

● 应用范围与使用条件 Applying range

该系列压缩机在冷凝温度 $\leq 40^{\circ}\text{C}$ ，蒸发温度单级 $+5^{\circ}\text{C}\sim 30^{\circ}\text{C}$ 双级 $-25^{\circ}\text{C}\sim -45^{\circ}\text{C}$ 的范围内，广泛应用于国民经济各部门中需要实现制冷的场合。如石油、化工、制药等工业产品的生产，国防、科研方面后低温试验，食品的低温加工贮藏和运输，工厂、医院及公共场所等大型建筑的空气调节等。

The series of compressors which are designed to the condensing temperatures below 40°C and evaporator temperatures of $+5^{\circ}\text{C}\sim 30^{\circ}\text{C}$ for single-stage and -25°C to -45°C for tow-stage can be applied to equipment for refrigeration, freezing and air conditioning applications.

● 压缩机的使用条件 Working condition

工质 Refrigerant 项目 Item	单级 Single-stage		双级 Two-stage	
			R717 R22	
	R717 R22	R12	低压级 L.P.	高压级 H.P.
最高排气压力 MPa (表压) Max.discharge pressure MPaG	≤ 1.5	≤ 1.15	≤ 0.7	≤ 1.5
最高排气温度 $^{\circ}\text{C}$ Max.discharge temperature $^{\circ}\text{C}$	≤ 150	≤ 130	≤ 120	≤ 150
最大压力差 MPa Max.Paessure difference MPaG	≤ 1.4	≤ 1.2	≤ 0.8	≤ 1.4

● 结构 Construction

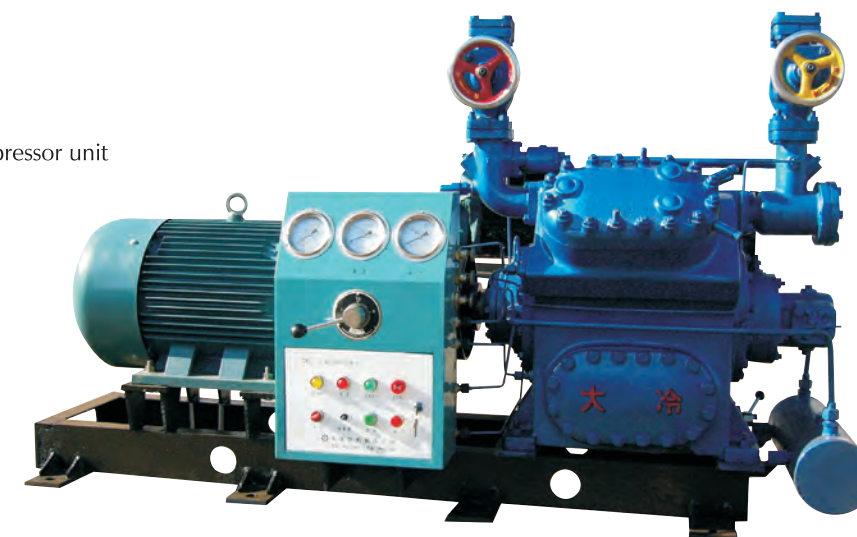
该系列压缩机在单级和单机双级两种机型，均属高速多缸逆流活塞式压缩机。设有能量调节装置。可实现无负荷启动。设有装放油三通阀。可在运转中加油，机器用联轴器直接与电机联接。

压缩机组压缩机、电动机、联轴器、控制(自动保护)台所组成，按装在同一公共底座上。控制台上装有高压、中压、油压继电器，保护机器运行安全可靠。

This series of compressors which are available in single-stage and internally compound stage types and with R717 ,R12 R22 are counter flow reciprocating compressors of high speed and multicylinder,These compressors Featruue capacity controls which can effect no-load starting, oil charge and drain valves being able to errect charging oil during run if needed, And they are directly coupling ,control panel (auto-natic protection) which are mounted on a common base. The control panel has high pressure ,intermediate pressure and oil pressure relays which ensure running reliability of the machine.

4AV10型氨制冷压缩机

Model 4AV10 ammonia refrigerating compressor unit



8AS12.5型氨制冷压缩机

Model 8AS12.5 ammonia refrigerating compressor unit



8ASJ17型氨制冷压缩机

Model 8ASJ17 ammonia refrigerating compressor unit

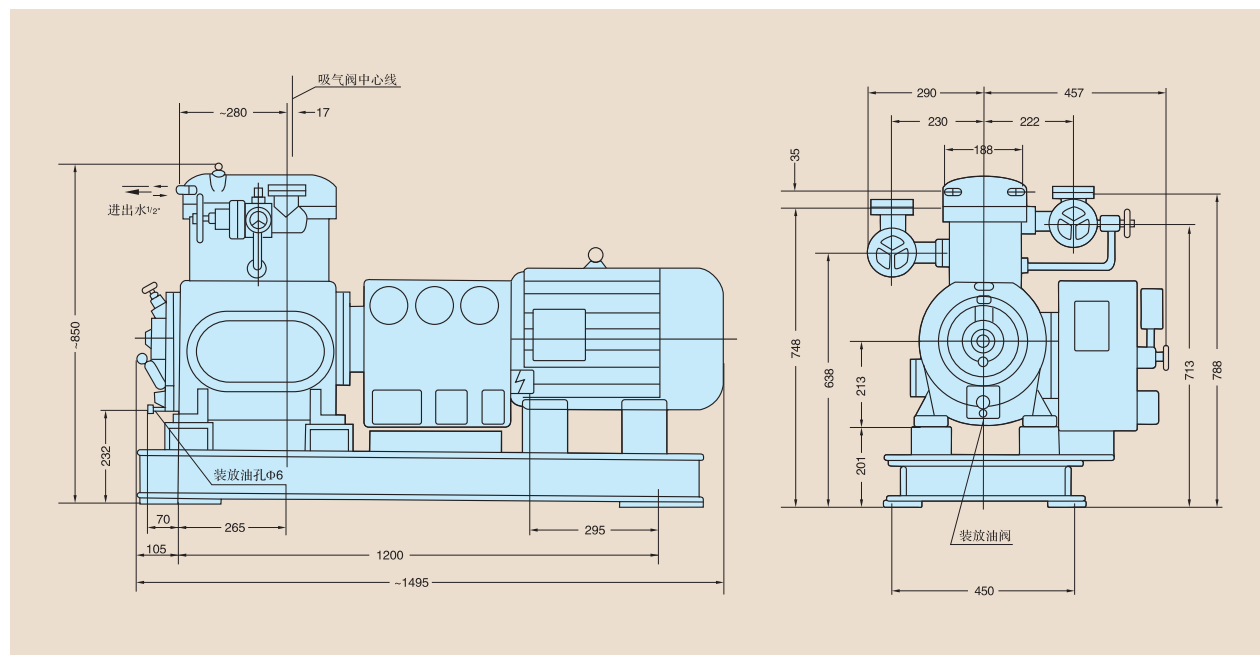


100 Series Reciprocating Refrigeration Compressor Unit

100系列活塞式制冷压缩机组

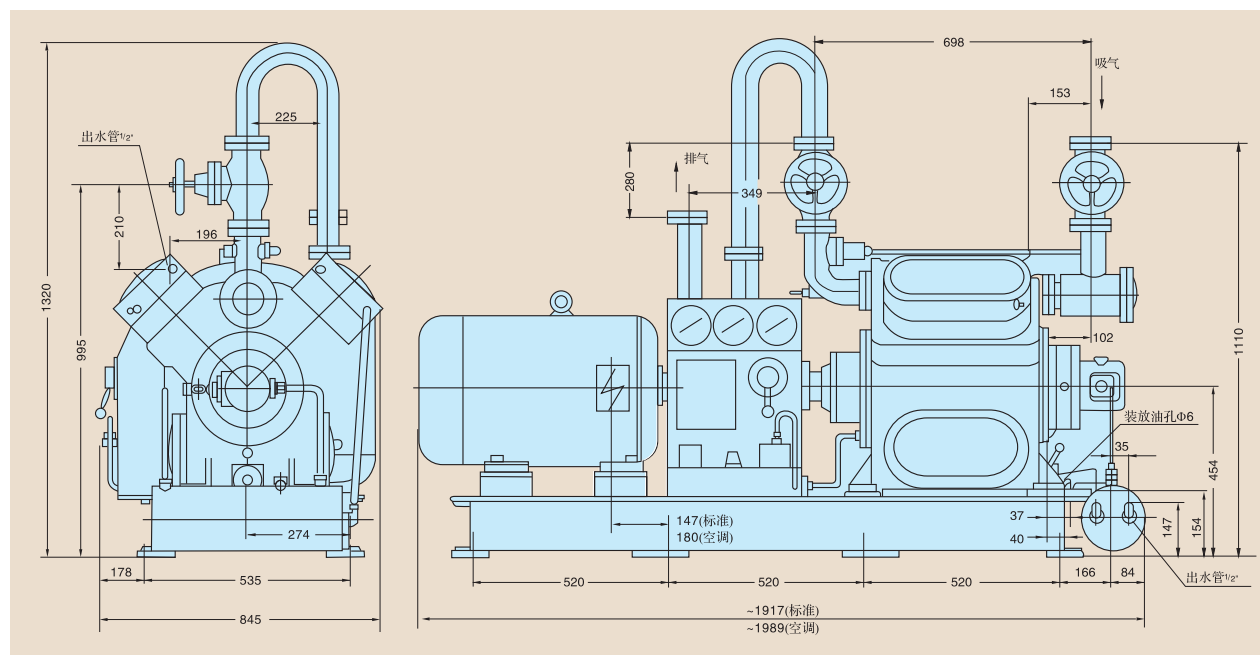
▼ 2AZ10型外形尺寸

Outside dimensions of 2AZ10 compressor unit



▼ 4AV10型外形尺寸

Outside dimensions of 4AV10 compressor unit

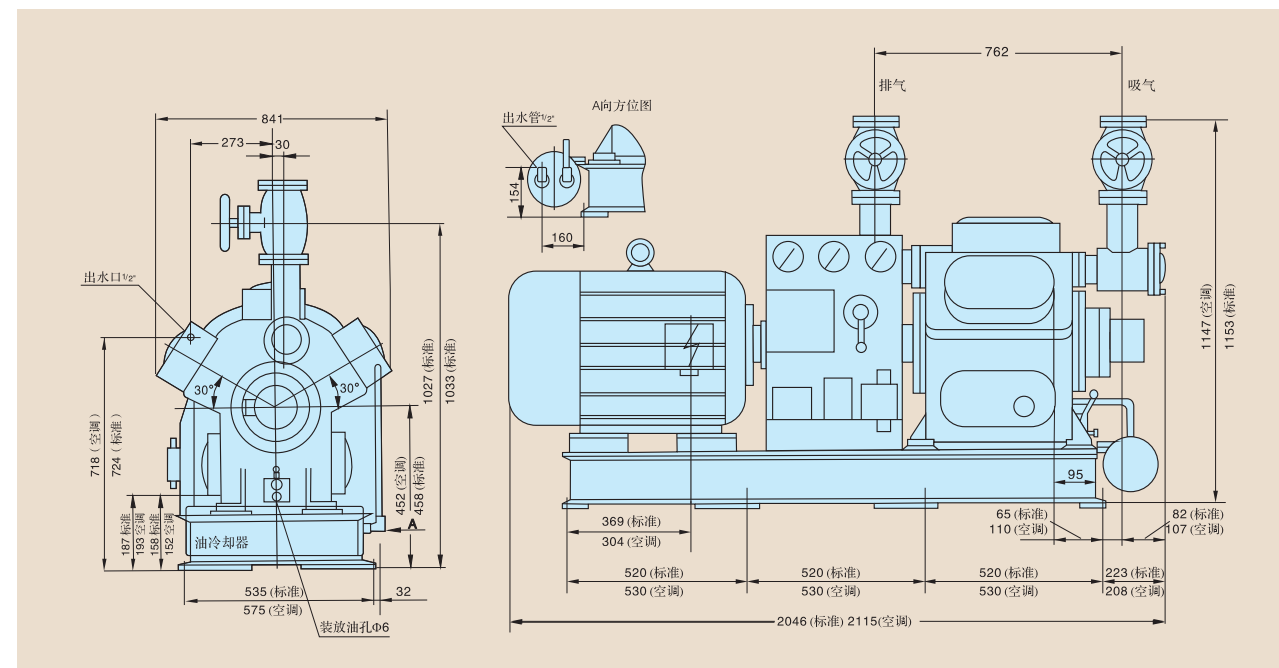


100 Series Reciprocating Refrigeration Compressor Unit

100系列活塞式制冷压缩机组

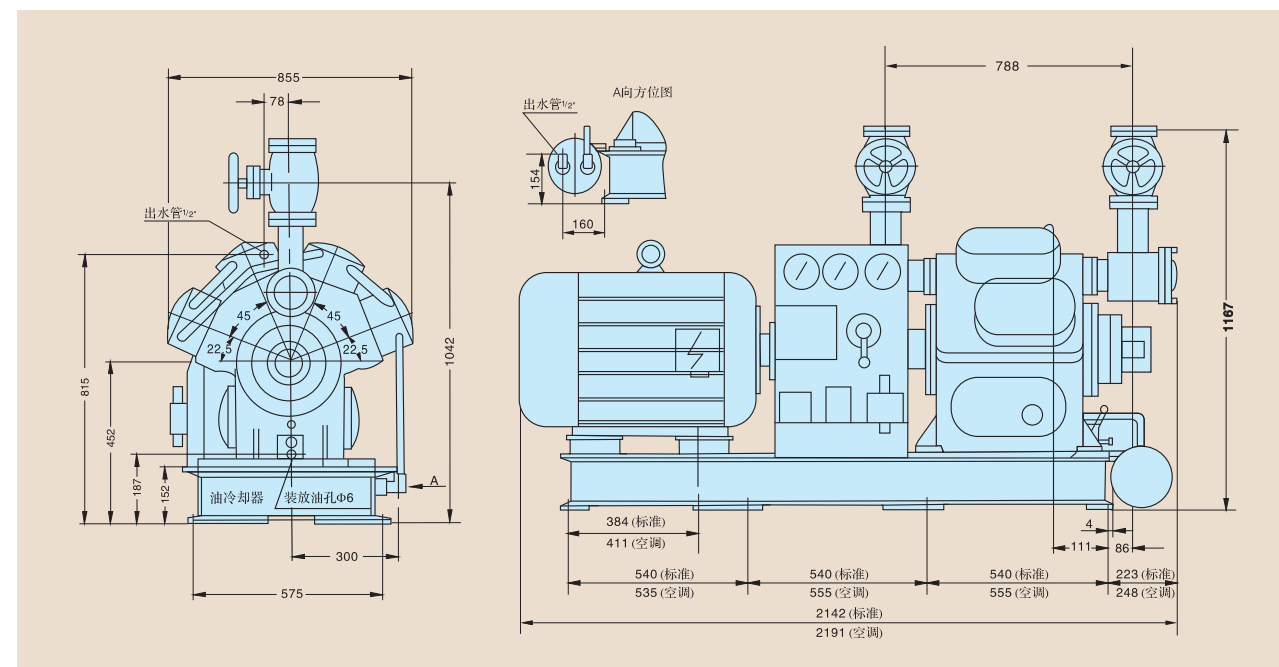
▼ 6AW10型外形尺寸

Outside dimensions of 6AW10 compressor unit

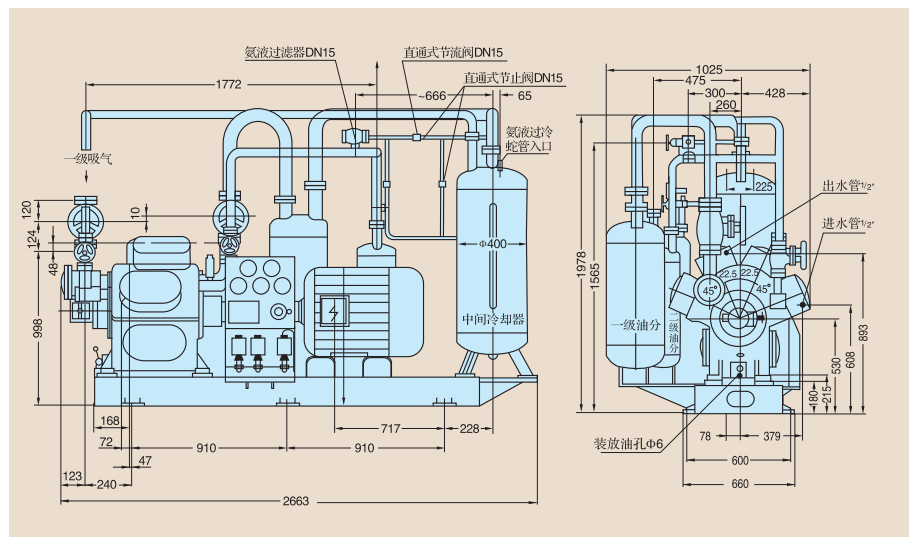


▼ 8AS10型外形尺寸

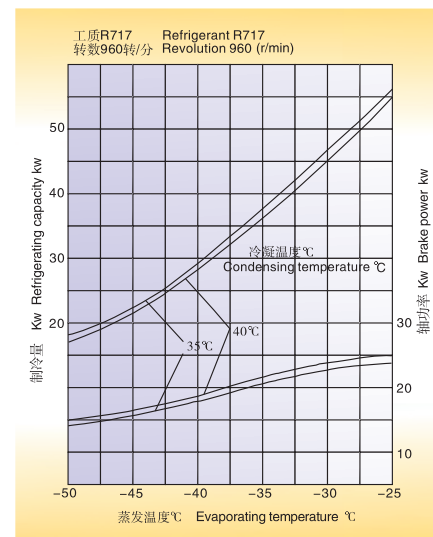
Outside dimensions of 8AS10 compressor unit



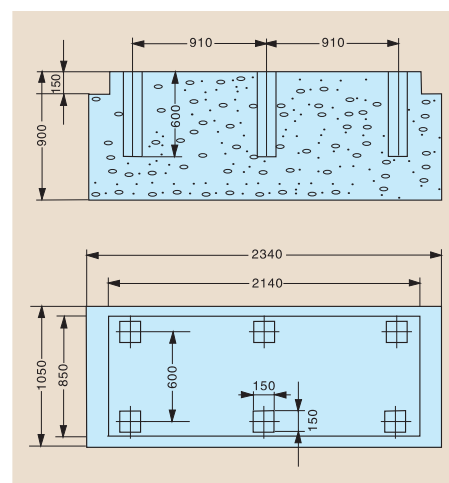
▼8ASJ10型外形尺寸
Outside dimensions of 8ASJ10 compressor unit



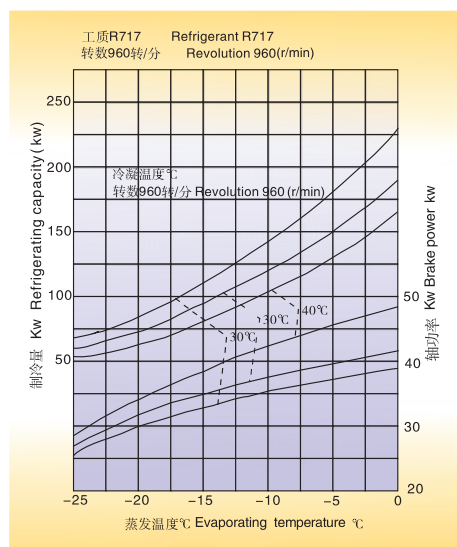
▼ 8ASJ10型性能曲线
Performance curves of 8ASJ10



▼ 8ASJ10型基础图
Foundation drawing of 8ASJ10



▼8AS10型性能曲线 Performance curves of 8AS10



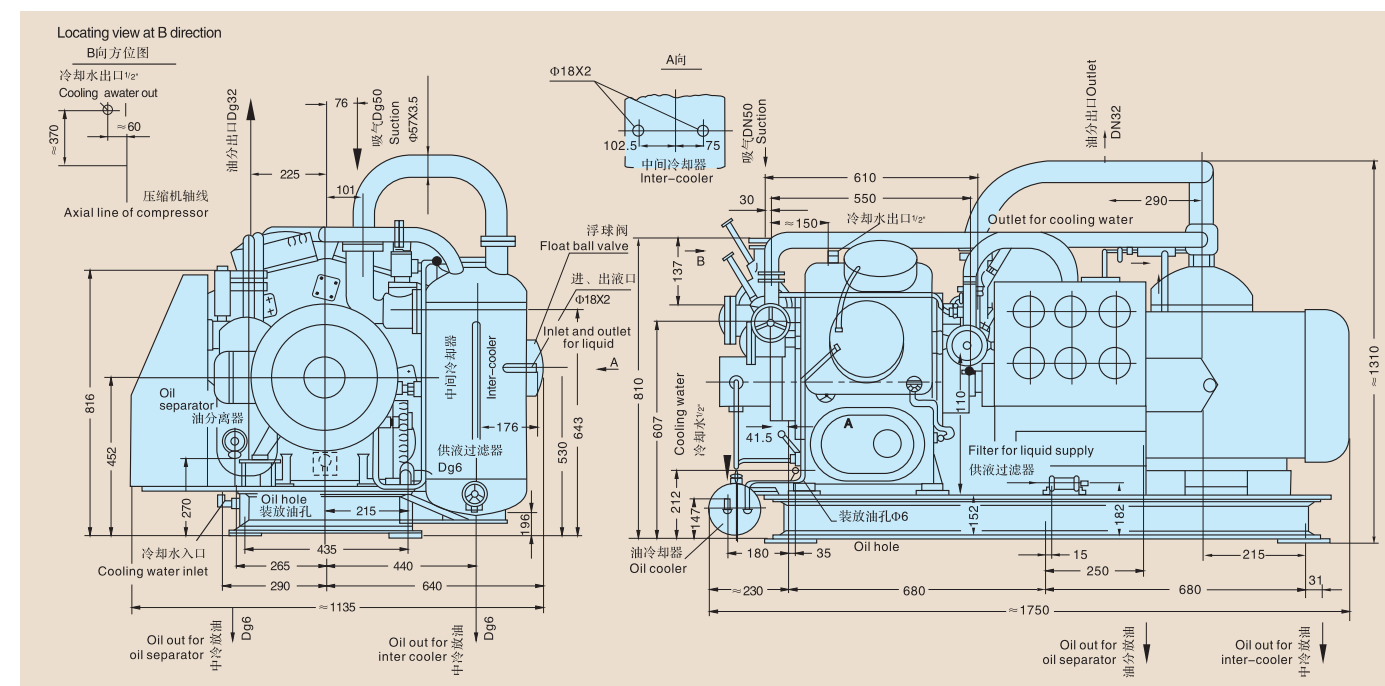
注：

- 性能曲线中所示的制冷量及轴功率均为8AS10制冷压缩机实测数据，在求2,4,6缸单级制冷压缩机的制冷量及轴功率时，可将表中数值按气缸数加以折算。如6AW10的制冷量为8AS10的3/4倍，轴功率也为8AS的3/4倍。
- 数据是在过冷度及过热度均为5℃时测得的。

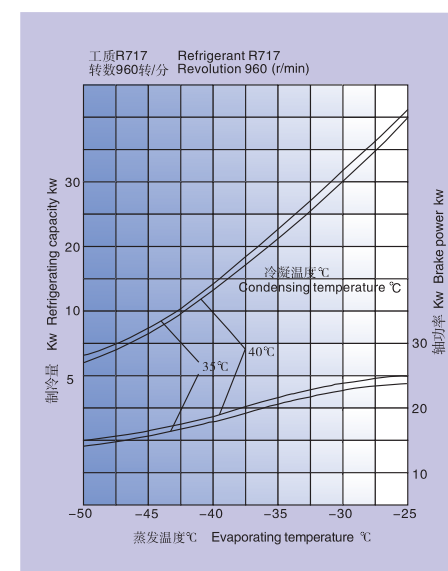
Note: 1. These performance curves are plotted the measured values for the 8AS10 compressor. They can be adopted in calculating the refrigerating capacity and shaft power values of the single stage compressors of 2, 4, 6, cylinders by converting the values plotted on the chart by the number of cylinders. For example, the refrigerating capacity and shaft power for the 6AW10 compressor are 3/4 of those of the 8AS10 compressor.

2. The degree of superheat and degree of subcooling of 5°C are conditioned for the measured values.

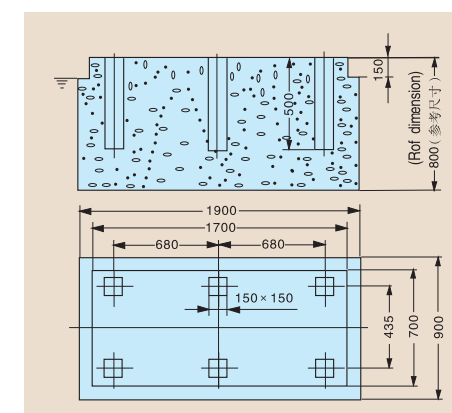
▼ 4ASJ10型外形尺寸
Outside dimensions of 4ASJ10 compressor unit

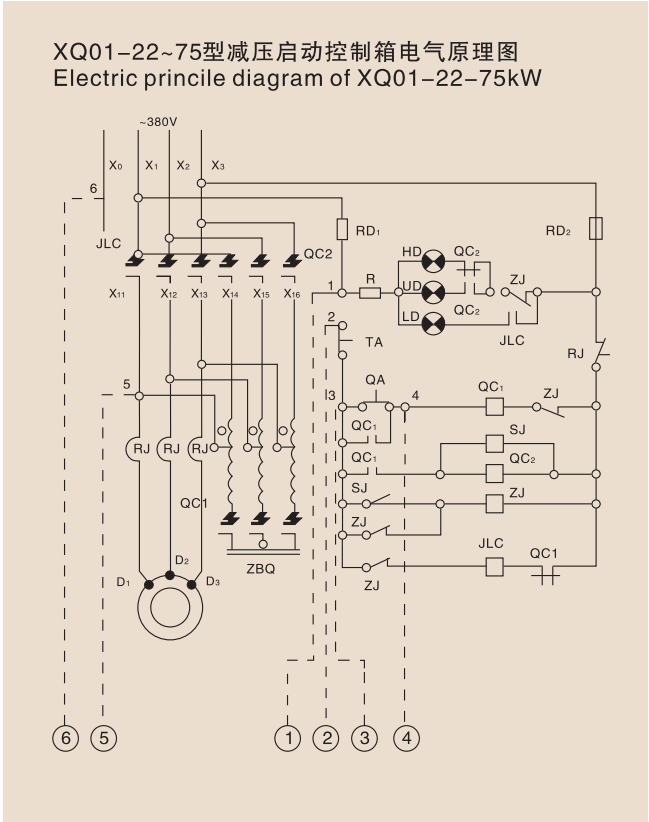


4ASJ10性能曲线
Outside dimensions of 4ASJ10 compressor unit

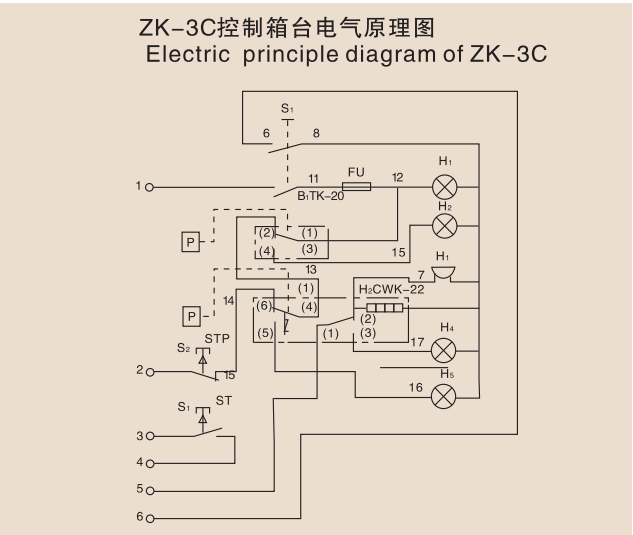
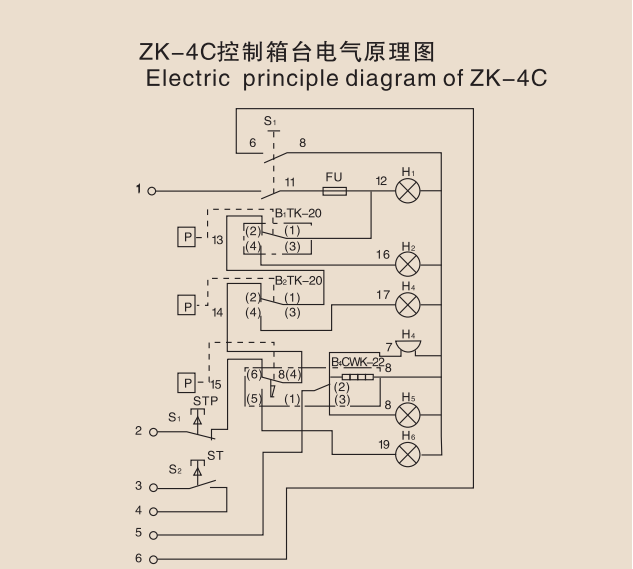


4ASJ10基础图
Foundation drawing of 4ASJ10





代 号	名 称	Name
S1	电源开关	Power switch
S2	停止开关	Stop switch
S3	起动开关	Start switch
H1	电源指示灯	Power indication
H2	一级排气保护指示	1-stage discharge prevention indication
H3	二级排气保护指示	2-stage discharge prevention indication
H4	蜂鸣器	Buzzer
H5	正常运行指示	Normal run indication
B1	一级排气保护压力控制	1-stage discharge pressure prevention controuer
B2	二级排气保护压力控制	2-stage discharge pressure prevention controuer
B3	油压保护压力控制器	Oil pressure prevontion controuer
FU	熔断器	Fuse



代 号	名 称	Name
S1	电源开关	Power switch
S2	停止开关	Stop switch
H1	电源指示	Power indication
H2	排气保护指示	Discharge prevontion indication
H3	蜂鸣器	Buzzer
H4	正常运行指示	Normal run indication
B1	排气保护压力控制	Discharge prevontion controller
B2	油压保护压力控制器	Oil pressure prevontion controuer
FU	熔断器	Fuse

注： 电控原理图以随机文件为准

▼ 100系列配件明细表Spare parts list of 100 series compressors

序号 No .	图号 Drawing No .	名称	Part	单位 Unit	每台数量 Quantity per set					
					2AZ10	4AZ10	6AW10	8AS10	4ASJ10	8ASJ10
1	2110-01-2	主轴承	Main bearing	个pcs	2	2	2	2	2	2
2	2113-02-00	曲轴组件	Crankshaft assembly	组set	1					
3	2112-02-00			组set		1				
4	2111-02-00			组set			1			
5	2110-02-00			组set				1	1	1
	2116-02-00									
6	2110-03-00	连杆组件	Connecting-rod assembly	组set	2	4	6	8		6
7	2115-12-00	活塞连杆组件	Piston connecting-rod assembly	组set					4	2
8	2110-03-3	大头衬套	Large end metal	副set	2	4	6	8	4	8
9	2110-03-1	小头衬套	Small end bushing	个pcs	2	4	6	8		
10	2115-12-1	滚针外套	Needle outer bushing	个pcs					4	2
11	2113-04-00	轴封组件	Shaft seal assembly	组set	1					
	2112-04-00					1	1	1	1	1
12	2110-04-2	定环	Fixed ring	个pcs	1	1	1	1	1	1
13	2110-04-5	动环	Movable ring	个pcs	1	1	1	1	1	1
14	2113-10-100	油泵组件	Oil pump assenbly	组set	1					
15	2115-10-400			组set		1	1	1	1	1
	2110-10-400									
	2116-10-400									
16	2110-12-00	活塞组件	Piston assembly	组set	2	4	6	8		6
17	2110-12-2	密封环	Pistonring	个pcs	4	8	12	16	8	16
18	2110-12-3	刮油环	Oil ring	个pcs	2	4	6	8	4	8
19	2110-12-4	活塞销	Piston pin	个pcs	2	4	6	8	4	8
20	2113-13-00	气阀缸套组件	Valve cylinder-liner assembly	组set	2					
21	2110-13-00			组set		4	6	8		
22	2115-13-00			组set					3	6
23	2115-23-00			组set					1	2
24	2110-13-7	排气阀片	Discharge valve plate	个pcs	2	4	6	8	4	8
25	2110-13-10	吸气阀片	Suction valve plate	个pcs	2	4	6	8	4	8
26	2110-13-9	气阀弹簧	Valve spring	个pcs	24	48	72	96	30	60
27	2115-13-1	吸气阀弹簧	Suction valve spring	个pcs					18	36
28	GB309	滚针3 × 30	Needles 3 × 30	个pcs					156	78

100 Series Reciprocating Refrigeration Compressor Unit
100系列活塞式制冷压缩机组

▼ 技术数据 Specification

	项目			Item		单位 Unit	2AZ10	4AV10	6AW10	8AS10	4ASJ10	8ASJ10	
机组 Unit	制冷量	标准工况		Refrierating capacity	Standard cond.		KW (Kcal/h)	26.7(23000)	54(46500)	81.4(70000)	108(93000) 232.6(200000)	tk=+35℃17.5	tk=+35℃37.2
		空调工况			Air conditioning cond.			54(46000)	116(100000)	174.4(150000)		t=-35℃(15000)	t=-35℃(32000)
	轴功率	标准工况		shaft power	Standard cond.		kw	8.12	16	23.8	31.6 48	10.1	20.4
		空调工况			Air conditioning cond.			12	24	36			
	总质量	标准工况		Total weight	Standard cond.		kg	575	1066	1330	1520 1600	1300	1700
空调工况		Air conditioning			603	1100		1480	70				
压缩机 Compressor	型式			Type			立式Vertical	V	W	VV	VV	VV	
	气缸直径			Cyinder bore		mm	100	100	100	100	100	100	
	活塞行程			Piston stroke		mm	70	70	70	70	70	70	
	气缸数			Number of cylinders		purchase	2	4	6	8	高压级high stage1 低压级low stage3 高压级high stage2 低压级low stage6		
	主轴转数			Revolution		r/min	960	960	960	960	960	960	
	活塞行程容积			Theoretical displacement		m³/h	63.3	126.6	190	253.3	高压级31.65 低压级94.95 高压级63.3 低压级190		
	能量调节范围			Capactiy regulating range				0,1/2,1	0,1/3,2/3,1	0,1/4,1/2,3/4,1	0,1/3,2/3,1	0,1/3,2/3,1	
	进气管径			Suction pipe dia.		mm	50	50	65	80	高压级32 低压级50	高压级40 低压级65	
	排气管径			Discharge pipe dia.		mm	40	50	65	80	高压级32 低压机50	高压级40 低压机65	
	曲轴箱装油量			Oil charge of crankcase		kg	8.5	12	15	15	8	15	
	冷却水进出管径			Diameter of cooling water inlet/outlet pipe		in	1/2″	1/2″	1/2″	1/2″	1/2″	1/2″	
	冷却水耗量			Cooling water consumption		kg	300	500	750	1000	500	1000	
	压缩机质量			Compressor weigth		kg	238	553	654	713	560	778	
电机 Motor	型号	标准工况		Type	Standard cond.			Y160L-6	Y200L2-6	Y250M-6	Y280S-6 Y280M-6	Y180L-6	Y225M-6
		空调工况			Air conditioning cond.			Y180L-6	Y225M-6	Y280S-6			
	功率	标准工况		Power	Standard cond.		kw	13	22	37	45 55	15	30
		空调工况			Air conditioning cond.			15	30	45			
	电压	标准工况		Voltage	Standard cond.		v				380		
		空调工况			Air conditioning cond.								
	转数	标准工况		Revolution	Standard cond.		r/min			960	(同步转数)Syuchro revolution		
		空调工况			Air conditioning cond.								
电控 Electric control	减压启动控制箱	标准工况	型号	Starter	Standard cond.	Type		XQ01-22	XQ01-40	XQ01-55	4ASJ10-17/D	XQ01-40	
		空调工况	型号		Air conditioning cond.	Type		XQ01-30	XQ01-55	XQ01-55			
	氨压缩机控制台	型号		Control panel	Model			DAK2-15 (带起动设备)with starter	ZK-3C₂	ZK-3C₃	ZK-3C₄	4ASJ10-17/N	ZK-4C₄

▼ 100系列配套表 Accessories of 100 series reciprocating compressors

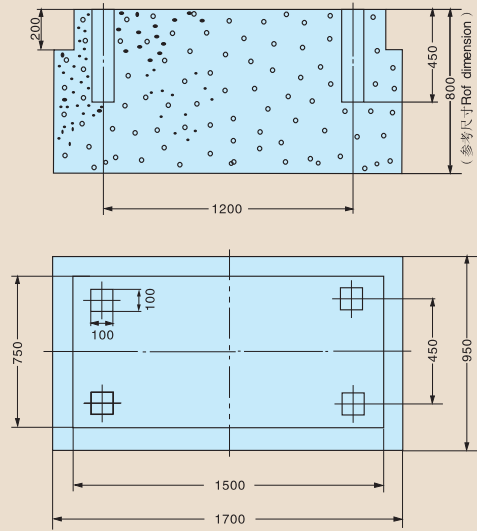
产品型号 Products model			8AS10机组 Unit		6AW10机组 Unit		4AV10机组 Unit		4ASJ10机组 Unit	8ASJ10机 Unit
配套设备 Accessories	工况 working conditiom of accessories	Refrigerating capacity kcal/h(kw)	-15℃/+30℃ standard	+5℃/+40℃ Air comditioning	-15℃/+30℃ standard	+5℃/+40℃ Air conditioning	-15℃/+30℃ standard	+5℃/+40℃ Air comditioning	-35℃/+35℃	-35℃/+35℃
	制冷量 千卡/时		93000 (108)	200000 (232.6)	70000 (81.4)	150000 (174.4)	46500 (54)	100000 (116)	15000 (17.5)	32000 (37.2)
	立式 vertical	型号 Model	LN-35	LN-75	LN-30	LN-75	LN-30	LN-35		
冷凝器 Condenser	卧式 Horizontal	型号 Model	DWN-32	DWN-65	DWN-25	DWN-50	DWN-25	DWN-32	JLZA-8.5/0.2	DWN-25
	立式 vertical	型号 Model	LZZ-40	LZZ-90	LZZ-30	LZZ-75	LZZ-20	LZZ-40	LZZ-20	LZZ-20
蒸发器 Evaporator	卧式 Horizontal	型号 Model	DWZ-50	DWZ-110	DWZ-32	DWZ-65	DWZ-25	DWZ-50	DWZ-25	DWZ-25
	油分离器 Oil separator	型号 Model	YF-80	YF-80	YF-65	YF-65	机组已带YF-65 united in the unit	机组已带YF-50 united in the unit	机组已带YF-32 YF-50 united in the unit	机组已带YF-40 YF-650 united in the unit
贮氨器 Receiver		型号 Model	ZA-0.5	ZA-1.0	ZA-0.5	ZA-1.0	ZA-0.25	ZA-0.5		ZA-0.25
集油器 Oil trap		型号 Model	JY-150	JY-150	JY-150	JY-150	JY-150	JY-150	JY-150	JY-150
氨液分离器 Ammonia liquid separator		型号 Model	AF-80		AF-65		AF-65		AF-50	AF-65
中间冷却器 Intercooler		型号 Model							机组已带 ZL1-0.5	机组已带 JZL-1.0
空气分离器 Air separator		型号 Model	KF-32	KF-32	KF-32	KF-32	KF-32	KF-32	KF-32	KF-32

▲注：
8ASJ10型氨压缩机组带有一级油分离器(65mm)，二级分离器(40mm)，中间冷却器(1m³)。

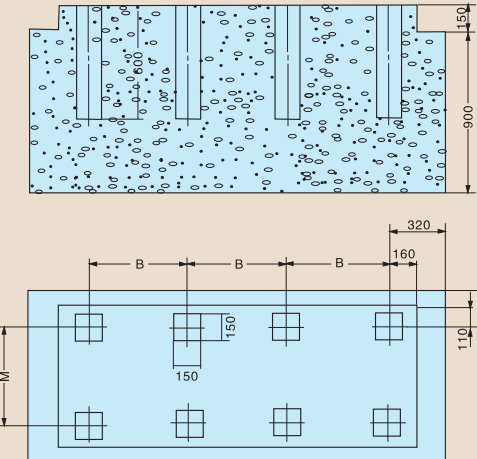
Note: The 8ASJ10 compressor unit includes a 1st-stage oil separator (65mm), 2nd-stage oil separator(40mm),inter cooler,(1m³)

100 Series Reciprocating Refrigeration Compressor Unit
100系列活塞式制冷压缩机组

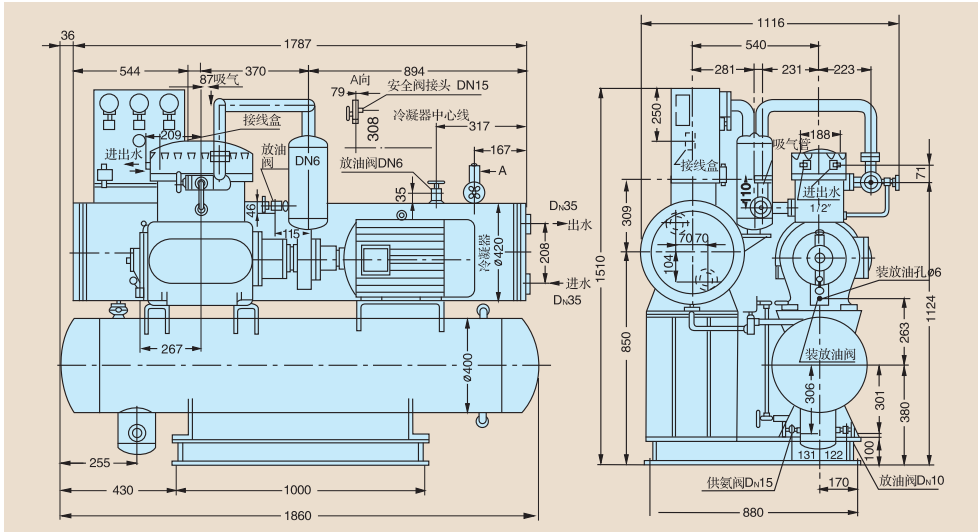
▼ 2AZ10型压缩机组基础图
Forndation drawing of 2AZ10 ammonia compressor



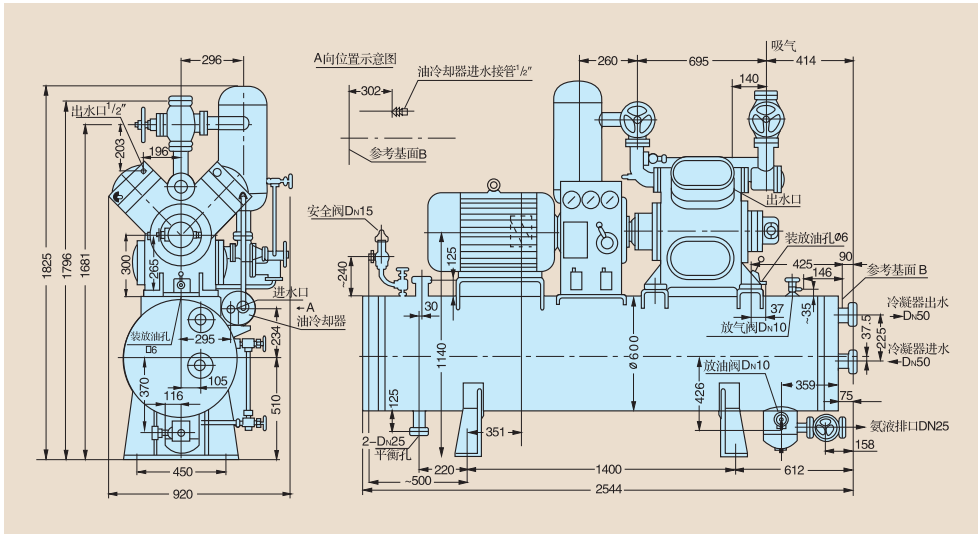
▼ 4AV10,6AW10,8AS10型基础图
Forndation drawing of 4AV10 ,6AW10,8AS10



机器型号 Model of compressor	工况 Working condition	电机型号功率 Mode and power of motor	M	B
8AS10	标准工况 Standard cond.	Y280S-6/45	575	540
	空调工况 Airconditioning cond.	Y280M-6/55	575	555
6AW10	标准工况 Standard cond.	Y250M-6/37	535	520
	空调工况 Airconditioning cond.	Y280S-6/45	575	530
4AV10	标准工况 Standard cond.	Y200L-6/22	535	520
	空调工况 Airconditioning cond.	Y225M-6/30	535	520

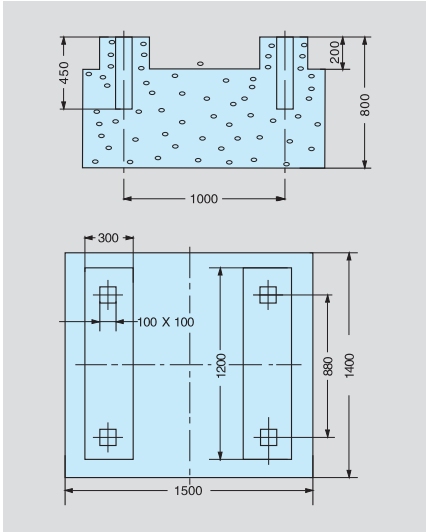


▲ LN2AZ10-1氨压缩冷凝机组外形尺寸
Outside dimensions of LN2AZ10-1 ammonia compression condensing unit

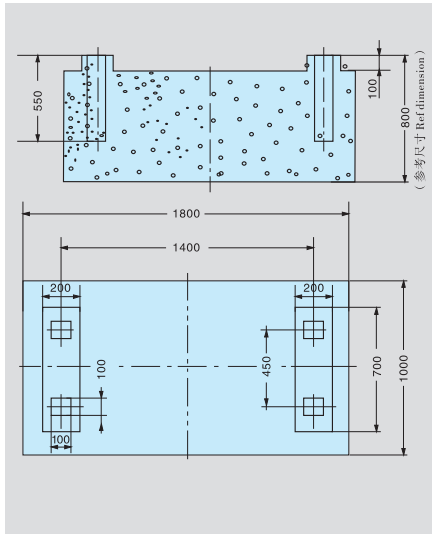


▲ LN4AV10氨压缩冷凝机组外形尺寸
Outside dimensions of LN4AV10 ammonia compression condensing unit

▼ LN2AZ10-1型基础图
Foundation drawing of LN2AZ10-1



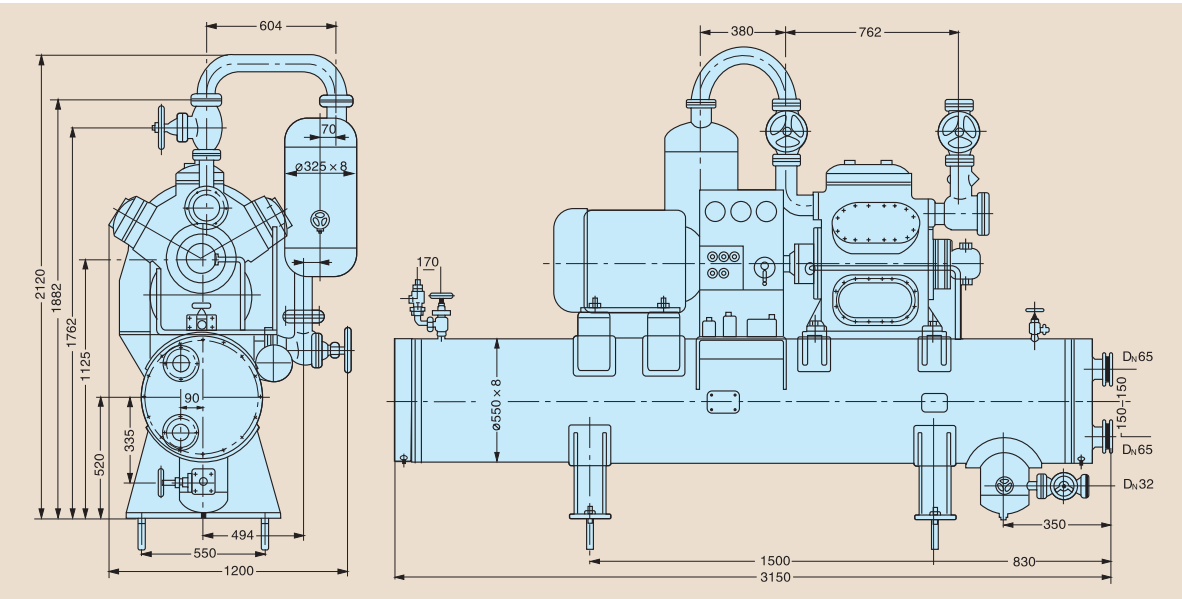
▼ LN4AV10型基础图
Foundation drawing of LN4AV10



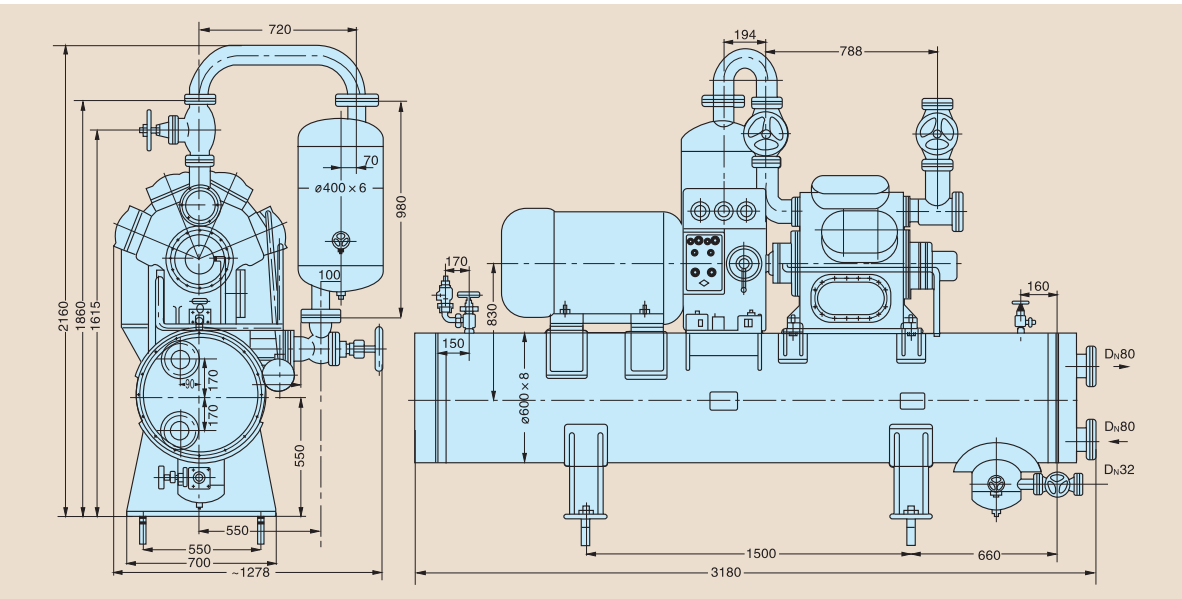
压缩冷凝机组配套表 Accessories of condensing units

产品型号			Products model	LN2AZ10-1	LN4AV10	LN6AW10	LN8AS10
配套工况			Working condition	标准Standard-15℃+30℃	标准Standard-15℃+30℃	标准Standard-15℃+30℃	标准Standard-15℃+30℃
制冷量 Kw(Kcal/h)		Refrigerating capacity		26.7(23000)	54(46500)	81.41(70000)	108.61(93000)
配套设备 Accessories	蒸发器 Evaporator	立式 Vertical	LZZ-20	LZZ-20	LZZ-30	LZZ-40	
		卧式 Horizontal	DWZ-25	DWZ-40	DWZ-32	DWZ-50	
	贮氨器	Ammonia receiver	机组已带	机组已带	ZA-0.5	ZA-0.5	
	集油器	Oil trap	JY-150	JY-150	JY-150	JY-150	
	液分离器	Ammonia Liquid separator	AF-50	AF-50	AF-50	AF-80	
	空气分离器	Air separator	KF-32	KF-32	KF-32	KF-32	

▼ LN6AW10机组外形尺寸图
Outside view of LN6AW10 unit



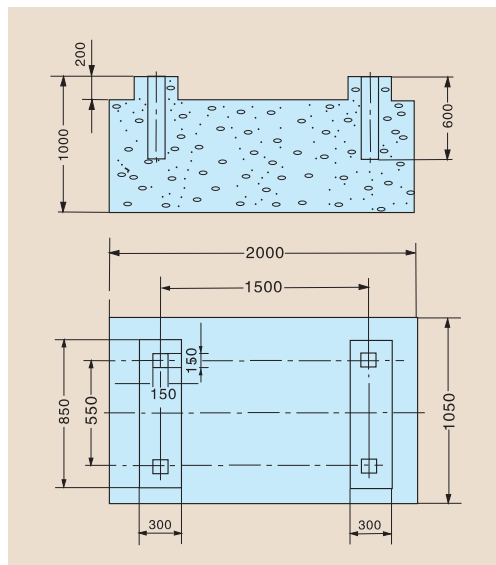
▼ LN8AS10机组外形尺寸图
Outside view of LN8AS10 unit



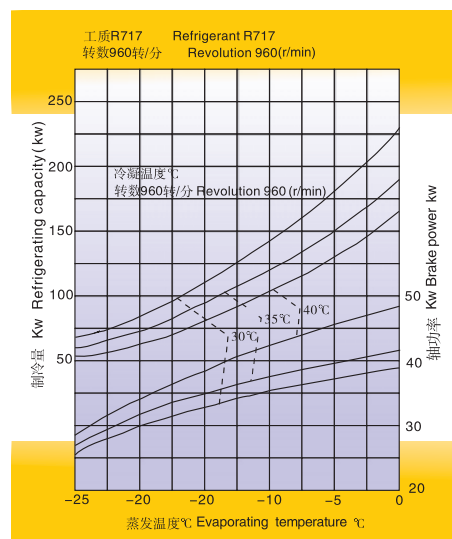
100 Series Reciprocating Refrigeration Compressor Unit

100系列活塞式制冷压缩机组

▼ LN6AW10-LN8AS10基础图
Foundation drawing of LN6AW10-LN8AS10



▼ LN8AS10性能曲线
Performance curves of LN8AS10



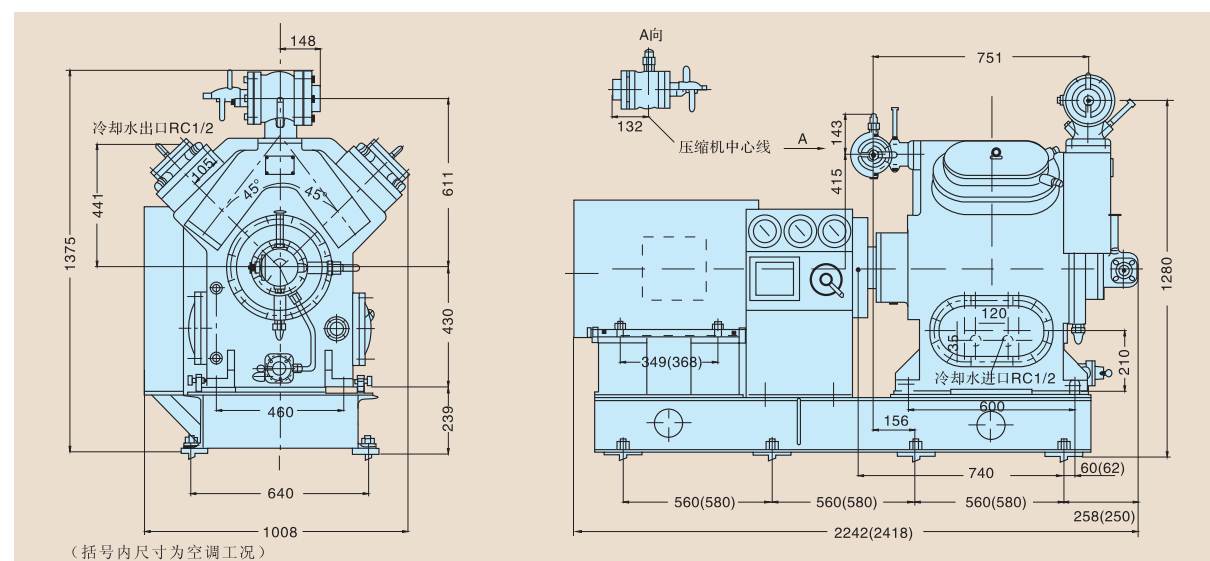
▼ 技术数据 Specification

	项目	Item	单位Unit	LN2AZ10-1	LN4AV10	LN6AW10	LN8AS10
机组 Unit	制冷量	Refrigerating capacity	Kw(Kcal/h)	26.7(23000)	54(46500)	81.4(7000)	108(93000)
	轴功率	Shaft power	kw	8.12	16	23.8	31.6
	总质量	Total weight	kg	1170	2200	2249	2836
	油分离器口径	Port dia.of oil,separator	mm	40	50	65	80
	冷凝器面积	Cooling area of condenser	m ²	10	20	30	40
	贮氨器容积	Volume of receiver	m ³	0.21	0.25		
压缩机 Compressor	型式	Type		立式	V型	W	VV
	气缸直径	Cylinder bore	mm	100	100	100	100
	活塞行程	Piston stroke	mm	70	70	70	70
	气缸数	Number of cylinders	p.c.s	2	4	6	8
	主轴转数	Revolution	r/min	960	960	960	960
	活塞行程容积	Displacement	m ³ /h	63.3	126.6	190	253.3
	进气管径	Suction pipe dia.	mm	50	50	65	80
	排气管径	Discharge pipe dia.	mm	40	50	65	80
	曲轴箱装油量	Oil charge of crankcase	kg	8.5	12	15	15
	压缩机冷却水进出口管径	Dia.of cooling water intel/outlet pipe	in	1/2"	1/2"	1/2"	1/2"
	冷却水耗量	Cooling water consumption	kg/h	压缩机300冷凝器6000 compressor 300 condenser6000	压缩机500冷凝器16000 compressor 300 condenser16000	压缩机750冷凝器18000 compressor 750 condenser18000	压缩机1000冷凝器24000 compressor 1000 condenser24000
	压缩机质量	Compressor weight	kg	238	553	654	713
电机 Motor	型号	Model		Y160L-6	Y200L2-6	Y250M-6	Y280S-6
	电机功率	Power	kw	13	22	37	45
	电压	Voltage	V	380	380	380	380
	转数	Revolution	r/min	960	960	960	960
启动柜	型号	Electric control	Model		XQ01-22	XQ01-40	XQ01-55
压缩机 控制台	型号	Control panel	Model		DAK2-15(带起启动设备) with starter	ZK-3C ₂	ZK-3C ₃

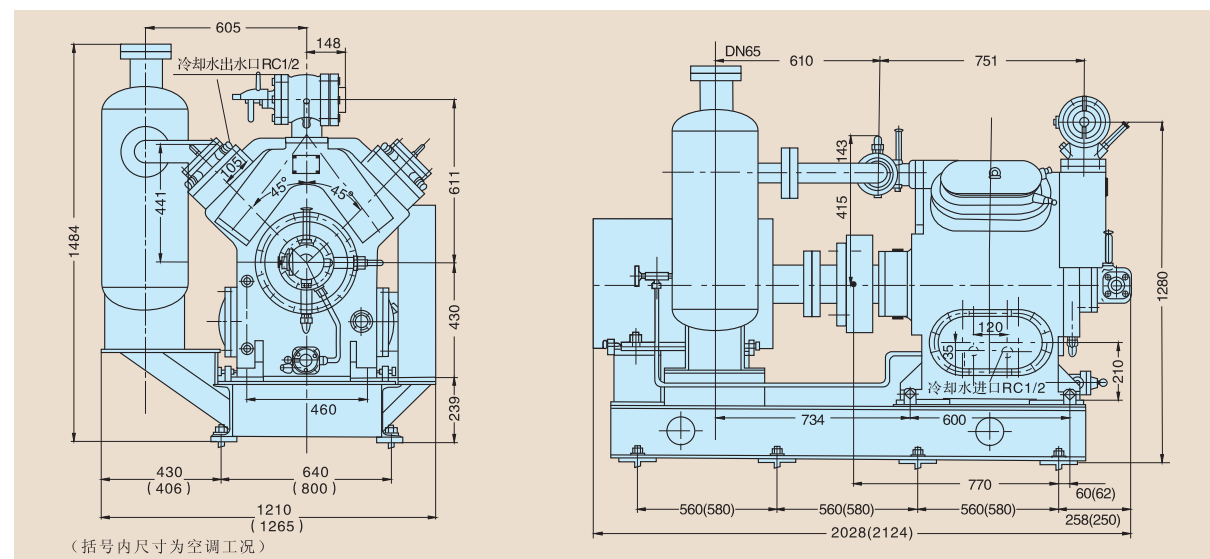
125 Series Reciprocating Refrigeration Compressor Unit

125系列活塞式制冷压缩机组

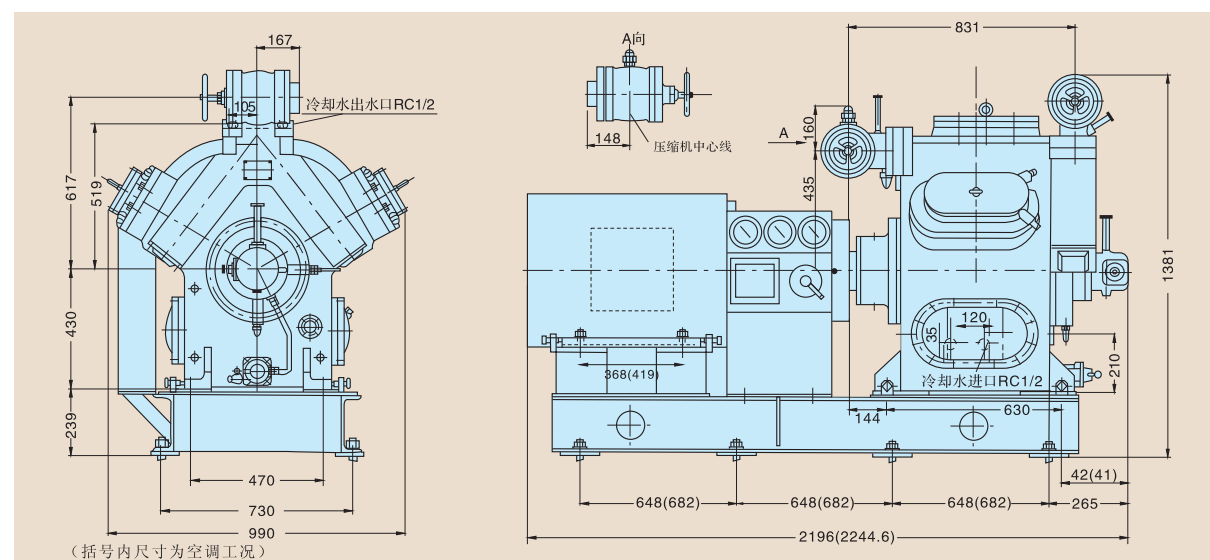
4AV12.5
机组外形



YF4AV12.5
机组外形



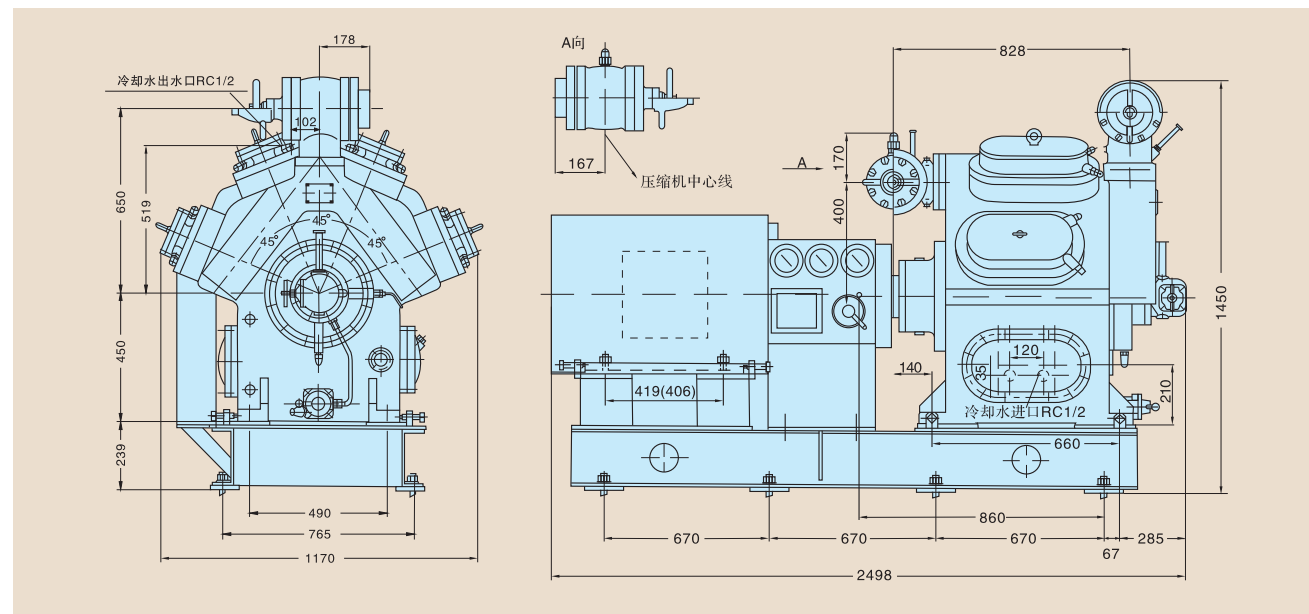
6AW12.5
机组外形



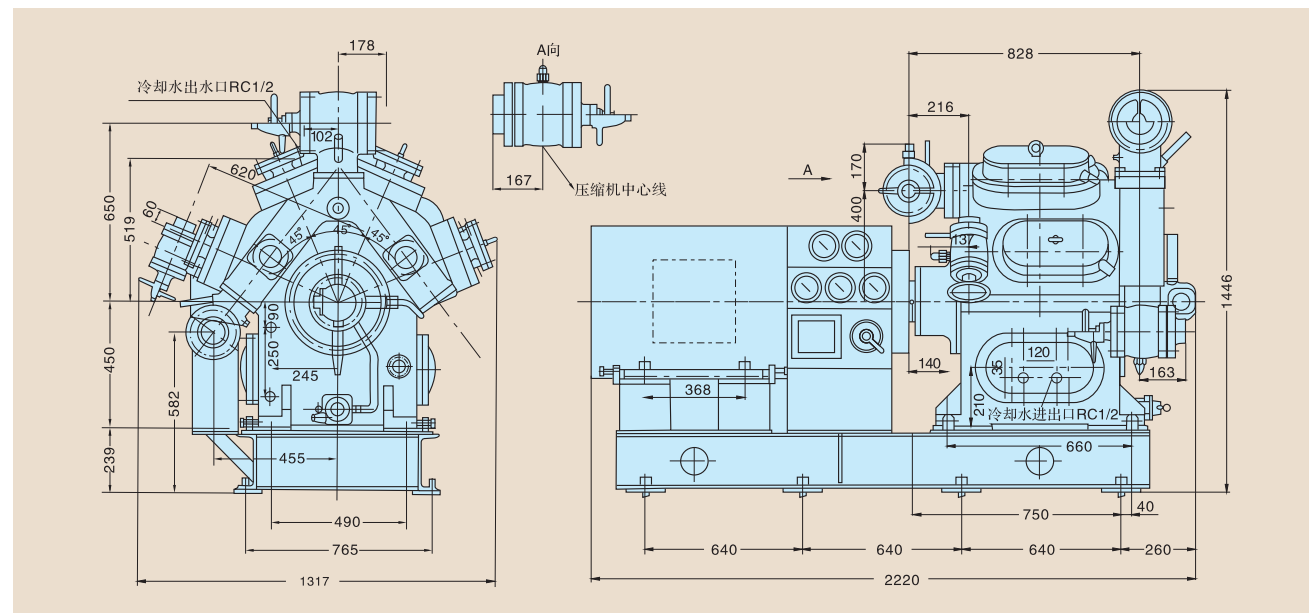
125 Series Reciprocating Refrigeration Compressor Unit

125系列活塞式制冷压缩机组

8AS12.5机组外形



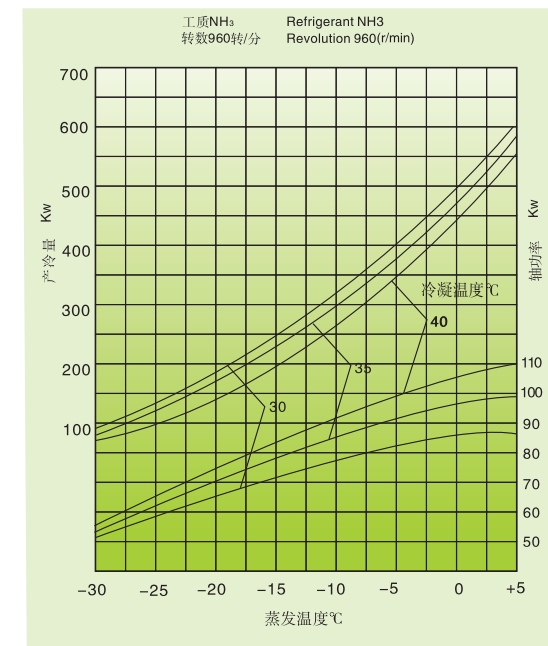
8ASJ12.5机组外形



125 Series Reciprocating Refrigeration Compressor Unit

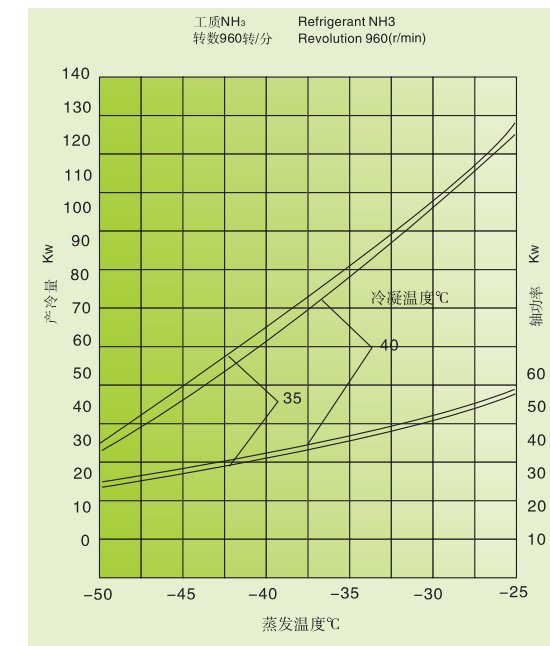
125系列活塞式制冷压缩机组

▼ 8AS12.5性能曲线
Performance curves of 8AS12.5



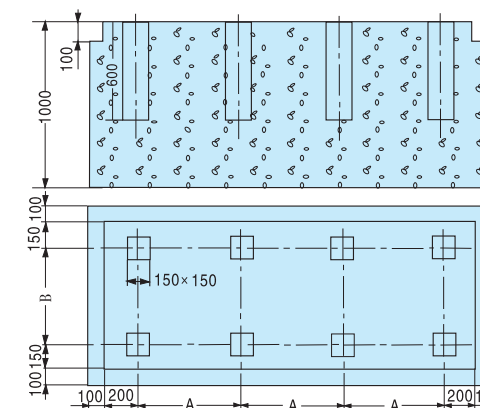
注：1 性能曲线所示的制冷量及轴功率均为812.5压缩机的实测数据。若求412.5、612.5压缩机制冷量及轴功率时，应将表中数据分别乘以1/2和3/4。
2.数据是在过冷温度和过热温度均为5℃时测得的。

▼ 8ASJ12.5性能曲线
Performance curves of 8ASJ12.5



Note:1. Refrigeration capacity and brake power show by performance curves are actual test figures of 812.5 compressors. Refrigeration capacity and brake power of 412.5, 612.5 models are that figures shown in the multiplies 1/2, 3/4.
2. The figures are obtained under the condition of super cooled temp 5℃, super heat temp 5℃.

● 125系列基础图
125 Series base diagram



型号 Model	工况 Working condition	A	B
8AS12.5	标准 Standard cond	670	765
	空调 Air cond		
6AW12.5	标准 Standard cond	648	730
	空调 Air cond	682	
YF4AV12.5	标准 Standard cond	612	640
	空调 Air cond		800
4AV125	标准 Standard cond	560	640
	空调 Air cond	580	
8ASJ12.5	-35℃/+35℃	640	765

● 主要技术数据 Main specification

项目 Item			型号 Model 单位 Unit	8AS12.5	6AW12.5	YF4AV12.5	4AV12.5	8ASJ12.5
机组 Unit	制冷量	标准工况Standard cond	Kw	250	187.5	125	125	81
	Refrigeration capacity	空调工况Air cond		545	409	272.5	272.5	
	轴功率	标准工况Standard cond	Kw	70.5	53	35.5	35.5	44.2
	Brake power	空调工况Air cond		106	79.5	53.5	53.5	
	总质量	标准工况Standard cond	Kg	2550	2400	1930	1930	2600
	Total Weight	空调工况Air cond		2660	2400	2300	2060	
压缩机 Compressor	气缸直径	Cylinder dia	mm	125	125	125	125	125
	活塞行程	Piston stroke	mm	100	100	100	100	100
	气缸数	Cylinder no	PCS	8	6	4	4	高2,低6High2,Low6
	主轴转数	Revolution	r/min	960	960	960	960	960
	活塞行程容积	Swept volume	m³/h	565	424	282.5	282.5	高141,低424 High141,Low424
	能量调节范围	Enenergy regulating range		0.1/4.1/2.3/4.1	0.1/3.2/3.1	0.1/2.1	0.1/2.1	0.1:1.1:2.1:3
	进气管径	Suction pipe dia	mm	125	100	80	80	高80,低125 High80,Low125
	排气管径	Discharge pipe dia	mm	100	80	60	60	高60,低100 High60,Low100
	冷却水进、出管径	Outlet and inlet dia of cooling water pipe	in	3/4	3/4	3/4	3/4	3/4
	冷却水耗量	Cooling water consumption	kg/h	1800	1500	1200	1200	1800
	压缩机重量	Weight	Kg	1378	1150	900	900	1300
电机 Motor	型号	标准工况Standard cond		JS116-6	JS115-6	Y280M-6	Y280M-6	JS115-6
	Model	空调工况Air cond		JS117-6	JS116-6	JS315S-6		
	功率	标准工况Standard cond	Kw	95	75	55	55	75
	Power	空调工况Air cond		115	95	75	75	
	重量	标准工况Standard cond	Kg	970	970	595	595	970
	Weight	空调工况Air cond		1080	970	990	990	
	电压	Voltage	V	380	380	380	380	380
电控 Electric controller	转速	Revolution	r/min	1000	1000	1000	1000	1000
	减压启动控制箱	标准工况Standard cond		XQ ₀₁ -100	XQ ₀₁ -75	XQ ₀₁ -55	XQ ₀₁ -55	XQ ₀₁ -75
	Voltage decreasing start box	空调工况Air cond		XQ ₀₃ -135	XQ ₀₁ -100	XQ ₀₁ -75	XQ ₀₁ -75	
	压缩机控制台	Control panel		ZK-3E ₄	ZK-3E ₃	ZK-3E ₂	ZK-3E ₃	ZK-4E ₄

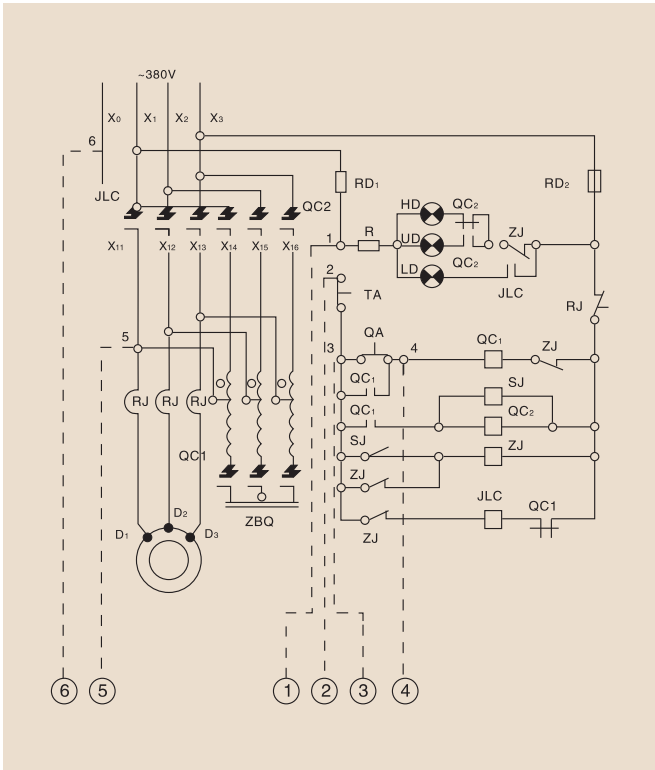
配套表
Completing List

产品型号 Product Model		8AS12.5		6AW12.5		TF4AV12.5		4AV12.5		8ASJ12.5
		标准	空调	标准	空调	标准	空调	标准	空调	
配套工况 Condition		Standard cond	Air cond	Standard cond	Air cond	Standard cond	Air cond	Standard cond	Air cond	-15℃/+35℃
		-15℃/+30℃	-5℃/+40℃	-15℃/+30℃	-5℃/+40℃	-15℃/+30℃	-5℃/+40℃	-15℃/+30℃	-5℃/+40℃	
制冷量 kw Refrigeration capacity		250	545	187.5	409	125	272.5	125	272.5	81
配套设备 Equipment	冷凝器 立式 Vertical	LN-75	LN-150	LN-55	LN-120	LN-35	LN-75	LN-35	LN-75	LN-35
	Condenser 卧式 Horizontal	DWN-65	DWN-150	DWN-50	DWN-110	DWN-32	DWN-65	DWN-32	DWN-65	DWN-32
	蒸发器 立式 Vertical	LZZ-90	LZL-200	LZZ-75	LZL-200	LZZ-40	LZL-90	LZZ-40	LZL-90	LZZ-40
	Evaporator 卧式 Horizontal	DWZ-90	DWZ-200	DWZ-90	DWZ-180	DWZ-50	DWZ-110	DWZ-50	DWZ-110	DWZ-50
	贮氨器 Receiver	ZA-1.0	ZA-2.0	ZA-1.0	ZA-1.5	ZA-0.5	ZA-1.0	ZA-0.5	ZA-1.0	ZA-0.5
	氨液分离器 Ammonia separator	AF-125		AF-100		AF-80		AF-80		AF-100
	中间冷却器 Inter cooler									ZL-2.0
	集油器 Oil trap	JY-200		JY-200		JY-200		JY-150		JY-150
	空气分离器 Air separator	KF-32		KF-32		KF-32		KF-32		KF-32
	油分离器 Oil separator	YF-100		YF-100		机组已带Equipped		YF-65		YF-65

● 125系列配套件明细表125 series fitting list

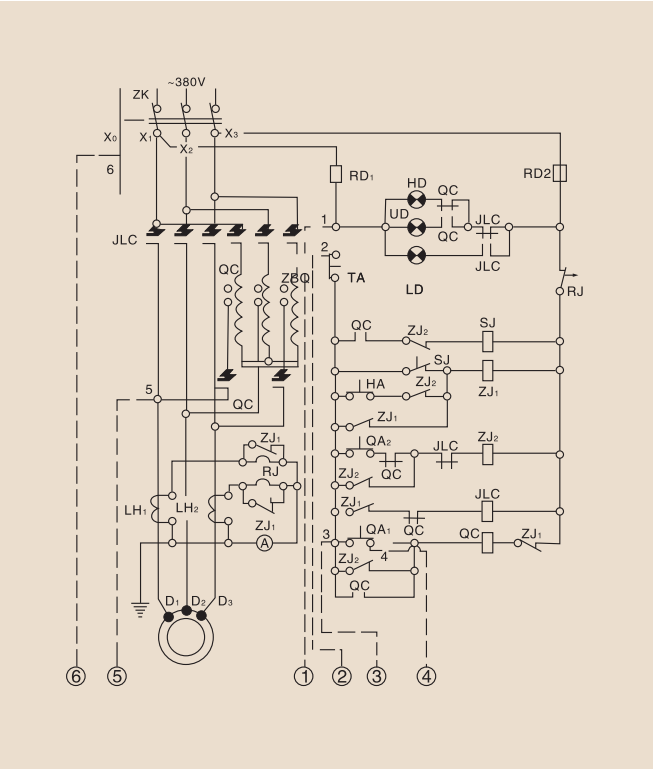
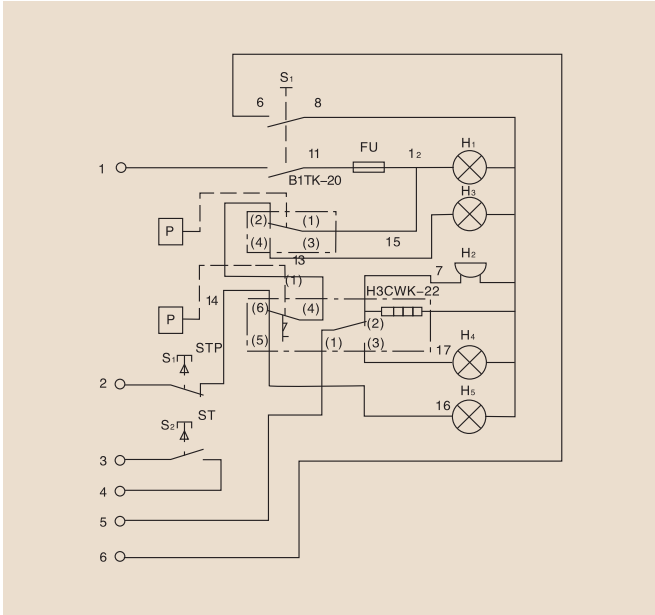
项目 Order NO.	图号 Drawing NO.	名称 Names.	单位 Unit	每台数量 Quantity for one refrigerator			
1	2111-01-7	前主轴承	Front Main bearing	个pcs	1	1	1
2	2011-01-7	后主轴承	Back Main bearing	个pcs	1	1	1
3	2111-02-0	曲轴组件	Crankshaft assembly	组xet	1		
4	2111-02-0	曲轴组件	Crankshaft assembly	组xet		1	
5	2111-02-0	曲轴组件	Crankshaft assembly	组xet			1
6	2111-03-0	连桿组件	Connecting-rod assembly	组xet	4	6	8
7	2111-03-4	大头轴瓦	Large end metal	副pair	4	6	8
8	2111-03-5	小头衬套	Small end bushing	个pcs	4	6	8
9	3111-07-0	轴封组件	Shaft seal assembly	组xet	1	1	1
10	2111-07-2	活动环	Movable ring	个pcs	1	1	1
11	2111-07-4	固定环	Fixed ring	个pcs	1	1	1
12	2111-06-0	油泵组件	Oil pump assembly	组xet		1	1
13	2113-06-0	油泵组件	Oil pump assembly	组xet	1		
14	2111-04-00	活塞组件	Piston assembly	组xet	4	6	8
15	2111-04-3	密封环	Piston assembly	个pcs	8	12	16
16	2111-04-5	刮油环	Oil ring	个pcs	4	6	8
17	2111-04-2	活塞销	Piston pin	个pcs	4	6	8
18	2115-04-0	活塞连桿组件	Piston connecting-rod assembly	组xet			2
19	2115-04-2	活塞销	Piston pin	个pcs			2
20	2115-03-2	滚动轴承外套	Ball Bearing Bushing	个pcs			2
21	GB309-64	滚针	Needles	个pcs			72
22	2111-05-0	气阀缸套组件	Valve cylinder-liner assembly	组xet	4	6	8
23	2111-05-4	吸气阀片	Suction valve plate	个pcs	4	6	8
24	2111-05-6	气阀弹簧	Vaive spring	个pcs	56	84	112
25	2111-05-5	排气阀片	Discharge valve plate	个pcs	4	6	8
26	2115-05-0	一级气阀缸套组件	First stage Valve cylinder-liner assembly	组xet			6
27	2115-05-6	吸气阀弹簧	Suction valve spring	个pcs			36
28	2115-05-0	二级阀弹簧	Second stage Valve cylinder-liner assembly	组xet			2

XQ01-22~135型减压启动控制箱电气原理图
Model XQ01-22-135 electric circuit diagram of voltage-decreasng start control cabinet



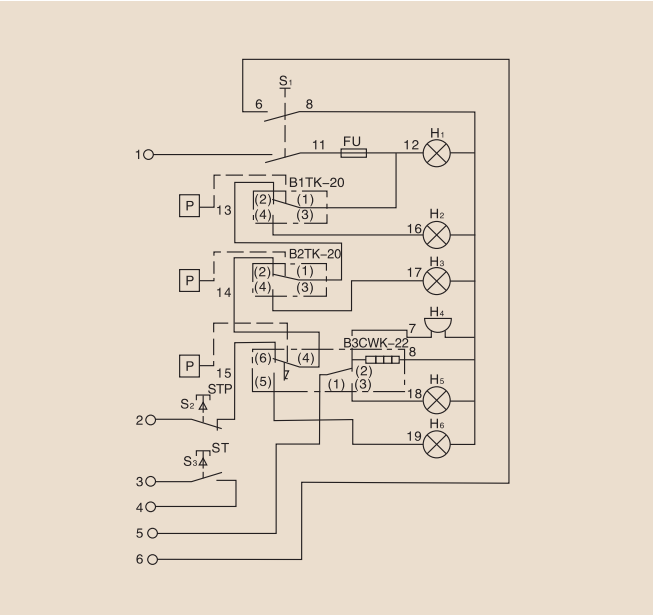
■ XQ1-22-75

ZK-3E型氨压缩机控制台电气原理图
Model ZK-3E electric circuit diagram of ammonia compressor control panel



■ XQ1-100-135

ZK-4E型氨压缩机控制台电气原理图
Model ZK-4E electric circuit diagram of ammonia compressor control panel



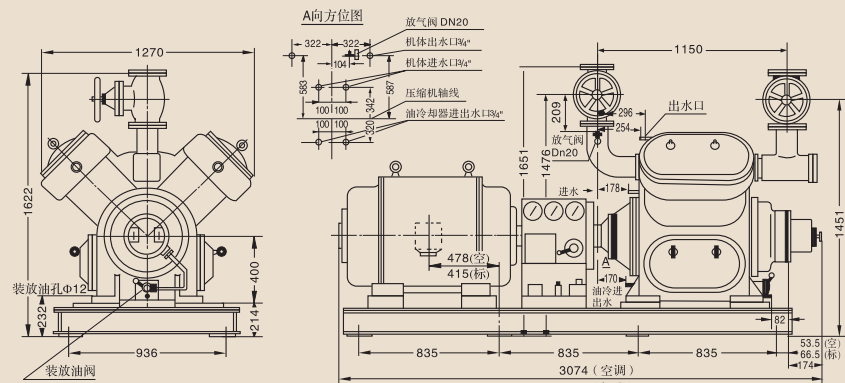
● 技术数据 Specification

项目				Item		单位Unit	4AV17	6AW17	8AS17	8ASJ17	
机组 Unit	制冷量	标准工况		Refrigerating capacity	Standard cond	Kw (kcal/h)	256(220000)	384(330000)	512(440000)	163 (140000)	
		空调工况			Air condition		558(480000)	837(720000)	1116(960000)		
	轴功率	标准工况		Brake power	Standard cond	kw	71.9	107.1	142	83.9	
		空调工况			Aircondition		107	160	213		
	总质量	标准工况		Total ceighe	Standard cond	kg	3750	5110	5932	5632	
		空调工况			Air condition		3980	5359	6152		
压缩机 Compressor	型式			Type			V	W	VV	VV	
	气缸直径			Cylinder bore		mm	170	170	170	170	
	活塞行程			Pistor stroke		mm	140	140	140	140	
	气缸数			Number of cylinders		purchase	4	6	8	High高2Low低6	
	主轴转数			Revolution		r/min	720	720	720	720	
	活塞行程容积			Theoretical volume		m³/h	550	825	1100	High高275Low低825	
	能量调节范围			Capacity regulating range			0.1/2.1	0.1/2.2/3.1	0.1/4.1/2.3/4.1	0.1:1.1:2.1:3	
	进气管径			Inlet pipe dia		mm	100	125	150	High高80Low低125	
	排气管径			Outlet pipe dia		mm	80	100	125	High高65Low低100	
	曲轴箱装油量			Oil amount of crankcase		kg	30	44	50	50	
	油冷却器进出水管径			Dia of water inlet and outlet pipe of oil cooling device		in	3/4"	3/4"	3/4"	3/4"	
	压机冷却水进出管径			Diameter of cooling water inlet and outlet pipe		in	3/4" .2 × 3/4"	1"	2 × 3/4" ,1"	3/4"	
	冷却水耗量			Cooling water consumption		kg	2000	3000	4000	2000	
	压缩机质量			Weight of compressors		kg	2500	3000	3500	3500	
电机 Motor	型号	标准工况		Type	Standard cond		JS₂-355M2	JS₂-400S₂	JS₂-400M₂	JS₂-400S₂	
		空调工况			Air condition		JS₂-400S₂	JS₂-400M₂	JS₂-400M₄		
	功率	标准工况		Power	Standard cond	kw	95	132	190	132	
		空调工况			Air condition		132	190	250		
	电压	标准工况		Voltage	Standard cond	V	280	380	380	380	
		空调工况			Air condition		280	380	380		
	转数	标准工况		Voltage Revolution	Standard cond	r/min	750	750	750	750	
		空调工况			Air condition		750	750	750		
	质量	标准工况		Weight	Standard cond	kg	1250	1480	1730	148	
		空调工况			Air condition		1480	1730	2000		
电控 Elevctric controller	减压启动 控制箱	标准工况	型号	Start of reducing pressure Controlling box	Standard ocnd	kg	XQ01-100	XQ01-135	XQ01-190	XQ01-135 450	
			质量		Weight		200	450	450		
		空调工况	型号		Air condition	kg	XQ01-135	XQ01-190	XQ01-255		
			质量		Weight		450	450	500		
	氨压缩机 控制台	型号		Control panel	Type		kg	ZK-3Z₂	ZK-3Z₃	ZK-3Z₄	ZK-4Z4 35
		质量			Weight			16	16	16	

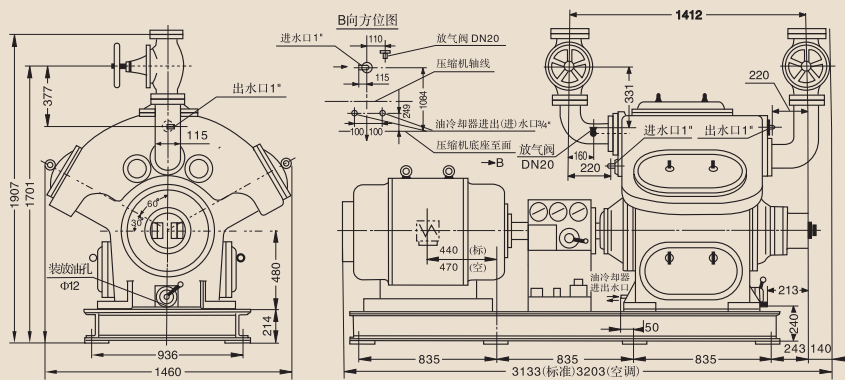
170 Series Reciprocating Refrigeration Compressor Unit

170系列活塞式制冷压缩机组

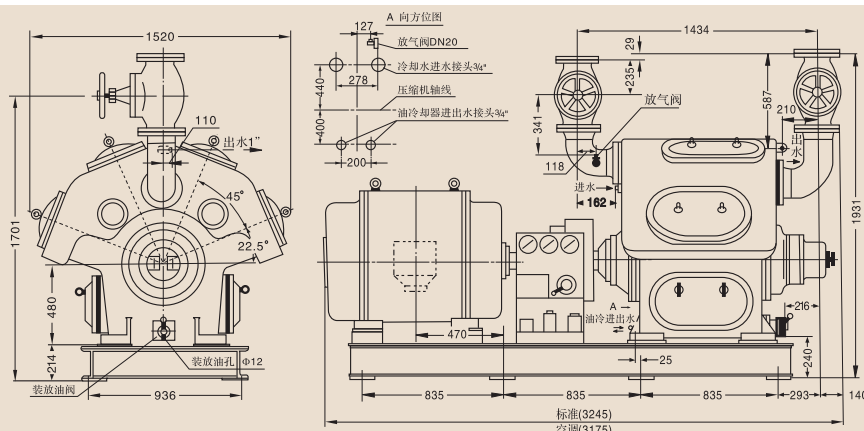
4AV17型外形尺寸
Outline dimension
4AV17 compressof



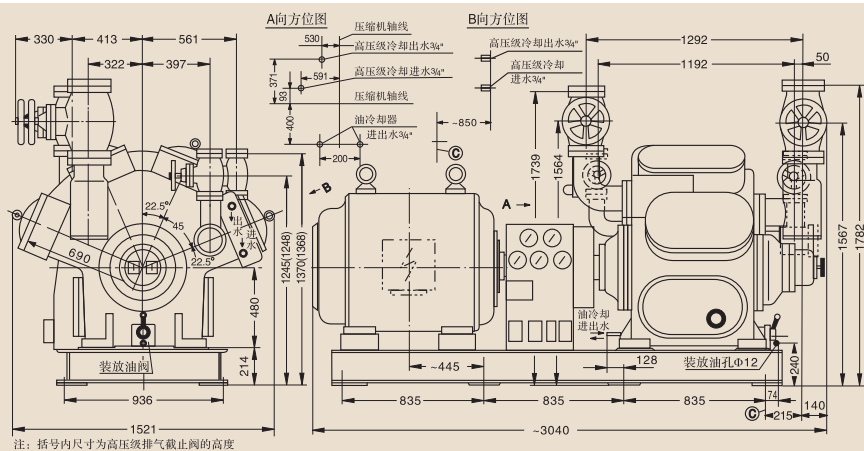
6AW17型外形尺寸
Outinedimension
6AW17 compressof



8AS17型外形尺寸
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8As17 compressof



8ASJ17型外形尺寸
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8ASJ17 compressof



注：括号内尺寸为高压级排气截止阀的高度

170 Series Reciprocating Refrigeration Compressor Unit

170系列活塞式制冷压缩机组

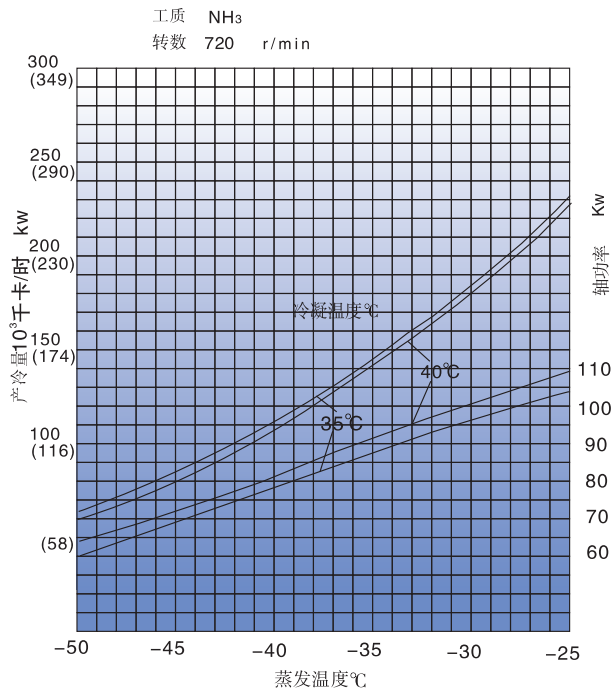
● 170系列配套表 170series Completing List

产品型号 Products model			8AS17机组 Unit		6AW17机组 Unit		4AV17机组 Unit		8ASJ17机组Unit
制冷量kw/千卡时	套配工况 Complete sets working cond		标准 -15℃/30℃ Standard	空调 +5℃/+40℃ Air condition	标准 -15℃/30℃ Standard	空调 +5℃/+40℃ Air condition	标准 -15℃/30℃ Standard	空调 +5℃/+40℃ Air condition	-35℃/+35
	Refrigerating capacity kw(kcal/h)		512 (440000)	1116 (960000)	384 (330000)	837 (720000)	256 (220000)	558 (480000)	163 (140000)
配套设备 Complete sets equipments									
冷 凝 器 Condenser	立式Vertical	型号Model	LN-150	LN-310	LN-120	LN-120	LN-75	LN-150	LN-75
	卧式Horizontal	型号Model	DWN-150	DWN-360	DWN-110	DWN-110	DWN-65	DWN-150	DWN-65
蒸 发 器 Evaporator	立式Vertical	型号Model	LZL-200	LZL-200×2	LZL-160	LZL-320	LZL-90	LZL-200	LZL-75
	卧式Horizontal	型号Model	DWZ-200	DWZ-250×2	DWZ-150	DWZ-360	DWZ-90	DWZ-200	DWZ-90
油分离器Oilseparator		型号Model	YF-125	YF-125	YF-100	YF-100	YF-80	YF-80	YF-65
贮氨器 Receiver		型号Model	ZA-2.0	ZA-5.0	ZA-1.5	ZA-3.0	ZA-1.0	ZA-2.0	ZA-0.5
集油器 Oil trap		型号Model	JY-300	JY-300	JY-200	JY-300	JY-200	JY-200	JY-200
氨液分离器Ammonia liquod separator		型号Model	AF-150		AF-125		AF-100		AF-125
中间冷却器 Intercllder		型号Model							ZL-3.5
空气分离器 Air depqrator		型号Model	KF-32	KF-32	KF-32	KF-32	KF-32	KF-32	KF-32

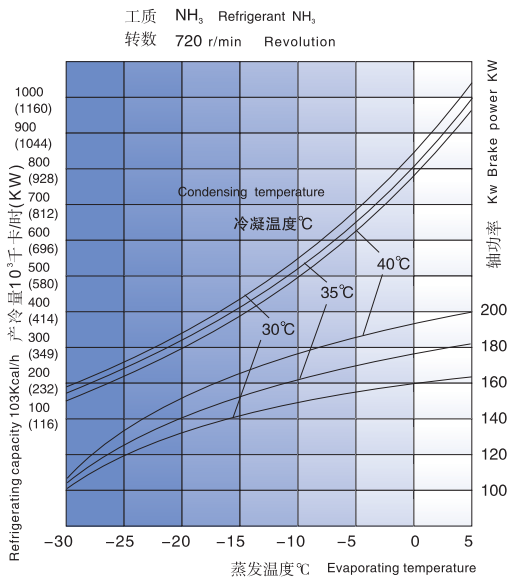
注：1.冷凝器、蒸发器在配套表中根据需要任选一种，如需淋水式或蒸发式冷凝器配套需另行说明。
2.氨分离器、空气分离器根据需要，定货时注明。

Note: 1.The condensers and evaporators those in the complete sets list should be chosen as you like according to the requirements. Please inform us before placing order if the dripping type of evaporative condenser is need for complete set.
2.The ammonia liquid separator and aor separator are chosen according to requirements. Please inform us when make an order.

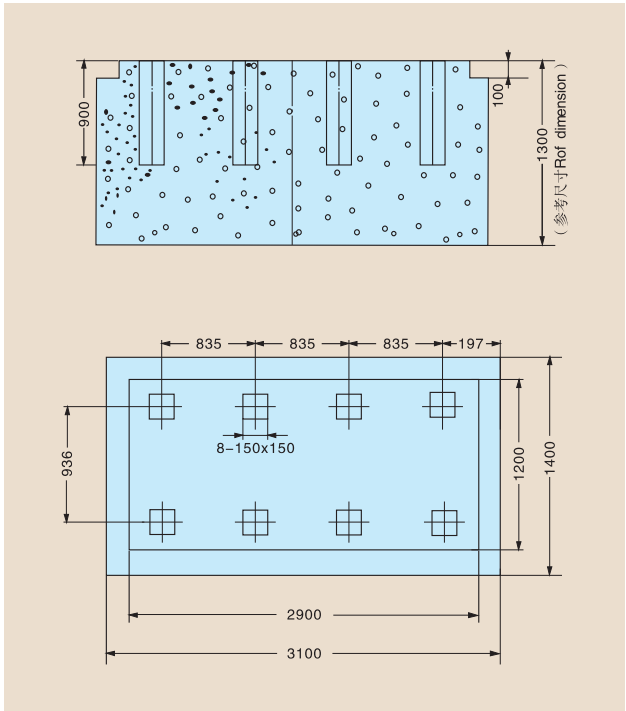
▼ 8ASJ17型性能曲线
Performance curves of 8ASJ17



▼ 8AS17型性能曲线
Performance curves of 8AS17



▼ 170系列压缩机组基础图
Forndation drawing of series 170



注：1.性能曲线中所示的制冷量及轴功率均为8AS17制冷压缩机实测数据,在求4.6缸单级制冷压缩机的制冷量及轴功率时，可将表中数值按气缸数加以折算，如6AW17的制冷量为8AS17的3/4倍，轴功率为8AS17的3/4倍。
2.数据是在过冷温度及过热温度均为5℃时测得的。

Note: 1.The refrigerating capacity and brake power which are shown in this curve both are the measured value of 8AS17 refrigerating compressor, therefore,the refrgerating capacity and brake power of other modeis may be converted according to the number of cylinders, For esample , the refrigerating capaoty and buake power of 6AW17 are 3/4 of 8AS17.
2.The data are measured under supercooled temperature5℃ and superheated5℃.

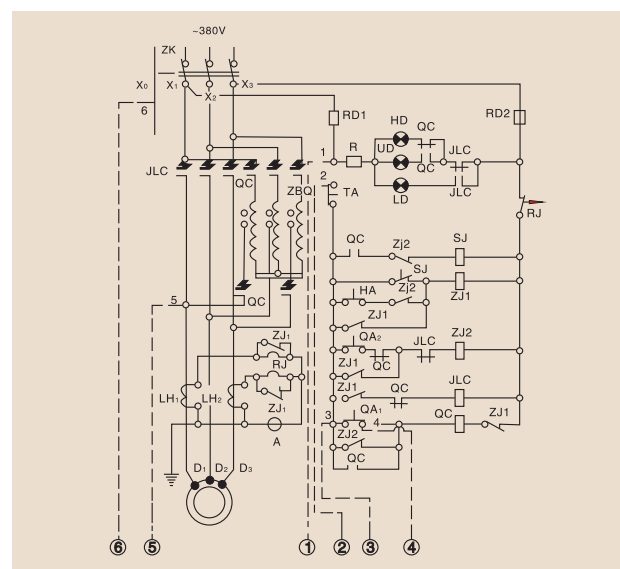
● 170系列配套件明细表 170series fitting list

项目 Order No.	图号 Drawing No.	名称 Nanes	单位 Unit	每台数量 Quantity for refrigeratorone			
				4AV17	6AW17	8AS17	8ASJ17
1	2101-01-34	前主轴承 Front Main bearing	个pcs	1	1	1	1
2	2101-01-35	后主轴承 Back Main bearing	个pcs	1	1	1	1
3	2103-02-0	曲轴组件 Crankshaft assenbly	组set	1			
4	2102-02-0	曲轴组件 Crankshaft assenbly	组set		1		
5	2101-02-0	曲轴组件 Crankshaft assenbly	组set			1	1
6	2102-03-0	连杆组件 Connecting-rod assembly	组set	4	6	8	6
7	2102-03-3	大头衬套 Large end bushing	副pair	4	6	8	8
8	2102-03-4	小头衬套 Small end bushing	个pcs	4	6	8	6
9	2101-04-0	轴封组件 Shaft seal assembly	组set	1	1	1	1
10	2101-04-2	活动环 Movable ring	个pcs	1	1	1	1
11	2101-04-4	固定环 Fixed ring	个pcs	1	1	1	1
12	2101-10-300	油泵组件 Oil pump assenbly	组set		1	1	1
13	2103-10-300	油泵组件 Oil pump assenbly	组set	1			
14	2102-12-00	活塞组件 Piston assebly	组set	4	6	8	6
15	2102-12-2	密封环 Piston ring	个pcs	8	12	16	16
16	2102-12-4	刮油环 Oil ring	个pcs	4	6	8	8
17	2101-12-5	活塞销 Piston pin	个pcs	4	6	8	6
18	2105-12-0	活塞连杆组件 Piston connecting-rod assembly	组set				2
19	2105-12-5	活塞销 Piston pin	个pcs				2
20	2105-12-2	滚动轴承外套 Ball Bearing Bushing	个pcs				2
21	GB309-64	滚针 Needles	个pcs				62
22	2102-13-0	气阀缸套组件 Valve cylinder-liner assenbly	组set	4	6	8	
23	2102-13-6	吸气阀片 Suction valve plate	个pcs	4	6	8	8
24	2102-13-13	气阀弹簧 Valve spring	个pcs	56	84	112	76
25	2102-13-14	排气阀片 Discharge valve plate	个pcs	4	6	8	8
26	2105-13-0	一级气阀缸套组件 First stage Valve cylinder-liner assenbly	组set				6
27	2105-13-1	吸气阀弹簧 Suction valve spring	个pcs				36
28	2105-23-0	二级气阀缸套组件 Second stage Valve cylinder-liner assembly	组set				2

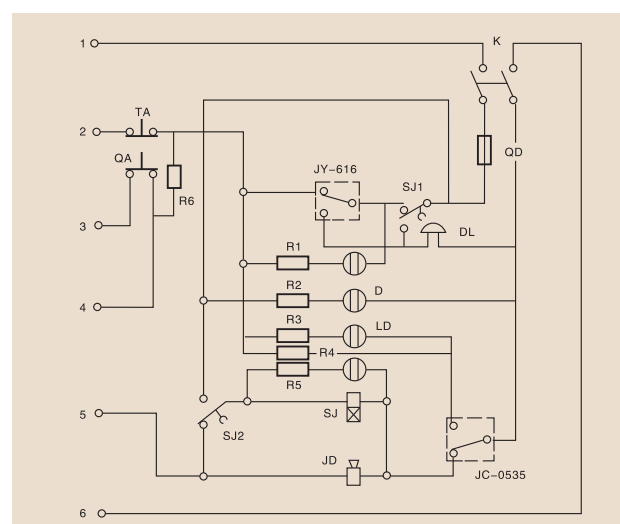
170 Series Reciprocating Refrigeration Compressor Unit

170系列活塞式制冷压缩机组

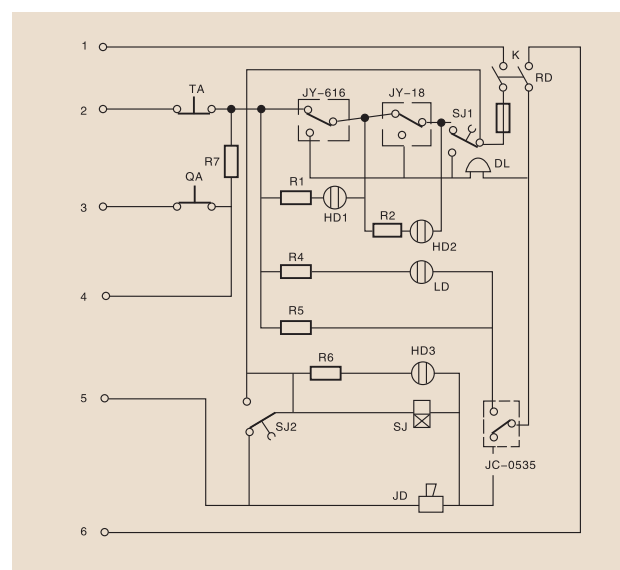
- XO01-75~320型减压启动控制箱电气原理图
Electric functional diagram of Start of reducing pressure
Controlling box Type XO01-75~320



- ZK-3Z型氨压缩机控制台电气原理图
Electric functional diagram of Control panel Type ZK-3Z



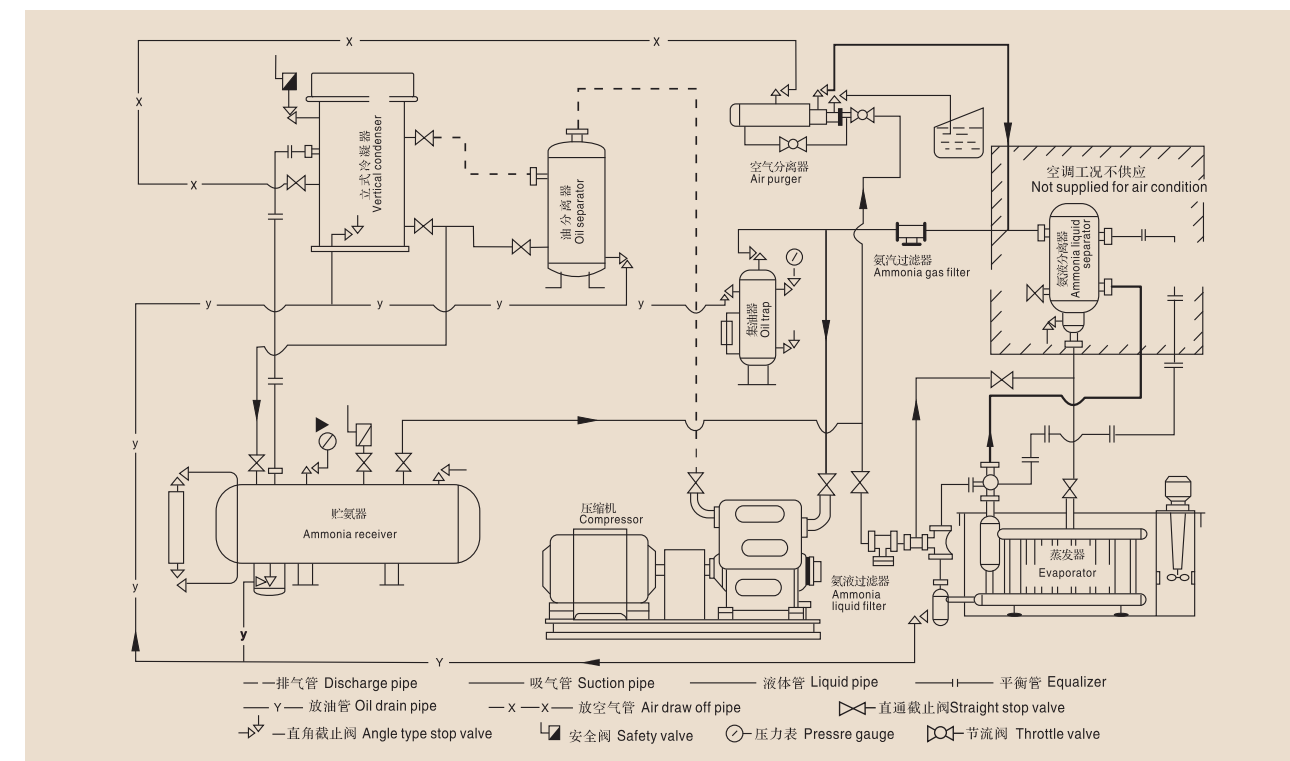
- ZK-4Z型氨压缩机控制台电气原理图
Electric functional diagram of Control panel Type ZK-4Z



170 Series Reciprocating Refrigeration Compressor Unit

170系列活塞式制冷压缩机组

- ▼ 单级流程示意图
Flow sheet schematic drawing of single stage compressor



- ▼ 双级流程示意图
Flow sheet schematic drawing of doublestage compressor

