

SPEC NO. QAHGC006

2011.03.25

DATE : MAR 25 2011

FOR APPROVAL

SPECIFICATION OF HERMETIC COMPRESSOR

MODEL NO. K1NC122GEJB-N

Attached Accessories

1.Refrigerant Oil

Charged

2.Electrical Components

Motor protector

1 pce/set

Terminal cover

1 pce/set

Packing

1 pce/set

Packing

1 pce/set

Holder

1 pce/set

Flange nut

1 pce/set

3.Mounting components

Rubber mount

3 pcs/set

CUSTOMER
APPROVAL _____

THE SPECIFICATION FOR **K1NC122GEJB-N** COMPRESSOR



General specification	TCSM002
1.Application	
Evaporating temp. range	-10~+15°C
Refrigerant	R22 (CHClF2) ,0.6 kg max.
2.Compressor data	
Outline dwg.	DA100D193
Design	Rolling piston type rotary
Displacement	12.24 cc/rev.
Number of cylinder	1
Oil charge	SUNISO 4GSD 300 cc
Weight	10.0 kgs.
3.Performance	
Performance curve	TCC171
Refrigerating capacity	2445/2465 W ±5%
Current	4.17/ 4.04 A ±5%
Motor input	835 / 860 W ±5%
Notes:Conditions	
Evaporating temp.	7.2 °C (45 °F)
Condensing temp.	54.4°C (130 °F)
Return gas temp.	35.0°C (95 °F)
Ambient temp.	35.0°C (95 °F)
Liquid temp.	46.1°C (115 °F)
4.Motor data	
Wiring diagram	DA200D002
Motor type	Permanent split capacitor
Output	705 W
Rated voltage	208V / 230V
Rated frequency	60 Hz
Phase	Single
Locked rotor current	24 A ±5% at 230V
Motor resistance (at 20°C)	Main winding 3.45 Ω ± 5%
	Aux. winding 5.35 Ω ± 5%
Insulation class	E
5.Electrical components	
Motor protector	MRA99246-9079 DA205D032 (19)
※Running capacitor	17 μF 430 VAC
6.Terminal parts accessories	
Terminal part assy	DA400D041
Terminal cover	1 pce. DA405Q001
Protector holder	1 pce. DA406D035
Packing	1 pce. DA408D043
Packing	1 pce. DA408D031
Flange nut	1 pce. DA904D025
7.Mounting accessories	
Compr. mounting	DA300D014
Rubber mount	3 pcs. DA306D013
8.Optional parts	
Nameplate	1 pce. DA912D045

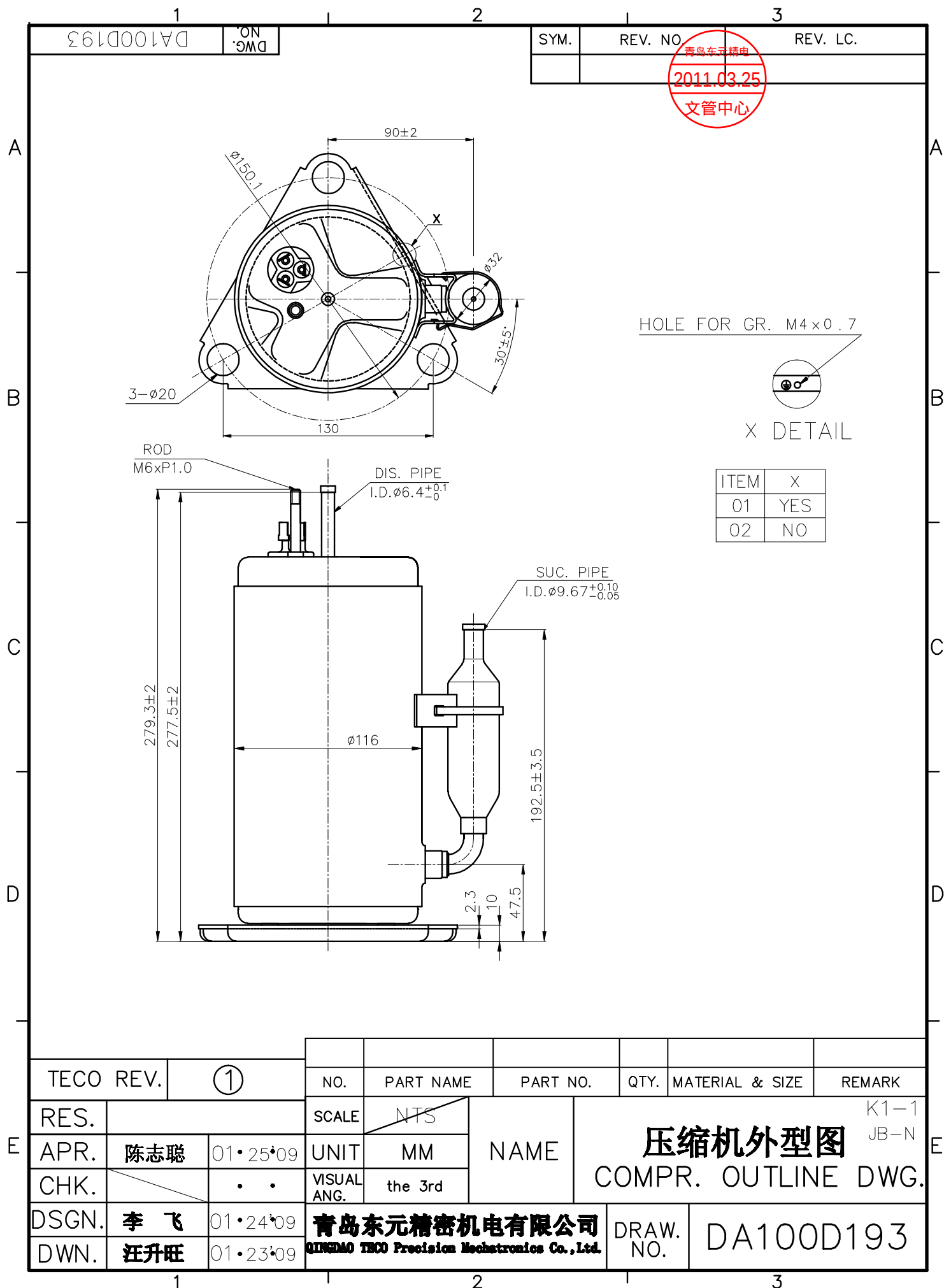
※The product recognized by International Safety-standard is recommended.

K1、K2系列压缩机使用基准与界限



K1, K2 series rotary compressor application limitations

No.	项目 Item	标准条件 Standard condition	过载条件 Overload Condition	备注 Remarks
1	使用冷媒 Refrigerant	R22 (使用冷媒质量, 适用JIS K1519规范)		
2	蒸发温度范围 Evaporating	-10~+15℃ (2.61~7.05kg/cm ² G)	-20℃以上 (1.5kg/cm ² G MIN)	
3	凝缩温度范围 Condensing	+28~+65℃ (10.5~26.51kg/cm ² G)	+68℃以下 (28kg/cm ² G MAX)	压缩机设计压力30kg/cm ² G The design pressure for our compressor is 30kg/cm ² G
4	压缩比 Compressing ratio	6以下 6MAX	8以下 8MAX	
5	马达线圈温度 Motor coil temperature	100℃以下 100℃MAX	125℃以下 125℃MAX	
6	压缩机底壳温度 Comp. bottom temp.	100℃以下 100℃MAX		
7	排出气体温度 Dis. gas temp.	100℃以下 100℃MAX	115℃以下 115℃MAX	排放管量测 measured at dis. pipe
8	吸入气体温度 Suc. gas temp.	吸入气体过热度+2℃以上 Superheat must be over +2℃	不可发生吸入液体之回流 No liquid-back	
9	供应电压 Voltage range	额定电压±10%以内 Rated voltage ±10%		压缩机端子电压 measured at comp. terminal
10	供应频率 Frequency range	额定频率±2%以内 Rated frequency ±2%		
11	ON-OFF频率 ON-OFF Cycle	每循环3分钟以上运转, 3分钟以上停止 3 min-ON, 3 min-OFF/cycle at least.		
12	冷媒充填 Refrigerant charging	冷冻油/冷媒之重量比, 需保持在0.4以上。 液态充填冷媒, 当系统有泄漏时, 需完全排放后重新充填。 The weight ratio of oil to refrigerant must be over 0.4. The refrigerant must be charged in liquid state. No additional charge before total discharge while system leaks.		冷冻油密度: 0.877g/cm ³ The density of the oil charged is 0.877g/cm ³ .
13	最低起动电压 Minimum starting voltage	1. 0.8E, 额定电压0.8倍. Rated voltage*0.8. 2. 环境温度20~35℃. Ambient temp. 20~35℃. 3. 高/低压力平衡. Balanced pressure.		
14	压缩机内油面 Oil level	稳定运转时, 油面需高于汽缸下缘5mm. At steady state, oil level must be 5mm above the bottom of cylinder.		
15	异常压力上升Abnormal pressure raising	40 Kg/mm ² G以下 40 Kg/mm ² G MAX		冷却风扇停止时 Fan-block condition
16	配管应力(铜管) Allowable stress of tube (Copper tube)	起动、停止及运输时: 3.0 Kg/mm ² G以下 starting, stopping and transportation: 3.0 Kgf/mm ² G MAX.		
		运转时: 2.0 Kg/mm ² G以下 operating: 2.0 Kgf/mm ² G MAX.		
17	水分 Residual moisture	系统中的水分需在100mg以下 100 mg MAX.		
18	真空度 Vacuum Pressure	系统真空度需在0.35mmHg以下 The vacuum pressure in system must be less than 0.35mmHg.		
19	倾斜 Tilt in operating	安装于系统时, 压缩机的倾斜度需在5° 以内 The compressor incline angle must be less than 5° .		
20	橡皮塞拔除 Rubber remove	橡皮塞需从排放管侧先拔除, 橡皮塞拔除后压缩机需于10分钟内安装于系统 The compressor should be installed in 10 minutes after rubber removed.		避免冷冻油喷出以及水分、杂质入侵 Avoid the oil loss and foreign body in.
21	储存 Storage	压缩机需储存于室内, 避免日晒雨淋, 环境温度-10~+65℃ The compressor should be indoor storage and the ambient temperature is between -10 to +65℃ to avoid poor climate.		

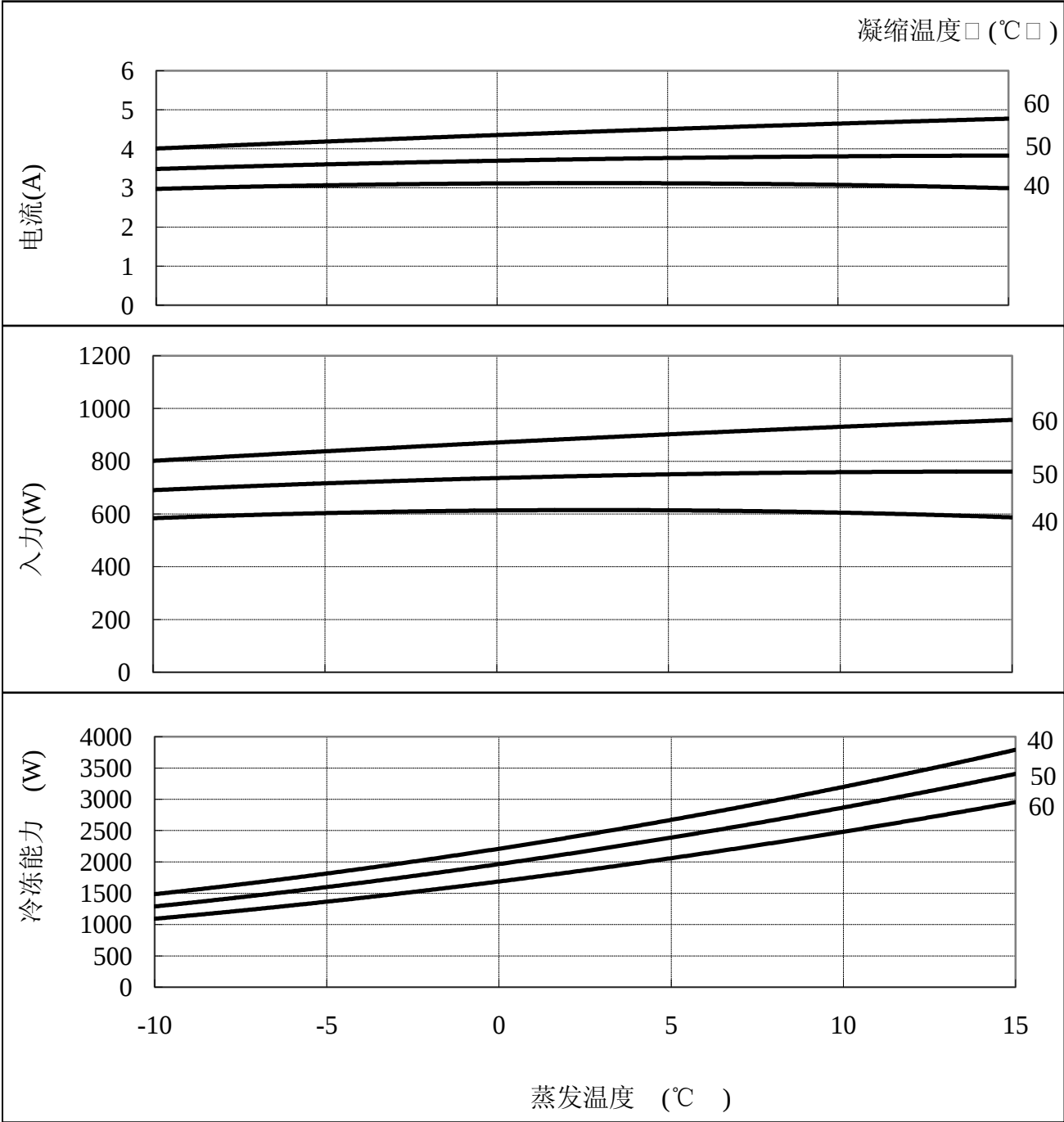


K1NC122GE 性能曲线

Rating condition □ 11 deg. return gas superheated
8.3 deg. liquid subcooled
35 deg. ambient □ forced air flow



1 □ 208V 60Hz

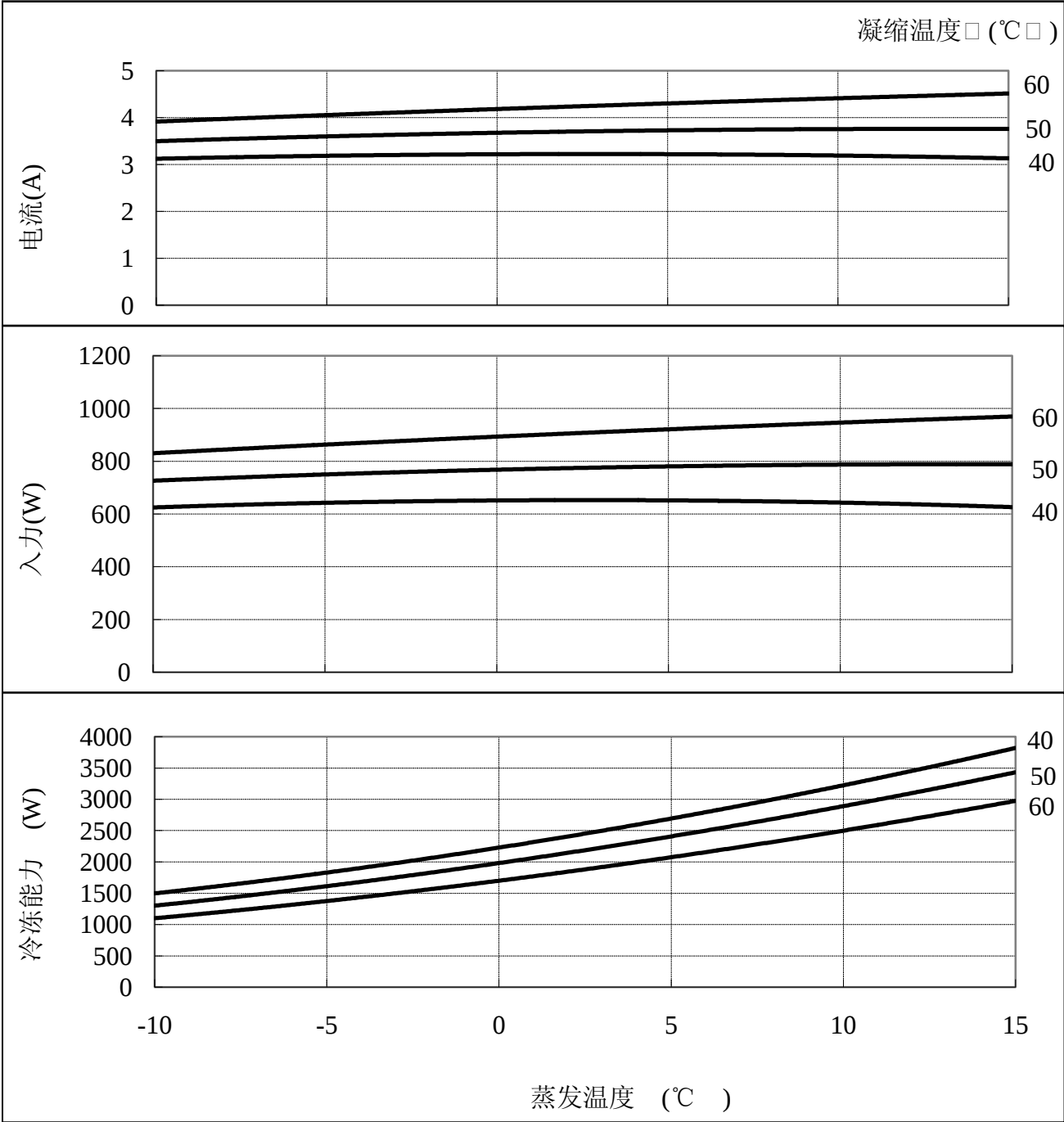


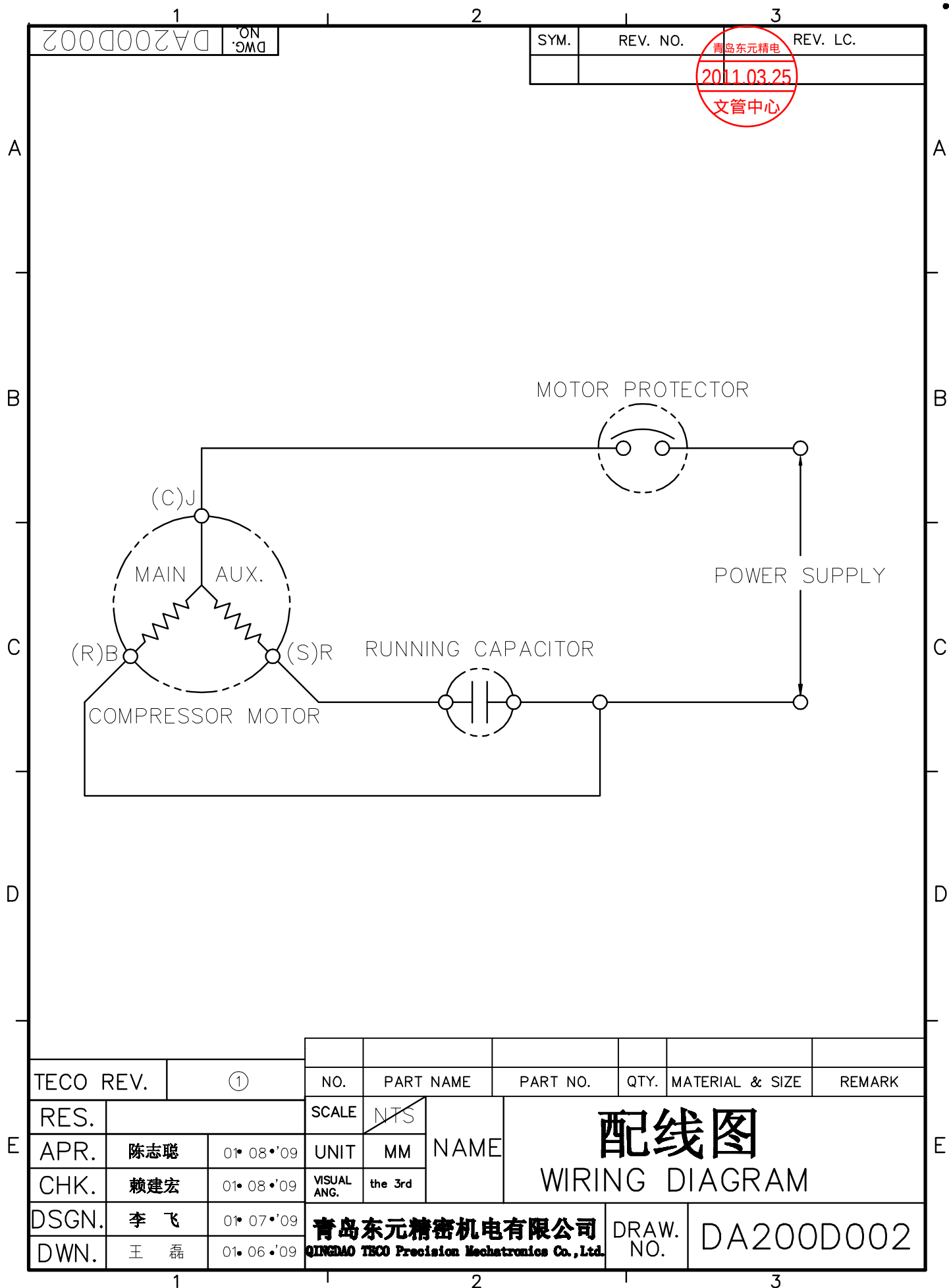
K1NC122GE 性能曲线

Rating condition □ 11 deg. return gas superheated
8.3 deg. liquid subcooled
35 deg. ambient □ forced air flow



1 □ 230V 60Hz





1		2		3	
ZC0050ZVD		台 号	版 次	设 变 单 号	设 变 位 置
		④	QYQ10028M	(1,D)	
					未标示之尺寸公差 (CNS标准)
					铁铸件 201 粗 0.25 粗级
					机械切削 文 粗 中 粗级
					冲 压 精 中 粗级
					金属烧结 精 中 粗级

注：1. 电木底盖需盖紧，以不影响动作特性及外观尺寸，其形状不予限制。

1. THE O.L.P. BOTTOM COVER SHOULD BE TIGHTLY FASTENED AND SHOULD NOT AFFECT ITS PERFORMANCE CHARACTERISTICS AND OUTLIN SPECIFICATIONS,BUT THE SHAPE IS NOT RESTRICTED.

ITEM	TYPE	OVERL TRIP CURRENT (@100℃) A±15%	LOCKED TRIP CURRENT(@25℃) A sec	OPEN TEMP. ℃	CLOSE TEMP. ℃	备 注	
01	MRA99069-9079	5.5	14.5 6~16	150± 7	80±11		
02	MRA99070-9023	11.8	23.5 6~16	155± 5	80±11		
03	MRA99071-9079	6.0	14.5 6~16	150± 7	75±11		
04	MRA99072-9023	14.0	26.0 6~16	160± 7	85±11		
05	MRA99073-9023	13.0	24.5 6~16	160±10	85±11		
06	MRA99074-9023	8.0	20.0 6~16	135± 7	70±11		
07	MRA99075-9023	9.0	20.0 6~16	140± 7	80±11		
08	MRA99076-9023	17.0	32.5 6~16	165±10	85±11		
09	MRA99077-9023	24.0	45.0 6~16	165±10	85±11		
10	MRA99083-9023	9.8	18.0 6~16	160±10	80±11		
11	MRA99084-9079	10.7	24.0 6~16	165±10	80±11		
12	MRA99085-9023	16.6	32.0 6~16	160±10	80±11		
13	MRA99086-9079	8.7	18.0 6~16	155±10	75±11		
14	MRA98881-9023	13.4	25.0 6~16	150±10	70±11		
15	MRA99091-9023	20.0	41.0 6~16	165± 7	90±11		
16	MRA99093-9023	6.8	14.0 6~16	140± 7	75±11		
17	MRA99232-9079	4.3(90℃)	12.5 6~16	140± 5	69± 9		
18	MRA99245-9079	7.8	17.5 6~16	155± 5	70±11		
19	MRA99246-9079	6.9	17.5 6~16	155± 5	70±11		
20	MRA99255-9079	5.8	15.0 6~16	160± 5	70±11		
21	MRA99263-9079	5.0(80℃)	13.3 6~16	135± 5	78±11		
22	MRA99280-9079	4.9	13.7 6~16	135± 5	78±11		
23	MRA12087-9079	9.5	25.0 2~12	150± 7	60±11		
24	MRA98834-9079	7.6(80℃)	16.0 6~16	135± 7	69±11		
④	25	MRA12166-9079	7.3	17.7 6~16	150± 5	61±9	
④	26	MRA12357-9079	7.9	19.0 6~16	145± 5	69±11	
④	27	MRA12359-9079	6.5	14.3 6~16	150± 5	69±9	
④	28	MRA12089-9023	8.9	22.5 2~12	150± 5	70±9	

1 2

CIRCUIT(9023)

1 2

CIRCUIT(9079)

6.35 0.5

∞

TERMINAL
(AMP #250 SERIES)

AMP #41800 FEMALE

AWG #14 LEAD
(BLACK)

65±4

12.5 16±0.5
3.0±0.3

ø24.8±0.3

ø26.2±0.3

台湾东元版本号		项 件 名 件 号 件数 材质 尺 寸 重量 备注							
规 范		比 例	NTS	图 名 马达保护器 MOTOR PROTECTOR					
核 定	陈志聪	05.10'10	单 位						MM
审 查		.	视 角						第三视角
校 对	李 飞	05.10'10	青 岛 东 元 精 密 机 电 有 限 公 司		设 图 号	DA205D032			
制 图	李 丽	05.07'10	QINGDAO TECO Precision Mechatronics Co.,Ltd.						

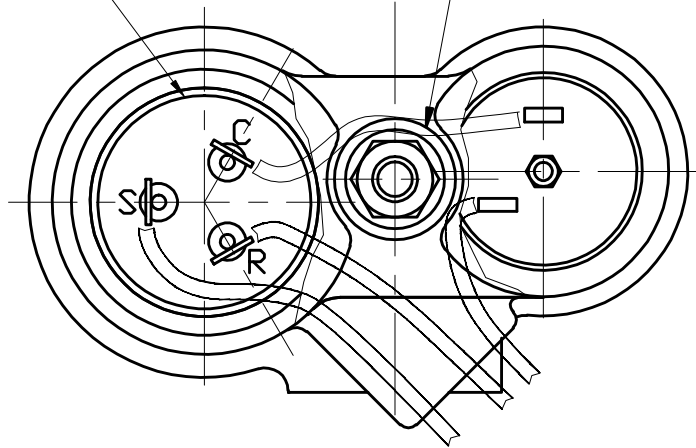
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1		2		1	
DA400D041		DWG. NO.		SYM.	REV. NO.
					REV. LC.

GLASS TERMINAL

PACKING



FLANGE NUT(M6)

ROD

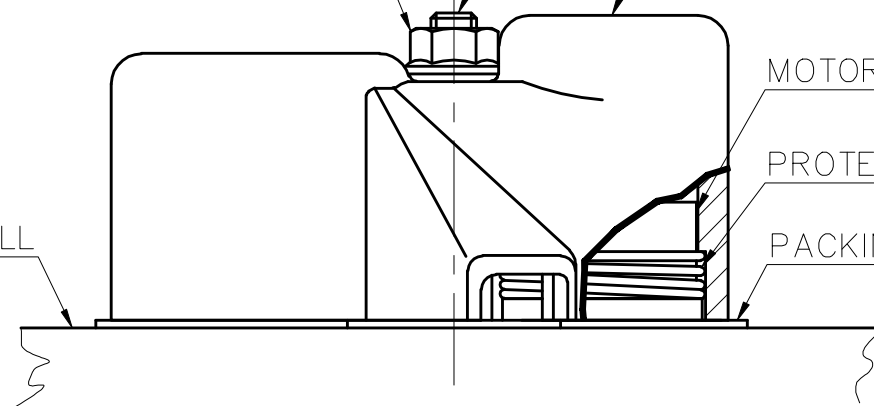
TERMINAL COVER

MOTOR PROTECTOR

PROTECTOR HOLDER

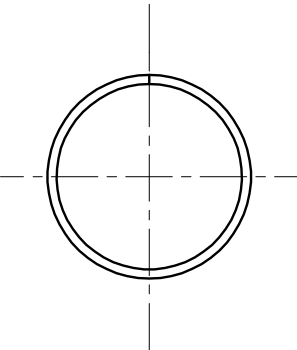
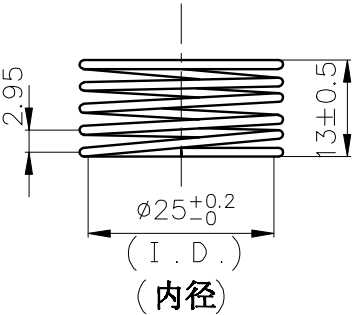
PACKING

U. SHELL



TECO REV.			②	NO.	PART NAME	PART NO.	QTY.	MATERIAL & SIZE	REMARK
RES.				SCALE	NTS	端子组立 K TERMINAL PART ASSY			
APR.	陈志聪	01.09.09	UNIT	MM	NAME				
CHK.	赖建宏	01.09.09	VISUAL ANG.	the 3rd					
DSGN.	李飞	01.08.09	青岛东元精密机电有限公司				DRAW. NO.	DA400D041	
DWN.	王磊	01.07.09	QINGDAO TECO Precision Mechatronics Co., Ltd.						

3

1			2			3																	
DA406D035			DWG. NO.			SYM.			REV. NO.			REV. LC.											
									2011.03.25			文管中心											
A																							
B																							
C																							
D																							
E																							
 																							
TECO REV.			③			NO.			PART NAME			PART NO.			QTY.			MATERIAL & SIZE			REMARK		
RES.			35014D320			SCALE			NTS			NAME			K			保护器固定座					
APR.			陈志聪			01.09.09			UNIT			MM			the 3rd			PROTEC HOLDER					
CHK.			赖建宏			01.09.09			VISUAL ANG.														
DSGN.			李 飞			01.08.09			青島東元精密机电有限公司			DRAW. NO.			DA406D035								
DWN.			王 磊			01.07.09			QINGDAO TECO Precision Mechatronics Co., Ltd.														
1						2						3											

1		2		3	
DWG. NO. DA408D043		SYM.		REV. NO.	
				REV. L.C. 青岛东元精密电	
				2011.03.25	
				文管中心	

注：1. 颜色：黑色。

2. 难燃性材质(145-160° C).

3. 绝缘测试：
以D. C. 500V绝缘抵抗须在30MΩ以上。

4. 耐压测试：
1200V-min, 1800C-sec合格。

5. 硬度：Hs70±5.

1. COLOR: BLACK

2. THE MATERIAL MUST BE HARD TO IGNITE (145~160℃).

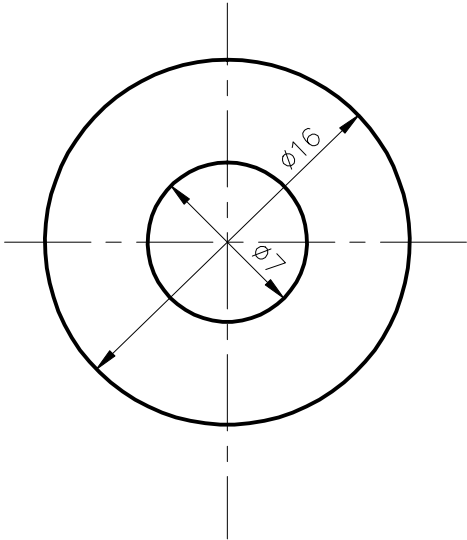
3. INSULATION RESISTANCE: 30MΩ OR MORE AT D. C. 500V

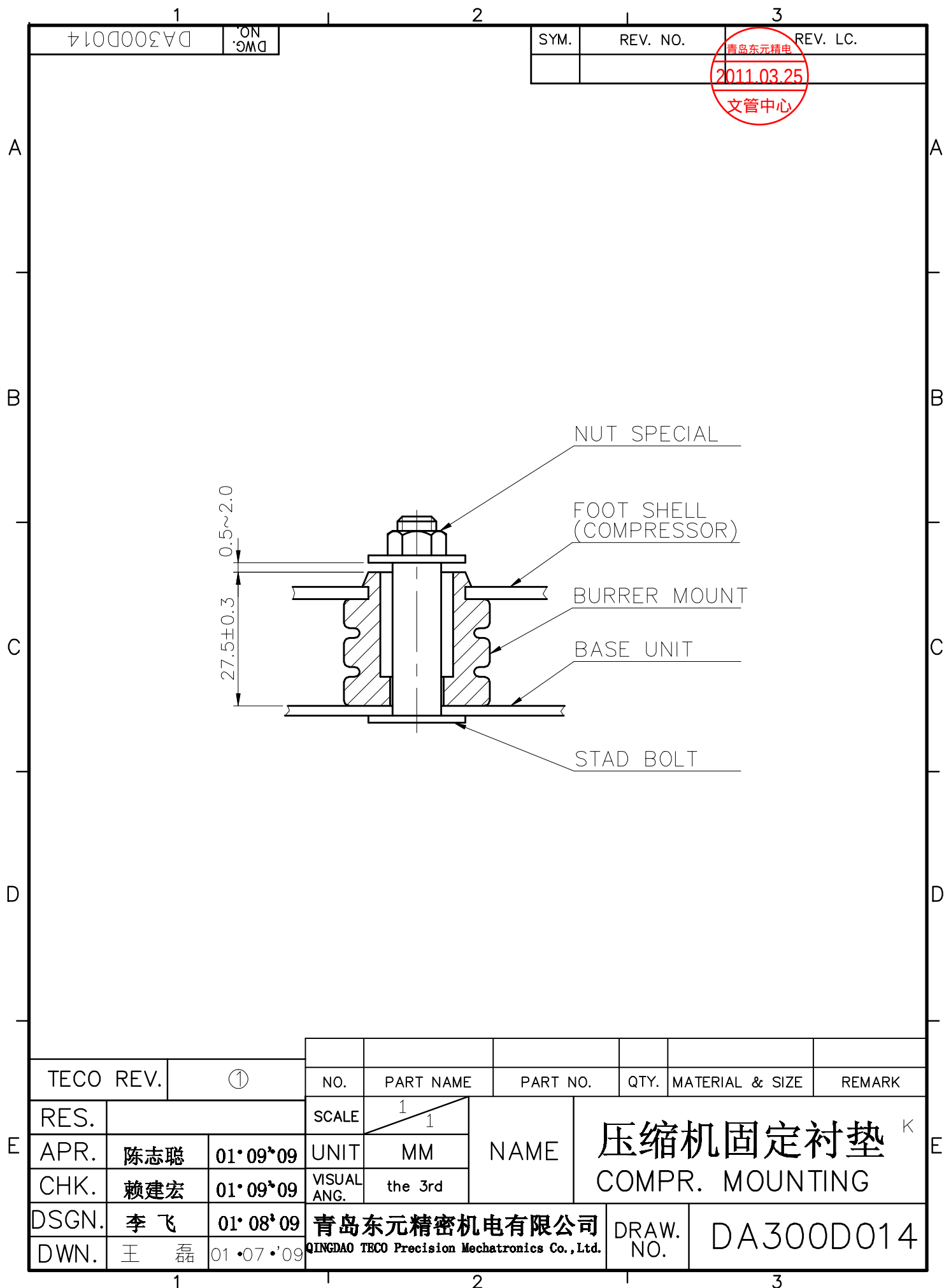
4. VOLTAGE DURABILITY TEST: AT LEAST 1800V-SEC, OR 1200V-MIN.

5. HARDNESS HS: 70±5.

Technical drawing of a mechanical part. Dimensions include: 28, 29, 28, 19.5, 25, 25, 16.5, 28, 11, 30, 46, 28, 38. Labels include: (W)R, S(V), C(U), and various diameters (φ28, φ38, φ11, φ30, φ46).

TECO REV.			③			EPT T1.5			
RES.	35023D553		NO.	PART NAME	PART NO.	QTY.	MATERIAL & SIZE	REMARK	
APR.	陈志聪	01·09·09	SCALE	1/1	NAME		衬垫	K	PACKING
CHK.	赖建宏	01·09·09	UNIT	MM					
DSGN.	李飞	01·08·09	VISUAL ANG.	the 3rd					
DWN.	王磊	01·07·09	青岛东元精密机电有限公司				DRAW. NO.	DA408D043	
			QINGDAO TECO Precision Mechatronics Co., Ltd						

1		2		3		
DA408D031		DWG. NO.		SYM.		
				REV. NO.		
				REV. LC.		
				2011.03.25		
				文管中心		
A						A
注: 1. 材质为耐燃性 (145~160° C).						
1. THE MATERIAL MUST BE						
HARD TO IGNITE (145~160°C).						
B						B
						
C						C
D						D
TECO REV.		②		EPT T1.5		
RES. 35023D254		NO.		PART NAME		
APR. 陈志聪		PART NO.		QTY.		
CHK. 赖建宏		SCALE		MATERIAL & SIZE		
DSGN. 李飞		UNIT		REMARK		
DWN. 王磊		VISUAL ANG.				
		the 3rd				
		NAME		衬垫		
				PACKING		
		青岛东元精密机电有限公司		DRAW. NO.		
		QINGDAO TECO Precision Mechatronics Co., Ltd.		DA408D031		
1		2		3		
E						E



TECO REV.			①							
NO.			PART NAME		PART NO.		QTY.	MATERIAL & SIZE		REMARK
RES.					SCALE	1 1	NAME	压缩机固定衬垫 COMPR. MOUNTING		
APR.	陈志聪	01*09*09		UNIT	MM					
CHK.	赖建宏	01*09*09		VISUAL ANG.	the 3rd					
DSGN.	李 飞	01*08*09		青岛东元精密机电有限公司			DRAW. NO.	DA300D014		
DWN.	王 磊	01*07*09		QINGDAO TECO Precision Mechatronics Co.,Ltd.						

S+0DZ16VD		ON GMD		SYM.		REV. NO.		3 青岛东元REV. LC.																																																														
注: 1. 颜色采白底黑字. 2. 此件须耐温125°C以上. 3. 制造编号:				①		QN9060M		2011.03.25 B)(2,D) 文管中心																																																														
年 (1994→4) _____ 月 (01, 02, . . . 11, 12) _____ 流水号 _____				①																																																																		
4. 材质为POLYESTER FILM, 厚为0.05.																																																																						
NOTES: 1.WORDS ARE BLACK WITH WHITE BACKGROUND. 2.HEAT DURABILITY MUST EXCEED 125°C. 3.SERIAL NO.:																																																																						
YEAR(1994→4) _____ MONTH(01,02...11,12) _____ CONTINUOUS NO. _____				①																																																																		
4.MATERIAL:POLYESTER FILM THICKNESS:0.05.																																																																						
频率 FREQUENCY 66 输入 INPUT 电压 VOLTAGE 交流电符号 AC SOURCE 制冷剂代号 REFRIGERANT 检验合格 INSPECTION O.K. 认证标志 (3C、UL、VPC. . 等) RECOGNIZED MARK 机种型名 NAME 电源相 PHASE 拘束电流 LOCKED CURRENT 制造编号 (注3) SERIAL NO. 机种型名 NAME MADE BY QINGDAO TECO PRECISION MECHATRONICS CO., LTD. 408000001① RoHS WARNING/DANGER FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN SERIOUS PERSONAL INJURY. 1.FOLLOW THE RECOGNIZED SAFETY PROCEDURES AND WEAR PROTECTIVE GOGGLES WHEN SERVICING THIS COMPRESSOR. 2.THE COMPRESSOR OR SYSTEM MUST BE GROUNDED. 3.DO NOT OPERATE OR PROVIDE ANY ELECTRIC POWER TO THIS UNIT UNLESS THE TERMINAL COVER IS IN PLACE AND SECURED. 4.DO NOT REMOVE THE TERMINAL COVER UNTIL ALL ELECTRICAL SOURCES HAVE BEEN DISCONNECTED. THERMALLY PROTECTED OK PH Hz V LRA A W																																																																						
<table border="1"><tr><td colspan="2">TECO REV.</td><td>①</td><td colspan="2">NO.</td><td colspan="2">PART NAME</td><td colspan="2">PART NO.</td><td>QTY.</td><td colspan="2">MATERIAL & SIZE</td><td>REMARK</td></tr><tr><td>RES.</td><td colspan="2">35970H003</td><td>SCALE</td><td colspan="2">NTS</td><td colspan="2" rowspan="3">NAME</td><td colspan="5" rowspan="3">铭 牌 NAMEPLATE</td></tr><tr><td>APR.</td><td>陈志聪</td><td>06·19'09</td><td>UNIT</td><td colspan="2">MM</td></tr><tr><td>CHK.</td><td></td><td>.</td><td>VISUAL ANG.</td><td colspan="2">the 3rd</td></tr><tr><td>DSGN.</td><td>李 飞</td><td>06·18'09</td><td colspan="5">青岛东元精密机电有限公司</td><td colspan="2">DRAW.</td><td colspan="3" rowspan="2">DA912D045</td></tr><tr><td>DWN.</td><td>雷 冰</td><td>06·17'09</td><td colspan="5">QINGDAO TECO Precision Mechatronics Co.,Ltd.</td><td colspan="2">NO.</td></tr></table>										TECO REV.		①	NO.		PART NAME		PART NO.		QTY.	MATERIAL & SIZE		REMARK	RES.	35970H003		SCALE	NTS		NAME		铭 牌 NAMEPLATE					APR.	陈志聪	06·19'09	UNIT	MM		CHK.		.	VISUAL ANG.	the 3rd		DSGN.	李 飞	06·18'09	青岛东元精密机电有限公司					DRAW.		DA912D045			DWN.	雷 冰	06·17'09	QINGDAO TECO Precision Mechatronics Co.,Ltd.					NO.	
TECO REV.		①	NO.		PART NAME		PART NO.		QTY.	MATERIAL & SIZE		REMARK																																																										
RES.	35970H003		SCALE	NTS		NAME		铭 牌 NAMEPLATE																																																														
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