

SDL-U Series

Drying Loader

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Version: Ver.C (English)



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1. General Description



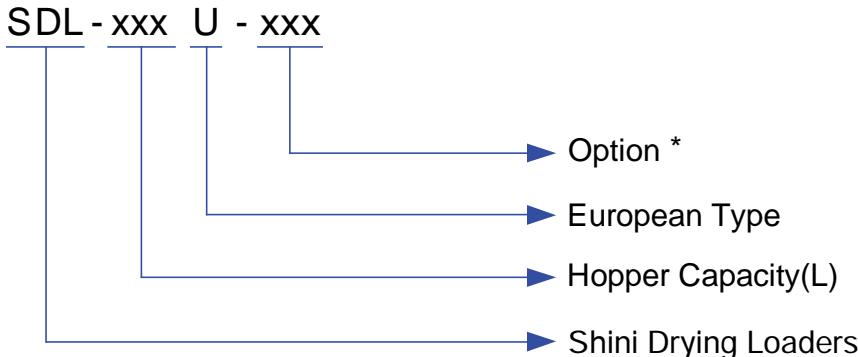
Read this manual carefully before operation to prevent damage of the machine or personal injuries.

SDL-U series of drying loader combine conventional hot air drying and two-stage conveying functions into a compact unit. It is particularly suitable for using with the big tonnage moulding machines when height restriction is concerned at the workshop. The SDL-U series has a unique function of two-stage conveying that can transport both raw material to its own drying hopper and dried material to the moulding machine.



Model: SDL-80U

1.1 Coding Principle



Note: *

P=For Polished Hopper Inside CE=CE Conformity

HD=Heatless Dehumidifying

1.2 Feature

- SDL-U integrates autoloading and drying into one unit, while SDL-U-HD integrates dehumidifying, drying and autoloading into one unit.
- Adopts microprocessor and P.I.D. control system to accurately control drying temperature.
- Occupy a small place, making movement easily and replacing units conveniently. .
- Hoppers are made of stainless steel to avoid contamination.
- Full functional alarming system can immediately show faults.
- Closed-loop conveying device eliminates the possibility of moisture reabsorption during dried material conveying.
- Hot air recycling device is equipped as a standard, featuring energy saving, no exhaust of hot air and dust, and environmental protection.
- Standard shut-off suction box ensures no residual material after each loading process.
- European type heat insulated hopper ensures no heat loss and no material pollution.
- 7-day start/stop timer is standard equipment, which can be customized.

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

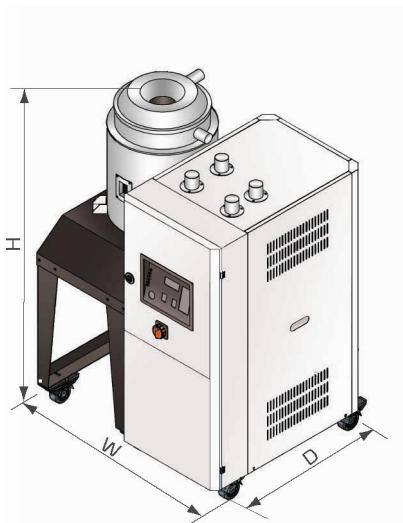
Model	SDL-	20U	40U	80U	120U	160U	230U	300U	450U	600U	750U	900U	1200U
Ver.		B	B	B	B	B	A	A	A	B	B	C	C
Process Blower (W)(50 / 60Hz)		50/ 58	120/ 145	120/ 145	120/ 145	120/ 145	120/ 145	180/ 215	180/ 215	550/ 660	550/ 660	550/ 660	1100/ 1320
Conveying Blower (kW)(50 / 60Hz)		1.5/ 1.8	3.75/ 4.7	3.75/ 4.7									
Process Heater (kW)		2.2	3	3.9	3.9	6	6	12	12	18	18	18	24
Air Inlet Dia. (inch)		2	2	2.5	2.5	3	3	3	3	4	4	4	4
Air Outlet Dia. (inch)		1.5	1.5	2	2	2.5	2.5	2.5	2.5	3	3	4	4
Conveying Hose Dia.(inch)		1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2	2
Drying Hopper Capacity(L)		20	40	80	120	160	230	300	450	600	750	900	1200
SHR-U-E Hopper (liter)		3	3	6	6	6	12	12	12	12	12	24	24
SHR-U Hopper (liter)		3	3	6	6	6	12	12	12	12	12	24	24
Dimension (mm)	W	1035	1035	1035	1035	1400	1400	1400	1400	1960	1960	1960	1960
	D	850	850	850	850	1000	1000	1000	1000	1450	1450	1450	1450
	(D1)	950	950	950	950	1180	1180	1180	1180	1450	1450	1450	1450
	H	1200	1300	1550	1800	1880	2160	2020	2420	2450	2720	2610	3030
Weight (kg)		110	120	130	195	215	240	310	350	435	500	550	600

Note: 1) For Heatless Dehumidifying Compact Dryers, model denotes "HD".

We reserve the right to change specifications without prior notice.

- 2) For hopper inside polished one, model denotes "z".
- 3) 4~6 bar compressed air supply.
- 4) Power supply: 3Φ, 230 / 400 / 460 / 575V, 50 / 60Hz.

1.3.2 Outline Drawing

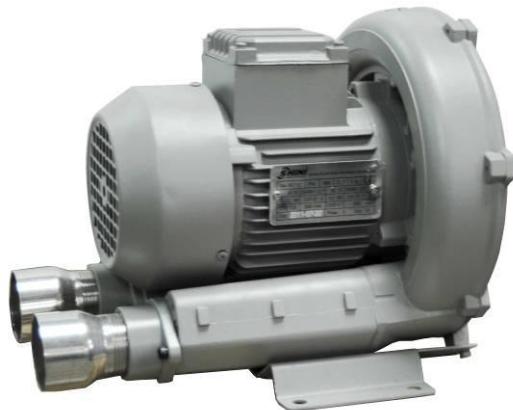


Picture 1-1: Outline Drawing

1.4 Safety Regulations

1.4.1 The Attentions for Using the Blower

- 1) The blower cover will be heated up during operation. Keep hands away from 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

1.4.2 Safety Signs and Labels



Danger!

High Voltage!

It is attached to the control box.



Attention!

This mark reminds you to be more careful.



Warning!

High temperature surface may burn hands!

It is attached on the cover of pipe heater.



Attention!

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



Attention!

To prevent over-temperature alarm from causing machine shutdown, don't randomly adjust EGO setting temp.

1.4.3 Transportation and Storage of the Machine

Transportation

- 1) SDL-U series are packed in crates or plywood cases with wooden pallet at the bottom, suitable for quick positioning by fork lift.
- 2) After unpacked, castors equipped on the machine 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°C to +55°C for long distance transportation and for a short distance, it can be transported with temperature under +70°C.

Storage

- 1) SDL-U series should be stored indoors with temperature kept from 5°C to 40°C 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°C 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, CO₂ 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:

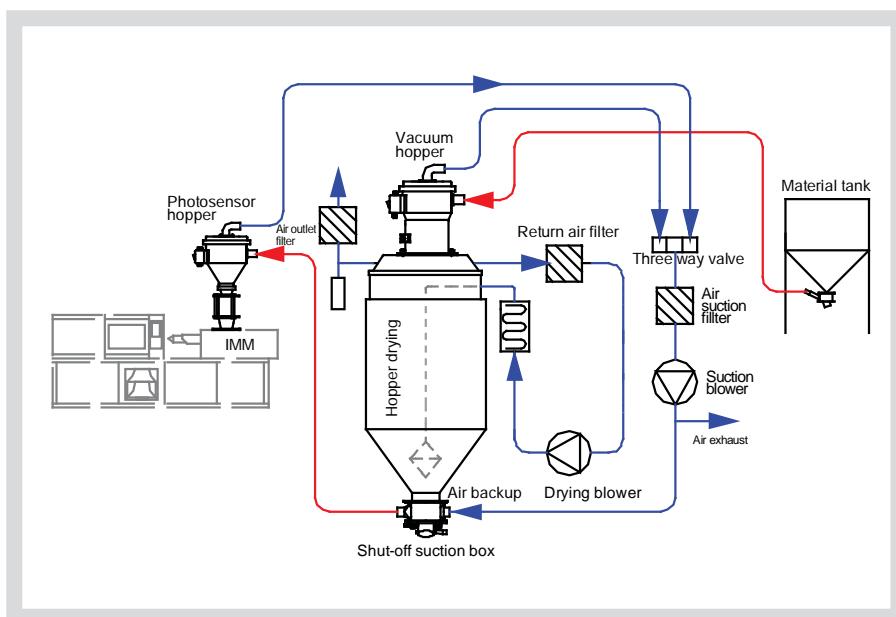
1. Any careless or man-made installations, operation and maintenances upon machines without referring to the Manual prior to machine using.
2. Any incidents beyond human reasonable controls, which include man-made vicious or deliberate damages or abnormal power, and machine faults caused by irresistible 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.

2. Structure Characteristics and Working Principle

2.1 Working Principle

Drying: based on the principle of water high temperature gasification, moisture of material would be blown away by high pressure air from blower after being high temperature gasified. A part of air with moisture discharges through filter of moisture outlet; most part of air are recyclable after being filtered through return air pipe.

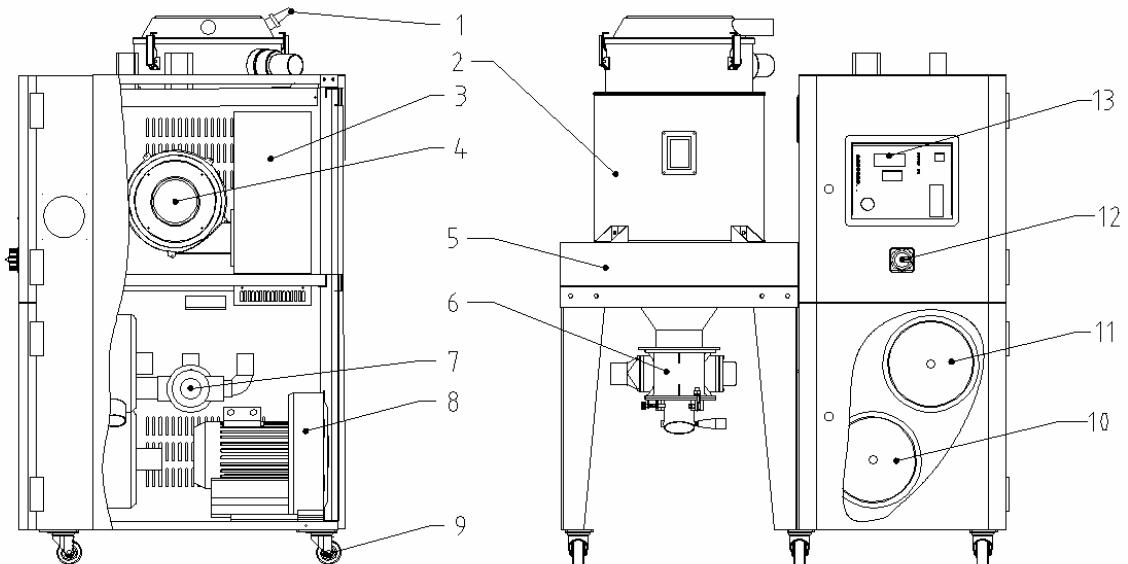
Conveying: suction force of high pressure blower makes a vacuum inside hopper also produces differential pressure between hopper and outer space. With the common force of differential pressure and continuous suction, materials and air mixture will be sucked into hopper. Due to the filter block of hopper, materials will be accumulated in hopper and the air is expelled from air outlet. Double-stage conveying is mainly accomplished by shifting three way valve of suction machine to control suction return circuit.



Picture 2-1: Working Principle

2.2 Drawing and Parts List

2.2.1 System structure

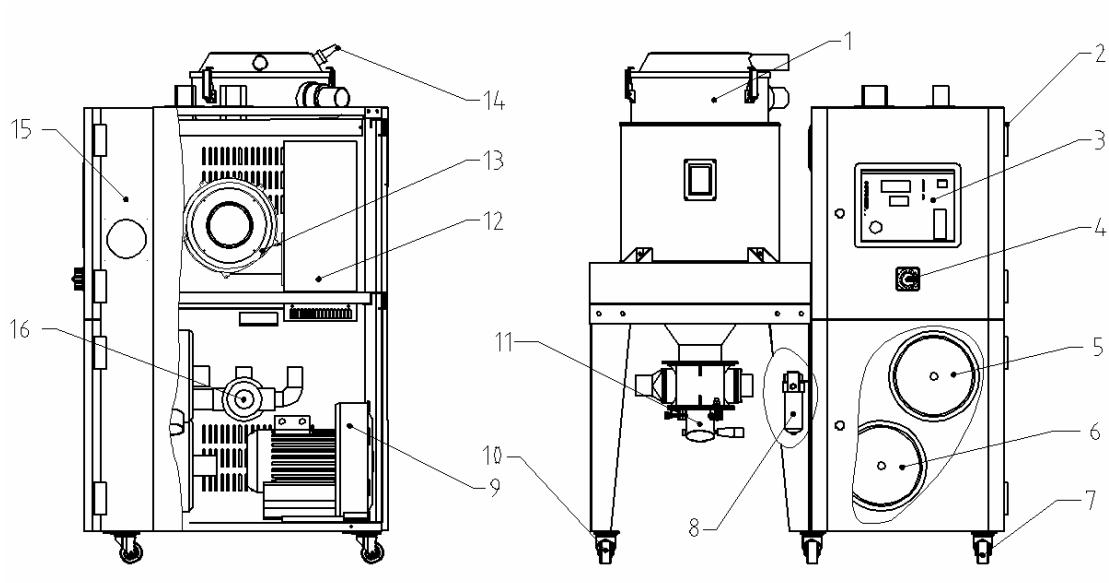


Names of Parts:

- | | | | |
|---------------------|---------------------|-------------------|----------------------|
| 1. Insulated hopper | 2. Heating box | 3. Process blower | 4. Conveying blower |
| 5. Castor | 6. Conveying filter | 7. Process filter | 8. Main power switch |
| 9. Material line | 10. Control panel | | |

Picture 2-2: System structure

2.2.2 Assembly Drawing



Remarks: Please refer to material list 2.2.3 for specific explanation of the Arabic numbers in parts drawing.

Picture 2-3: Assembly Drawing

2.2.3 Parts List

Table 2-1: Parts List (SDL-20U~120U)

No.	Name	Part No.			
		SDL-20U	SDL-40U	SDL-80U	SDL-120U
1	Insulated hopper	BY10002000150	BY10004000150	BY10008000150	BY10012000250
2	Door hinge	YW06203100200	YW06203100200	YW06203100200	YW06203100200
3	Plastic panel	YR40000400400	YR40000400400	YR40000400400	YR40000400400
4	Main power switch	YE10200300000	YE10200300000	YE10200300000	YE10200300000
5	Filter	YR50708000100	YR50708000100	YR50708000100	YR50708000100
6	Filter	YR50708000100	YR50708000100	YR50708000100	YR50708000100
7	3" castor	YW03000300000	YW03000300000	YW03000300000	YW03000300000
8	Filter & pressure regulating valve*	YE30200020000	YE30200020000	YE30200020000	YE30200020000
9	Conveying blower*	BM30042000050	BM30042000050	BM30042000050	BM30042000050
10	3" castor	YW03000300200	YW03000300200	YW03000300200	YW03000300200
11	Shut-off valve suction box	BY10203800050	BY10203800050	BY10203800050	BY10203800050
12	Pipe heater**	BH70202200050	BH70400300350	BH70803900250	BH70123900150
13	Drying blower*	BM40001500850	BM40025300850	BM40338000850	BM40338000850
14	Copper silencer	YW80000400300	YW80000400300	YW80000400300	YW80000400300
15	Control box	BH35002000050	BH35004000050	BH35008000050	BH35012000050
16	Three-way valve	BY20001500050	BY20001500050	BY20001500050	BY20001500050

* 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 2-2: Parts List (SDL-160U~450U)

No.	Name	Part No.			
		SDL-160U	SDL-230U	SDL-300U	SDL-450U
1	Insulated hopper	BY10016000150	BY10023000050	BY10030000550	BY10045000050
2	Door hinge	YW06203100200	YW06203100200	YW06203100200	YW06203100200
3	Plastic panel	YR40000400400	YR40000400400	YR40000400400	YR40000400400
4	Main power switch	YE10200300000	YE10200300000	YE10200300000	YE10200300000
5	Filter	YR50203000000	YR50203000000	YR50203000000	YR50203000000
6	Filter	YR50708000100	YR50708000100	YR50708000100	YR50181100000
7	3" castor	YW03000300000	YW03000300000	YW03000300000	YW03000300000
8	Filter & pressure regulating valve*	YE30200020000	YE30200020000	YE30200020000	YE30200020000
9	Conveying blower*	BM30042000050	BM30042000050	BM30042000050	BM30042000050
10	3" castor	YW03000300200	YW03000300200	YW03000300200	YW03000300200
11	Shut-off valve suction box	BY10163800250	BY10163800250	BY10163800250	BY10163800250
12	Pipe heater**	BH70160600250	BH70230600250	BH70301200150	BH70451200250
13	Drying blower*	BM40000450850	BM40000450850	BM40538000850	BM40538000850
14	Copper silencer	YW80000400300	YW80000400300	YW80000400300	YW80000400300
15	Control box	BH35016000050	BH35023000050	BH35030000050	BH35030000050
16	Three-way valve	BY20001500050	BY20001500050	BY20001500050	BY20001500050

* 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 2-3: Parts List (SDL-600U~1200U)

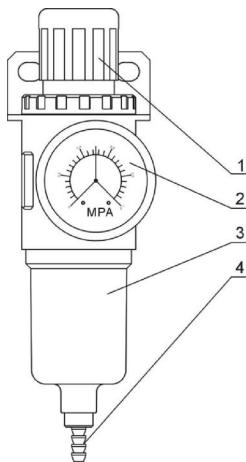
No.	Name	Part No.			
		SDL-600U	SDL-750U	SDL-900U	SDL-1200U
1	Insulated hopper	BY10016000150	BY10075000050	BY10090000550	BY10120000150
2	Door hinge	YW06203100200	YW06203100200	YW06203100200	YW06203100200
3	Plastic panel	YR40000400400	YR40000400400	YR40000400400	YR40000400400
4	Main power switch	YE10200300000	YE10200300000	YE10200300000	YE10200300000
5	Filter	YR50241400000	YR50241400000	YR50241400000	YR50241400000
6	Filter	YR50181100000	YR50181100000	YR50181100000	YR50181100000
7	3" castor	YW03000400000	YW03000400000	YW03000400000	YW03000400000
8	Filter & pressure regulating valve*	YE30200020000	YE30200020000	YE30200020000	YE30200020000
9	Conveying blower*	BM30042000050	BM30042000050	BM30055000050	BM30055000050
10	3" castor	YW03000400200	YW03000400200	YW03000400200	YW03000400200
11	Shut-off valve suction box	BY10163800250	BY10163800250	BY10163800250	BY10163800250
12	Pipe heater**	BH70601800250	BH70601800250	BH70601800250	BH70122400050
13	Drying blower*	BM30055000250	BM30055000150	BM30055000150	BM30113230050
14	Copper silencer	YW80000400300	YW80000400300	YW80000400300	YW80000400300
15	Control box	BH35060000050	BH35060000050	BH35090000050	BH35120000050
16	Three-way valve	BY20001500050	BY20001500050	BY20002000150	BY20002000150

* 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.

2.2.4 Filter & Pressure Regulating Valve Drawing

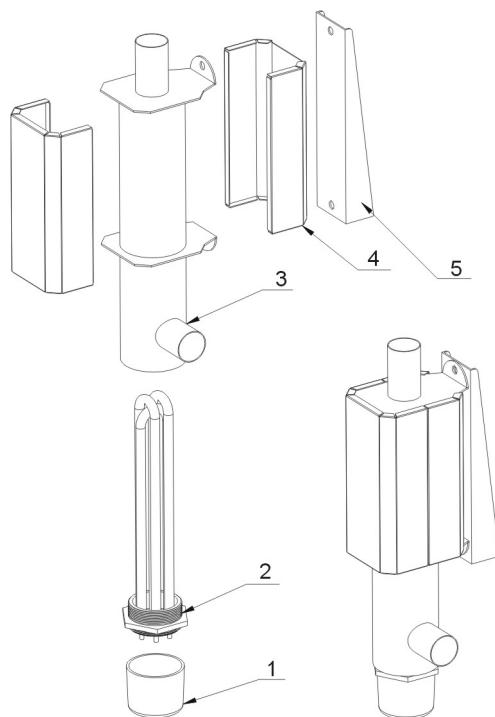


Parts list:

1. Pressure adjusting knob 2. Pressure gauge 3. Cup 4. Water outlet

Picture 2-4: Filter & Pressure Regulating Valve Drawing

2.2.5 Heater



Parts Name:

- | | | |
|-------------------------|----------------|-------------------|
| 1. Electric wood cover | 2. Pipe heater | 3. Heating bucket |
| 4. Outer covering board | 5. Fixer | |

Picture 2-5: Heater

2.3 Electrical Diagram(400V)

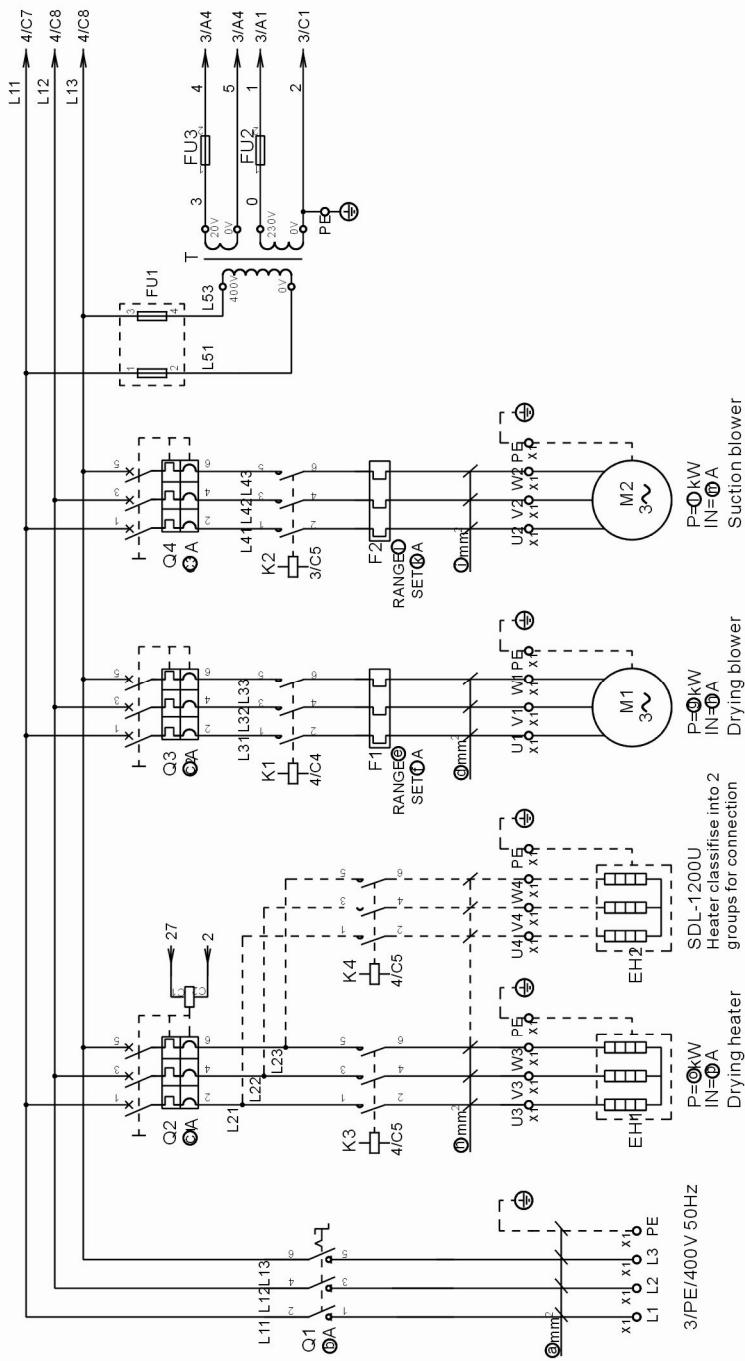
2.3.1 Electrical Circuit(400V)

Table 2-4: Electrical Circuit(400V)

MODE \ SYMBOL	(a)	(b)	(c)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	
SDL-20U	2.5	16	6	6	16	1.5	0.18-0.25	0.19	0.05	0.15	2.5	3.5-5	3.8	1.5	2.2	2.5	2.2	3.3
SDL-40U	2.5	16	6	6	16	1.5	0.28-0.4	0.38	0.12	0.33	2.5	3.5-5	3.8	1.5	2.2	2.5	3.0	4.5
SDL-80U	2.5	16	10	6	16	1.5	0.28-0.4	0.38	0.12	0.33	2.5	3.5-5	3.8	1.5	2.2	2.5	3.9	6.0
SDL-120U	2.5	16	10	6	16	1.5	0.28-0.4	0.38	0.12	0.33	2.5	3.5-5	3.8	1.5	2.2	2.5	3.9	6.0
SDL-160U	2.5	16	16	6	16	1.5	0.28-0.4	0.38	0.12	0.33	2.5	3.5-5	3.8	1.5	2.2	2.5	6.0	9.0
SDL-230U	2.5	25	16	6	16	1.5	0.28-0.4	0.38	0.12	0.33	2.5	3.5-5	3.8	1.5	3.7	2.5	6.0	9.0
SDL-300U	6.0	32	25	6	16	1.5	0.45-0.63	0.54	0.18	0.48	2.5	3.5-5	3.8	1.5	3.7	4.0	12.0	18.0
SDL-450U	6.0	32	25	6	16	1.5	0.45-0.63	0.54	0.18	0.48	2.5	3.5-5	3.8	1.5	3.7	4.0	12.0	18.0
SDL-600U	6.0	40	32	6	16	1.5	1.1-1.6	1.4	0.55	1.3	2.5	3.5-5	3.8	1.5	3.7	6.0	18.0	27.0
SDL-750U	6.0	40	32	6	16	1.5	1.1-1.6	1.4	0.55	1.3	2.5	3.5-5	3.8	1.5	3.7	6.0	18.0	27.0
SDL-900U	10.0	60	50	6	16	1.5	1.1-1.6	1.4	0.55	1.3	2.5	5.5-8	6.0	2.4	5.9	6.0	18.0	27.0
SDL-1200U	10.0	60	50	10	16	1.5	2.2-3.2	2.5	1.1	2.4	2.5	5.5-8	6.0	2.4	5.9	4.0	12.0*2 18.0x2	

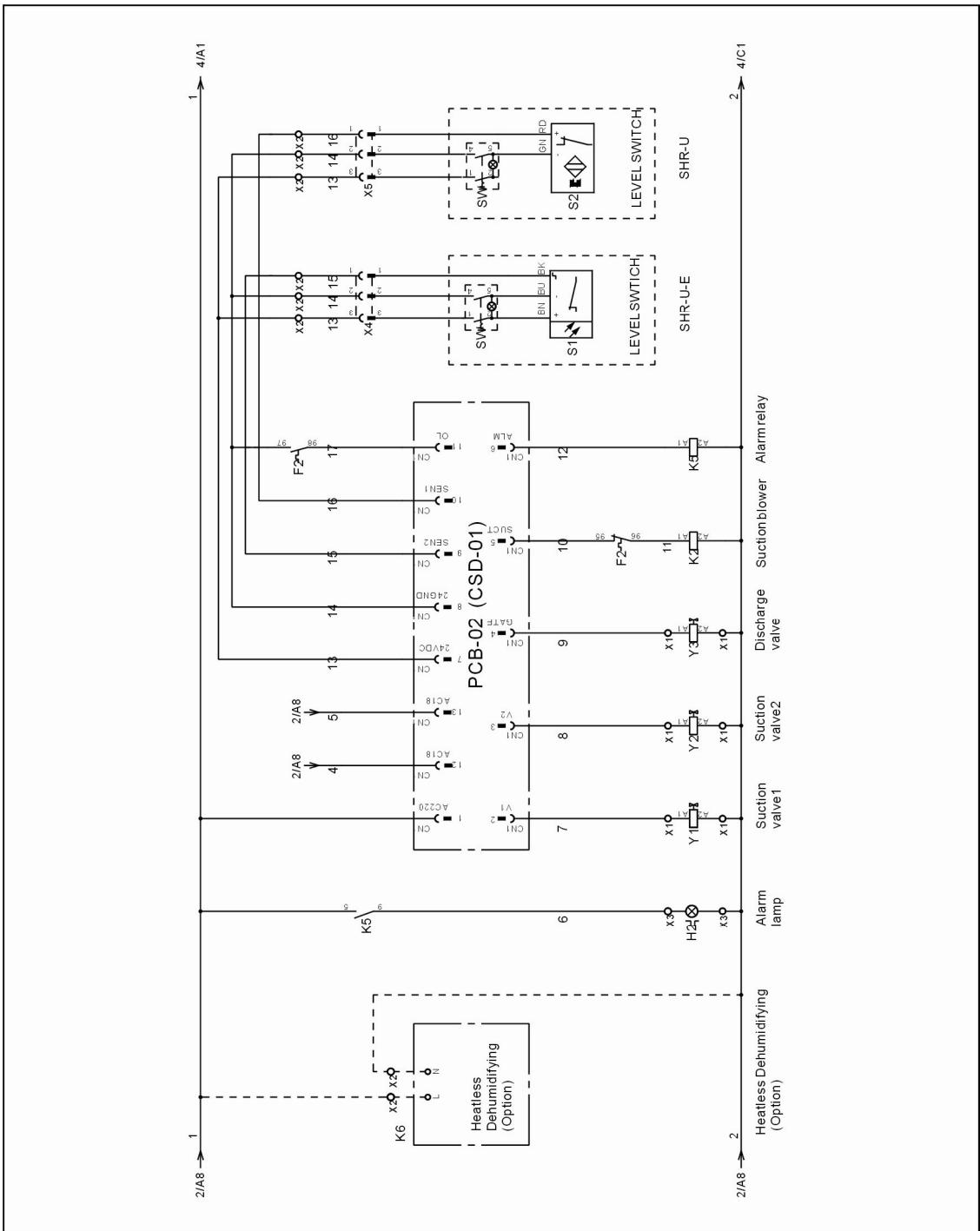
- (a) Mainpower cable dia.
- (b) Main power switch
- (c1) Circuit breaker for heater
- (c2) Circuit breaker for blower
- (d) Drying blower cable dia.
- (e) Loader of drying blower
- (f) Setting of drying blower loader
- (g) Power of drying blower
- (h) Current of drying blower
- (i) Cable dia. of material loading blower
- (j) Loader of material loading blower
- (k) Setting of material loading blower loader
- (l) Power of material loading blower
- (m) Current of material loading blower
- (n) Heater cable dia.
- (o) Heater power
- (p) Heater current

2.3.2 Main Circuit(400V)

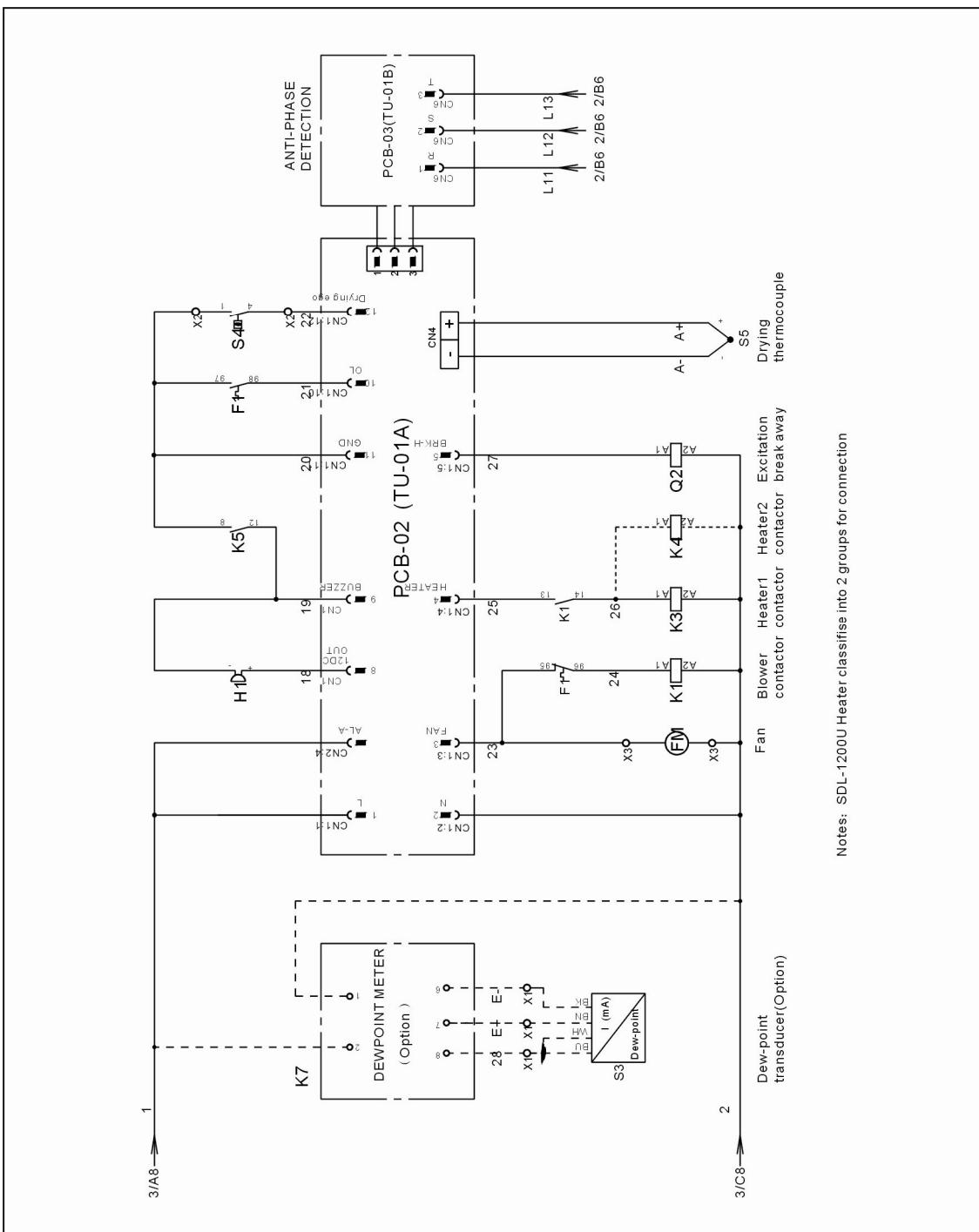


Picture 2-6: Main Circuit(400V)

2.3.3 Control Circuit(400V)

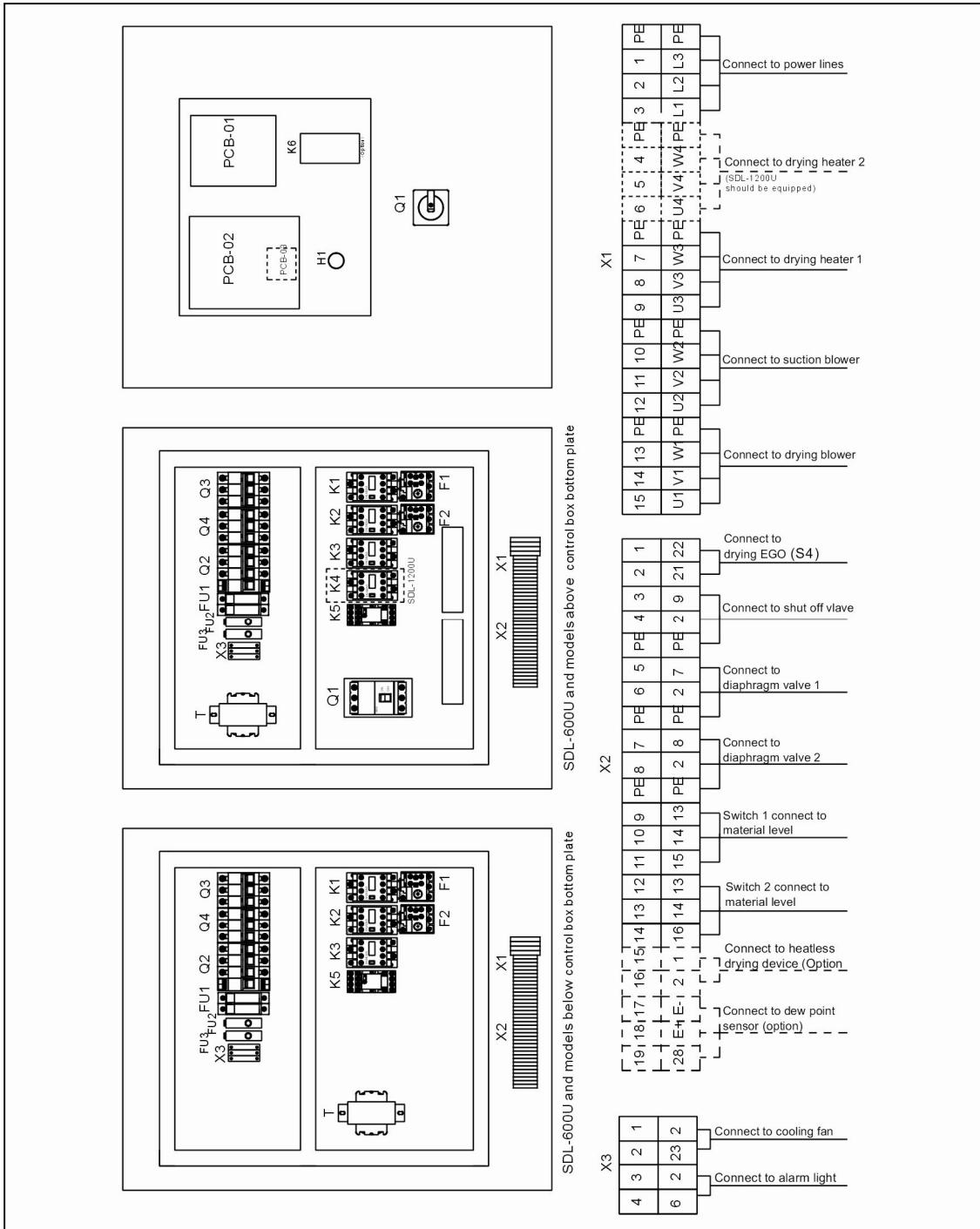


Picture 2-7: Control Circuit 1(400V)



Picture 2-8: Control Circuit 2(400V)

2.3.4 Electrical Components Layout(400V)



Picture 2-9: Electrical Components Layout (400V)

2.3.5 Electrical Components List (400V)

Table 2-5: Electrical Components List (SDL-20U 400V)

NO.	Symbol	Name	SDL-20U	
			Specification	Part NO.
1	Q1	Main switch	16A	YE1020030000
2	Q2	Circuit breaker*	6A	YE40300603000
3	-	Excitation break away	230VAC 50/60Hz	YE40023560000
4	Q3	Circuit breaker*	6A	YE40300603000
5	Q4	Circuit breaker*	16A	YE40301603000
6	K1	Contactor*	220V 50/60Hz	YE00601521000
7	K2	Contactor*	220V 50/60Hz	YE00601521000
8	K3	Contactor*	220V 50/60Hz	YE00601521000
9	K5	Middle relay	230V 50/60Hz	YE03270700000
10	K6	Heatless Dehumidifying	230V 50/60Hz	-
11	K7	Dew-point meter	230V 50/60Hz	YE85122000100
12	T	Transformer*	IN=400V OUT=230/20V 800mA	YE70402300600
13	F1	Overload relay*	0.18~0.25A	YE01618200000
14	F2	Overload relay*	3.5~5A	YE01160350000
15	FU1	Fuse box**	2P	YE41032200000
16	-	Fuse core	2A	YE46002000000
17	FU2	Fuse**	2A	YE46002000000
18	FU3	Fuse**	-	YE46002000000
19	-	Fuse core	0.5A	YE46630500000
20	S3	Dew-point transducer	POWER=24VDC OUT=4-20mA	YE10041100000
21	S4	Overheat protector*	115-320°	BH90115000150
22	S5	Thermocouple	K	BE90802000050
23	PCB-01	PCB*	18VAC	YE80101100000
24	PCB-02	PCB*	230VAC 50/60Hz	YE80001100000
25	PCB-03	PCB*	-	YE80001100100
26	H1	Buzzer	3-24VDC	YE84002700000
27	H2	Alarm indicate lamp	230VAC 50Hz	YE83305100200
28	FM	Fan	230VAC 40W	YM60121200400
29	Y1 Y2 Y3	Solenoid valve*	230VAC 50/60Hz	YE32051800300
30	M1	Blower*	400V 50/60Hz 0.05kW	-
31	M2	Blower*	400V 50/60Hz 1.5kW	-
32	EH1	Heater**	400V 50/60Hz 2.2kW	-
33	X1	Terminal board	-	YE61040040000
34	-	-	-	YE61043500000
35	X2	Terminal board	-	YE61250040000

NO.	Symbol	Name	SDL-20U	
			Specification	Part NO.
36	-	-	-	YE61253500000
37	-	-	-	YE61250040000
38	-	-	-	YE61250040000
39	X3	Terminal board	-	YE61250040000
40	X4 X5	Heavy duty connector	4P 10A	YE68041000100

* 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 2-6: Electrical Components List (SDL-40U 400V)

NO.	Symbol	Name	SDL-40U	
			Specification	Part NO.
1	Q1	Main switch	16A	YE10200300000
2	Q2	Circuit breaker*	6A	YE40300603000
3	-	Excitation break away	230VAC 50/60Hz	YE40023560000
4	Q3	Circuit breaker*	6A	YE40300603000
5	Q4	Circuit breaker*	16A	YE40301603000
6	K1	Contactor*	220V 50/60Hz	YE00601521000
7	K2	Contactor*	220V 50/60Hz	YE00601521000
8	K3	Contactor*	220V 50/60Hz	YE00601621000
9	K5	Middle relay	230V 50/60Hz	YE03270700000
10	K6	Heatless Dehumidifying	230V 50/60Hz	-
11	K7	Dew-point meter	230V 50/60Hz	YE85122000100
12	T	Transformer*	IN=400V OUT=230/20V 800mA	YE70402300600
13	F1	Overload relay*	0.28~0.4A	YE01161280000
14	F2	Overload relay*	3.5~5A	YE01160350000
15	FU1	Fuse box**	2P	YE41032200000
16	-	Fuse core	2A	YE46002000000
17	FU2	Fuse**	2A	YE46002000000
18	FU3	Fuse**	-	YE46002000000
19	-	Fuse core	0.5A	YE46630500000
20	S3	Dew-point transducer	POWER=24VDC OUT=4-20mA	YE10041100000
21	S4	Overheat protector*	115-320°	BH90115000150
22	S5	Thermocouple	K	BE90802000050
23	PCB-01	PCB*	V1.1 18VAC	YE80101100000
24	PCB-02	PCB*	230VAC50/60Hz	YE80001100000
25	PCB-03	PCB*	-	YE80001100100
26	H1	Buzzer	3-24VDC	YE84002700000
27	H2	Alarm indicate lamp	230VAC 50Hz	YE83305100200
28	FM	Fan	230VAC 40W	YM60121200400
29	Y1 Y2 Y3	Solenoid valve*	230VAC 50/60Hz	YE32051800300
30	M1	Blower*	400V 50/60Hz 0.12kW	-
31	M2	Blower*	400V 50/60Hz 1.5kW	-
32	EH1	Heater**	400V 50/60Hz 3.0kW	-
33	X1	Terminal board	-	YE61250040000
34	-	-	-	YE61253500000
35	X2	Terminal board	-	YE61250040000
36	-	-	-	YE61253500000

NO.	Symbol	Name	SDL-40U	
			Specification	Part NO.
37	-	-	-	YE61250040000
38	-	-	-	YE61250040000
39	X3	Terminal board	-	YE61250040000
40	X4 X5	Heavy duty connector	4P 10A	YE68041000100

* 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 2-7: Electrical Components List (SDL-80U/120U 400V)

NO.	Symbol	Name	SDL-80U/120U	
			Specification	Part NO.
1	Q1	Main switch	16A	YE10021160000
2	Q2	Circuit breaker*	10A	YE40301003000
3	-	Excitation break away	230VAC 50/60Hz	YE40023560000
4	Q3	Circuit breaker*	6A	YE40300603000
5	Q4	Circuit breaker*	16A	YE40301603000
6	K1	Contactor*	220V 50/60Hz	YE00601521000
7	K2	Contactor*	220V 50/60Hz	YE00601521000
8	K3	Contactor*	220V 50/60Hz	YE00601821000
9	K5	Relay	230V 50/60Hz	YE03270700000
10	K6	Heatless Dehumidifying	230V 50/60Hz	-
11	K7	Dew-point meter	230V 50/60Hz	YE85122000100
12	T	Transformer*	IN=400V OUT=230/20V 800mA	YE70402300600
13	F1	Overload relay*	0.28~0.4A	YE01161280000
14	F2	Overload relay*	3.5~5A	YE01160350000
15	FU1	Fuse box**	2P	YE41032200000
16	-	Fuse core	2A	YE46002000000
17	FU2	Fuse**	2A	YE46002000000
18	FU3	Fuse**	-	YE46002000000
19	-	Fuse core	0.5A	YE46630500000
20	S3	Dew-point transducer	POWER=24VDC OUT=4-20mA	YE10041100000
21	S4	Overheat protector*	115-320°	BH90115000150
22	S5	Thermocouple	K	BE90802000050
23	PCB-01	PCB*	V1.1 18VAC	YE80101100000
24	PCB-02	PCB*	230VAC50/60Hz	YE80001100000
25	PCB-03	PCB*	-	YE80001100100
26	H1	Buzzer	3-24VDC	YE84002700000
27	H2	Alarm indicate lamp	230VAC 50Hz	YE83305100200
28	FM	Fan	230VAC 40W	YM60121200400
29	Y1 Y2 Y3	Solenoid valve*	230VAC 50/60Hz	YE32051800300
30	M1	Blower*	400V 50/60Hz 0.12kW	-
31	M2	Blower*	400V 50/60Hz 1.5kW	-
32	EH1	Heater**	400V 50/60Hz 3.9kW	-
33	X1	端子排	-	YE61250040000
34	-	-	-	YE61253500000
35	X2	端子排	-	YE61250040000
36	-	-	-	YE61253500000

NO.	Symbol	Name	SDL-80/120U	
			Specification	Part NO.
37	-	-	-	YE61250040000
38	-	-	-	YE61250040000
39	X3	端子排	-	YE61250040000
40	X4 X5	重载接头	4P 10A	YE68041000100

* 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 2-8: Electrical Components List (SDL-160U 400V)

NO.	Symbol	Name	SDL-160U	
			Specification	Part NO.
1	Q1	Main switch	16A	YE1002160000
2	Q2	Circuit breaker*	16A	YE40301603000
3	-	Excitation break away	230VAC 50/60Hz	YE40023560000
4	Q3	Circuit breaker*	6A	YE40300603000
5	Q4	Circuit breaker*	16A	YE40301603000
6	K1	Contactor*	220V 50/60Hz	YE00601521000
7	K2	Contactor*	220V 50/60Hz	YE00601521000
8	K3	Contactor*	220V 50/60Hz	YE00607821000
9	K5	Relay	230V 50/60Hz	YE03270700000
10	K6	Heatless Dehumidifying	230V 50/60Hz	-
11	K7	Dew-point meter	230V 50/60Hz	YE85122000100
12	T	Transformer*	IN=400V OUT=230/20V 800mA	YE70402300600
13	F1	Overload relay*	0.28~0.4A	YE01161280000
14	F2	Overload relay*	3.5~5A	YE01160350000
15	FU1	Fuse box**	2P	YE41032200000
16	-	Fuse core	2A	YE46002000000
17	FU2	Fuse**	2A	YE46002000000
18	FU3	Fuse**	-	YE46002000000
19	-	Fuse core	0.5A	YE46630500000
20	S3	Dew-point transducer	POWER=24VDC OUT=4-20mA	YE10041100000
21	S4	Overheat protector*	115-320°	BH90115000150
22	S5	Thermocouple	K	BE90802000050
23	PCB-01	PCB*	V1.1 18VAC	YE80101100000
24	PCB-02	PCB*	230VAC50/60Hz	YE80001100000
25	PCB-03	PCB*	-	YE80001100100
26	H1	Buzzer	3-24VDC	YE84002700000
27	H2	Alarm indicate lamp	230VAC 50Hz	YE83305100200
28	FM	Fan	230VAC 40W	YM60121200400
29	Y1 Y2 Y3	Solenoid valve*	230VAC 50/60Hz	YE32051800300
30	M1	Blower*	400V 50/60Hz 0.12kW	-
31	M2	Blower*	400V 50/60Hz1.5kW	-
32	EH1	Heater**	400V 50/60Hz 6.0kW	-
33	X1	Terminal board	-	YE61040040000
34	-	-	-	YE61043500000
35	X2	Terminal board	-	YE61250040000
36	-	-	-	YE61253500000

NO.	Symbol	Name	SDL-160U	
			Specification	Part NO.
37	-	-	-	YE61250040000
38	-	-	-	YE61250040000
39	X3	Terminal board	-	YE61250040000
40	X4 X5	Heavy duty connector	4P 10A	YE68041000100

* 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 2-9: Electrical Components List (SDL-230U 400V)

NO.	Symbol	Name	SDL-230U	
			Specification	Part NO.
1	Q1	Main switch	25A	YE10210300000
2	Q2	Circuit breaker*	15A	YE40601500000
3	-	Excitation break away	230VAC 50/60Hz	YE40023560000
4	Q3	Circuit breaker*	5A	YE40603000000
5	Q4	Circuit breaker*	15A	YE40601500000
6	K1	Contactor*	220V 50/60Hz	YE00601521000
7	K2	Contactor*	220V 50/60Hz	YE00601521000
8	K3	Contactor*	220V 50/60Hz	YE00601821000
9	K5	Relay	230V 50/60Hz	YE03270700000
10	K6	Heatless Dehumidifying	230V 50/60Hz	-
11	K7	Dew-point meter	230V 50/60Hz	YE85122000100
12	T	Transformer*	IN=400V OUT=230/20V 800mA	YE70402300600
13	F1	Overload relay*	0.28~0.4A	YE01161280000
14	F2	Overload relay*	3.5~5A	YE01160350000
15	FU1	Fuse box**	2P	YE41032200000
16	-	Fuse core	2A	YE46002000000
17	FU2	Fuse**	2A	YE46002000000
18	FU3	Fuse**	-	YE46002000000
19	-	Fuse core	0.5A	YE46630500000
20	S3	Dew-point transducer	POWER=24VDC OUT=4-20mA	YE10041100000
21	S4	Overheat protector*	115-320°	BH90115000150
22	S5	Thermocouple	K	BE90802000050
23	PCB-01	PCB*	V1.1 18VAC	YE80101100000
24	PCB-02	PCB*	230VAC50/60Hz	YE80001100000
25	PCB-03	PCB*	-	YE80001100100
26	H1	Buzzer	3-24VDC	YE84002700000
27	H2	Alarm indicate lamp	230VAC 50Hz	YE83305100200
28	FM	Fan	230VAC 40W	YM60121200400
29	Y1 Y2 Y3	Solenoid valve*	230VAC 50/60Hz	YE32051800300
30	M1	Blower*	400V 50/60Hz 0.12kW	-
31	M2	Blower*	400V 50/60Hz 1.5kW	-
32	EH1	Heater**	400V 50/60Hz 6.0kW	-
33	X1	Terminal board	-	YE61250040000
34	-	-	-	YE61253500000
35	X2	Terminal board	-	YE61250040000
36	-	-	-	YE61253500000

NO.	Symbol	Name	SDL-230U	
			Specification	Part NO.
37	-	-	-	YE61250040000
38	-	-	-	YE61250040000
39	X3	Terminal board	-	YE61250040000
40	X4 X5	Heavy duty connector	4P 10A	YE68041000100

* 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 2-10: Electrical Components List (SDL-300U/450U 400V)

NO.	Symbol	Name	SDL-300U/450U	
			Specification	Part NO.
1	Q1	Main switch	32A	YE10220300000
2	Q2	Circuit breaker*	25A	YE40602500000
3	-	Excitation break away	230VAC 50/60Hz	YE40023560000
4	Q3	Circuit breaker*	5A	YE40603000000
5	Q4	Circuit breaker*	15A	YE40601500000
6	K1	Contactor*	220V 50/60Hz	YE00601521000
7	K2	Contactor*	220V 50/60Hz	YE00601521000
8	K3	Contactor*	220V 50/60Hz	YE00602622000
9	K5	Relay	230V 50/60Hz	YE03270700000
10	K6	Heatless Dehumidifying	230V 50/60Hz	-
11	K7	Dew-point meter	230V 50/60Hz	YE85122000100
12	T	Transformer*	IN=400V OUT=230/20V 800mA	YE70402300600
13	F1	Overload relay*	0.45~0.63A	YE01161450000
14	F2	Overload relay*	3.5~5A	YE01160350000
15	FU1	Fuse box**	2P	YE41032200000
16	-	Fuse core	2A	YE46002000000
17	FU2	Fuse**	2A	YE46002000000
18	FU3	Fuse**	-	YE46002000000
19	-	Fuse core	0.5A	YE46630500000
20	S3	Dew-point transducer	POWER=24VDC OUT=4-20mA	YE10041100000
21	S4	Overheat protector*	115-320°	BH90115000150
22	S5	Thermocouple	K	BE90802000050
23	PCB-01	PCB*	V1.1 18VAC	YE80101100000
24	PCB-02	PCB*	230VAC50/60Hz	YE80001100000
25	PCB-03	PCB*	-	YE80001100100
26	H1	Buzzer	3-24VDC	YE84002700000
27	H2	Alarm indicate lamp	230VAC 50Hz	YE83305100200
28	FM	Fan	230VAC 40W	YM60121200400
29	Y1 Y2 Y3	Solenoid valve*	230VAC 50/60Hz	YE32051800300
30	M1	Blower*	400V 50/60Hz 0.18kW	-
31	M2	Blower*	400V 50/60Hz 1.5kW	-
32	EH1	Heater**	400V 50/60Hz 12.0kW	-
33	X1	Terminal board	32A 690V	YE61250040000
34	-	-	-	YE61253500000
35	-	-	-	YE61040000000
36	-	-	-	YE61043500000

NO.	Symbol	Name	SDL-300U/450U	
			Specification	Part NO.
37	-	-	-	YE61060000000
38	-	-	-	YE61063500000
39	X2	Terminal board	-	YE61250040000
40	-	-	-	YE61253500000
41	-	-	-	YE61250040000
42	-	-	-	YE61250040000
43	X3	Terminal board	-	YE61250040000
44	X4 X5	Heavy duty connector	4P 10A	YE68041000100

* 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 2-11: Electrical Components List (SDL-600U/750U 400V)

NO.	Symbol	Name	SDL-600U/750U	
			Specification	Part NO.
1	Q1	Main switch	40A	YE4110400000
2	Q2	Circuit breaker*	32A	YE40603200000
3	-	Excitation break away	230VAC 50/60Hz	YE40023560000
4	Q3	Circuit breaker*	5A	YE40603000000
5	Q4	Circuit breaker*	15A	YE40601500000
6	K1	Contactor*	220V 50/60Hz	YE00601500000
7	K2	Contactor*	220V 50/60Hz	YE00601521000
8	K3	Contactor*	220V 50/60Hz	YE00602822000
9	K5	Relay	230V 50/60Hz 12A	YE03270700000
10	K6	Heatless Dehumidifying	230V 50/60Hz	-
11	K7	Dew-point meter	230V 50/60Hz	YE85122000100
12	T	Transformer*	IN=400V OUT=230/20V 800mA	YE70402300600
13	F1	Overload relay*	1.1~1.6A	YE01160110000
14	F2	Overload relay*	3.5~5A	YE01160350000
15	FU1	Fuse box**	2P	YE41032200000
16	-	Fuse core	2A	YE46002000000
17	FU2	Fuse**	2A	YE46002000000
18	FU3	Fuse**	-	YE46002000000
19	-	Fuse core	0.5A	YE46630500000
20	S3	Dew-point transducer	POWER=24VDC OUT=4-20mA	YE10041100000
21	S4	Overheat protector*	115-320°	BH90115000150
22	S5	Thermocouple	K	BE90802000050
23	PCB-01	PCB*	V1.1 18VAC	YE80101100000
24	PCB-02	PCB*	-	YE80001100000
25	PCB-03	PCB*	-	YE80001100100
26	H1	Buzzer	3-24VDC	YE84002700000
27	H2	Alarm indicate lamp	230VAC 50Hz	YE83305100200
28	FM	Fan	230VAC 40W	YM60121200400
29	Y1 Y2 Y3	Solenoid valve*	230VAC 50/60Hz	YE32051800300
30	M1	Blower*	400V 50/60Hz 0.55kW	-
31	M2	Blower*	400V 50/60Hz 1.5kW	-
32	EH1	Heater**	400V 50/60Hz 18.0kW	-
33	X1	Terminal board	-	YE61250040000
34	-	-	-	YE61253500000
35	-	-	-	YE61060000000
36	-	-	-	YE61063500000

NO.	Symbol	Name	SDL-600U/750U	
			Specification	Part NO.
37	X2	Terminal board	-	YE61250040000
38	-	-	-	YE61253500000
39	-	-	-	YE61250040000
40	-	-	-	YE61250040000
41	X3	Terminal board	-	YE61250040000
42	X4 X5	Heavy duty connector	4P 10A	YE68041000100

* 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 2-12: Electrical Components List (SDL-900U 400V)

NO.	Symbol	Name	SDL-900U	
			Specification	Part NO.
1	Q1	Main switch	60A	YE41106000000
2	Q2	Circuit breaker*	50A	YE40605000000
3	-	Excitation break away	230VAC 50/60Hz	YE40023560000
4	Q3	Circuit breaker*	5A	YE40603000000
5	Q4	Circuit breaker*	15A	YE40601500000
6	K1	Contactor*	220V 50/60Hz	YE00601521000
7	K2	Contactor*	220V 50/60Hz	YE00601621000
8	K3 K4	Contactor*	220V 50/60Hz	YE00602822000
9	K5	Relay	230V 50/60Hz 12A	YE03270700000
10	K6	Heatless Dehumidifying	230V 50/60Hz	-
11	K7	Dew-point meter	230V 50/60Hz	YE85122000100
12	T	Transformer*	IN=400V OUT=230/20V 800mA	YE70402300600
13	F1	Overload relay*	1.1~1.6A	YE01160110000
14	F2	Overload relay*	5.5~8A	YE01160550000
15	FU1	Fuse box**	2P	YE41032200000
16	-	Fuse core	2A	YE46002000000
17	FU2	Fuse**	2A	YE46002000000
18	FU3	Fuse**	-	YE46002000000
19	-	Fuse core	0.5A	YE46630500000
20	S3	Dew-point transducer	POWER=24VDC OUT=4-20mA	YE10041100000
21	S4	Overheat protector*	115-320°	BH90115000150
22	S5	Thermocouple	K	BE90802000050
23	PCB-01	PCB*	V1.1 18VAC	YE80101100000
24	PCB-02	PCB*	-	YE80001100000
25	PCB-03	PCB*	-	YE80001100100
26	H1	Buzzer	3-24VDC	YE84002700000
27	H2	Alarm indicate lamp	230VAC 50Hz	YE83305100200
28	FM	Fan	230VAC 40W	YM60121200400
29	Y1 Y2 Y3	Solenoid valve*	230VAC 50/60Hz	YE32051800300
30	M1	Blower*	400V 50/60Hz 0.55kW	-
31	M2	Blower*	400V 50/60Hz 2.4kW	-
32	EH1	Heater**	400V 50/60Hz 18kW	-
33	X1	Terminal board	-	YE61250040000
34	-	-	-	YE61253500000
35	-	-	-	YE61040000000
36	-	-	-	YE61043500000

NO.	Symbol	Name	SDL-900U	
			Specification	Part NO.
37	-	-	-	YE611000000000
38	-	-	-	YE61103500000
39	X2	Terminal board	-	YE61250040000
40	-	-	-	YE61253500000
41	-	-	-	YE61250040000
42	-	-	-	YE61250040000
43	X3	Terminal board	-	YE61250040000
44	X4 X5	Heavy duty connector	4P 10A	YE68041000100

* 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 2-13: Electrical Components List (SDL-1200U 400V)

NO.	Symbol	Name	SDL-1200U	
			Specification	Part NO.
1	Q1	Main switch	60A	YE41106000000
2	Q2	Circuit breaker*	50A	YE40605000000
3	-	Excitation break away	230VAC 50/60Hz	YE40023560000
4	Q3	Circuit breaker*	10A	YE40600300000
5	Q4	Circuit breaker*	15A	YE40601500000
6	K1	Contactor*	230V 50/60Hz	YE00601621000
7	K2	Contactor*	230V 50/60Hz	YE00601621000
8	K3 K4	Contactor*	230V 50/60Hz	YE00602622000
9	K5	Relay	230V 50/60Hz 12A	YE03270700000
10	K6	Heatless Dehumidifying	230V 50/60Hz	-
11	K7	Dew-point meter	230V 50/60Hz	YE85122000100
12	T	Transformer*	IN=400V OUT=230/20V 800mA	YE70402300600
13	F1	Overload relay*	2.2~3.2A	YE011602220000
14	F2	Overload relay*	5.5~8A	YE01160550000
15	FU1	Fuse box**	2P	YE41032200000
16	-	Fuse core	2A	YE46002000000
17	FU2	Fuse**	2A	YE46002000000
18	FU3	Fuse**	-	YE46002000000
19	-	Fuse core	0.5A	YE46630500000
20	S3	Dew-point transducer	POWER=24VDC OUT=4-20mA	YE10041100000
21	S4	Overheat protector*	115-320°	BH90115000150
22	S5	Thermocouple	K	BE90802000050
23	PCB-01	PCB*	V1.1 18VAC	YE80101100000
24	PCB-02	PCB*	-	YE80001100000
25	PCB-03	PCB*	-	YE80001100100
26	H1	Buzzer	3-24VDC	YE84002700000
27	H2	Alarm indicate lamp	230VAC 50Hz	YE83305100200
28	FM	Fan	230VAC 40W	YM60121200400
29	Y1 Y2 Y3	Solenoid valve*	230VAC 50/60Hz	YE32051800300
30	M1	Blower*	400V 50/60Hz 1.1kW	-
31	M2	Blower*	400V 50/60Hz 2.4kW	-
32	EH1	Heater**	400V 50/60Hz 12kW	-
33	X1	Terminal board	-	YE61250040000
34	-	-	-	YE61253500000
35	-	-	-	YE61040000000
36	-	-	-	YE61043500000

NO.	Symbol	Name	SDL-1200U	
			Specification	Part NO.
37	-	-	-	YE611000000000
38	-	-	-	YE61103500000
39	X2	Terminal board	-	YE61250040000
40	-	-	-	YE61253500000
41	-	-	-	YE61250040000
42	-	-	-	YE61250040000
43	X3	Terminal board	-	YE61250040000
44	X4 X5	Heavy duty connector	4P 10A	YE68041000100

* 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.

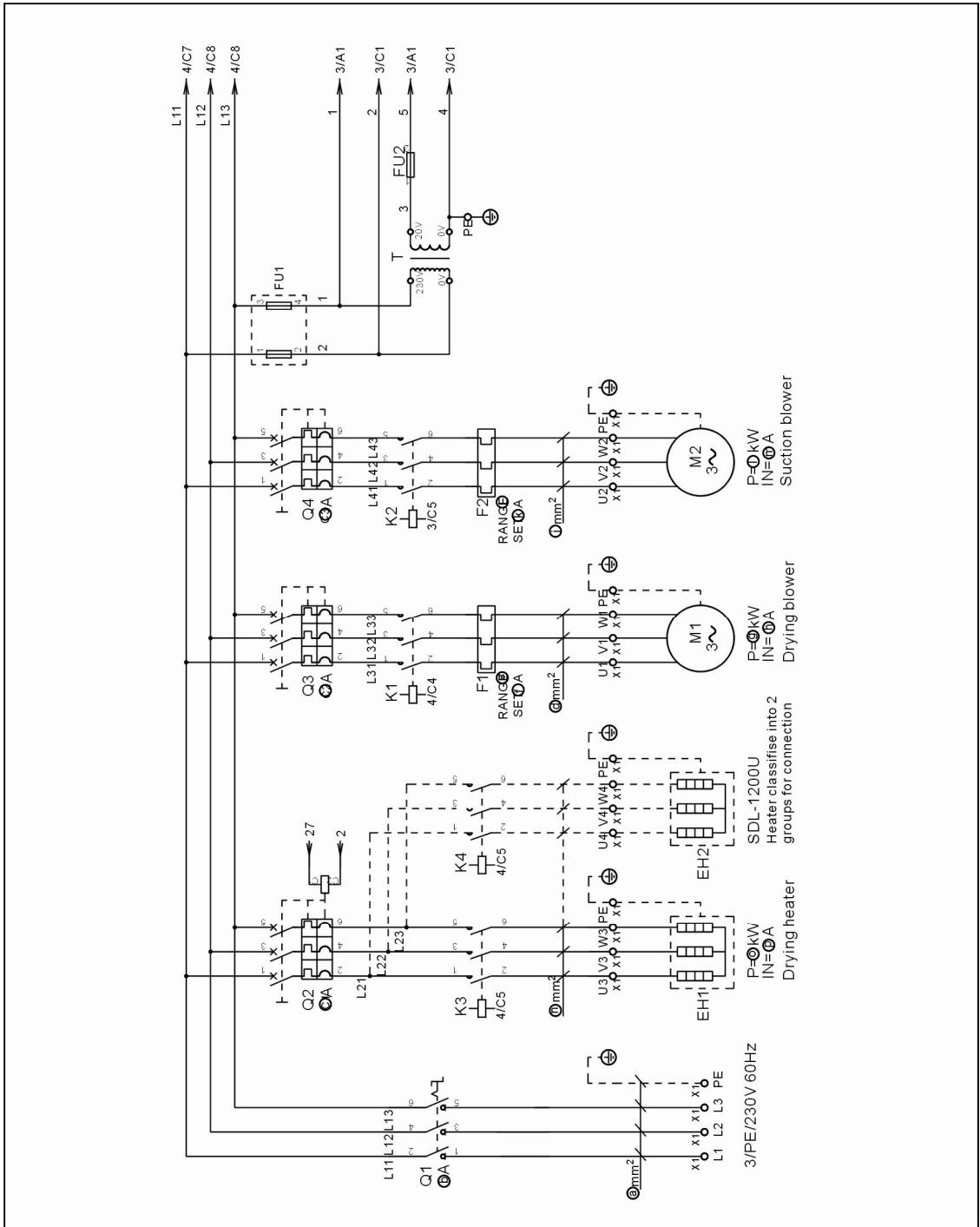
2.3.6 Electrical Circuit(230V)

Table 2-14: Electrical Circuit (230V)

MODE \ SYMBOL	(a)	(b)	(c)	(c2)	(c3)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)
SDL-20U	4.0	25	10	6	16	1.5	0.28-0.4	0.33	0.05	0.3	1.5	5.5-8	7.0	1.5	6.3	2.5	2.2	5.5
SDL-40U	4.0	25	10	6	16	1.5	0.7-1	0.8	0.12	0.75	1.5	5.5-8	7.0	1.5	6.3	2.5	3.0	7.5
SDL-80U	4.0	25	16	6	16	1.5	0.7-1	0.8	0.12	0.75	1.5	5.5-8	7.0	1.5	6.3	2.5	3.9	9.8
SDL-120U	4.0	25	16	6	16	1.5	0.7-1	0.8	0.12	0.75	1.5	5.5-8	7.0	1.5	6.3	2.5	3.9	9.8
SDL-160U	4.0	25	20	6	16	1.5	0.7-1	0.8	0.12	0.75	1.5	5.5-8	7.0	1.5	6.3	2.5	6.0	15
SDL-230U	6.0	25	20	6	16	1.5	0.7-1	0.8	0.12	0.75	1.5	5.5-8	7.0	1.5	6.3	2.5	6.0	15
SDL-300U	10	63	40	6	16	1.5	1.1-1.6	1.3	0.18	1.1	1.5	5.5-8	7.0	1.5	6.3	6.0	12.0	30
SDL-450U	10	63	40	6	16	1.5	1.1-1.6	1.3	0.18	1.1	1.5	5.5-8	7.0	1.5	6.3	6.0	12.0	30
SDL-600U	16	60	60	6	16	1.5	2.2-3.2	2.5	0.55	2.3	1.5	5.5-8	7.0	1.5	6.3	16	18.0	45
SDL-750U	16	60	60	6	16	1.5	2.2-3.2	2.5	0.55	2.3	1.5	5.5-8	7.0	1.5	6.3	16	18.0	45
SDL-900U	25	90	80	6	20	1.5	2.2-3.2	2.5	0.55	2.3	2.5	9-12.5	11	2.4	10.2	16	18.0	45
SDL-1200U	25	90	80	10	20	1.5	3.5-5	4.5	1.1	4.2	2.5	9-12.5	11	2.4	10.2	6.0	12*2	30x2

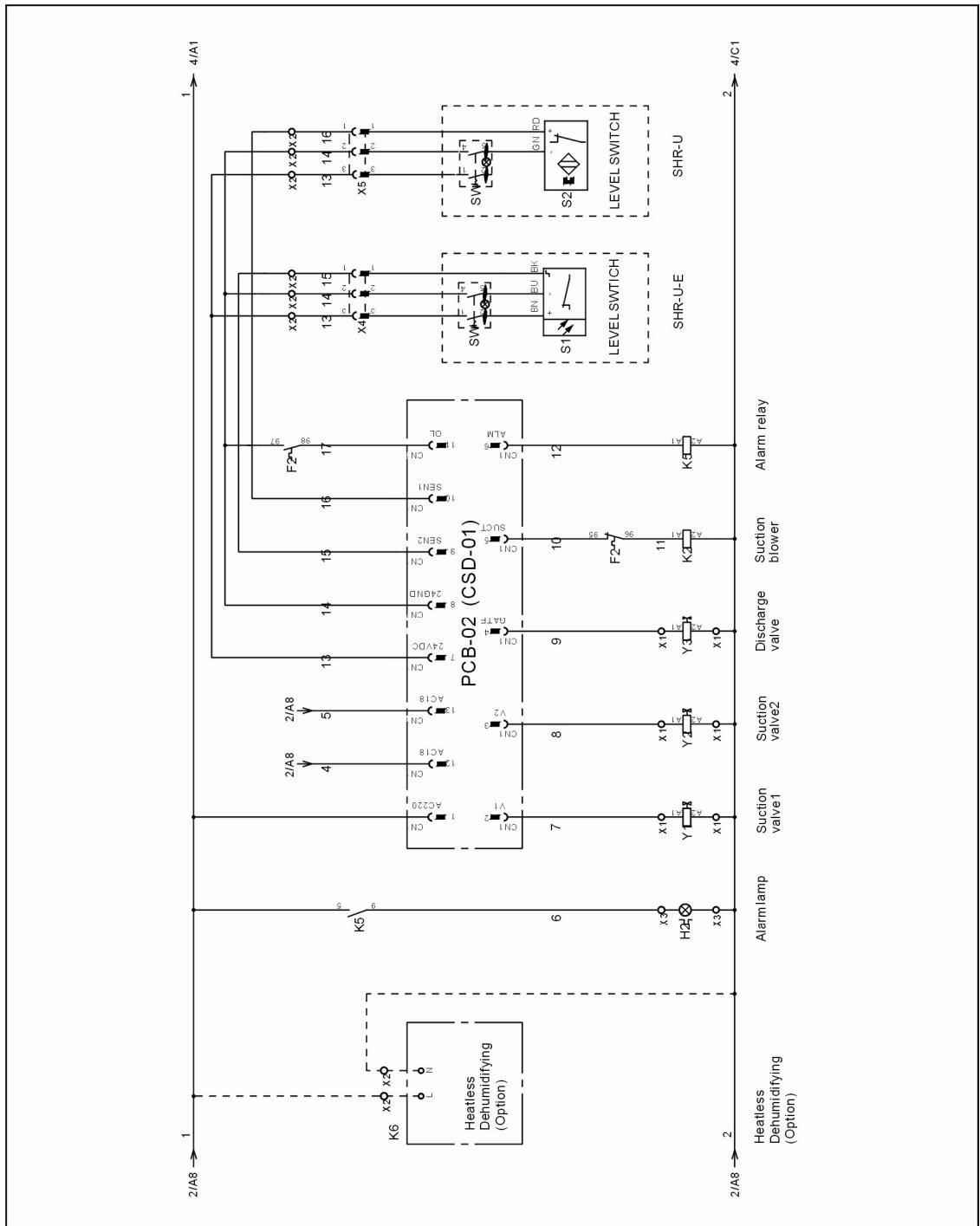
- (a) Mainpower cable dia.
- (b) Main power switch
- (c1) Circuit breaker for heater
- (c2) Circuit breaker for blower
- (d) Drying blower cable dia.
- (e) Loader of drying blower
- (f) Setting of drying blower loader
- (g) Power of drying blower
- (h) Current of drying blower
- (i) Cable dia. of material loading blower
- (j) Loader of material loading blower
- (k) Setting of material loading blower loader
- (l) Power of material loading blower
- (m) Current of material loading blower
- (n) Heater cable dia.
- (o) Heater power
- (p) Heater current

2.3.7 Main Circuit (230V)

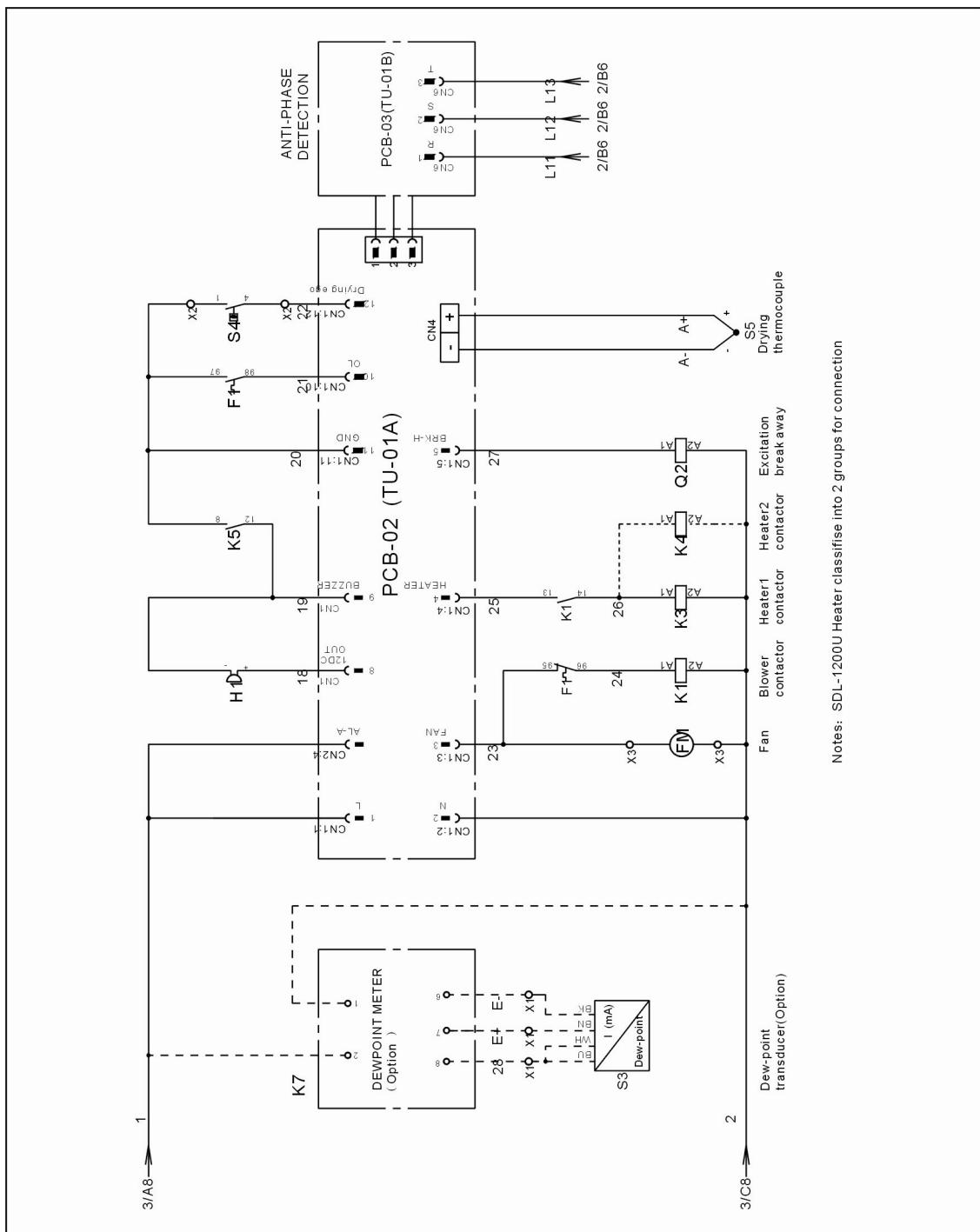


Picture 2-10: Main Circuit (230V)

2.3.8 Control Circuit (230V)

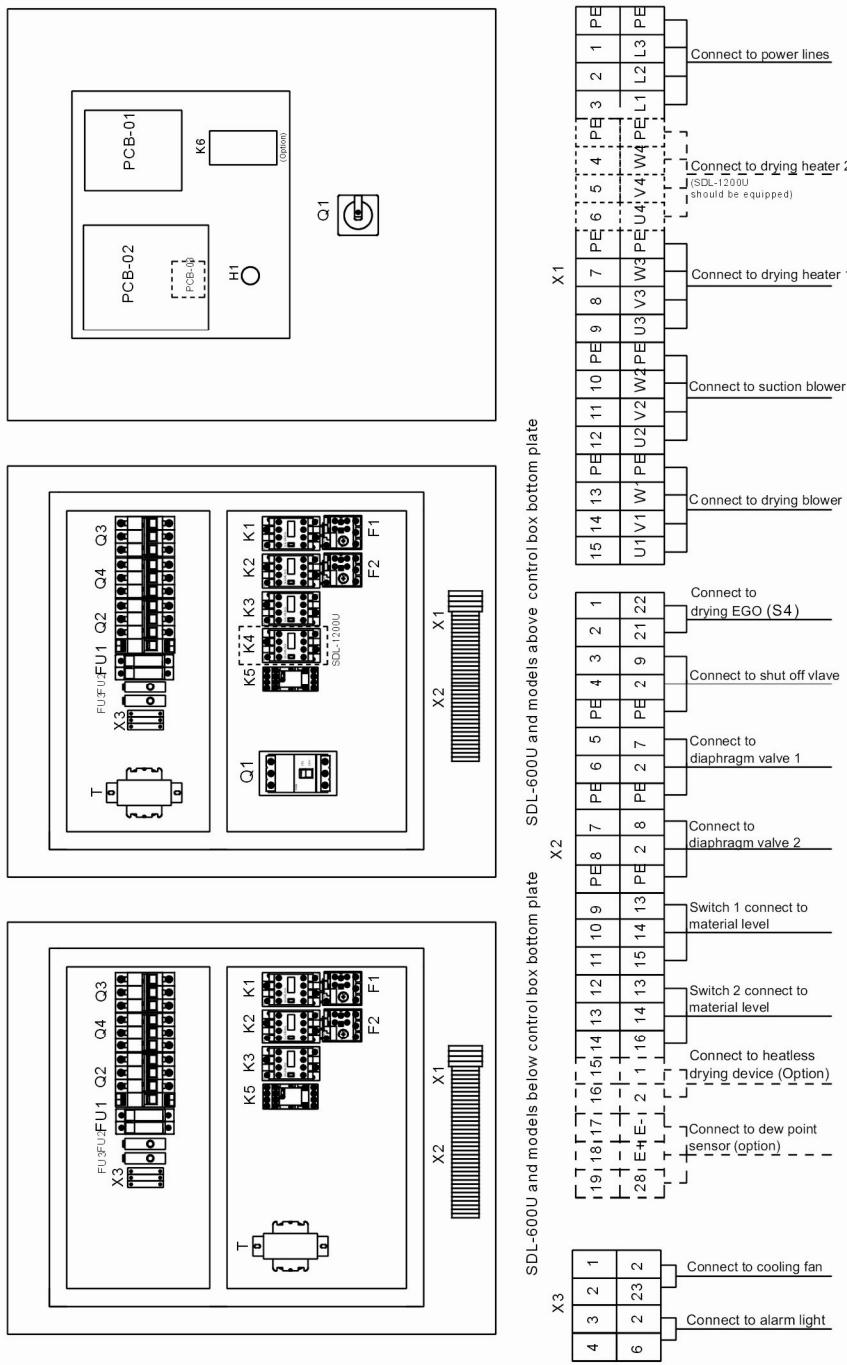


Picture 2-11: Control Circuit 1 (230V)



Picture 2-12: Control Circuit 2 (230V)

2.3.9 Electrical Components Layout (400V)



Picture 2-13: Electrical Components Layout (230V)

2.3.10 Electrical Components List (230V)

Table 2-15: Electrical Components List (SDL-20U 230V)

NO.	Symbol	Name	SDL-20U	
			Specification	Part NO.
1	Q1	Main switch	25A	YE10125250000
2	Q2	Circuit breaker*	10A	YE40301003000
3	-	Excitation break away	230VAC 50/60Hz	YE40023560000
4	Q3	Circuit breaker*	6A	YE40300603000
5	Q4	Circuit breaker*	16A	YE40301603000
6	K1	Contactor*	220V 50/60Hz	YE00601521000
7	K2	Contactor*	220V 50/60Hz	YE00601621000
8	K3	Contactor*	220V 50/60Hz	YE00601621000
9	K5	Middle relay	230V 50/60Hz	YE03270700000
10	K6	Heatless Dehumidifying	230V 50/60Hz	-
11	K7	Dew-point meter	230V 50/60Hz	YE85122000100
12	T	Transformer*	IN=230V OUT=230/20V 500mA	YE70202300400
13	F1	Overload relay*	0.28~0.4A	YE01161280000
14	F2	Overload relay*	5.5~8A	YE01160550000
15	FU1	Fuse box**	2P	YE41032200000
16	-	Fuse core	2A	YE46002000000
17	FU2	Fuse**	-	YE46002000000
18	-	Fuse core	0.5A	YE46630500000
19	S3	Dew-point transducer	POWER=24VDC OUT=4-20mA	YE10041100000
20	S4	Overheat protector*	115-320°	BH90115000150
21	S5	Thermocouple	K	BE90802000050
22	PCB-01	PCB*	18VAC	YE80101100000
23	PCB-02	PCB*	230VAC 50/60Hz	YE80001100000
24	PCB-03	PCB*	-	YE80001100100
25	H1	Buzzer	3-24VDC	YE84002700000
26	H2	Alarm indicate lamp	230VAC 50Hz	YE83305100200
27	FM	Fan	230VAC 40W	YM60121200400
28	Y1 Y2 Y3	Solenoid valve*	230VAC 50/60Hz	YE32051800300
29	M1	Blower*	230V 50/60Hz 0.05kW	-
30	M2	Blower*	230V 50/60Hz 1.5kW	-
31	EH1	Heater**	230V 50/60Hz 2.2kW	-
32	X1	Terminal board	-	YE61040040000
33	-	-	-	YE61043500000
34	X2	Terminal board	-	YE61250040000
35	-	-	-	YE61253500000

NO.	Symbol	Name	SDL-20U	
			Specification	Part NO.
36	-	-	-	YE61250040000
37	-	-	-	YE61250040000
38	X3	Terminal board	-	YE61250040000
39	X4 X5	Heavy duty connector	4P 10A	YE68041000100

* 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 2-16: Electrical Components List (SDL-40U 230V)

NO.	Symbol	Name	SDL-40U	
			Specification	Part NO.
1	Q1	Main switch	25A	YE10125250000
2	Q2	Circuit breaker*	10A	YE40301003000
3	-	Excitation break away	230VAC 50/60Hz	YE40023560000
4	Q3	Circuit breaker*	6A	YE40300603000
5	Q4	Circuit breaker*	16A	YE40301603000
6	K1	Contactor*	220V 50/60Hz	YE00601521000
7	K2	Contactor*	220V 50/60Hz	YE00601621000
8	K3	Contactor*	220V 50/60Hz	YE00601721000
9	K5	Middle relay	230V 50/60Hz	YE03270700000
10	K6	Heatless Dehumidifying	230V 50/60Hz	-
11	K7	Dew-point meter	230V 50/60Hz	YE85122000100
12	T	Transformer*	IN=230V OUT=230/20V 500mA	YE70202300400
13	F1	Overload relay*	0.7~1A	YE01160700000
14	F2	Overload relay*	5.5~8A	YE01160550000
15	FU1	Fuse box**	2P	YE41032200000
16	-	Fuse core	2A	YE46002000000
17	FU2	Fuse**	-	YE46002000000
18	-	Fuse core	0.5A	YE46630500000
19	S3	Dew-point transducer	POWER=24VDC OUT=4-20mA	YE10041100000
20	S4	Overheat protector*	115-320°	BH90115000150
21	S5	Thermocouple	K	BE90802000050
22	PCB-01	PCB*	18VAC	YE80101100000
23	PCB-02	PCB*	230VAC 50/60Hz	YE80001100000
24	PCB-03	PCB*	-	YE80001100100
25	H1	Buzzer	3-24VDC	YE84002700000
26	H2	Alarm indicate lamp	230VAC 50Hz	YE83305100200
27	FM	Fan	230VAC 40W	YM60121200400
28	Y1 Y2 Y3	Solenoid valve*	230VAC 50/60Hz	YE32051800300
29	M1	Blower*	230V 50/60Hz 0.12kW	-
30	M2	Blower*	230V 50/60Hz 1.5kW	-
31	EH1	Heater**	230V 50/60Hz 3.0kW	-
32	X1	Terminal board	-	YE61040040000
33	-	-	-	YE61043500000
34	X2	Terminal board	-	YE61250040000
35	-	-	-	YE61253500000
36	-	-	-	YE61250040000

NO.	Symbol	Name	SDL-40U	
			Specification	Part NO.
37	-	-	-	YE61250040000
38	X3	Terminal board	-	YE61250040000
39	X4 X5	Heavy duty connector	4P 10A	YE68041000100

* 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 2-17: Electrical Components List (SDL-80U/120U 230V)

NO.	Symbol	Name	SDL-80U/120U	
			Specification	Part NO.
1	Q1	Main switch	25A	YE10125250000
2	Q2	Circuit breaker*	16A	YE40301603000
3	-	Excitation break away	230VAC 50/60Hz	YE40023560000
4	Q3	Circuit breaker*	6A	YE40300603000
5	Q4	Circuit breaker*	16A	YE40301603000
6	K1	Contactor*	220V 50/60Hz	YE00601521000
7	K2	Contactor*	220V 50/60Hz	YE00601621000
8	K3	Contactor*	220V 50/60Hz	YE00601821000
9	K5	Middle relay	230V 50/60Hz	YE03270700000
10	K6	Heatless Dehumidifying	230V 50/60Hz	-
11	K7	Dew-point meter	230V 50/60Hz	YE85122000100
12	T	Transformer*	IN=230V OUT=230/20V 500mA	YE70202300400
13	F1	Overload relay*	0.7~1A	YE01160700000
14	F2	Overload relay*	2.8~4A	YE01160280000
15	F2	Overload relay*	5.5~8A	YE01160550000
16	FU1	Fuse box**	2P	YE41032200000
17	-	Fuse core	2A	YE46002000000
18	FU2	Fuse**	-	YE46002000000
19	-	Fuse core	0.5A	YE46630500000
20	S3	Dew-point transducer	POWER=24VDC OUT=4-20mA	YE10041100000
21	S4	Overheat protector*	115-320°	BH90115000150
22	S5	Thermocouple	K	BE90802000050
23	PCB-01	PCB*	V1.1 18VAC	YE80101100000
24	PCB-02	PCB*	230VAC 50/60Hz	YE80001100000
25	PCB-03	PCB*	-	YE80001100100
26	H1	Buzzer	3-24VDC	YE84002700000
27	H2	Alarm indicate lamp	230VAC 50Hz	YE83305100200
28	FM	Fan	230VAC 40W	YM60121200400
29	Y1 Y2 Y3	Solenoid valve*	230VAC 50/60Hz	YE32051800300
30	M1	Blower*	230V 50/60Hz 0.12kW	-
31	M2	Blower*	230V 50/60Hz 1.5kW	-
32	EH1	Heater**	230V 50/60Hz 3.9kW	-
33	X1	Terminal board	-	YE61040040000
34	-	-	-	YE61043500000
35	X2	Terminal board	-	YE61250040000
36	-	-	-	YE61253500000

NO.	Symbol	Name	SDL-80U/120U	
			Specification	Part NO.
37	-	-	-	YE61250040000
38	-	-	-	YE61250040000
39	X3	Terminal board	-	YE61250040000
40	X4 X5	Heavy duty connector	4P 10A	YE68041000100

* 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 2-18: Electrical Components List (SDL-160U 230V)

NO.	Symbol	Name	SDL-160U	
			Specification	Part NO.
1	Q1	Main switch	25A	YE10125250000
2	Q2	Circuit breaker*	20A	YE40302003000
3	-	Excitation break away	230VAC 50/60Hz	YE40023560000
4	Q3	Circuit breaker*	6A	YE40300603000
5	Q4	Circuit breaker*	16A	YE40301603000
6	K1	Contactor*	220V 50/60Hz	YE00601521000
7	K2	Contactor*	220V 50/60Hz	YE00601621000
8	K3	Contactor*	220V 50/60Hz	YE00602622000
9	K5	Middle relay	230V 50/60Hz 12A	YE03270700000
10	K6	Heatless Dehumidifying	230V 50/60Hz	-
11	K7	Dew-point meter	230V 50/60Hz	YE85122000100
12	T	Transformer*	IN=230V OUT=230/20V 500mA	YE70202300400
13	F1	Overload relay*	0.7~1A	YE01160700000
14	F2	Overload relay*	5.5~8A	YE01160550000
15	FU1	Fuse box**	2P	YE41032200000
16	-	Fuse core	2A	YE46002000000
17	FU2	Fuse**	-	YE46002000000
18	-	Fuse core	0.5A	YE46630500000
19	S3	Dew-point transducer	POWER=24VDC OUT=4-20mA	YE10041100000
20	S4	Overheat protector*	115-320°	BH90115000150
21	S5	Thermocouple	K	BE90802000050
22	PCB-01	PCB*	V1.1 18VAC	YE80101100000
23	PCB-02	PCB*	230VAC 50/60Hz	YE80001100000
24	PCB-03	PCB*	-	YE80001100100
25	H1	Buzzer	3-24VDC	YE84002700000
26	H2	Alarm indicate lamp	230VAC 50Hz	YE83305100200
27	FM	Fan	230VAC 40W	YM60121200400
28	Y1 Y2 Y3	Solenoid valve*	230VAC 50/60Hz	YE32051800300
29	M1	Blower*	230V 50/60Hz 0.12kW	-
30	M2	Blower*	230V 50/60Hz 1.5kW	-
31	EH1	Heater**	230V 50/60Hz 6.0kW	-
32	X1	Terminal board	-	YE61040040000
33	-	-	-	YE61043500000
34	-	-	-	YE61250040000
35	-	-	-	YE61253500000
36	X2	Terminal board	-	YE61250040000

NO.	Symbol	Name	SDL-160U	
			Specification	Part NO.
37	-	-	-	YE61253500000
38	-	-	-	YE61250040000
39	-	-	-	YE61250040000
40	X3	Terminal board	-	YE61250040000
41	X4 X5	Heavy duty connector	4P 10A	YE68041000100

* 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 2-19: Electrical Components List (SDL-230U 230V)

NO.	Symbol	Name	SDL-230U	
			Specification	Part NO.
1	Q1	Main switch	25A	YE10210300000
2	Q2	Circuit breaker*	20A	YE40602000000
3	-	Excitation break away	230VAC 50/60Hz	YE40023560000
4	Q3	Circuit breaker*	5A	YE40603000000
5	Q4	Circuit breaker*	15A	YE40601500000
6	K1	Contactor*	220V 50/60Hz	YE00601521000
7	K2	Contactor*	220V 50/60Hz	YE00601621000
8	K3	Contactor*	220V 50/60Hz	YE00602622000
9	K5	Middle relay	230V 50/60Hz 12A	YE03270700000
10	K6	Heatless Dehumidifying	230V 50/60Hz	-
11	K7	Dew-point meter	230V 50/60Hz	YE85122000100
12	T	Transformer*	IN=230V OUT=230/20V 500mA	YE70202300400
13	F1	Overload relay*	0.7~1A	YE01160700000
14	F2	Overload relay*	5.5~8A	YE01160550000
15	FU1	Fuse box**	2P	YE41032200000
16	-	Fuse core	2A	YE46002000000
17	FU2	Fuse**	-	YE46002000000
18	-	Fuse core	0.5A	YE46630500000
19	S3	Dew-point transducer	POWER=24VDC OUT=4-20mA	YE10041100000
20	S4	Overheat protector*	115-320°	BH90115000150
21	S5	Thermocouple	K	BE90802000050
22	PCB-01	PCB*	V1.1 18VAC	YE80101100000
23	PCB-02	PCB*	230VAC 50/60Hz	YE80001100000
24	PCB-03	PCB*	-	YE80001100100
25	H1	Buzzer	3-24VDC	YE84002700000
26	H2	Alarm indicate lamp	230VAC 50Hz	YE83305100200
27	FM	Fan	230VAC 40W	YM60121200400
28	Y1 Y2 Y3	Solenoid valve*	230VAC 50/60Hz	YE32051800300
29	M1	Blower*	230V 50/60Hz 0.12kW	-
30	M2	Blower*	230V 50/60Hz 1.5kW	-
31	EH1	Heater**	230V 50/60Hz 6.0kW	-
32	X1	Terminal board	-	YE61250040000
33	-	-	-	YE61253500000
34	-	-	-	YE61060000000
35	-	-	-	YE61063500000
36	X2	Terminal board	-	YE61250040000

NO.	Symbol	Name	SDL-230U	
			Specification	Part NO.
37	-	-	-	YE61253500000
38	-	-	-	YE61250040000
39	-	-	-	YE61250040000
40	X3	Terminal board	-	YE61250040000
41	X4 X5	Heavy duty connector	4P 10A	YE68041000100

* 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 2-20: Electrical Components List (SDL-300U/450U 230V)

NO.	Symbol	Name	SDL-300U/450U	
			Specification	Part NO.
1	Q1	Main switch	63A	YE10250400000
2	Q2	Circuit breaker*	40A	YE40604000000
3	-	Excitation break away	230VAC 50/60Hz	YE40023560000
4	Q3	Circuit breaker*	5A	YE40603000000
5	Q4	Circuit breaker*	15A	YE40601500000
6	K1	Contactor*	220V 50/60Hz	YE00601521000
7	K2	Contactor*	220V 50/60Hz	YE00601621000
8	K3	Contactor*	220V 50/60Hz	YE00602822000
9	K5	Middle relay	230V 50/60Hz 12A	YE03270700000
10	K6	Heatless Dehumidifying	230V 50/60Hz	-
11	K7	Dew-point meter	230V 50/60Hz	YE85122000100
12	T	Transformer*	IN=230V OUT=230/20V 500mA	YE70202300400
13	F1	Overload relay*	1.1~1.6A	YE01160110000
14	F2	Overload relay*	5.5~8A	YE01160550000
15	FU1	Fuse box**	2P	YE41032200000
16	-	Fuse core	2A	YE46002000000
17	FU2	Fuse**	-	YE46002000000
18	-	Fuse core	0.5A	YE46630500000
19	S3	Dew-point transducer	POWER=24VDC OUT=4-20mA	YE10041100000
20	S4	Overheat protector*	115-320°	BH90115000150
21	S5	Thermocouple	K	BE90802000050
22	PCB-01	PCB*	V1.1 18VAC	YE80101100000
23	PCB-02	PCB*	230VAC 50/60Hz	YE80001100000
24	PCB-03	PCB*	-	YE80001100100
25	H1	Buzzer	3-24VDC	YE84002700000
26	H2	Alarm indicate lamp	230VAC 50Hz	YE83305100200
27	FM	Fan	230VAC 40W	YM60121200400
28	Y1 Y2 Y3	Solenoid valve*	230VAC 50/60Hz	YE32051800300
29	M1	Blower*	230V 50/60Hz 0.18kW	-
30	M2	Blower*	230V 50/60Hz 1.5kW	-
31	EH1	Heater**	230V 50/60Hz 12kW	-
32	X1	Terminal board	-	YE61250040000
33	-	-	-	YE61253500000
34	-	-	-	YE61060000000
35	-	-	-	YE61063500000
36	-	-	-	YE61100000000

NO.	Symbol	Name	SDL-300U/450U	
			Specification	Part NO.
37	-	-	-	YE61103500000
38	X2	Terminal board	-	YE61250040000
39	-	-	-	YE61253500000
40	-	-	-	YE61250040000
41	-	-	-	YE61250040000
42	X3	Terminal board	-	YE61250040000
43	X4 X5	Heavy duty connector	4P 10A	YE68041000100

* 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 2-21: Electrical Components List (SDL-600U/750U 230V)

NO.	Symbol	Name	SDL-600U/750U	
			Specification	Part NO.
1	Q1	Main switch	60A	YE41106200000
2	Q2	Circuit breaker*	60A	YE40606000000
3	-	Excitation break away	230VAC 50/60Hz	YE40023560000
4	Q3	Circuit breaker*	5A	YE40603000000
5	Q4	Circuit breaker*	15A	YE40601500000
6	K1	Contactor*	220V 50/60Hz	YE00601521000
7	K2	Contactor*	220V 50/60Hz	YE00601621000
8	K3	Contactor*	220V 50/60Hz	YE00504400000
9	K5	Middle relay	230V 50/60Hz 12A	YE03270700000
10	K6	Heatless Dehumidifying	230V 50/60Hz	-
11	K7	Dew-point meter	230V 50/60Hz	YE85122000100
12	T	Transformer*	IN=230V OUT=230/20V 500mA	YE70202300400
13	F1	Overload relay*	2.2-3.2A	YE01160220000
14	F2	Overload relay*	5.5~8A	YE01160550000
15	FU1	Fuse box**	2P	YE41032200000
16	-	Fuse core	2A	YE46002000000
17	FU2	Fuse**	-	YE46002000000
18	-	Fuse core	0.5A	YE46630500000
19	S3	Dew-point transducer	POWER=24VDC OUT=4-20mA	YE10041100000
20	S4	Overheat protector*	115-320°	BH90115000150
21	S5	Thermocouple	K	BE90802000050
22	PCB-01	PCB*	V1.1 18VAC	YE80101100000
23	PCB-02	PCB*	230VAC 50/60Hz	YE80001100000
24	PCB-03	PCB*	-	YE80001100100
25	H1	Buzzer	3-24VDC	YE84002700000
26	H2	Alarm indicate lamp	230VAC 50Hz	YE83305100200
27	FM	Fan	230VAC 40W	YM60121200400
28	Y1 Y2 Y3	Solenoid valve*	230VAC 50/60Hz	YE32051800300
29	M1	Blower*	230V 50/60Hz 0.55kW	-
30	M2	Blower*	230V 50/60Hz 1.5kW	-
31	EH1	Heater**	230V 50/60Hz 18kW	-
32	X1	Terminal board	-	YE61250040000
33	-	-	-	YE61253500000
34	-	-	-	YE61160000000
35	-	-	-	YE61163500000
36	X2	Terminal board	-	YE61250040000

NO.	Symbol	Name	SDL-600U/750U	
			Specification	Part NO.
37	-	-	-	YE61253500000
38	-	-	-	YE61250040000
39	-	-	-	YE61250040000
40	X3	Terminal board	-	YE61250040000
41	X4 X5	Heavy duty connector	4P 10A	YE68041000100

* 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 2-22: Electrical Components List (SDL-900U 230V)

NO.	Symbol	Name	SDL-900U	
			Specification	Part NO.
1	Q1	Main switch	90A	YE41109200000
2	Q2	Circuit breaker*	80A	YE40800300000
3	-	Excitation break away	230VAC 50/60Hz	YE40023560000
4	Q3	Circuit breaker*	5A	YE40603000000
5	Q4	Circuit breaker*	20A	YE40602000000
6	K1	Contactor*	220V 50/60Hz	YE00601521000
7	K2	Contactor*	220V 50/60Hz	YE00601721000
8	K3	Contactor*	220V 50/60Hz	YE00504400000
9	K5	Middle relay	230V 50/60Hz 12A	YE03270700000
10	K6	Heatless Dehumidifying	230V 50/60Hz	-
11	K7	Dew-point meter	230V 50/60Hz	YE85122000100
12	T	Transformer*	IN=230V OUT=230/20V 500mA	YE70202300400
13	F1	Overload relay*	2.2-3.2A	YE01160220000
14	F2	Overload relay*	9-12.5A	YE01169125000
15	FU1	Fuse box**	2P	YE41032200000
16	-	Fuse core	2A	YE46002000000
17	FU2	Fuse**	-	YE46002000000
18	-	Fuse core	0.5A	YE46630500000
19	S3	Dew-point transducer	POWER=24VDC OUT=4-20mA	YE10041100000
20	S4	Overheat protector*	115-320°	BH90115000150
21	S5	Thermocouple	K	BE90802000050
22	PCB-01	PCB*	V1.1 18VAC	YE80101100000
23	PCB-02	PCB*	-	YE80001100000
24	PCB-03	PCB*	-	YE80001100100
25	H1	Buzzer	3-24VDC	YE84002700000
26	H2	Alarm indicate lamp	230VAC 50Hz	YE83305100200
27	FM	Fan	230VAC 40W	YM60121200400
28	Y1 Y2 Y3	Solenoid valve*	230VAC 50/60Hz	YE32051800300
29	M1	Blower*	230V 50/60Hz 0.55kW	-
30	M2	Blower*	230V 50/60Hz 2.4kW	-
31	EH1	Heater**	230V 50/60Hz 18kW	-
32	X1	Terminal board	-	YE61250040000
33	-	-	-	YE61253500000
34	-	-	-	YE61160000000
35	-	-	-	YE61163500000
36	-	-	-	YE61025000000

NO.	Symbol	Name	SDL-900U	
			Specification	Part NO.
37	-	-	-	YE61025000100
38	X2	Terminal board	-	YE61250040000
39	-	-	-	YE61253500000
40	-	-	-	YE61250040000
41	-	-	-	YE61250040000
42	X3	Terminal board	-	YE61250040000
43	X4 X5	Heavy duty connector	4P 10A	YE68041000100

* 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 2-23: Electrical Components List (SDL-1200U 230V)

NO.	Symbol	Name	SDL-1200U	
			Specification	Part NO.
1	Q1	Main switch	90A	YE41109200000
2	Q2	Circuit breaker*	80A	YE40800300000
3	-	Excitation break away	230VAC 50/60Hz	YE40023560000
4	Q3	Circuit breaker*	10A	YE40600300000
5	Q4	Circuit breaker*	20A	YE40602000000
6	K1	Contactor*	220V 50/60Hz	YE00601521000
7	K2	Contactor*	220V 50/60Hz	YE00601721000
8	K3	Contactor*	220V 50/60Hz	YE00602822000
9	K5	Middle relay	230V 50/60Hz 12A	YE03270700000
10	K6	Heatless Dehumidifying	230V 50/60Hz	-
11	K7	Dew-point meter	230V 50/60Hz	YE85122000100
12	T	Transformer*	IN=230V OUT=230/20V 500mA	YE70202300400
13	F1	Overload relay*	3.5-5A	YE01160350000
14	F2	Overload relay*	9-12.5A	YE01169125000
15	FU1	Fuse box**	2P	YE41032200000
16	-	Fuse core	2A	YE46002000000
17	FU2	Fuse**	-	YE46002000000
18	-	Fuse core	0.5A	YE46630500000
19	S3	Dew-point transducer	POWER=24VDC OUT=4-20mA	YE10041100000
20	S4	Overheat protector*	115-320°	BH90115000150
21	S5	Thermocouple	K	BE90802000050
22	PCB-01	PCB*	V1.1 18VAC	YE80101100000
23	PCB-02	PCB*	-	YE80001100000
24	PCB-03	PCB*	-	YE80001100100
25	H1	Buzzer	3-24VDC	YE84002700000
26	H2	Alarm indicate lamp	230VAC 50Hz	YE83305100200
27	FM	Fan	230VAC 40W	YM60121200400
28	Y1 Y2 Y3	Solenoid valve*	230VAC 50/60Hz	YE32051800300
29	M1	Blower*	230V 50/60Hz 0.55kW	-
30	M2	Blower*	230V 50/60Hz 2.4kW	-
31	EH1	Heater**	230V 50/60Hz 12kW	-
32	X1	Terminal board	-	YE61250040000
33	-	-	-	YE61253500000
34	-	-	-	YE61060000000
35	-	-	-	YE61063500000
36	-	-	-	YE61025000000

NO.	Symbol	Name	SDL-1200U	
			Specification	Part NO.
37	-	-	-	YE61025000100
38	X2	Terminal board	-	YE61250040000
39	-	-	-	YE61253500000
40	-	-	-	YE61250040000
41	-	-	-	YE61250040000
42	X3	Terminal board	-	YE61250040000
43	X4 X5	Heavy duty connector	4P 10A	YE68041000100

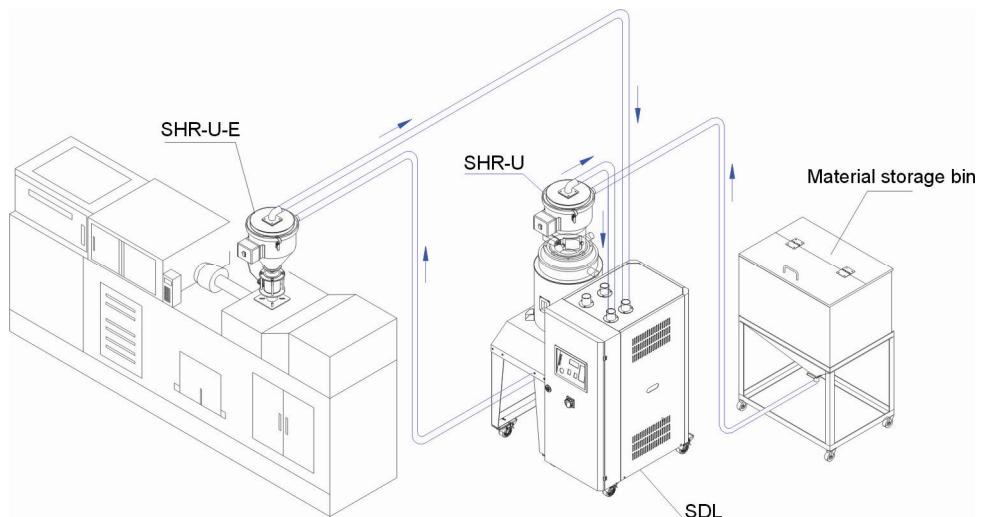
* means possible broken parts. ** means easy broken part. and spare backup is suggested.
 Please confirm the version of manual before placing the purchase order to guarantee that the item number of the spare part is in accordance with the real object.

3. Installation and Debugging

3.1 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: $\pm 5\%$
Main power frequency: $\pm 2\%$
- 7) Refer to the pipe connection diagram to complete the installation.

3.2 Installation diagram



Picture 3-1: Installation diagram

3.3 Power Supply

Make sure that the power supply conforms with required specifications before installation. SDL-U are generally set to be used with 3Φ400V 50Hz power supply or other specifications if required.



Picture 3-2: Power Supply



Notes!

Keep the machine 2M from the combustible distance.

3.4 Pipe Heaters

- 1) Put the heating pipes into the heating jacket.
- 2) Fix the heater assembly on the machine support. (See right picture)



Picture 3-3: Pipe Heaters



Warning!

High temperature, take care of hands!

This label is attached on the surface of heating pipes.

3.5 Blower

3.5.1 Drying Blower

- 1) Fix inlet/outlet flange of blower, and tighten 4 screws securely.
- 2) Connect the blower with electrical source.
- 3) Install the blower on the Machine frame.



Picture 3-4: Drying Blower

3.5.2 Conveying Blower

- 1) Fix inlet/outlet flange of blower, and tighten 4 screws securely.
- 2) Connect the blower with electrical power source.
- 3) Install the blower on the Machine frame.
- 4) Fix the three-way valve (See Fig.13).
- 5) Install the solenoid valve, and then tighten 2 screws on the machine frame (See Fig.14).



Picture 3-5: Conveying Blower

3.5.3 Installation of Drying Hopper

- 1) Install drying hopper on the machine frame.
- 2) Fix the shut-off valve adaptor on the suction box.
- 3) Install the shut-off valve on the suction box.



Picture 3-6: Installation of Drying Hopper

3.5.4 Filter & Pressure Regulating Valve

- 1) Switch on the air source.
- 2) Pull the black pressure adjusting knob 1 upward and rotate it, observe the pressure gauge 2, generally a 0.5 Mpa pressure is advisable.
- 3) Push back the black knob 1.

4. Application and Operation

Turn on the main switch to connect power supply on the control panel.

4.1 Panel Operation

- 1) Open the main switch.
- 2) Press "RUN/STOP" key to start loading.

4.2 Temperature Setup

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

4.3 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 4-1: Intermittent Running Setup 1

- 2) PV displays "0-ON" to stand for drying periods. "0-OFF" stands for machine stop time. Press \blacktriangle \blacktriangledown key to add or decrease time value of "SV/setup value". Each press of \blacktriangle \blacktriangledown 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 4-2: 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 4-3: Intermittent Running Setup 3

4.4 Weekly Time Start Setup

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



Picture 4-4: Weekly Time Start Setup 1

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



Picture 4-5: Weekly Time Start Setup 2

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



Picture 4-6: 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.

4.5 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.

4.6 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.

4.7 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.

4.8 Wrong Codes Remark

Table 4-1: Wrong Codes Remark

Wrong codes	Remark
E-01	Break line of thermocouple
E-02	Power reverse phase, default phase
E-03	Overload of blower
E-04	Drying temp. exceeds EGO set value
E-05	Drying temp. exceeds max. set value
E-07	Overheat protection (PV ≥ SV plus set value, alarm sounds)
E-08	Memory errors

4.9 Operation of Conveying System

- 1) Press  once to set the suction time of the hopper 1.
Press  once to set the suction time of the hopper 2.
Press  three times to set the time for opening the valve.
- 2) Change the required time with  key.
- 3) Press RUN/STOP once, hopper 1 turned on but hopper 2 turned off.
Press RUN/STOP twice, both hopper 1 and 2 turned on.
Press RUN/STOP three times, hopper 1 turned off but hopper 2 turned on.
Press RUN/STOP four times, both hopper 1 and 2 turned off.

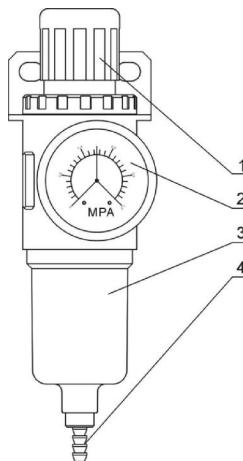
5. Trouble-shooting

Fault	Possible reasons	Solution
System cannot operate	1. Main AC power supply unconnected	1. Close main AC power source
	2. Put timer switch into ON status	2. Reset timer button and restart again
	3. Motor overload or Phase reverse	3. Check close-loop, regenerative motor and AC power source are connected correctly.
Long lack time but suction fan not work	1. Main AC power source unconnected or touch button is not in ON position	1. Close main AC power supply
	2. Funnel's sensor, micro switch are bad contact	2. Adjust or replace
	3. Signal cable is broken	3. Re-connect or replace
Motor does not run	1. Heat relay off load	1. Check reason and reset
	2. Connector is not working	2. Check it is burnt out or not
	3. Power source lack of phase or motor is burnt out	3. Check and replace
Material is full but suction fan still working	1. LED sensor or micro switch is On status	1. Adjust or replace
	2. Signal's cable is broken	2. Check signal cable
	3. Mechanical problem or connector point is melt	3. Repair or Replace
	4. PLC problem	4. Check and replace
Continuous running but cannot fill up funnel	1. Material is used up	1. To add more materials
	2. Pipe is leakage	2. Repair or replace
	3. Filter is blocked	3. Clean
	4. Diaphragm valve or shutoff valve is closed	4. Check diaphragm valve or shutoff valve's pressure, electric valve may be burnt out, circuit is well connected or not
	5. Motor's blade problem	5. Check and repair

6. Maintenance and Repair

6.1 Filter & Pressure Regulating Valve

6.1.1 Filter & Pressure Regulating Valve Drawing



Parts list:

1. Pressure adjusting knob 2. Pressure gauge 3. Cup 4. Water outlet

Picture 6-1: Filter & Pressure Regulating Valve Drawing

6.1.2 Filter & Pressure Regulating Valve Operation steps

- 1) Switch on the air source.
- 2) Pull the black pressure adjusting knob 1 upward and rotate it, observe the pressure gauge 2, generally a 0.5 Mpa pressure is advisable.
- 3) Push back the black knob 1.

6.2 Air Filters

Please periodically clean the dust on the air filters, once per week.

Cleaning steps:

- 1) Take out the air filter carefully.
- 2) Blow off the dust on the air filter screen and the cover with pressure air.
- 3) Wipe off the barrel wall of air filter with rag.
- 4) After cleaning, place all parts in reversed order carefully.



Note!

Don't make sundries fall into the barrel, when taking out the air filter.

6.3 Blower Motors

- 1) To clean blower both internal and external parts (especially the fan cooling path), by removing surface dust. If more dusts are accumulated, it will cause deficiency for ventilation, temperature rising up, blower power reduced, vibration increased and so it will cause machine broke down.
- 2) Ball bearing, oil seal and sound-proof are belonging to consumable parts and so it has a life period and requires regular replacement.



Picture 6-2: Blower Motors

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
Process heater	Above 1 year
Contactor	Above 100,000 act

6.4 Maintenance Schedule

6.4.1 About the Machine

Model _____ SN _____ Manufacture date _____

Voltage _____ V Frequency _____ Hz Power _____ kW

6.4.2 Installation & Inspection

- Check if the pipe joint is tightly locked by clips or not.
- Check that the material clearance door is firmly closed.

Electrical Installation

- Voltage: _____ V _____ Hz
- Fuse melt current: 1 Phase _____ A 3 Phase _____ A
- Check phase sequence of the power supply.

6.4.3 Daily Checking

- Check power supply wires.
- Check the start/stop function.

6.4.4 Weekly Checking

- Check all the electrical cables.
- Check if there are loose connections of electrical components.
- Check and clean air filter.
- Check the function of solenoid valve.
- Check motor overload relay and anti-phase function.

6.4.5 Monthly Checking

- Check whether the material inlet pipe leaks air.
- Check whether the motor works normally.
- Check whether the process heater works normally.

6.4.6 Half-yearly Checking

- Check if there are damages of heat-resistant hoses.
- Check the pipe heaters.
- Check process blower and blower fans.