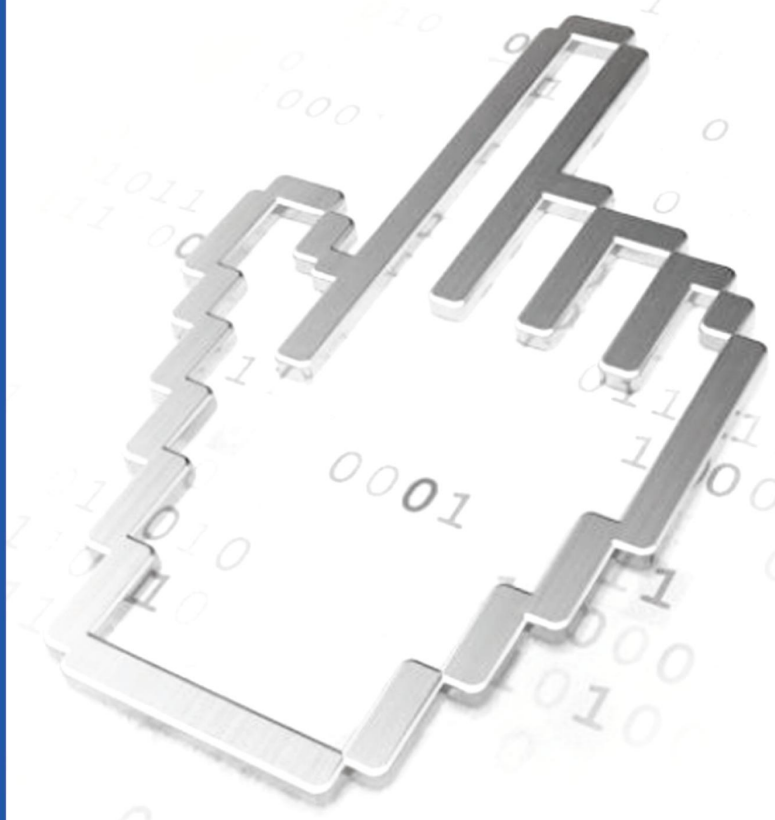
INGWEI精威制冷

半封闭螺杆压缩机

使用说明书



注意！

本厂生产的半封闭螺杆压缩机及冷凝系统,严禁使用氧气等易燃气体保压或检漏。

注：本说明书内容仅供参考，如有更改恕不另行通知。

Note!

The semi-enclosed screw compressor and condensing system manufactured by our factory are strictly prohibited from using oxygen and other flammable gases to keep pressure or detect leakage.

Note: the contents of this manual are only for reference, subject to change without notice.

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Catalog

结构简介

本系列半封闭螺杆冷冻压缩机的机体，由电机室和转子箱体组成并连成一体。机体两端分别由压缩机端盖和电机端盖密封。

压缩机工作时，低温低压的制冷剂从电机端盖的吸气阀截止阀吸入，经过电机通道进入箱体，在螺杆的作用下被压缩成高温高压的气体，再经安装在机体上的排气截止阀排出。

由于低温的制冷剂首先经过电机室，使电机得到了良好的冷却，故电机过载能力大，可靠性好。电机定子绕组内还装有热敏电阻，用于控制电机温度。因其原件体积小，对电机绕组温度变化非常灵敏，可有效防止压缩机过热运转，起到保护电机的作用。

本系列螺杆压缩机采用压差式供油。压缩机把储集飞溅落下的冷冻油供转子轴承润滑，滴进相应的油孔得到润滑，起到冷却、清洗和密封的作用。

外置油分加热器工作时，需要注意以下几点

1、用导线将电加热器和交流接触器的常闭头连接起来，防止压缩机开机时外置油分电加热器通电加热。

2、为防止曲轴箱在缺少冷冻油时接通电加热器造成电加热器损坏，要注意外置油分内油面是否处于正常油位。

3、当启动长期停用的压缩机前，电加热器要通电加热 2-4 小时再启动。

Brief introduction of structure

This series of semi-enclosed screw refrigeration compressor is composed of a motor chamber and a rotor box. The two ends of the body are sealed respectively by the compressor end cover and the motor end cover.

When the compressor is working, low temperature and low pressure refrigerant is inhaled from the exhaust valve globe valve of the motor end cover, enters the box through the motor passage, is compressed into high temperature and high pressure gas under the action of the screw, and then discharged through the exhaust globe valve installed on the body.

Because the cryogenic refrigerant passes through the motor room first, the motor is well cooled, so the motor has a large overload capacity and good reliability. A thermistor is also installed in the stator windings of the motor to control the temperature of the motor. Because of its small size, it' s sensitive to the temperature change, therefore,it can prevent effectively the compressor from overheating operation, play a role in protecting the motor.

This series screw compressor adopts differential pressure feeding. The compressor lubricates the rotor bearings by dropping the spattered frozen oil into corresponding oil hole for cooling, cleaning and sealing.

Pay attention to the follwing points when the external oil heater is working.

1.Use wire to connect the electric heater and the normally closed head of the AC contactor. in case the external oil heater is heated by electricity When the compressor is stopped, .

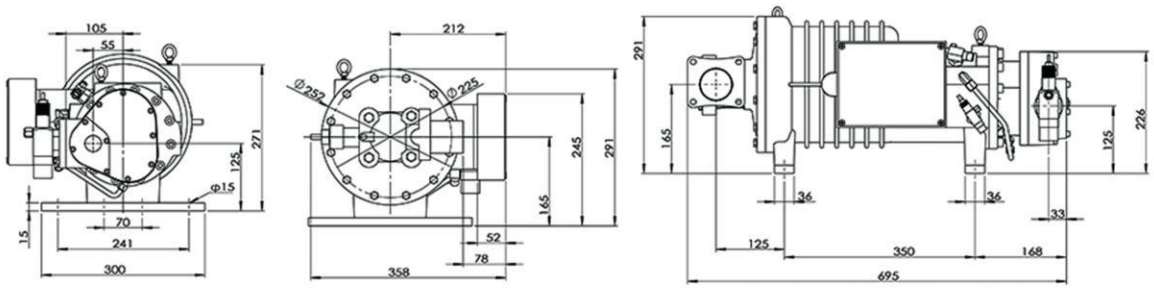
2. In order to prevent the crankcase from being damaged by the electric heater when it is short of refrigerated oil, it is necessary to pay attention to whether the oil surface inside the external oil is in the normal oil level.

3. The compressor which is out of service for a long time, the electric heater should be electrified for 2-4 hours before starting.

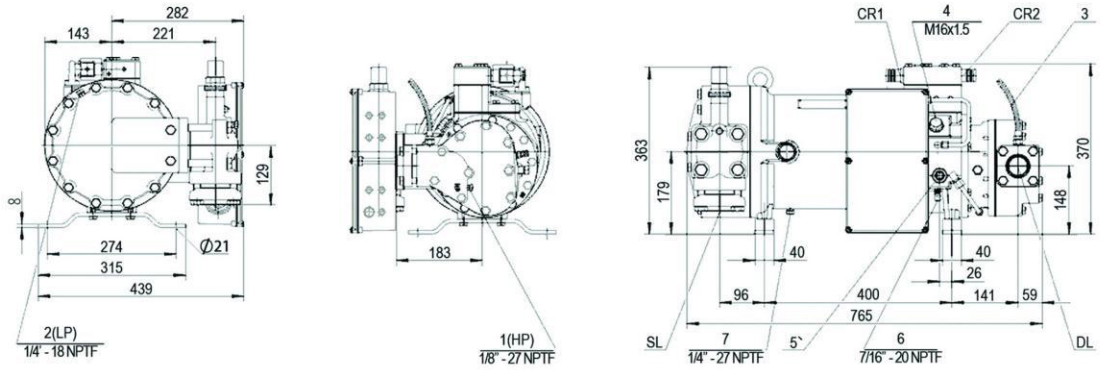
产品型号参数

压缩机型号	电机名义功率	排气量		电源	电器参数		供油方式	重量
Model	Power	Displacement		Power Supply	Electrical Pparameter		Oil Supply Methed	（含冷冻油）
DBL：低温型号 ZBL：中温型号	HP/KW	2900g/min 50Hz	3500g/min 60Hz		最大工作电流	启动/堵转电流		Weight Including Freezing Oil
JWLG-DBL-10	10/7.5	34.73m³/h	41.92m³/h	380.415V D/DD3/50Hz	19.9A	59.0A D/ 99.0A DD	压差式供油	116kg
JWLG-DBL-15	15/10.5	63.5m³/h	76.64m³/h		30.8A	81.0A D/ 132.0A DD		126kg
JWLG-DBL-20	20/15	84m³/h	101m³/h		47.0A	129.0A D/ 201.0A DD		174kg
JWLG-DBL-30	30/22.5	118m³/h	142m³/h		58.0A	153.0A D/ 266.0A DD		183kg
JWLG-DBL-40	40/30	140m³/h	168m³/h		65.0A	187.0A D/ 313.0A DD		234kg
JWLG-DBL-50	50/37.5	165m³/h	198m³/h		79.0A	206.0A D/ 355.0A DD		238kg
JWLG-DBL-60	60/45	192m³/h	232m³/h		98.0A	267.0A D/ 449.0A DD		297kg
JWLG-DBL-70	70/52.5	220m³/h	266m³/h		124.0A	290.0A D/ 485.0A DD		310kg
JWLG-DBL-75	75/56	250m³/h	302m³/h		144.0A	350.0A D/ 585.0A DD		326kg
JWLG-DBL-100	100/75	320m³/h	384m³/h		180.0A	520.0A D/ 801.0A DD		425kg
JWLG-DBL-120	120/90	410m³/h	495m³/h		216.0A	612.0A D/ 943.0A DD		437kg
JWLG-DBL-160	160/105	580m³/h	696m³/h		274.0A	729.0A D/ 1114.0A DD		665kg
JWLG-ZBL-15	15/10.5	34.73m³/h	41.92m³/		25.0A	59.0A D/ 99.0A DD		120kg
JWLG-ZBL-20	20/15	63.5m³/h	76.64m³/h		28.0A	97.0A D/ 158.0A DD		130kg
JWLG-ZBL-30	30/22.5	84m³/h	101m³/h		52.0A	126.0A D/ 218.0A DD		170kg
JWLG-ZBL-40	40/30	118m³/h	142m³/h		66.0A	182.0A D/ 311.0A DD		183kg
JWLG-ZBL-50	50/37.5	140m³/h	168m³/h		79.0A	206.0A D/ 355.0A DD		240kg
JWLG-ZBL-60	60/45	165m³/h	198m³/h		98.0A	267.0A D/ 449.0A DD		246kg
JWLG-ZBL-70	70/52.5	192m³/h	232m³/h		124.0A	290.0A D/ 485.0A DD		305kg
JWLG-ZBL-80	80/60	220m³/h	266m³/h		144.0A	350.0A D/ 585.0A DD		314kg
JWLG-ZBL-90	90/67.5	250m³/h	302m³/h		162.0A	423.0A D/ 686.0A DD		336kg
JWLG-ZBL120	120/90	320m³/h	384m³/h		216.0A	612.0A D/ 943.0A DD		425kg
JWLG-ZBL-140	140/105	410m³/h	495m³/h		246.0A	665.0A D/ 1023.0A DD		437kg
JWLG-ZBL-180	180/120	580m³/h	696m³/h		274.0A	729.0A D/ 1114.0A DD		665kg

产品结构图



10-20匹低温/中温半封闭螺杆压缩机结构图



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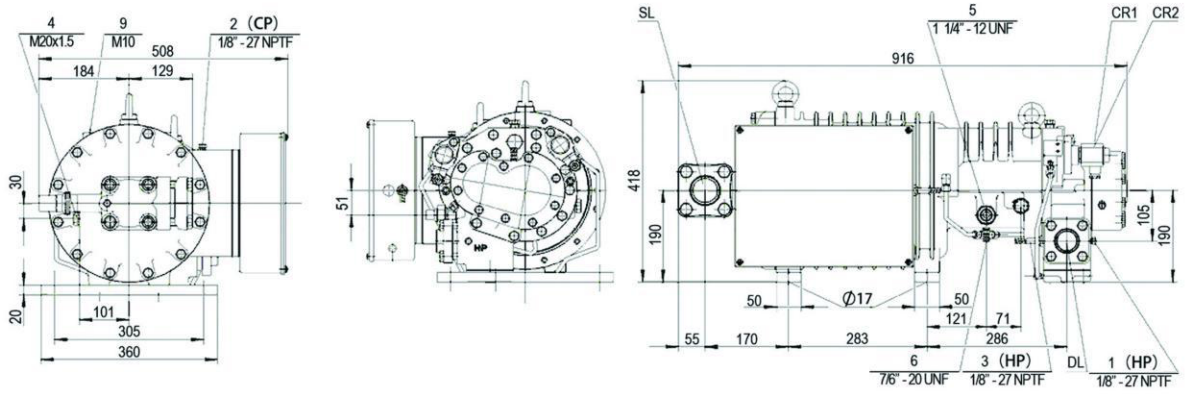
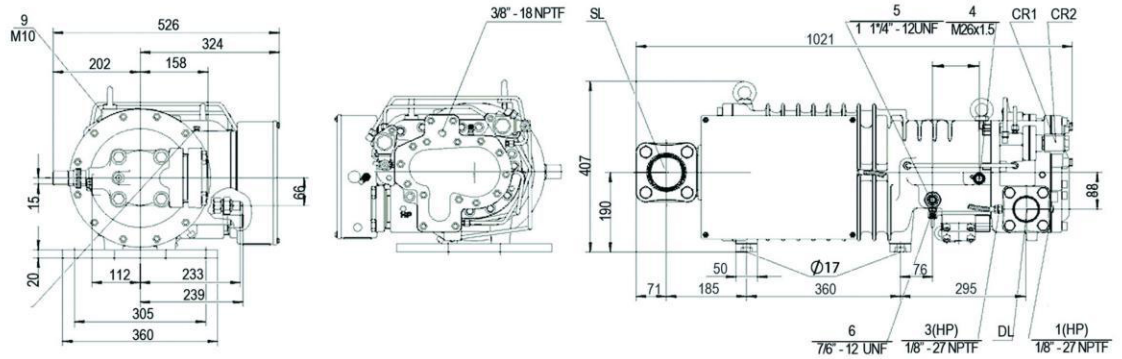
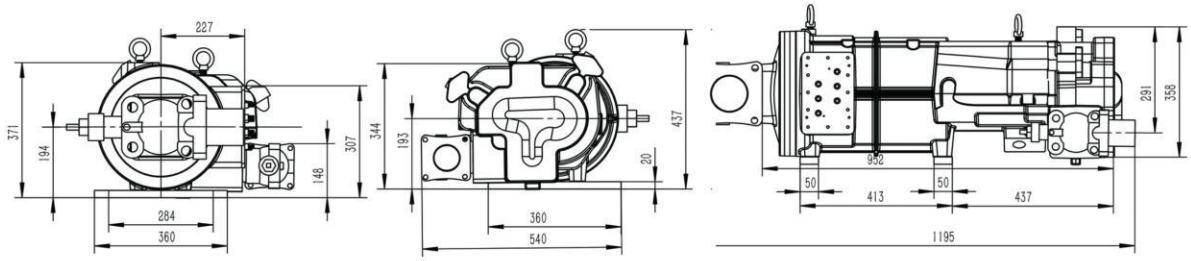


40-60匹低温/中温半封闭螺杆压缩机结构图



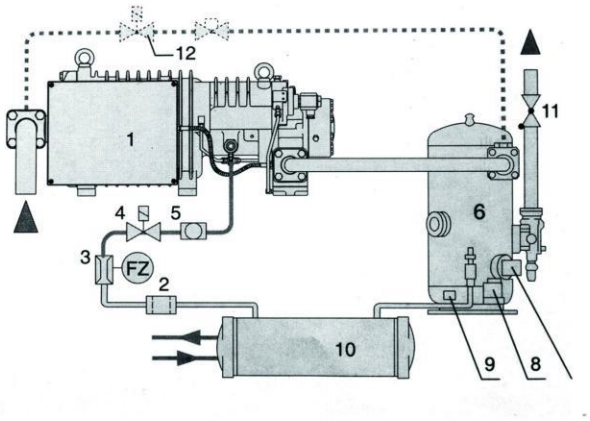
60-90匹低温/中温半封闭螺杆压缩机结构图



100-160匹低温/中温半封闭螺杆压缩机结构图

1、compressor
2、oil filter
3、oil flow switch
4、oil solenoid valve
5、mirrors
6、an oil separator
7、oil level switch
8、oil temperature controller
9、oil heater
10、oil cooler (if needed)
11、check valve
12、solenoid valve (shutdown bypass) if desired

1、压缩机
2、油过滤器
3、油流开关
4、油电磁阀
5、视镜
6、油分离器
7、油位开关
8、油温控器
9、油加热器
10、油冷却器（如果需要）
11、截止阀
12、电磁阀（停机时旁通用）



压缩机安装示意图

BL Series 53・64・74

Displacement from 84 to 560m³/h (50Hz)
Parallel system can be big 1500 m³/h

BL series screw compressors in technical innovation,versatility and energy efficiency at the advanced level in the world

Technical characteristics

Electronic protection module

- motor winding temperature(6 cell PTC)
- exhaust temperature(PRC)
- steering
- phase
- & short circuit breaker
- phase imbalance
- open stop frequency
- self-diagnosis

Standard

. Energy regulation
. Start the uninstallation
. Suction shut-off valve
Exhaust Frank with welded sleeves
. Check valve in the discharge chamber
. Built-in safety valve,meet GB9237-2001/EN378 and UL984 requirements
Compressor electronic protection device
. Damping device
. lnjector assembly

lnjector assembly

Standard configuration
. Oil Filters
. Oil flow switch
. Solenoid valve
. Oil sight glass
. Different capacity oil separator,oil heater Is equipped with pre-installed casing asked and there was a switch controller
. Air-cooled oil cooler
. Water-cooled oil cooler
. Siphon oil cooling equipment exercise (depending on the system design)

BL 系列 53・64・74

排气量从 84 到 560m³/h（50Hz）
并联系统可到达 1500 m³/h

BL 系列螺杆压缩机在技术创新，通用性和能效方面在世界范围内处于领先水平

技术特性

电子保护模块

-电机线圈温度（6 格 PTC）
-排气温度（PRC）
-转向
-缺相
-断路&短路
-相不平衡
-开停频率
-自诊断

标配

. 能量调节
. 启动卸载
. 吸气截止阀
. 带焊接套管的排气法兰
. 排气腔内的止回阀
. 内置安全阀，满足 GB9237-2001/EN378 和 UL984 要求
. 压缩机电子保护装置
. 减震装置
. 喷油组件

喷油组件

标准配置
. 油过滤器
. 油流开关
. 电磁阀
. 油视镜
. 不同容量油分离器，配备油加热器，带预安装套管的油温控器和有位开关
. 风冷油冷却器
. 水冷油冷却器
. 虹吸式油冷却设备询（取决于系统设计）

Lubr icants 润滑油						
Oil type 油类型	Viscosity 粘度 （ost/40℃）	refrigerant 制冷剂	condensing temperature 冷凝温度（℃）	evaporation temperature 蒸发温度（℃）	exhaust temperature 排气温度（℃）	injector perature 喷油温度（℃）
		R134a	..70	+20..–20		
Bse170	170	R404A/r507A	.55	+7.5..–50		
		R407A/R407F	.55	+7.5..–50		
					Ca.60..max100	max100
B150SH	150	R22	.60	+12.5..–40		max100
B100	100	R22	..45(56)	5..–50		max.80

TYPE DESCERIPTION	型号说明
JWLG–ZBL–60	JWLG–ZBL –60
semi–hermetic sorew compressors	半封闭螺杆压缩机
JWLG–ZBL –60	JWLG–ZBL –60
Applications range(Dorz)	应用范围（D 或 Z）
JWLG–ZBL –60	JWLG–ZBL –60
Soale models(53/54/74)	机型尺度(53/54/74)
JWLG–ZBL –60	JWLG–ZBL –60
Diaplacement(4/5/6/7)	排气量(4/5/6/7)
JWLG–ZBL –60	JWLG–ZBL –60
The first generations of compressor code	压缩机第几代代号
JWLG–ZBL –60	JWLG–ZBL –60
Motor size	电机大小
JWLG–ZBL –60	JWLG–ZBL –60
Motor Codes	电机代码

Performance Parameters
Performance standard is based on the European standard EN12900(50Hz) Evaporating temperature and condensing Temperature“dew point”(saturated steam)

性能参数
性能标准基于欧洲标准 EN12900（50H）蒸发温度和冷凝温度为“露点温度”（饱和蒸汽）

Liquid subcooling
According to EN12900 standard conditions no Liquid subcooling standard conditions,so the Corresponding cooling capacity and energy Efficiency comparison(COP)lower than the Corresponding values are based on five or Eight block cold

液体过冷度
根据 EN12900 标准工况没有液体过冷度标准工况，因此相应在的制冷量和能效化（COP）比基于 5 或者 8 度过冷度的相应数值低

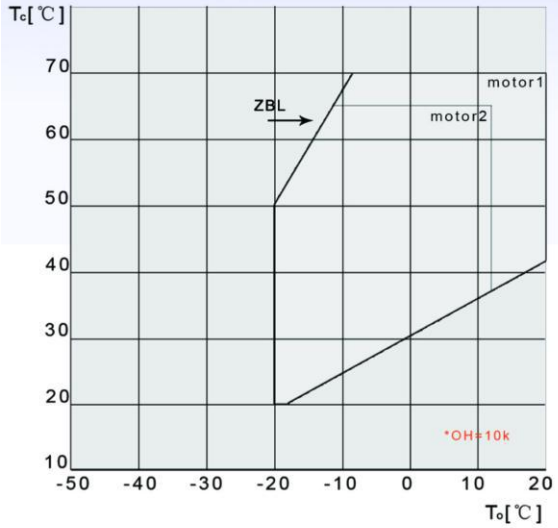
Economy running
Performance parameters for the economic Runtime parameter containing liquid Subcooling,according to EN12900, Temperature is defined as the liquid inlet in the Economizer saturation temperature Corresponding to +5 degrees(Tcu=Tms+5k)

经济器运行
经济器运行时的性能参数为含液体过冷度的参数，根据 EN12900，液体的温度定义为在经济器入口对应饱和温度+5 度（Tcu=Tms+5k）

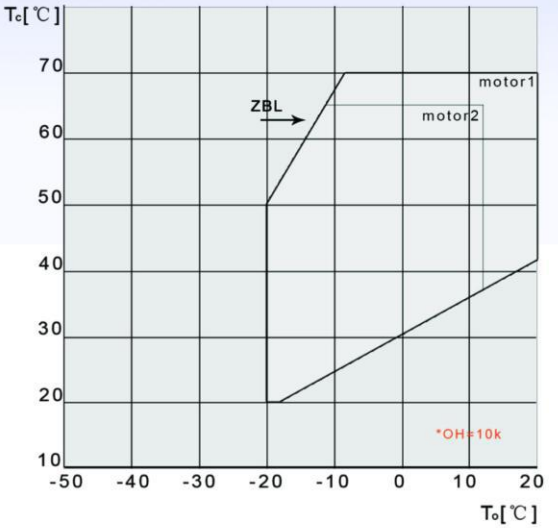
Single operating point
Unit operating conditions can be input via a Compressor detailed data selection.The output Includes all the important performance Parameters of the compressor and additional Components.Incleding applications,technical Parameters,Dimensions and accessories,and Can produce specialized data table that can be Printed,can be exported as a PDF file or Converted to other program files(such as Excel)for use.

单个运行工况点
可以通过将单位工况的数据输入压缩机详细选型。输出结果包括压缩机及其附加部件的所有重要性能参数。包括应用范围，技术参数，外形尺寸图及附件等并且可以产生专门的数据表，此表可以打印，可以办理出为 PDF 文件或转化为其他程序文件（如 Excel）供使用。

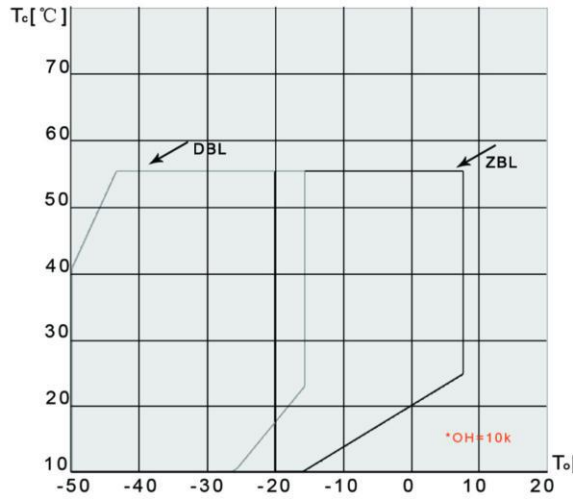
R134a CR100%



R134a CR75% ·CR50%



R404A ·R507 CR100%



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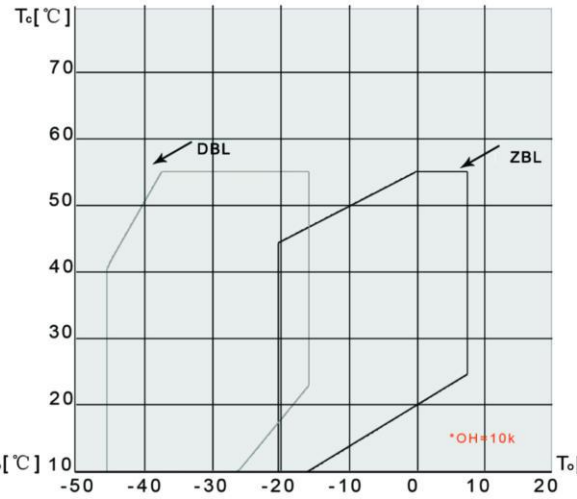
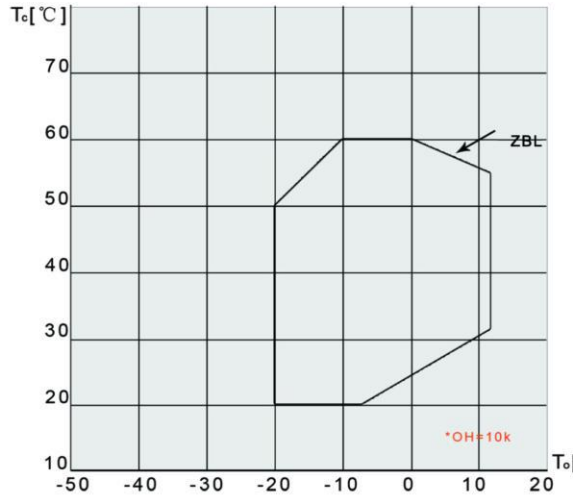
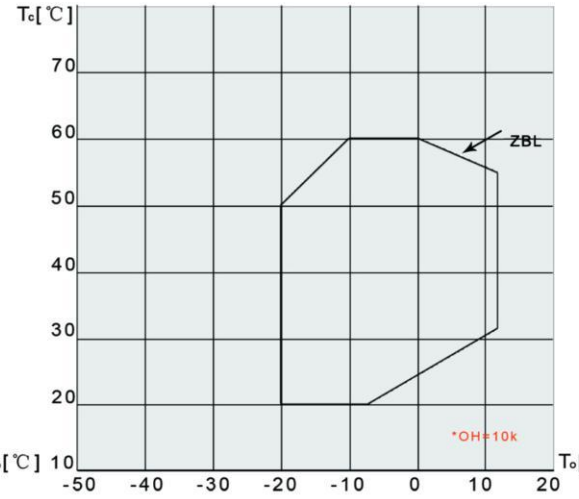


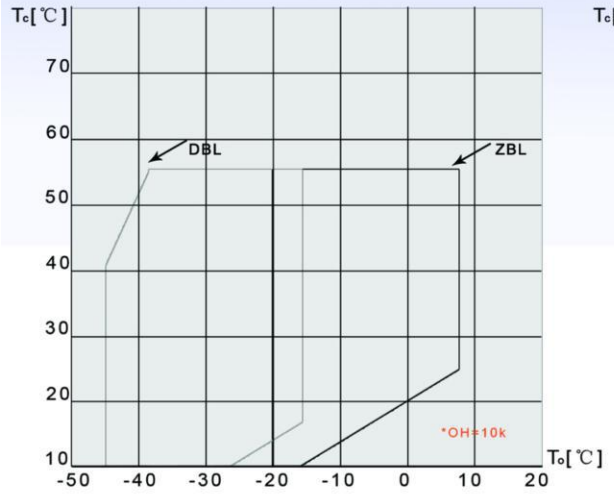
R407C CR100%



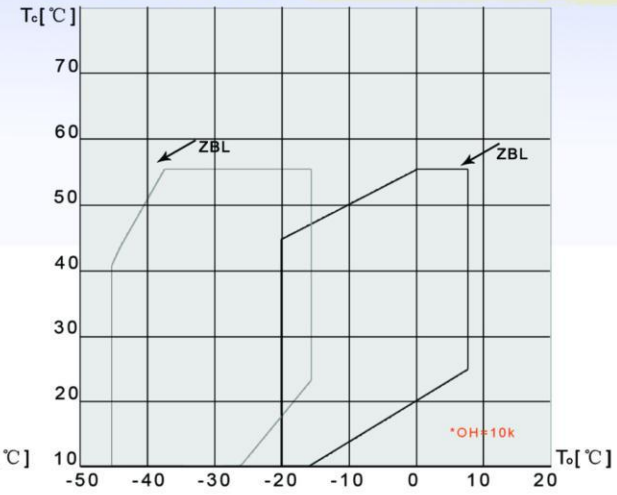
R407C CR75%·CR50%



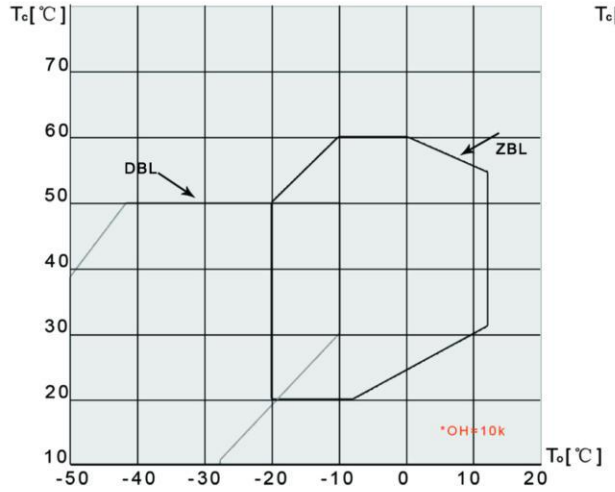
R407A ·R407F CR100%



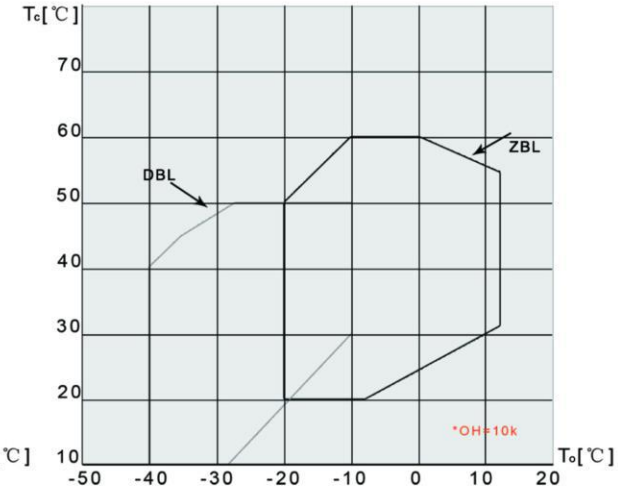
R407A ·R507F CR75% CR50%



R22 CR100%



R22 CR75% CR50%



Legend
To the evaporation temperature (℃)
Condensing temperature Tc (℃)
Excessive suction superheat

Oil cooling
Need to use oil cooler range of applications, see SuperWay software, you can determine the amount of refrigeration cooler by software.

ECO economy running
The maximum temperature can cause condensation receive limited, when the economy is running with the energy regulator can only regulate the use of primary energy (75%). Exceptions may (depending on operating conditions), but this exception should ask Jing Wei. 2 energy regulation for only started when uninstalling.

图例
To 蒸发温度（℃）
Tc 冷凝温度（℃）
吸气过热度

油冷却
需要采用油冷却器的应用范围，参见精威使用说明手册，可以由精威使用说明手册确定冷却器的制冷量。

ECO 经济器运行
可能会使最大冷凝温度受到限制，带经济器运行时，能量调节只能采用一级能量调节（75%）。可以有例外（取决于运行状况），但是应就此例外向精威询问。两级能量调节仅用于卸载启动时。

Performance parameters 性能参数（50Hz）

Based on 10k suction superheat,without Liquid subcooling 基于 10K 吸气过热度，无液体过冷

High/medium temperature operating conditlons 高、中温工作情况

Compressor Model 压缩机型号	Cond Temp 冷凝温度	制冷量 Cooling capacity QO[wait] Evapor ation temperature 蒸发温度								
		20	15	10	5	0	−5	−10	−15	−20
JWLG-ZBL-15	30					40120	32650	26580	20250	14580
	40		54900	49300	42900	35950	29300	22350	17650	12350
	50	51200	47500	41000	38500	31000	25600	20100	16300	11250
	60	46300	43200	38500	34600	27900	21800	15900		
JWLG-ZBL-20	30					47000	37900	31690	24100	20000
	40	65200	60900	55600	50980	41000	33900	29600	22000	14900
	50	56300	52200	47900	43760	37600	22300	23000	18100	13600
	60	53800	49800	44600	40500	34200	19800	20300		
JWLG-ZBL-30	30					48750	39600	31800	25250	19720
	40		77300	64300	53000	43300	35050	28000	22100	17160
	50	82000	68300	56500	46400	37700	30300	24100	18820	14440
	60	71300	59100	48600	39600	31950	25450	19980		
JWLG-ZBL-40	30					69428	56676	45841	36695	29030
	40		11080	92200	76200	62449	50711	40753	32360	25337
	50		98600	81700	67200	54745	44134	35149	27590	21275
	60		85500	70500	57500	46514	37185	29211		
JWLG-ZBL-50	30					84600	68600	55100	43600	33950
	40		135100	112200	92400	75400	60900	48600	38250	29600
	50	143500	119600	98900	81100	65900	52900	42000	32850	25200
	60	124700	103500	85200	69500	56100	44750	35200		
JWLG-ZBL-60	30					101500	82900	67100	53600	42350
	40		160300	133500	110400	90500	73500	59100	46850	36600
	50	170100	142000	117700	96800	78900	63600	50600	39750	30600
	60	147800	122800	101200	82600	66800	53300	42000		
JWLG-ZBL-70	30					122300	99200	79500	62800	48750
	40		196000	162600	133900	109200	88100	70300	55200	42600
	50	207500	172900	143000	117300	95300	76500	60700	47450	36400
	60	178800	148400	122300	99900	80700	64500	50900		
JWLG-ZBL-80	30					140500	114100	91600	72500	56600
	40		224400	186300	153500	125300	101200	80900	62700	49400
	50	238500	198700	164400	134900	109600	88100	70000	54800	42100
	60	207400	172100	11700	115700	93400	74600	58700		
JWLG-ZBL-90	30					153600	125400	101500	81200	64200
	40		242600	202000	167000	137000	111300	89500	7100	55600
	50	257400	214900	178200	146600	119500	96400	76800	60300	46550
	60	224000	186100	153400	125300	101300	81000	63800		
JWLG-ZBL-120	30					213700	196800	175600	154300	132000
	40		279600	240300	214300	195400	176800	152600	131400	115400
	50	281400	247600	215000	193600	153200	153200	136200	114700	96500
	60	265600	224600	199000	187000	149800	142600	124300		
JWLG-ZBL-140	30					222300	219900	189800	162800	143200
	40		365400	301200	243900	209200	185600	168600	145800	123600
	50	380500	326600	265000	207300	175300	160000	145800	127400	106400
	60	328500	269400	222300	189900	160700	152300	138100		
JWLG-ZBL-160	30					241700	229600	205700	185700	165800
	40		384200	325400	268500	225400	195200	185600	164700	143200
	50	304100	349800	274100	223400	183400	179800	163200	145700	
	60	345200	291000	245600	204100	187400	172300	154700		

R134a

Special operating point and 60Hz performance parameters,

！Note:when using R134a refrigerant,useesteroils BSE170

特殊工兑点及 60Hz 性能参数请参考精威官网

！注意：使用 R134a 制冷剂时，需使用酯类油 BSE170

性能参数（50Hz）

Based on 10k suction superheat,without Liquid subcooling
High/medium temperature operating conditlons

基于 10K 吸气过热度，无液体过冷

高、中温工作情况

Compressor Model 压缩机型号	Cond Temp 冷凝温度	输入功率 Output power Pe[kw] Evapor ation temperature 蒸发温度								
		20	15	10	5	0	-5	-10	-15	-20
JWLG-ZBL-15	30					9.87	8.30	8.00	7.60	7.00
	40		12.30	11.40	11.00	10.40	10.80	10.00	9.70	9.00
	50	15.30	13.50	13.00	12.50	11.40	12.80	12.00	11.50	10.80
	60	18.30	17.50	17.00	16.50	15.40	14.90	14.00	13.70	13.00
JWLG-ZBL-20	30					10.70	9.70	9.00	8.60	8.00
	40		11.30	10.30	10.00	9.40	8.70	8.00	7.40	7.00
	50	16.40	15.60	14.80	14.00	13.60	12.70	12.00	11.30	10.40
	60	17.30	16.40	16.00	15.30	14.30	13.50	12.60	12.00	11.50
JWLG-ZBL-30	30					11.23	10.71	10.28	9.94	9.67
	40		14.54	13.83	13.27	12.84	12.52	12.28	12.09	11.93
	50	17.96	16.26	16.65	16.14	15.74	15.44	15.27	15.22	15.30
	60	21.60	21.10	20.60	20.20	19.78	19.56	19.57		
JWLG-ZBL-40	30					16.22	15.98	15.78	15.59	15.37
	40			20.80	20.50	20.20	20.10	19.80	19.60	19.38
	50			25.90	25.60	25.40	25.20	25.00	24.70	24.20
	60			32.30	32.00	31.70	31.40	31.10		
JWLG-ZBL-50	30					16.22	15.98	15.78	15.59	15.37
	40		21.20	20.80	20.50	20.20	20.20	19.88	19.67	19.38
	50	26.70	26.30	25.90	25.60	25.40	25.20	25.00	24.70	24.42
	60	33.00	32.60	32.30	32.00	31.70	31.40	31.10		
JWLG-ZBL-60	30					21.00	20.00	19.55	19.01	18.67
	40		27.70	26.80	25.90	25.10	24.40	23.80	23.40	23.10
	50	34.10	33.00	32.00	31.20	30.40	29.80	29.30	29.00	28.70
	60	40.50	39.50	38.60	37.80	37.10	36.60	36.30		
JWLG-ZBL-70	30					23.20	23.20	23.30	23.40	23.30
	40		29.80	29.30	29.20	29.30	29.40	29.40	29.40	28.90
	50	37.50	37.00	36.90	37.00	37.30	37.40	37.40	36.90	35.90
	60	47.00	47.10	47.20	47.40	47.40	47.20	46.70		
JWLG-ZBL-80	30					26.10	25.70	25.80	25.00	24.70
	40		34.10	33.40	32.90	32.60	32.30	32.00	31.70	31.20
	50	43.00	42.30	41.70	40.00	40.90	40.60	40.20	39.70	39.00
	60	53.10	52.50	51.90	51.00	51.00	50.50	49.90		
JWLG-ZBL-90	30					30.80	29.70	28.70	27.90	27.40
	40		40.70	39.20	37.90	36.80	35.90	35.00	34.30	33.80
	50	50.00	48.40	47.00	45.70	44.60	43.70	43.00	42.50	42.10
	60	59.40	57.90	56.60	55.50	54.50	53.70	53.20		
JWLG-ZBL-120	30					39.20	38.50	37.20	36.50	35.10
	40		50.30	49.30	48.20	47.10	46.20	45.10	44.60	43.60
	50	61.30	60.20	59.60	58.20	57.20	56.50	55.30	54.10	53.20
	60	74.60	73.40	72.40	71.50	70.10	69.10	68.20	67.10	66.30
JWLG-ZBL-140	30					41.20	40.50	38.40	37.40	38.50
	40		53.40	52.10	51.20	50.60	49.90	48.60	47.50	46.30
	50	64.50	63.60	62.50	61.20	60.80	59.40	58.60	57.40	56.80
	60	78.30	77.40	76.30	75.30	74.20	73.10	72.50	70.90	66.20
JWLG-ZBL-160	30					43.50	42.40	41.30	40.60	39.50
	40		55.90	54.60	53.20	52.10	51.00	50.60	49.40	48.90
	50	67.60	66.20	65.50	64.20	63.80	62.30	61.30	60.20	59.30
	60	81.90	80.10	79.80	78.30	77.50	76.30	75.50	74.90	73.20

R134a

特殊工兑点及 60Hz 性能参数请参考精威官网

！注意：使用 R134a 制冷剂时，需使用酯类油 BSE170

Data based on r404a, r507a will adopt miner differences, see

！Note:when using R134a refrigerant,useesteroils BSE170

数据基于 R404a，采用 R507a 会有微小差异，详见精威官网

！注意：使用 R134a 制冷剂时，需使用酯类油 BSE170

Performance parameters 性能参数（50Hz）
Based on 10k suction superheat,without Liquid subcooling 基于 10K 吸气过热度，无液体过冷
High/medium temperature operating conditlons 高、中温工作情况

Compressor Model 压缩机型号	Cond Temp 冷凝温度	制冷量 Cooling capacity QO[wait] Evapor ation temperature 蒸发温度						
		7.5	5	0	−5	−10	−15	−20
JWLG-ZBL-15	30	58950	53200	44500	37510	30100	24100	18900
	40	52250	47500	39600	32600	26500	21600	16900
	50	45350	41280	34550	28950	23600	18500	14600
JWLG-ZBL-20	30	67350	61980	51850	42980	35680	28900	23800
	40	60500	55360	45320	38520	32100	26100	19000
	50	52500	48950	41230	26750	27150	22100	17300
JWLG-ZBL-30	30	103900	95000	79100	65400	53700	43600	35050
	40	89400	81600	67700	55700	45400	36650	29200
	50	74000	67400	54000	45150	36450	29000	22750
JWLG-ZBL-40	30	146700	134400	112200	93000	76400	62300	50200
	40	127300	116400	96700	79700	65100	52700	42050
	50	106100	96600	79700	65100	52700	42050	33050
JWLG-ZBL-50	30	181800	166300	138600	114700	94000	76500	61500
	40	155800	142300	118200	97400	79500	64300	51500
	50	128200	116800	96300	78700	63700	51000	40300
JWLG-ZBL-60	30	216000	197800	165100	136800	112500	91600	73800
	40	186800	170800	141900	117000	95700	77300	61800
	50	154300	140600	115900	94700	76500	61000	47900
JWLG-ZBL-70	30	266100	243400	202800	167600	137500	111600	89700
	40	228200	208300	172700	142100	115900	93500	74600
	50	186800	169900	139800	114000	91900	73200	57500
JWLG-ZBL-80	30	302000	276400	230500	190700	156600	1127300	102400
	40	259100	236700	196600	162000	132400	107200	85800
	50	213500	194500	160400	131200	106300	85100	67300
JWLG-ZBL-90	30	326900	299400	250000	207300	170400	138900	111900
	40	283000	258700	215100	177400	145000	117300	93700
	50	234000	213200	175900	143700	116200	92700	72900
JWLG-ZBL-120	30	392600	364600	312400	285600	251400	231700	212400
	40	353400	321400	291700	267400	231900	205600	175500
	50	312100	287500	254600	221700	200700	174700	143400
JWLG-ZBL-140	30	513600	472500	392300	319900	269800	252800	238750
	40	474300	436900	319200	288300	258600	235200	192600
	50	429500	392900	295300	246800	225800	197450	166400
JWLG-ZBL-160	30	583500	524300	410500	339600	271600	282500	256600
	40	524600	460900	335300	301000	289000	252700	214300
	50	463600	452900	269600	258100	232500	214800	182100

R404aR507a

Special operating point and 60Hz performance parameters,
！Note:when using R134a refrigerant,useesteroils BSE170

特殊工兑点及 60Hz 性能参数请参考精威官网
！注意：使用 R404a. R507a 制冷剂时，需使用酯类油 BSE170

Performance parameters 性能参数（50Hz）
Based on 10k suction superheat,without Liquid subcooling 基于 10K 吸气过热度，无液体过冷
High/medium temperature operating conditlons 高、中温工作情况

Compressor Model 压缩机型号	Cond Temp 冷凝温度	输入功率 Output power Pe[kw] Evapor ation temperature 蒸发温度						
		7.5	5	0	−5	−10	−15	−20
JWLG-ZBL-15	30	13.40	12.80	12.10	11.50	11.00	10.60	10.00
	40	20.50	19.90	19.30	18.70	18.00	17.50	17.00
	50	24.60	24.00	23.60	23.00	22.60	22.10	21.60
JWLG-ZBL-20	30	15.30	14.70	14.00	13.60	13.00	12.50	12.10
	40	22.30	21.80	21.00	20.50	20.10	19.60	19.00
	50	26.50	26.00	25.70	25.10	24.60	24.20	23.70
JWLG-ZBL-30	30	19.92	19.58	18.94	18.35	17.81	17.32	16.88
	40	23.50	23.20	22.50	22.00	21.50	21.00	20.60
	50	28.40	28.10	27.50	27.00	26.40	25.90	25.30
JWLG-ZBL-40	30	27.00	26.60	25.80	25.00	24.30	23.60	23.00
	40	32.20	31.80	31.00	30.30	29.60	28.90	28.30
	50	39.10	38.70	38.00	37.20	36.50	35.80	35.20
JWLG-ZBL-50	30	29.40	29.00	28.40	28.00	27.70	27.40	27.00
	40	35.60	35.40	35.00	34.60	34.20	33.80	33.30
	50	43.30	43.20	42.90	42.40	41.90	41.40	40.90
JWLG-ZBL-60	30	38.90	38.30	37.20	36.10	35.10	34.20	33.40
	40	46.30	45.70	44.70	43.60	42.70	41.90	40.70
	50	55.80	55.30	54.30	53.20	52.20	51.20	50.10
JWLG-ZBL-70	30	38.70	38.00	39.50	4.00	40.50	40.80	40.90
	40	49.70	50.0	50.50	50.90	51.20	51.40	51.40
	50	63.70	64.20	64.80	65.10	65.20	65.10	64.90
JWLG-ZBL-80	30	48.00	47.40	46.50	45.90	45.40	44.90	44.30
	40	58.70	58.30	57.70	57.10	56.60	55.90	55.00
	50	72.30	72.20	71.80	71.20	70.60	69.80	69.00
JWLG-ZBL-90	30	57.10	56.30	54.60	53.00	51.40	50.00	48.80
	40	68.00	67.20	65.50	63.90	62.40	61.00	59.80
	50	81.80	81.00	79.40	77.90	76.40	75.00	73.60
JWLG-ZBL-120	30	80.20	79.50	78.40	77.30	76.20	75.40	74.50
	40	91.50	90.40	89.20	88.30	87.40	87.40	85.10
	50	100.30	99.20	98.70	97.60	96.40	95.20	94.10
JWLG-ZBL-140	30	90.30	89.50	88.60	87.30	86.50	85.70	84.20
	40	96.30	95.40	94.30	93.60	92.40	91.50	90.00
	50	102.30	101.20	100.00	99.20	98.60	97.30	96.40
JWLG-ZBL-160	30	96.30	95.30	94.30	93.20	92.40	91.60	90.80
	40	98.20	97.30	96.50	95.60	94.70	93.20	92.50
	50	104.30	103.20	102.50	101.60	100.50	99.60	97.80

R404a R507a

Special operating point and 60Hz performance parameters,
! Note:when using R134a refrigerant,useesteroils BSE170

数据基于 R404a，采用 R507a 会有微小差异，详见精威官网
！注意：使用 R134a 制冷剂时，需使用酯类油 BSE170

Performance parameters **R404aR507a** 性能参数（50Hz）
Based on 10k suction superheat,without 基于 10K 吸气过热度，无液体过冷
Liquid subcooling
Low temperature Economiser operation 低温工作情况（带经济器运行）

Compressor Model 压缩机型号	Cond Temp 冷凝温度	制冷量 Cooling capacity QO[wait] Evapor ation temperature 蒸发温度						
		−15	−20	−25	−30	−35	−40	−45
JWLG-DBL-10	30	38400	28900	24300	21500	19000	16300	14300
	40	31600	26800	23600	19800	16050	14800	12600
	50	28500	23100	20300	18900	15300	13900	
JWLG-DBL-15	30	44800	37500	31650	26000	22100	18600	15100
	40	40200	34500	26800	23200	19800	16000	13900
	50	27600	31600	25300	21000	18200	14000	
JWLG-DBL-20	30	58700	49450	41250	34000	27650	22050	17220
	40	55600	46700	38750	31750	25550	20100	15330
	50			35200	28400	22350	17020	12330
JWLG-DBL-30	30	78200	66000	55200	45600	37150	29800	23400
	40	73900	62400	52100	42950	34900	27850	21700
	50			47700	39150	31550	24800	18930
JWLG-DBL-40	30	94400	79600	66300	54700	44400	35350	27500
	40	89100	75000	62500	51500	41750	33250	25850
	50			56900	46700	37700	29800	22900
JWLG-DBL-50	30	108700	91600	76500	63200	51600	41400	32600
	40	101200	85400	71500	59100	48250	38750	30500
	50			64300	53100	43200	34400	26700
JWLG-DBL-60	30	136000	138000	94400	77300	62500	49550	38300
	40	124600	104400	86700	71100	57500	45600	35300
	50			76600	62900	50800	40150	30850
JWLG-DBL-70	30	251800	127500	10610	87400	71000	56700	44250
	40	140800	118200	98500	81100	65900	52700	41200
	50		105800	88000	72400	58700	46650	36150
JWLG-DBL-75	30	160100	134500	112100	92500	75500	60700	47850
	40	147100	123800	103300	85500	69800	52600	44400
	50	130300	109800	91700	75800	61800	49450	38600
JWLG-DBL-100	30	182400	165400	142100	126400	107500	89200	68400
	40	167600	146700	125600	104800	87640	65400	49280
	50	154600	132100	110600	90870	74500	43100	41200
JWLG-DBL-120	30	246000	248000	154400	137300	112500	95200	78300
	40	224600	194400	146700	120300	107500	80300	55300
	50	193300	162500	126600	102900	80800	79600	50860
JWLG-DBL-140	30	252400	251000	173500	142800	121000	103200	82500
	40	230800	239500	165400	137600	107600	96300	73600
	50	210900	193600	142600	120500	96050	83200	69900

R404a R507a

Special operating point and 60Hz performance parameters,
！Note:when using R134a refrigerant,useesteroils BSE170

数据基于 R404a，采用 R507a 会有微小差异，详见精威官网
！注意：使用 R134a 制冷剂时，需使用酯类油 BSE170

性能参数（50Hz）

Based on 10k suction superheat,without Liquid subcooling

Low temperature operating conditlons

性能参数（50Hz）

基于 10K 吸气过热度，无液体过冷

低温工作情况

Compressor Model 压缩机型号	Cond Temp 冷凝温度	输入功率 Output power Pe[kw Evapor ation temperature 蒸发温度						
		-15	-20	-25	-30	-35	-40	-45
JWLG-DBL-10	30	17.20	16.30	15.50	15.00	14.50	13.70	13.10
	40	21.30	20.50	19.80	19.10	18.50	17.40	16.80
	50			23.40	22.40	21.50	20.40	20.00
JWLG-DBL-15	30	19.30	18.80	17.40	16.70	15.90	15.10	14.30
	40	23.50	22.40	21.50	20.00	19.40	18.30	17.60
	50			25.30	24.60	23.90	23.00	22.30
JWLG-DBL-20	30	22.10	22.50	20.90	20.20	19.46	18.63	17.70
	40	27.90	27.10	26.30	25.30	24.20	23.00	21.50
	50			32.00	30.40	29.20	28.10	26.00
JWLG-DBL-30	30	28.60	27.60	26.70	25.70	24.60	23.50	22.30
	40	36.00	33.90	33.70	32.40	31.00	19.50	28.00
	50			41.20	39.40	37.90	37.20	35.10
JWLG-DBL-40	30	32.20	31.10	30.00	38.80	27.70	26.40	25.10
	40	39.90	38.70	37.50	36.10	34.70	33.20	31.50
	50			45.30	44.00	42.50	42.00	39.90
JWLG-DBL-50	30	39.60	38.10	36.50	34.90	33.20	31.50	29.60
	40	48.70	46.80	44.90	42.90	40.90	38.80	36.80
	50			53.50	52.20	51.00	48.70	46.60
JWLG-DBL-60	30	47.00	44.70	43.00	40.70	40.50	39.20	37.50
	40	65.90	55.10	53.60	52.20	50.90	49.40	47.50
	50			64.50	63.80	63.70	61.90	60.20
JWLG-DBL-70	30	50.70	48.70	46.90	45.10	43.30	41.50	39.60
	40	60.70	59.80	57.80	55.80	52.70	51.60	49.30
	50			72.10	65.90	67.50	64.90	62.00
JWLG-DBL-75	30	57.00	54.60	52.30	50.00	47.60	45.10	42.60
	40	69.30	66.50	63.70	60.90	58.10	55.30	52.60
	50	85.20	82.00	78.70	75.30	72.10	69.10	66.50
JWLG-DBL-100	30	71.30	68.40	66.50	64.30	62.10	60.20	58.70
	40	82.40	80.50	77.30	75.10	72.70	70.50	68.40
	50	96.60	92.40	88.30	85.50	82.20	79.20	76.30
JWLG-DBL-120	30	75.50	72.60	70.30	68.20	66.10	64.30	62.50
	40	87.50	85.30	83.50	81.20	79.40	77.90	75.20
	50	100.30	96.30	94.30	92.50	90.90	88.00	86.40
JWLG-DBL-140	30	79.20	77.20	75.30	73.20	71.60	69.20	67.30
	40	90.20	88.40	86.50	84.30	82.40	80.00	78.40
	50	102.30	100.20	98.20	96.30	94.30	92.50	90.60

R404a R507a

Special operating point and 60Hz performance parameters,

! Note:use the R22 refrigerant,you need an ester oil 100 or B150SH

! Note:when using R134a refrigerant,useesteroils BSE170

性能参数（50Hz）

Based on 10k suction superheat,without Liquid subcooling
Low temperature Economiser operation

基于 10K 吸气过热度，无液体
高/中温工作情况

Compressor Model 压缩机型号	Cond Temp 冷凝温度	制冷量 Cooling capacity QO[wait] Evapor ation temperature 蒸发温度								
		12.5	10	7.5	5	0	−5	−10	−15	−20
JWLG-ZBL-15	30	68400	62700	57500	52600	43800	36400	29500	23700	18800
	40	60800	55800	51100	46700	38800	31100	25900	20800	16300
	50	53300	18800	44700	40800	33800	27700	22400	17800	13900
JWLG-ZBL-20	30	79100	72600	66500	60900	50700	41900	34200	27500	21800
	40	70600	64700	59300	54200	45000	37000	30000	24000	18900
	50	61800	56700	51800	47300	39200	28900	25900	20600	16000
JWLG-ZBL-30	30	116000	107000	98800	90600	76200	63700	52700	43300	35150
	40	105700	97300	89800	82200	68800	57200	47050	38350	30750
	50	93800	86100	79100	72100	59800	49100	39750	31700	24800
JWLG-ZBL-40	30	162100	149800	138600	127400	107600	90200	75000	61700	50100
	40	147900	136400	126600	115500	97100	80900	66700	54300	43500
	50	132200	121700	112100	102500	85500	70700	57700	46350	36550
JWLG-ZBL-50	30	192700	177800	164200	150600	126700	105700	87500	71600	57900
	40	174400	160500	148000	135400	113300	94000	77300	62800	50300
	50	154900	142200	130600	119100	98900	81300	66100	53000	41800
JWLG-ZBL-60	30	227300	210000	194300	178600	150900	126500	105200	86500	70200
	40	207400	191300	176700	162000	136200	113500	93000	76200	61000
	50	185400	170600	137100	143700	119900	99100	80900	65000	51200
JWLG-ZBL-70	30	284600	262600	242500	222500	187200	156400	129600	106400	86500
	40	259500	239700	220500	201900	169200	140600	115800	94300	75800
	50	230500	211700	194500	177300	147200	121000	98100	78400	61400
JWLG-ZBL-80	30	320400	295600	273000	250400	210700	175900	145600	119300	96500
	40	290100	267100	246300	225400	188700	156700	128800	104800	84100
	50	258000	236900	217700	198500	165000	135800	110500	88700	70100
JWLG-ZBL-90	30	344300	318200	294400	270600	228600	191700	159400	131200	106500
	40	343000	290000	267800	245600	206500	172100	142000	115700	92800
	50	283100	258900	238500	218100	182100	150600	123000	99000	78100
JWLG-ZBL-120	30	405700	372600	352400	332600	302700	271800	250600	232600	211700
	40	376200	341500	321700	295400	272500	240600	211600	194900	170400
	50	345400	311500	282600	252400	241800	210800	186700	156900	137200
JWLG-ZBL-140	30	426300	397500	375800	365400	324800	293600	271500	251800	231500
	40	395200	367500	342600	312500	291000	265800	236900	216300	196800
	50	365600	331700	307500	276900	269400	230900	211500	171500	151600
JWLG-ZBL-160	30	444300	412500	396100	361400	345100	311400	296200	271600	256600
	40	416200	382600	362800	331900	316500	281800	257200	231600	218300
	50	382600	352700	321500	297600	281300	259600	231600	199600	173200

R22

！Note:use the R22 refrigerant,you need an ester oil 100 or B150SH

！注意：使用 R22 制冷剂时，需使用酯类油 100 或者 B150SH

Performance parameters
Based on 10k suction superheat,without
Liquid subcooling
High/medium temperature operating conditlons

性能参数（50Hz）
基于 10K 吸气过热度，无液体过冷
高/中温工作情况

Compressor Model 压缩机型号	Cond Temp 冷凝温度	输入功率 Output power Pe[kw] Evapor ation temperature 蒸发温度								
		12.5	10	7.5	5	0	-5	-10	-15	-20
JWLG-ZBL-15	30	10.60	10.30	10.00	9.80	9.60	9.30	9.00	8.60	8.30
	40	15.30	15.00	14.60	14.20	13.80	13.50	13.30	12.60	12.20
	50	19.50	19.20	19.00	18.70	18.50	18.40	18.00	17.60	17.40
JWLG-ZBL-20	30	12.10	12.50	12.10	11.70	11.30	11.00	10.70	10.40	10.00
	40	17.90	17.20	17.00	16.40	16.10	15.60	15.00	14.80	14.30
	50	21.40	21.10	20.70	20.20	19.70	19.50	19.00	18.60	18.20
JWLG-ZBL-30	30	14.86	14.93	14.98	15.02	15.09	15.13	15.16	15.18	15.20
	40	19.01	18.99	18.97	18.95	18.93	18.92	18.92	18.93	18.96
	50	23.10	23.20	23.25	23.30	23.40	23.40	23.50	23.60	23.60
JWLG-ZBL-40	30	25.40	25.20	24.85	24.50	23.80	23.00	22.20	21.40	20.80
	40	30.30	29.80	29.30	28.80	27.80	27.00	27.30	25.70	25.30
	50	34.90	34.50	34.10	33.70	33.00	32.30	31.70	31.30	30.90
JWLG-ZBL-50	30	27.30	26.90	26.60	26.30	25.70	25.30	24.80	24.50	24.20
	40	33.60	32.80	32.20	31.60	30.80	30.40	30.20	30.10	30.10
	50	38.20	37.90	37.70	37.50	37.20	37.10	37.10	37.10	37.10
JWLG-ZBL-60	30	35.60	35.30	34.85	34.40	33.30	32.20	31.10	30.00	29.20
	40	42.50	41.80	41.05	40.30	39.00	37.90	36.90	36.10	35.40
	50	49.00	48.40	47.85	47.30	46.20	45.30	44.50	43.80	43.40
JWLG-ZBL-70	30	35.30	35.50	35.60	35.70	35.90	36.00	36.00	36.10	36.10
	40	45.20	45.10	45.05	45.00	45.00	45.00	45.00	45.00	45.00
	50	55.00	55.10	55.25	55.40	55.60	55.70	55.90	56.00	56.20
JWLG-ZBL-80	30	43.90	43.30	42.80	42.30	41.40	40.60	40.00	39.40	38.90
	40	54.00	52.80	51.85	50.90	49.60	48.90	48.60	48.50	48.40
	50	61.50	61.00	60.65	60.30	59.90	59.80	59.70	59.70	59.70
JWLG-ZBL-90	30	52.30	51.70	51.05	50.40	48.90	47.20	45.60	44.10	42.80
	40	62.30	61.30	60.25	59.20	57.30	55.60	54.10	52.90	52.00
	50	71.90	71.00	70.15	69.30	67.80	66.40	65.20	64.30	63.60
JWLG-ZBL-120	30	82.30	81.30	80.50	79.30	78.10	77.10	76.20	75.30	74.10
	40	91.40	90.20	89.40	88.20	87.30	86.30	85.10	84.00	83.10
	50	100.60	99.60	98.50	97.40	96.30	95.30	94.20	93.10	92.50
JWLG-ZBL-140	30	90.70	89.60	89.10	87.50	87.00	86.30	85.80	85.30	84.60
	40	99.30	98.50	98.00	97.40	97.00	96.40	95.70	95.00	94.30
	50	108.30	107.20	106.60	106.00	105.30	104.70	104.00	103.50	102.60
JWLG-ZBL-160	30	98.40	97.40	97.00	96.50	95.70	95.00	94.30	93.60	92.50
	40	107.40	106.40	106.00	105.30	104.60	104.00	103.50	102.80	101.40
	50	116.40	115.70	114.80	114.00	113.50	112.70	112.00	111.30	110.40

R22

! Note:use the R22 refrigerant,you need an ester oil 100 or B150SH

！注意：使用 R22 制冷剂时，需使用酯类油 100 或者 B150SH

Performance parameters
Based on 10k suction superheat,without Liquid subcooling
Low temperature Economiser operation

性能参数（50Hz）
基于 10K 吸气过热度，无液体过冷
低温工作情况（带经济器运行）

Compressor Model 压缩机型号	Cond Temp 冷凝温度	制冷量 Cooling capacity QO[wait] Evapor ation temperature 蒸发温度						
		−15	−20	−25	−30	−35	−40	−45
JWLG-DBL-10	30	28900	23500	19200	16200	13600	11200	9800
	40	25300	21500	17200	14300	11900	9980	7600
	50	23100	18600	15100	13600	10600	8350	
JWLG-DBL-15	30	36100	32100	26500	20100	17000	13500	11900
	40	32900	29200	21600	18200	14700	10200	8700
	50	22500	26300	19300	16300	13200	8900	6750
JWLG-DBL-20	30	53200	44450	36750	29950	24000	18830	14370
	40	50700	42300	34800	28200	22450	17450	13140
	50	47450	39350	32150	25800	20250	15370	
JWLG-DBL-30	30	72300	60800	50600	41550	33600	26700	20700
	40	69300	58100	48200	39400	31700	24950	19090
	50	65200	54500	44900	36400	28900	22350	
JWLG-DBL-40	30	83500	70100	58300	47800	38600	30600	23700
	40	80000	67000	55500	45300	36350	28550	21850
	50	75500	62900	51700	41750	33000	25400	
JWLG-DBL-50	30	98900	83200	69200	56900	46000	36600	28400
	40	94400	79200	65700	53800	43300	34100	26100
	50	88400	73900	61000	49500	49400	30500	
JWLG-DBL-60	30	123600	103200	85200	69500	55700	43700	33400
	40	116800	97400	80200	65100	51900	40450	30500
	50	108300	90000	73700	59300	46700	35650	
JWLG-DBL-70	30	137000	115000	95600	78400	63400	50300	39100
	40	130500	109300	90500	74000	59500	46850	35900
	50	122200	101900	83900	68000	54000	41700	
JWLG-DBL-75	30	147900	124300	103400	84900	68800	54800	42600
	40	140400	117800	97700	80000	64500	51000	39200
	50	130800	109400	90400	73500	58600	45600	
JWLG-DBL-100	30	166890	142400	120600	103700	80600	66740	50230
	40	157800	134300	112600	98270	78600	61280	48320
	50	144300	124400	102500	87900	69470	52360	
JWLG-DBL-120	30	179800	156200	136300	112300	96700	76300	61200
	40	162300	146300	125300	108700	87600	75000	52000
	50	156800	132600	111600	97690	76300	61300	
JWLG-DBL-140	30	189100	169900	143900	121300	105600	83900	72800
	40	178900	158600	132600	118600	96000	80500	63100
	50	167100	142900	125600	101000	87500	78600	

R22

! Note:use the R22 refrigerant,you need an ester oil 100 or B150SH

！注意：使用 R22 制冷剂时，需使用酯类油 100 或者 B150SH

性能参数（50Hz）
基于 10K 吸气过热度，无液体过冷

Low temperature Economiser operation　　低温工作情况

Compressor Model 压缩机型号	Cond Temp 冷凝温度	输入功率 Output power Pe[kw] Evapor ation temperature 蒸发温度 -15	-20	-25	-30	-35	-40	-45
JWLG-DBL-10	30	13.30	13.20	13.10	13.00	12.60	12.50	12.40
	40	15.30	15.20	15.10	15.00	14.90	14.80	14.60
	50	16.40	16.30	16.20	16.20	16.00	15.80	
JWLG-DBL-15	30	15.30	15.00	15.00	14.90	14.60	14.50	14.30
	40	19.80	19.70	19.50	19.40	19.40	19.20	19.00
	50	20.50	20.30	20.20	20.20	19.90	19.40	
JWLG-DBL-20	30	17.90	14.90	16.60	15.33	14.67	14.05	13.42
	40	21.70	20.80	20.00	19.23	18.46	17.71	16.98
	50	26.60	25.80	24.80	23.80	22.80	21.70	
JWLG-DBL-30	30	24.30	23.00	21.90	20.90	20.00	19.10	18.17
	40	29.00	27.80	26.70	25.60	24.50	23.50	22.40
	50	35.10	33.90	32.60	31.30	30.00	28.60	
JWLG-DBL-40	30	27.60	26.30	25.20	24.20	23.30	22.40	21.50
	40	33.00	31.90	30.80	29.70	28.60	27.50	26.30
	50	40.10	38.90	37.60	36.20	34.80	33.20	
JWLG-DBL-50	30	33.00	31.40	39.90	28.60	27.40	26.20	24.90
	40	39.30	37.70	36.30	34.90	33.50	32.10	30.80
	50	47.40	45.80	44.20	42.60	41.00	39.30	
JWLG-DBL-60	30	40.00	37.60	35.70	34.10	32.70	31.40	30.20
	40	47.90	46.00	44.30	42.70	41.20	39.70	38.30
	50	58.30	56.60	54.80	52.90	51.00	48.90	
JWLG-DBL-70	30	44.00	41.90	40.20	38.60	37.20	35.80	34.50
	40	52.40	50.60	48.90	47.20	56.60	43.90	42.20
	50	63.30	61.50	59.60	57.50	55.40	53.00	
JWLG-DBL-75	30	48.30	45.70	43.50	41.60	39.80	38.10	36.40
	40	57.00	54.70	52.60	50.60	48.70	46.80	44.90
	50	68.30	66.10	63.90	61.70	59.50	57.20	
JWLG-DBL-100	30	54.60	52.70	50.50	48.60	46.30	44.10	42.20
	40	68.70	66.40	64.30	62.10	60.50	58.40	56.60
	50	80.20	78.20	76.30	76.30	72.40	70.10	
JWLG-DBL-120	30	58.30	56.90	54.20	52.30	50.40	48.80	46.30
	40	71.20	69.30	67.40	65.70	63.40	61.30	59.70
	50	82.10	80.30	78.20	76.40	74.60	72.60	
JWLG-DBL-140	30	62.10	60.30	58.70	56.70	54.70	52.10	50.90
	40	73.30	71.20	69.40	47.40	65.40	63.20	61.20
	50	84.20	82.30	80.90	78.80	76.30	74.30	

R22

！Note:use the R22 refrigerant,you need an ester oil 100 or B150SH

！注意：使用 R22 制冷剂时，需使用酯类油 100 或者 B150SH

Performance parameters
Based on 10k suction superheat,without Liquid subcooling

性能参数（50Hz）
基于 10K 吸气过热度，无液体过冷

Verdichter Typ / Compressor Type / 压缩机型号	Motor-Version / 电机类型 ①	Forder-Version 50HZ / Displace-ment 50HZ / 排气量 50HZ m^3/h②	Forder-Volume 60HZ / Displace-ment 60HZ / 排气量 60HZ m^3/h②	gewicht / weight / 重量 kg	Rohranschlusse / Pipe connections / 管路连接 排气 Druckleitung Mm zoll / Discharge line mm inch / 毫米 英寸	吸气 Saugleitung Mm zoll / Suction line mm inch / 毫米 英寸	Leistungs-Stufen nominal / Capacity Steps nominal / 能量调节 %③	Motor-Anschluss / Motor Connec-tion / 电源 ④	Max. Betriebs-strom / Max. Orerating current / 最大工作电流 A⑤	Max. Leistungs-aufnahme / Mzx. Power Consum. / 最大功率 kw⑤	Anlauf-Strom (Rotorblockiert) Starting current (lockedrotor) / 启动电流堵转 A△/△△
JWLG-ZBL-15	1	34.73	41.92	126	35 1 3/8"	42 1 5/8"	无		19.9	17	59/99
JWLG-DBL-10	1	34.73	41.92	116	35	42	无		19.9	15	59/99
JWLG-ZBL-20	1	63.5	76.63	130	35 1 3/8"	42 1 5/8"	无		30.8	22	97/158
JWLG-DBL-15	1	63.5	76.63	120	35	42	无		30.8	19	81/132
JWLG-ZBL-30	1	84	101	170	42 1 5/8"	54 2 1/8"	无		52	33	126/218
JWLG-DBL-20	1			166			无		48	29	129/201
JWLG-ZBL-40	1	118	142	183	42 1 5/8"	54 2 1/8"	无		66	42	182/311
JWLG-DBL-30	1			174			无	400v±10%	58	37	153/266
JWLG-ZBL-50	1	140	168	238	42 1 5/8"	54 2 1/8"	100/85/60	△/△△-3-50HZ	79	50	206/355
JWLG-DBL-40	1			234			100/75/50	400v±10%	65	40	187/313
JWLG-ZBL-60	1	165	198	246	42 1 5/8"	54 2 1/8"	100/80/55	△/△△-3-60HZ Partwinding	98	65	267/449
JWLG-DBL-50	1			238			100/75/45		79	50	206/355
JWLG-ZBL-70	1	192	232	305	54 2 1/8"	76 3 1/8"	100/75/45		124	75	290/485
JWLG-DBL-60	1			297			100/80/65		98	65	267/449
JWLG-ZBL-80	1	220	266	314	54 2 1/8"	76 3 1/8"	100/70/40		144	85	350/485
JWLG-DBL-70	1			310			100/75/60		124	75	290/485
JWLG-ZBL-90	1	250	302	336	54 2 1/8"	76 3 1/8"	100/60/40		162	92	423/686
JWLG-DBL-75	1			326			100/75/55		144	85	350/585
JWLG-ZBL-120	1	320	384	342	76 3 1/8"	108 4 2/5"	100/75/50		155	124	439/675
JWLG-DBL-100	1			330			100/75/50		155	106	439/675
JWLG-ZBL-140	1	410	495	348	76 3 1/8"	108 4 2/5"	100/75/50		216	132	612/943
JWLG-DBL-120	1			340			100/75/50			120	612/943
JWLG-ZBL-160	1	470	567	365	76 3 1/8"	108 4 2/5"	100/75/50		260	148	729/1114
JWLG-DBL-140	1			360			100/75/50			135	729/1114

①Motor 2:particularly for R134a optimised com-
Pressor series for air conditioning and medium
Temperature application up to max.65℃ con-
Densing temperature

②With 2900 min^{-1}(50Hz)
With 3500 min^{-1}(50Hz)

③Effective capacity steps are dependent upon
Operating conditions
Z models-10/45℃(Without ECO)
D models-35/40℃(Without ECO)

④For other electrical supplies upon request

⑤For the selection of contactors,cables and
Fuses the max.operating current/max.
Power consumption must be considered.
Contactors:operational category AC3
Winding partition:50%50%
PW:Select both motor contactors for approx.
60% of the maximum operating current

①电机 2：专门为在高温和中温工况应用
R134a 制冷剂优化设计的电机，最大冷凝温度可以到
65 度

②2900 转/分钟（50Hz）
3500 转/分钟（60Hz）

③有效的能量调节级数取决于运行工况
Z 系列-10/45℃（不带经济器 ECO）
D 系列-35/40℃（不带经济器 ECO）

④其他类型电源备询

⑤选择继电器、电缆、熔断器时，必须考虑最大工作电
流和最大功率。
继电器：AC3
分线圈线圈比例：50%/50%
分线圈启动时，根据最大工作电流的 60%选择

安装使用要求

1、焊接压缩机吸、排气管路时，尽可能将阀卸下，以避免截止阀密封垫片损坏，并使用湿布包裹，防止阀内密封件受热损坏，影响密封性能。

2、制冷系统的其他设备（如冷凝器、储液器、油分离器、干燥过滤器、蒸发器等）以及其连接管道必须严格

清理和干燥处理，系统内不得残留焊渣、锈斑、氧化皮、水份等杂质。

3、压缩机出场前已入 0.05-0.1MPa 干燥氮气，启封后应尽快安装制冷系统中，以免造成压缩机内部零件锈蚀。

4、系统安装结束后，应进行压力、真空和制冷剂三种方法检漏，真空检验用于真空泵抽空到 1.3KPa（10mmhg)以下，严禁用压缩机自行抽空。

5、螺杆压缩机出 时 注入我公司制定的冷冻油，系统运行后，部分冷冻机油会带入系统造成油位下降，因此需要进行补充。不应使用长久暴露在大气中的冷冻油，不要将压缩机内倒出的冷冻油继续回用。

6、压缩机电机接线盒接好线后，需要 704 防水密封接线座，以防止系统运行时接线座产生凝露和结霜，影响电机的绝缘性能。

7、压缩机应可靠接地，以确保安全。若要打开电机接线盒，必须切断电源。不允许接线盒未装好前接通电源进行操作。

8、风冷冷凝器在接通风机电源时，应注意其转向，使风机产生气流朝向压缩机。

注意事项

1、为了确保压缩机能安全可靠的运行，请遵照使用说明书中要求进行安装，并将制冷系统保持在使用范围内使用。建议在吸气截止阀前装吸气过滤器，并定期检查和清洗，以保护压缩机和电机不会受到伤害。

2、主电源必须用交流电或继电器启动。

3、制冷系统中必须安装保护装置：如高、低压继电器、温度继电器、热过载继电器、油压差继电器、电机保护器和排气超温保护器。

4、严禁压缩机吸、排气阀未打开前接通电源启动压缩机，否则会对机及人员造成机械、电气损伤。

5、压缩机应在排气压力和吸气压力平衡的情况下启动，停机后吸、排气压尚可达到平衡时不要急于启动。压缩机应避免频繁启动。1 小时内开停机次数应少于 6 次，每次停机间隙时间不应少于 5 分钟。

6、不能用压缩机自行抽真空，以免损坏压缩机。严禁在真空状态下给压缩机通电。

7、发现冷冻油油位下降或者变脏时需及时添加或更换。不能加入与型号不能的或长期暴露在空气中导致含水量多的不合格的冷冻机油，否则会引起高温碳化、低温析腊、电机绝缘受损、系统回油困难等故障。

8、严禁使用氧气、压缩空气及其他可燃性，对压缩机机制冷系统进行试压检漏。

Installation and use requirements

1.When welding the suction and exhaust pipes of compressor, the valve should be unloaded as far as possible to avoid damaging the sealing gasket of globe valve and wrapped with wet cloth to prevent the sealing parts in the valve from being damaged by heat and affecting the sealing performance.

2.Other equipment of refrigeration system (such as condenser, reservoir, oil separator, drying filter, evaporator, etc.) and its connecting pipes must be cleaned and dried strictly. No welding slag, rust spots, oxide scale, moisture and other impurities should be left in the system.

3. The compressor has entered 0.05-0.1 MPa dry nitrogen before it leaves the field. The refrigeration system should be installed as soon as possible after opening the seal to avoid rusting of the compressor internal parts.

4. After the system is installed, leak detection by pressure, vacuum and refrigerant should be carried out. Vacuum inspection is used for vacuum pump to be evacuated below 1.3KPa (10mmhg), and compressor is prohibited strictly to be used for self-evacuation.

5. The screw compressor is injected with the refrigerating oil formulated by our company when it goes out. After the system runs, part of the refrigerating oil will be brought into the system and the oil level will drop, so it needs to be supplemented. Refrigerated oil that has been exposed to the atmosphere for a long time should not be used. Refrigerated oil poured from the compressor should not be reused.

6. After the connection box of compressor motor is connected, 704 waterproof and sealed wiring base is needed to prevent condensation and frost formation of wiring base when the system is running, which affects the insulation performance of the motor.

7, the compressor should be reliably grounded to ensure safety. If you want to turn on the electrical junction box, you must cut off the power supply. It is not allowed to turn on the power supply before the junction box is installed.

8. When the air-cooled condenser is connected to the fan power supply, attention should be paid to its steering, so that the fan produces air flow toward the compressor.

Matters needing attention

1. In order to ensure the safe and reliable operation of the compressor, please follow the instructions for installation, and keep the refrigeration system reliable in use. It is recommended that suction filters showd be installed before suction globe valves and inspected and cleaned to periodically protect compressors and motors from damage.

2. the main power source must be started by alternating current or relay.

3. Protective devices must be installed in the refrigeration system, such as high and low voltage relays, temperature relays, thermal overload relays, oil pressure differential relays, motor protectors and exhaust overtemperature protectors.

4. Prohibit strictly compressor suction, exhaust valve not open before the power supply starting the compressor, otherwise it will cause mechanical and electrical damage to the machine and personnel.

5. The compressor should start when the exhaust pressure and suction pressure are balanced. Do not start immediately when the suction and exhaust pressure can reach the balance after shutdown. Compressor should not start. frequently The number of shutdowns should be less than 6 times per 1 hour, and the interval should not be less than 5 minutes.

6, do not cold with the compressor to evacuated itself, so as not to damage the compressor. It is prohibited strictly to electrify the compressor in vacuum.

7. it is necessary to add or replace the refrigerant oil level down or dirty. The unqualified refrigerating oil which can not be added to the model or exposed to the air for a long time will cause high temperature carbonization, low temperature wax precipitation, motor insulation damage, system oil return difficulties and other failures.

8. Prohibit strictly the use of oxygen, compressed air and other combustible, compressor refrigeration system for pressure leak detection.

五、半封闭螺杆压缩机系列使用范围

项目	R22	R134a	R404a	R407a	R407b	R407c
制冷剂 蒸发温度 Evaporation temperature	-40～+12.5℃	-20～+12.5℃	-40～+10℃	-40～+10℃	-40～+10℃	-30～+10℃
冷凝温度 Condensing temperature	30～40℃（水冷）30～45℃（WARET COOLED）			30～50℃（水冷）30～45℃（WARET COOLED）		
最大压力差 MAX.compression ratio	1.83MPa					
最大压缩比 MAX.compression ratio	18					
最高排气温度 MAX.disscharge temperature	105℃（排气管表面）(Dischar ge pipe sur fare)					
吸气过热度 Suction superheat	最小：10℃ 最大：保证排气温度小于135℃时最大过热度 Min:10℃ Max:Value which maintains the discharge temperaalure below 135℃					
最高油温 MAX.lil temperature	80℃					
电源 Power supply	3ph 380/440v 50/60Hz					
电机温度 Motor temperature	105℃以下 below 105℃					
冷冻机油 Refrigerant oil	SUNINSO 3GS			SUNISO SL32S		
最高环境温度 MAX.ambient temperature	43℃					

注：①蒸发温度低于-20℃时，系统应安装气液分离器，电路设计成负压（抽真空）停机，可以保证系统回油，防止产生“液击”损坏压缩机。另外必须更换冷冻机油，可以选用凝点较低的冷冻机油。②表中压力均为表压。

Note: 1. When the evaporation temperature is below - 20 C, the system should install a gas-liquid separator. The circuit is designed as a negative pressure (vacuum pumping) shutdown, which can ensure the oil return of the system and prevent the "liquid hammer" from damaging the compressor. In addition, refrigerating oil must be replaced and cryopreserved oil with low freezing point can be used. 2. The pressure in the table is gauge pressure.

故障及排除方法

故障	分析原因	排除方法
高压压力过高	系统内混入空气或其他气体	将制冷剂回收至冷凝器或储液器内并在高处排除空气
	冷凝器散热不好	冷凝面积不足必须更换冷凝器，水冷式准凝器要清除水垢及污垢，检查进出口水温及水流量，风冷冷凝器要检查翅片清洁度，进出口通道是否畅通，风扇风向和转向是否正确
	排气管路部份阻塞	检查排气管路阀件是否全开
	吸气压力过高	检查吸气系统是否有问题
	冷凝器中积油过多	检查油分离器工作是否正常，回油管路是否阻塞
	制冷剂充注过量	回收多余制冷剂
高压压力过低	制冷剂不足或泄漏	消除泄漏点并适当添加制冷剂
	冷凝器换热太强	调整水冷冷凝器水流量不能过大
	环境温度太低	减小风或增加气流阻力
	吸气压力过低	参看吸气压力过低内容叙述
	蒸发器传热面积过大或者压缩机制冷量偏小	根据负荷计算蒸发器传热面积或者添加制冷剂
低压压力过高	膨胀阀选型不对或供液太多	更换膨胀阀或减小开度
	膨胀阀感温包位置不正确或保温不好	固定感温包至正确位置并将感温包用绝热材料包扎好
	制冷剂充注过量	回收多余制冷剂
	蒸发压力调节阀调节不当	根据低压表度数进行调整
	制冷剂填充不足或者泄漏	消除泄漏点并适当添加制冷剂
低压压力过低	管路部分阻塞	检查管路上的阀件是否开足，干燥过滤器是否脏堵
	膨胀阀未配置或开启度开的过小	更换膨胀阀或增加开启度
	膨胀阀感温包充注剂泄漏	更换膨胀阀

故障	分析原因	排除方法
排气温度过高	排气压力过高	参看高压压力过高内容叙述
	压缩机冷却不足	检查冷凝系统
	吸气管过长和未进行绝热	加强吸气管的绝热措施
	电机故障绕组异常升温	检查电机发热原因，属电机毛病应更换
压缩机噪音增大	转子轴承磨损过大	更换轴承
油压下降	冷冻油油面下降、油量不足	添加冷冻油到规定油面
	低压压力过低	检查系统是否脏堵
	油分离器故障	针对不回油原因进行修理或更换
油耗增加，油面下降过快	管路集油，回油不畅	检查管路设计造成不回油原因进行调整
	管路泄漏	找到泄漏处予以处理，再补充充油量
电机温度过高	电源电压太低或太高	检查电源，使电压控制在额定电压的±5%以内
	缺相运转	检查线路接头，接触器触头是否烧坏，熔断器是否断开
	三相电压不平衡	三相之间电压不平衡不能超过 5%
	电机绕组匝间短路	更换电机绕组
	电机过载	检查运动零件是否润滑不良或冷冻油太脏引起的负荷加大以及吸气压力是否过高
	压缩机停开频繁	检查故障是否来自温度继电器差值太小油压差继电器、高压继电器或电机保护器起作用
压缩机不能启动	安全保护装置是否动作或损坏	排除其中的保护期的保障或更换
	电机损坏	更换电机
	缺油轴承抱轴	更换有关配件

fault	Analysis of reasons	Elimination method
High pressure is too high	Mixing air or other gases into the system.	Recycle refrigerant into condenser or reservoir and remove air at high altitude.
	The condenser doesn't heat well.	Water-cooled quasi-condenser should remove fouling and dirt, check inlet and outlet water temperature and water flow, air-cooled condenser should check fin cleanliness, inlet and outlet passage is unobstructed, fan cooling and steering is correct.
	Exhaust pipe partially blocked	Check whether exhaust valve is fully open.
	Inspiratory pressure too high	Check if there is a problem with the suction system.
	Too much oil in the condenser.	Check whether the oil separator works normally and whether the oil return line is blocked.
	Refrigerant overcharge	Recovery of excess refrigerants
High pressure pressure is too low.	Inadequate refrigerant or leakage	Eliminate leakage points and properly add refrigerants.
	Condenser heat transfer is too strong.	Adjust water cooled condenser water flow can not be too large.
	The ambient temperature is too low.	Reducing wind is increasing airflow resistance.
	Low inspiratory pressure	See the low intake pressure.
	The heat transfer area of evaporator is too large or the cooling capacity of compressor mechanism is too small.	Calculate the evaporator heat transfer area or refrigerant according to the load.
Low pressure is too high.	Incorrect selection of expansion valve or too much liquid supply.	Replace expansion valve or reduce opening.

	The temperature of the expansion valve is incorrect or the insulation is not good.	Fix the thermosensitive package to the correct position and wrap the temperature with the insulation material.
	Refrigerant overcharge	Recovery of excess refrigerants
	Improper adjustment of evaporation pressure regulating valve	Adjust according to the low voltage meter.
	Inadequate refrigerant filling or leakage.	Eliminate leakage points and properly add refrigerants.
Low pressure pressure too low	Partial obstruction of pipeline	Check whether the valve on the pipeline is open enough and whether the filter is dirty or not.
	The expansion valve is not configured or opened too small.	Replace expansion valve or increase opening degree.
	Expansion valve temperature sensitive charge charge leakage	Replacement expansion valve
Exhaust temperature too high	Exhaust pressure too high	Refer to high pressure and excessive content.
	Insufficient cooling of compressor	Check the condensing system
	The suction tube is too long and is not insulated.	Strengthening insulation measures of suction pipes
	Abnormal temperature rise of motor fault winding	Check the cause of motor fever. It should be replaced by clicking.
Compressor noise increased	Excessive wear of rotor bearing	Replacement bearing
Oil pressure drop	The oil level of refrigerant oil is reduced and the oil volume is insufficient.	Add refrigerated oil to the specified oil level.
	Low pressure pressure too low	Check whether the system is dirty.
	Oil separator fault	Repair or replace the reasons for not returning oil.
Oil consumption	Oil gathering and poor oil return.	Check piping design and cause no oil return.

increased, oil surface fell too fast	Pipeline leakage	Find the leak and deal with it and replenish the oil.
The temperature of motor is too high	The supply voltage is too low or too high.	Check the power supply, so that the voltage is within 5% of the rated voltage.
	Lack of phase operation	Check the connection of the line, whether the contactor contact is burned or not, and whether the fuse is broken.
	Three phase voltage imbalance	Voltage imbalance between three phases should not exceed 5%
	Inter turn short circuit of motor windings	Replacing motor windings
	motor overload	Check whether the moving parts are not lubricated properly or the load caused by dirty refrigerating oil is increased and whether the suction pressure is too high.
	Compressor shut down frequently	Check whether the fault is caused by too small difference of temperature relay, oil pressure differential relay, high voltage relay or motor protector
The compressor can't start.	Safety protection device whether action or damage	Exclude the protection or replacement of the protection period.
	Motor damage	Replace motor
	Oil deficient bearing axle	Replacement of accessories

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