

SWCS

Single Wire Conveying System

Date: Feb. 2017

Version: Ver.A (English)



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1. General Description



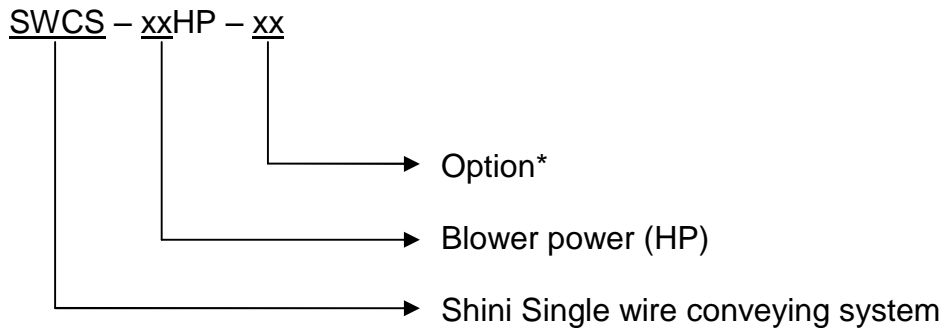
Read this manual carefully before operation to prevent damage of the machine or personal injuries.

Single wire conveying system is suitable for conveying new materials. It adopts European design and stainless steel hopper to prevent material from contamination. It's powerful. With touch screen operation panel, it features simple and convenient operation. When equipped with 1-12 Single wire hopper receiver SWHR-U, it's suitable for "one-to-many" way of conveying materials to different molding machines or storage tanks.



Model: SWCS

1.1 Coding Principle



Notes: *

D=Double-stage Blower CE=CE Conformity A=Auto cleaning device

1.2 Feature

1) Standard configuration

- With up to 12 stations of material conveying, it can greatly lower the cost.
- With lower suction type design and filter with cyclone baffle plate below it mounted in the separating dust collector, it can reduce the load of filter effectively.
- Separating dust collector is convenient for dust cleaning.
- Equipped with faults and motor overload indicators, the main machine can give an alarm immediately.
- All main machines are equipped with vacuum valve to protect the blower.
- Storage hoppers SCH-6U/12U/24U of both standard and insulation type are available as options. They are installed under the vacuum hopper and then put on the IMM directly.
- With central operation panel, it can centrally set parameters of loading material for each station.
- With distributed bus control, it can save cables and is easy to construct as well as to maintain.
- Adopt communication mode RS485.

2) Accessory option

- If there are quite much tiny impurities or recycled materials in the raw materials, the main machine can be equipped with accumulator auto washing device and the machine model should be followed by "A".
- Multi-functional frame HMB-900 whose largest dia. is 900mm is optional.

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 so as 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.

Headquarter and Taipei factory:

Tel: (886) 2 2680 9119

Shini Plastics Technologies (Dongguan), Inc:

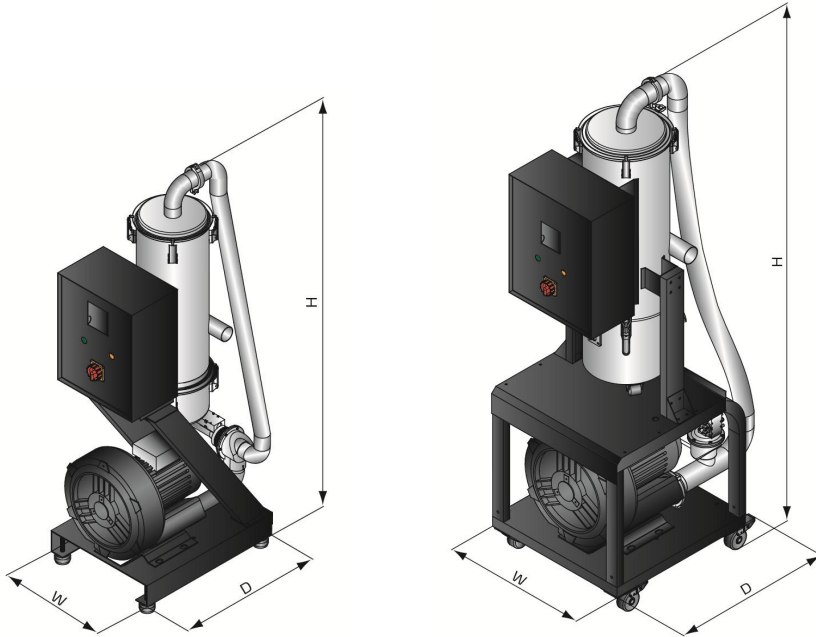
Tel: (86) 769 8111 6600

Shini Plastics Technologies India Pvt.Ltd.:

Tel: (91) 250 3021 166

1.3 Technical Specifications

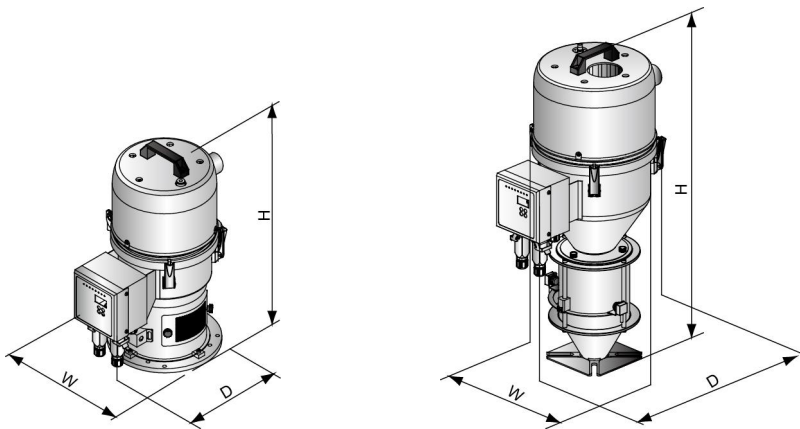
1.3.1 Dimensions



SWCS-5HP

SWCS-10HP

Picture 1-1: Main Machine Dimensions



SWHR-U

SWHR-U-E

Picture 1-2: Dimensions of Hopper

1.3.2 Specifications

Table 1-1: Specifications

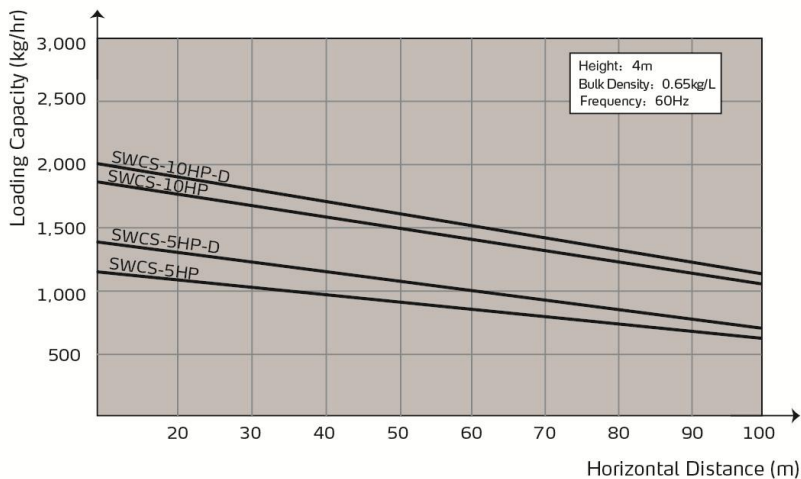
Main Machine				Hopper Receivers				Conveying Pipe Dia (inch)	Air Suction Pipe Dia. (inch)	Conveying Capacity (kg/hr)
Model	Motor Power (kW)	Dimensions (mm) H×W×D	Weight (kg)	Applicable Model	Capacity (L)	Dimensions (mm) H×W×D	Weight (kg)			
SWCS-5HP	3.7	1380×505×615	175	12×SWHR-12U	12	616×335×470	11	1.5	2	1200
				12×SWHR-12U-E		810×335×460	12			
SWCS-5HP-D	3.7	1380×790×515	180	12×SWHR-12U	12	616×335×470	11	1.5	2	1350
				12×SWHR-12U-E		810×335×460	12			
SWCS-10HP	7.5	1380×720×720	185	12×SWHR-36U	36	1036×335×470	14	2	2.5	1800
SWCS-10HP-D	7.5	1380×900×720	192	12×SWHR-36U	36	1036×335×470	14	2	2.5	2000

Note: 1) "D" stands for double-stage blower.

4) Conditions of conveying capacity test: bulk density 0.65kg/L, plastic rawmaterials granules of dia.3-5 mm, vertical conveying height: 4m, horizontal conveying distance: 5m.

5) Power supply: 3Φ, 400VAC, 50Hz.

1.3.3 Loading Capacity



Picture 1-3: Loading Capacity

1.4 Safety Regulations

Strictly abide by the following safety regulations to prevent damage of the machine or personal injuries.

1.4.1 Safety Signs and Labels



All the electrical components should be installed by professional technicians.

Turn off the main switch and control switch during maintenance or repair.



Warning! High voltage!

This sign is attached on the cover of control box!



Warning! Be careful!


Be more careful at the place where this sign appears!



Attention!

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

1.4.2 Signs and Labels

 <p>Please clean the suction filter regularly YF01423000000</p>	<ol style="list-style-type: none">1. Please clean the suction filter regularly to avoid clogging and ensure proper loading capacity and long life span.2. The one year warranty does not cover the suction filter, please clean the filter carefully.
--	--

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:

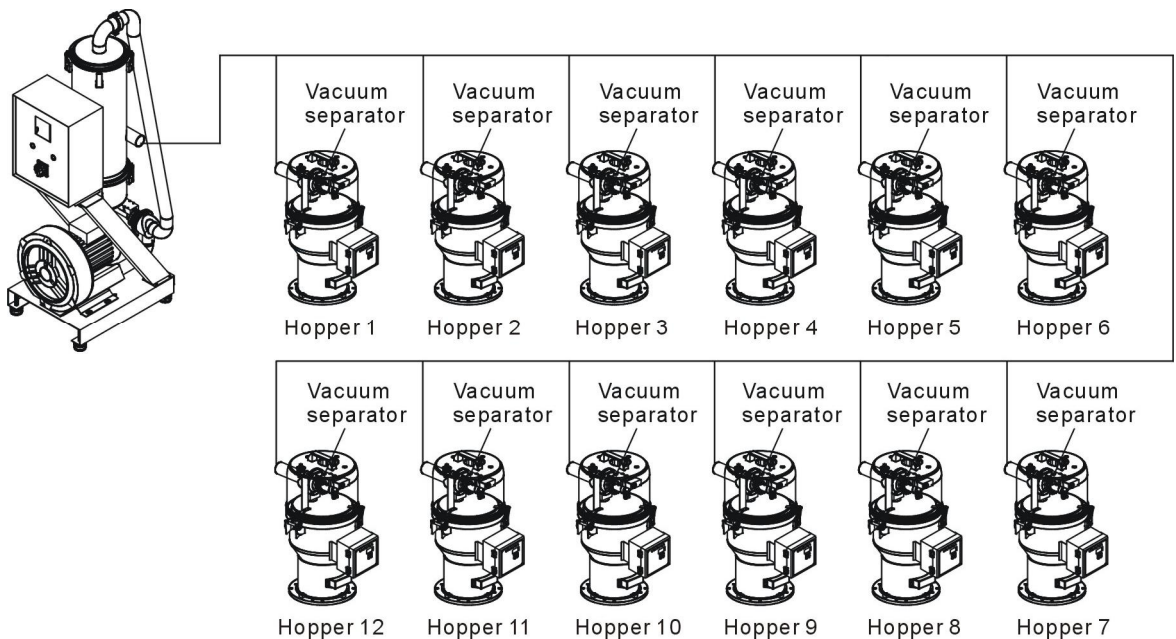
1. Any careless or man-made installations, operation and maintenances upon machines without referring to the manual prior to machine using.
2. Any incidents beyond human reasonable controls, which include man-made vicious or deliberate damages or abnormal power, and machine faults caused by irresistible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

SWCS Single wire conveying system is suitable for conveying plastic granules. It mainly conveys plastics through pressure difference which is formed in material tank by turning motor to generate vacuum.

2.1.1 Working Principle

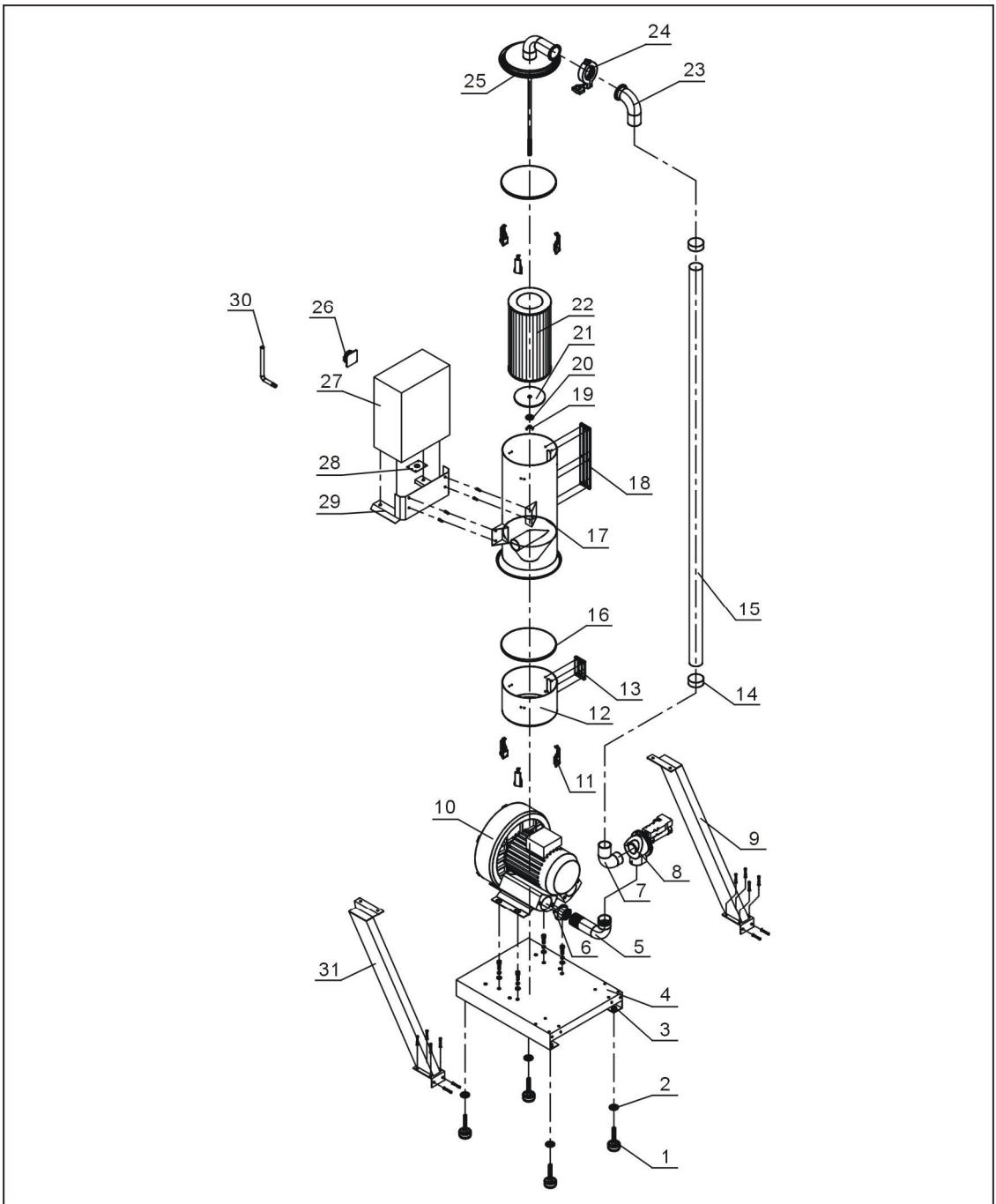


Picture 2-1: Working Principle

Small central feeding station conveys plastics through pressure difference which is formed in material tank by turning motor to generate vacuum. After starting up, hoppers will load materials one by one if all the 12 hoppers are in the state of working. Any one of the 12 hoppers will stop loading if it's full of material while other hoppers keep working. If all hoppers are full of material, the blower will keep working for a period of time before stopping. After it stops, the blower can be restarted by any signal of starving from hoppers. Please remember there is only one hopper working each time; hoppers work according to the coming order of starving signal.

2.2 Parts Drawing

2.2.1 Parts Drawing SWCS-5HP(-D)



Note: Please refer to material list 2.2.2 for specific explanation of the Arabic numbers in parts drawing.

Picture 2-2: Parts Drawing SWCS-5HP(-D)

2.2.2 Parts List SWCS-5HP(-D)

Table 2-1: Parts List SWCS-5HP(-D)

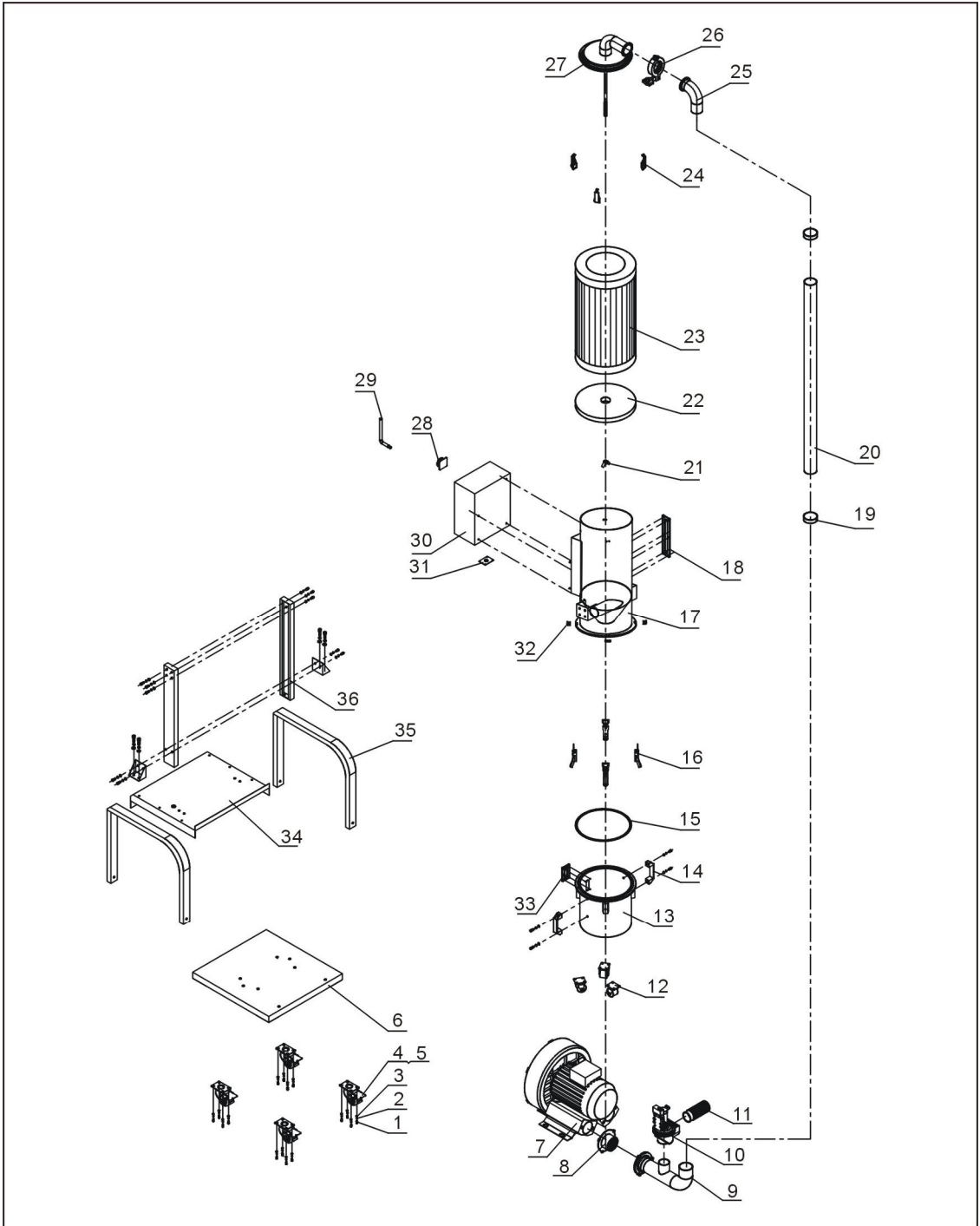
No.	Name	Part No.	No.	Name	Part No.
1	anti-vibration foot $\Phi 50$	YW03005000000	16	Dust collecting fastener*	YR10708000100
2	Flat gasket 8	YW66082200100	17	Filter tank assembly	-
3	Screw M12	YW64012100000	18	Six-hole sight glass assembly	BH90000600050
4	Base	BL21003500120	19	Butterfly nut 5/16"	YW69051600000
5	Air inlet pipe	BL26003506520-	20	Flat gasket 8	YW66082200100
6	Blower flange	-	21	Filter fixing plate	BL26003502520
7	Vacuum breaking separator 1.5"	BY20003800100	22	Filter ADC2 **	YR50181100000
8	Vacuum breaking diaphragm valve	-	23	Air suction pipe	-
9	Right stand pole	-	24	Pipe clamp	YW07000200000
10	High pressure blower 5HP	BM30055000050	25	Filter tank cover assembly	-
	High pressure blower 5HP (double stage)	YM30433700000	26	Main power switch	YE10210300000
11	Snap hook *	YW02003000400	27	Control box	-
12	Dust collecting tank	BL26003507021	28	Line clamp fixing plate	-
13	Four-hole sight glass assembly	BH90000400050	29	Bracket for fixing filter tank	-
14	Pipe fastener 2.5" *	YW02002500000	30	Anti-theft screw wrench	JT40450000000
15	Steel wire rubber pipe 2" *	YR60205040100	31	Left stand pole	-

* means possible broken parts;

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

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

2.2.3 Parts Drawing SWCS-10HP(-D)



Note: Please refer to material list 2.2.4 for specific explanation of the Arabic numbers in parts drawing.

Picture 2-3: Parts Drawing SWCS-10HP(-D)

2.2.4 Parts List SWCS-10HP(-D)

Table 2-2: Parts List SWCS-10HP(-D)

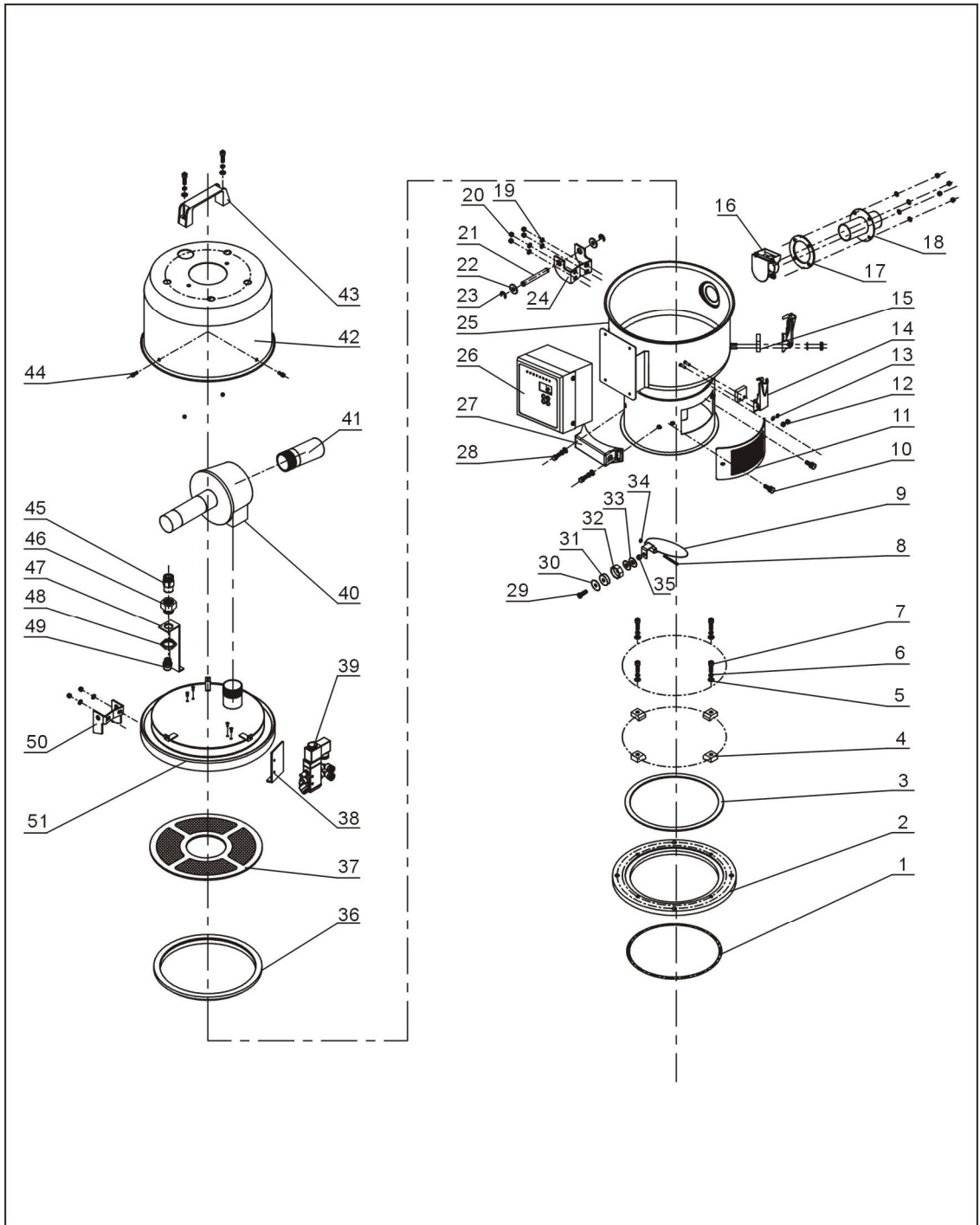
No.	Name	Part No.	No.	Name	Part No.
1	Outer hexagon screw M6×16	YW60061600100	19	Stainless steel pipe fastener 3" *	YW02000300000
2	Flat gasket 6	YW66061300000	20	Steel wire rubber pipe 2.5" *	YR60253000000
3	Spring gasket 6	YW65006000100	21	Butterfly nut 5/16"	YW69051600000
4	Brake type universal castor 3"	YW03000300000	22	Filter fixing plate	BL26007504720
5	Freestyle universal caster 3"	YW03000300200	23	Filter ADC2 **	YR50221400000
6	Base	BL26007502721	24	Snap hook *	YW02003000400
7	High pressure blower 10HP	BM30081000050	25	Air suction pipe	-
	High pressure blower 10HP (double stage)	YM30637500000	26	Pipe clamp	YW07002500600
8	Blower flange	-	27	Filter tank cover assembly	-
9	Air inlet pipe	BL26007504920	28	Main power switch	YE10210300000
10	Vacuum separating valve 2"	BY20502400050	29	Dedicated wrench for anti-theft screw	JT40450000000
11	Air filter *	-	30	Control box	-
12	universal casters 2.5"	YW03002500000	31	Line clamp fixing plate	-
13	Dust collecting tank	BL26007502421	32	Pothook	-
14	Aluminum square handle L120	BW20012000040	33	Four-hole sight glass assembly	BH90000400050
15	Dust collecting fastener *	YE32051800100	34	Intermediate plate	-
16	Big handle *	YW02003000100	35	Frame	-
17	Filter tank assembly	-	36	Stand pole for filter tank	-
18	Six-hole sight glass assembly	BH90000600050			

* means possible broken parts;

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

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

2.2.5 Parts Drawing of Single Wire Hopper Receiver (SWHR-6U)



Note: Please refer to material list 2.2.6 for specific explanation of the Arabic numbers in parts drawing.

Picture 2-4: Parts Drawing of Single Wire Hopper Receiver (SWHR-6U)

2.2.6 Parts List (SWHR-6U)

Table 2-3: Parts List (SWHR-6U)

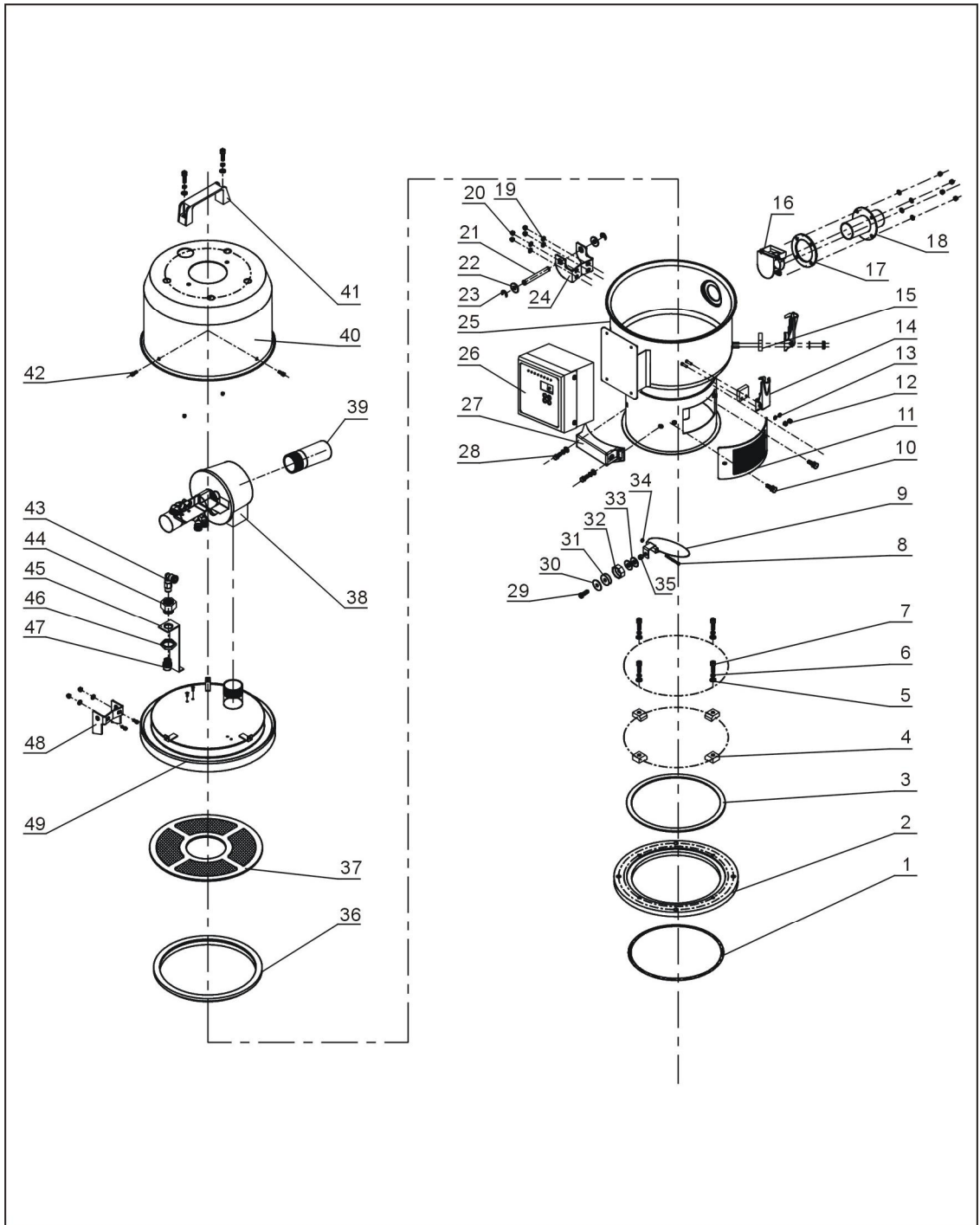
No.	Name	Part No.	No.	Name	Part No.
1	O type seal ring inner dia.Φ200×5.5	YR20205500000	27	Sensor shell	YR40000601100
2	Base	BW21275100010	28	Inner hexagon cylindrical screw M6×10	YW63061000000
3	Base fastener	-	29	Cross recessed pan head screw M6×20	YW63062000000
4	Press block	BW20000630500	30	Magnet cover	BL21000600120
5	Flat gasket 6	YW66061300000	31	Permanent magnetic sheet Φ25×Φ7×7	YW90257700000
6	Spring gasket 6	YW65006000000	32	Magnet sleeve	BH12000600010
7	Inner hexagon cylindrical screw M6×20	YW61062000200	33	Flat gasket 8×22	YW66082200100
8	Cross recessed pan head screw M3×40	YW63034000000	34	locknut M3	YW64000300000
9	Unloading plate	BL20000601820	35	locknut M6	YW64000600200
10	Star handle	YR40061500000	36	Hopper fastener *	YR10000300100
11	Ventilation window	YR40000601000	37	Filter screen *	BL21000600620
12	Locknut M4×0.7	YW64040700100	38	Solenoid valve fixing plate	-
13	Flat gasket 4	YW66040800000	39	Solenoid valve *	YE32421000300
14	Spring gasket *	YW02003000400	40	Diaphragm valve1.5"	-
15	Snap hook pad	YR40000600800	41	Air suction pipe	-
16	1.5" Backstop assembly	BL27002401420	42	Motor outside cover	BR40033000110
17	Feeding pipe fastener	YR10000600300	43	Aluminum square handle L120	BW20012000040
18	Feeding pipe	-	44	Cross recessed pan head screw M5×15	YW62051500000
19	Flat gasket 5	YW66051000100	45	Quick connector APC8-1/4PT	YW80081400000
20	Locknut M5	YW64000500000	46	Connection copper head	BH12002400010
21	Hinge pin	BH10006003110	47	Air pipe connector fixing plate	-
22	Flat gasket 8×22	YW66082200100	48	Connecting nut	BH12003600410
23	E-ring 8	YW69896800000	49	Quick connector APC8-1/4PT	YW80081400000
24	Down hinge	BL32000600140	50	Up hinge	BL32000600240
25	Storage tank	-	51	Hopper cover	-
26	Control box	-			

* means possible broken parts;

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

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

2.2.7 Parts Drawing of Single Wire Hopper Receiver (SWHR-12U)



Note: Please refer to material list 2.2.8 for specific explanation of the Arabic numbers in parts drawing.

Picture 2-5: Parts Drawing of Single Wire Hopper Receiver (SWHR-12U)

2.2.8 Parts List (SWHR-12U)

Table 2-4: Parts List (SWHR-12U)

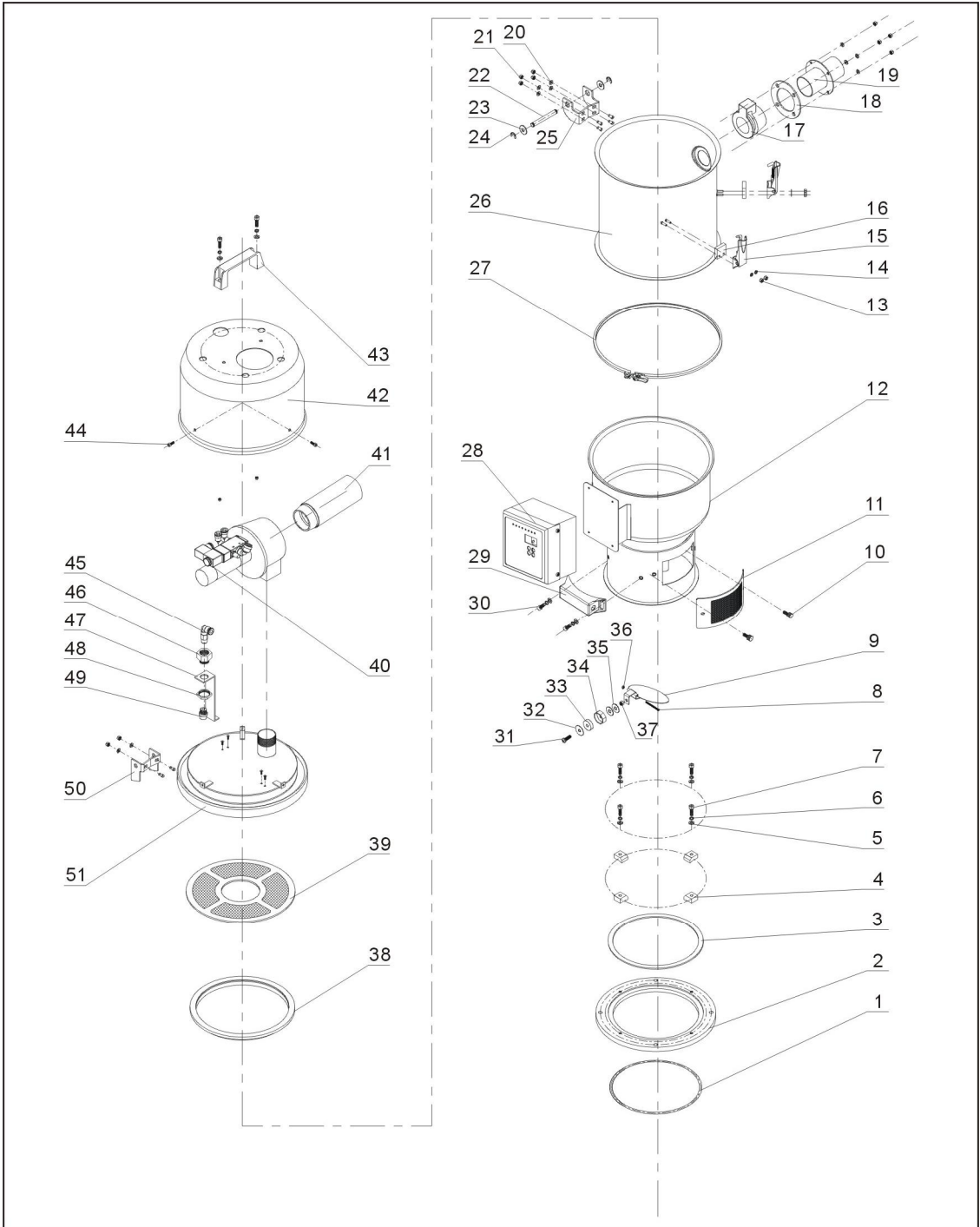
No.	Name	Part No.	No.	Name	Part No.
1	O type seal ring inner dia. $\Phi 200 \times 5.5$	YR20205500000	26	Control box	-
2	Base	BW21275100010	27	Sensor shell	YR40000601100
3	Base fastener	-	28	Inner hexagon cylindrical screw M6 \times 10	YW63061000000
4	Press block	BW20000630500	29	Cross recessed pan head screw M6 \times 20	YW63062000000
5	Flat gasket 6	YW66061300000	30	Magnet cover	BL21000600120
6	Spring gasket 6	YW65006000000	31	Permanent magnetic sheet $\Phi 25 \times \Phi 7 \times 7$	YW90257700000
7	Inner hexagon cylindrical screw M6 \times 20	YW61062000200	32	Magnet sleeve	BH12000600010
8	Cross recessed pan head screw M3 \times 40	YW63034000000	33	Flat gasket 8 \times 22	YW66082200100
9	Unloading plate	BL20000601820	34	Locknut M3	YW64000300000
10	Star handle	YR40061500000	35	Locknut M6	YW64000600200
11	Ventilation window	YR40000601000	36	Hopper fastener *	YR10000600200
12	Locknut M4 \times 0.7	YW64040700100	37	Filter screen *	BL21001200320
13	Flat gasket 4	YW66040800000	38	Diaphragm valve 1.5"	BY20382400050
14	Spring gasket *	YW02003000400	39	Air suction pipe	-
15	Snap hook pad	YR40000600800	40	Motor outside cover	BR40036000310
16	1.5" Backstop assembly	BL27002401420	41	Aluminum square handle L120	BW20012000040
17	Feeding pipe fastener	YR10000600300	42	Cross recessed pan head screw M5 \times 15	YW62051500000
18	Feeding pipe	-	43	Quick connector APL8-1/4PT	YW80081400100
19	Flat gasket 5	YW66051000100	44	Connection copper head	BH12002400010
20	Locknut M5	YW64000500000	45	Air pipe connector fixing plate	-
21	Hinge pin	BH10006003110	46	Connecting nut	BH12003600410
22	Flat gasket 8 \times 22	YW66082200100	47	Quick connector APC8-1/4PT	YW80081400000
23	E-ring 8	YW69896800000	48	Up hinge	BL32000600240
24	Down hinge	BL32000600140	49	Hopper cover	-
25	Storage tank	-			

* means possible broken parts;

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

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

2.2.9 Parts Drawing of Single Wire Hopper Receiver (SWHR-24U)



Note: Please refer to material list 2.2.10 for specific explanation of the Arabic numbers in parts drawing.

Picture 2-6: Parts Drawing of Single Wire Hopper Receiver (SWHR-24U)

2.2.10 Parts List (SWHR-24U)

Table 2-5: Parts List (SWHR-24U)

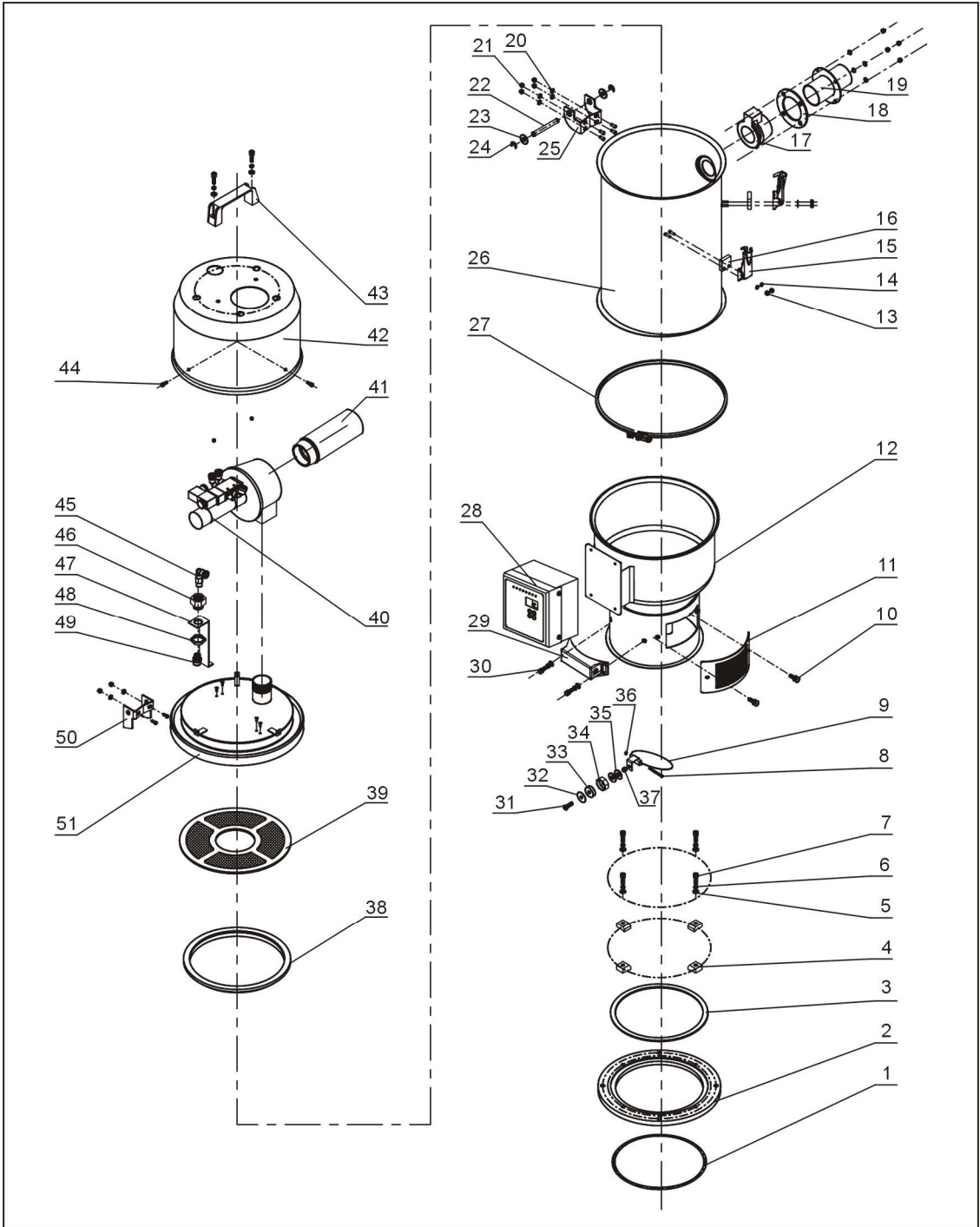
No.	Name	Part No.	No.	Name	Part No.
1	O type seal ring innerdia.Φ200×5.5	YR20205500000	27	Pipe fastener	-
2	Base	BW2127500010	28	Control box	-
3	Base fastener	-	29	Sensor shell	YR40000601100
4	Press block	BW20000630500	30	Inner hexagon cylindrical screw M6×10	YW63061000000
5	Flat gasket 6	YW66061300000	31	Cross recessed pan head screw M6×20	YW63062000000
6	Spring gasket 6	YW65006000000	32	Magnet cover	BL20000601220
7	Inner hexagon cylindrical screw M6×20	YW61062000200	33	Permanent magnetic sheet Φ25×Φ7×7	YW90257700000
8	Cross recessed pan head screw M3×40	YW63034000000	34	Magnet sleeve	BH12000600010
9	Unloading plate	BL27002401920	35	Flat gasket 8×22	YW66082200100
10	Star handle	YR40061500000	36	locknut M3	YW64000300000
11	Ventilation window	YR40000601000	37	locknut M6	YW64000600200
12	Storage hopper	-	38	Hopper fastener *	YR10000600200
13	Locknut M4×0.7	YW64040700100	39	Filter screen *	BL21001200320
14	Flat gasket 4	YW66040800000	40	Diaphragm valve 2"	BY20502400050
15	Spring gasket *	YW02003000400	41	Air suction pipe	-
16	Snap hook pad	YR40000600800	42	Motor outside cover	BR40036000310
17	2" Backstop *	YR90240800000	43	Aluminum square handle L120	BW20012000040
18	Feeding pipe fastener	-	44	Cross recessed pan head screw M5×15	YW62051500000
19	Feeding pipe	-	45	Quick connector APL8-1/4PT	YW80081400100
20	Flat gasket 5	YW66051000100	46	Connection copper head	BH12002400010
21	Locknut M5	YW64000500000	47	Air pipe connector fixing plate	-
22	Hinge pin	BH10006003110	48	Connecting nut	BH12003600410
23	Flat gasket 8×22	YW66082200100	49	Quick connector APC8-1/4PT	YW80081400000
24	E-ring 8	YW69896800000	50	Up hinge	BL32000600240
25	Down hinge	BL32000600140	51	Hopper cover	-
26	Extra large material tank	-			

* means possible broken parts;

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

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

2.2.11 Parts Drawing of Single Wire Hopper Receiver (SWHR-36U)



Note: Please refer to material list 2.2.12 for specific explanation of the Arabic numbers in parts drawing.

Picture 2-7: Parts Drawing of Single Wire Hopper Receiver (SWHR-36U)

2.2.12 Parts List (SWHR-36U)

Table 2-6: Parts List (SWHR-36U)

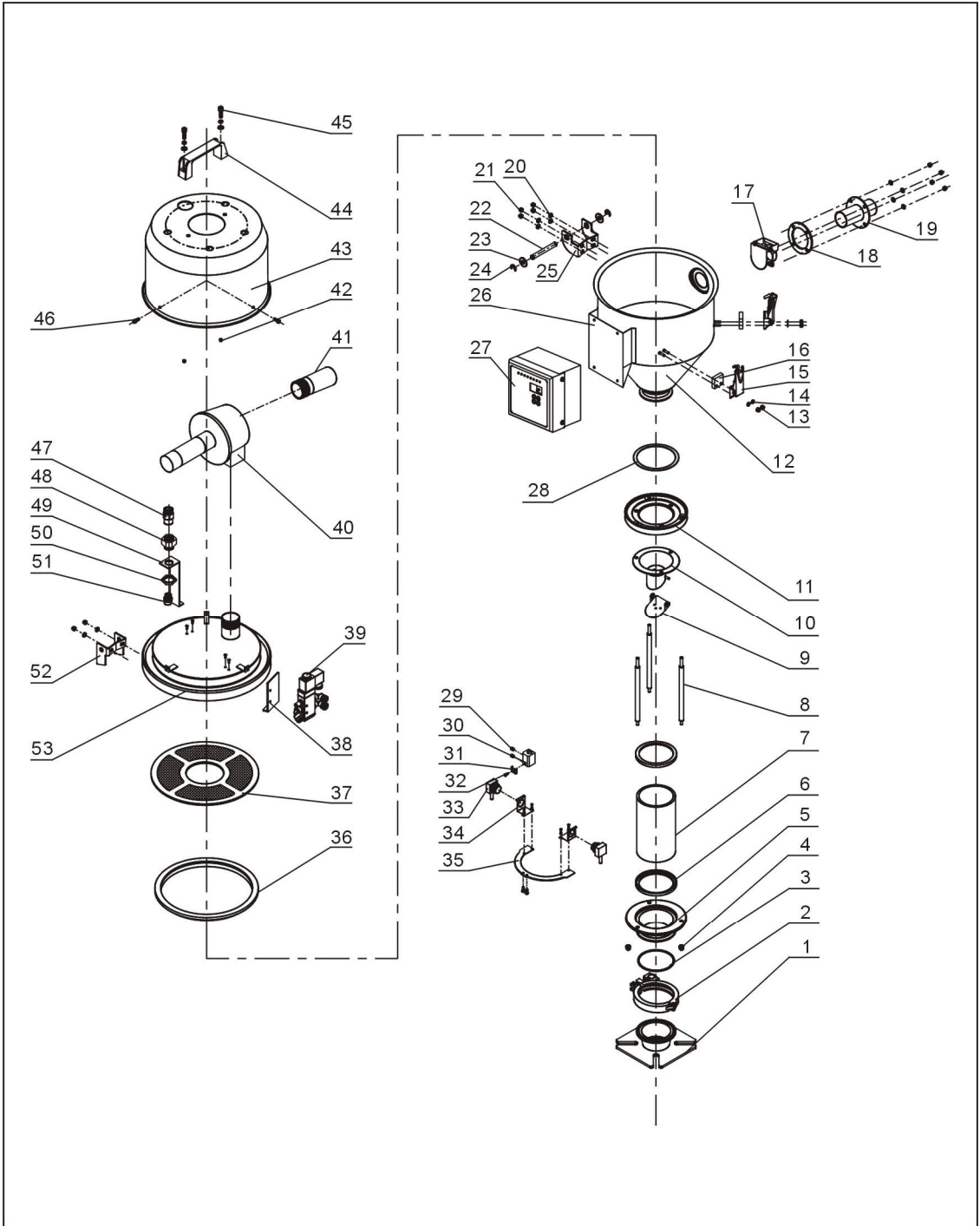
No.	Name	Part No.	No.	Name	Part No.
1	O type seal ring inner dia. $\Phi 200 \times 5.5$	YR20205500000	27	Pipe fastener	-
2	Base	BW21275100010	28	Control box	-
3	Base fastener	-	29	Sensor shell	YR40000601100
4	Press block	BW20000630500	30	Inner hexagon cylindrical screw M6 \times 10	YW63061000000
5	Flat gasket 6	YW66061300000	31	Cross recessed pan head screw M6 \times 20	YW63062000000
6	Spring gasket 6	YW65006000000	32	Magnet cover	BL21000600120
7	Inner hexagon cylindrical screw M6 \times 20	YW61062000200	33	Permanent magnetic sheet $\Phi 25 \times \Phi 7 \times 7$	YW90257700000
8	Cross recessed pan head screw M3 \times 40	YW63034000000	34	Magnet sleeve	BH12000600010
9	Unloading plate	BL27002401920	35	Flat gasket 8 \times 22	YW66082200100
10	Star handle	YR40061500000	36	locknut M3	YW64000300000
11	Ventilation window	YR40000601000	37	locknut M6	YW64000600200
12	Storage hopper	-	38	Hopper fastener *	YR10000600200
13	Locknut M4 \times 0.7	YW64040700100	39	Filter screen *	BL21001200320
14	Flat gasket 4	YW66040800000	40	Diaphragm valve 2"	BY20502400050
15	Spring gasket *	YW02003000400	41	Air suction pipe	-
16	Snap hook pad	YR40000600800	42	Motor outside cover	BR40036000310
17	2" Backstop *	YR90240800000	43	Aluminum square handle L120	BW20012000040
18	Feeding pipe fastener	-	44	Cross recessed pan head screw M5 \times 15	YW62051500000
19	Feeding pipe	-	45	Quick connector APL8-1/4PT	YW80081400100
20	Flat gasket 5	YW66051000100	46	Connection copper head	BH12002400010
21	Locknut M5	YW64000500000	47	Air pipe connector fixing plate	-
22	Hinge pin	BH10006003110	48	Connecting nut	BH12003600410
23	Flat gasket 8 \times 22	YW66082200100	49	Quick connector APC8-1/4PT	YW80081400000
24	E-ring 8	YW69896800000	50	Up hinge	BL32000600240
25	Down hinge	BL32000600140	51	Hopper cover	-
26	Extra large material tank	-			

* means possible broken parts;

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

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

2.2.13 Parts Drawing of Single Wire Glass Receiver (SWHR-6U-E)



Note: Please refer to material list 2.2.14 for specific explanation of the Arabic numbers in parts drawing.

Picture 2-8: Parts Drawing of Single Wire Glass Receiver (SWHR-6U-E)

2.2.14 Parts List (SWHR-6U-E)

Table 2-7: Parts List (SWHR-6U-E)

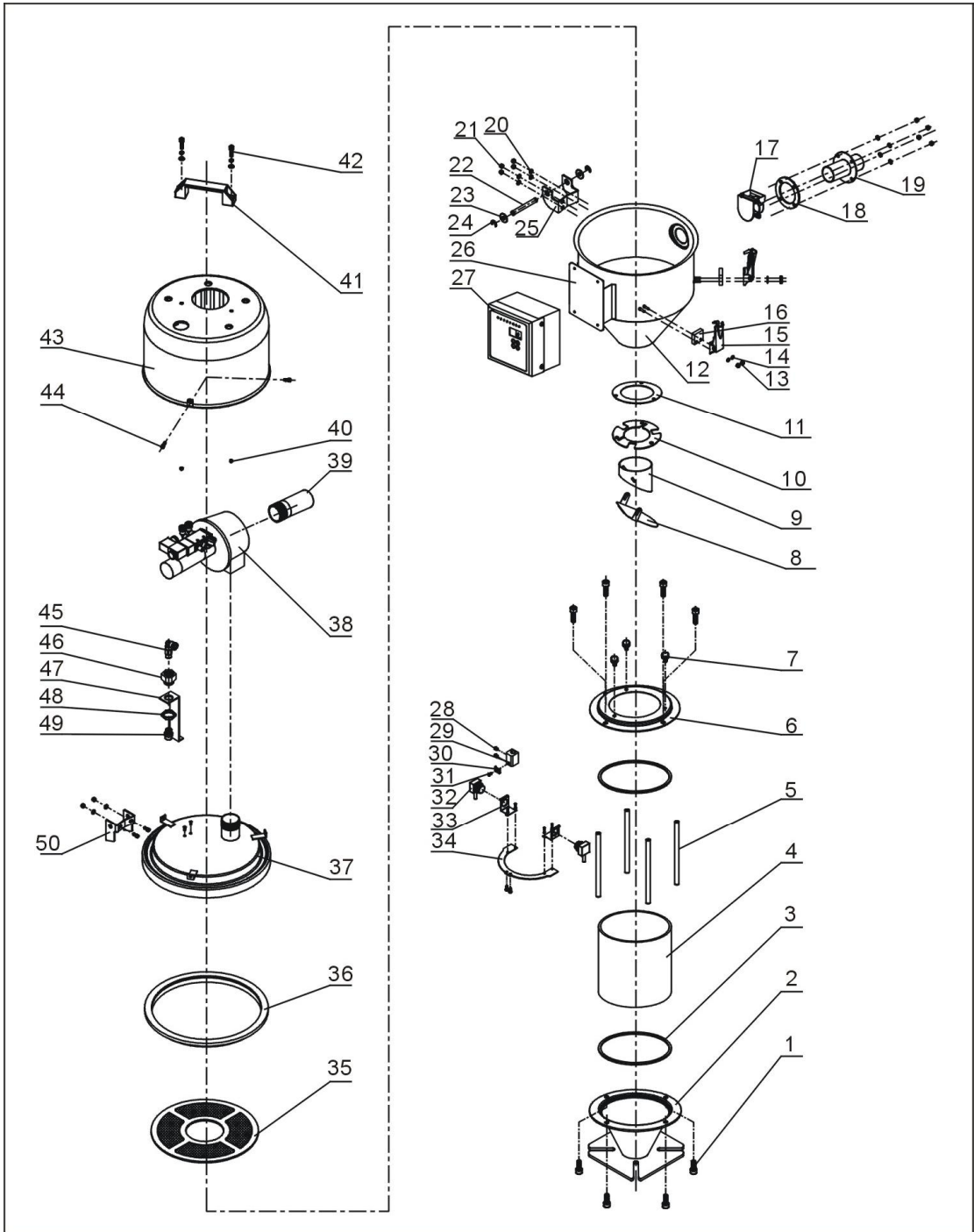
No.	Name	Part No.	No.	Name	Part No.
1	Mounting flange	BL21060200820	28	Hopper base plate fastener	-
2	3" Stainless steel pipe clamp	YW07000300000	29	Set screw M4×5	YW68004500000
3	O type seal ring	YR20802600000	30	Photosensor fixing base	BL90001000120
4	Cap nut M6	YW64006000100	31	Photosensor cable pressure block	YW31616200000
5	Down flange of glass pipe	BW32610900010	32	Cross recess pan head screw M4×10	YW63041000000
6	Glass pipe fastener *	YR10060200000	33	Photosensor	YE15143900000
7	Glass pipe *	YW70317000600	34	Photosensor mounting plate	-
8	Flange connection shaft	BH10000600640	35	Photosensor fixing plate	BL21061200020
9	Unloading plate	-	36	Hopper fastener *	YR10000300100
10	Discharge port	-	37	Filter screen *	BL21000600620
11	Up flange of glass pipe	BW32610800010	38	Solenoid valve fixing plate	-
12	Material storage tank	-	39	Solenoid valve *	YE32051800100
13	Locknut M4×0.7	YW64040700100	40	Diaphragm valve 1.5"	-
14	Flat gasket 4	YW66040800000	41	Air suction pipe	-
15	Snap hook *	YW02003000400	42	Locknut M6	YW64000600200
16	Pad	YR40000600800	43	Motor cover	BR40033000110
17	1.5" Backstop assembly	BL27002401420	44	Aluminum square handle L120	BW20012000040
18	Material inlet pipe fastener	-	45	Inner hexagon cylinder head screw M6×20	YW61062000300
19	Material inlet pipe	-	46	Cross recess pan head screw M5×15	YW62051500000
20	Flat gasket 5	YW66051000100	47	Quick connector APC8-1/4PT	YW80081400000
21	Locknut M5	YW64000500000	48	Connection copper plate	BH12002400010
22	Hinge pin	BH10006003110	49	Air pipe connector fixing block	-
23	Flat gasket 8×22	YW66082200100	50	Connecting nut	BH12003600410
24	E rings 8	YW69896800000	51	Quick connector APC8-1/4PT	YW80081400000
25	Down hinge	BL32000600140	52	Up hinge	BL32000600240
26	Control box base	-	53	Hopper cover	-
27	Control box	-			

* means possible broken parts;

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

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

2.2.15 Parts Drawing of Single Wire Glass Receiver (SWHR-12U-E)



Note: Please refer to material list 2.2.16 for specific explanation of the Arabic numbers in parts drawing.

Picture 2-9: Parts Drawing of Single Wire Glass Receiver (SWHR-12U-E)

2.2.16 Parts List (SWHR-12U-E)

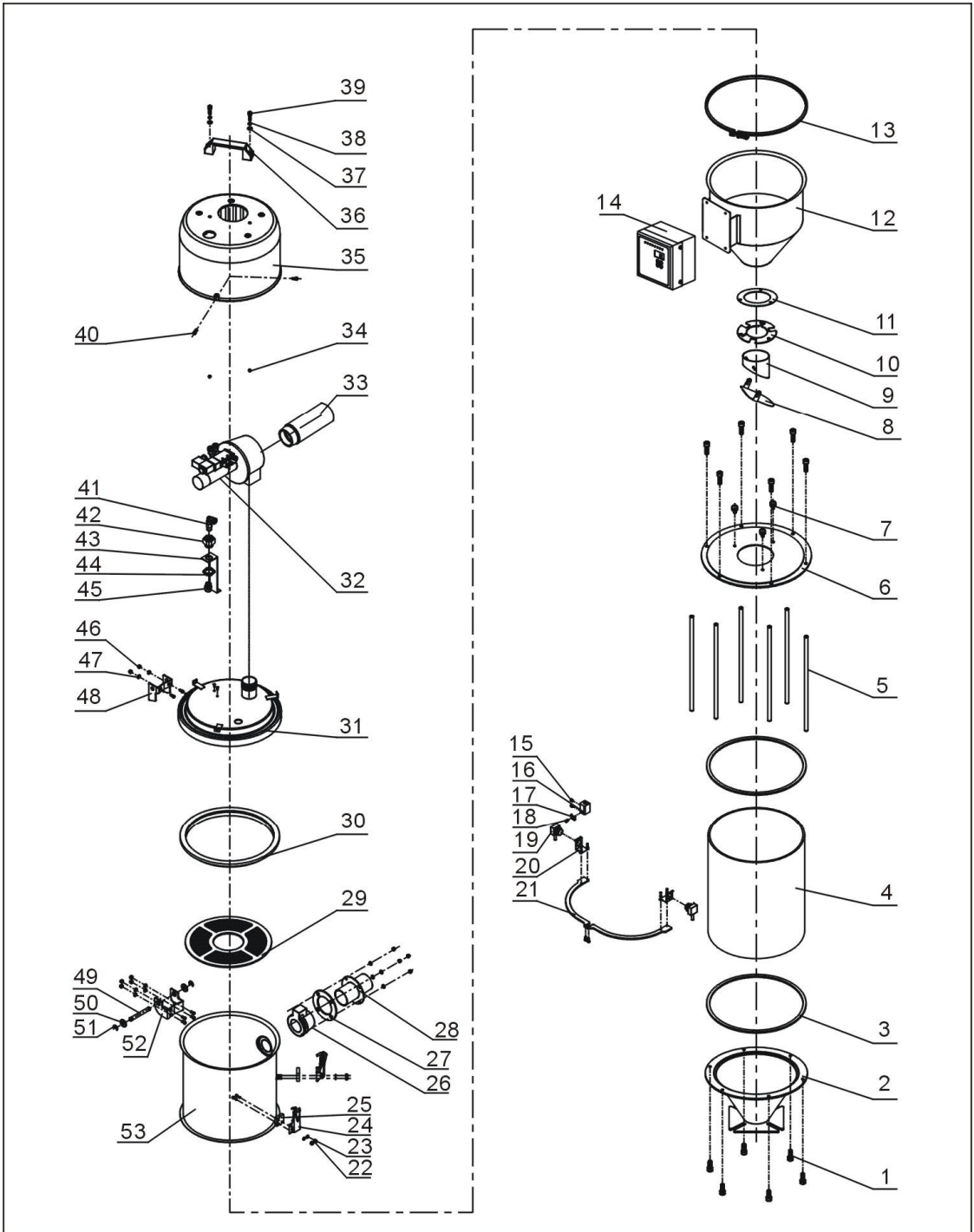
Table 2-8: Parts List (SWHR-12U-E)

No.	Name	Part No.	No.	Name	Part No.
1	Inner hexagon cylindrical screw GB/T 70.1M6x16-longzine	YW61061601200	26	Control box base	-
2	Lower flange of glass tube	BL21000610710	27	Anti-proof junction box WDJH-100	BH90615000010
3	Glass tube fastener *	YR10001200100	28	Inner hexagon socket set screw with flat point GB/T 77M4x5-longzine	YW68004500000
4	Glass tubeΦ170×Φ160×170*	YW70171700000	29	Photosensor fixed base	BL90001000120
5	Flange connecting rod	BH10101600210	30	Photosensor cable pressure block	YW31616200000
6	Upper flange of glass tube	BW32001200110	31	Inner hexagon cylindrical screw M4x12GB/T818-longzine	YW63041200100
7	Mnual tighten up screw M6x15	YW69621600000	32	Photosensor FOTEK T18-3MN-PE	YE15143900000
8	Non-return valve	BL21001200520	33	Photosensor installation block	-
9	Discharging port	-	34	Photosensor fixed block	BL21001200120
10	Vent flange	-	35	Filter screen	BL21001200320
11	Hopper flange	-	36	Hopper fastener	YR10000600200
12	Material storage hopper	SHR-12U-MES-ALL-01	37	Hopper cover	SHR-12U-S-A-09
13	Non metal insert of hexagon locknut GB/T889.1M4	YW64040700100	38	Diaphragm valve 1.5"(24VDC)	BY20382400050
14	Flat gasket A GB/T97.1 4-longzine	YW66040800000	39	Air suction pipe	SHR-12U-S-A-13
15	Snap adjustable	YW02003000400	40	Hexagon nut M6 anti-loose	YW64000600200
16	Snap hook block SAL-6U	YR40000600800	41	Aluminum square handle L120	BW20012000040
17	1.5" Backstop	BL27002401420	42	Inner hexagon cylindrical screw GB/T70.1 M6X20-12.9-longzine	YW61062000300
18	Material inlet pipe fastener	YR10243600000	43	Motor cover	BR40036000310
19	Material inlet pipe	SHR-12U-S-A-14	44	Cross recessed raised countersunk head screw JIS1111 M5X16-longzine	YW62051500000
20	Flat gasket A 5x12x1 (SUS202)	YW66051200000	45	L screw connector APL8-02 1/4-φ8(Airtac)	YW80081400100
21	Hexagon nut M5 anti-loose	YW64000500000	46	Connection copper head	BH12002400010
22	Hinge pin	BH10006003110	47	Air pipe connector fixed block	SHR-36U-S-A-05
23	E rings GB/T896-86	YW69896800000	48	Connecting nut	BH12003600410
24	Big gasket CGB/T968 (8.4X24X2) -longzine	YW66082200100	49	Screw straight connector APC8-02 1/4-Φ8(Airtac)	YW80081400000
25	Down hinge	BL32000600140	50	Up hinge	BL32000600240

* means possible broken parts; ** means easy broken part and a spare backup is suggested.

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

2.2.17 Parts Drawing of Single Wire Glass Receiver (SWHR-24U-E)



Note: Please refer to material list 2.2.18 for specific explanation of the Arabic numbers in parts drawing.

Picture 2-10: Parts Drawing of Single Wire Glass Receiver (SWHR-24U-E)

2.2.18 Parts List (SWHR-24U-E)

Table 2-9: Parts List (SWHR-24U-E)

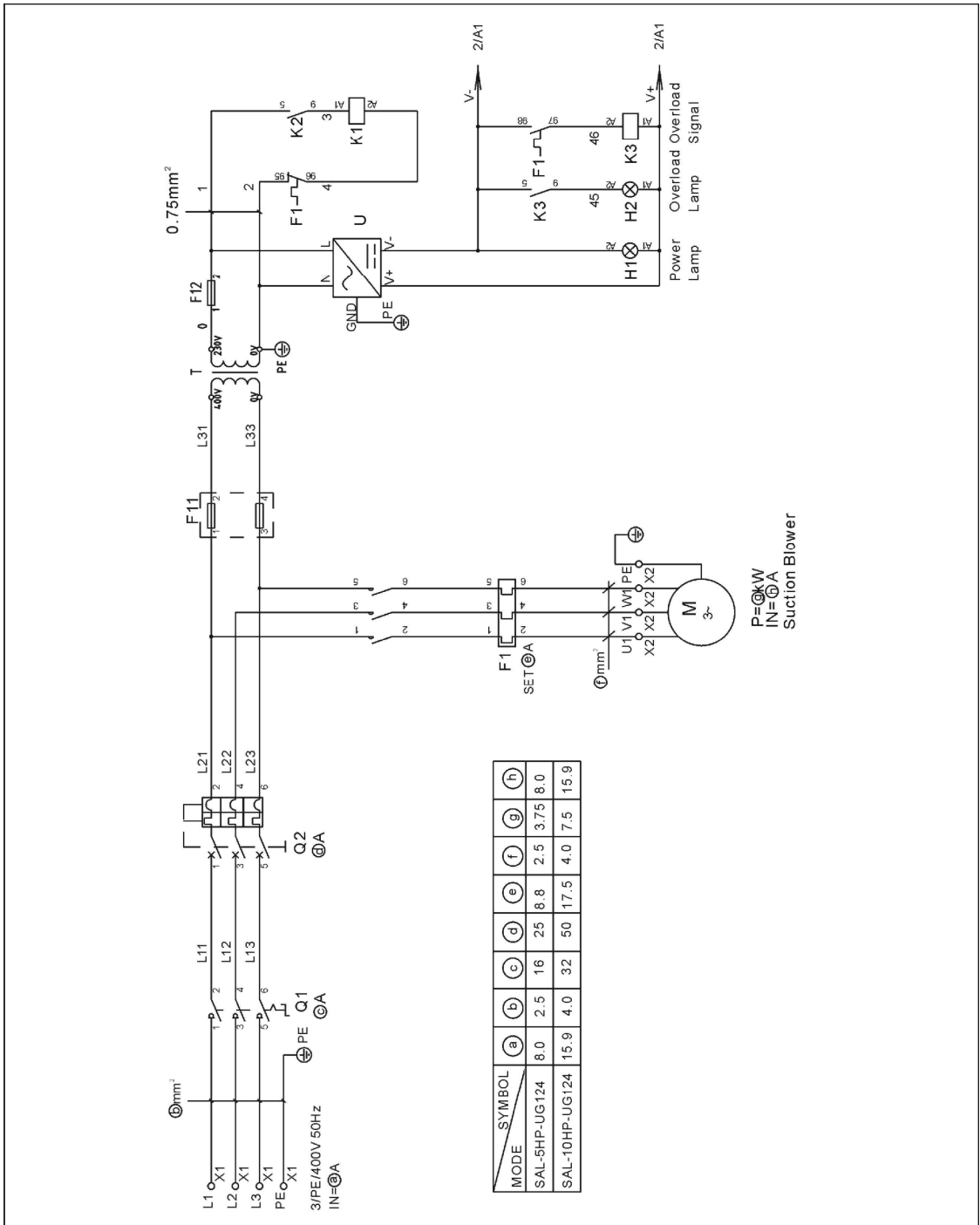
No.	Name	Part No.	No.	Name	Part No.
1	Inner hexagon cylindrical screw GB/T 70.1M6x16-longzine	YW61061601200	28	Material inlet pipe	SHR-24U-S-A-06
2	Lower flange of glass tube	SHR-24U-E-A-10	29	Filter screen	BL21001200320
3	Glass tube fastener *	YR10001200100	30	Hopper fastener	YR10000600200
4	Glass tubeΦ280×Φ270×340*	YW70282700000	31	Hopper cover	SHR-36U-S-A-01
5	Flange connecting rod	BH10103300040	32	Diaphragm valve 2" (24VDC)	BY20502400050
6	Upper flange of glass tube	SHR-24U-E-A-11	33	Air suction pipe	SHR-24U-S-A-01
7	Mnual tighten up screw M6x15	YW69621600000	34	Hexagon nut M6 anti-loose	YW64000600200
8	Non-return valve	BL21001200520	35	Motor cover	BR40036000310
9	Discharging port	SHR-12U-E-A-01	36	Aluminum square handle L120	BW20012000040
10	Vent flange	SHR-12U-E-A-09	37	Flat gasket A GB/T97.1 6-longzine	YW66061300000
11	Hopper flange	SHR-12U-E-A-06	38	Standard spring washer GB/T93 6-A2-70(SUS)	YW65006000000
12	Material storage hopper	SHR-24U-E-A-12	39	Inner hexagon cylindrical screw GB/T70.1 M6X20-12.9-longzine	YW61062000300
13	Pipe clamp	SAL-12U-A-04	40	Cross recessed raised countersunk head screw JIS1111 M5X16-longzine	BL21001200320
14	Anti-proof junction box WDJH-100	BH90615000010	41	L screw connector APL8-02 1/4-ø8(Airtac)	YW80081400100
15	Inner hexagon socket set screw with flat point GB/T 77M4x5-longzine	YW68004500000	42	Connection copper head	BH12002400010
16	Photosensor fixed base	BL90001000120	43	Air pipe connector fixed block	SHR-36U-S-A-05
17	Photosensor cable pressure block	YW31616200000	44	Connecting nut	BH12003600410
18	Cross socket head cap screw M4x12GB/T818-longzine	YW63041200100	45	Screw straight connector APC8-02 1/4-ø8	YW80081400000
19	Photosensor FOTEK T18-3MN-PE	YE15143900000	46	Hexagon nut M5 anti-loose	YW64000500000
20	Photosensor installation block	-	47	Flat gasket 5x12x1(SUS202)	YW66051200000
21	Photosensor fixed block	BL21001200120	48	Upper hinge	BL32000600240
22	Non metal insert of hexagon locknut GB/T889.1M4	YW64040700100	49	Hinge pin	BH10006003110
23	Flat gasket A GB/T97.1 4-longzine	YW66040800000	50	Big gasket C GB/T968(8.4X24X2) -longzine	YW66082200100
24	Snap adjustable	YW02003000400	51	E rings GB/T896	YW66000600000
25	Snap hook block SAL-6U	YR40000600800	52	Down hinge	BL32000600140
26	2" Backstop	YR90240800000	53	Large size hopper	SHR-24U-S-A-03
27	Material inlet pipe fastener	YR10243600000			

* means possible broken parts; ** means easy broken part and a spare backup is suggested.

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

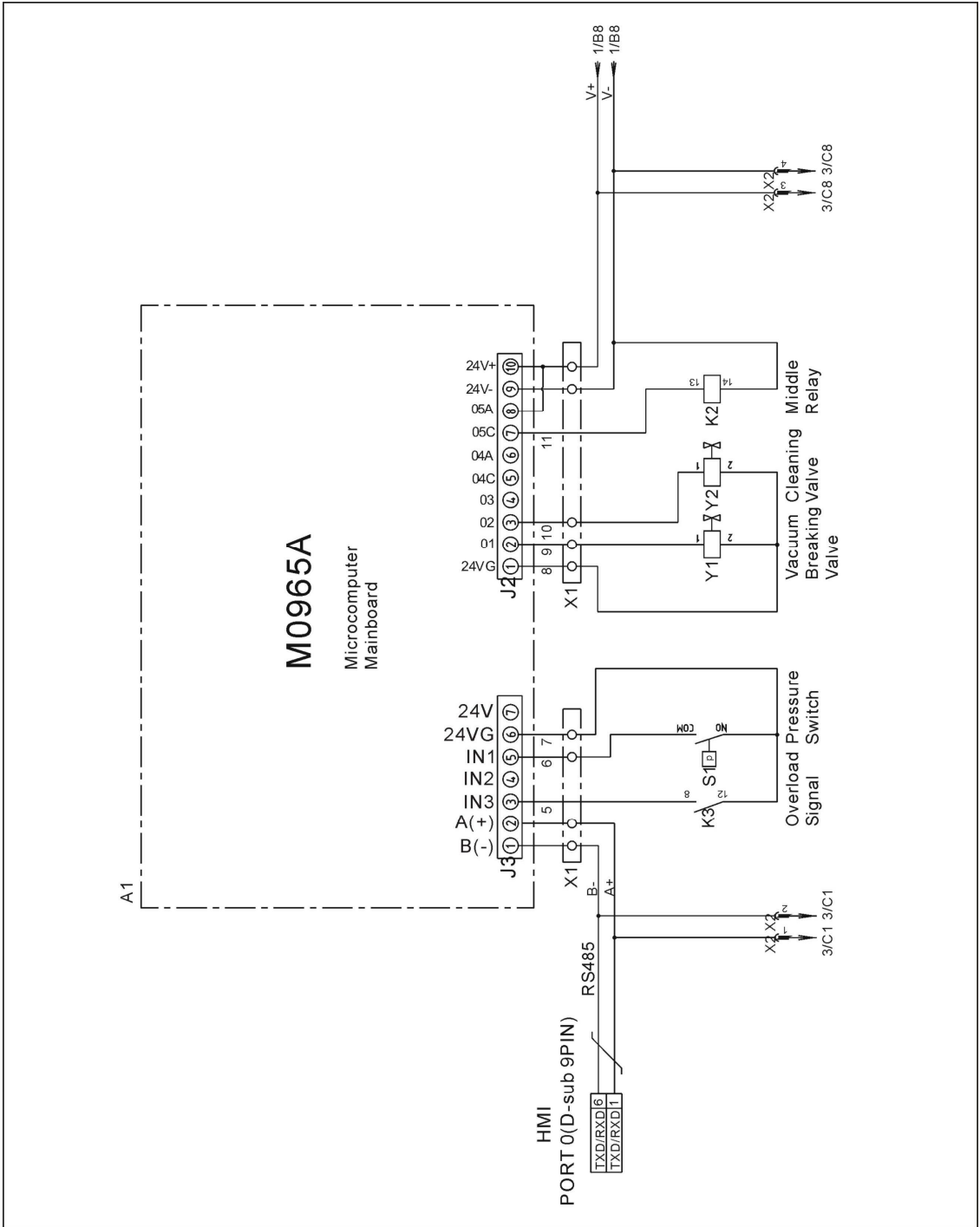
2.3 Circuit Layout

2.3.1 Circuit Layout

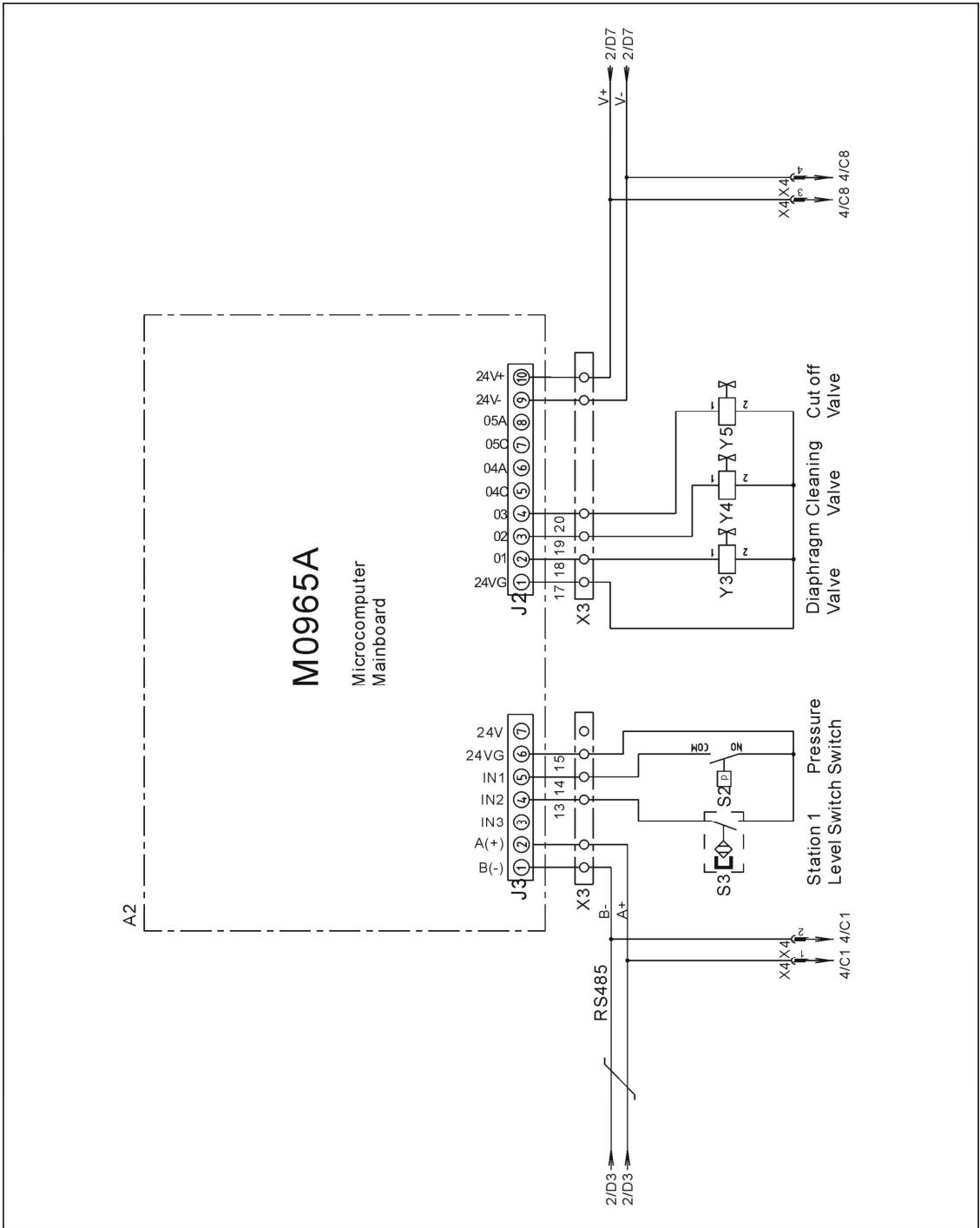


Picture 2-11: Circuit Layout

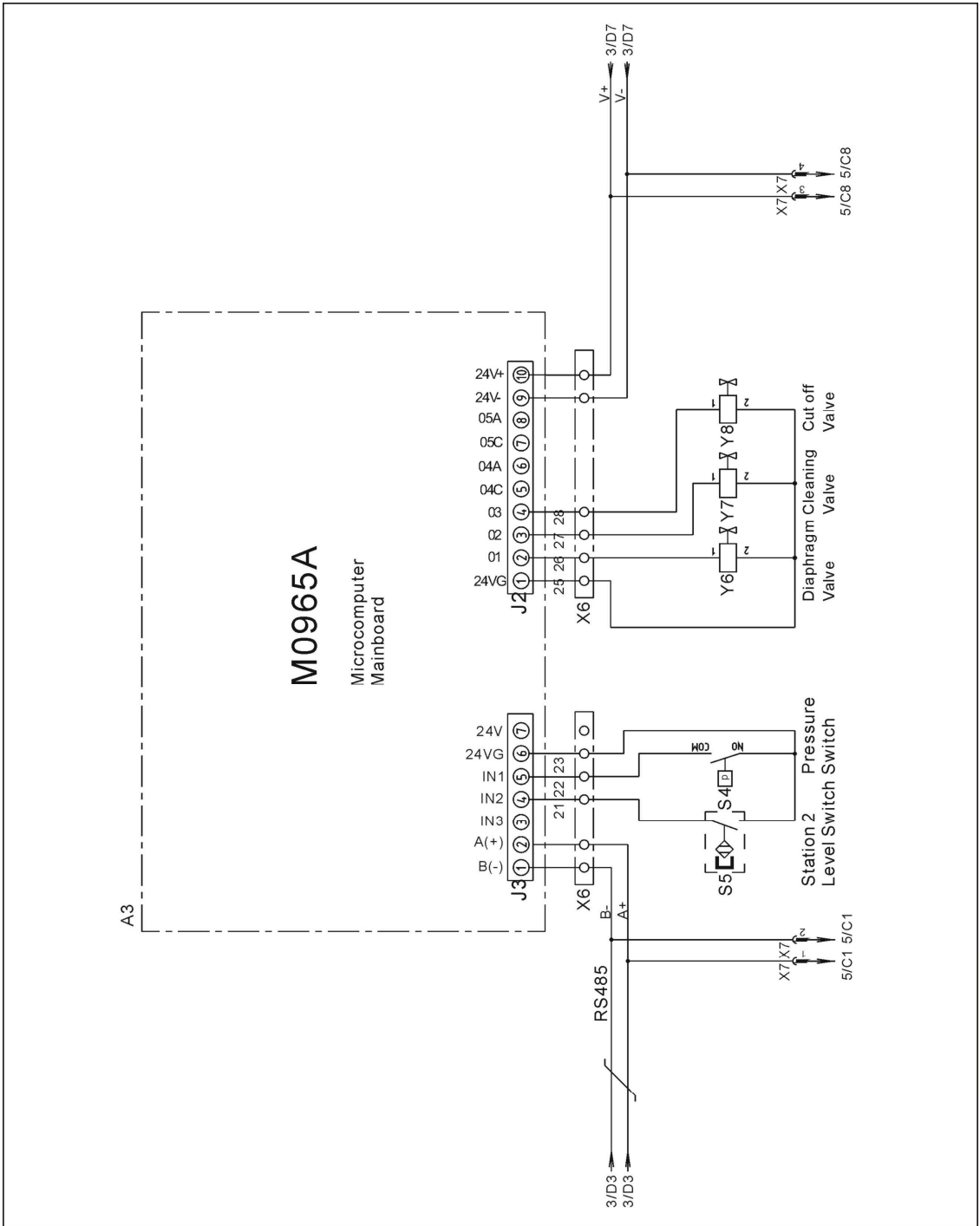
2.3.2 Control Circuit Layout



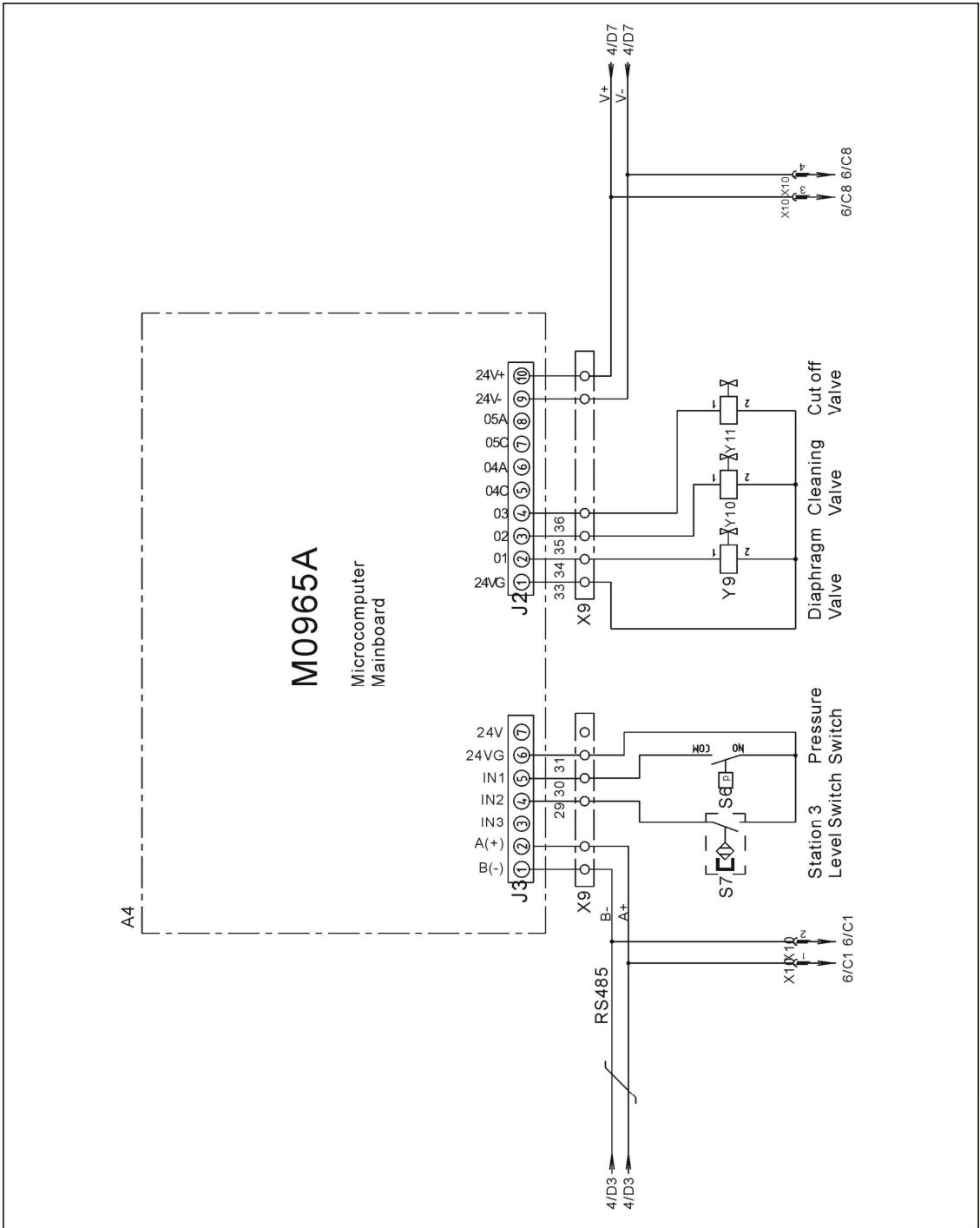
Picture 2-12: Control Circuit Layout



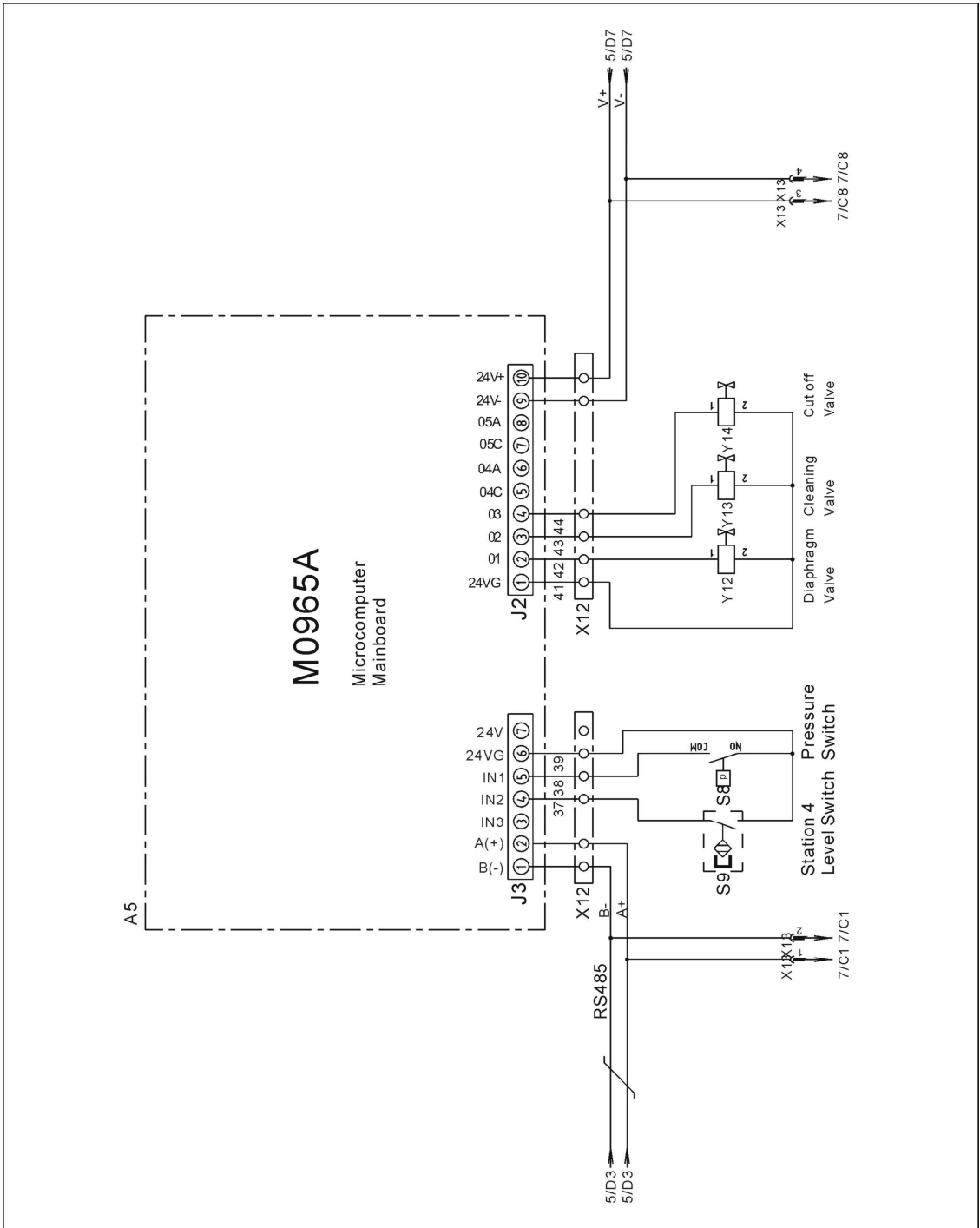
Picture 2-13: Control Circuit Layout of Hopper 1



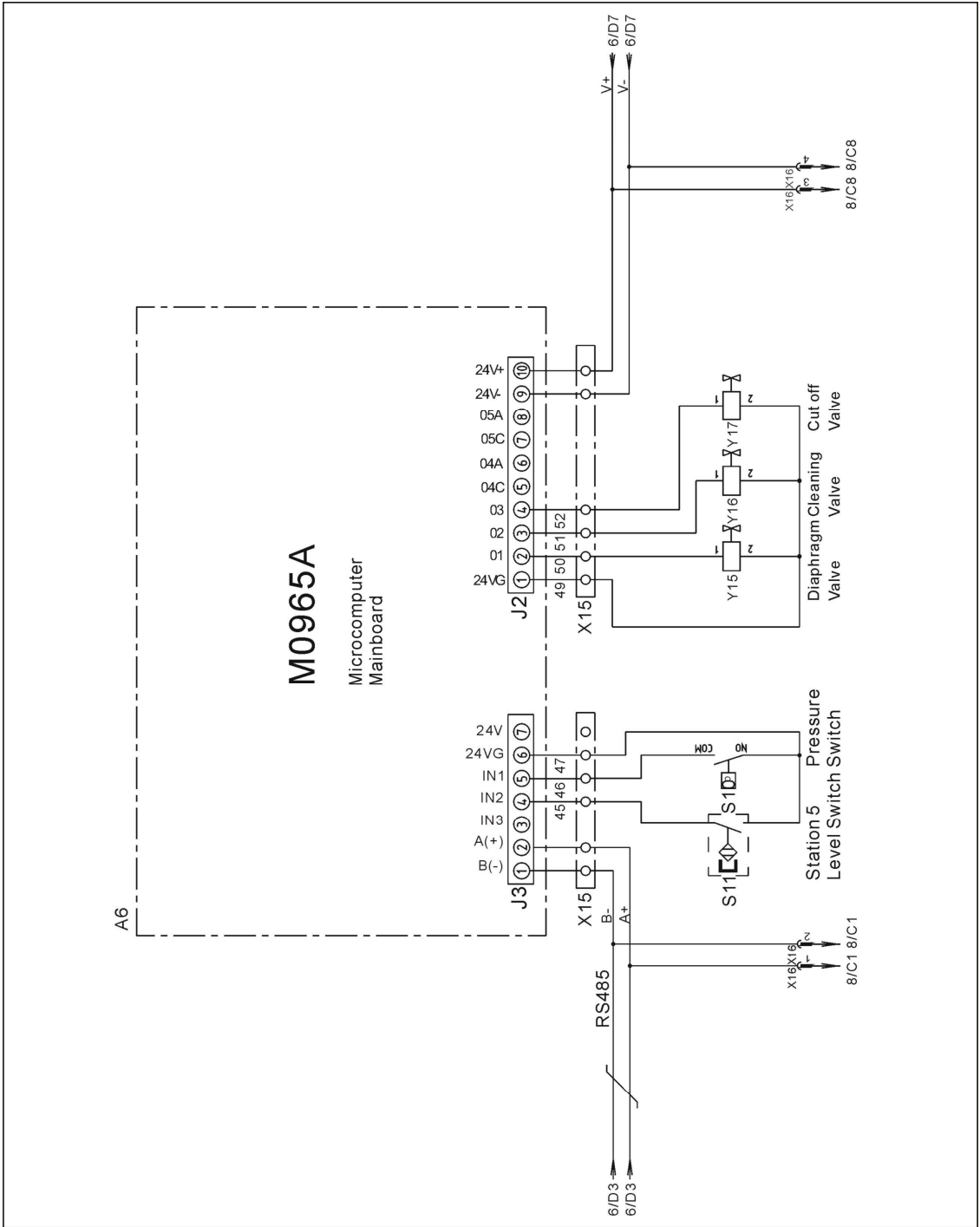
Picture 2-14: Control Circuit Layout of Hopper 2



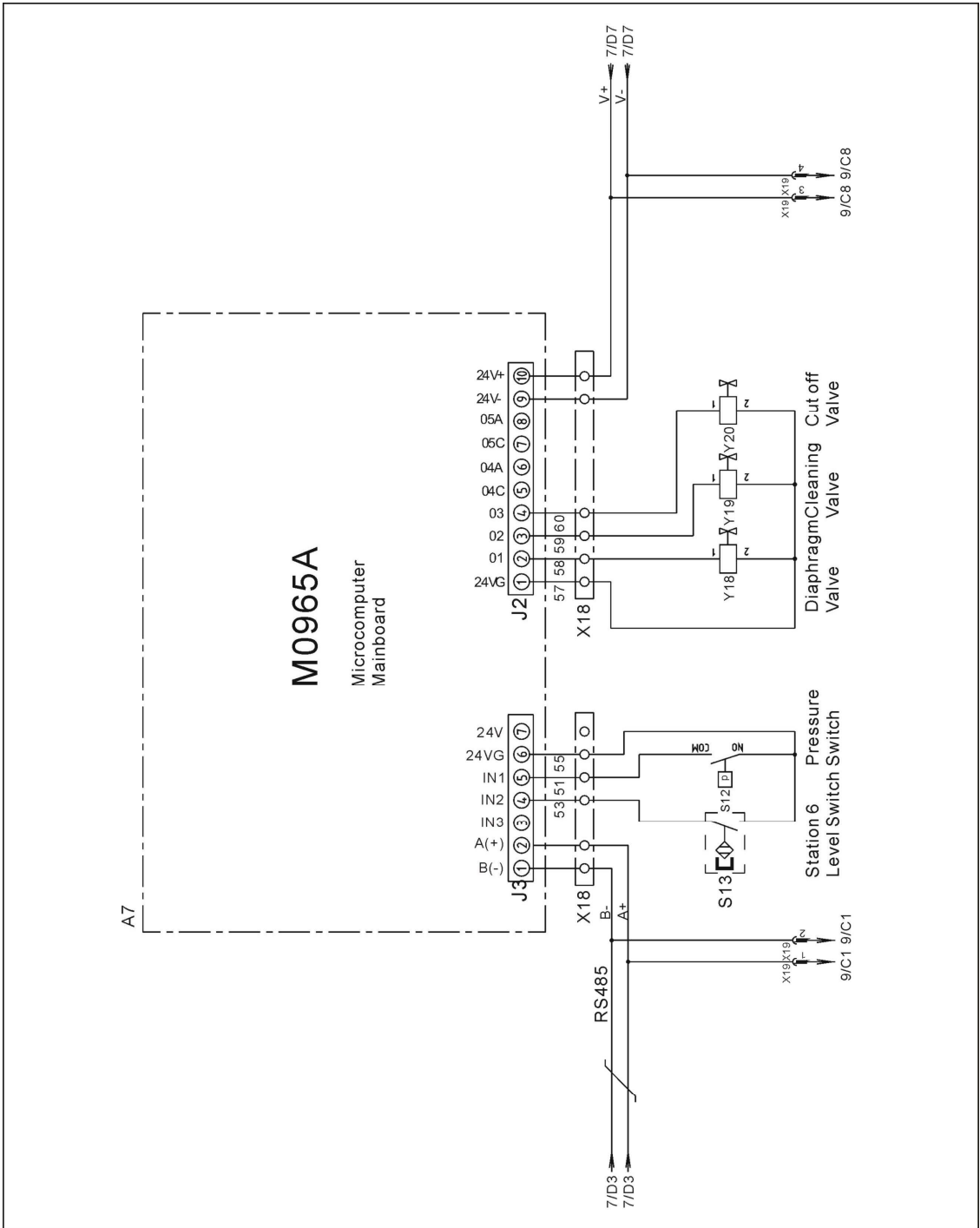
Picture 2-15: Control Circuit Layout of Hopper 3



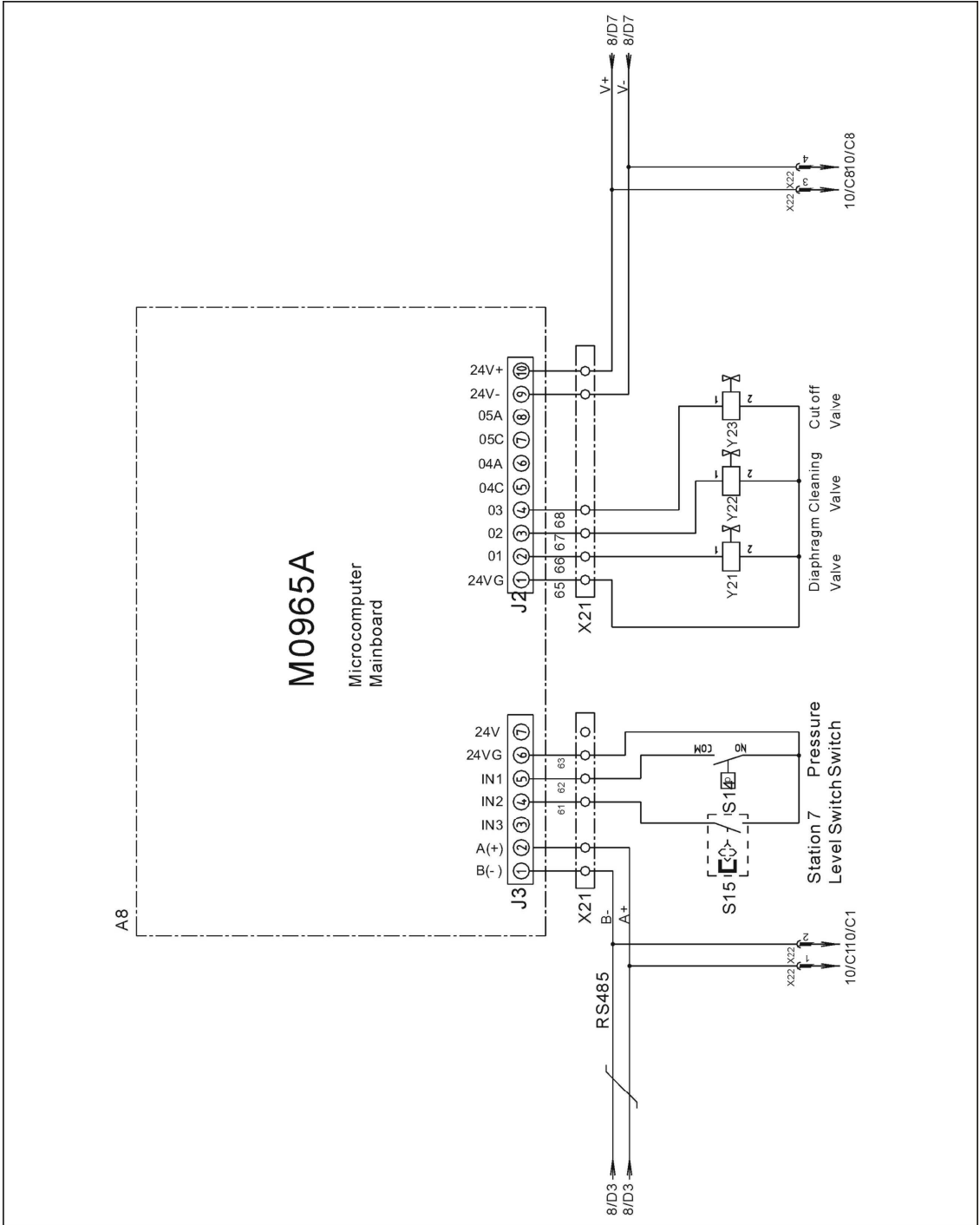
Picture 2-16: Control Circuit Layout of Hopper 4



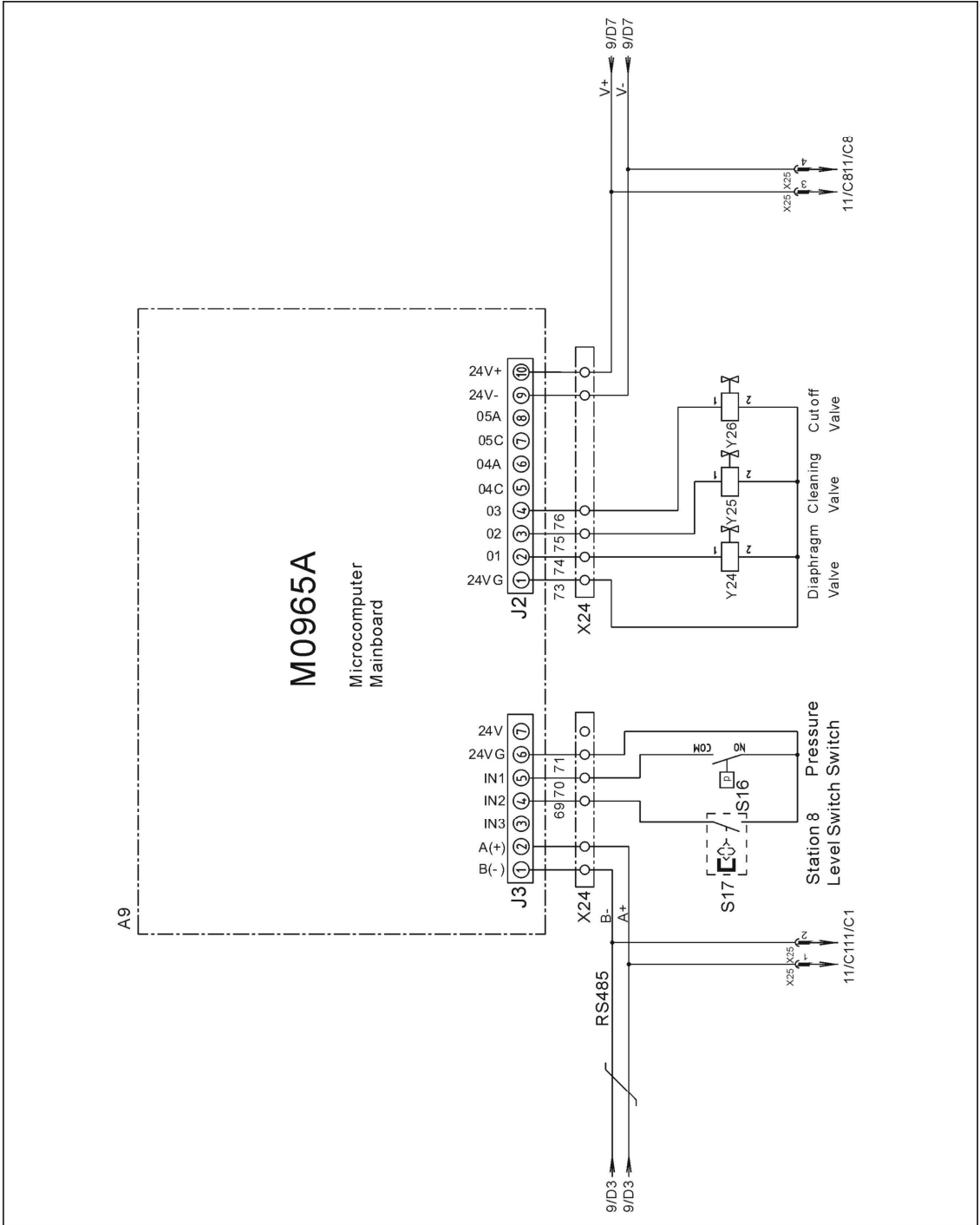
Picture 2-17: Control Circuit Layout of Hopper 5



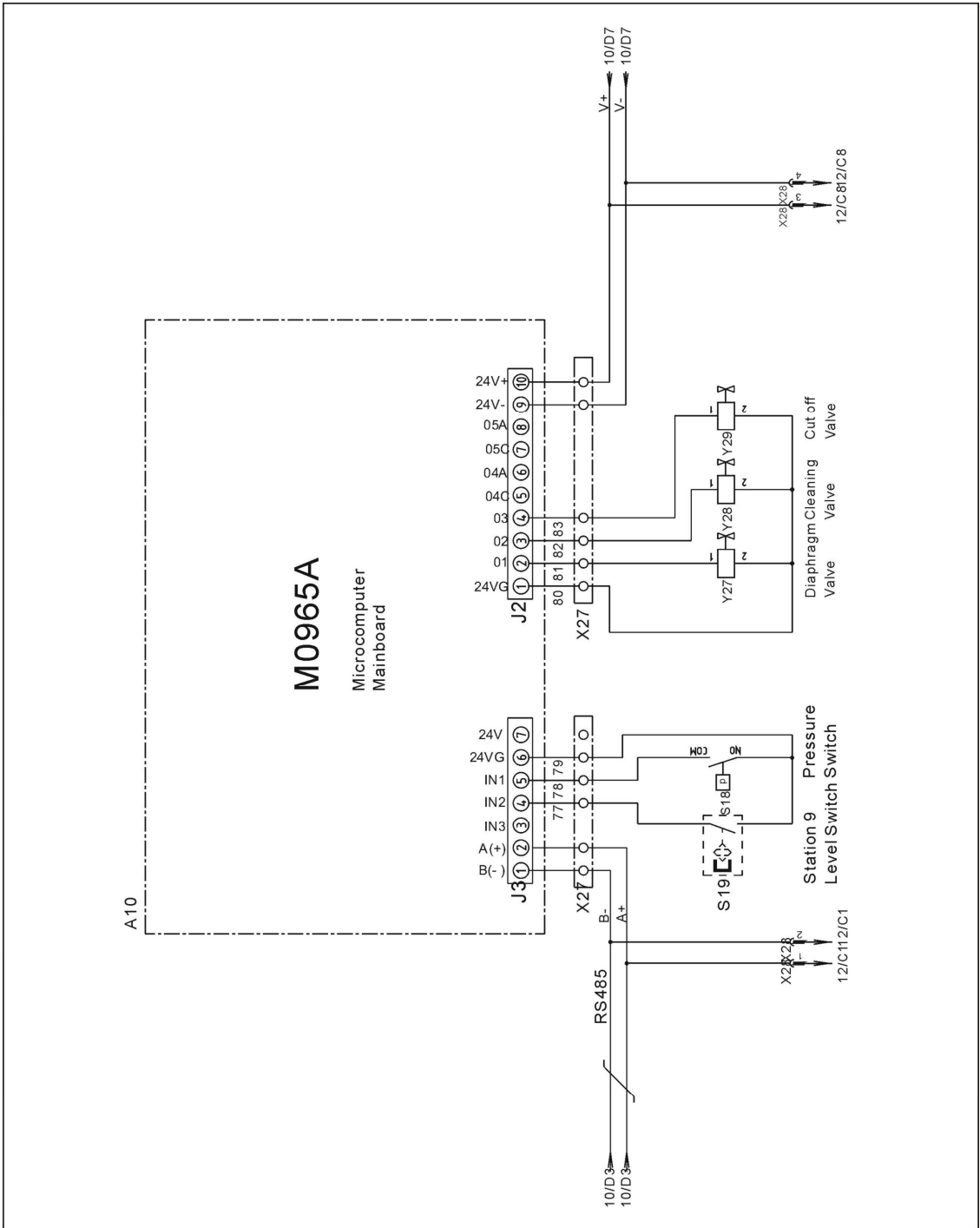
Picture 2-18: Control Circuit Layout of Hopper 6



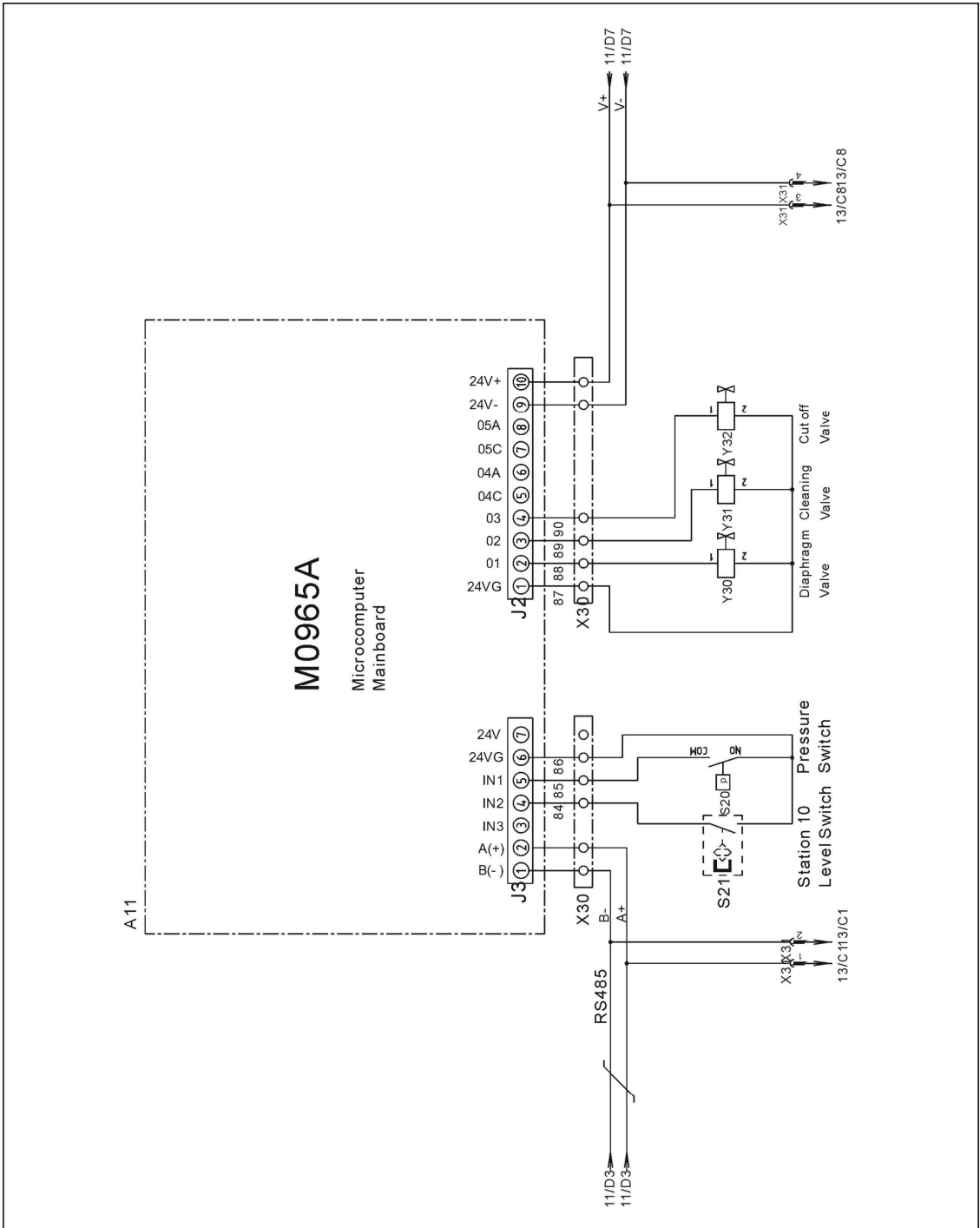
Picture 2-19: Control Circuit Layout of Hopper 7



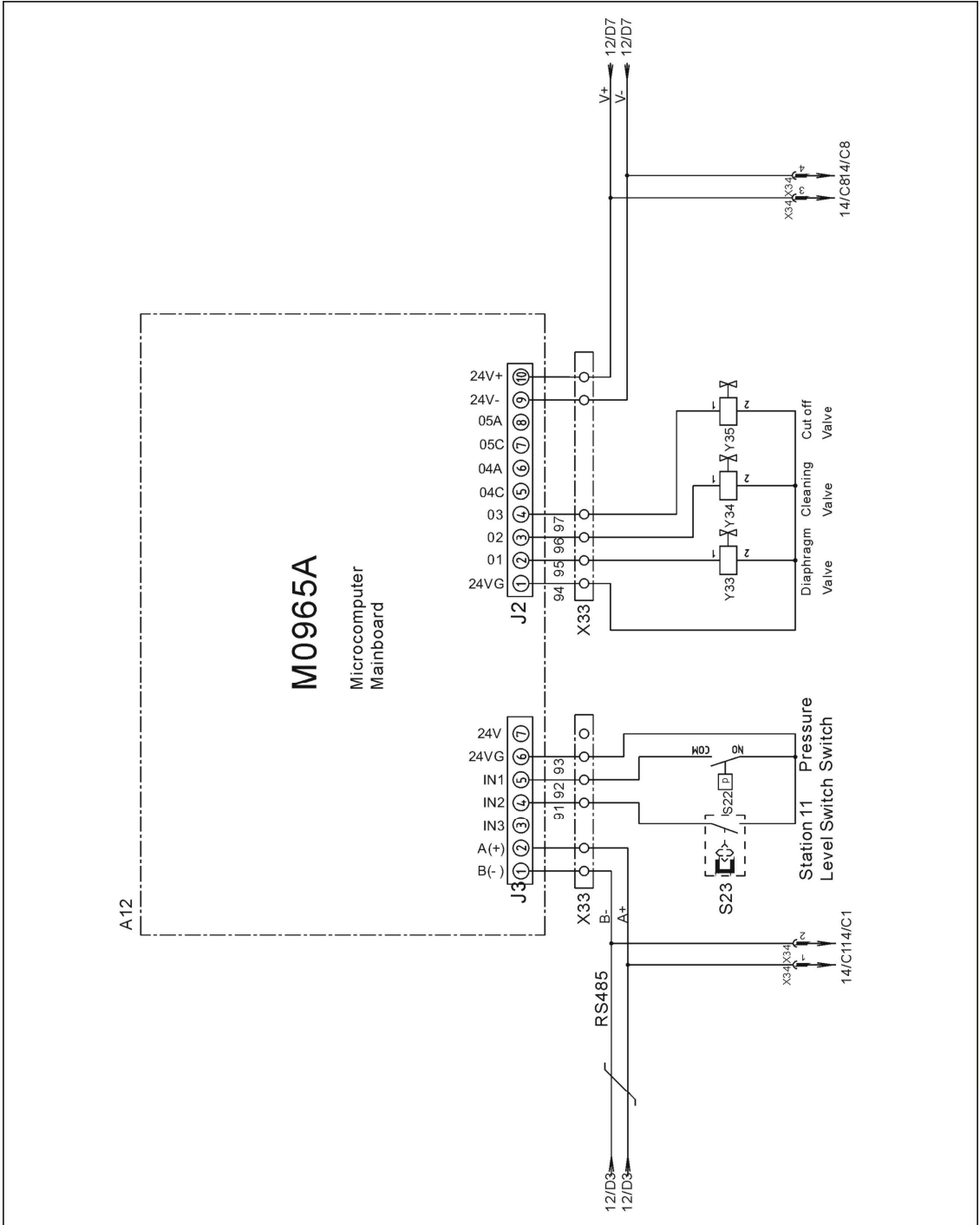
Picture 2-20: Control Circuit Layout of Hopper 8



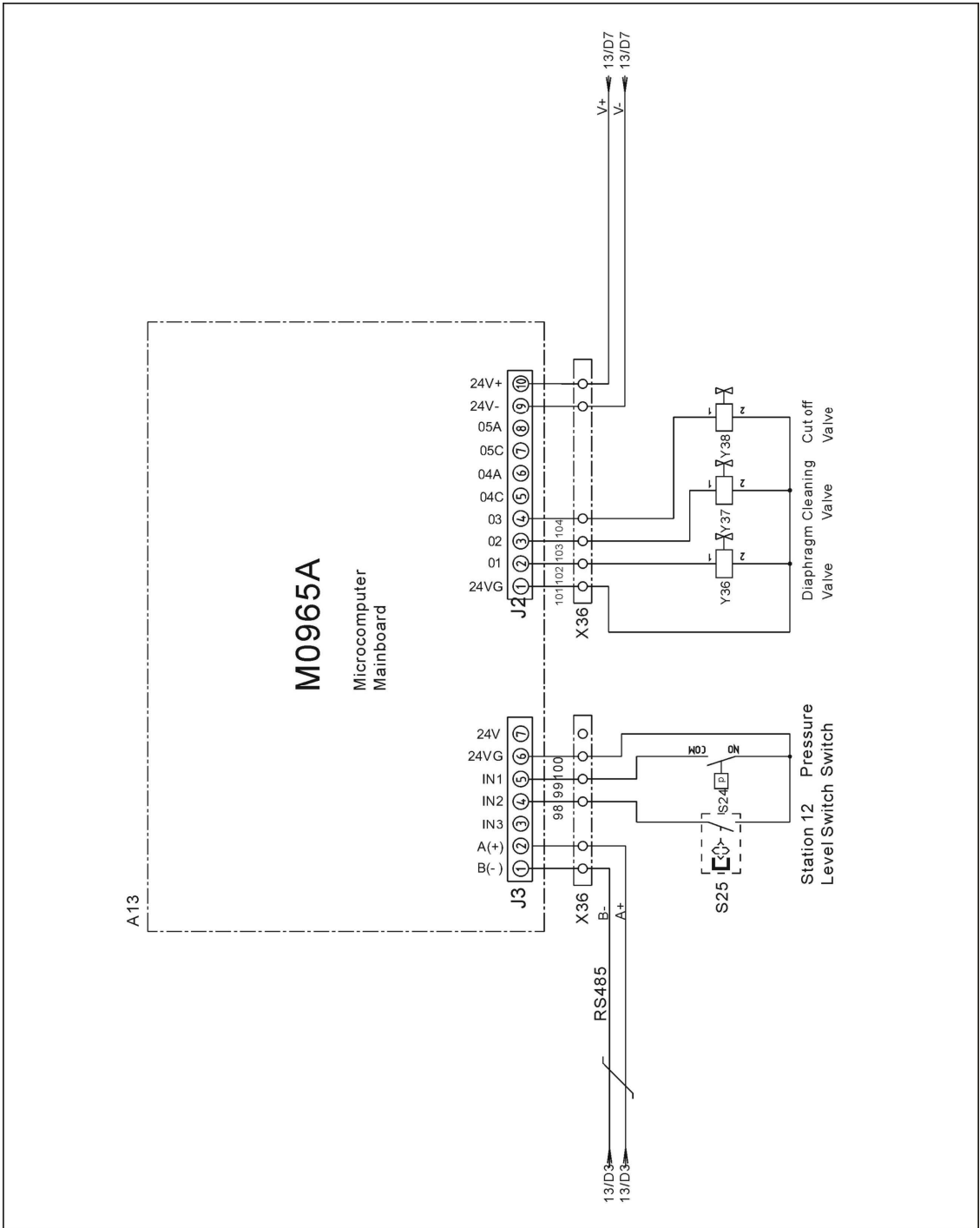
Picture 2-21: Control Circuit Layout of Hopper 9



Picture 2-22: Control Circuit Layout of Hopper 10

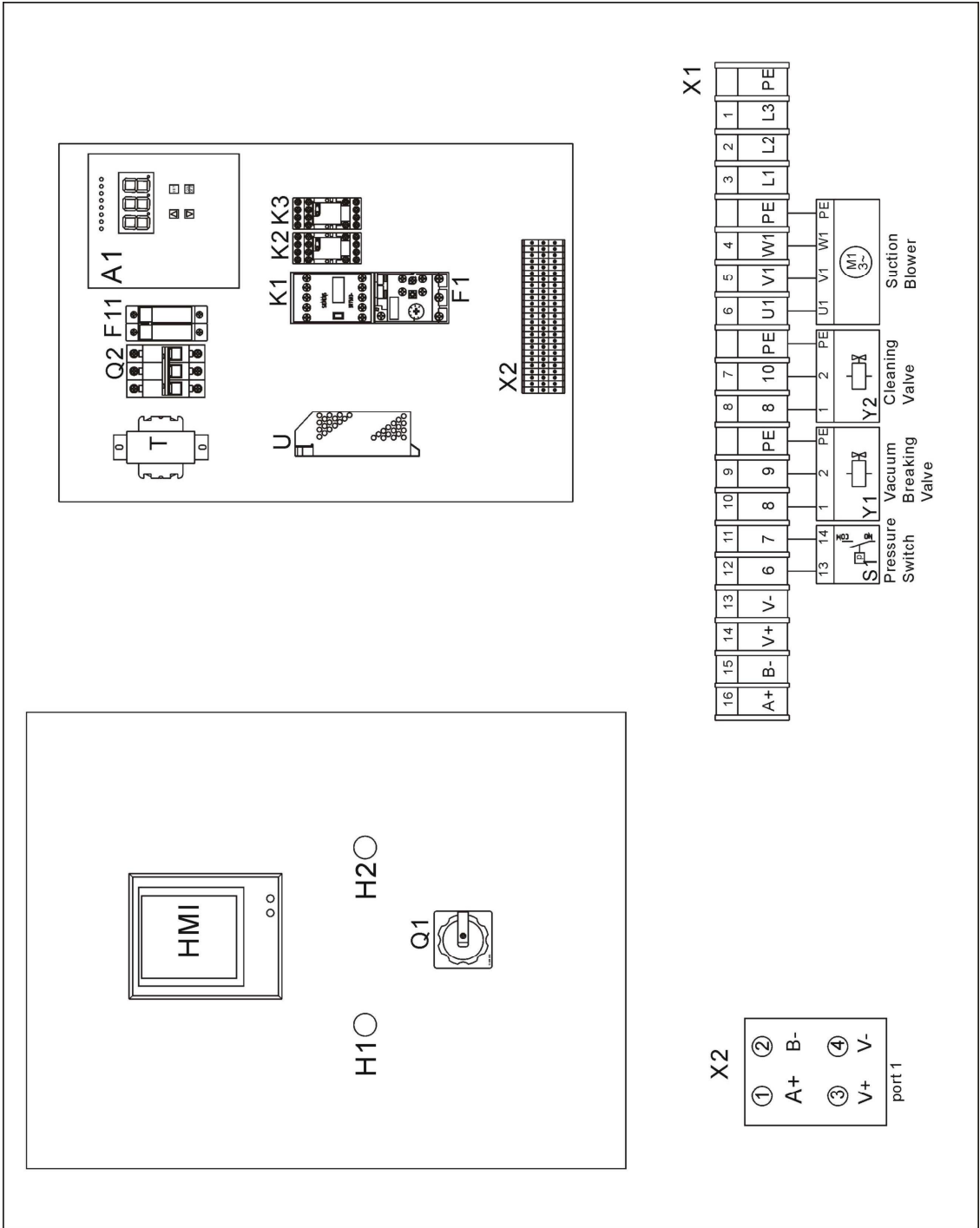


Picture 2-23: Control Circuit Layout of Hopper 11

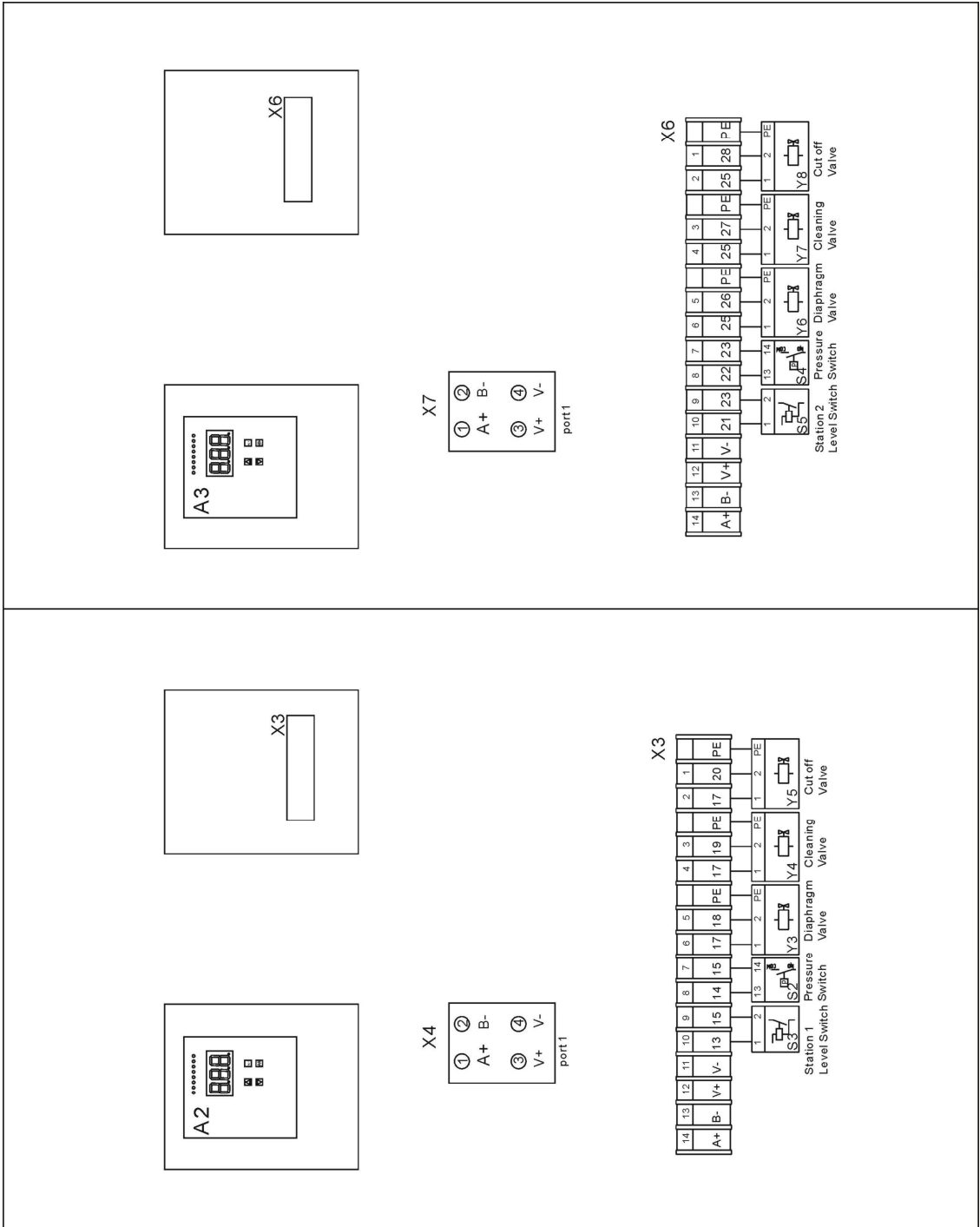


Picture 2-24: Control Circuit Layout of Hopper 12

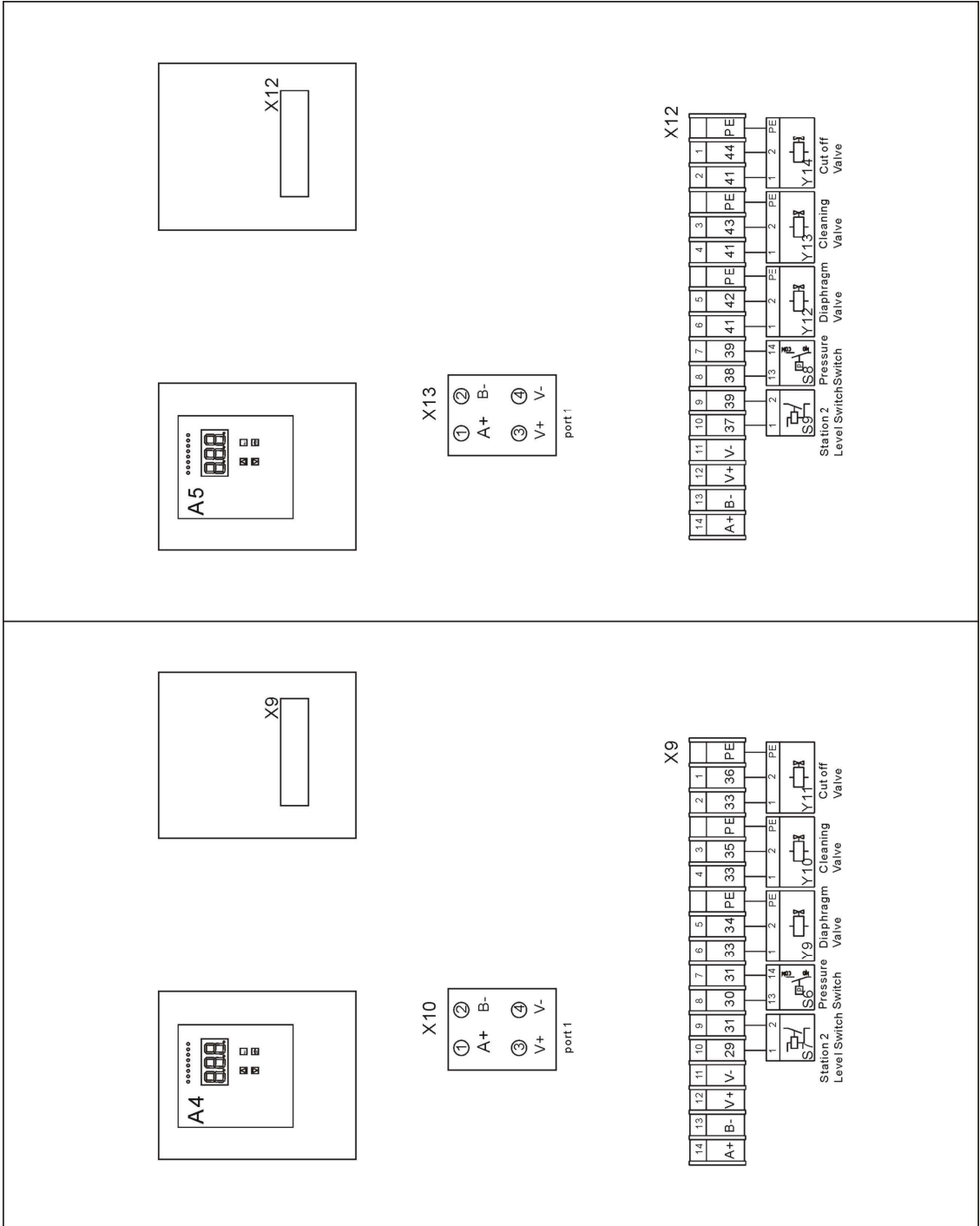
2.3.3 Electrical Components Layout



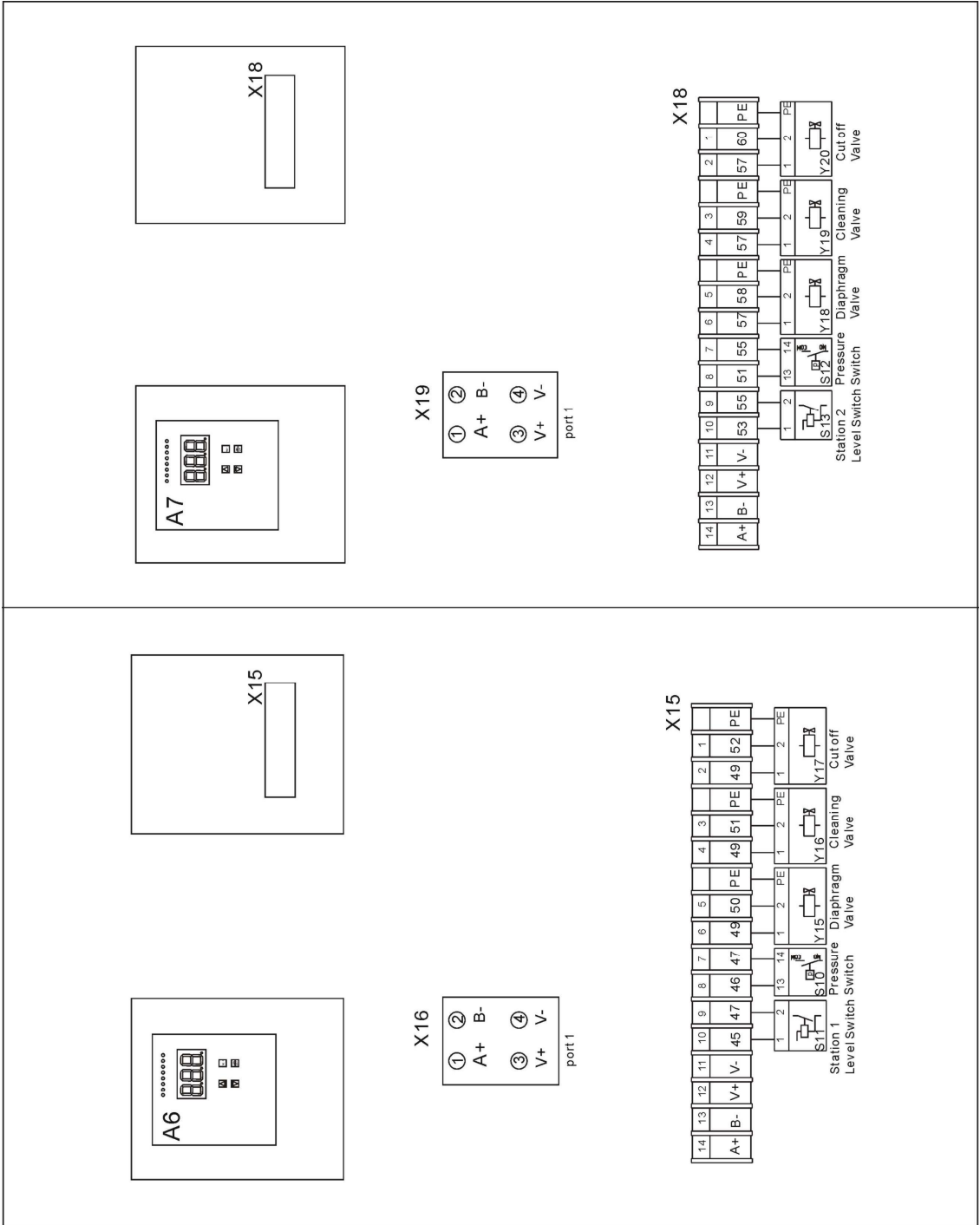
Picture 2-25: Electrical Components Layout



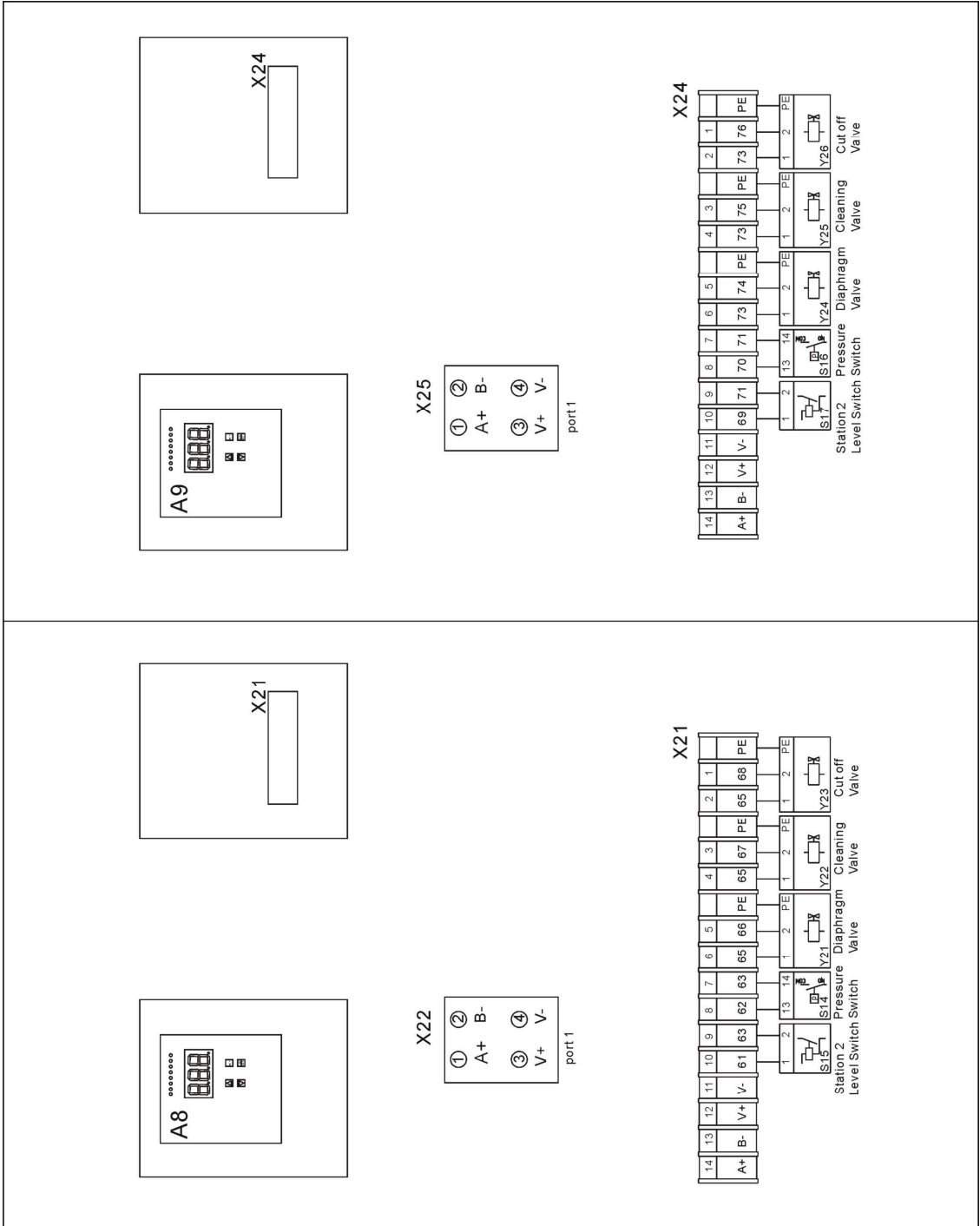
Picture 2-26: Electrical Components Layout of Hopper 1 and 2



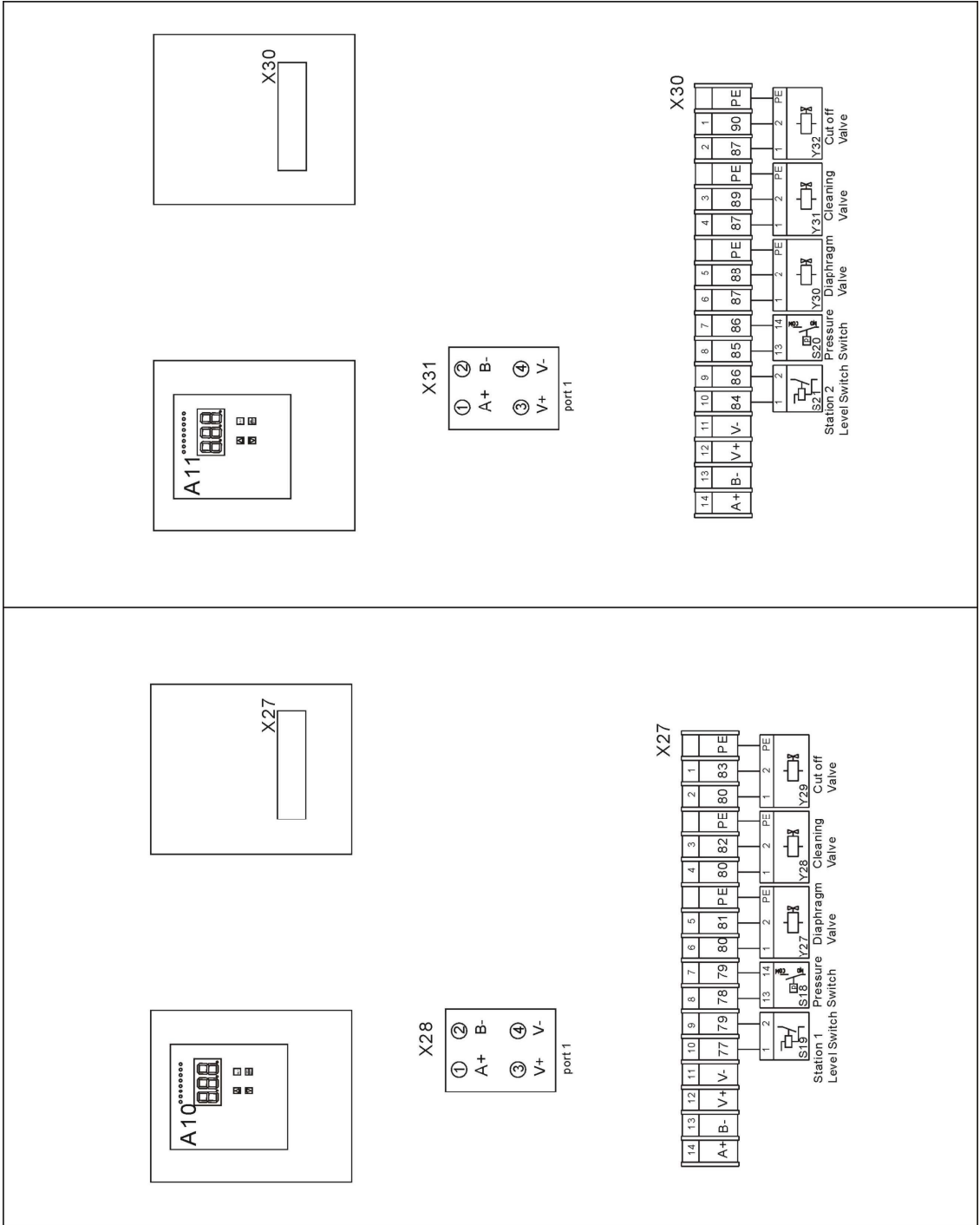
Picture 2-27: Electrical Components Layout of Hopper 3 and 4



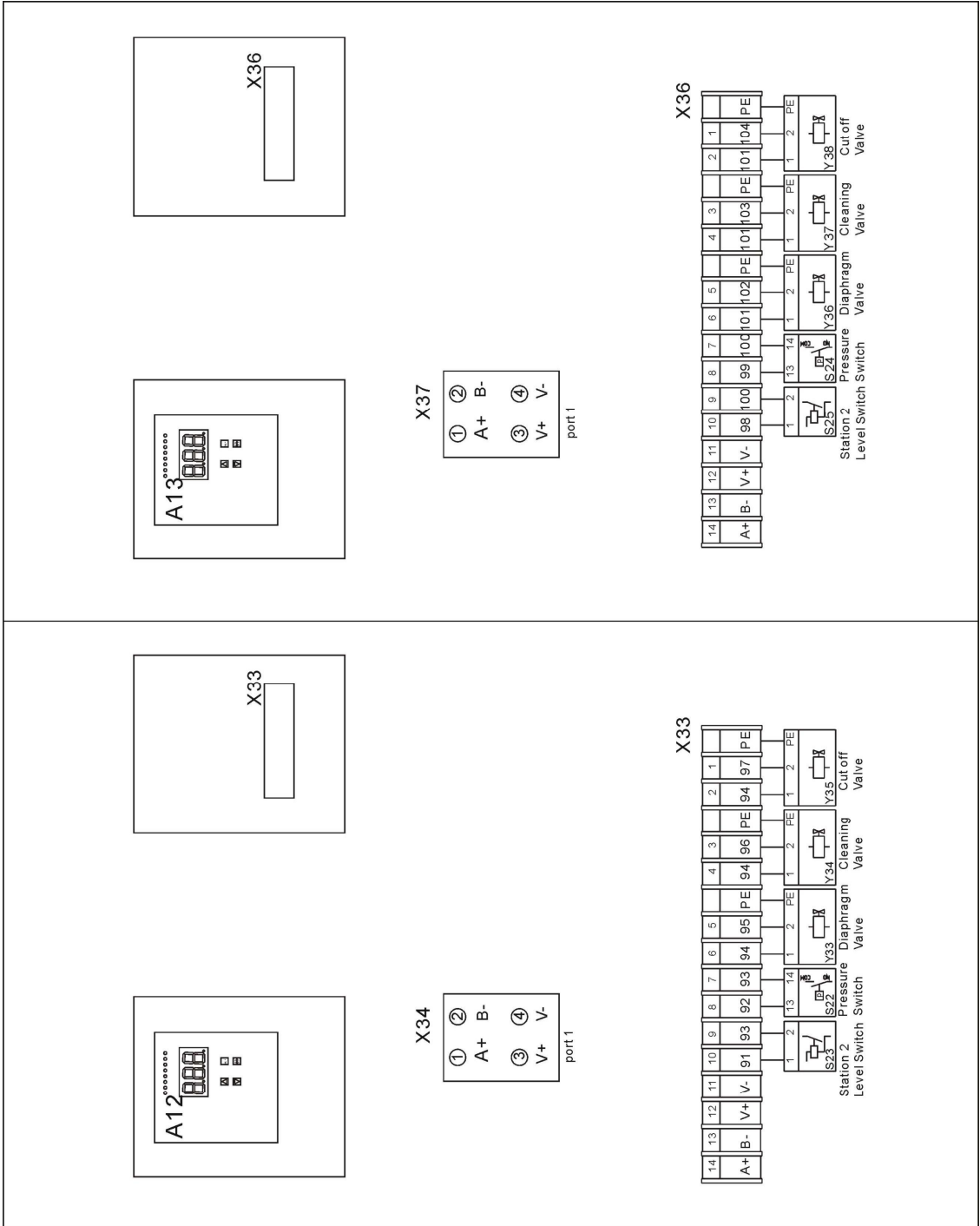
Picture 2-28: Electrical Components Layout of Hopper 5 and 6



Picture 2-29: Electrical Components Layout of Hopper 7 and 8



Picture 2-30: Electrical Components Layout of Hopper 9 and 10



Picture 2-31: Electrical Components Layout of Hopper 11 and 12

2.3.4 Parts List

Table 2-10: Electrical Component List (SWCS-5HP)

No.	Symble	Name	SWCS-5HP	
			Specification	Part No.
1	Q1	Main switch *	16A	YE10021160000
2	Q2	Circuit-breaker **	20A	YE40602000000
3	K1	Contacto r **	230V 50/60Hz	YE00601721000
4	K2 K3	Intermediate relay	24VDC	YE03272400000
5	H1	Alarm lamp	24VDC	YE83050200100
6	H2	Alarm lamp	24VDC	YE83050200000
7	F1	Thermal overload relay	7~10A	YE01167100000
8	T	Transformer **	500mA	YE70402300800
9	F11	Fuse base	500V 2P	YE41032200000
10	-	Fuse **	500V 10×38 2A	YE46002000100
11	A1~A13	Circuit board	24VDC	YE80096500000
12	HMI	Touch screen	24VDC	YE80640000000
13	U1	DC power supply *	+24V 1.5A	YE71352400000
14	S1 S2 S4 S6 S8 S10 S12 S14 S16 S18 S20 S22 S24	Pressure switch	-	-
15	S3 S5 S7 S9 S11 S13 S15 S17 S19 S21 S23 S25	Photoelectric switch*	10...30VDC	YE15143900000
16	-	Magnetic reed switch	24VDC	YE15123200000
17	Y1 Y3 Y6 Y9 Y12 Y15 Y18 Y21 Y24 Y27 Y30 Y33 Y36	Solenoid valve *	24VDC	-
18	Y2 Y4 Y7 Y10 Y13 Y16 Y19 Y22 Y25 Y28 Y31 Y34 Y37	Solenoid valve *	24VDC	-
19	Y5 Y8 Y11 Y14 Y17 Y20 Y23 Y26 Y29 Y32 Y35 Y38		24VDC	-
20	X1	Card terminal block *	-	YE61250040000
21	-	Grounding terminal block	-	YE61253500000
22	X3	Card terminal block *	-	YE61250040000
23	-	Grounding terminal block	-	YE61253500000
24	X6	Card terminal block *	-	YE61250040000
25	-	Grounding terminal block	-	YE61253500000
26	X9	Card terminal block *	-	YE61250040000
27	-	Grounding terminal block	-	YE61253500000
28	X12	Card terminal block *	-	YE61250040000

No.	Symble	Name	SWCS-5HP	
			Specification	Part No.
29	-	Grounding terminal block	-	YE61253500000
30	X15	Card terminal block *	-	YE61250040000
31	-	Grounding terminal block	-	YE61253500000
32	X18	Card terminal block *	-	YE61250040000
33	-	Grounding terminal block	-	YE61253500000
34	X21	Card terminal block *	-	YE61250040000
35	-	Grounding terminal block	-	YE61253500000
36	X24	Card terminal block *	-	YE61250040000
37	-	Grounding terminal block	-	YE61253500000
38	X27	Card terminal block *	-	YE61250040000
39	-	Grounding terminal block	-	YE61253500000
40	X30	Card terminal block *	-	YE61250040000
41	-	Grounding terminal block	-	YE61253500000
42	X33	Card terminal block *	-	YE61250040000
43	-	Grounding terminal block	-	YE61253500000
44	X36	Card terminal block *	-	YE61250040000
45	-	Grounding terminal block	-	YE61253500000
46	X2 X4 X7 X10 X13 X16 X19 X22 X25 X28 X31 X34 X37	Heavy-duty connector	4P	YE60000400000
47	-	Card terminal block	4P	YE60000040000
48	M	Blower **	3.75kW	--

* means possible broken parts;

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

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

Table 2-11: Electrical Components List (SWCS-10HP)

No.	Symble	Name	SWCS-10HP	
			Specification	Part No.
1	Q1	Main switch *	25A	YE10125250000
2	Q2	Circuit-breaker **	25A	YE40602500000
3	K1	Contactor **	230V 50/60Hz	YE00602622000
4	K2 K3	Intermediate relay	24VDC	YE03272400000
5	H1	Alarm lamp	24VDC	YE83050200100
6	H2	Alarm lamp	24VDC	YE83050200000
7	F1	Thermal overload relay	14~20A	YE01260140000
8	T	Transformer **	500mA	YE70402300800
9	F11	Fuse base	500V 2P	YE41032200000
10	-	Fuse **	500V 10×38 2A	YE46002000100
11	A1~A13	Circuit board	24VDC	YE80096500000
12	HMI	Touch screen	24VDC	YE80640000000
13	U1	DC power supply *	+24V 1.5A	YE71352400000
14	S1 S2 S4 S6 S8 S10 S12 S14 S16 S18 S20 S22 S24	Pressure switch	-	-
15	S3 S5 S7 S9 S11 S13 S15 S17 S19 S21 S23 S25	Photoelectric switch *	10...30VDC	YE15143900000
16	-	Magnetic reed switch	24VDC	YE15123200000
17	Y1 Y3 Y6 Y9 Y12 Y15 Y18 Y21 Y24 Y27 Y30 Y33 Y36	Solenoid valve *	24VDC	-
18	Y2 Y4 Y7 Y10 Y13 Y16 Y19 Y22 Y25 Y28 Y31 Y34 Y37	Solenoid valve *	24VDC	-
19	Y5 Y8 Y11 Y14 Y17 Y20 Y23 Y26 Y29 Y32 Y35 Y38		24VDC	-
20	X1	Card terminal block *	-	YE61040000000
21	-	Grounding terminal block	-	YE61043500000
22	-	Card terminal block *	-	YE61250040000
23	-	Grounding terminal block	-	YE61253500000
24	X3	Card terminal block *	-	YE61250040000
25	-	Grounding terminal block	-	YE61253500000
26	X6	Card terminal block *	-	YE61250040000
27	-	Grounding terminal block	-	YE61253500000
28	X9	Card terminal block *	-	YE61250040000
29	-	Grounding terminal block	-	YE61253500000
30	X12	Card terminal block *	-	YE61250040000

No.	Symble	Name	SWCS-10HP	
			Specification	Part No.
31	-	Grounding terminal block	-	YE61253500000
32	X15	Card terminal block *	-	YE61250040000
33	-	Grounding terminal block	-	YE61253500000
34	X18	Card terminal block *	-	YE61250040000
35	-	Grounding terminal block	-	YE61253500000
36	X21	Card terminal block *	-	YE61250040000
37	-	Grounding terminal block	-	YE61253500000
38	X24	Card terminal block *	-	YE61250040000
39	-	Grounding terminal block	-	YE61253500000
40	X27	Card terminal block *	-	YE61250040000
41	-	Grounding terminal block	-	YE61253500000
42	X30	Card terminal block *	-	YE61250040000
43	-	Grounding terminal block	-	YE61253500000
44	X33	Card terminal block *	-	YE61250040000
45	-	Grounding terminal block	-	YE61253500000
46	X36	Card terminal block *	-	YE61250040000
47	-	Grounding terminal block	-	YE61253500000
48	X2 X4 X7 X10 X13 X16 X19 X22 X25 X28 X31 X34 X37	Heavy-duty connector	4P	YE60000400000
49	-	Card terminal block	4P	YE60000040000
50	M	Blower **	7.5kW	--

* means possible broken parts;

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

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

2.4 Optional Accessories

2.4.1 Air Accumulator

2.4.1.1 Function of Air Accumulator



Picture 2-32: Air Accumulator

2.4.1.2 Dimensions of Air Accumulator

Air Accumulator: HxD=170x76mm



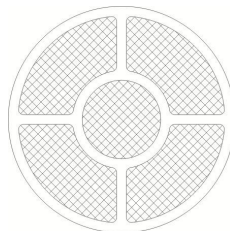
Note!

Please connect the air pipe in right way. Range of air pressure is 4~6kgf/cm².

2.4.2 Filter screen

2.4.2.1 Conditions for Choosing This Filter Screen

This filter screen is suitable for the situation where the recycled materials are more than 30%. It can increase the service life of filter.



Picture 2-33: Filter Screen

2.4.2.2 Specifications of Filter Screen

Mesh number: 14 Diameter of steel wire: 0.5mm

3. Installation and Debugging



Note!

Read this chapter carefully before installation of the machine.

Install the machine by following steps.

Power supply should be fixed by qualified technicians!

3.1 Installation Space

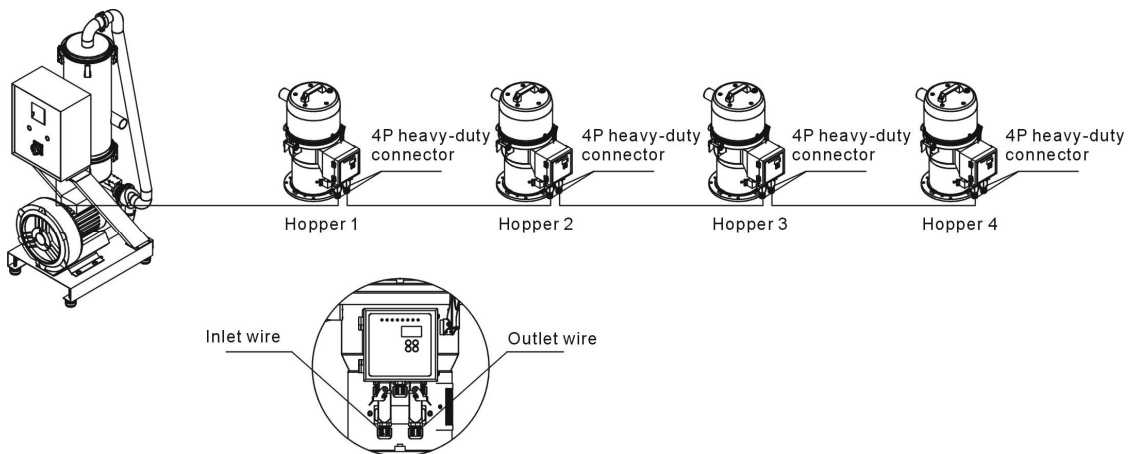
As shown in the picture, make sure there is enough space for installation when install this machine (there should be at least 1m of space reserved around the machine). It is not convenient for checking and maintenance if it is installed in a narrow space.



Picture 3-1: Installation Space

3.2 Signal Connection

Signal connection: The main machine is connected with all hoppers via 4P heavy-duty connectors by series connection.



Picture 3-2: Signal Connection

3.3 Power Connection

Check whether the power supply is complied with the required specification before connection.

The power specification of the machine is usually set to be 3 Φ 400V and also can be made according to customer's specific requirements.

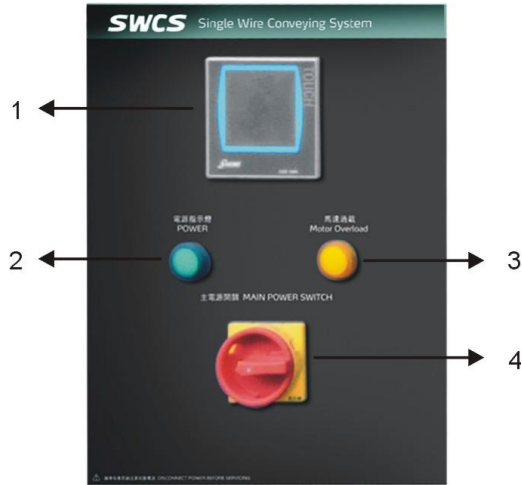


Warning!

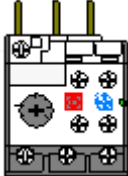
Before connecting to power supply, make sure the power switch is in shut off state.

4. Application and Operation

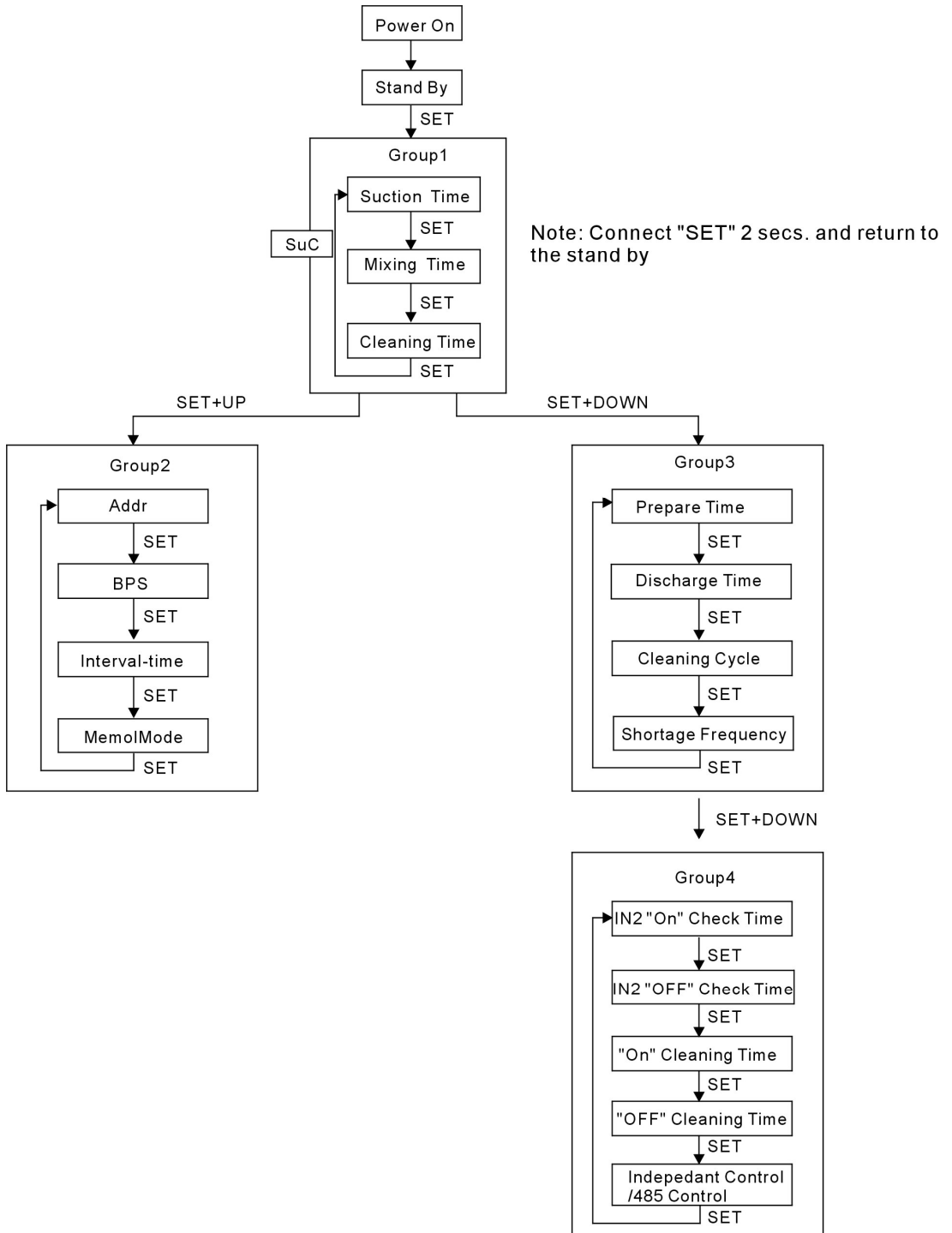
4.1 Control Panel



Picture 4-1: Control Panel

No.	Name	Function description	Notes
1	Control panel	Set all parameters to control the start and stop of machine.	Note: Do not use sharp and tough object to operate the control panel.
2	Power indicator	After connecting to the power supply and turning on main power switch, this light is on.	Note: Do not disassemble any unit or contact any terminal. Otherwise, it may lead to electric shock.
3	Motor overload Indicator	When the motor is overloaded, this light will light up and the buzzer will sound. Besides, the system stops working.	Check the motor to see if there are problems like getting stuck or bearing damage. If not, check setup current of the thermo overload relay to see whether it is too little. Wait for one minute after shooting the above troubles. Then press the blue "reset" to restart the thermo overload relay to reset the alarm indicator. 
4	Main power switch	Control the machine power.	Note: Turn the main power switch to "off" state.

4.2 Operation Flow Chart



4.3 Parameter Setting

Item	Parameter group	Code	Description	Parameter value	
1	Group1	1	SuC	Suction time	0--999
2		2	M1T	Mixing time	0--999
3		3	CLr	Clear time	0--999
4	Group2	1	Add	Device address [ADD]	0--250
5		2	bps	Communication speed [BPS]	0--3
6		3	Int	Interval time of reacting	0-100
7		4	EEP	EEPROM Save mode [EEP]	ON / OFF
8	Group3	1	Pr1	Readiness time	0--999
9		2	bLy	Time for checking material	0--100
10		3	FCy	Cleaning times of screen	0--999
11		4	MCy	Starving times	0--999
12		5	dLy	Motor delay time	0--999
13	Group4	1	1on	Time for confirming the suction signal is on.	0--999
14		2	1oF	Time for confirming the suction signal is off.	0--999
15		3	Fon	Time for confirming the filter screen's high pressure signal is on.	0--999
16		4	FoF	Time for confirming the filter screen's high pressure signal is off.	0--999
17		5	SEF	Independent operation / 485 wired control	0(485 control) / 1(Independent operation / 485 wired control)

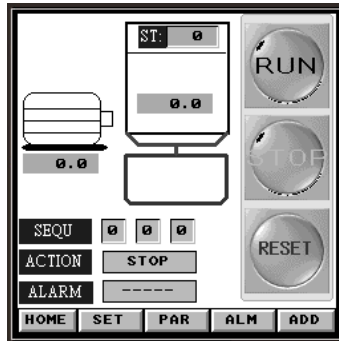
4.3.1 Parameter Setting of Mainboard

Item	Parameter group	Code	Description	Parameter value	
1	Group1	1	SuC	Suction time	1--999
2		2	M1T	Mixing time	0
3		3	CLr	Clear time	0
4	Group2	1	Add	Device address [ADD]	99
5		2	bps	Communication speed [BPS]	2
6		3	Int	Interval time of reacting	0
7		4	EEP	EEPROM Save mode [EEP]	OFF
8	Group3	1	Pr1	Readiness time	0
9		2	bLy	Time for checking material	0
10		3	FCy	Cleaning times of screen	0
11		4	MCy	Starving times	0
12		5	dLy	Motor delay time	1
13	Group4	1	1on	Time for confirming the suction signal is on.	100
14		2	1oF	Time for confirming the suction signal is off.	70
15		3	Fon	Time for confirming the filter screen's high pressure signal is on.	5
16		4	FoF	Time for confirming the filter screen's high pressure signal is off.	5
17		5	SEF	Independent operation / 485 wired control	0

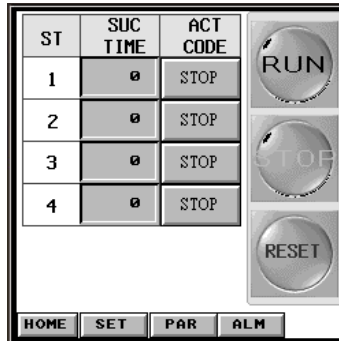
4.3.2 Parameter Setting of Each Hopper

Item	Parameter group	Code	Description	Parameter value	
1	Group1	1	SuC	Suction time	1--999
2		2	M1T	Mixing time (Time for stopping material)	0
3		3	CLr	Clear time	0
4	Group2	1	Add	Device address [ADD]	1,2,3,4.....
5		2	bps	Communication speed [BPS]	2
6		3	Int	Interval time of reacting	0
7		4	EEP	EEPROM Save mode [EEP]	OFF
8	Group3	1	Pr1	Readiness time	0
9		2	bLy	Time for checking material	1-100
10		3	FCy	Cleaning times of screen	0
11		4	MCy	Starving times	0
12		5	dLy	Motor delay time	0
13	Group4	1	1on	Time for confirming the suction signal is on.	100
14		2	1oF	Time for confirming the suction signal is off.	70
15		3	Fon	Time for confirming the filter screen's high pressure signal is on.	5
16		4	FoF	Time for confirming the filter screen's high pressure signal is off.	5
17		5	SEF	Independent operation / 485 wired control	0

4.4 Interface Description



1. ST: 1...12 (Action hopper).
2. Suction time for action hopper
3. Motor running time
4. SEQU The sequence of hoppers waiting to run
5. ACTION Running state of action hopper
6. ALARM Warning state of action hopper
7. RUN Execute Key. When it flashes, it indicates that the system is running.
8. STOP Stop key. When it flashes, it indicates that the system is stopping.
9. REST Alarm clear & on-line key (automatically communicate positively with each hopper to confirm their state and the ADD will automatically display ON if the state of one hopper is on.)
10. HOME Switch key of home page
11. SET Suction time setting page
12. PAR Parameter setting page for moving forward
13. ALM Alarm information page
14. ADD On-line setting page of each controller



b. Setting page for each hopper (the main machine is not included) (SET)

1. ST: Parts no.
2. SUC TIME : Setting of each hopper's suction time
3. ACT CODE : Carrying out or stopping switch of each hopper
4. Other parameters are the same with those on home page.



c. Moving-forward parameter setting of each hopper (the main machine is not included.) (PAR)

1. ST: Hopper number of current setting page



2. : Switch to the last hopper number (ADD is ON.)



3. : Switch to next hopper number (ADD is ON.)

4. Readiness time: 0 ~ 999;

5. Time for cleaning screen: 0 ~ 999;
6. Mixing time (Time for stopping material): 0 ~ 999;
7. Material falling time: 0 ~ 100;
8. Cleaning times of screen: 0 ~ 999;
9. Starving times: 0 ~ 999 (It's necessary to restart the machine after setting.)
10. Time of keeping starving signal ON: 0 ~ 999;
11. Time of keeping full signal: 0 ~ 999;
12. Time of keeping screen cleaning vacuum pressure : 0 ~ 999;
13. Time of keeping vacuum pressure after cleaning: 0 ~ 999;
14. Other parameters are the same with those on home page.



d. Alarm information recording page of each hopper (ALM)

1. MM/DD/YY: Current date
2. HH: MM : Current time
3. CLR ALM: Clear record of alarm information

ADD	ACTIVE	ADD	ACTIVE
1	ON	11	
2	ON	12	
3	ON	13	
4	ON	14	
5		15	
6		16	
7		17	
8		18	
9		19	
10		99	ON

HOME 下頁

e. On-line setting page of each hopper (ADD)

1. ADD: Hopper number
2. ACTIVE: On-line key of each hopper (Only in ON state, it can perform the action)

ADD	STATUS	ADD	STATUS
1	----	11	
2	----	12	
3	----	13	
4	----	14	
5		15	
6		16	
7		17	
8		18	
9		19	
10		99	----

HOME 上頁

3. Next page; Switch to on-line monitoring page

ADD; Hopper number

STATUS; ---- means the hopper is on-line while blank means off-line.

4.5 Steps of Operation

1. Turn on the main machine of each hopper and HITECH man-machine interface power source.
2. Set parameters of the main machine and each hopper the same as the above table. Otherwise, it can't be on line.

Note: Set the ADD of the main machine to be 99 while the ones of all hoppers respectively to be 1, 2, 3, 4...12.

BPS is 2.

SEF is 0.

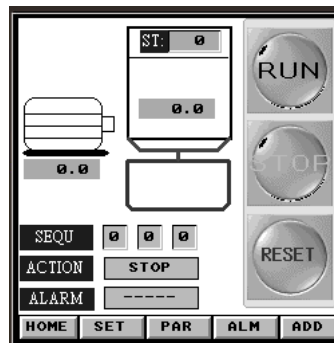
Material checking time of main machine must be set as 0.

3. Shutdown

4. Turn on power source again.

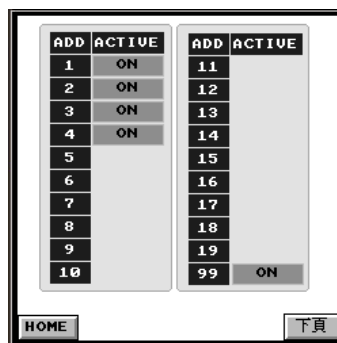
5. Press ON / OFF to make the main machine and all hoppers in holding state where the screen displays - - -. If the screen displays OFF, it means it's powered off.

6. Touch any point on HITECH man-machine interface.

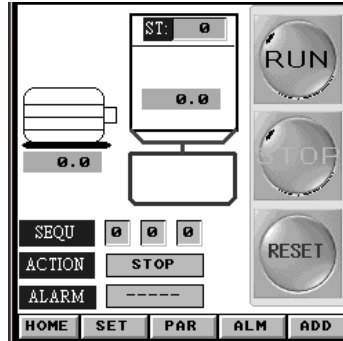


7. Enter into home page (HOME).

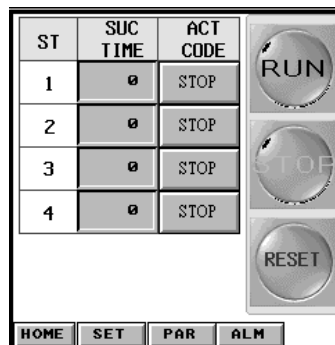
8. Press ADD and input password 88888888 to enter into device address ADD screen.



9. Check whether the hopper requires action is on. If it's off, it means the ADD or BPS is wrong or the ADD is repeated. Please reset the ADD and BPS and then restart the machine or press HOME for going back to home page to press PESET to be on line again. Repeat step 8 and 9 to confirm.



10. Turn back to home page (HOME).



11. Press SET to enter the screen of setting suction time for hopper 1, 2, 3, 4...12. Press HOME to go back to home page.

Press RUN for running. At the same time, the RUN key will flash. (The STOP key will flash which means stop of running when being pressed. Press RESET will clear one alarm for each time. Therefore, alarms should be cleared in turn by pressing RESET twice if there are two kinds of alarms. RESET also has the function of resetting the machine on-line.)

5. Trouble-shooting

Failures	Possible reasons	Solutions
Power indicator is not alight after turning on the power	Unconnected to main power. Power switch is damaged. Power circuit fails. Fuse of control circuit blew out. Control transformer damage.	Connect to the main power. Replace power switch. Check power circuit. Check power circuit and replace fuse. Replace transformer.
After turning on the power switch, the system doesn't work.	Circuit failure Material level sensor is at the place where there is material or the material level switch is damaged.	Check power circuit. Clear material or replace material level sensor.
Suction blower doesn't run, though the starving situation have been lasting for a long time.	Circuit failure or magnetic reed switch damage.	Check lines or replace magnetic reed switch.
Failure alarm occurs after one station suction for several times (which may be set to be 1,2,3, ...).	Circuit failure Magnetic reed switch damage Diaphragm valve is damaged. The tube is not airtight so that it can't suction materials.	Check power circuit. Replace magnetic reed switch. Replace diaphragm valve. Check to see whether there is any leakage.
Full storage but the blower is still working.	Magnetic reed switch is on. Signal wire is of short circuit. Contactor is of mechanical failure or the contacting point is sticking together.	Adjust or replace the switch. Check the signal line. Repair or replace. Check and replace.
Feed-in motor can not work.	Motor is damaged. Contactor is damaged. Overload relay is damaged. Circuit failure	Check and replace. Check and replace. Check and replace. Check and replace.

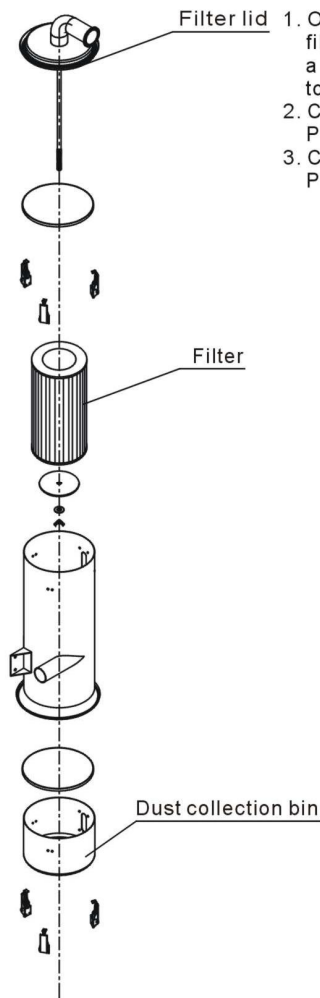
6. Maintenance and Repair



Note!

All the repair work should be done by professionals in order to prevent personal injuries and damage of the machine.

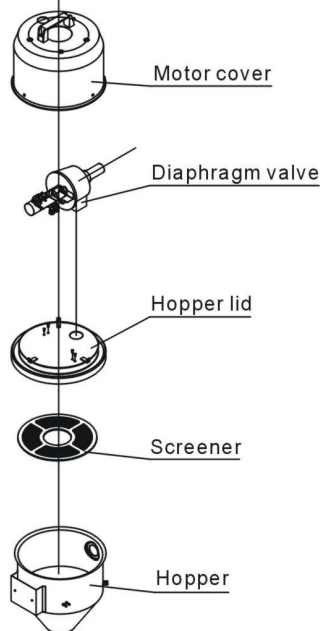
Main body, Filter Inspection and Storage Hopper Cleanup



1. Open the filter lid and remove the filter, blow away the dust on it with a high pressure air gun from inside to outside.
2. Clean the filter.
Period: daily
3. Clean the dust collection bin.
Period: daily

Hopper, Screener

1. Loosen the snap hook of the tank, remove the filtering barrel lid, take out the plate filter and eliminate the dust on it.
2. Clean the plate filter. Period: daily



6.1 Material Hopper

Cleaning of material hopper: There is a filter screen inside the storage hopper. Please check it periodically or loose the snap hook, take down the hopper cover, and take out the filter screen when finding conveying capacity reduced. Remove all dust on the filter screen to keep it well ventilated as well as enhance suction.

6.2 Main Body

Please check it periodically or take out the filter screen when finding conveying capacity reduced. Remove all dust on the filter screen to keep it well ventilated as well as enhance suction.

Cleaning steps:

- 1) Loosen snap hooks, take down the filter cover and loosen the butterfly screws to take out the filter.
- 2) Remove dusts adhering to the filter to keep good suction power.

6.3 Magnetic Reed Switch, Photoelectric Switch

Magnetic reed switch

When the indicator of the magnetic reed switch doesn't work, check the switch contact and adjust or replace it if it doesn't work well.

- 1) Unscrew the fixing screw of the outer box of the sensor.
- 2) Adjust the depth or move the position the sensor inserted into the box up and down. If the indicator is on, it means that magnetism has been detected and it can be ready for use through tightening the screws.
- 3) If there is no reaction even when the magnet come close to the sensor, please check whether the switch is badly contacted or damaged.

Photoelectric Switch

When the indicator of the photoelectric switch doesn't work, check the switch contact and adjust or replace it if it doesn't work well.

- 1) Check whether the wires are badly contacted.
- 2) Please replace with a new one if the switch is damaged.

6.4 Weekly Checking

- 1) Check if there are broken electrical wires. Replace the broken wires immediately if there are.
- 2) Check functions of the keys on the control panel.
- 3) Check if screws at material inlet are loose and if the fastener is sealed up.



Note!

Cut off power supply when you check power lines.

6.5 Monthly Checking

- 1) Check if snap hooks on hopper cover are loose.
- 2) Check if the discharging plate is out of shape. If it is, please replace it.
- 3) Check the performance of magnetic reed switch or photo sensor. If there is any poor contact, please adjust or replace it.

6.6 Maintenance Schedule

6.6.1 About the Machine

Model _____ SN _____ Manufacture date _____

Voltage _____ Φ _____ V Frequency _____ Hz Power _____ kW

6.6.2 Installation & Inspection

- Check if the connecting pipe has been correctly connected.
- Check if that pipe is locked up by clips.
- Check if mounting base is locked tightly.

Electrical Installation

- Voltage: _____ V _____ Hz
- Fuse specification: One-phase: A _____ Three-phase: _____ A
- Check phase sequence of power supply.

6.6.3 Daily Checking

- Check main power switch.
- Check filter screen.
- Check working state of the motor.

6.6.4 Weekly Checking

- Check all the electrical cables.
- Check if there are loose connections of electrical components.
- Check if the screw of the feed-in pipe's flange is loosed.
- Check the air filter.

6.6.5 Monthly Checking

- Check if the spring lock on the hopper cover is loosed.
- Check if the reversal stop piece is deformed.
- Check the function of the magnetic reed switch.