

零件及图纸清单 (PARTS AND DRAWING LIST)

暂 行 TENTATIVE

机种名: 9RD138ZBA2J
MODEL

页面
(PAGE)

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规格编号: SC-RW2817-EE-01
SPEC. CODE.

1. 规格书 SPECIFICATION

名 称 NAME	图纸编号 DRAW. NO.	备 注 REMARKS
压缩机特性规格 & 附属书 SPECIFICATIONS FOR ROTARY COMP & APPENDIX	SC-P-RW2817-A (P-2, 3, 4, 5, 6, 7, 8)	SC-RW2817-EE (A3-1, 2, 3)
接线图及附属品取付要领 WIRING DIAGRAM & ACCESSORY FITTING	SC-W-52171516-B	---
接地规格 CONNECTION FOR EARTHING	SC-E-52170835-D	---
压缩机规格书通用附属规格书 COMPRESSOR SPECIFICATION COMMON APPENDIX	CE-100004C CE-100004E	---
压缩机使用上的安全要求书 SAFETY REQUEST ON THE USE OF COMPRESSOR	CE-100006C CE-100006E	---

2. 压缩机及附属品的列表

LIST OF COMPRESSOR & ACCESSORY PARTS

名称 NAME	部品编号 PARTS NO.	图纸编号 DRAW NO.	备注 REMARKS	部品数量 QTY UNIT	标记 MARK	提供 SUPPLY
压缩机 COMPRESSOR ASS'Y	RW2817	ADRW2817-A	OIL IN	1	A	
P 接线柱胶盖 TERMINAL COVER	7070220U	AD7070220U	---	1	A	
A 端盖垫 TERMINAL COVER GASKET	7070651	AD7070651	---	1	A	
R 螺母 NUT-TERMINAL COVER	7080310	AD7080310	---	1	A	
T 螺母垫 NUT GASKET	7070621U	AD7070621U	---	1	A	
S 减振胶脚 RUBBER GROMMET	7070865	AD7070865	---	3	A	
过载保护器 OVERLOAD PROTECTOR	7100956	AD7100956	KSD301-11.5/10BC16X2-S4	1	B	
弹簧 SPRING FOR OLP HOLD DOWN	7071200	AD7071200	---	1	A	

A: 压缩机的附件必须由压缩机厂家提供。

Purchaser must use above specified parts NO. made by compressor supplier.

B: 压缩机附件由压缩机厂家提供或客户按规格书上要求到附件厂家购买。

Purchaser use get specified parts directly from supplier of the parts.

C: 客户自行购买指定的部品。

Purchaser may get specified parts from any source.

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		机种名 (MODEL NAME): 9RD138ZBA2J		

1、适用 (APPLICATION)

适用类型 (APPLICATION)	热泵采暖 HEAT PUMP FOR HEATER
冷媒 (REFRIGERANT)	R32
冷媒充注量 (REF CHARGE LIMIT)	1600 gMAX.
电源 (ELECTRIC SOURCE)	无感无刷变频器 SENSOR-LESS BRUSHLESS INVERTER
认证种类 (APPROVAL TYPE)	TUV(NO. :R 50424017 0002) PED(NO. :CE 0035)

2、主要构造项目 (COMPRESSOR DATA)

压缩机类型 COMPRESSOR TYPE	全封闭型电动压缩机 HERMETIC MOTOR COMPRESSOR	
泵体类型 PUMP TYPE	旋转式 ROTARY	
汽缸容积 DISPLACEMENT	13.8	cm ³ /REV.
冷冻机油种类・油充注量 OIL (PRECHARGED)	FW50S	
	450	cm ³
涂装 PAINTING	黑色涂装, 烘烤干燥 BLACK COLOR PAINT , BAKED	
总质量 (含冷冻机油) NET MASS (OIL IN)	10.1	kg
吸入管内径 SUCTION TUBE I. D.	12.9	mm
吐出管 内径/外径 DISCHARGE TUBE I. D. /O. D.	6.53/(9.53)	mm
其它接线管 I. D. OTHER TUBE ()	6.5	mm

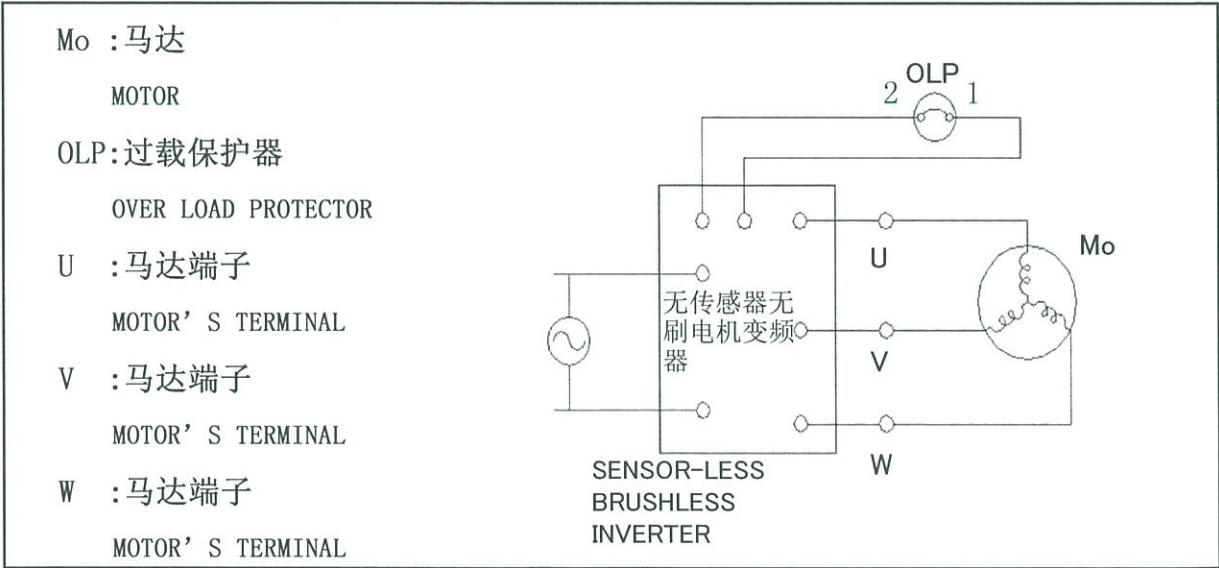
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3、马达 (MOTOR)

电动机种类 MOTOR	直流无刷电机 BRUSHLESS MOTOR		
极数·额定输出功率 POLE · RATED OUTPUT	6 POLE	950	W
绝缘等级 INSULATION GRADE	E GRADE		
线圈电阻 Ω (at 20° C) (± 7%) WINDING RESISTANCE	U-V	V-W	U-W
	1.886	1.866	1.880

4、电气部品及电气回路图 (ELECTRICAL COMPONENT & WIRING DIAGRAM)

电容器 CAPACITOR	启动用 (START)	—— μ F — ——V
	运转用 (RUN)	—— μ F — ——V
启动继电器 RELAY	_____	
过载保护器 OVER LOAD PROTECTOR	7100956 (KSD301-11.5/10BC16X2-S4) 或等同品	



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5、额定性能 (RATED PERFORMANCE)

性能测定电源 正弦波变频器

ELECTRIC SOURCE:SINE WAVE INVERTER

变频器内部直流部电压 DC VOLTAGE OF THE INVERTER	280	V
回转数 REVOLUTION	3450	r/min

性 能 PERFORMANCE	额定性能 RATED PERFORMANCE	参考性能 REFERENCE PERFORMANCE	单位 UNITS
制热能力 HEATING CAPACITY	5210 ±5%	——	W
功率 (不含控制器) MOTOR INPUT	1375 ±5%	——	W

额定温度条件 RATING CONDITIONS	(P-JIS-A)	(-)	单位 UNITS
蒸发温度 EVAPORATING TEMP.	7.0	——	℃
冷凝温度 CONDENSING TEMP.	55.0	——	℃
吸气温度 RETURN GAS TEMP.	15.0	——	℃
过冷却温度 LIQUID TEMP.	55.0	——	℃
环境条件 AMBIENT, AIR OVER	35.0℃, 1m/s	——	-
EVI	OFF	——	-

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6、噪音 振动 SOUND VIBRATION

测定电源 正弦波变频器

ELECTRIC SOURCE:SINE WAVE INVERTER

振动 (空气开放运转, 半振幅, 振动测定台, 壳体, 3450r/min, EVI关闭.) VIBRATION (AT AIR, HALF AMPLITUDE, MESUREMENT BASE. COMP. SHELL, 3450r/min, EVI OFF.)	30	μ m MAX.
噪音 (额定温度条件 (N-JIS-A, 无风), 3450r/min, 压缩机表面30cm, 全周A声级平均值, EVI 关闭。 SOUND LEVEL (AT RATED COND. (N-JIS-A, NO AIR FLOW). 3450r/min. 30cm FROM COMP. SURFACE, THE AVERAGE RATE, EVI OFF.)	74	dB (A) MAX.

7、一般特性CHARACTERISTIC

气密试验压力(表压) LEAK TIGHT (NO LEAKAGE) (GAUGE PRESSURE)	4.3	MPa
强度试验压力(表压) HYDROSTATIC STRENGTH (NO LEAKAGE) (GAUGE PRESSURE)	17.0	MPa
绝缘电阻 (运转后热态时) INSULATION RESISTANCE (AFTER RUNNING)	50 (500VDC)	MΩ MIN.
耐电压 (泄漏电流 10 mA MAX.) DIELECTRIC WITHSTAND(LEAK CURRENT 10 mA MAX.)	1250	V-1min
*残留水分量 RESIDUAL MOISTURE	40	mg MAX.
*残留杂质量 RESIDUAL IMPURITIES	30	mg MAX.
*残留油量 (冷冻机油和组立油除外) RESIDUAL OIL(EXCEPT REFRIGERANT OIL AND ASSEMBLY OIL)	500	mg MAX.
*残留氯素量 RESIDUAL CHLORINE	30	ppm MAX.

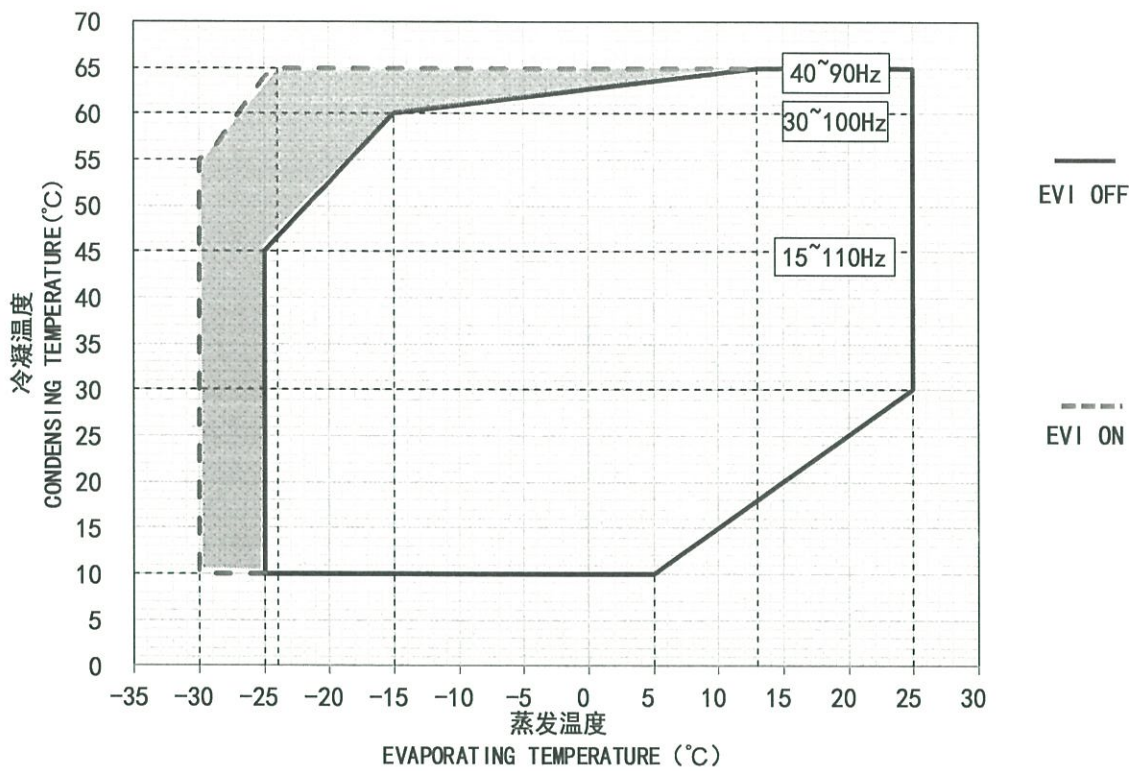
*松下内部测定标准 (PANASONIC TEST STANDARD)

8、冷冻系统使用范围 (LIMIT OF SYSTEM APPLICATION)

运转可能压力范围 LIMIT OF OPERATING PRESSURE RANGE

压缩机仕様允许频率: 15~110Hz

LIMIT OF OPERATING REVOLUTION SPEED



●最大使用温度压力电流范围 (LIMIT OF OPERATING CONDITIONS)

吸气压力 (表压力) GAUGE SUCTION PRESSURE	0.17-1.6	MPa.
吸气温度 RETURN GAS TEMPERATURE	35	℃ MAX.
卷线温度 MOTOR WIRE TEMPERATURE	130	℃ MAX.
瞬间最大电流 MAXIMUM INSTANTANEOUS CURRENT	54	A MAX.
排气温度 DISCHARGE TEMPERATURE	115	℃ MAX.

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●最大表面应力，最大倾斜角度等STRESS IN SURFACE, INCLINATION OF COMP.DURING OPERATION

液压缩运转 LIQUID REFRIGERANT BACK		
冷冻系统设计时，须防止液体冷媒进入压缩机产生液压缩，防止因液压缩引起的异常噪音、振动以及电流波动等现象。		
SYSTEM SHOULD BE DESIGNED NOT TO ALLOW THE LIQUID TO GO BACK TO COMPRESSOR WHICH CAUSE KNOCKING NOISE, CURRENT INCREASE OR UNDESIRABLE VIBRATION.		
排气管、吸气管（包括储液器连接管）最大表面应力 STRESS IN SUCT. &DISCH.PIPING SURFACE(INCLUDE ACCUM)	稳定运行状态： 15 启动、停止过程： 25	MPa MAX.
压缩机的最大倾斜角度 INCLINATION OF COMP.DURING OPERATION	8	° MAX.
冷冻系统内最大残留水分量 RESIDUAL MOISTURE IN THE SYSTEM	100	ppm MAX.
冷冻系统内最大残留空气量 RESIDUAL NON-CONDENSABLE GAS IN THE SYSTEM(N.T.P.)	30	cm ³ MAX.

●保管温度 STORAGE TEMPERATURE -40° C ～ 80° C

●加振动 VIBRATING THE COMPRESSOR
使用时不可外部加振

THE COMPRESSOR SHOULD NOT BE VIBRATED DURING OPERATING FROM OUTSIDE OF THE COMPRESSOR. (NOT BE APPLIED FOR VEHICLES, VESSELS AND OTHERS.)

9、压缩机整机内不纯物 ALL SYSTEM CONTAMINATES

●不可有氯系不纯物及严重影响油、冷媒的不纯物。

RESIDUAL CHLORINE AND IMPURITIES THAT AFFECT A DAMAGE TO THE OIL AND REFRIGERANT SHOULD BE ELIMINATED.

10、制造上的限制 PROCESS LIMITATIONS

●系统焊接时，使用干燥氮气保护防止氧化。

ALWAYS PURGE THE SYSTEM AND THE COMPRESSOR WITH THE DRY NITROGEN IN ORDER TO PREVENT OXIDATION OF THE PIPING.

●在本体检查工程时，不得与HCFC系冷媒用及其他油发生混合。

ANY PROCESS IN WHERE THE HCFC' s REFRIGERANT OR THE DIFFERENT KIND OF OIL AGAINST THE DEFINED COMPRESSOR OIL ARE MIXED SHOULD BE AVOIDED.

●必须避免进行损害压缩机机能、可靠性的试运转、试运转检查、保护装置检测运转等。

THE RUNNING OPERATION, THAT INSPECTION AND THE PROTECTOR INSPECTION THAT AFFECT A DAMAGE TO THE FUNCTION AND DURABILITY OF THE COMPRESSOR SHOULD BE AVOIDED.

●连接检查用室内机运转，使室外机运转时，必须对压缩机排出的冷冻机油进行充分回收。

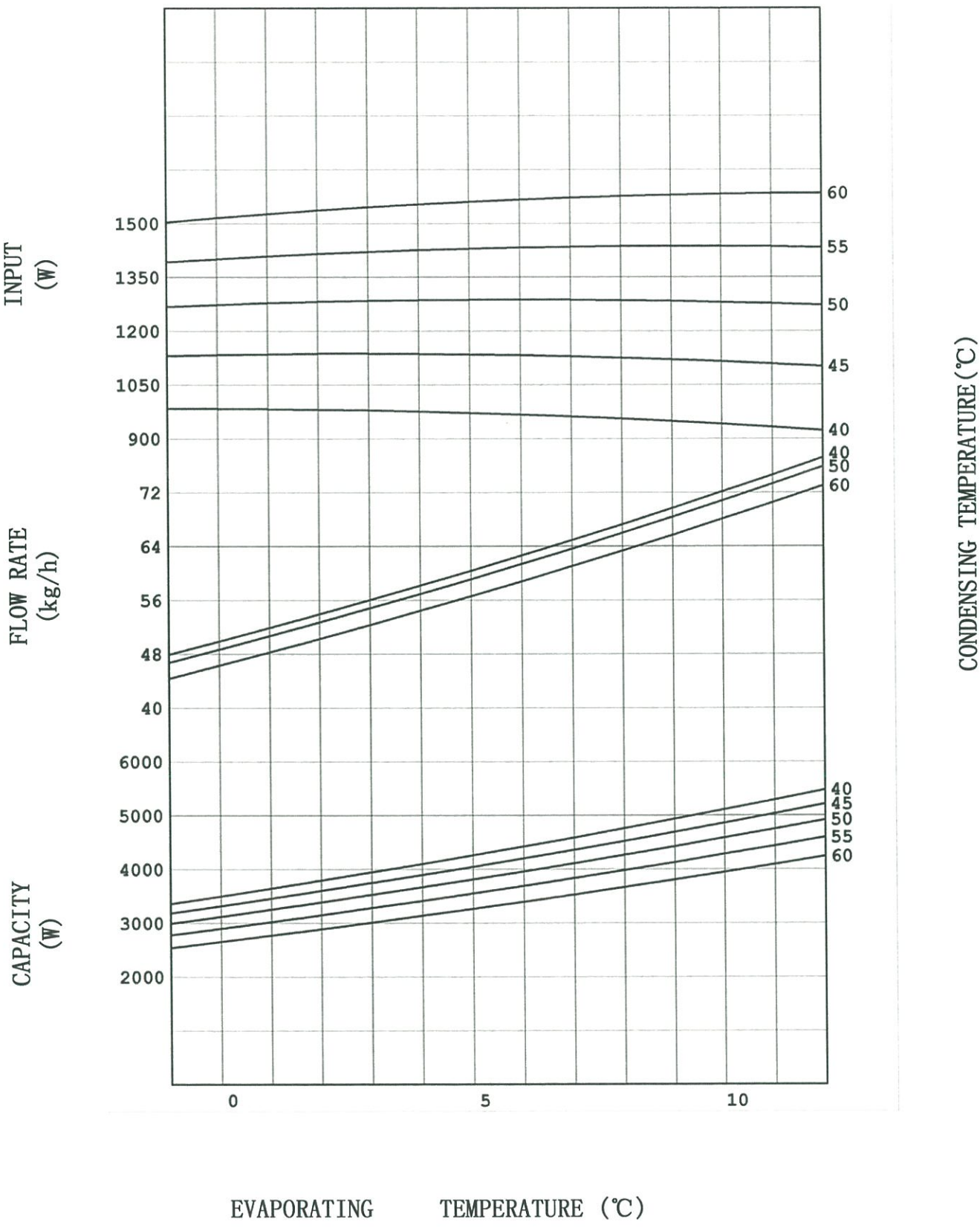
WHEN THE OUTDOOR UNIT IS OPERATED WITH THE INDOOR DUMMY UNIT, THE OIL DISCHARGED OUT OF THE COMPRESSOR SHOULD BE RECOVERED ENOUGH.

●胶塞取出顺序：排气管胶塞→吸气管胶塞→补气管胶塞

THE ORDER OF TAKING DOWN THE SEALS FOLLOWS AS:

DISCHARGE TUBE SEAL→SUCTION TUBE SEAL→INJECTION TUBE SEAL

BASED ON VOLTAGE 280V , FREQUENCY 3450 r/min
RETURN GAS SUPER HEATING 8.0 ℃
LIQUID SUB COOLING 0 ℃
AMBIENT, AIR OVER 1 m/s 35.0 ℃



R	压缩机特性规格书(附属书) SPECIFICATION FOR COMPRESSOR (APPENDIX) 暂 行 TENTATIVE	NO. :SC-RW2817-EE	页面 (PAGE)	A3-2
		机种名 (MODEL NAME): 9RD138ZBA2J		

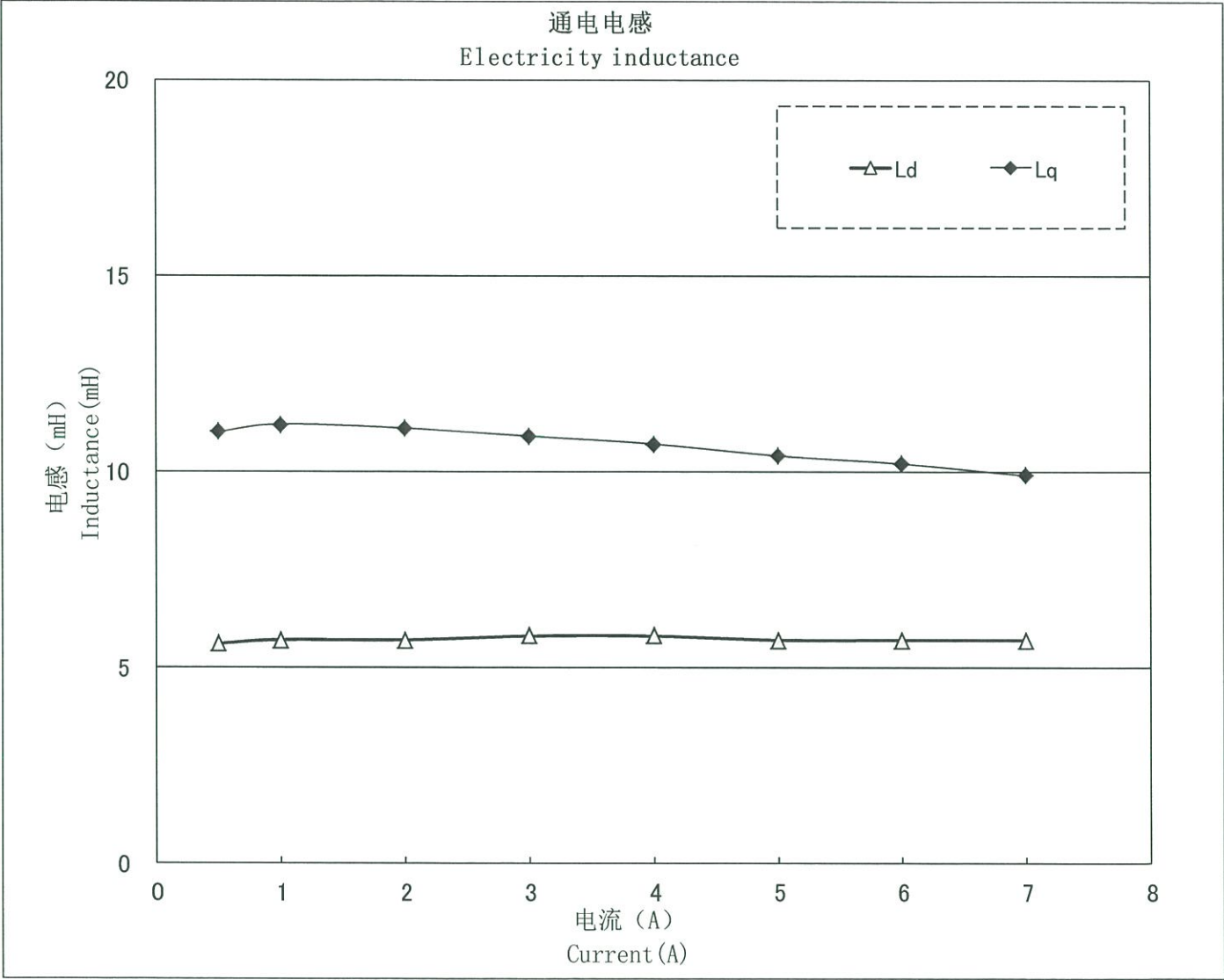
NO.	项目 Item	记号・单位 Units	参数 Parameter	备注 Remark
1	机种 Model	-	9RD138ZBA2J	
2	压缩机厂家 Manufacturer	-	松下・万宝(广州)压缩机有限公司 Panasonic Wanbao Appliances Compressor (Guangzhou) Co., Ltd.	
3	略 称 Abbreviation	-	PWAPCGZ	
4	压缩机结构 Compressor type	-	双转子 Double piston	
5	马达极数 Motor Pole	-	6极 6 poles	
6	卷线仕様 Winding type	-	分布卷 Distribution	
7	磁石 Magnet	-	稀土类 Rare earth	
8	电阻 Resistance	[Ω]	0.939	单相电阻 at 20°C Phase to neutral at 20°C
9	感应电压常数Ke Induced voltage constant Ke	[Vmean/krpm]	61.6	线间电压 Line to line voltage
10	转矩常数Kt Torque constant Kt	Kt[Nm/A]	0.976	
11	转动惯量 Rotary inertia	J[kgm ²]	4.8 E-04	转子 单体 Rotor only
12	d轴电感(单相) d axis inductance	Ld[mH]	5.5	无通电电感 No electricity inductance
13	q轴电感(单相) q axis inductance	Lq[mH]	10.0	无通电电感 No electricity inductance
14	最高回转数 MAX revolution	[rpm]	6600	
15	最低回转数 MIN revolution	[rpm]	900	
16	减磁电流 Demagnetizing current	[Peak A]	54.0	4%减磁 at 100°C 4% demagnetizing at 100°C

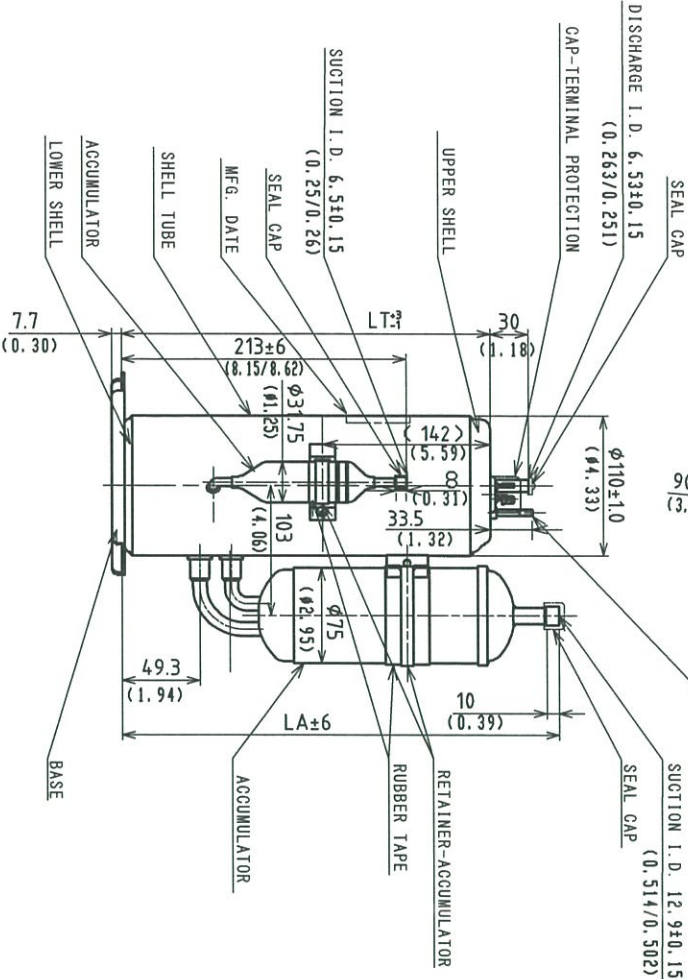
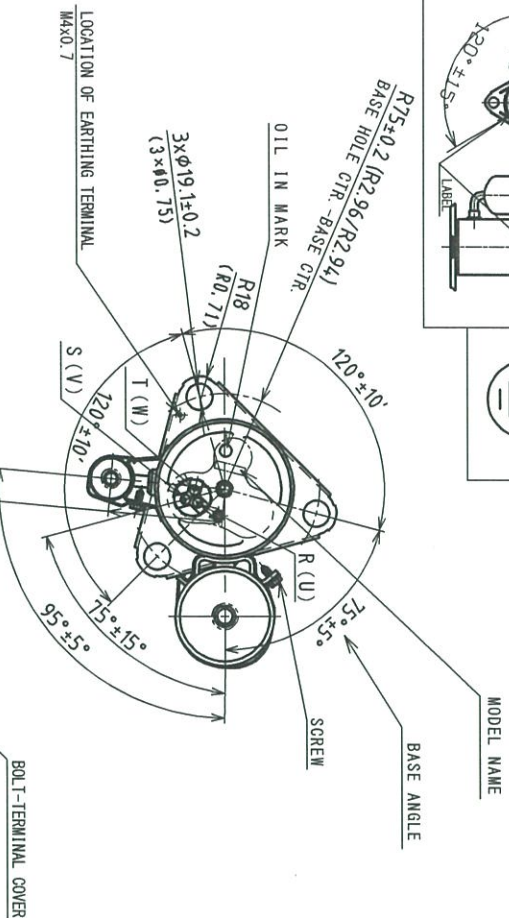
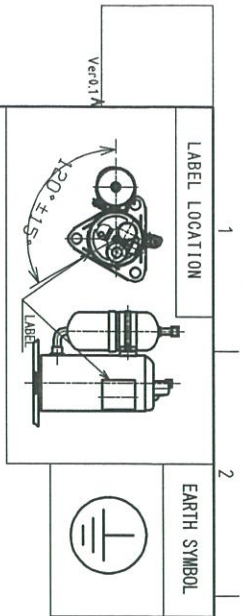
注：通电电感详见附表1 (Page A3-3)

Remark: Electricity inductance can be seen in attached list 1 (Page A3-3) .

附表1: 通电电感 (测定频率: 60Hz)
Attached list 1: Electricity inductance (Frequency: 60Hz)

电流 [A] Current [A]	0.5	1.0	2.0	3.0	4.0	5.0	6.0	7.0
Ld [mH]	5.6	5.7	5.7	5.8	5.8	5.7	5.7	5.7
Lq [mH]	11.0	11.2	11.1	10.9	10.7	10.4	10.2	9.9





- NOTES
1. PAINTING : BLACK PAINT BAKED.
 2. OIL : FMSOS 450cm³ CHARGED AND OIL MARK STAMPED ON THE UPPER SHELL.
 3. NITROGEN GAS (OVER ATMOSPHERIC PRESSURE) : CHARGED AFTER DEHYDRATION.
 4. EARTH SYMBOL : SHOWN NEAR THE EARTHING TERMINAL.
 5. ETC. : IDENTIFICATION MARKS FOR COMPRESSOR MANUFACTURING USE MAY BE APPEARED.

SYM	DT	ISSUED DATE	REVISION	R. NO.	SIGNED	CHECKED
x						
x						
x						

ADRW2817-A	RW2817	9RD1382BA2J	290 (11.4)	332 (13.07)	
DRAW. NO.	PARTS NO.	MODEL NAME	L T	L A	DATE SIGNED/RECEIVED

UNIT: mm(INCH)

SPECIFICATION MATERIAL ETC)		AUTHORIZED DATE		SERIES/MODEL/FACORY		PMAPOGZ TOC	
ITERATIVE		Label ISSUED DATE		R-SERIES DO-2PISTON			
SCALE	FREE	PAINTER	CHECKED	APPROVED	PART CODE	ADRW2817-A	
COMMERCIAL TOLERANCE	±1.5	DRAWN	钱燕子	Jun.19.19			
	±3	DESIGN					

(NOTICE) DON'T MEASURE THIS DRAWING
(注意) 図面を測図しないこと
(注意) 不能測図図面尺寸

A3

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3RD ANGLE SYSTEM UNIT: mm