Kaishan Rotary Screw Air Compressor

KRSV 50HP Parts Manual

PN: 97002023000128

Release June 2023, Version: C

(460V/60HZ/VSD/ASME/UL)

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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. The serial number tag is shown as follows.

KAISHAN	
MODEL	
SERIAL NUMBER	
MAX VACUUM LEVEL 29.9"HG MC	DTOR POWER HP
VOLTAGE DATE	OF MFG
NET WEIGHT KG	
KAISHAN COMPRESSOR	-

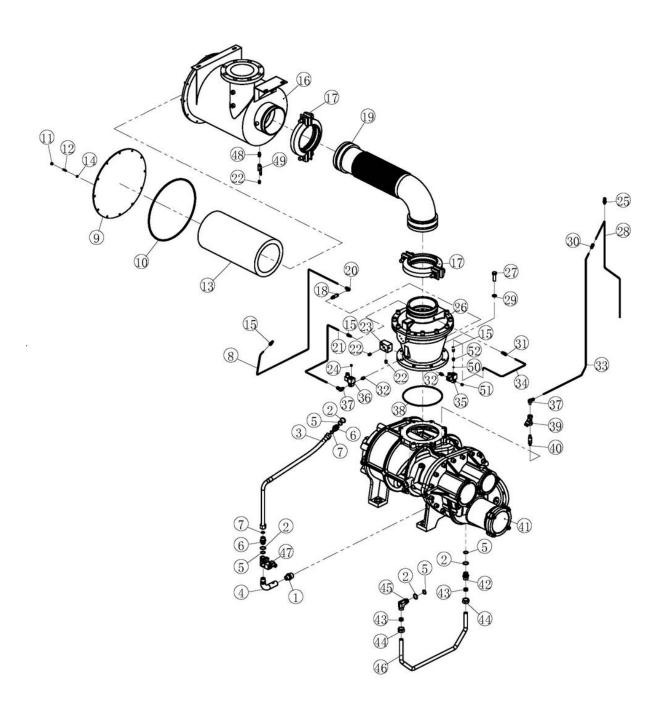
All KRSV Compressors must use KCA recommended fluid for maintenance.

## Spare Parts

Recommended spare parts are shown as follows:

ITEM No.	QTY	PART NUMBER	DESCRIPTION	-	
1	1	537702 322610	Air filter element		
1	1	537702 322620	Child element		
2	1	537705 330800	Oil filter		
3	1	55400 439700E	Fluid/air separator element		

### Airend and Inlet valve

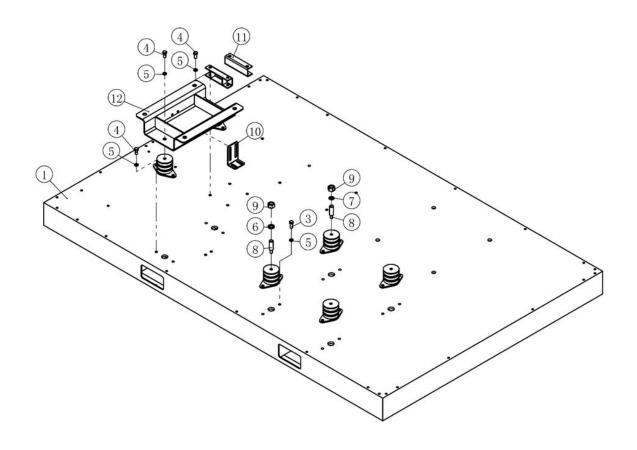


## Airend and Inlet valve

NO.	VERSION	PN	DESCRIPTION	QTY	REMARK
1		91031 01100 01	Joint	1	
2		02201 00020 00	Screw washer	4	
3		91031 01220 01	Air pipe	1	
4		91031 01210 01	Connecting pipe	1	
5		02901 02360 20	O ring	4	23.6X2.65
6		12315 06004 09	Joint	2	
7		02901 01600 20	O ring	2	16X2.65
8	S01	91031 01140 01	Oil return pipe	1	
9	S01	91031 08010 20	Air filter cover	1	
10		02901 41800 70	O ring	1	418X7
11		01322 08000 00	Nut	12	M8
12		01391 08020 02	Bolt	12	AM8×20
13		537702 322610	Air filter element	1	
14		01365 08000 00	Washer	12	8
15		01512 06100 00	Joint	3	
16	S01	91031 08010 10	Air filter shell	1	
17		01530 10119 37	Joint	2	
18		01610 03000 00	Check valve	1	
19	S01	91031 01001 01	Air filter connecting pipe	1	
20	1	01513 06100 00	Joint	1	
21	S01	91031 01130 01	Air control pipe	1	
22		02103 00008 00	Plug	3	
23	S01	18031 07002 00	Connecting block	1	
24		07711 04005 00	Muffler	1	
25		92217 03300 00	Joint	1	
26		01688 00000 00	Inlet valve	1	
26A*		04002 00160 05	Inlet valve kit	1	20X2.65 oring, 150X5.3 oring, 30X2.65 oring (2), 180X3.55 oring, 320x5.3 oring, guide belt, spring A, guide belt A, spring B, guide belt B
27		01307 16050 00	Bolt	8	M16×50
28	S01	91031 01160 01	Oil return pipe	1	
29		01365 16000 00	Washer	8	16
30		01558 06000 00	Joint	1	
31		01512 06130 00	Joint	1	
32		98018 07011 03	Joint	2	
33	S01	91031 01150 01	Oil return pipe	1	
34	S01	91031 01120 01	Air control pipe	1	
35		01603 31016 00	Solenoid valve	1	
36		01603 31015 00	Solenoid valve	1	
37		01513 06130 00	Joint	2	
38		02901 25000 50	O ring	1	250X5.3
39	1 1	07706 00025 00	Filter	1	
40	1 1	01610 01020 02	Visible check valve	1	
41	1 1	1780201	Airend	1	
42	1 1	16403 06005 00	Joint	1	

## Airend and inlet valve

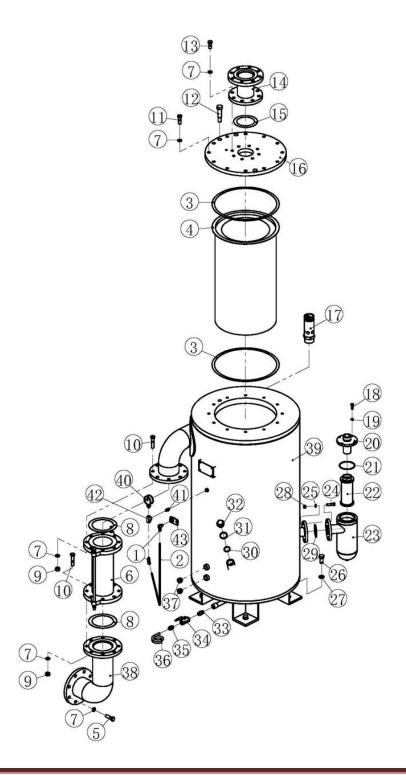
NO.	VERSION	PN	DESCRIPTION	QTY	REMARK
43		01514 02200 00	Cutting sleeve	2	22
44		01504 02200 00	Nut	2	G22
45		15435 06200 02	Joint	1	
46	S01	91031 01170 01	Oil injection pipe	1	
47		01603 00014 03	Solenoid valve	1	16bar,18
48		98018 07011 00	Joint	1	
49		01613 00800 00	Ball valve	1	
50		02901 00400 10	O ring	1	4X1.8
51		07711 08006 00	Muffler	1	
52		91031 01250 01	Joint	1	M5-Rp0.125



## Base mounting

NO.	VERSION	PN	DESCRIPTION	QTY	REMARK
1	S01	91031 02010 00	Base	1	
2		02905 00001 00	Absorber	6	
3		01307 12030 00	Bolt	1	M12×30
4		01307 12025 00	Bolt	3	M12×25
5		01365 12000 00	Washer	4	12
6		01365 20000 00	Washer	1	20
7		01365 16000 00	Washer	1	16
8		13031 02001 00	Bolt	4	
9		01322 20000 00	Nut	4	M20
10		17330 00005 00	Fixing plate, shipping	1	
11	S01	91031 06150 01	Motor support	2	
12	S01	91031 02002 01	Motor support	1	

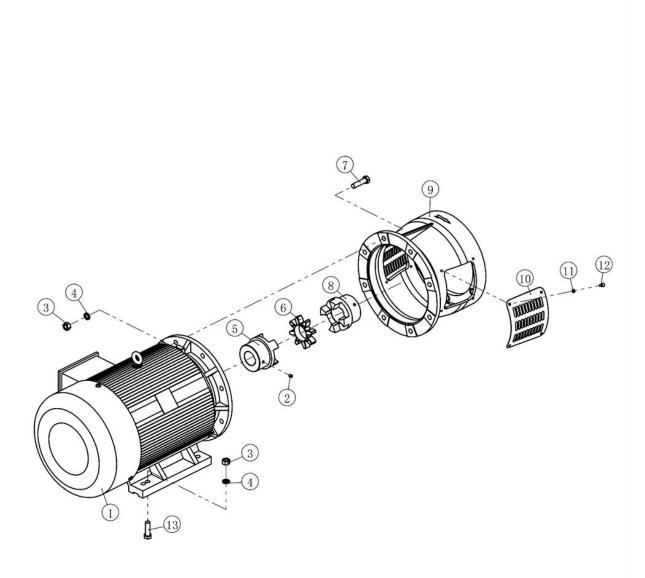
Reservoir



### Reservoir

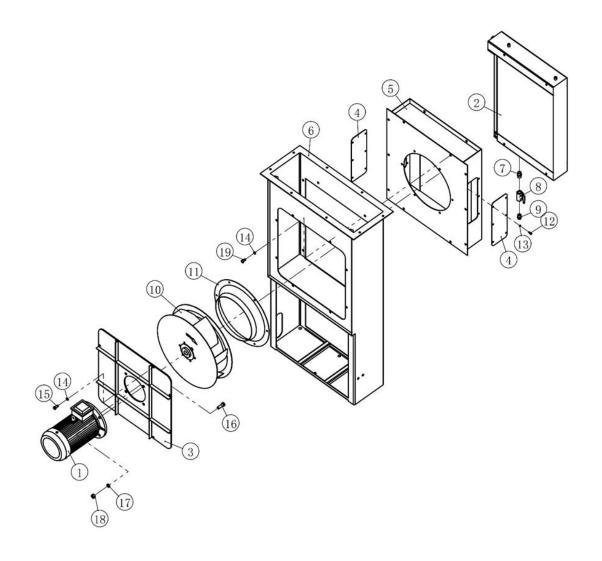
NO.	VERSION	PN	DESCRIPTION	QTY	REMARK
1		01513 06130 00	Joint	2	
2		91031 03100 01	Connecting pipe	1	
3		02216 40436 16	Gasket	2	
4		55400 439700E	Air/fluid separator element	1	
5		01307 16055 00	Bolt	1	M16×55
6		28404 07004 01	Corrugated pipe	1	
7		01365 16000 00	Washer	11	16
8		02216 12516 06	Gasket	2	
9		01322 16000 00	Nut	2	M16
10		01306 16075 00	Bolt	2	M16×75
11		01307 16050 00	Bolt	1	M16×50
12		821141 103030	Bolt	1	
13		01307 16040 00	Bolt	8	M16×40
14	S01	91031 03005 01	Air pipe	1	
15		02216 10016 06	Gasket	1	
16	S01	91031 03010 81	Lid	1	
17		01601 50015 07	Safety valve	1	
18		01307 10030 00	Bolt	1	M10×30
19		01365 10000 00	Washer	1	10
20	S01	91031 03002 01	Oil strainer flange	1	
21		02901 10000 30	O ring	1	100X3.55
22		07706 16901 60	Oil strainer element	1	
23	S01	91031 03006 01	Oil strainer seat	1	
24		01307 12045 00	Bolt	1	M12×45
25		01365 12000 00	Washer	1	12
26		01307 20040 00	Bolt	4	M20×40
27		01365 20000 00	Washer	4	20
28		01322 12000 00	Nut	1	M12
29		02216 04016 06	Gasket	1	
30		02901 03350 30	O ring	1	33.5X3.55
31		02201 03320 00	Screw washer	1	
32		13340 03003 00	Plug	1	
33		91001 05005 00	Joint	1	
34		01613 01500 00	Ball valve	1	DN15
35		01543 21012 00	Joint	1	
36		02917 12300 00	Nylon pipe	1	
37		02102 00020 00	Sight glass	2	
38	S01	91031 03004 01	Airend discharge pipe	1	
39	S01	91031 03010 01	Air/fluid separator tank	1	
40	-	02801 06301 00	Pressure gauge	1	
41		18031 07110 00	Joint	1	
42		11476 07003 00	Tee joint	1	1/4
43		90217 03100 00	Pressure sensor seat	1	1/7

## **Driving System and Electrical Motor**



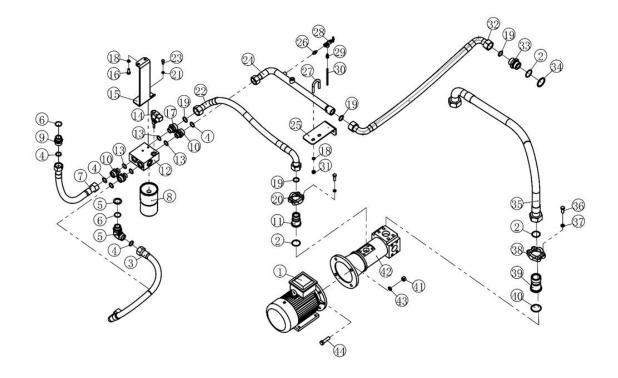
# Driving System and Electrical Motor

NO.	VERSION	PN	DESCRIPTION	QTY	REMARK
1		64037 46043 25	Motor	1	50HP,IE3,460V
2		01347 10010 00	Set screw	2	M10X10
3		01322 18000 00	Nut	2	M18
4		01365 18000 00	Washer	2	18
5		01905 06506 00	Half coupling	1	
6		01908 06500 00	Elastomer	1	
7		01306 18070 00	Bolt	1	M18×70
8		01905 06507 50	Half coupling	1	
9		1780102601	Motor adaptor	1	
10		01910 19226 01	Coupling guard	2	
11		01365 08000 00	Washer	1	8
12		01307 08016 00	Bolt	1	M8×16
13		01307 18060 00	Bolt	1	M18×60



## Air Cooler

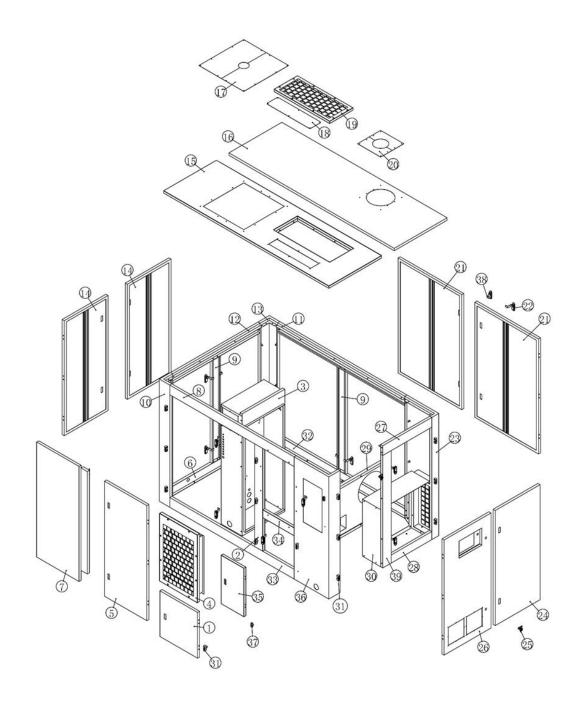
NO.	VERSION	PN	DESCRIPTION	QTY	REMARK
1		66001 46651 25	Motor	1	1.1KW
2	S01	91031 05010 11	Oil cooler	1	
3	S01	91217 05003 00	Fan motor fixing plate	1	
4	S01	91031 05006 01	Seal cover	2	
5	S01	91031 05001 01	Cooler support	1	
6	S01	91031 05002 01	Centrifugal fan support	1	
7		13340 03004 00	Joint	1	
8		01613 01500 00	Ball valve	1	DN15
9		01543 21012 00	Joint	1	
10		07261 45028 12	Impeller	1	
11		07261 45000 22	Collector	1	
12		01307 06016 00	Bolt	1	M6×16
13		01365 06000 00	Washer	1	6
14		01365 10000 00	Washer	2	10
15		01307 10025 00	Bolt	1	M10×25
16		01307 14040 00	Bolt	1	M14×40
17		01365 14000 00	Washer	1	14
18		01322 14000 00	Nut	1	M14
19		01307 10020 00	Bolt	1	M10×20



## Fluid Piping

NO.	VERSION	PN	DESCRIPTION	QTY	REMARK
1		64115 46641 25	Motor	1	1.5KW
2		02901 03870 30	O ring	3	38.7X3.55
3	S01	91031 06004 01	Oil pipe	1	Oil cooler to thermal valve
4		02901 02360 30	Oring	5	23.6X3.55
5		91217 06100 00	Adjustable elbow	1	1.3125-12UN-M36X2
6		02901 91600 30	Oring	2	3-916
7	S01	91031 06003 01	Oil pipe	1	Thermal valve to oil
8		537705 330800	Oil filter	1	
9		91201 06005 00	Joint	1	
10		91001 06004 00	Joint	3	
11	S01	91031 06007 01	Oil pump connecting pipe	1	
12		01611 02018 37	Thermal valve	1	
12A*		04004 34001 00	Thermal valve kit	1	Check ring, O'ring 30x2.65, adjustable block, thread sleeve, valvce element, plunger, Spring
13		02901 91200 30	O ring	4	3-912
14		02809 02000 00	Oil filter indicator	1	
15	S01	91031 06005 01	Oil pipe support	1	
16		01307 10025 00	Bolt	1	M10×25
17		89817 06003 00	Joint	1	
18		01365 10000 00	Washer	3	10
19		02901 02580 30	O ring	4	25.8X3.55
20		01555 03200 00	Flange	2	
21		01365 08000 00	Washer	1	8
22	S01	91031 06002 01	Oil pipe	1	Oil pump to thermal valve
23	201	01307 08020 00	Bolt	1	M8×20
24	S01	91031 06008 01	Outlet thermal valve pipe	1	1107(20
25	S01	91031 06100 01	Oil pipe support	1	
26	501	98018 07011 06	Joint	1	
20		01313 03300 00	U bolt	1	33
28		01613 00600 99	Sample valve	1	55
20		01511 06100 00	Joint	1	
30		91217 06007 00	Drain hose	1	
31		01322 10000 00	Nut	1	M10
32	S01	91031 06009 01	Inlet airend pipe	1	MIO
33	301	98018 06006 00	Joint	1	
33		02201 00032 00	Screw washer	1	
35	S01	91031 06001 01		1	Tank to oil pump
35	501		Oil pipe	1	
30	-	01307 12030 00 01365 12000 00	Bolt Washer	1	M12×30 12
37		01365 12000 00		2	12
	0.01		Flange		
39	S01	91031 06006 01	Oil pump connecting pipe	1	10 722 55
40		02901 04870 30	O ring	1	48.7X3.55
41		01322 14000 00	Nut	1	M14
42		GR40SMT16B100LGV	Oil pump	1	1.4
43		01365 14000 00	Washer	1	14
44		01307 14050 00	Bolt	1	M14×50
45		01306 10035 00	Bolt	1	M10×35

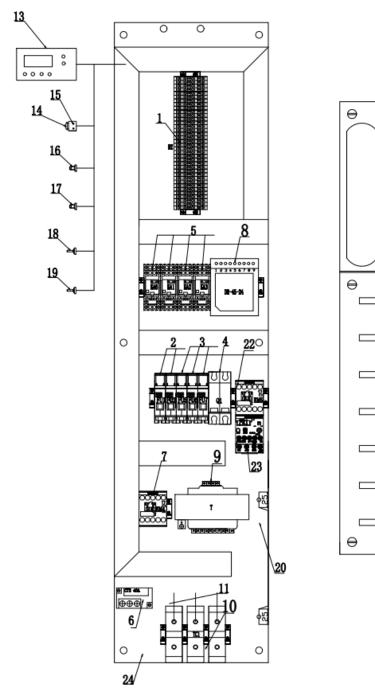
## Cabinet

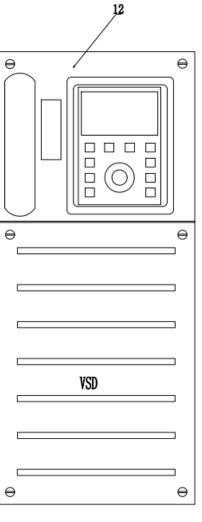


## Cabinet

NO.	VERSION	PN	DESCRIPTION	QTY	REMARK
1	S01	91031 08190 01	Door	1	
2	S01	91031 08290 01	Support	1	
3	S01	91231 08220 01	Electrical enclosure	1	
4	S01	91031 08300 01	Air inlet mesh plate	1	
5	S01	91031 08340 01	Door	1	
6	S01	91031 08160 01	Beam	1	
7	S01	91031 08330 01	Door	1	
8	S01	91031 08006 01	Beam	1	
9	S01	91031 08440 01	Support	2	
10	S01	91031 08002 01	Support	1	
11	S01	91031 08007 01	Beam	1	
12	S01	91031 08140 01	Beam	1	
13	S01	91031 08004 01	Support	1	
14	S01	91031 08100 01	Door	2	
15	S01	91031 08260 01	Top cover	1	
16	S01	91031 08250 01	Top cover	1	
17	S01	91031 08430 01	Baffle	1	
18	S01	91031 08280 01	Cooler seal plate	1	
19	S01	91031 08270 01	Top mesh plate	1	
20	S01	16031 08290 00	Air filter plate	1	
21	S01	91031 08130 01	Door	2	
22		02702 84301 00	Lock	4	
23	S01	91031 08350 01	Support	1	
24	S01	91031 08380 01	Door	1	
25		02702 71111 03	Lock	2	
26	S01	91231 08370 01	Door	1	
27	S01	91031 08360 01	Beam	1	
28	S01	91031 08390 01	Beam	1	
29	S01	91031 08400 01	Motor air inlet	1	
30	S01	91031 08200 01	Air box	1	
31		02701 20601 00	Hinge	26	
32	S01	91031 08008 01	Beam	1	
33	S01	91031 08170 01	Beam	1	
34	S01	91031 08310 01	Beam	1	
35	S01	87031 08410 01	Door	1	
36	S01	91031 08001 01	Support	1	
37		02702 22200 00	Hinge	2	
38	Ī	02702 84301 00	Lock	10	
39	S01	91031 08420 01	Support	1	
*		07706 09805 05	Frame VSD cabinet filter	2	*Not shown on the
*		07706 98052 00	Frame VSD cabinet filter	2	drawing.
*		07211 22081 40	VSD Vent Fan	2	
*		160004-001	VSD cabinet filters element	1	

**Electrical Enclosure** 





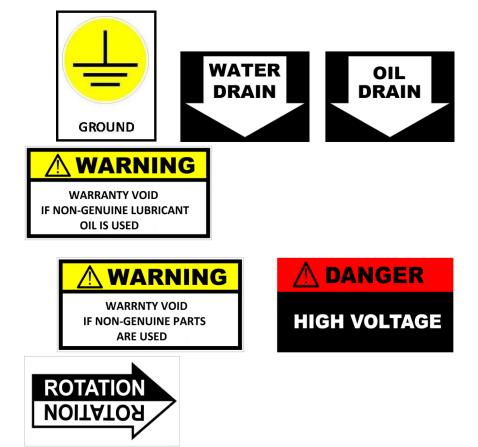
## **Electrical Enclosure**

NO.	PN	DESCRIPTION	QTY	REMARK
1	08703 00004 00	Terminal block	35	DZ
2	02820 00001 00	Fuse block	2	FU1-FU2
3	02820 00001 00	Fuse block	3	FU5-FU7
4	02819 06526 00	Miniature breaker	1	Q1
5	02814 00002 00	Intermediate relay seat	4	
5	02814 01102 00	Intermediate relay	4	KA1-KA3;KA6
6	02824 20040 00	Fan motor current transformer	1	CT2
7	02825 60038 00	Fan motor contactor		KM4
8	02808 04524 00	Power switch	1	DR
9	02818 03150 10	Transformer	1	Т
10	08703 00050 00	Terminal	3	TC1
11	08704 04025 00	Cable	1.8M	BVR
12	02828 01037 04	VSD	1	VSD
13	02811 16014 37	Monitor	1	XSQ
14	02827 04844 00	Emergency button	1	JT
15	02827 04104 00	Emergency button seat	1	JT
16	02810 01082 00	Pressure sensor	1	DP
17	02810 01572 00	Pressure sensor	1	SP
18	02810 01096 00	Pressure sensor	1	IP
19	02810 30965 00	Temperature sensor	1	DT
20	02829 32020 60	Grounding copper bar	1	JDTP
22	02825 60038 00	Fan motor contactor	1	KM5
23	02814 36116 16	Cooling fan thermal overload relay	1	FR1
24	KRSVBP50.9- 8(250*1040*2.5)	Electrical control board	1	DKB
*25	02821 10004 00	Fuse	2	FU1-FU2
*26	02821 10002 00	Fuse	3	FU5-FU7

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

#### Decals

Decals information is shown as following.



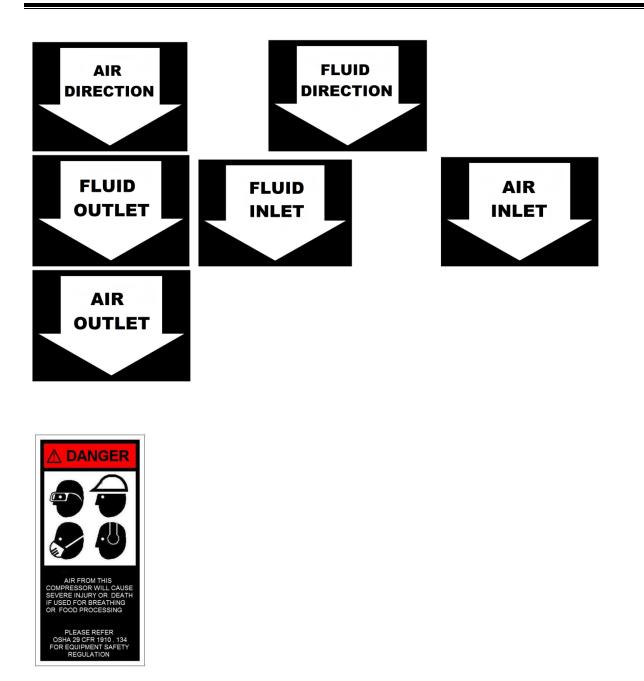
#### Decals



NOTE:

1. DECALS P/N: 142939

### Decals



#### NOTE:

1. DECALS P/N : 142939

### **Standard Terms and Conditions**

These terms and conditions govern the sale of Products ("Rotary Screw Air Compressors and parts") and provisions of services by Kaishan Compressor USA, LLC (Seller) and its authorized representative or buyer. These terms and conditions ("Agreement") take precedence over Buyer's supplemental or conflicting terms and conditions to which notice of objection is hereby given. Neither Seller's commencement of performance or delivery shall be deemed or construed as acceptance of Buyer's supplemental or conflicting terms will not change or add to the terms of this agreement. Buyer's acceptance of the Products and/or Services from Seller shall be deemed to constitute acceptance of the terms and conditions contained herein.

**Orders:** All orders placed by Buyer are subject to acceptance by Seller. Orders may not be canceled or rescheduled without Seller's written consent. All orders must identify the products, unit quantities, part numbers, applicable prices and requested delivery dates of the Products being purchased. Seller may at its sole discretion allocate Product among its Buyer. Seller may designate certain Products and Services as non-cancelable, non-returnable and the sale of such Products shall be subject to the special terms and conditions contained in Seller's Customer Acknowledgement or Non-Returnable Product Form, which shall prevail and supersede any inconsistent terms and conditions contained herein or elsewhere.

**Prices:** The prices of the Products are those prices specified on the front of the invoice or contained within an agreed written contract. Price quotations shall automatically expire in thirty (30) days from the date issued, or as otherwise stated in the quotation.

**Taxes:** Unless otherwise agreed to in writing by Seller, all prices quoted are exclusive of transportation and insurance costs, duties, and all taxes including federal, state and local sales, excise and value added, goods and services taxes, and any other taxes. Buyer agrees to indemnify and hold Seller harmless for any liability for tax in connection with the sale, as well as the collection or withholding thereof, including penalties and interest thereon. When applicable, transportation and taxes shall appear as separate items on Seller's invoice.

**Payment:** Payment may be made by check, money order, credit card, or wire transfer (all fees are borne by the Buyer). Where Seller has extended credit to Buyer, terms of payment shall be net thirty (30) days from date of invoice, without offset or deduction. On any past due invoice, Seller may impose a monthly interest rate. If Buyer fails to make the required payments the Seller will impose the interest rate each month. If Buyer fails to make each payment when it is due, Seller reserves the right to withdraw credit and thereby suspend or cancel performance under any or all purchase orders or agreements in which Seller has extended credit to Buyer. In the event of default by Buyer, Seller shall be entitled to costs, fees, and expenses including but not limited to recovery of attorney fees, court costs and fees, and collections costs.

### **Standard Terms and Conditions**

**Delivery and Title:** The locations of shipment delivery will be made according to the Seller and Buyer agreement. Title and risk of loss pass to the Buyer upon delivery of the Product to the carrier. Seller's delivery dates are estimates only and Seller is not liable for delays in delivery or for failure to perform due to causes beyond the reasonable control of the Seller, nor shall the carrier be deemed an agent of the Seller. A delayed delivery of any part of an Order does not entitle Buyer to cancel other deliveries. KCA will comply with various federal, state and local laws and regulation concerning occupational health, safety and environment concerns. Buyer has full responsibility to comply with those laws and regulations during the installation and operation of the equipment.

Acceptance / Returns: Shipments will be deemed to have been accepted by Buyer upon delivery of the said shipments to Buyer unless rejected upon receipt. Buyer shall perform all inspections and tests. Buyer deems necessary as promptly as possible but in no event later than 7 days after receipt of Products, at which time Buyer will be deemed to have irrevocably accepted the Products. Any discrepancy in shipment quantity must be reported within 7 days after receipt of Products. Buyer may not return Products without a Return Material Authorization ("RMA") number. RMA's valid for 30 days from the date issued.

**Standard Warranty:** Buyer will honor Product warranties and indemnities authorized by the manufacturer, including any transferable. 90 days warranty is given for service parts from receipt date. Seller warrants to Buyer that Products purchased hereunder will conform to the applicable manufacturer's specifications for such products and that any value-added work performed by Seller on such Products will conform to applicable Buyer's specifications. If Seller breaches this warranty, Buyer's remedy is limited to (at Seller's election) (1) refund of Buyer's purchase price for such Product (without interest), (2) repair of such Products, or (3) replacement of such Products provided that such Products must be returned to Seller, along with acceptable evidence of purchase within 13 days from date of delivery, transportation charges prepaid. No warranty will apply if the Product has been subject to misuse, neglect, accident or modification.

Limitation of Liabilities: Buyer shall not be entitled to, and Seller shall not be liable for, loss of profit or revenue, promotional or manufacturing expenses, overheads expenses, business interruption cost, loss of data, removal or reinstallation costs, injury to reputation of buyer, punitive damages, loss of contractor orders or any indirect, special, incidental or consequential damages of any nature. Buyer's recovery from seller for any claim shall not exceed the purchase price paid for the affected products irrespective of the nature of the claim whether in contract, tort, warranty, or otherwise. Buyer will indemnify, defend and hold seller harmless from any claims based on (a) Seller's compliance with buyer's designs, specifications, or instructions, (b) Modification of any products by anyone other than Seller, or (c) use in combination with other products not supplied by seller.

**Use of Products:** Unless otherwise specified. Products sold by Seller are not designed, intended or authorized for use in life support, life sustaining, nuclear, or other applications in which the failure of such Products could reasonably be expected to result in personal injury, loss of life or catastrophic property damage. If buyer uses or sales the Products for use in any such applications: (1) Buyer acknowledges that such use or sale is at Buyer's sole risk; (2) Buyer agrees that Seller and the manufacturer of the Products are not liable, in whole or in part, for any claim or damage arising from such use; and (3) Buyer agrees to indemnify, defend and hold Seller and the manufacturer of the Products for in connection with such use or sale.

**Force Majeure:** Seller is not liable for failure to fulfill its obligations for any accepted Order or for delays in delivery due to causes beyond Seller's reasonable control including, but not limited to, acts of God, natural or artificial disaster, riot, war, strike, delay by carrier, shortage of Product, acts or omissions of other parties, acts or omissions of civil or military authority, Government priorities, changes in law, material shortages, fire, strikes, floods, epidemics, quarantine restrictions, acts of terrorism, delays in transportation or inability to obtain labor, materials or products through its regular sources, which shall be considered as an event of force majeure excusing Seller from performance and barring remedies for non-performance. In an event of force majeure condition, the Seller's time for performance shall be extended for a period equal to the time lost as a consequence of the force majeure condition without subjecting Seller to any liability or penalty. Seller may, at its option, cancel the remaining performance, without any liability or penalty, by giving notice of such cancellation to the Buyer.

**General:** (a) Seller will comply with state law for any dispute from buyer. (b) Buyer may not assign this Agreement without the prior written consent of Seller. Seller or its affiliates may perform the obligations under this Agreement. This Agreement is binding on successor and assigns, (c) Products, including software or other intellectual property, are subject to any applicable rights of third parties, such as patents, copyrights and/or user licenses.

## Appendix

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