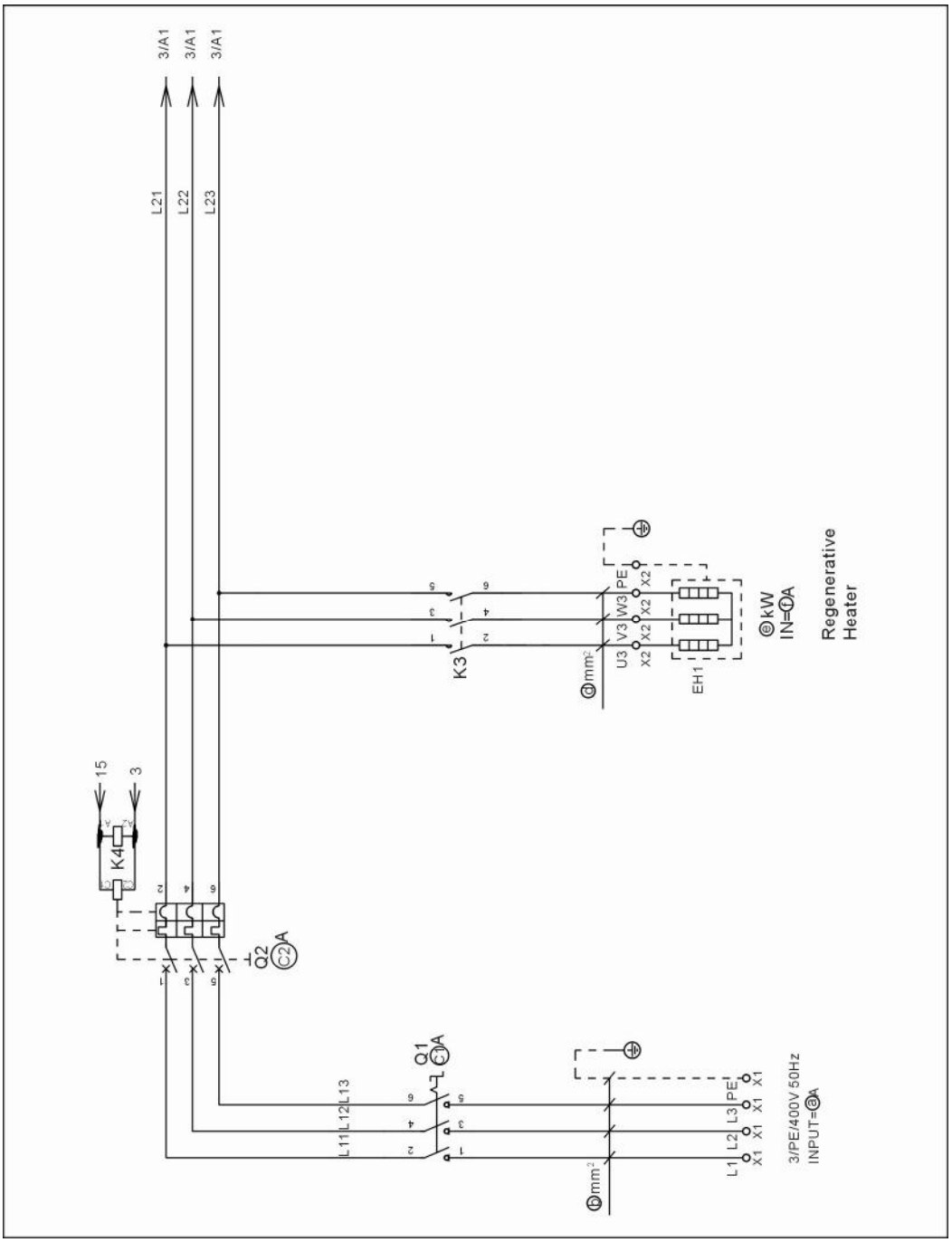
2.4.1 Electrical Diagram (SMD-500H~1500H)

Table 2-2: Electrical Diagram (SMD-500H~1500H)

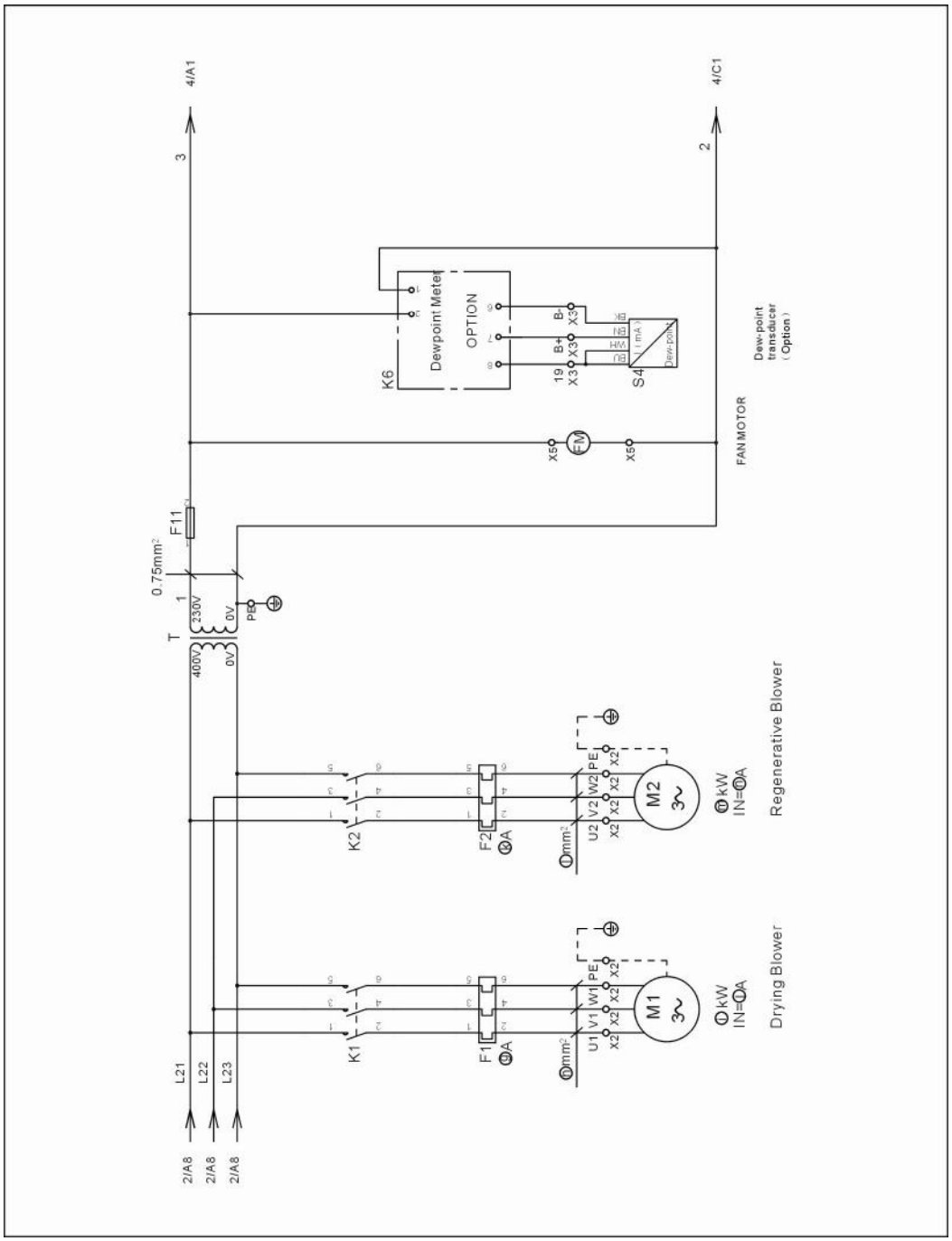
No. / Model	ⓐ	ⓑ	ⓒ1	ⓒ2	ⓓ	ⓔ	ⓕ	ⓖ	ⓗ	ⓘ	ⓙ	ⓚ	ⓛ	ⓜ	ⓝ
SMD-500H	10.1	2.5	16	20	2.5	5	7.5	2-3.2	1.5	0.75	2.3	1-1.6	1.5	0.4	1.29
SMD-1000H	16.3	4.0	25	25	2.5	7.2	10.8	3.2-5	1.5	1.5	3.9	2-3.2	1.5	0.75	2.3
SMD-1500H	31.3	6.0	63	50	4.0	15	22.5	3.2-5	1.5	1.5	3.9	5-8	2.5	2.2	5.6

ⓐMain current
ⓑMain power cable Dia.
ⓒ1Main power switch
ⓒ2Main power breaker
ⓓReturn heater cable Dia.
ⓔRegen. Heater power
ⓕRegen. Current
ⓖDrying blower relay setting range
ⓗDrying blower cable dia.
ⓘDrying blower power
ⓙDrying blower current
ⓚRegen. blower relay setting range
ⓛRegen. blower cable dia.
ⓜRegen. Blower power
ⓝRegen. Blower current

2.4.2 Main Circuit (SMD-500H~1500H)

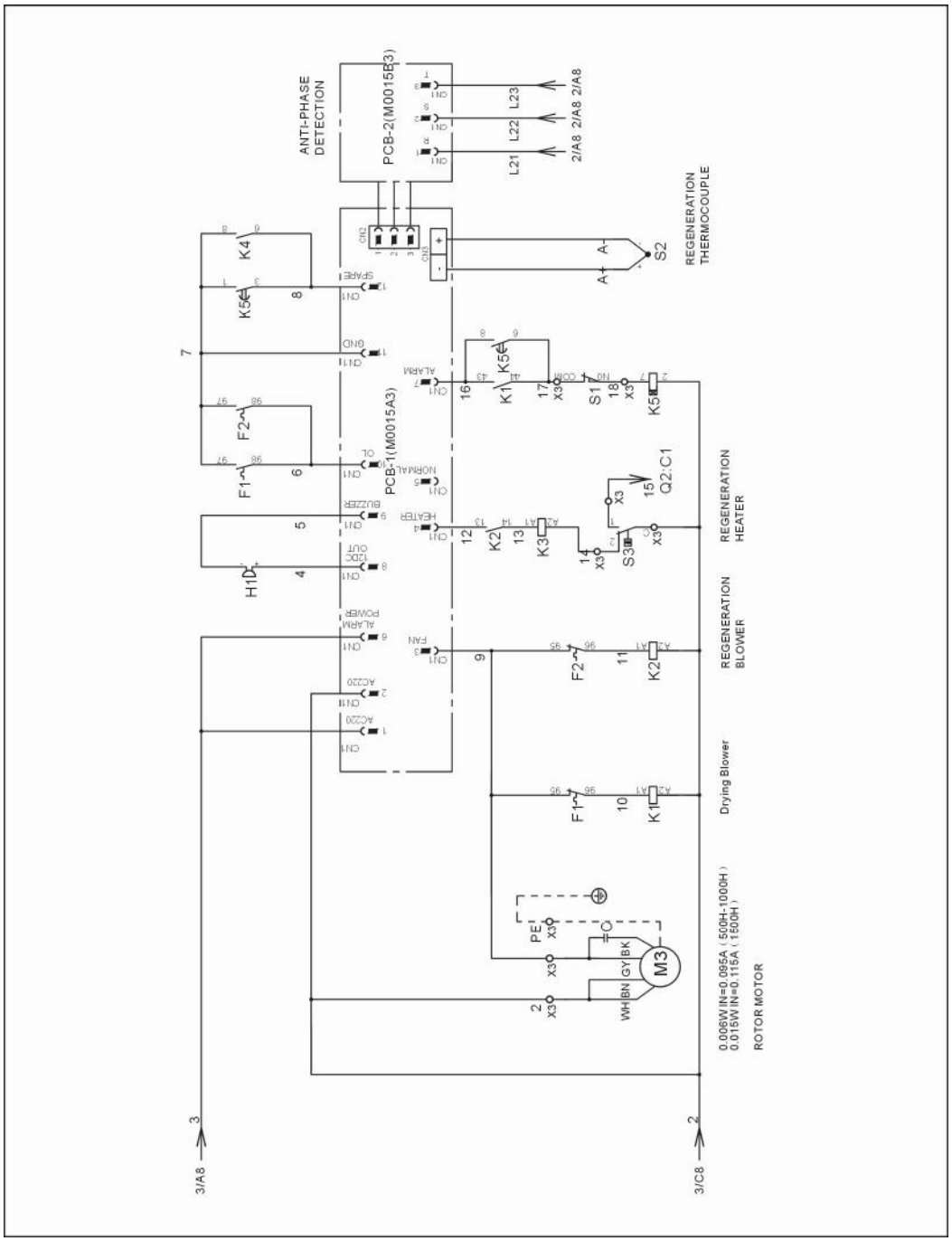


Picture 2-6: Main Circuit 1 (SMD-500H~1500H)



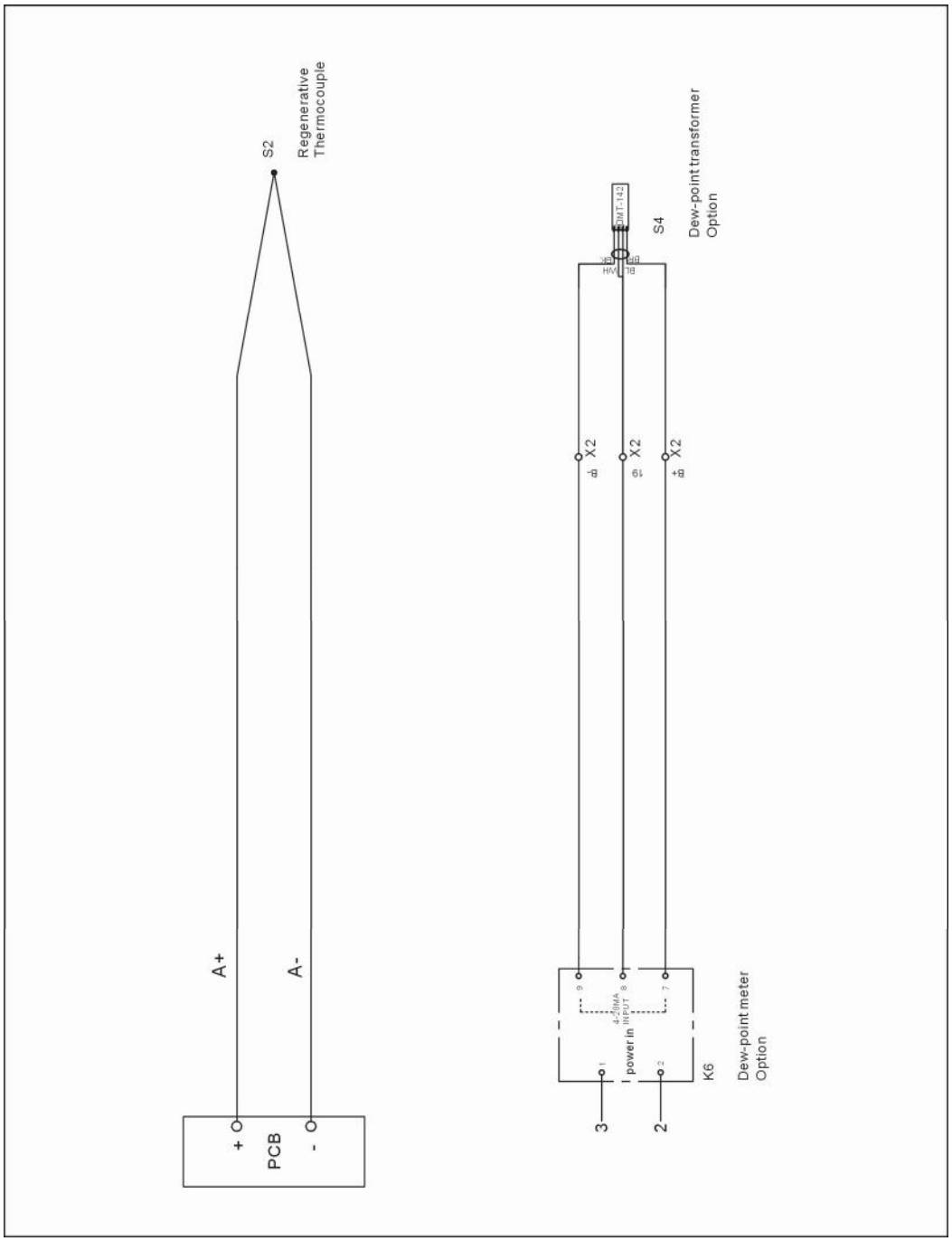
Picture 2-7: Main Circuit 2 (SMD-500H~1500H)

2.4.3 Control Circuit (SMD-500H~1500H)



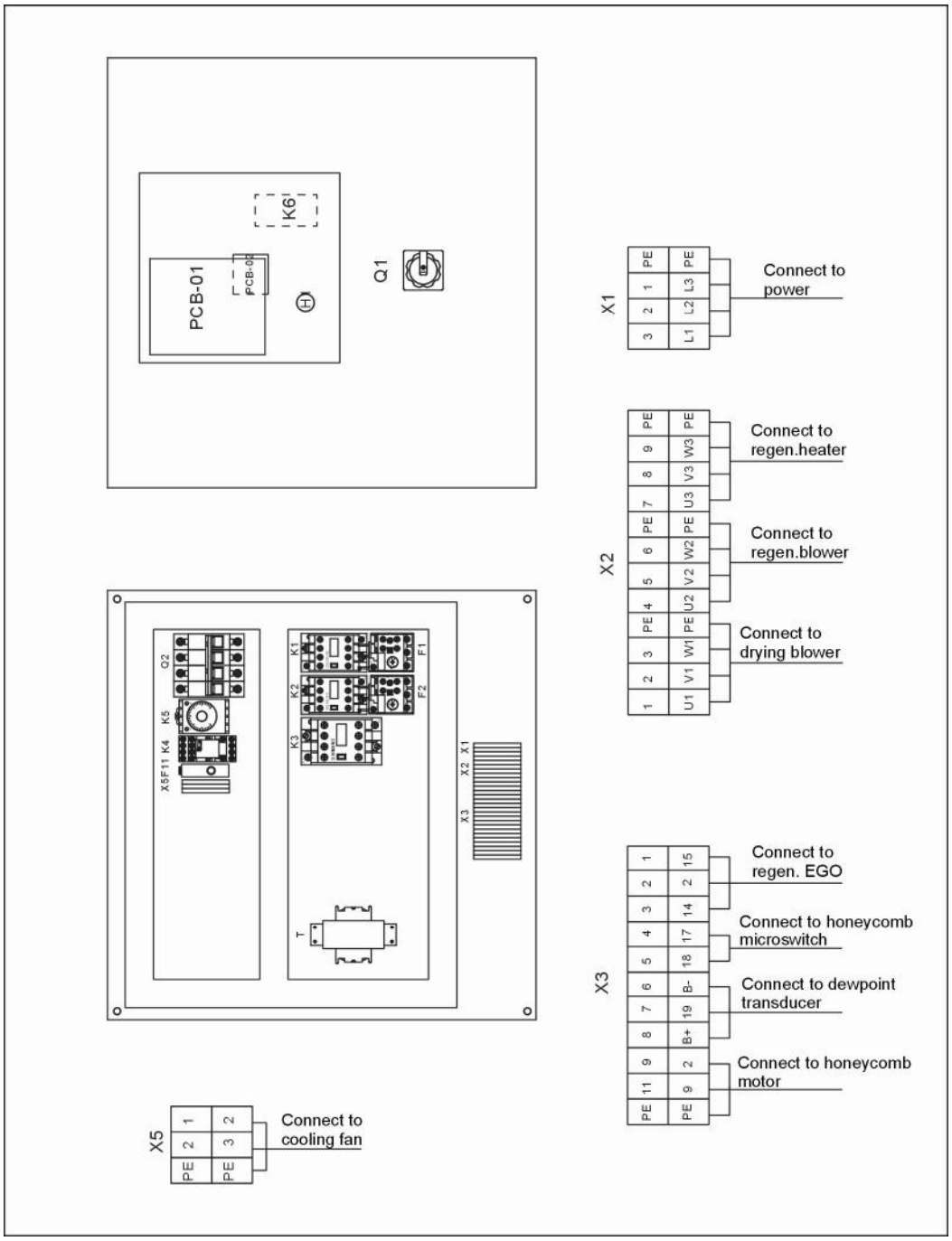
Picture 2-8: Control Circuit (SMD-500H~1500H)

2.4.4 Thermocouple Wiring Diagram (SMD-500H~1500H)



Picture 2-9: Thermocouple Wiring Diagram (SMD-500H~1500H)

2.4.5 Element and Terminal Layout (SMD-500H~1500H)



Picture 2-10: Element and Terminal Layout (SMD-500H~1500H)

2.4.6 Electrical Components List (SMD-500H~1500H)

Table 2-3: Electrical Components List (SMD-500H)

No.	Symbol	Name	Specifications	Part No.
1	Q1	Main switch	16A 690V 3P	YE10200300000
2	Q2	Circuit breaker*	20A 400V 3P	YE40602000100
3	-	Circuit breakers	S9	YE40000900000
4	K1	Contactor*	230V 50/60Hz	YE00301000000
5	K2	Contactor*	230V 50/60Hz	YE00301000000
6	K3	Contactor*	230V 50/60Hz	YE00310000000
7	K4	Middle relay*	230VAC 50/60Hz	YE03270700000
8	K5	Timer	230VAC 50/60Hz	YE86300300000
9	K6	Dew-point meter	100~240VAC 50/60Hz	YE85122000100
10	F1	Overload relay*	2~3.2A	YE01023200000
11	F2	Overload relay*	1~1.6A	YE01011600000
12	F11	Fuse**	2A 250VAC	YE41001000000
13	T	Transformer*	IN=400V OUT=230V 500mA	YE70040000300
14	S1	Micro switch*	10A	YE14511200000
15	S2	Thermocouple	-	BE90300000050
16	S3	Overheat protector*	250V 5(4)A	YE21503000100
17	S4	Dew-point transducer*	-	YE15041200000
18	PCB-01	PCB*	STC43/44	YE80001500000
19	PCB-02	PCB*	SFD-102	YE80010200000
20	FM	FAN*	220-240~50/60Hz 0.14A	YM60121200400
21	H1	Buzzer	24VDC	YE84002700000
22	X1	Terminal board	-	YE61250000000
23	-	Terminal board	-	YE61253500000
24	X2	Terminal board	-	YE61250000000
25	-	Terminal board	-	YE61253500000
26	X3	Terminal board	-	YE61250000000
27	-	Terminal board	-	YE61253500000
28	X4	Terminal board	-	YE61250000000
29	-	Terminal board	-	YE61253500000
30	X5	Terminal board	-	YE61250000000
31	-	Terminal board	-	YE61253500000
32	M1	Drying blower*	400V 50Hz 0.75kW	YM30075000100
33	M2	Regen. blower*	400V 50Hz 0.4kW	BM30020500050
34	M3	Motor*	0.006kW	YM50616400100
35	EH1	Heater**	400V 50Hz 5kW	BH70200400050

* means possible broken parts. ** means easy broken part. and spare backup is suggested. Please confirm the version of manual before placing the purchase order to guarantee that the item number of the spare part is in accordance with the real object.

Table 2-4: Electrical Components List (SMD-1000H)

No.	Symbol	Name	Specifications	Part No.
1	Q1	Main switch	25A 690V 3P	YE10210300000
2	Q2	Circuit breaker*	25A 400V 3P	YE40632500000
3	-	Circuit breakers	S9	YE40000900000
4	K1	Contactor*	230V 50/60Hz	YE00301000000
5	K2	Contactor*	230V 50/60Hz	YE00301000000
6	K3	Contactor*	230V 50/60Hz	YE00320000000
7	K4	Middle relay*	230VAC 50/60Hz	YE03270700000
8	K5	Timer	230VAC 50/60Hz	YE86300300000
9	K6	Dew-point meter	100~240VAC 50/60Hz	YE85122000100
10	F1	Overload relay*	3.2~5A	YE01032500000
11	F2	Overload relay*	2~3.2A	YE01023200000
12	F11	Fuse**	2A 250VAC	YE41001000000
13	T	Transformer*	IN=400V OUT=230V 500mA	YE70040000300
14	S1	Micro switch*	10A	YE14511200000
15	S2	Thermocouple	-	BE90300000050
16	S3	Overheat protector*	250V 5(4)A	YE21503000100
17	S4	Dew-point transducer*	-	YE15041200000
18	PCB-01	PCB*	STC43/44	YE80001500000
19	PCB-02	PCB*	SFD-102	YE80010200000
20	FM	FAN*	220-240~50/60Hz 0.14A	YM60121200400
21	H1	Buzzer	24VDC	YE84002700000
22	X1	Terminal board	-	YE61040000000
23	-	Terminal board	-	YE61043500000
24	X2	Terminal board	-	YE61250000000
25	-	Terminal board	-	YE61253500000
26	X3	Terminal board	-	YE61250000000
27	-	Terminal board	-	YE61253500000
28	X4	Terminal board	-	YE61250000000
29	-	Terminal board	-	YE61253500000
30	X5	Terminal board	-	YE61250000000
31	-	Terminal board	-	YE61253500000
32	M1	Drying blower*	400V 50Hz 1.5kW	BM30152300050
33	M2	Regen. blower*	400V 50Hz 0.75kW	BM30031000150
34	M3	Motor*	0.006kW	YM50715400000
35	EH1	Heater**	400V 50Hz 7.2kW	BH70307200250

* means possible broken parts. ** means easy broken part. and spare backup is suggested. Please confirm the version of manual before placing the purchase order to guarantee that the item number of the spare part is in accordance with the real object.

Table 2-5: Electrical Components List (SMD-1500H)

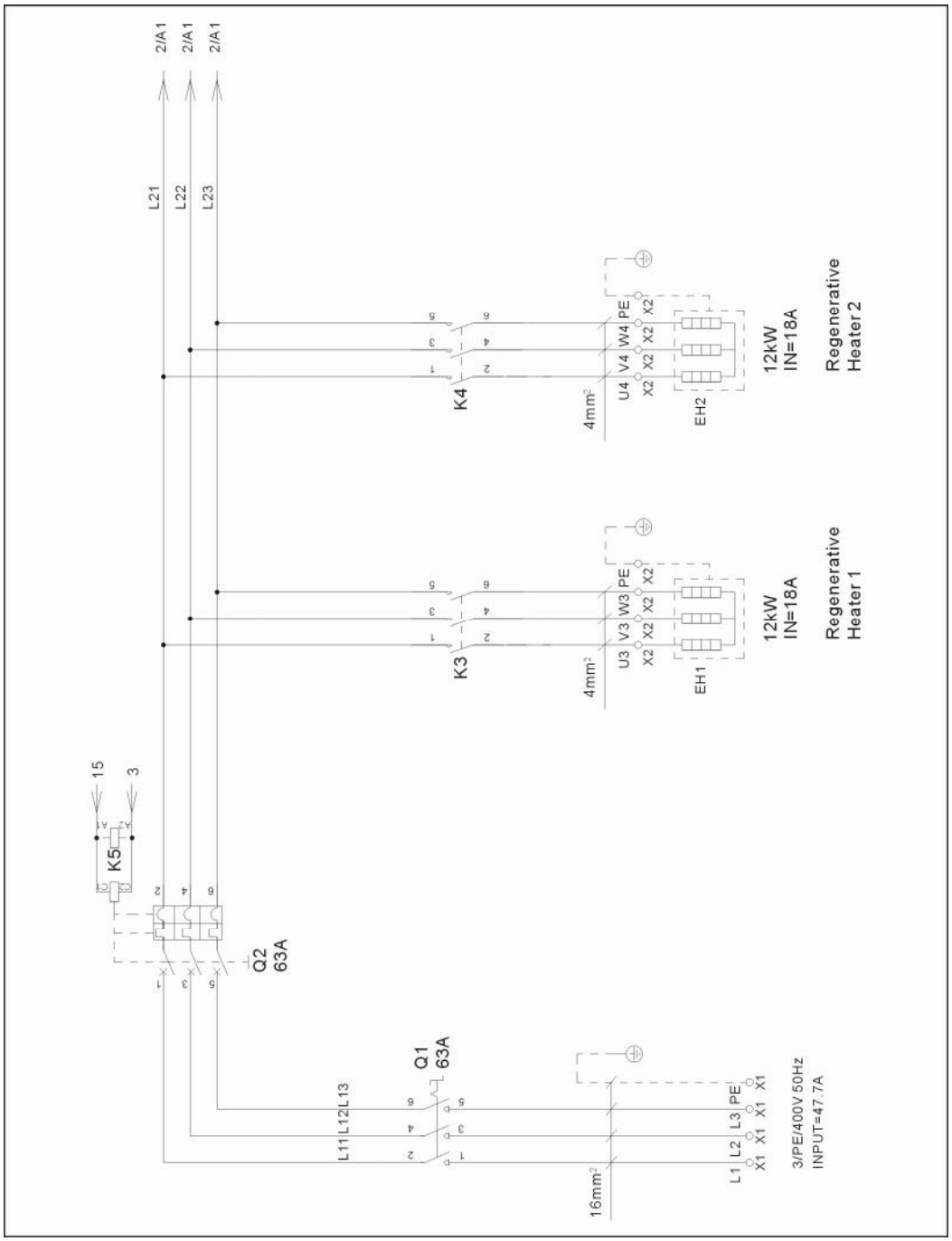
No.	Symbol	Name	Specifications	Part No.
1	Q1	Main switch	63A 690V 3P	YE10250400000
2	Q2	Circuit breaker*	50A 400V 3P	YE40635000000
3	-	Circuit breakers	S9	YE40000900000
4	K1	Contactor*	230V 50/60Hz	YE00301000000
5	K2	Contactor*	230V 50/60Hz	YE00301000000
6	K3	Contactor*	230V 50/60Hz	YE00350000000
7	K4	Middle relay*	230VAC 50/60Hz	YE03270700000
8	K5	Timer	230VAC 50/60Hz	YE86300300000
9	K6	Dew-point meter	100~240VAC 50/60Hz	YE85122000100
10	F1	Overload relay*	3.2~5A	YE01032500000
11	F2	Overload relay*	2~3.2A	YE01023200000
12	F11	Fuse**	2A 250VAC	YE41001000000
13	T	Transformer*	IN=400V OUT=230V 500mA	YE70040000300
14	S1	Micro switch*	10A	YE14511200000
15	S2	Thermocouple	-	BE90300000050
16	S3	Overheat protector*	250V 5(4)A	YE21503000100
17	S4	Dew-point transducer*	-	YE15041200000
18	PCB-01	PCB*	STC43/44	YE80001500000
19	PCB-02	PCB*	SFD-102	YE80010200000
20	FM	FAN*	220-240~50/60Hz 0.14A	YM60121200400
21	H1	Buzzer	24VDC	YE84002700000
22	X1	Terminal board	-	YE61000600300
23	-	Terminal board	-	YE61060000000
24	X2	Terminal board	-	YE61040000000
25	-	Terminal board	-	YE61043500000
26	X3	Terminal board	-	YE61250000000
27	-	Terminal board	-	YE61253500000
28	X4	Terminal board	-	YE61250000000
29	-	Terminal board	-	YE61253500000
30	X5	Terminal board	-	YE61250000000
31	-	Terminal board	-	YE61253500000
32	M1	Drying blower*	400V 50Hz 1.5kW	YM30020000000
33	M2	Regen. blower*	400V 50Hz 2.2kW	BM30224000050
34	M3	Motor*	0.015kW	YM10914000000
35	EH1	Heater**	400V 50Hz 15kW	BH70151500050

* means possible broken parts.

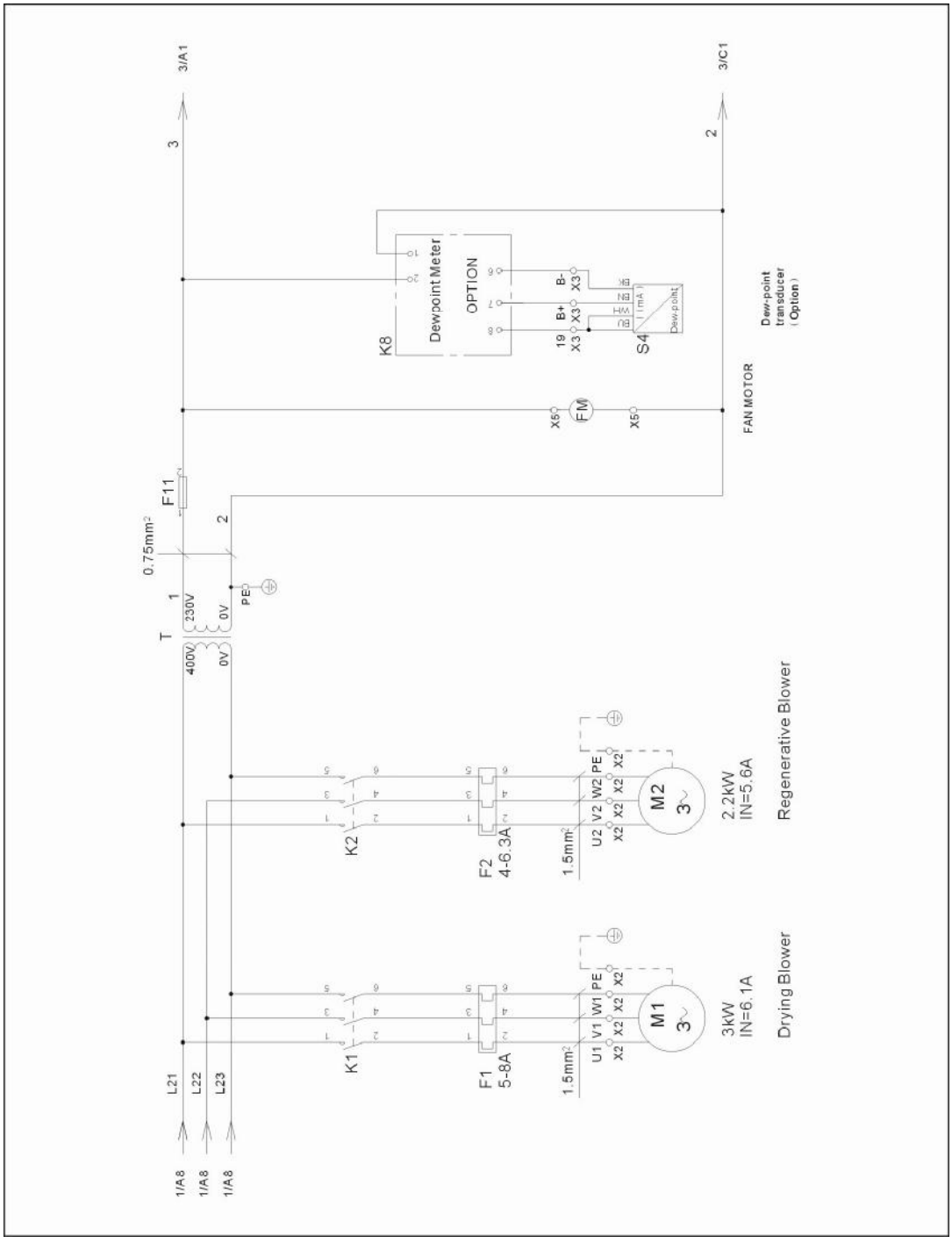
** means easy broken part. and spare backup is suggested.

Please confirm the version of manual before placing the purchase order to guarantee that the item number of the spare part is in accordance with the real object.

2.4.7 Main Circuit (SMD-2000H)

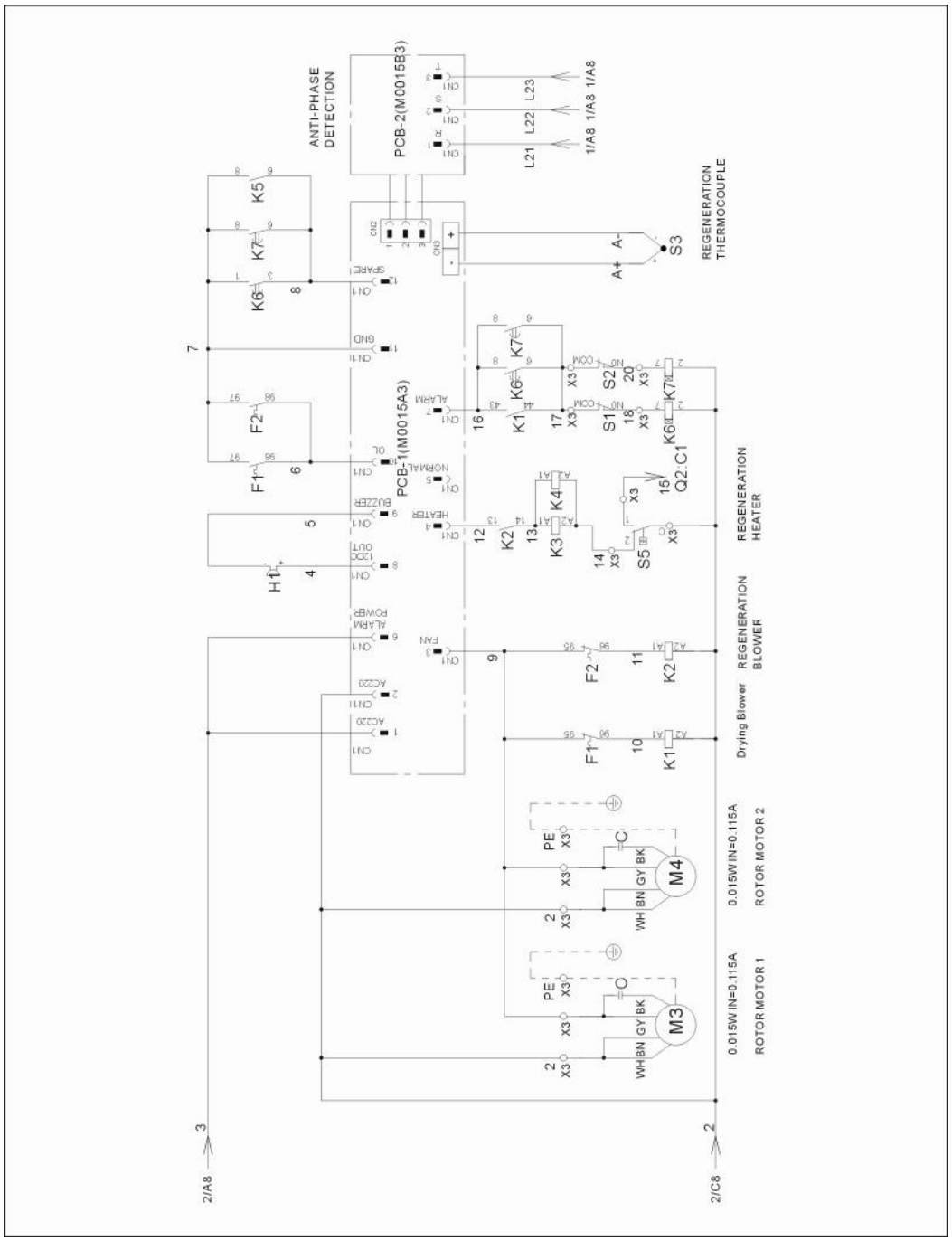


Picture 2-11: Main Circuit 1 (SMD-2000H)



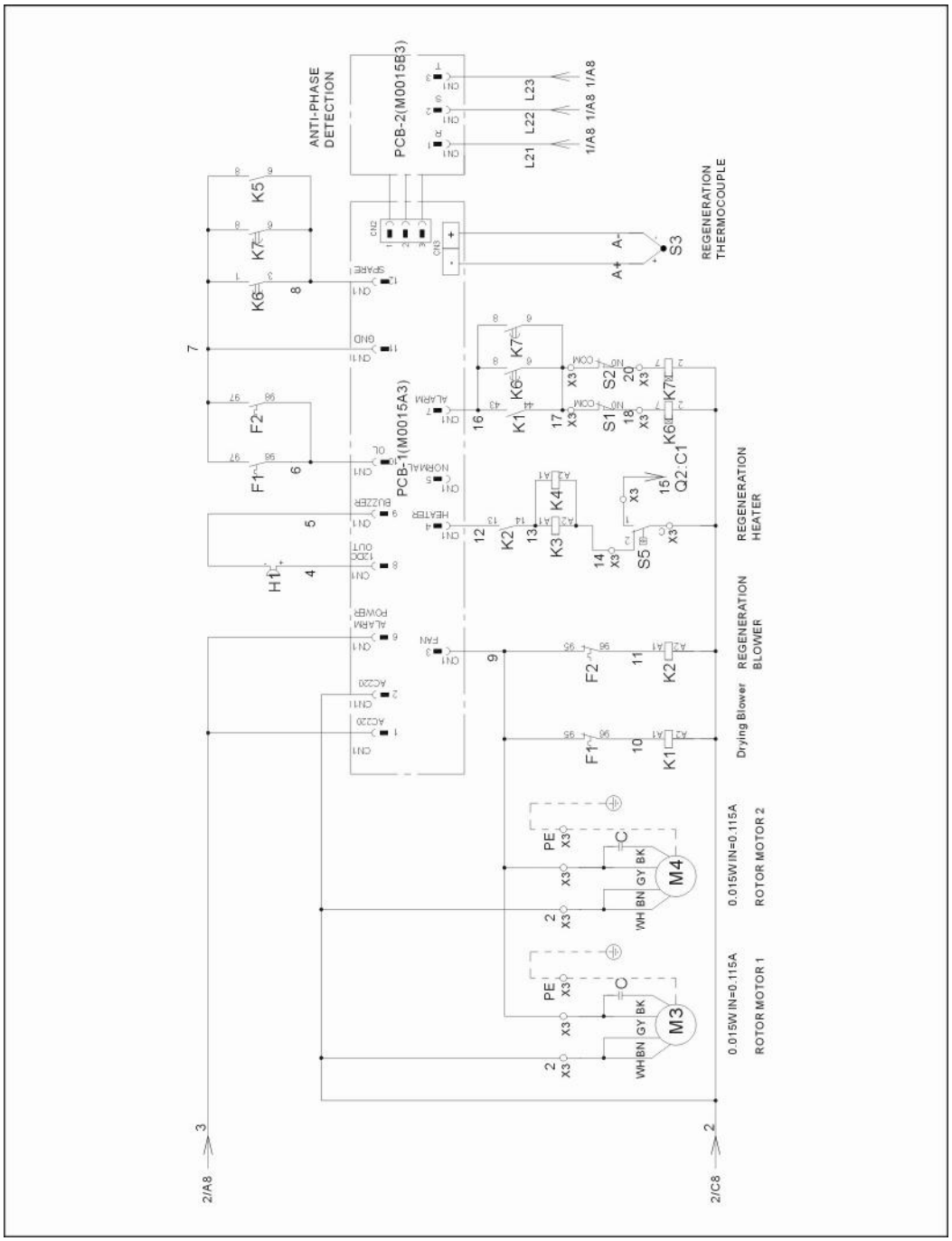
Picture 2-12: Main Circuit 2 (SMD-2000H)

2.4.8 Control Circuit (SMD-2000H)



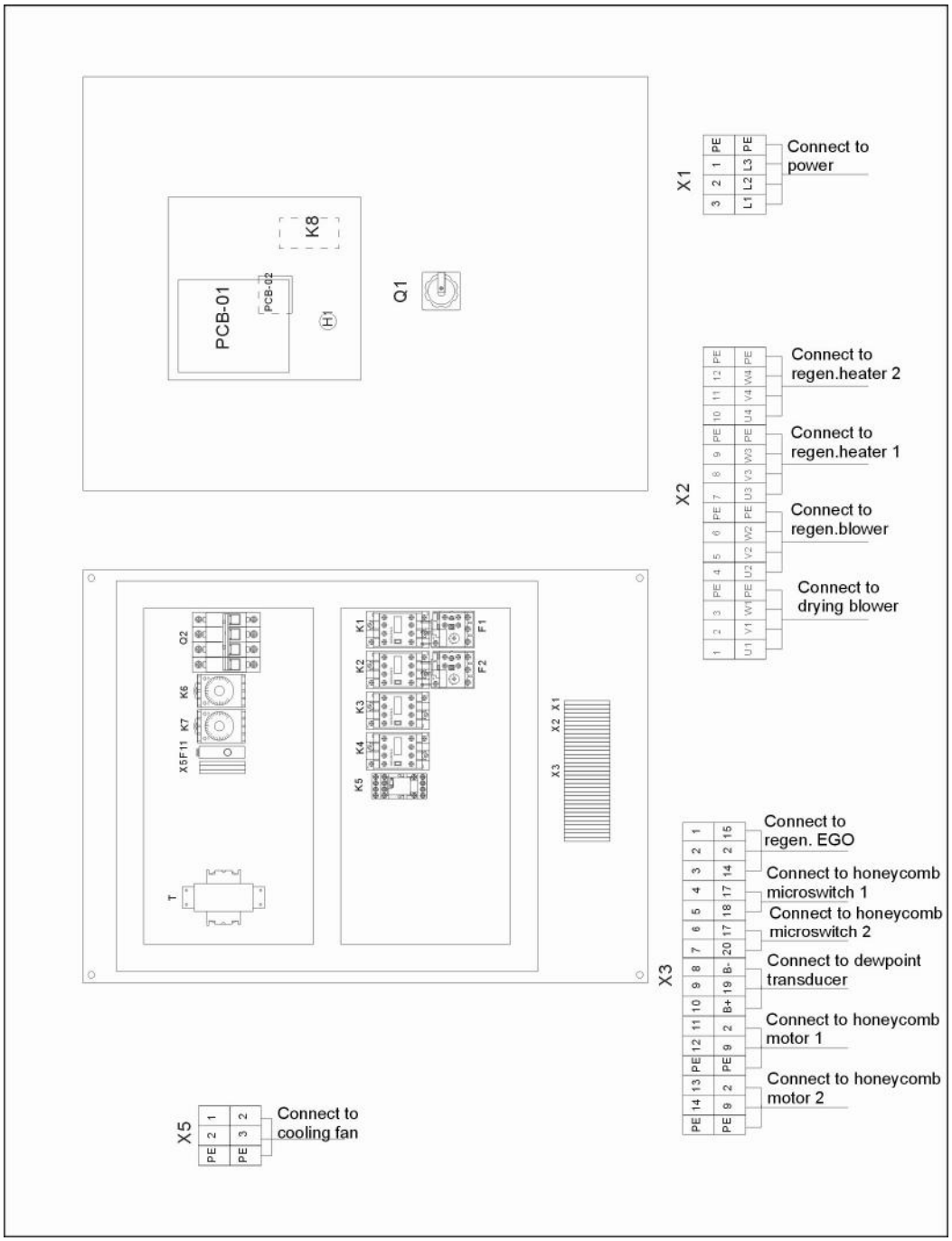
Picture 2-13: Control Circuit (SMD-2000H)

2.4.9 Thermocouple Wiring Diagram (SMD-2000H)



Picture 2-14: Thermocouple Wiring Diagram (SMD-2000H)

2.4.10 Element and Terminal Layout (SMD-2000H)



Picture 2-15: Element and Terminal Layout (SMD-2000H)

2.4.11 Electrical Components List (SMD-2000H)

Table 2-6: Electrical Components List (SMD-2000H)

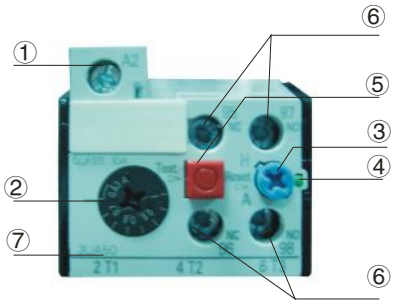
No.	Symbol	Name	Specifications	Part No.
1	Q1	Main switch	63A 690V 3P	YE10250400000
2	Q2	Circuit breaker*	63A 400V 3P	YE40636300000
3	-	Circuit breakers	S9	YE40000900000
4	K1	Contactor*	230V 50/60Hz	YE00301000000
5	K2	Contactor*	230V 50/60Hz	YE00301000000
6	K3	Contactor*	230V 50/60Hz	YE00330000000
7	K4	Middle relay*	230VAC 50/60Hz	YE03270700000
8	K5	Timer	230VAC 50/60Hz	YE86300300000
9	K6	Dew-point meter	100~240VAC 50/60Hz	YE85122000100
10	F1	Overload relay*	5~8A	YE01050800000
11	F2	Overload relay*	4~6.3A	YE01046300100
12	F11	Fuse**	2A 250VAC	YE41001000000
13	T	Transformer*	IN=400V OUT=230V 800mA	YE70040000400
14	S1	Micro switch*	10A	YE14511200000
15	S2	Thermocouple	-	BE90300000050
16	S3	Overheat protector*	250V 5(4)A	YE21503000100
17	S4	Dew-point transducer*	-	YE15041200000
18	PCB-01	PCB*	STC43/44	YE80001500000
19	PCB-02	PCB*	SFD-102	YE80010200000
20	FM	FAN*	220-240~50/60Hz 0.14A	YM60121200400
21	H1	Buzzer	24VDC	YE84002700000
22	X1	Terminal board	-	YE61000600100
23	-	Terminal board	-	YE61000600300
24	X2	Terminal board	-	YE61250000000
25	-	Terminal board	-	YE61253500000
26	-	Terminal board	-	YE61040000000
27	-	Terminal board	-	YE61043500000
28	X3	Terminal board	-	YE61250000000
29	-	Terminal board	-	YE61253500000
30	X4	Terminal board	-	YE61250000000
31	-	Terminal board	-	YE61253500000
32	X5	Terminal board	-	YE61250000000
33	-	Terminal board	-	YE61253500000
34	M1	Drying blower*	400V 50Hz 3kW	YM30230150000
35	M2	Regen. blower*	400V 50Hz 2.2kW	BM30224000050
36	M3	Motor*	0.015kW	YM50715400000
37	EH1	Heater**	400V 50Hz 12kW	BH70202400050

* means possible broken parts. ** means easy broken part. and spare backup is suggested. Please confirm the version of manual before placing the purchase order to guarantee that the item number of the spare part is in accordance with the real object.

2.4.12 Main Electrical Components Description

Overload Relay

At delivery, the overload relay is set for manual reset. (the reset button pointing to H). Manually reset the relay at the tripping of the switch. When motor overload occurs, stop the machine, then check and solve the problem. After that open the door of control box, press down the reset button of overload relay (if you can not press down the reset button, wait for one minute.)



Picture 2-16: Overload Relay

1) Terminal for contact coil A2.
2) Setting current adjusting scale.
3) Reset (blue)

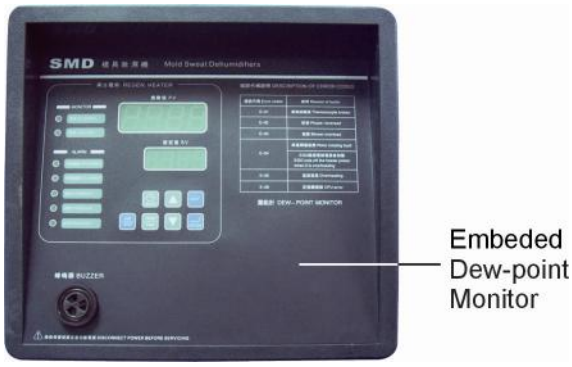
H: manual reset

A: automatic reset

4) Switch position indication (green).
   Tripping of a manual-resetting is indicated by a pin projecting from the front plate.
5) Test button (red).
6) Auxiliary contact terminals shown in 95.96.97.98. NC and NO contacts are shown in position 95.96. and 97.98. respectively.
7) Main circuit connection No. must be correspond with terminal Number of contactor.

2.5 Operation Procedures

2.5.1 Embedded Dew-point Monitor



Picture 2-17: Embedded Dew-point Monitor

2.5.2 Portable Dew-point Monitor

Picture 2-18: Portable Dew-point Monitor

3. Installation Testing

3.1 Attention

General safety regulations:

1) Make sure voltage and frequency of the power source comply with those indicated on the manufacturer nameplate, which is attached to the machine.
2) Power cable and earth connections should conform to your local regulations.
3) Use independent power cable and ON/OFF switch. The cable's size should not smaller than those wired in the electrical requirement of control panel.
4) The power cable connection terminals should be tightened securely.
5) The machine requires a 3-phase 4-wire power source, connect the power lead (L1, L2, L3) to the live wires, and the earth (PE) to the ground.
6) Power supply requirements:
   Main power voltage: ± 5%
   Main power frequency: ± 2%
7) The cooling water temperature is 6℃10℃, the cooling water pressure is 3~5 kgf/cm^2, and the pressure gap the inlet water and the outlet water is 3~5 kgf/cm^2.

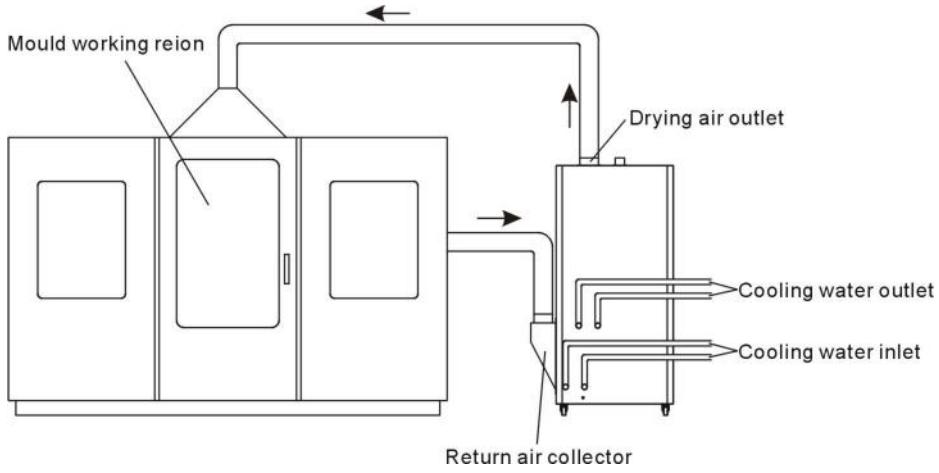
Power Supply

Make sure that the power supply conforms with required specifications before installation. SMD are generally set to be used with 3Φ400V power supply or other specifications if required.

Picture 3-1: Installation

Note! Keep the machine 1m from the combustible distance.

3.2 Installation Diagram



Picture 3-2: Installation Diagram

3.3 Installation

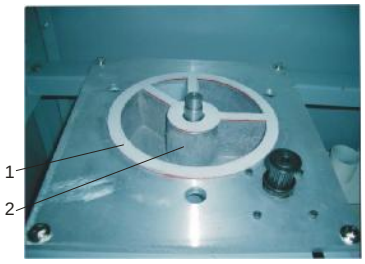
3.3.1 What is Honeycomb-rotor

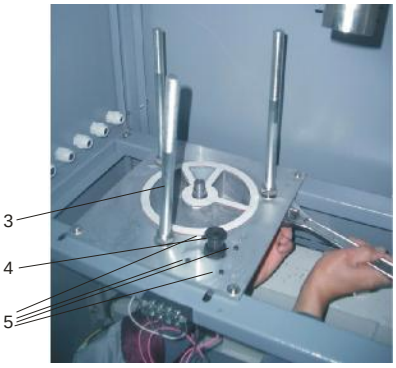
The main body of the honeycomb-rotor is a honeycomb, made by ceramic fibre and organic additives, sintered under high temperature with molecular sieve and silica gel, to be strongly bonded together and form a solid and hard surface. Not like common molecular sieve, which will produce dusts and fines to pollute raw materials when aging or become saturated requiring regular replacement, honeycomb-rotor offer unlimited long life and can be cleaned when it is polluted. The moisture of return air is quick absorbed by numerous tunnels before coming out of the rotor to form low dew-point air. At the same time, regenerating blower takes dry air into the honeycomb-rotor from an opposite direction to regenerate the rotor.

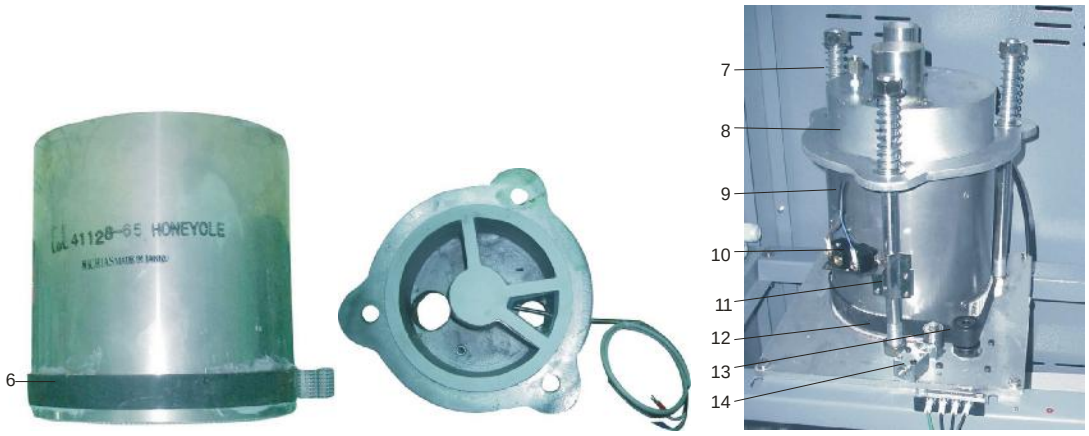
Picture 3-3: What is Honeycomb-rotor

3.3.2 Installation of Honeycomb-rotor

1) The upper and lower lid of honey-comb should install Teflon gasket (Fig. 1).
2) Use 4 screws to fix the rotor base on the machine frame firmly, and then install the shaft accordingly (Fig. 2).
3) Install the gearmotor and transmission gear (Fig. 4).
4) Install and fix the main support screws (Fig. 3).
5) Fit the transmission belt in proper position (Fig. 6).
6) Install the honeycomb-rotor (Fig. 9) and transmission belt (Fig. 12).
7) Fix the rotor top cover (Fig. 8).
8) Fit all springs and tighten the screws (Fig. 7).
9) Install both the transmission belt (Fig. 13) and belt tension regulator (Fig. 14).
10) Install micro-switch and fixed board firmly (Fig. 10).







Picture 3-4: Installation of honeycomb-rotor

3.4 Heater Assemblies

1) Install the heating pipe in the heater.
2) Fix the heater into the housing. (See right picture).

Warning!
Hot surfaces could burn hands. Take care of high temperature!
This label should be stick to the shell of heater.

1

2

Picture 3-5: Heater Assemblies

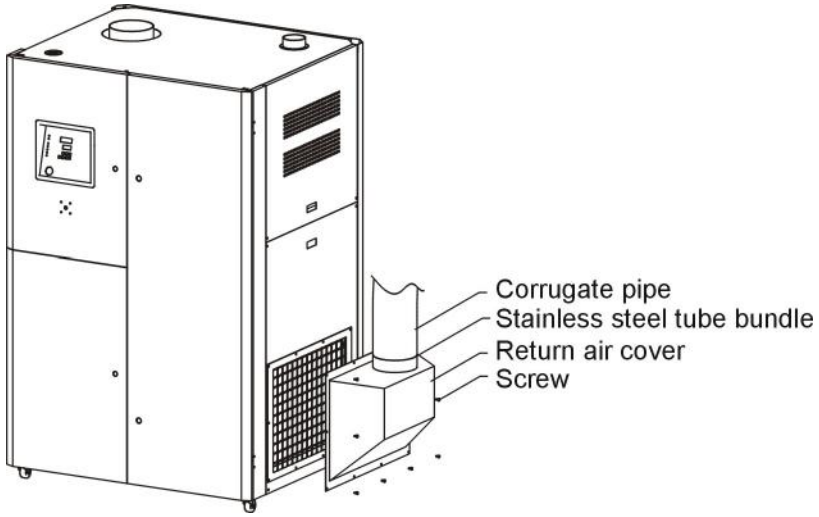
3.4.1 EGO

The EGO value has been setting before out factory, Don't modify it.

Picture 3-6: EGO

3.4.2 Return Air Collector (Optional)

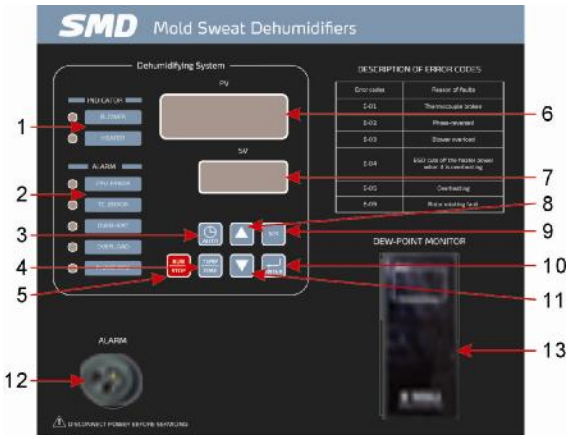
Screw the return air cover to the side plate of the machine, fix one end of the corrugate pipe to the cover with stainless steel tube bundle, and fix the other end to the mould in the injection molding machine.



Picture 3-7: Return Air Collector Assembly Diagram (Optional)

4. Operating

4.1 Control Panel



Picture 4-1: Control Panel

Table 4-1: Control Panel Table

No.	Name	Function description	Remarks
1	Running indicating	Indicates the working status of blower and heater	Green light on indicates working status Green light off indicates stop status
2	Fault indicating	Indicates current alarm message	Red light on indicates fault occurs
3	Time start	Set weekly start or intermittent start/stop	When time has been set, press this key to set time start mode
4	Temp/time shift key	Display alternatively in between temp. And time for temp or time set up	
5	Start/stop key	Control the start and stop of the machine	Press to start at stop status. Press to stop at working status
6	Real value indicated by LED	Display real regen. heater or parameter code	
7	Set value indicated by LED	Display real regen. heater or parameter code	
8	Increase set value	Increase set value	
9	Set key	Enter or exit value setting	
10	Confirm key	Confirm the input of data	
11	Decrease set value	Decrease the set value	
12	Buzzer	Buzzer keeps on when fault exists.	Buzzer only silence after trouble shooting
13	Dew-point	Dew-point display	Display real timely the moisture content within the material

4.2 Panel Operation

1) Open the main switch.

2) Press "RUN/STOP "key to start loading.

4.3 Temperature Setup

1) The setup number will flicker after pressing "SET" key, add or decrease temperature by pressing ▲▼ key.
2) Press "ENTER" key to confirm the input value.

4.4 PID Auto-tuning Setting

1) Press “SET” and the digits flash. At this time press “SET” and ”Enter” meanwhile for 1.5 seconds to enter auto-tuning mode. Then two values of “At” and “Present temperature” will display alternatively in PV and the set temperature value displays in SV till auto-tuning is finished. After that, system goes back to the normal operation directly.
2) If auto-tuning setting could not be finished within 1 hour, the parameters will not be altered and system goes back to normal operation.
3) Pressing “ON/OFF” to go back normal operation amid automatic calculation would not alter the original parameters.

4.5 Intermittent Running Setup

Drying periods(0-ON) ⇄ Stop periods (0-OFF)

1) Press "SET" key to change temp. setup value into time setup value，press "TEMP/TIMER" key to enter into setup mode, at this time "SV/setup value" flickers，"PV/setup value"displays"0-ON".

Picture 4-2: Intermittent running setup 1

2) PV displays "0-ON" to stand for drying periods. "0-OFF" stands for machine

stop time. Press ▲▼ key to add or decrease time value of "SV/setup value". Each press of ▲▼ can add or decrease 15 mins set time.

3) Press "ENTER" to confirm the input time value and enter into "0-OFF" time setup items, then repeat step 2.

Picture 4-3: Intermittent running setup 2

Note: If set 0-ON as 04:00, 0-OFF as 05:00, which means drying periods is 4 hours stop time is 5 hours，then working for 4 hours and being stopped for 5 hours and repeat this so long.

4) Cancel intermittent running by entering 00.00 at "0-ON" or "0-OFF" press "ENTER" to confirm input value after time setup and enter into time setup items from "1-ON" "week-ON".

Picture 4-4: Intermittent running setup 3

4.6 Weekly Time Start Setup

1) Press ▲▼ key to add or decrease the time value in "SV/setup value" of "1-ON". Press "ENTER" to confirm the input value and comes into the time setup items of "1-OFF" "MON-OFF".

Picture 4-5: Weekly Time Start Setup 1

2) Press ▲▼ key to add or decrease the time value in "SV/setup value" of "1-OFF" . Press "ENTER" to confirm the input value and comes into the time setup items of "2-ON""TUE-ON".

Picture 4-6: Weekly Time Start Setup 2

3) Do the same setup again and again to setup the ON/OFF time from Monday to Sunday.

Picture 4-7: Weekly Time Start Setup 3

4) Press "SET" key to back to normal status, after finish all the setup.

5) Setup all the "ON" to 00:00 if it is not for time start/stop.

Note:

1. F-20 functions as an password lock，hold on "SET" till the "PV" displays F-20.

2. Press▲▼ key and only after input 0021 in the SV，can you press "ENTER" to come into F-03 and other settings，so F-20 functions as an coded lock for entering into next parameters setup, which prevents the modification from unprofessionals.

Picture 4-8：Weekly Time Start Setup 4

3. F-03 stands for the selection of temperature unit. Press ▲▼ to shift between ℃/℉ then press “ENTER” to confirm.

4. F-04 is data lockup function, press ▲▼ key to shift between OFF / LOCK，LOCK is for locking up information，not able to input or change any data: OFF is for lockup cancellation.

Picture 4-9：Weekly Time Start Setup 5

5. F-05 stands for the function of temperature protection. Alarm will be launched if actual temperature were equal to or higher than the addition of setting temperature value and setting value. This temperature range is between 0 and 50, and default value is 15.

4.7 Present Time Modification

1) Repeat the above steps until PV displays "TIME" to stand for present time.

2) Press ▲▼ key to add or decrease time.

3) Press "ENTER" key and PV displays "DAY" to stand for week days.

4) Press ▲▼ key to add or decrease days.

5) Press "SET" key to back to normal status after finish all the setup.

4.8 Weekly Time Start

1) Activate the weekly time start after finish the time setup and the present time setup.

2) Press "AUTO" key at working or stop status to preset the time start/stop, the "PV" will display the time and temp. alternatively.

3) Press "AUTO" again if want to cancel that weekly time setup.

4.9 Lock Setup Way

1) Press "SET" key down and release it till "PV" displays F-20.

2) Press ▲▼ key to make "SV" to 0021, then press "ENTER" key，the "PV" will display F-04.

3) F-04 are for LOCK function selection，press ▲▼ key to select LOCK or OFF.

4) Press ENTER or "SET" key after setup.

5) If select LOCK，the "SV" will display "LOCK" when pressing "SET" key, which means the parameters have been setup and not accessible to any change.

4.10 The second level of Advanced Setting

1) Enter the first level of advanced setting and press “SET” and ”Enter” meanwhile for 3 seconds till F-06 displays in PV..

2) Press ▲▼ to set SV into 0003 and press “Enter”, at this time F-06 displays in PV.

3) Now pressing ▲▼ can alter value, press “Enter” to input after confirming then jump to F-07.

4) If you want to leave the function setting, just press “SET”.

1. F-06 stands for the passwords of second level.

2. F-07 stands for proportional band of heating side (P); it is a preset value before delivery.

3. F-08 stands for integration time of heating side (I); it is a preset value before delivery.

4. F-09 stands for differential time of heating side (D); it is a preset value before delivery.

5. F-10 stands for switch cycle of heating side; its preset value is 15 sec.

6. F-16 stands for power deliver delay time of heater, it is adjustable, the unit is Sec..

7. F-17 stands for blower power-off delay time, it is adjustable, the unit is Sec..

8. F-18 stands for the protection of maximum temperature. Its setting range is 140~250.

9. F-19 stands for microswitch timeset of honeycomb rotor. “OFF” functions as shut-off and “ON” functions as open. The setting range is 0~9999 with the unit is Sec..

4.11 Wrong Codes Remark

Table 4-2: Wrong Codes Remark

Wrong codes	Remark
E-01	Thermocouple break
E-02	Inverse phase
E-03	Overload input
E-04	Overheat input for drying EGO
E-05	Maximum temperature protection
E-07	Thermal protection temperature
E-08	Memory errors
E-09	Rotor Microswitch input
E-10	Overheat input for regenerative EGO
E-11	Reversed-phase of thermocoupel
E-12	Auto-tuning errors

4.12 Installation for Dewpoint Monitor

1) Use blade to cut off the film and outline the reserved hole site on the SCD control panel.

Picture 4-10: Hole Site

2) Check if there are complete parts for dewpoint monitor including:

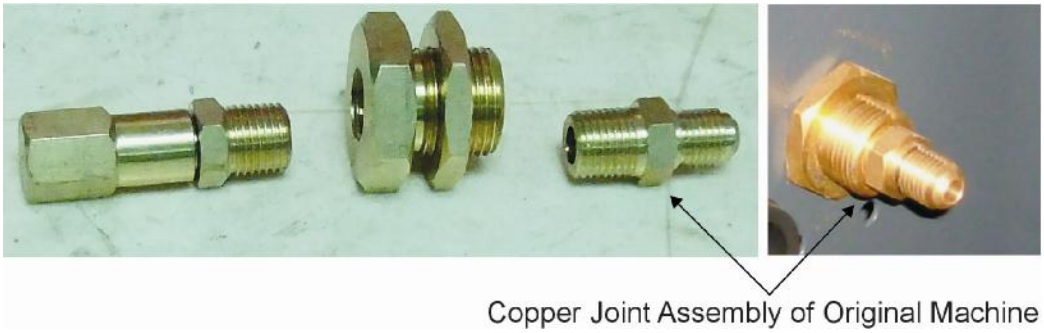
Dew-point monitor

Dew-point transmitter assembly (dew-point detector, detection cable, washer and installation guide)

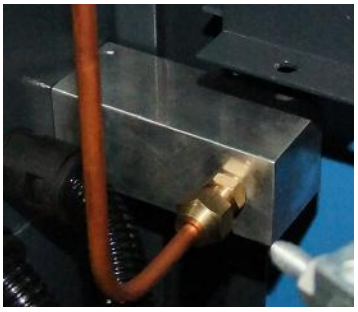
Copper joint, installation seat for dew-point monitor

Picture 4-11: Parts of Dew-point Monitor

3) Dismantle the copper joint of original machine and replace it with installation seat for dew-point monitor. Then dismantle straight form bushing from copper joint of original machine and install it on the installation seat, and connect copper pipe with straight form bushing.



Picture 4-12: Copper Joint Assembly of Original Machine



Picture 4-13: Installation Seat

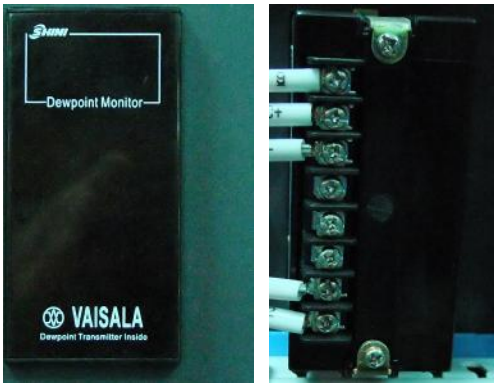
4) Install dew-point transmitter assembly to copper joint.

Picture 4-14: Installation for Transmitter

5) Connect signal wire. Particular shape of signal wire joint would avoid the wrong insert and connection.

Picture 4-15: Connection of Signal Wire

6) Match dew-point monitor with holes on the panel and fix the installation.



Picture 4-16: Installation for Dew-point Monitor

7) Connect signal wires of the transmitter and power lines of dew-point monitor

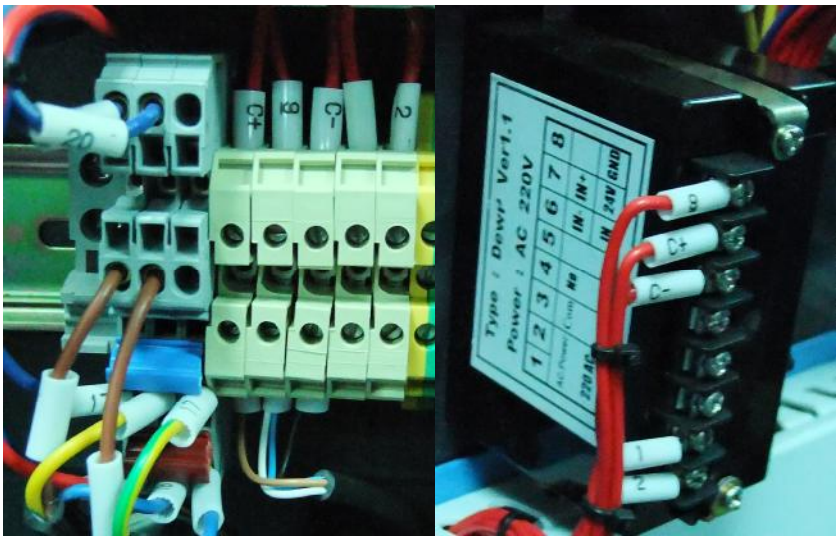
with the according terminals.

Connet contact No.1 and No.2 with power, supply is 220VAC.

Contact No.3, No.4 and No.5 are idle.

Connect contact No.6, No.7 and No.8 with the signal of transmitter. (C- Connects contact No.6, C+ connects contact No.7 and wire No.9 connects contact No.8.

Transmitter conection (White and blue wire connect wire No9, black wire connect C- and gray wire connect C+)



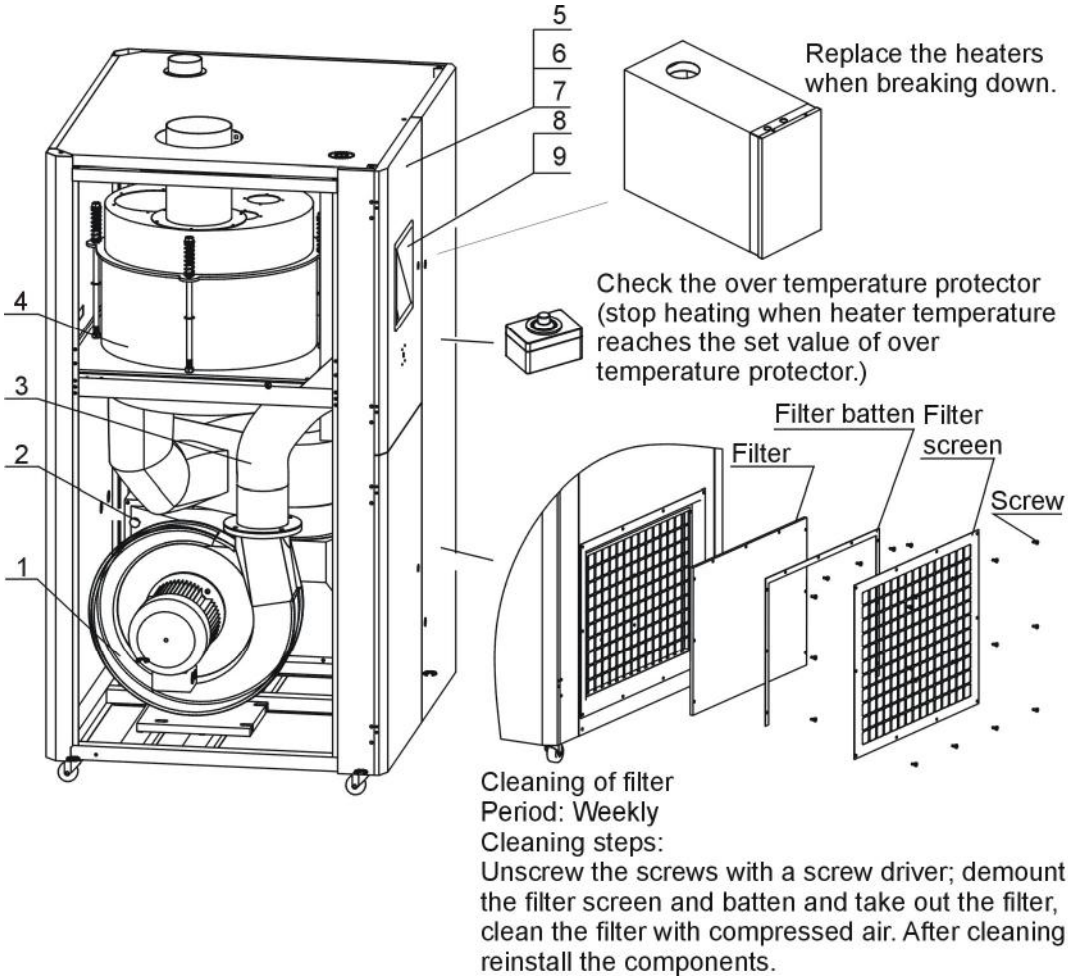
Picture 4-17: Connection of Dew-point Monitor

5. Trouble-shooting

Symptom	Possible causes	Actions taken
Main power indicator does not shine after turn on main power switch.	1. Does not connect through power supply. 2. Main power switch problems. 3. Problems of electrical wires. 4. Fuse of control circuit melted. 5. Transformer problems.	1. Connect through power supply. 2. Replace main power switch. 3. Check electrical wires. 4. Check electrical wires and replace fuse. 5. Replace the transformer.
E-02 is shown at PV, buzzer sounds and machine stops.	1. Voltage of power supply is too low. 2. Phase shortage. 3. Phase frequency mistakes.	1. Check the power supply. 2. Check the power supply. 3. Exchange the connection of two of the electrical wires.
Overload alarm of blower is lit up.	1. Abnormal fluctuation of voltage. 2. Blower being stalled. 3. Failures of blower motor. 4. Setting current of overload relay (F1) is too low.	1. Check power supply. 2. Check the blower. 3. Check the motor. Set the current of overload relay 1.1 times of rated current of the motor. Referring to 10-4 for more information of overload relay. Reset overload relay: press down the blue button on the relay after 1 minutes.
Pipe heater overheat alarm is lit up, and the buzzer sounds and machine stops working.	1. Temperature setting mistakes. 2. Temp. measuring mistakes. 3. Overheat relay of pipe heater failures.	1. Correctly set the parameters of temp. Controller. 2. Replace thermocouple. 3. Replace the contactor.
E-04 is shown at PV, buzzer sounds and machine stops	1. Heater contactor seized up. 2. EGO parameter setting wrong. 3. EGO fault. 4. Circuit fault.	1. Check or replace the heater contactor. 2. Set EGO parameter correctly. 3. Replace EGO. 4. Check circuit.
E-09 is shown at PV, buzzer sounds and machine stops	1. Problems of rotor motor. 2. Rotor belt broken. 3. Problems of electrical circuit. 4. Microswitch of the rotor failures. 5. Parameter mistakes of timer for control of rotor.	1. Check or replace the motor. 2. Replace the belt. 3. Check the electrical circuit. 4. Replace. 5. Reset the timer. (Set time should be bigger than rotor rotating time in one turn and plus 1 minute.)
Abnormal temp. fluctuations.	1. Too short of time since start of the machine. 2. Improper parameters for temp. controller.	1. Wait for a while. 2. Check the parameters of temp. Controller.

Symptom	Possible causes	Actions taken
Air temp. can not rise up.	1. Temp. Setting is too high. 2. Contactor of heater is bad. 3. Pipe heater is damaged. 3. Problems of thermocouple. 5. Parameter of temp. controller is set to STOP. 6. Temp. controller output problems.	1. Set heater temp. under 180℃. 2. Replace contactor. 3. Replace pipe heater. 4. Replace thermocouple. 5. Set temp. controller under working mode. 6. Replace or repair temp. controller.
Breaker tripping off when connect with power supply.	1. Short circuits of main circuit. 2. Short circuit of transformer. 3. Problems of breaker.	1. Check the circuit. 2. Replace the breaker. 3. Replace the breaker.
Circuit breaker trips right after system switch on.	1. Short circuit of pipe heater. 2. Problems of the breaker.	1. Check the circuit. 2. Replace the breaker.

6. Maintenance and Repair



1. Clean the blower
   a. Blow off the dust inside and outside the blower. Period: Monthly.
   b. Replace the bearing, grease seal and muffler according to the operating environment.
   c. Replace the blades, shell and metal mesh according to the operating environment.
2. Clean the cooler. Period: Semiyearly.
3. Check whether the air pipeline. Period: Weekly.
4. The maintenance and repair of honeycomb
   a. Make sure the gear motor and the synchromesh gear have no damage.
   b. Clean the honeycomb. Period: Semiyearly.

5. Check whether the contactor is normal. Period: Weekly.
6. Replace the PC board. Period: every 3 years.
7. Replace the no fuse switch. Period: when damage occurs.
8. Check the accuracy of the temperature controller. Period: Daily.
9. Check whether the dew point is normal. (when dew-point monitor is installed on the machine) Period: Daily.

Honeycomb Rotor cleaning steps:

1) Use a vacuum-cleaner with brush to suck up the dust on rotor surface.
2) Blow off the dust in the rotor channels with compressed air.
3) If there is dirt sticking to the channel walls inside the rotor, cleaning steps are as follows:

a. Saturate the rotor by blowing humid air (higher than 60%RH) through the rotor without having regeneration circuit on. This can be done by just turning the regeneration heater off and still have the process blower running if process air has high humidity. If the process air is too dry try to put a humidifier in the air stream. Do this for one hour.
b. According to the character of the dirt, sink the rotor into water with cleaning agent in it (PH value 3~2 liquid is applied to silica gel, PH value 7~10 applied to molecular valve). Greasy dirt should be put into a detergent solution with xylene. 15 minutes cleaning is suggested.
c. Take the rotor out of the liquid and let it rest with the channels vertically for 5 minutes so the liquid can run out.
d. Blow off the residual liquid in the channels with compressed air.
e. Put the rotor back into the dehumidifier and run the unit with regeneration circuit (the regeneration temperature between 50℃ and 60℃) on for at least one hour.

Note!

1. Note that in the dry air and wet air outlets, there will be high concentrations liquid out for some time. If a solvent has been used, there will be a residual smell for several days.

2. For some dirt which is greasy and sticky in the rotor, 100% elimination is impossible. The only one thing you can do is to replace the rotor for the cleaned rotor performance can only be recovered partly.

Note!

Please note that some dirt, like oil mist or other types of sticky mist, is almost impossible to clean out effectively so the rotor may not be cleaned effectively and has to be replaced. This may be happened if it is polluted by exhaust gas of machines drived by diesel oil. After cleaning, the dehumidifying capacity of the rotor may be as good as before, but usually it would be affected. If you need special service for cleaning the rotor, feel free to contact us.

The useful life of the key parts of the product

Table 6-1: The useful life of the key parts of the product

Name of the parts	Useful life
Blower	Above 5 years
Regen. heater	Above 1 year
Contactor	Above 100,000 act

6.1 Maintenance Schedule

6.1.1 General Information of the Machine

Model _____ SN _____ Manufacture date _____

Voltage_____Φ_____V Frequency _____ Hz Power _____ kW

6.1.2 Installation & Inspection

☐Check if the air pipe are tightly connected.

☐Check if the material clearance door tightly closed.

☐Check if the air pipes are correctly connected.

Electrical Installation

☐Voltage _____ V _____ Hz

☐Fuse melt current: 1 Phase _____A 3 Phases _____ A

☐Check phase sequence of the power supply.

☐Check rotating direction of regenerating motor.

6.1.3 Daily Checking

☐Check the switch of the machine.
☐Check auto start-up of the machine.
☐Check the temperature controller.
☐Clean the filter.
☐Check whether overheat protection is normal.
☐Check whether dew-point is normal.
☐Check whether cooling water circulation and Y-type fitter are normal[1].

6.1.4 Weekly Checking

☐Check all the electric wires.
☐Check loose electric connections.
☐Check and clean compressed air filter and regulator.
☐Check magnetic valve.
☐Check motor overload relay and phase-reversed prevention function.
☐Check whether air pipe is shed, leaked and loose.

6.1.5 Monthly Checking

☐Check if the belt is loose or not.

- ☐ Check gear box working conditions.
- ☐ Check if there are leakages in the honeycomb.

6.1.6 Half-yearly Checking

- ☐ Check if hot air pipe is broken or not.
- ☐ Check dehumidifier heater.
- ☐ Check regulation blower/material conveying blower/fans.
- ☐ Check whether honey-comb rotor belt is damaged.
- ☐ Clean the cooler.

6.1.7 Yearly Checking

- ☐ Check whether the contactor is normal [2].

6.1.8 3 year Checking

- ☐ PC board renewal.
- ☐ No fuse breaker renewal.

Note: 1. Y-type filter has the function of filling water cooling protection effect, be sure the waterway are clear to avoid cooling failure.

2. Manufacturer laboratory data for AC contactor is two million times in life. we suggest service life for one million four hundred thousand times, if work eight hours per day, recommended replacing frequency is 1.5 years, if work day and night, replacement is suggested to be done every six months.