

---

# **Kaishan Rotary Screw Air Compressor**

---

## **KRSB 20-30HP Parts Manual**

---

---

October 2022

Serial numbers ending with S01 or 6 digit

(115PSI/125PSI/150PSI/190PSI/208-230V/460V/60HZ/BELT/ASME/ UL)

# TABLE OF CONTENTS

---

<b>Service Parts .....</b>	<b>3</b>
<b>Serial Number .....</b>	<b>3</b>
<b>Spare Parts .....</b>	<b>4</b>
<b>Airend and Inlet valve.....</b>	<b>5</b>
<b>Base Mounting.....</b>	<b>7</b>
<b>Reservoir .....</b>	<b>9</b>
<b>Belt Drive System .....</b>	<b>11</b>
<b>Air Cooler .....</b>	<b>13</b>
<b>Fluid Piping.....</b>	<b>15</b>
<b>Air Piping.....</b>	<b>17</b>
<b>Cabinet.....</b>	<b>19</b>
<b>Electrical Enclosure .....</b>	<b>21</b>
<b>Appendix.....</b>	<b>33</b>
<b>Contact Information .....</b>	<b>34</b>

## Service Parts

---

The following information must be provided for ordering service parts:

1. The serial number of unit must be provided. It will be verified to ensure correct replacement parts are ordered.
2. Service parts must be ordered from closest authorized distributor.
3. Exact part number, quantity and delivery method must be provided.

All service parts must be ordered through nearest authorized distributor. Insist on genuine manufacturer parts only. Failure to do so may void product warranty.

## Serial Number

---

The unit serial number can be found on serial number tag, which is located on the cabinet corner post of the unit.



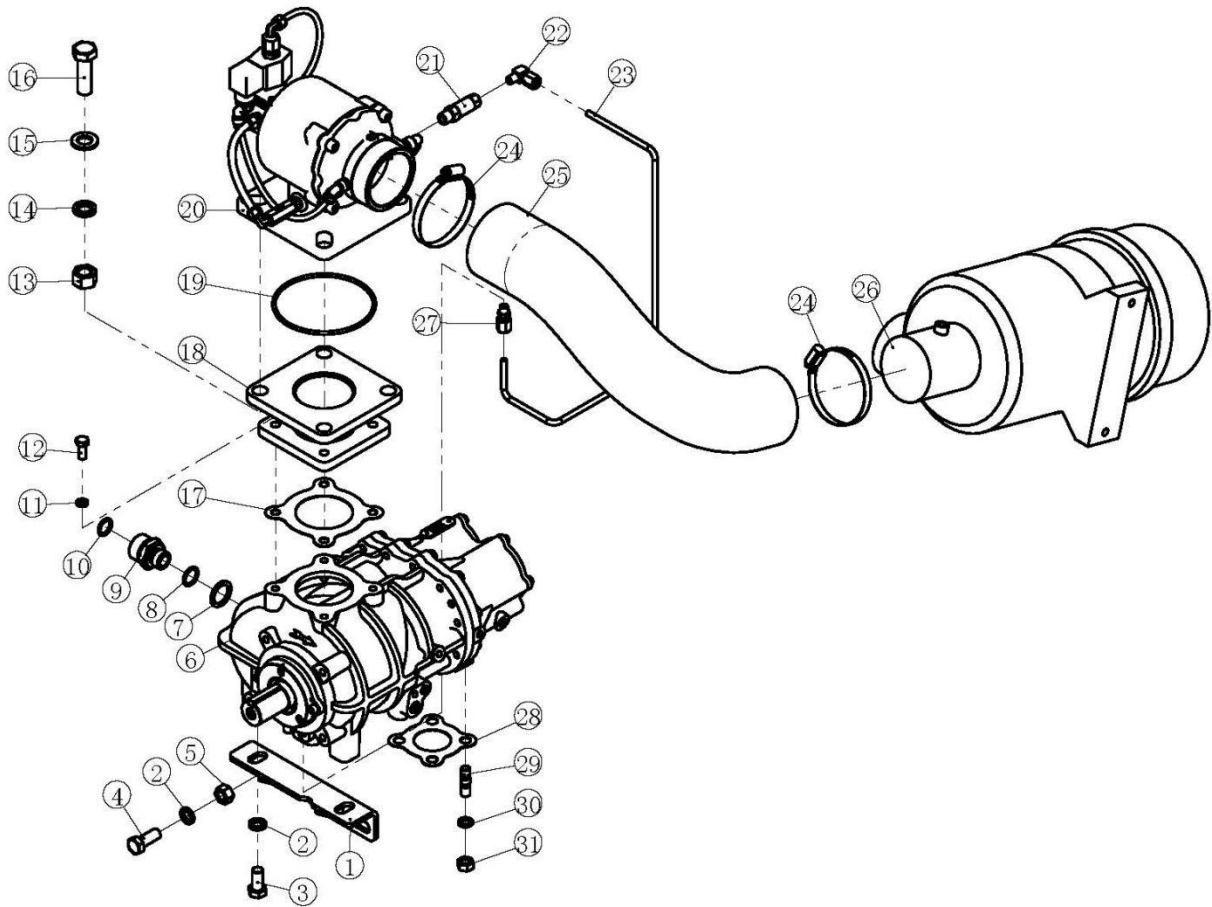
## Spare Parts

Recommended spare parts are shown as follows:

ITEM	No.	QTY	PART NUMBER	DESCRIPTION		
1		1	537702 320510	AIR FILTER ELEMENT		
2		1	07709 94172 00	OIL FILTER		
3		1	07704 55143 02	FLUID/AIR SEPARATOR ELEMENT		

## Airend and Inlet valve

---



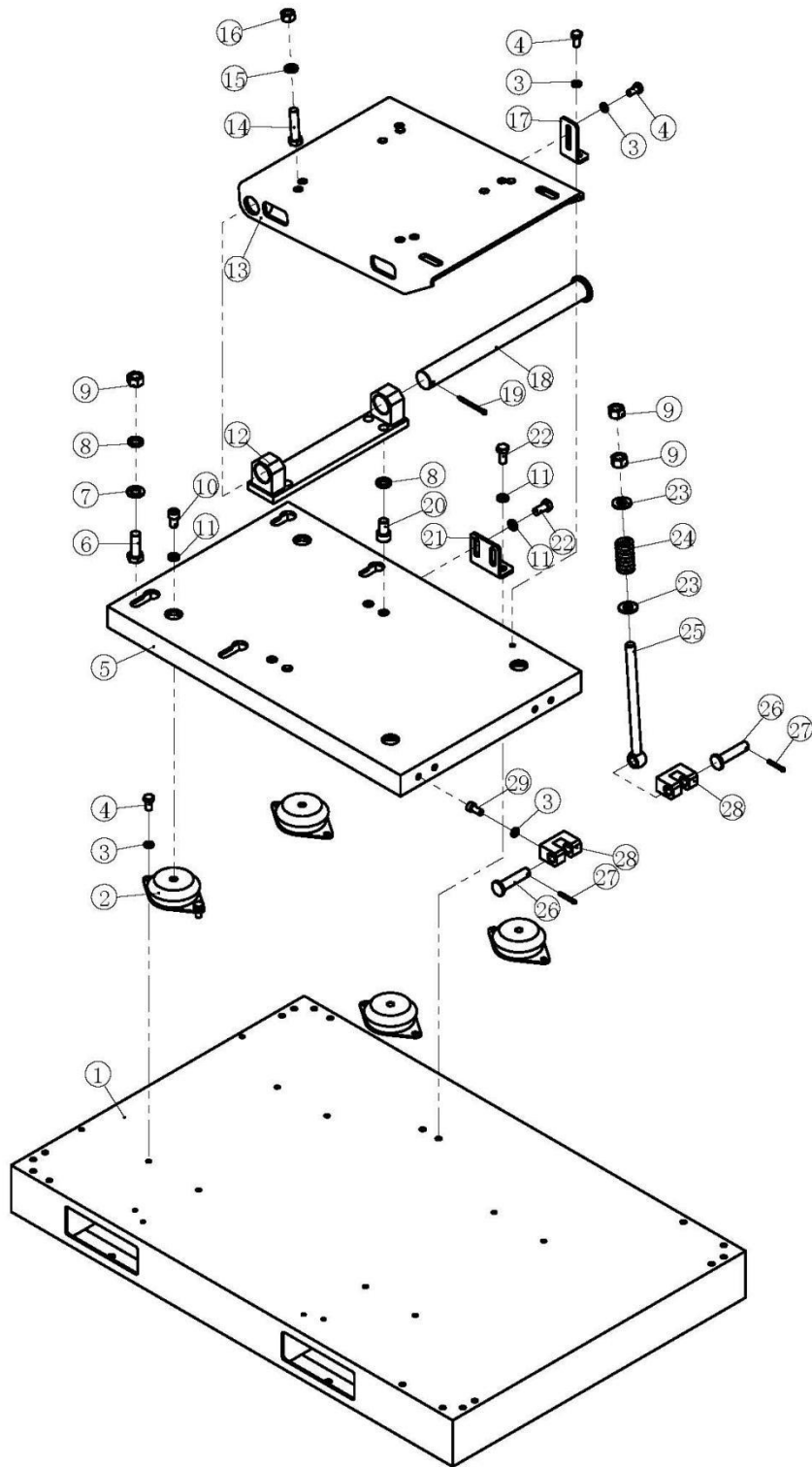
## Airend and Inlet valve

(GROUP PN: )

NO.	PN	DESCRIPTION	QTY	REMARK
1	85433 01001 00	Airend support	1	
2	01365 12000 00	Washer	4	12
3	01307 12025 00	Bolt	2	M12X25
4	01307 12030 00	Bolt	2	M12X30
5	01322 12000 00	Nut	2	M12
6	1250101	Airend	1	
7	02201 00015 00	Screw washer	1	
8	02901 01800 20	O-ring	1	18X2.65
9	13315 06001 09	Joint	1	
10	02901 01600 20	O-ring	1	16X2.65
11	01365 08000 00	Washer	4	8
12	01307 08020 00	Bolt	4	M8X20
13	01322 16000 00	Nut	4	M16
14	01365 16000 00	Washer	4	16
15	01366 16000 00	Washer	1	16
16	01307 16050 00	Bolt	4	M16X50
17	02217 11004 16	Gasket	1	
18	87219 01001 09	Flange	1	
19	02901 11000 30	O-ring	1	110X3.55
20	01608 06512 00	Inlet valve	1	
*20A	01605 90375 10	Blowdown valve	1	
*20B	01610 90266 00	Check valve	1	
*20C	04002 00065 04	Inlet valve kit	1	1 Spring A, 1 Spring B, 1 Piston ring, 1 O-ring 54x3, 1 Sealer, 1 O-ring 28x2, 1 O-ring 110.72x3.53
*20D	01603 00018 00	Solenoid valve	1	
21	01610 03000 00	Check valve	1	
22	01513 06100 00	Joint	1	
23	03211 06000 00	Stainless steel pipe	1	
24	04401 08001 00	Hoop	2	
25	02907 08080 50	Flexible pipe	1	
26	537702 320510	Air filter	1	
27	01512 06100 00	Joint	1	
28	02217 07504 16	Gasket	1	
29	01391 10025 00	Stud	4	M10X25
30	01365 10000 00	Washer	4	10
31	01322 10000 00	Nut	4	M10

\*Items not shown on the drawing.

# Base Mounting



## Base Mounting

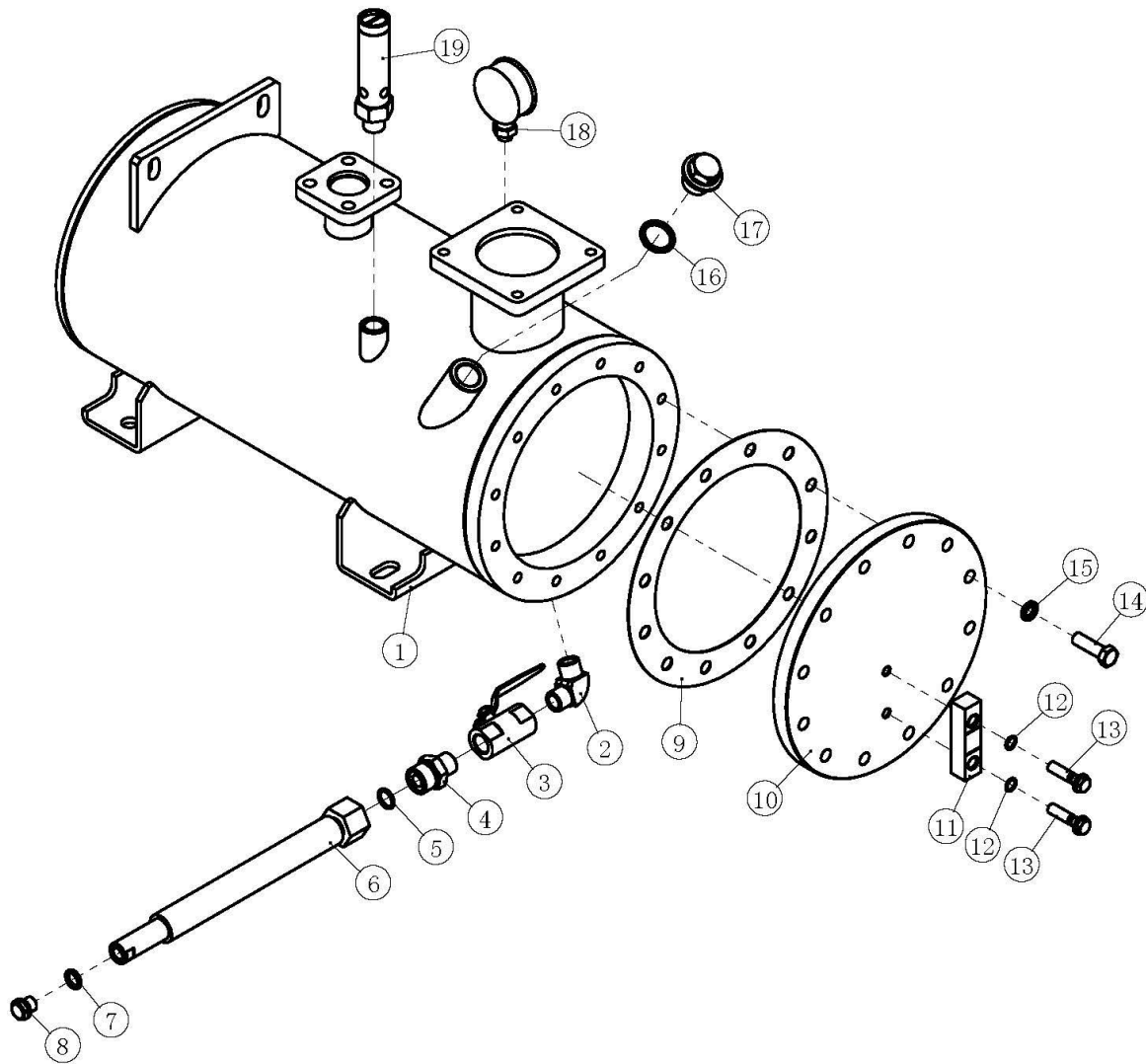
(GROUP PN: )

NO.	PN	DESCRIPTION	QTY	REMARK
1	87219 02010 10	Base	1	
2	02905 00006 00	Absorber	4	
3	01365 10000 00	Washer	14	10
4	01307 10020 00	Bolt	10	M10X20
5	87219 02020 09	Support	1	
6	01307 16045 00	Bolt	4	M16X45
7	01366 16000 00	Washer	4	16
8	01365 16000 00	Washer	8	16
9	01322 16000 00	Nut	8	M16
10	01344 12020 00	Screw	4	M12X20
11	01365 12000 00	Washer	8	12
12	16323 02002 00	Support	1	
13	87219 02030 09	Motor support	1	
14	01306 14060 00	Bolt	4	M14X60
15	01365 14000 00	Washer	4	14
16	01322 14000 00	Nut	4	M14
17	12333 02110 00	Fixing plate, shipping	1	
18	16323 02001 00	Pin	1	
19	01384 50056 00	Cotter pin	1	5X56
20	01344 16025 00	Screw	4	M16X25
21	12419 02002 00	Fixing plate, shipping	1	
22	01307 12025 00	Bolt	4	M12X25
23	13323 02003 00	Washer	4	
24	13323 02002 00	Spring	2	
25	13323 02001 00	Bolt	2	
26	13340 02003 00	Pin	2	
27	01384 50028 00	Cotter pin	2	5X28
28	13340 02002 00	Block	2	
29	01344 10020 00	Screw	4	M10X20



# Reservoir

---



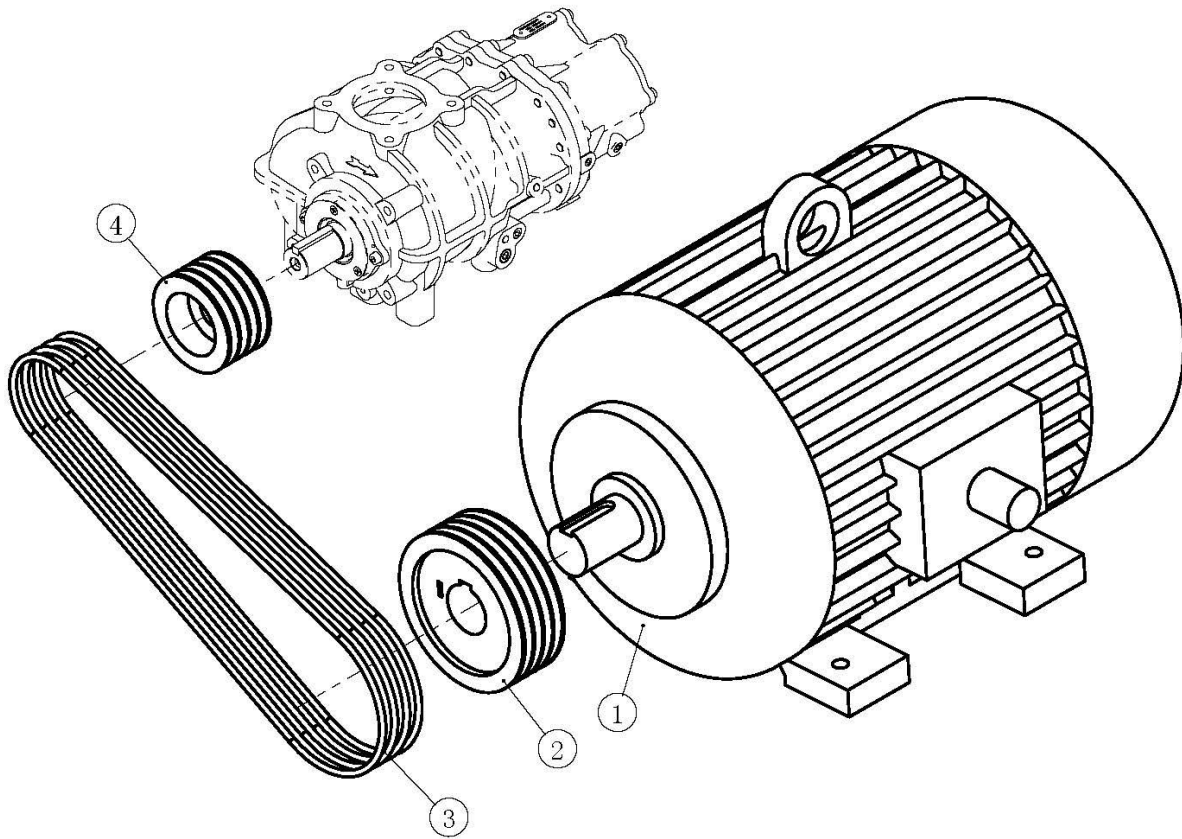
# Reservoir

(GROUP PN: )

NO.	PN	DESCRIPTION	QTY	REMARK
1	87219 03010 09	Fluid/air separator	1	ASME UL
2	99121 03002 00	Elbow	1	
3	01613 01500 00	Ball valve	1	DN15
4	13315 03006 00	Joint	1	
5	02901 01600 20	O-ring	1	16X2.65
6	97537 00003 00	Drain pipe	1	
7	01534 14000 00	Bond washer	1	14
8	13315 03005 00	Plug	1	M14X1.5
9	13315 03011 06	Gasket	1	
10	87219 03010 16	Cover	1	
11	13315 03002 04	Oil sight glass	1	
12	02901 01060 10	O-ring	4	10.6X1.8
13	13315 03001 00	Hollow bolt	2	M10X40
14	01307 12040 00	Bolt	12	M12X40
15	01365 12000 00	Washer	12	12
16	01534 27000 00	Bond washer	1	27
17	01535 27200 00	Plug	1	M27X2
18	02801 06309 00	Pressure gauge	1	
19	01601 15175 07	Relief valve	1	No UL/100-150PSI
	01601 15210 07			No UL/175-190PSI

# Belt Drive System

---

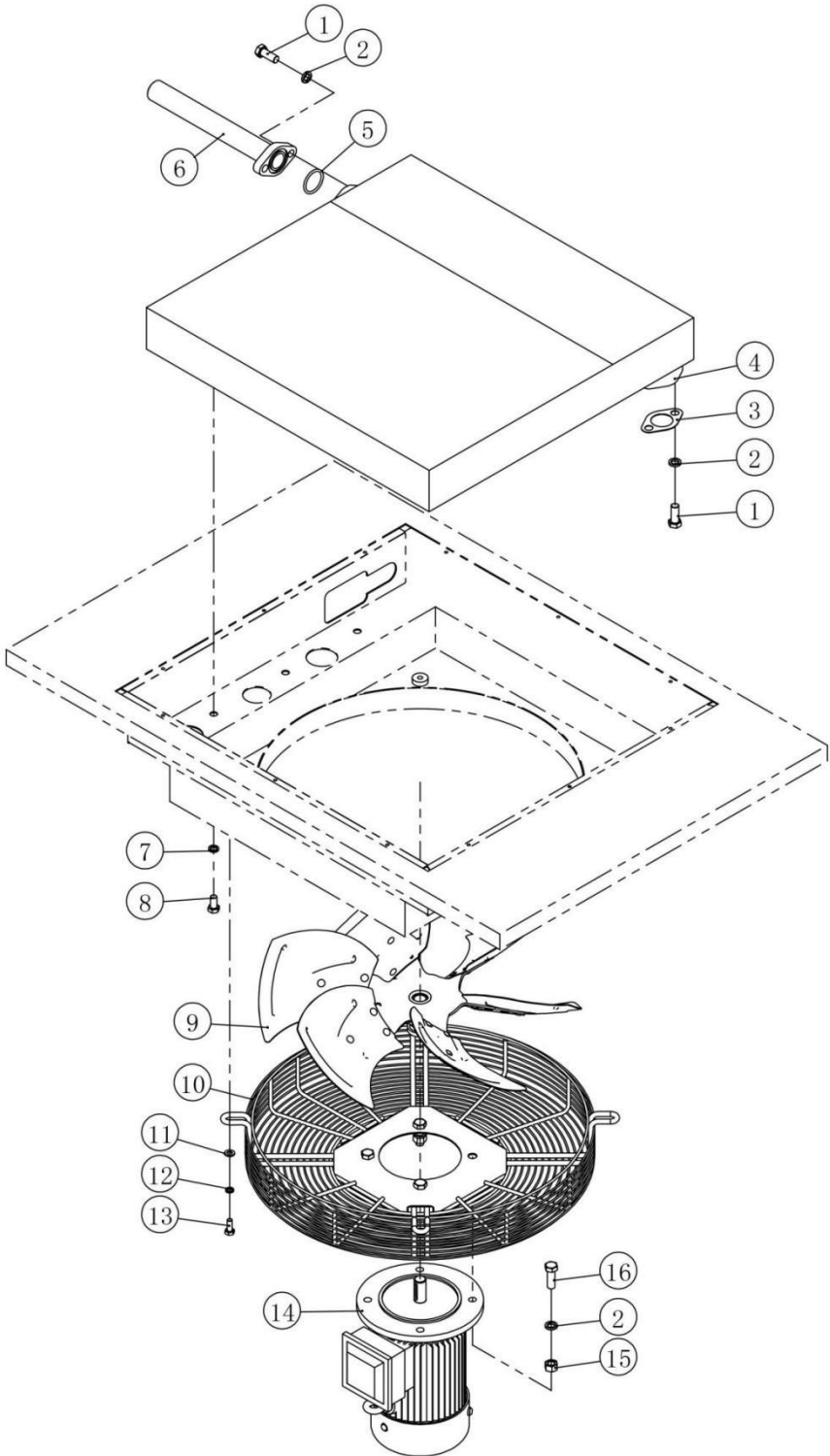


# Belt Drive System

(GROUP PN: )

NO.	PN	DESCRIPTION	QTY	REMARK
1	62015 37633 24	Motor (15kW)	1	208-230/460V、IE3
	62015 58633 24			575V、IE3
	62018 37633 24	Motor (18.5kW)		208-230/460V、IE3
	62018 58633 24			575V、IE3
	62022 37633 24	Motor (22kW)		208-230/460V、IE3
	62022 58633 24			575V、IE3
2	01812 15040 48	Motor pulley	1	30-115
	01812 14040 48			30-125,30-150, 30-175
	01812 13240 42			25-115,25-125
	01812 12540 42			25-150,20-115
	01812 11840 42			20-125,25-175
	01812 11240 42			20-150
	01812 10640 42			20-175
3	01808 01087 01	Belt	4	30-115~150, 25-115,25-150
	01808 01112 00			30-175, 25-125,25-175, 20-115~175
4	01812 09040 30	Airend pulley	1	30-115,30-125, 25-115
	01812 09540 30			25-125
	01812 10040 30			25-150,30-150
	01812 10640 30			20-115
	01812 11240 30			20-125,25-175 30-175
	01812 11840 30			20-150
	01812 13240 30			20-175

# Air Cooler



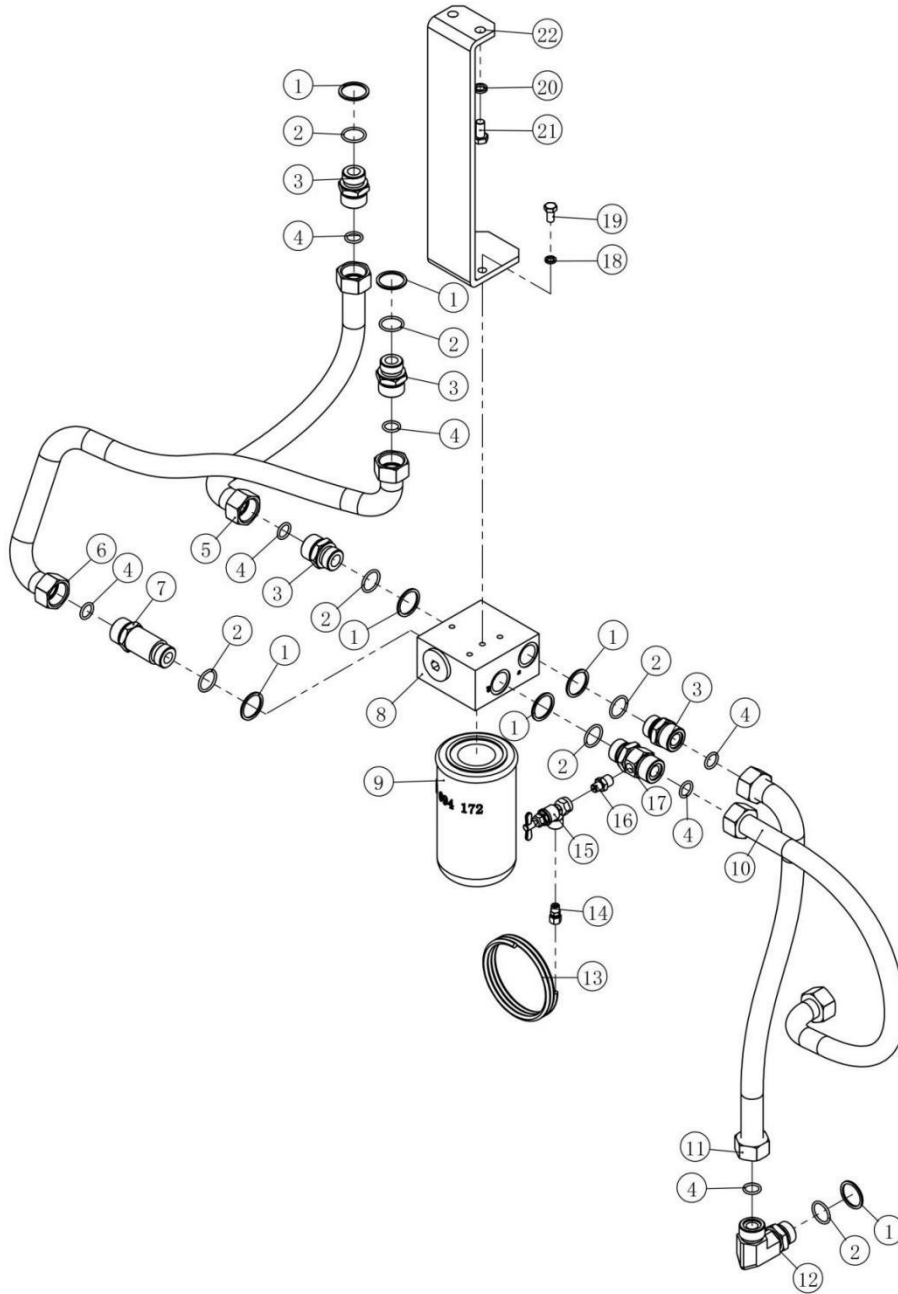
## Air Cooler

(GROUP PN: )

NO.	PN	DESCRIPTION	QTY	REMARK
1	01307 12030 00	Bolt	4	M12×30
2	01365 12000 00	Washer	8	12
3	13323 05002 06	Gasket	2	
4	14419 05010 00	Cooler	1	
5*	02901 03550 30	O-ring	1	35.5*3.55
	13323 05002 06	Gasket	1	
6	87219 05001 09	Connecting ouoe	1	
7	01365 10000 00	Washer	6	10
8	01307 10020 00	Bolt	6	M10×20
9	07204 50013 00	Impeller	1	
10	07205 00500 02	Net cover	1	
11	01366 08000 00	Washer	4	8
12	01365 08000 00	Washer	4	8
13	01307 08020 00	Bolt	4	M8×20
14	66155 37651 25	Motor(0.55KW)	1	208-230/460
	66155 58651 25			575V
15	01322 12000 00	Nut	4	M12
16	01307 12035 00	Bolt	4	M12×35

\*Newer units come with o'ring. O'ring or gasket can be used.

# Fluid Piping



## Fluid Piping

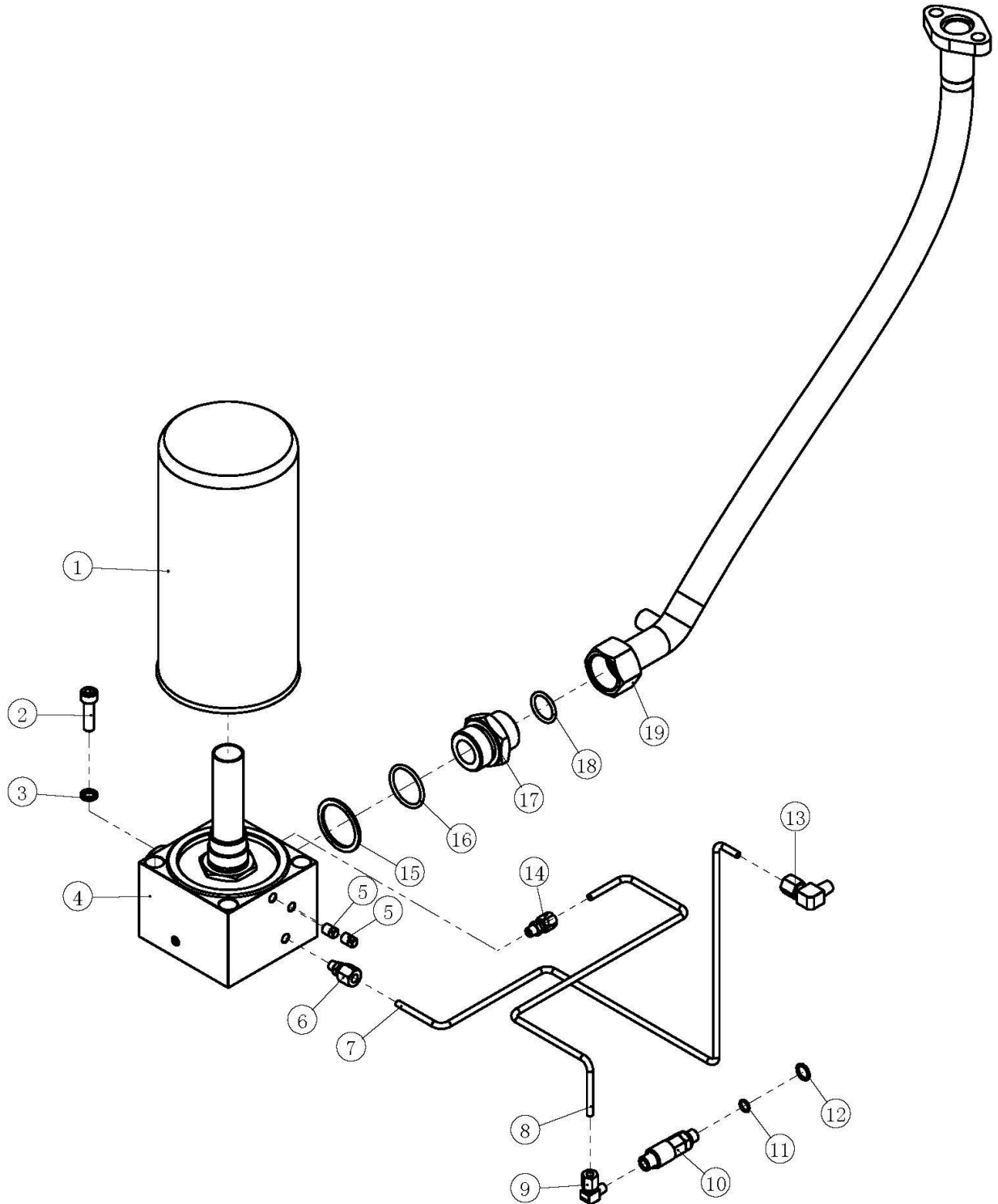
(GROUP PN: )

NO.	PN	DESCRIPTION	QTY	REMARK
1	02201 00020 00	Screw washer	7	
2	02901 02360 20	O-ring	7	23.6X2.65
3	13315 06009 09	Joint	5	
4	02901 01600 20	O-ring	7	16X2.65
5	87219 06003 06	Oil pipe	1	Inlet cooler
6	87219 06004 10	Oil pipe	1	Outlet cooler
7	13333 06009 00	Connecting pipe	1	
8	01611 02083 01	Thermal valve	1	
8A*	04004 20083 02	Thermal valve kit	1	O-ring 38x3, Valve element, Sleeve, Spring.
9	07709 94172 00	Oil filter	1	
10	87219 06002 07	Oil return pipe	1	
11	87219 06001 06	Oil pipe	1	Inlet thermal valve
12	16435 06006 02	Adjustable elbow	1	
13	02917 06040 00	Nylon pipe	1	
14	01511 06100 00	Joint	1	
15	01613 00600 99	Sample valve	1	
16	98018 07011 02	Joint	1	
17	14149 06002 00	Washer	1	
18	01365 08000 00	Washer	2	8
19	01307 08016 00	Bolt	2	M8X16
20	01365 10000 00	Washer	2	10
21	01307 10020 00	Bolt	2	M10X20
22	87219 06006 09	Oil filter support	1	

\*Items not shown on the drawing.



# Air Piping



## Air Piping

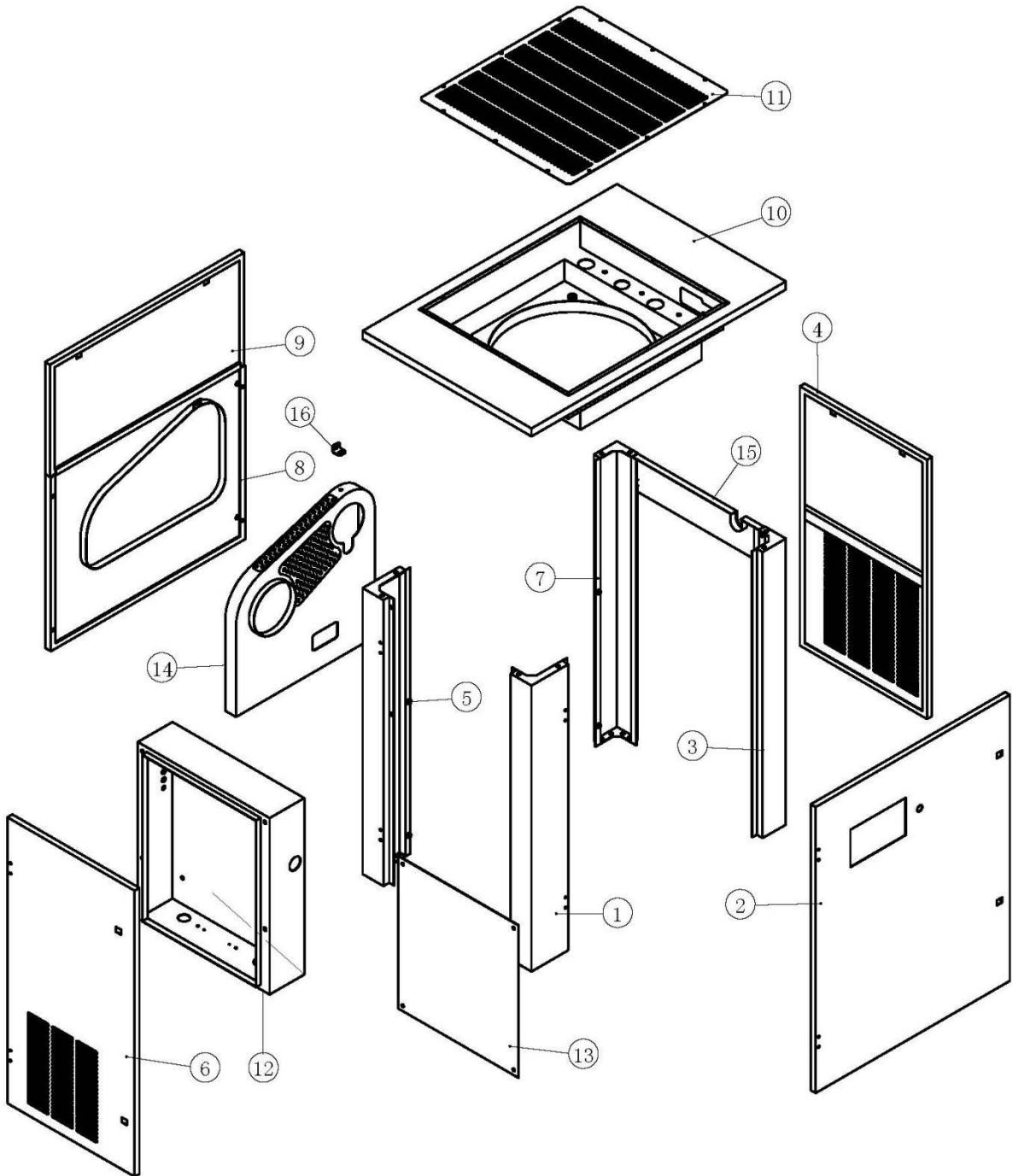
(GROUP PN: )

NO.	PN	DESCRIPTION	QTY	REMARK
1	07704 55143 02	Fluid/air separator element	1	
2	01344 10035 00	Screw	4	M10X35
3	01365 10000 00	Washer	4	10
4	01617 00025 08	Combination valve	1	
4A*	04002 00025 01	Combination valve kit	1	O'ring 34x3, o'ring 39x3, Valve element A, Check spring, Valve element B, o'ring 25x2.62, spring, o'ring 104.37x3.53
5	02103 00006 00	Plug	2	
6	01512 08100 00	Joint	1	
7	87219 07110 09	Stainless steel pipe	1	
8	87219 07100 09	Stainless steel pipe	1	
9	01513 06100 00	Joint	1	
10	01610 01010 01	Oil sight check valve	1	
11	02901 00950 10	O-ring	1	9. 5X1. 8
12	02201 01215 00	Screw washer	1	
13	01513 08130 00	Joint	1	
14	01512 06100 00	Joint	1	
15	02201 00032 00	Screw washer	1	
16	02901 03870 30	O-ring	1	38. 7X3. 55
17	98018 06006 00	Joint	1	
18	02901 02580 30	O-ring	1	25. 8X3. 55
19	87219 07001 09	Air pipe	1	Inlet cooler

\*Items not shown on the drawing.

# Cabinet

---

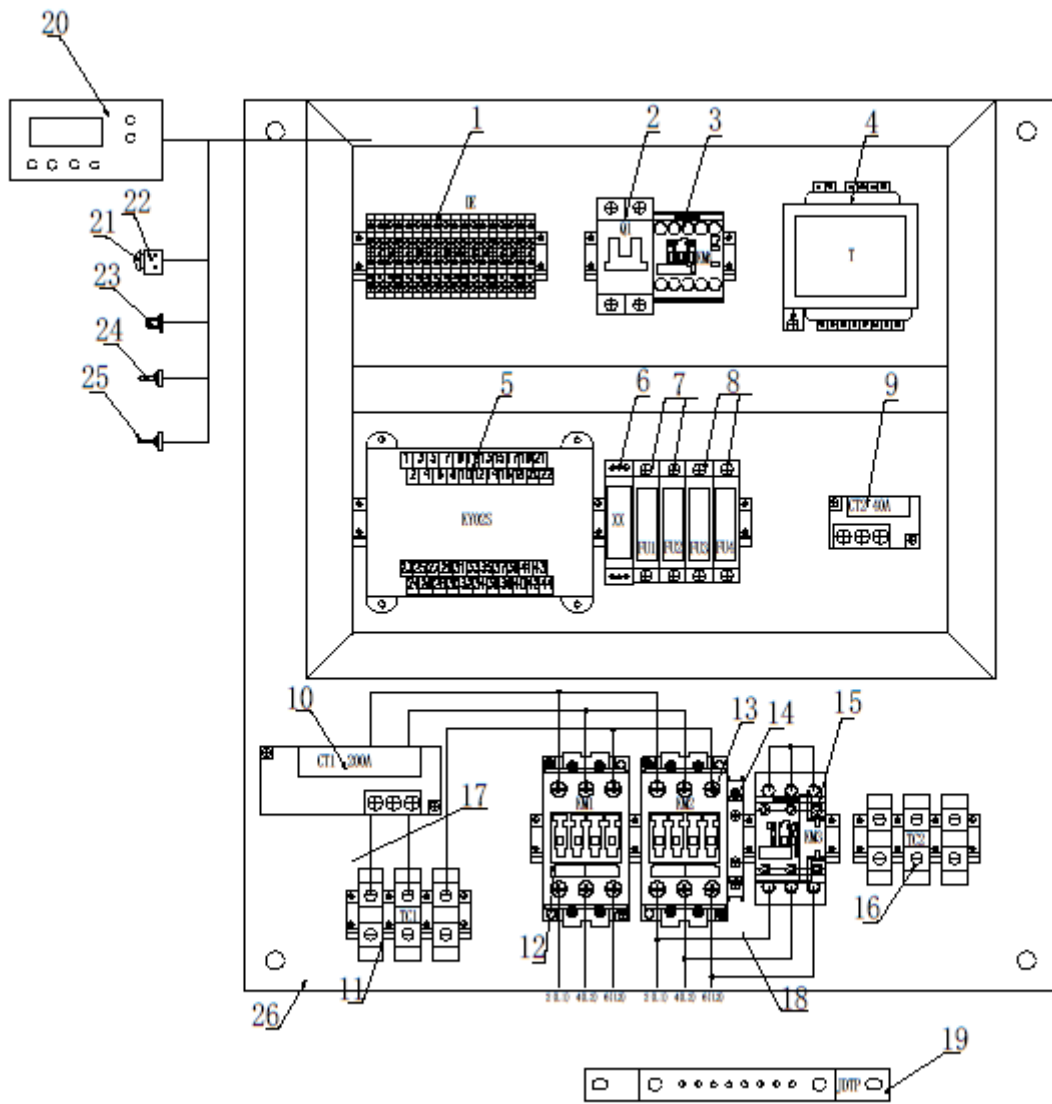


# Cabinet

(GROUP PN: )

NO.	PN	DESCRIPTION	QTY	REMARK
1	87219 08001 09	Support	1	
2	87219 08002 09	Door	1	
3	87219 08003 09	Support	1	
4	87219 08004 09	Door	1	
5	87219 08005 09	Support	1	
6	87219 08006 09	Air intake plate	1	
7	87219 08007 09	Support	1	
8	87219 08008 09	Baffle	1	
9	87219 08009 09	Door	1	
10	87219 08100 09	Top cover	1	
11	14419 08110 00	Top net cover	1	
12	87219 08120 09	Electric cabinet	1	
13	87219 08120 19	Electric control board	1	
14	86219 08130 00	Safety fence	1	20/25HP
	87219 08130 09		1	30HP
15	87219 08140 09	Fixing plate	1	
16	84219 08140 00	Fixing plate	1	

# Electrical Enclosure



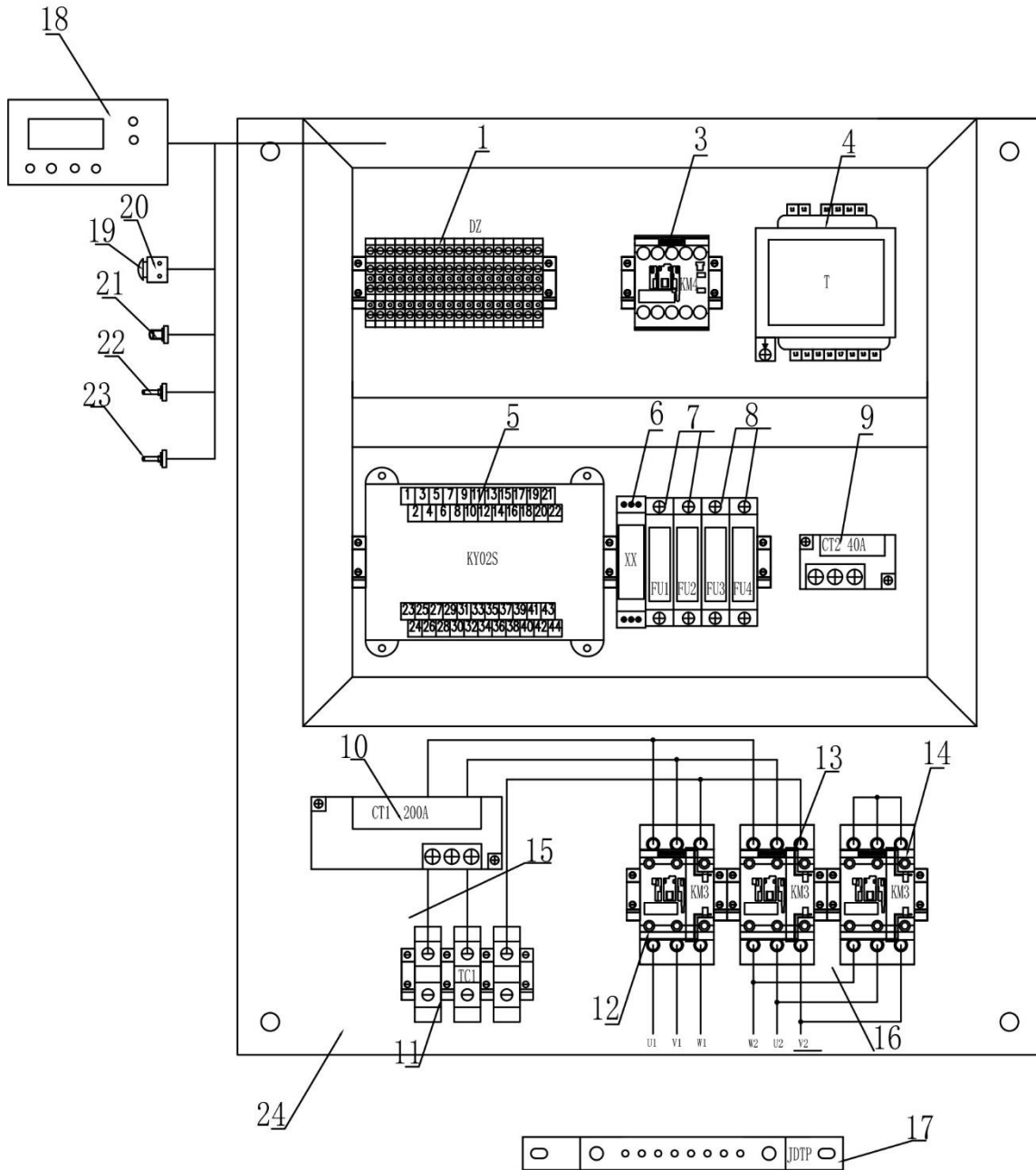
## Electrical Enclosure (20HP)

(208-230V/460V)

NO.	PN	DESCRIPTION	QTY	REMARK
1	08703 00004 00	Terminal block	18	DZ
2	02819 06526 00	Miniature breaker	1	Q1
3	02825 60038 00	AC contactor	1	KM4
4	02818 01000 10	Transformer	1	T
5	02811 00210 55	Main controller	1	PLC
6	02814 00080 00	Phase sequence protector	1	XX
7	02820 00001 00	Fuse block	2	FU1-FU2
8	02820 00001 00	Fuse block	2	FU3-FU4
9	02824 20040 00	Fan motor current transformer	1	CT2
10	02824 00200 00	Current transformer	1	CT1
11	08703 00035 00	Terminal block	3	TC1
12	02825 60040 01	AC contactor	1	KM1
13	02825 60040 01	AC contactor	1	KM2
14	08705 35921 11	Auxiliary contact	1	FZ
15	02825 60025 01	AC contactor	1	KM3
16	08703 00035 00	Terminal block	3	TC2
17	08704 06016 00	Cable	0.6M	BVR
18	08704 08010 00	Cable	1.2M	BVR
19	02829 32020 60	Grounding copper bar	1	JDTP
20	02815 00202 02	Monitor	1	XSQ
21	02827 04844 00	Emergency button	1	JT
22	02827 04104 00	Emergency button support	1	JT
23	02810 00016 00	Pressure sensor	1	DP
24	02810 10004 00	Temperature sensor	1	DT
25	02810 10004 00	Temperature sensor	1	ST
26		Electric control board	1	DKB
*27	02821 10002 00	Fuse	4	FU1-FU4

Note: \* Items are not shown on the drawing.

# Electrical Enclosure



## Electrical Enclosure (20HP)

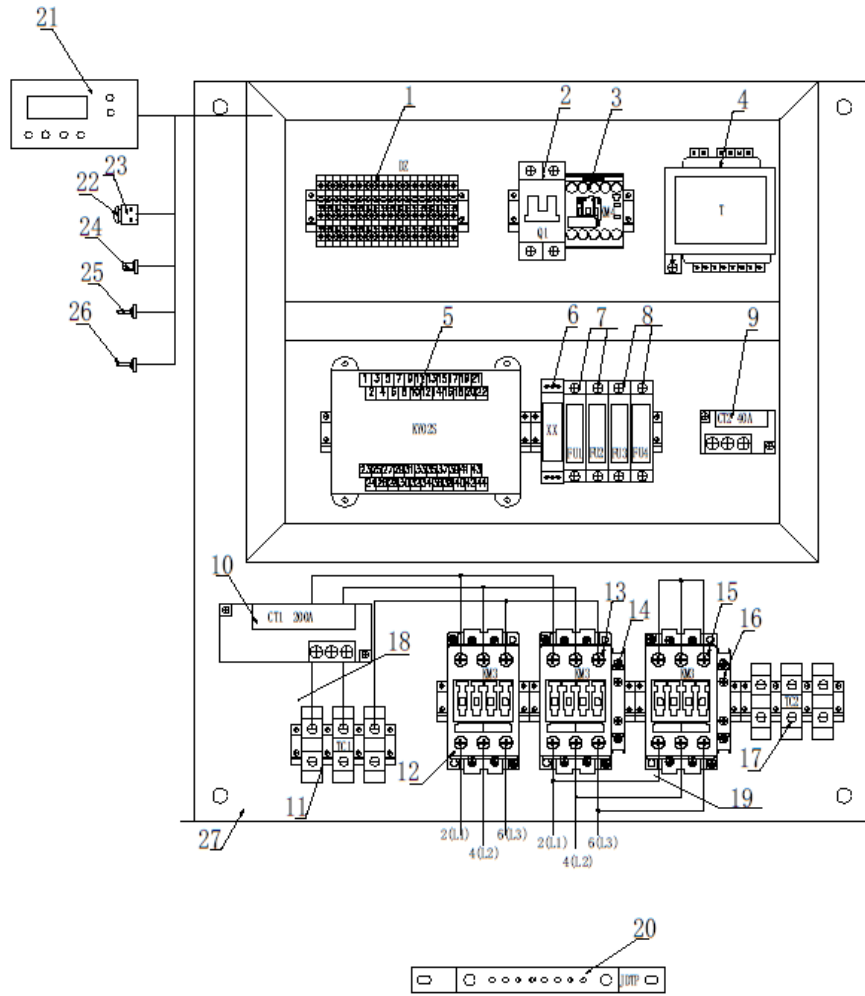
(575V)

NO.	PN	DESCRIPTION	QTY	REMARK
1	08703 00004 00	Terminal block	18	DZ
3	02825 60038 00	Fan motor contactor	1	KM4
4	02818 01000 10	Transformer	1	T
5	02811 00210 55	Controller	1	PLC
6	02814 05169 00	Phase sequence protector	1	XX
7	02820 00001 00	Fuse block	2	FU1-FU2
8	02820 00001 00	Fuse block	2	FU3-FU4
9	02824 20040 00	Fan motor transformer	1	CT2
10	02824 00200 00	Fan motor transformer	1	CT1
11	08703 00035 00	Terminal block	3	TC1
12	02825 60032 01	AC contactor	1	KM1
13	02825 60032 01	AC contactor	1	KM2
14	02825 60025 01	AC contactor	1	KM3
15	08704 08010 00	Cable	0.6M	BVR
16	08704 10006 00	Cable	1.2M	BVR
17	02829 32020 60	Grounding copper bar	1	JDTP
18	02815 00202 02	Monitor	1	XSQ
19	02827 04844 00	Emergency stop button	1	JT
20	02827 04104 00	Emergency stop button seat	1	JT
21	02810 00016 00	Pressure sensor	1	DP
22	02810 10004 00	Temperature sensor	1	DT
23	02810 10004 00	Temperature sensor	1	ST
24		Electric control board	1	DKB
*25	02821 10002 00	Fuse	4	FU1-FU4

Note: \* Items are not shown on the



# Electrical Enclosure



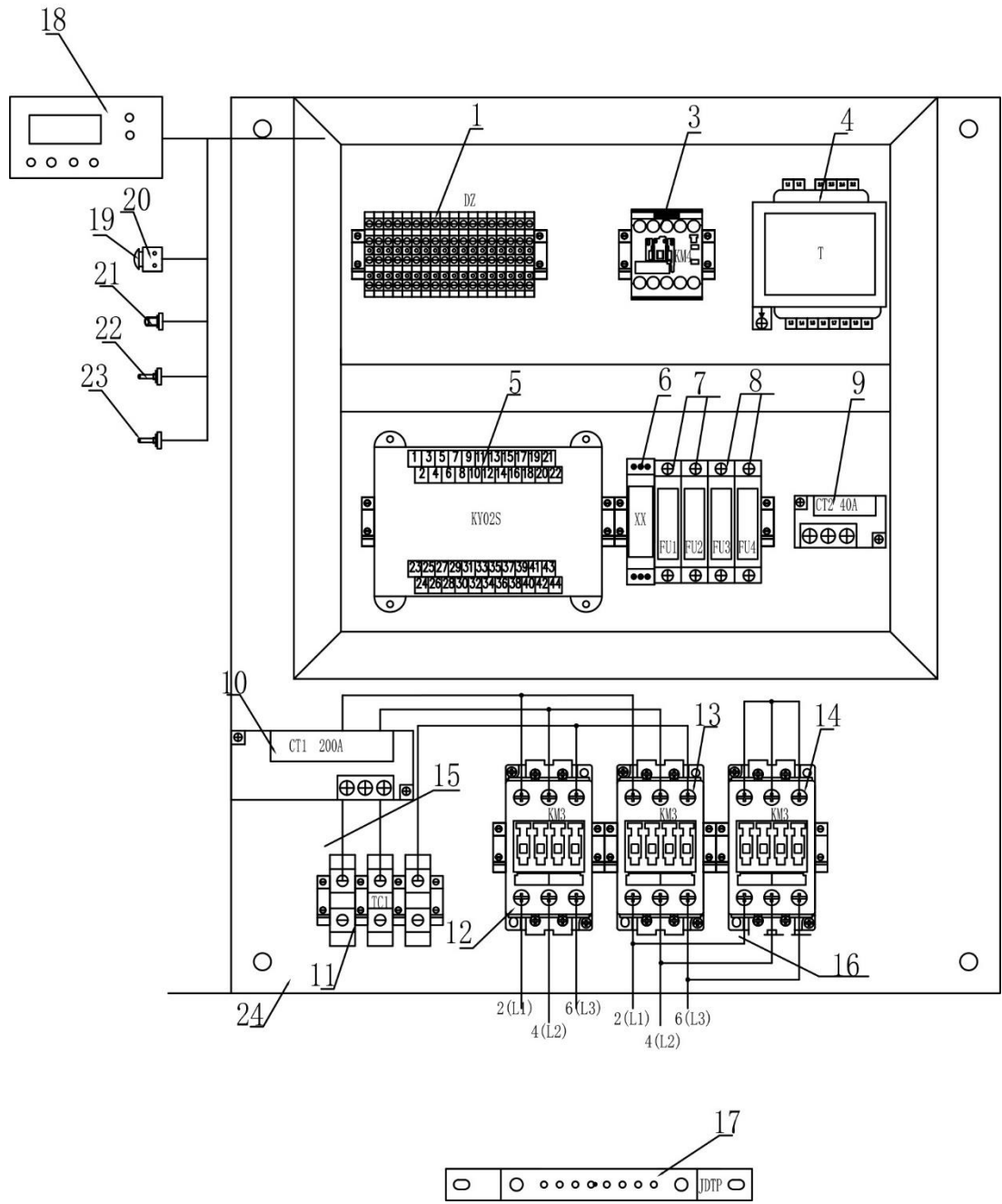
## Electrical Enclosure (25HP)

(208-230V/460V)

NO.	PN	DESCRIPTION	QTY	REMARK
1	08703 00004 00	Terminal block	18	DZ
2	02819 06526 00	Miniature breaker	1	Q1
3	02825 60038 00	AC contactor	1	KM4
4	02818 03150 10	Transformer	1	T
5	02811 00210 55	Main controller	1	PLC
6	02814 00080 00	Phase sequence protector	1	XX
7	02820 00001 00	Fuse block	2	FU1-FU2
8	02820 00001 00	Fuse block	2	FU3-FU4
9	02824 20040 00	Fan motor current transformer	1	CT2
10	02824 00200 00	Current transformer	1	CT1
11	08703 00035 00	Terminal block	3	TC1
12	02825 60050 01	AC contactor	1	KM1
13	02825 60050 01	AC contactor	1	KM2
14	08705 35921 11	Auxiliary contact	1	FZ
15	02825 60040 01	AC contactor	1	KM3
16	08705 35921 11	Auxiliary contact	1	FZ
17	08703 00035 00	Terminal block	3	TC2
18	08704 04025 00	Cable	0.6M	BVR
19	08704 06016 00	Cable	1.2M	BVR
20	02829 32020 60	Grounding copper bar	1	JDTP
21	02815 00202 02	Monitor	1	XSQ
22	02827 04844 00	Emergency button	1	JT
23	02827 04104 00	Emergency button support	1	JT
24	02810 00016 00	Pressure sensor	1	DP
25	02810 10004 00	Temperature sensor	1	DT
26	02810 10004 00	Temperature sensor	1	ST
27		Electric control board	1	DKB
*28	02821 10004 00	Fuse	2	FU1-FU2
*29	02821 10002 00	Fuse	2	FU3-FU4

Note: \* Items are not shown on the drawing.

# Electrical Enclosure



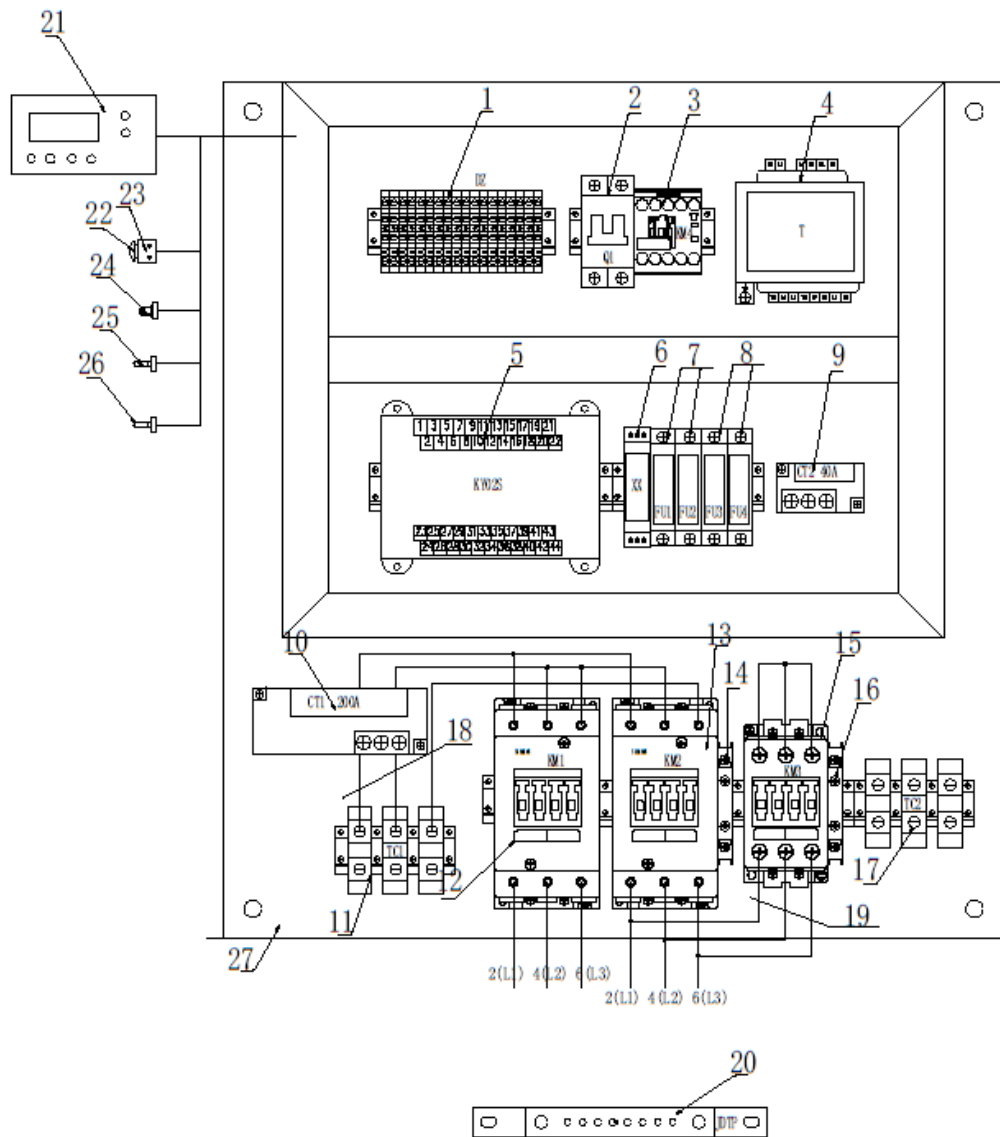
## Electrical Enclosure (25HP)

(575V)

NO.	PN	DESCRIPTION	QTY	REMARK
1	08703 00004 00	Terminal block	18	DZ
3	02825 60038 00	Fan motor contactor	1	KM4
4	02818 01000 10	Transformer	1	T
5	02811 00210 55	Controller	1	PLC
6	02814 05169 00	Phase sequence protector	1	XX
7	02820 00001 00	Fuse block	2	FU1-FU2
8	02820 00001 00	Fuse block	2	FU3-FU4
9	02824 20040 00	Fan motor transformer	1	CT2
10	02824 00200 00	Motor transformer	1	CT1
11	08703 00035 00	Terminal block	3	TC1
12	02825 60032 01	AC contactor	1	KM1
13	02825 60032 01	AC contactor	1	KM2
14	02825 60025 01	AC contactor	1	KM3
15	08704 08010 00	Cable	0.6M	BVR
16	08704 10006 00	Cable	1.2M	BVR
17	02829 32020 60	Grounding copper bar	1	JDTP
18	02815 00202 02	Monitor	1	XSQ
19	02827 04844 00	Emergency stop button	1	JT
20	02827 04104 00	Emergency stop button seat	1	JT
21	02810 00016 00	Pressure sensor	1	DP
22	02810 10004 00	Temperature sensor	1	DT
23	02810 10004 00	Temperature sensor	1	ST
24		Electric control board	1	DKB
*25	02821 10004 00	Fuse	2	FU1-FU2
*26	02821 10002 00	Fuse	2	FU3-FU4

Note: \* Items are not shown on the drawing.

# Electrical Enclosure



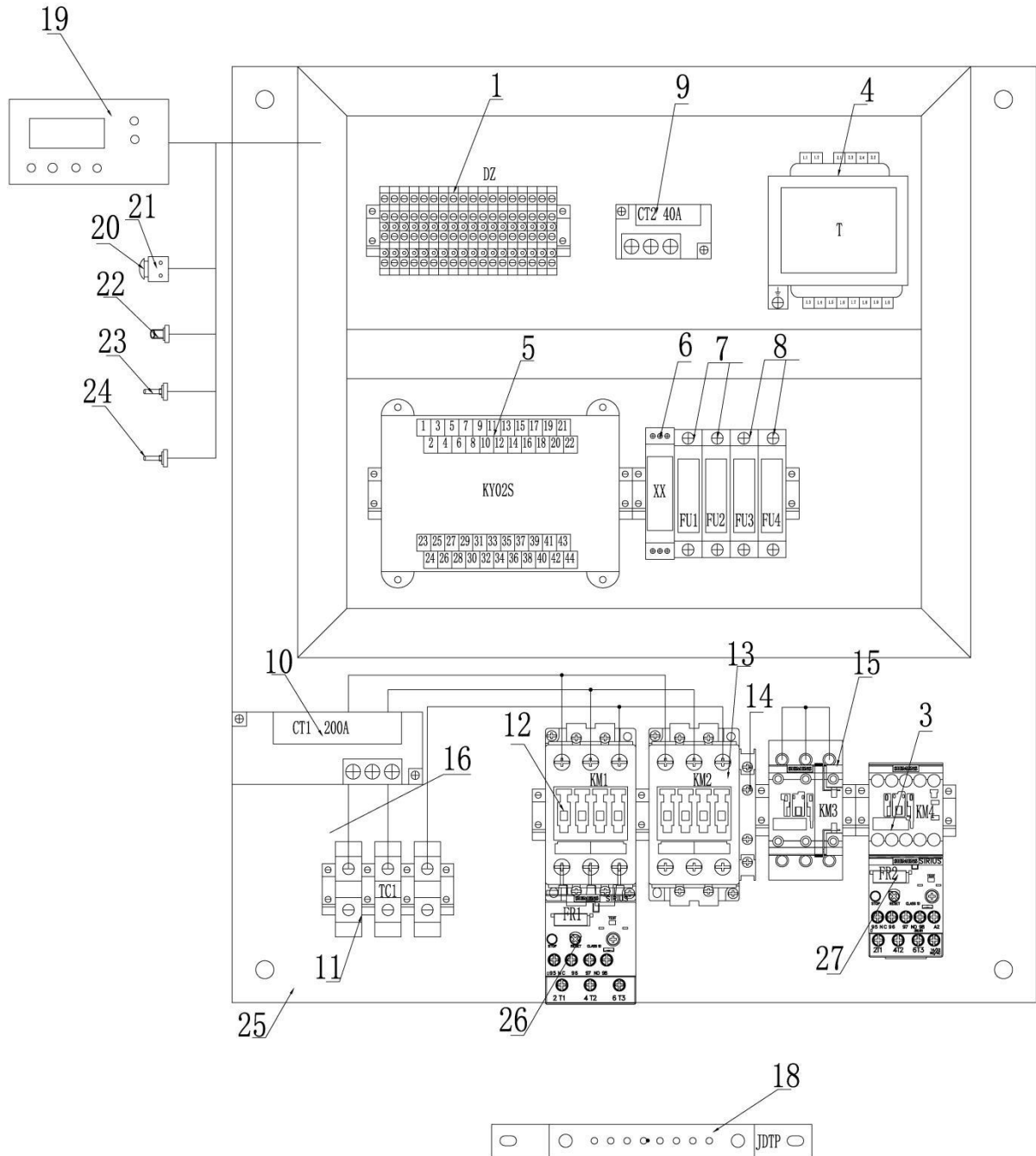
## Electrical Enclosure (30HP)

(208-230V/460V)

NO.	PN	DESCRIPTION	QTY	REMARK
1	08703 00004 00	Terminal block	18	DZ
2	02819 06526 00	Miniature breaker	1	Q1
3	02825 60038 00	AC contactor	1	KM4
4	02818 03150 10	Transformer	1	T
5	02811 00210 55	Main controller	1	PLC
6	02814 00080 00	Phase sequence protector	1	XX
7	02820 00001 00	Fuse block	2	FU1-FU2
8	02820 00001 00	Fuse block	2	FU3-FU4
9	02824 20040 00	Fan motor current transformer	1	CT2
10	02824 00200 00	Current transformer	1	CT1
11	08703 00035 00	Terminal block	3	TC1
12	02825 60065 01	AC contactor	1	KM1
13	02825 60065 01	AC contactor	1	KM2
14	08705 35921 11	Auxiliary contact	1	FZ
15	02825 60050 01	AC contactor	1	KM3
16	08705 35921 11	Auxiliary contact	1	FZ
17	08703 00035 00	Terminal block	3	TC2
18	08704 04025 00	Cable	0.6M	BVR
19	08704 06016 00	Cable	1.2M	BVR
20	02829 32020 60	Grounding copper bar	1	JDTP
21	02815 00202 02	Monitor	1	XSQ
22	02827 04844 00	Emergency button	1	JT
23	02827 04104 00	Emergency button support	1	JT
24	02810 00016 00	Pressure sensor	1	DP
25	02810 10004 00	Temperature sensor	1	DT
26	02810 10004 00	Temperature sensor	1	ST
27		Electric control board	1	DKB
*28	02821 10004 00	Fuse	2	FU1-FU2
*29	02821 10002 00	Fuse	2	FU3-FU4

Note: \* Items are not shown on the drawing.

# Electrical Enclosure



## Electrical Enclosure (30HP)

(575V)

NO.	PN	DESCRIPTION	QTY	REMARK
1	08703 00004 00	Terminal block	18	DZ
3	02825 60038 00	AC contactor	1	KM4
4	02818 01000 10	Transformer	1	T
5	02811 00210 55	Controller	1	PLC
6	02814 05169 00	Phase sequence protector	1	XX
7	02820 00001 00	Fuse block	2	FU1-FU2
8	02820 00001 00	Fuse block	2	FU3-FU4
9	02824 20040 00	Fan motor current transformer	1	CT2
10	02824 00200 00	Current transformer	1	CT1
11	08703 00035 00	Terminal	3	TC1
12	02825 60040 01	AC contactor	1	KM1
13	02825 60040 01	AC contactor	1	KM2
14	08705 35921 11	Auxiliary contact	1	FZ
15	02825 60025 01	AC contactor	1	KM3
16	08704 06016 00	Cable	0.6M	BVR
17	08704 08010 00	Cable	1.2M	BVR
18	02829 32020 60	Grounding copper bar	1	JDTP
19	02815 00202 02	Monitor	1	XSQ
20	02827 04844 00	Emergency button	1	JT
21	02827 04104 00	Emergency button seat	1	JT
22	02810 01082 00	Pressure sensor	1	DP
23	02810 04001 07	Temperature sensor	1	DT
24	02810 04001 07	Temperature sensor	1	ST
25		Electric control board	1	DKB
26	02814 35136 40	Thermal relay	1	FR1
27	02814 35116 01	Thermal relay	1	FR2
*28	02821 10004 00	Fuse	2	FU1-FU2
*29	02821 10002 00	Fuse	2	FU3-FU4

Note: \* Items are not shown on the drawing.



## **Appendix**

*(If your machine is standard, this page is blank.)*

## Contact Information

---

Kaishan Compressor, LLC.,  
Add.: 15445 Industrial Park Dr., Loxley, AL, Post code: 36551  
Office number: +1 251-202-0577  
[www.KaishanUSA.com](http://www.KaishanUSA.com)