Hitachi Highly

Rollkolbenverdichter

Rotary Compressors

Spezifikation
Manual

BSA804SD-A3BUA

R 134a

8,04 cm3/rev

2400-7200 min-1

Änderungen jederzeit vorbehalten
We reserve the right to change at any time without prrior notice

RIES GmbH, Rudolf-Diesel-Str. 10, D 64569 Nauheim, GERMANY

Phone: +49 6152 9741 0, Fax: +49 6152 9741 21, Email: info@ries-gmbh.de, Website: www.ries-gmbh.de

	SUBJECT Model BSA804SD-A3BUA SPECIFICATION	PAGE: 1/22

1. SCOPE

This specification is applied to rotary compressors produced by SHEC.

2. SPECIFICATION OF THE MODEL

Item	Spec
2.1 Model Type	BSA804SD-A3BUA
2.2 Power source input to inverter	Rated voltage 220V Rated frequency 50Hz Phase 1phase
2.3 Application	Dryer
2.4 Refrigerant	R134a
2.5 Displacement	8.04ml/rev
2.6 Allowable frequency range	2400～7200min^{-1}
2.7 Oil	α 68HES-H or equivalent 280±20ml
2.8 Allowable amount of refrigerant charge	Below 550g 550g
2.9 Compressor cooling	Forced air
2.10 Hermetic Terminal	1/4" quick connect type
2.11 Space volume of inner case	700cm^3
2.12 Compressor weight	4.7kg incl. Oil
2.13 Motor Type Insulation class Winding resistance	Direct current brushless motor E class 3.22Ω(at 75℃)
2.14 Rated Capacity (see *) (W)	960
2.15 Compressor Rated Input (see *) (W)	278
2.16 COP	3.45

Item	Spec
2.18 Current (A)	2.19 (compressor input)
2.19 Capacity measuring conditions and noise & vibration measuring condition	Rotational speed 3000min^{-1} Evaporating temp. 7.2℃ Condensing temp. 54.4℃ Liquid temp. 46.1℃ Ambient temp. 35.0℃ Return gas temp. 35.0℃ Wind speed 2m/s

*. Rated Capacity and input are measured with HITACHI inverter circuit by secondary Refrigerant calorimeter Methods of JIS B8606 by Shanghai Hitachi Electrical Appliances Co., Ltd. Allowable capacity should be more than 95% of the rated capacity and allowable input should be less than 107% of rated motor input. Don't need to set the ambient temperature and wind speed when measuring the noise and vibration.

3. THE PARAMETER OF MOTOR

Item		Parameter	Remark
3.1 Rotor Pole		4	4 Pole 12 Slot Separation
3.2 Running Range (Hz)		80～240	Up To INV VDC Max
3.3 Limiting Current	(A) De-magnetic Current	20A	Test under 120C, Peak Current, Current lasting 2sec, De-magnetic effect less than 5%
	Allowable Long Time Operation Current (A)	5A	Allowable long time operation current of terminal pins and motor lead wire
3.4 d axis inductance (mH)		(table 1)	Inductance change as current value, refer to table 2
3.5 q axis inductance (mH)		(table 1)	Inductance change as Current value, refer to table 2
3.6 Stator Winding Resistance (25℃) (Ω)		2.72 (25℃)	line-to-line
3.7 Induce Voltage (Vrms/krp)		27.2V/krpm	line-to-line

Item	Parameter	Remark
3.8 Motor Torque (N·m/Arms)	0.399	N • m/Arms
3.9 Moment Of Inertia (Kg·m2)	I=0.00018797	I1=M/2*(Ro ^ 2+Ri ^ 2) I2=Mp/2*Rp ^ 2+Mp* ε ^ 2 I=I1+I2
3.10 Flux Φa (Wb)	0.106	Φ (— peak)= $\frac{\sqrt{2}\times E0}{2\pi f\sqrt{3}}$

Notice: M—rotor weight Ro—rotor external radius Ri—rotor inside radius
Mp—centerless part weight Rp—centerless part radius ε —centerless

Table 1 Test Frequancy100Hz

Current (RMS)	1A	1.5A	2A	2.5A	3A	3.5A	4A	5A	7A
Lq(mH)	12.85	12.46	11.99	11.55	11.15	10.78	10.46	9.93	9.02
Ld(mH)	7.74	7.69	7.61	7.52	7.42	7.32	7.21	7.01	6.61

Table 2

Running toque (Nm)	0.7
Running current RMS(A)	1.75

4. CHARACTERISTICS

4.1 Appearance

The surface of the compressor is painted to black, without obvious flaw , impact scar, paint peel off, rust and so on.

。

4.2. Indication

Compressor model type, manufacturing data are clearly indicated on the surface of compressor。

4.3. Residual moisture 150mg MAX

4.4. Residual impurities 70mg MAX

5. PARTS AND DRAWING LIST

PARTS NAME	QTY/SET	DRAWING NO.	REMARKS
Compressor	1	4CYCA0050	Dimensioned sketch
		Chart 1	Pressure guarantee Chart

PARTS NAME	QTY/SET	DRAWING NO.	REMARKS
WIRING DIAGRAM	--	4CYC01034	
Electrical components			
THERMOSTAT	1	4CYC00956	1NT01L-5730
Terminal parts accessories			
Rubber cover	1	4CYC01035	
Terminal cover	1	SC01D775	
Clip	1	SC01D076	
Packing	1	SC01D075	
◆ Mounting accessories			
Rubber mount	3	4CYC01034	

*Out of supply, for reference.

COMPRESSOR CRITERIA

1 Strictly observe the specification

The compressor should be used in specifications written in this “compressor specification” and not be used in specifications outside it.. The main circuit must link up with fuse or breaker.

2 Source voltage

Specified inverter is linked up with compressor terminals . Applied voltage of this inverter should be voltage specified in this “compressor specification”. Alternating voltage should never be applied on terminals (for example : commercial alternating voltage of 1φ100V, 200V, 3φ200V). This is because that if applied alternating current the direct current motor will demagnetize.

3 Operating voltage range

The compressor should be operated in the range of rated voltage ±10%, under standard condition and overload condition of rated frequency (applied voltage to inverter). It must be satisfied with item 5 ,6,7.

4 Operating temperatures and pressures

The operating temperatures and pressures of a compressor should be within the range shown in the table 3 for a reliable compressor operation over lifetime, according to lifetime test SHEC protocols.

Item	
Discharge pressure /MPa	in the range mentioned in chart 1.
Suction Pressure /MPa	0.201～0.887MPa
Compressor case bottom temp	99℃or below and 6 degrees higher than condensing temperature
Motor winding temp	R.Voltage±10%:
Accumulator temp	Higher than outlet pipe of evaporator
Ambient temp	Meet for the condition of above mentioned motor winding temp.

Table 3

5 Current limitation

Current peak among motor terminals (include instantaneous current peak) should be below 20A in order to prevent magnet in motor from demagnetization.

6 Pressure difference between suction and discharge

In all allowable rotational speed range, the difference of pressure should be more than 39MPa{4kgf/cm^2}. But if there is no problem of noise when assembled in air conditioner,

it can also below this value.

7 Discharge pipe temperature

Discharge pipe temperature is measured at a distance 300mm from the surface of compressor and should be less than 110℃. The tip of the thermocouple is fixed by soldering when measuring discharge pipe temperature .Furthermore, soldering point is covered with urethane foam to prevent the effect of wind.

8 Dust of compressor hermetic terminals

Compressor hermetic terminals should be mounted with specified cover in right way to prevent dust entering, and should be used in direction which dust is hard to enter in.

9 Lead wire of compressor hermetic terminals

Measuring the temperature of hermetic terminals , lead wire should be resist to the temperature and be clamped so as not in touch with the surface of compressor and pipe.

10 Start-stop frequency

The frequency should be less than 6 times per hour. Operating time from start to stop should be more than 3 minutes. Stopping time should be more than 3minutes.

11 Rate of rotational speed change

The rate of compressor rotational speed (acceleration) should be less than 133min^{-1}/s, But if The variable range is below 120min^{-1}, rate can also be less than 600min^{-1} when rotational speed is reduced to avoid temporary over- current.

12 Air and moisture in refrigerating system

The degree of vacuum in refrigerating system should be less than 133Pa (998×10^{-3}mmHg) at room temperature just before charging refrigerant. The quantity of water should be less than 0.2ml.

13 Impurities in refrigerating system

(1) The weight of residue on the inside surface of the heat exchanger and tube should be less than $0.01g/m^2$. But metallic dust should not be permitted in the system. This value means the weight of foreign residue collected by filer paper after washing inside surface of the heat exchanger tubes with R-11.

(2) Prevent the impurities from entering into the enclosed unit system used R410A. When the impurities entered into the enclosed system, it will damage the moving mechanism parts and result in the capillary depositing.

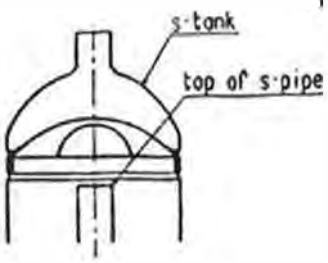
(3) Eliminate all system contaminants such as trichlorethylene, alkalies, soaps, oil, acids & washing fluid used at machining heat exchanger and tubes.

14 Compressor vacuum operation

Compressor should never be operated while under vacuum. Otherwise, internal arcing can cause damaging parts.

15 The compressor should be operated for more than 20 seconds within 15 minutes after charging refrigerant into the system so proper lubrication results.

(2) There should not exist noise of the liquid refrigerant compress: increase. System can append the assistant stank or reduce the amount from liquid refrigerant compression. Refrigerant system forbid flowing back compressor in any case. In normal condition the overhe flow back compressor.



17 Purge parts with dry nitrogen or dry air to remove remains in parts (dust, detergent, etc.) before assembly of system. Time fur purging: over one second for pipe; over three seconds for heat exchanger. Purging pressure: 0.9±0.1MpaG. Dew point of dry air: Below -20℃.

The motor winding temperature should be less than 149℃and hermetic terminal body temperature should be less than 177℃in process of manufacturing.

18 Apply for vehicle

The compressor should not be used on moving equipment such as automobiles, trains, ships, etc.

19 Installation

The rotational axis of compressor should be kept vertical during operation. But in actual application the axis incline must be within 5°at all directions during operation.

20 Pipe vibration

The displacement of the pipes, which connect from the compressor to other parts of the refrigerate-or systems, should be less than 0.8mm(1/32")when the compressor is operating at allowable rotational speed range and voltage range of rated ±10%.
Displacement in excess of 0.8mm(1/32") will require changing tube length and/or routing.

21 Connecting tube design

In designing and routing tubing that connect from the comprssor to the other parts of the air conditioner, following should be considered.

Moving tubes to the moving parts; minimum clearance 12.7mm(1/2")

Moving tubes to non-moving parts; minimum clearance 9.5mm((3/8")

Moving tubes never touch to lead wire.

22 Miscellany

(1) The compressor should be carried carefully to avoid drop, drag , impact and should not apply partial force on projection parts such as pipe, hermetic terminals, foot during carrying and processing.

(2) The compressor should not be operated to form a vacuum and to absorb air. The compressor only can run in one direction which according to lead routing wiring diagram. Never reversion otherwise the compressor will be in trouble.

(3) The compressor should not be left opened in the atmosphere for more than 5 minutes.

When the air entered into the unit system with refrigerant R407C, it will expedite the deterioration of the oil and result in the capillary depositing and the reducing of insulation resistance.

(4) Electric pulse should not be applied to compressor when it is in vacuum.

(5) The compressor should be kept in the place with low-dust, low-moisture.

(6) The compressor can't be used in the place with corrosive atmosphere such as hot spring and chemical warehouse. It should not be the structure often splash water on the surface of the compressor forcibly.

(7) The trouble of cross valve, electromagnetic valve, defroster, refrigerant controller, fan motor used in refrigerating system may cause compressor accident .So their reliability should be ensured completely. Moreover, the way of design, manufacture, application of refrigeration cycle with less-leak should be adopted.

(8) The main electric circuit should be equipped with fuse or breaker.

(9) Refrigerant should be charged from the end of condenser of refrigerating systems. Never Charge refrigerant to the compressor directly.

The refrigerant should always be charged in liquid state. When the refrigerant is charged in gas state, The percent component will possibly be changed. Do not recharge with the remaining refrigerant in the system when leakage happened. Because the percent component of the refrigerant in the unit system had possibly been changed.

(10) Temperatures within systems during stable compressor operation should not be less than -35℃ to prevent wax precipitation from the oil.

(11) The units of refrigerating system should be connected to earth.

(12) Compressor mounting

Rubber grommets are designed soft to provide the noise isolation and to lessen vibration Energy transmission. Stud bolt should be designed to provide sufficient clearance for noise andvibration isolation and to prevent compressor from coming off its mount.

(13) There should be 0.5～3mm clearance between the under－surface of Push-Nut and the upper surface of rubber grommets.

(14) SHEC will not take any responsibility against accident that is caused by the accessories equipped by yourselves.

(15) The hermetic terminals of compressor should not be inserted slantingly and not be applied twisting force after inserting so as to avoid reducing of terminal fixed force.

(16) The pipe and hermetic pens attached to the compressor should not be bent.

(17) The dropped compressor can't be used anymore.

(18) Compressor can be used when ambient temperature is higher than -10℃. Confirm the start-up of compressor if the temperature of compressor surface is below -10℃. Heat up compressor to reach the temperature higher than -10℃ with heater if the ambient temperature is below -10℃.

(19) Set a thermistor on the case cover of compressor to prevent from accident of leakage of refrigerant. The thermistor can stop the operation of compressor when compressor in abnormal temperature. The lead wires of thermostat is enveloped with tube, as same as that of the terminals, to avoid directcontact with the compressor and pipe.

be splashed with water intentionally. Prevent moisture from entering into the enclosed unit system. When the moisture entered into the unit of the refrigerant R407C, the refrigerant oil and the organic compound material presented in the hermetic motor will possibly decompose on the affecting of water. It will result in the capillary depositing and the reducing of insulation resistance.

It is necessary to install a dryer to dehumidify the residual moisture mixed in the refrigerant in the cycling system. The specially defined molecular-sieve dryer is advised.

(21) Use the refrigerant of specified brand. When the refrigerant not specified used, it will possibly cause trouble of the performance and reliability of the compressor by the impurities in the refrigerant.

(22) The lead wires should be connected to hermetic terminals without being touched on the surface of the compressor.

(23) Be careful of avoiding oxide scale while soldering during assembly of refrigerating system.
(for example: flow or fulfill dry nitrogen)

(24) The quantity and kind of contamination (the process materials) in the cycle should be grasped and managed. Carry on reliability test that input contamination a lot than anticipated contamination quantity.

(25) To avoid water and impurity into he refrigeration system and make sure no leakage of refrigerant during the operating course. It's required to direct the erector and

maintenance man of air-conditioner.

(26) The start-up current and torsion of compressor

Adjust the start-up current of the compressor to get enough torsion by inverter. Confirm and measure the start-up current if change the parts and design.

(27) The thickness of the refrigerating system using tube

the tube thickness as followed

external diameter(mm)	Thickness mm
6.35	0.5
6.35～11.0	0.5
11.0～13.0	0.6
13.0～15.0	0.6
15.0～19.0	0.8

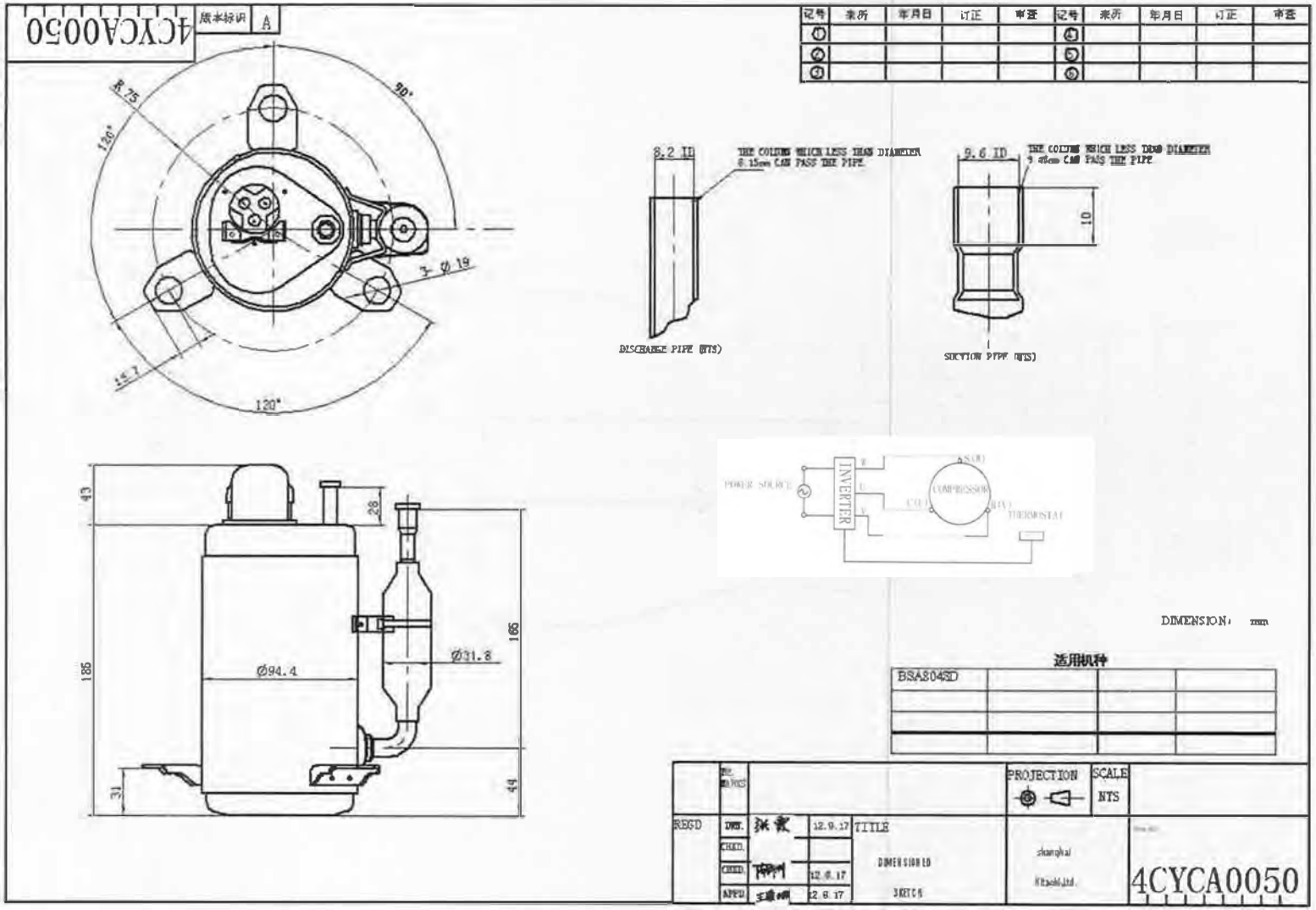
1. Basis for Checking upon Delivery

The Performance test will be carried out in accordance with this “compressor Specification”.

The Safety Performance in accordance with GB4706.1 Safety of household and similar electrical appliances General requirements and GB 4706.17 Safety of household and similar electrical appliances Particular requirements for motor-compressor.

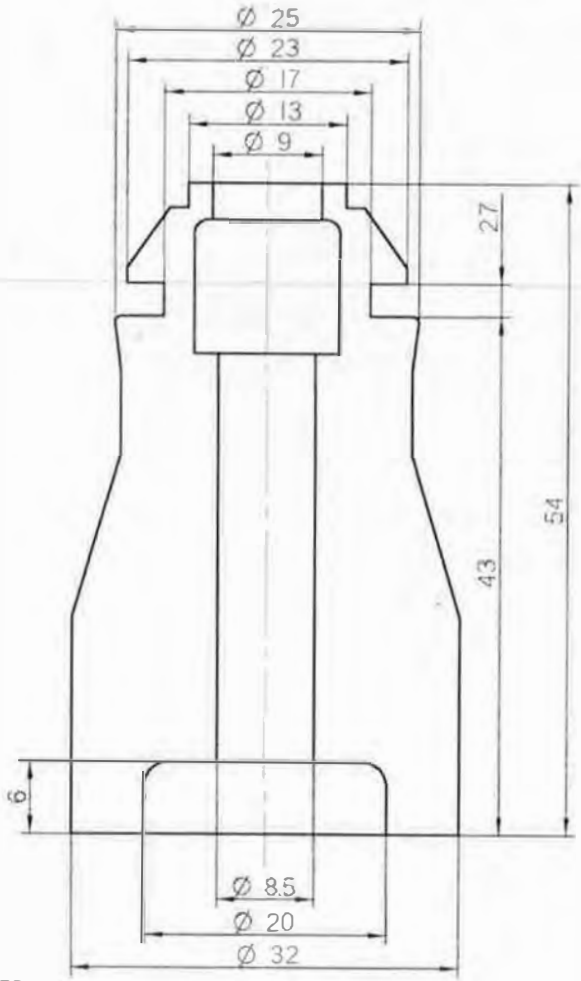
2. Rule for Checking upon Delivery

If come across any quality problem, please notify the company in written form within 30 days after the arrival of the cargo, the company shall exchange exactly the number of the products, otherwise they shall be regarded as being up to standard.


4CYCA0050
版本标识 A
记号 来所 年月日 订正 审查
R75
90°
120°
3-Ø19
45.7
120°
8.2 ID
THE COLUMN WHICH LESS HEAD DIAMETER Ø 15mm CAN PASS THE PIPE.
DISCHARGE PIPE (NTS)
9.6 ID
THE COLUMN WHICH LESS HEAD DIAMETER Ø 10mm CAN PASS THE PIPE
10
SUCTION PIPE (NTS)
43
28
185
Ø94.4
Ø31.8
166
31
44
POWER SOURCE
INVERTER
COMPRESSOR
THERMOSTAT
DIMENSION: mm
适用机种
BSA804SD
PROJECTION
SCALE NTS
REGD
DWG.
CHKD.
APPD
12.9.17
12.9.17
12.9.17
TITLE
DIMENSIONED SKETCH
shanghai Hitachi Ltd.
4CYCA0050

4CYC00851

記号	来历	年月日	订正	审查	记号	来历	年月日	订正	审查
①					④				
②					⑤				
③					⑥				



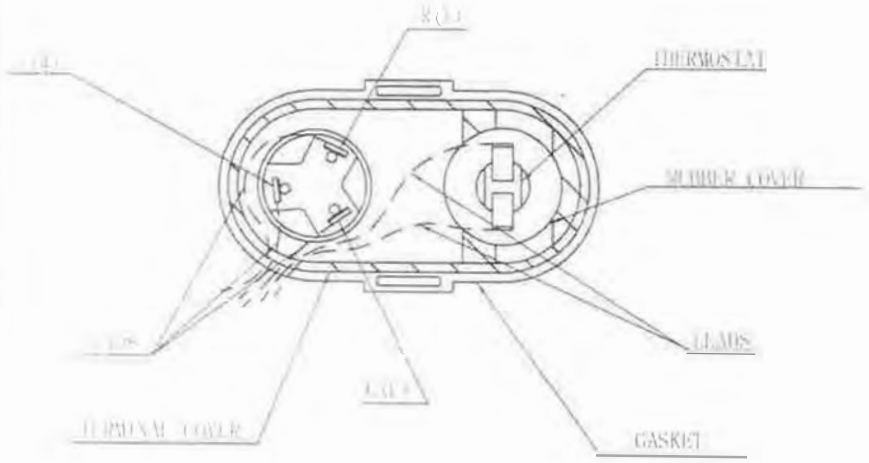
NOTE:
1. MATERIAL: NATURAL RUBBER
2. HARDNESS: Hs = 40 ± 5°

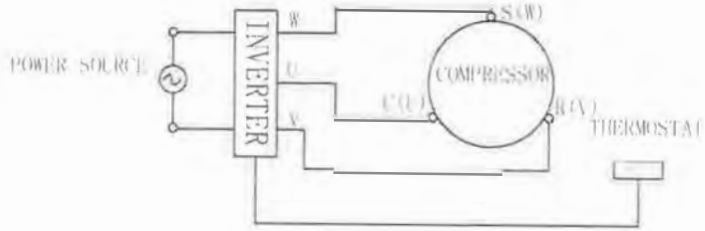
DIMENSION: mm

	RE-MARKS		PROJECTION	SCALE
				NTS

REGD.	DWN.	07.06.25	TITLE	Shanghai hitachi, Ltd	DWN. NO.
	CHKD.	07. 6.25	RUBBER GROMMET		4CYC00851
	CHKD.	07. 6. 26			
	APPD.	07. 6.26			

4CYC01031

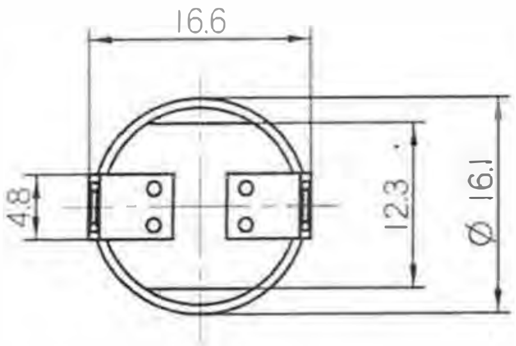


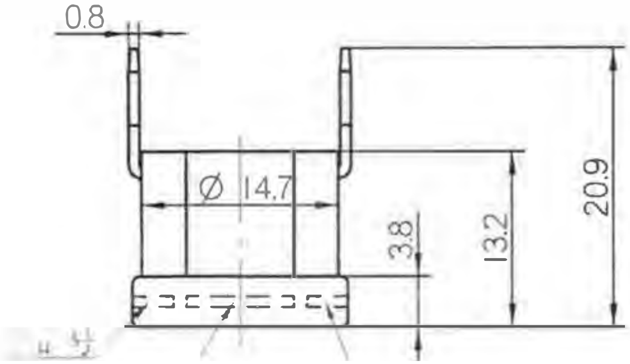


PLEASE PREPARE LEADS BY YOURSELF
TO TERMINAL C(U), R(V), OR S(W) STANDS FOR EACH TERMINAL.

				PROJECTION	SCALE	
READ	CHK	11.5.20	TITLE: LEAD ROUTING WIRING DIAGRAM	Shanghai Hitachi Ltd.	NTS	DWG. NO. 4CYC01034
	DWN	11.5.20				
	ENG	11.5.20				

4CYC00956 A

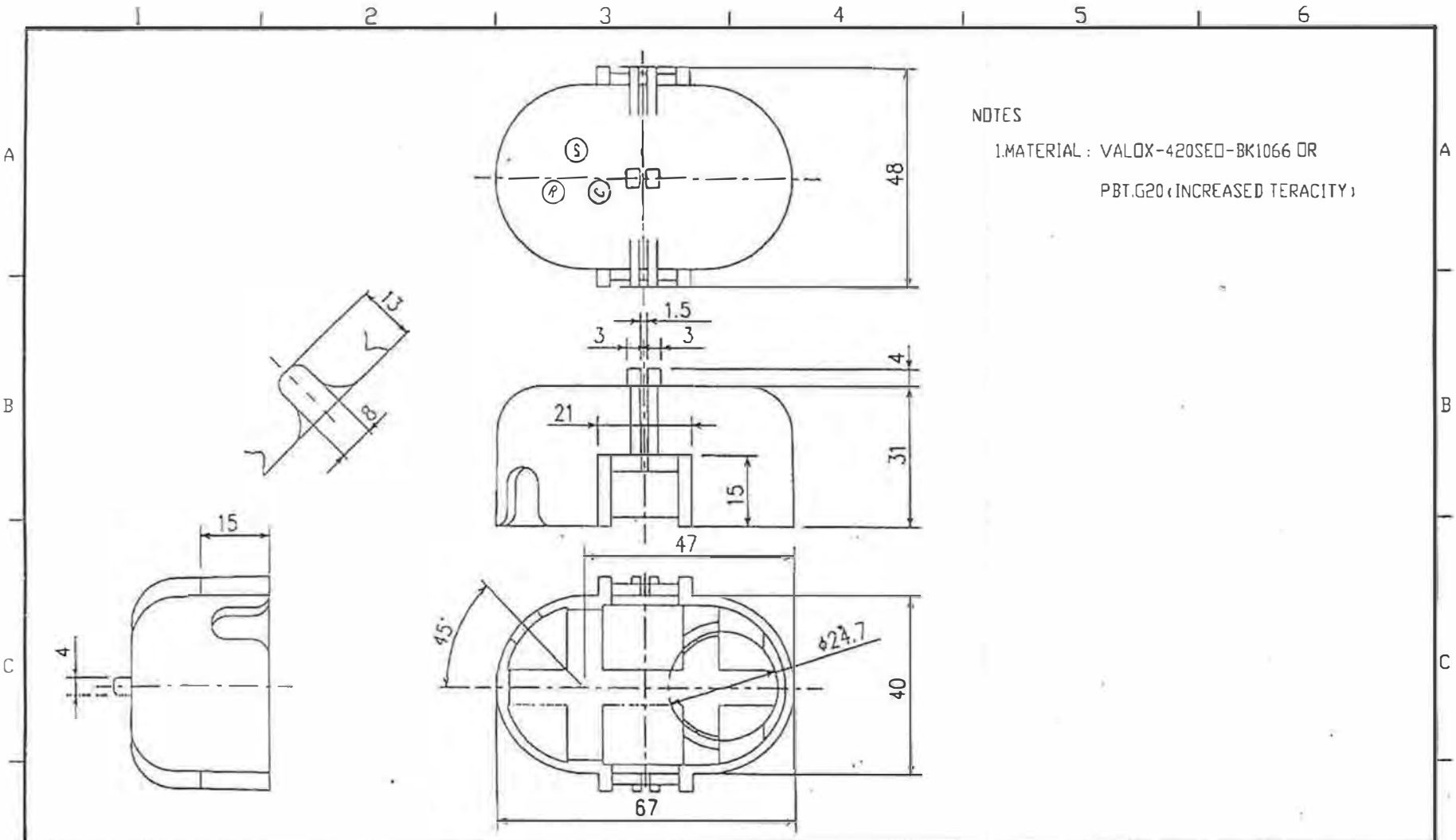




SPECIFIED LIMITS

Code	OFF	ON		
INTOIL-5730	115±3℃	95±5℃	AC125V	15A

PROJECTION	SCALE NTS		
TITLE	THERMOSTAT	shanghai Hitachi,Ltd	DWN NO 4CYC00956



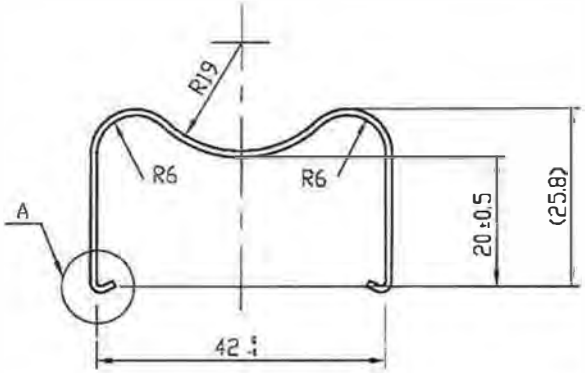
CHANGE						
A	2000-11-30	NOTES 1.MATERIAL : VALOX-420SEO-BK1066 OR PBT/003-008-2001	B	2001-3-24		

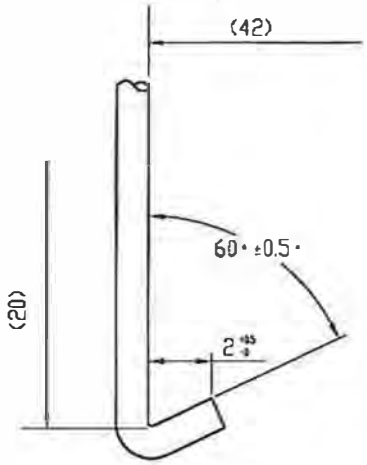
SHANGHAI HITACHI ELECTRICAL APPLIANCES CO.,LTD.

DIM.IN mm	DATE	97-12-24	APPROVED	TERMINAL COVER
SCALE	DRAWN			SC01D775 1/1
1:1 ~~NTS~~	CHECKED			
	DESIGN			

NOTES

1.MATERIAL : SUS 304WPb φ1.2





DETAIL A (5/1)

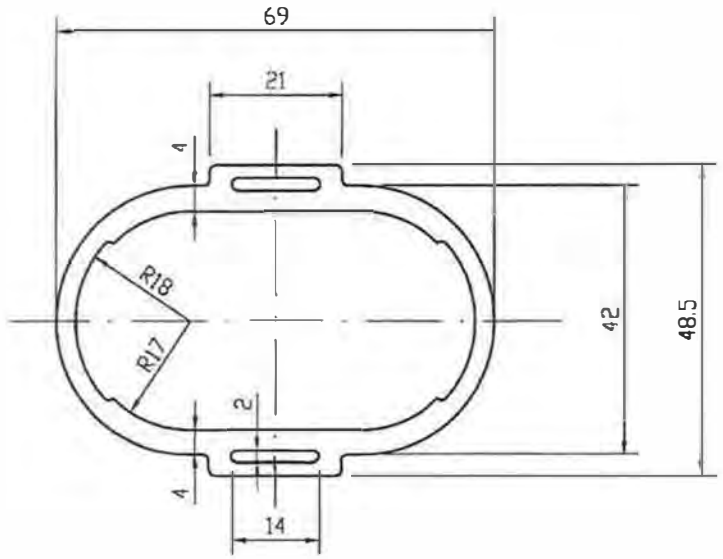
CHANGE	2000-12-1 A		SHANGHAI HITACHI ELECTRICAL APPLIANCES CO.,LTD.		
		DIM.IN mm	DATE 97-12-24	APPROVED	CLIP
		SCALE 1:1 ~~NTS~~	DRAWN		SC01D076 1/1
			CHECKED		
			DESIGN		

NOTES 1. MATERIAL : EPTR

(ETHYLENE PROPYLENE TRIPOLYMER RUBBER)

2. THICKNESS : 1.0mm

3. FLAME RETARDANT MATERIAL



CHANGE	2000-12-4		SHANGHAI HITACHI ELECTRICAL APPLIANCES CO.,LTD.			
			DIM.IN mm	DATE 97-12-24	APPROVED	PACKING
			SCALE	DRAWN		SC01D075
			1:1 ~~NTS~~	CHECKED		1/1
				DESIGN		

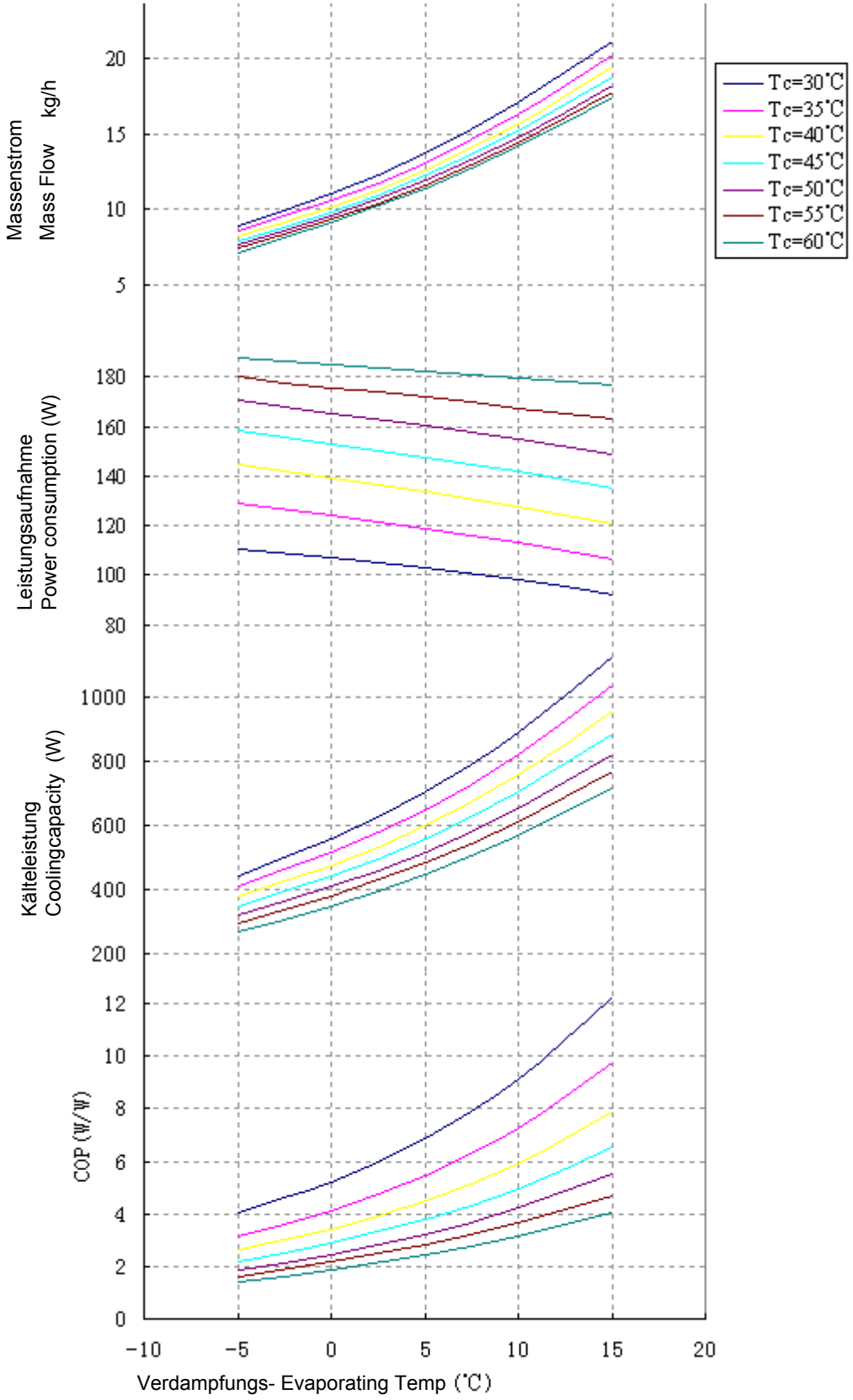
BSA804SD Leistungsdaten / Performance bei/at 1800min-1/RPM

Arbeitsbedingungen / Working Condition ：Überhitzung/Superheat Temp. 11.1K,
Unterkühlung / Subcooling Temp. 8.3K, Umgebungstemp./ Ambient Temp.35℃

Tc \ Te		-5	0	5	10	15
30	C	443.9	556.8	704	891.3	1124
	P	110.5	106.8	102.7	97.86	91.74
	M	8.936	11.01	13.68	17.03	21.13
	COP	4.017	5.214	6.855	9.108	12.25
35	C	408.5	513.2	648.8	820.5	1035
	P	128.7	123.9	118.8	113.1	106.3
	M	8.563	10.56	13.11	16.29	20.2
	COP	3.174	4.142	5.461	7.254	9.735
40	C	376.8	474.4	599.8	758.4	955.5
	P	144.7	139.3	133.8	127.7	120.7
	M	8.245	10.18	12.63	15.68	19.41
	COP	2.604	3.406	4.483	5.939	7.916
45	C	347.9	439.8	556.4	703.4	885.4
	P	158.6	153	147.5	141.6	134.9
	M	7.965	9.867	12.24	15.18	18.76
	COP	2.193	2.875	3.773	4.967	6.564
50	C	320.8	408.1	517.3	654	822.9
	P	170.4	165.2	160.1	154.9	148.9
	M	7.709	9.599	11.92	14.77	18.23
	COP	1.883	2.47	3.231	4.222	5.526
55	C	294.7	378.3	481.6	609.1	766.1
	P	180.1	175.7	171.7	167.5	162.8
	M	7.458	9.361	11.66	14.44	17.8
	COP	1.636	2.153	2.805	3.636	4.706
60	C	269.1	349.8	447.7	567.9	713.8
	P	187.7	184.7	182.1	179.5	176.6
	M	7.198	9.137	11.43	14.18	17.45
	COP	1.434	1.894	2.459	3.164	4.042

C: Kälteleistung (W), P: Leistungsaufn (W), A: Stromaufn. (A), M: Massenstrom (kg/h)
C:Capacity (W) , P:Power (W), A:Current (A), M:Mass Flow (Kg/h)

BSA804SD Leistungsdaten / Performance bei/at 1800min-1/RPM



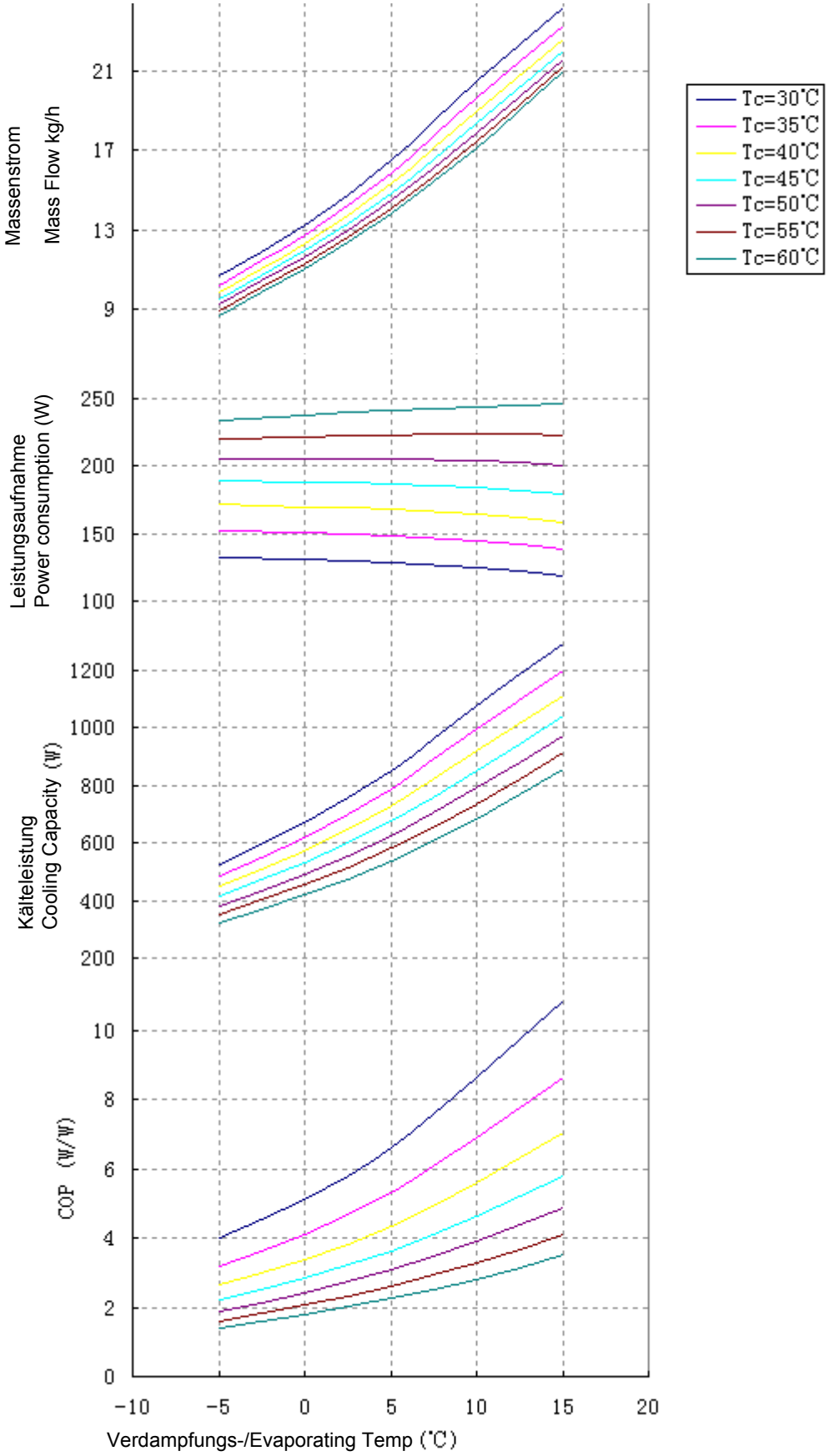
BSA804SD Leistungsdaten / Performance bei/at 2400min-1/RPM

Arbeitsbedingungen / Working Condition ： Überhitzung/Superheat Temp. 11.1K，
Unterkühlung / Subcooling Temp. 8.3K，Umgebungstemp./ Ambient Temp. 35℃

Tc \ Te		-5	0	5	10	15
30	C	528.5	670.6	850.7	1075	1289
	P	131.9	130.7	128.4	124.5	118.7
	M	10.64	13.26	16.53	20.54	24.23
	COP	4.007	5.131	6.625	8.635	10.86
35	C	487	618.7	785.4	992.2	1195
	P	152.2	150.6	148	144.1	138.3
	M	10.21	12.73	15.87	19.7	23.32
	COP	3.2	4.108	5.307	6.886	8.638
40	C	450.1	572.7	727.1	918.5	1112
	P	171	169.6	167.3	163.7	158.5
	M	9.848	12.29	15.31	18.99	22.59
	COP	2.632	3.377	4.346	5.611	7.016
45	C	415.9	530.9	674.6	852.1	1039
	P	188.6	187.7	186.2	183.5	179.3
	M	9.522	11.91	14.84	18.39	22.01
	COP	2.205	2.828	3.623	4.644	5.794
50	C	383.7	492.3	627.1	792.1	973.6
	P	204.7	205	204.6	203.3	200.6
	M	9.22	11.58	14.45	17.89	21.57
	COP	1.874	2.401	3.065	3.896	4.854
55	C	352.7	456.3	582.4	736.9	914.2
	P	219.6	221.4	222.8	223.3	222.6
	M	8.926	11.29	14.1	17.47	21.24
	COP	1.606	2.061	2.614	3.3	4.107
60	C	322.4	421.1	540.6	685.2	858.6
	P	233.1	237	240.6	243.5	245.2
	M	8.624	11	13.8	17.11	20.99
	COP	1.383	1.777	2.247	2.814	3.502

C: Kälteleistung (W), P: Leistungsaufn (W), A: Stromaufn. (A), M: Massenstrom (kg/h)
C:Capacity (W) , P:Power (W), A:Current (A), M:Mass Flow (Kg/h)

BSA804SD Leistungsdaten / Performance bei/at 2400min-1/RPM



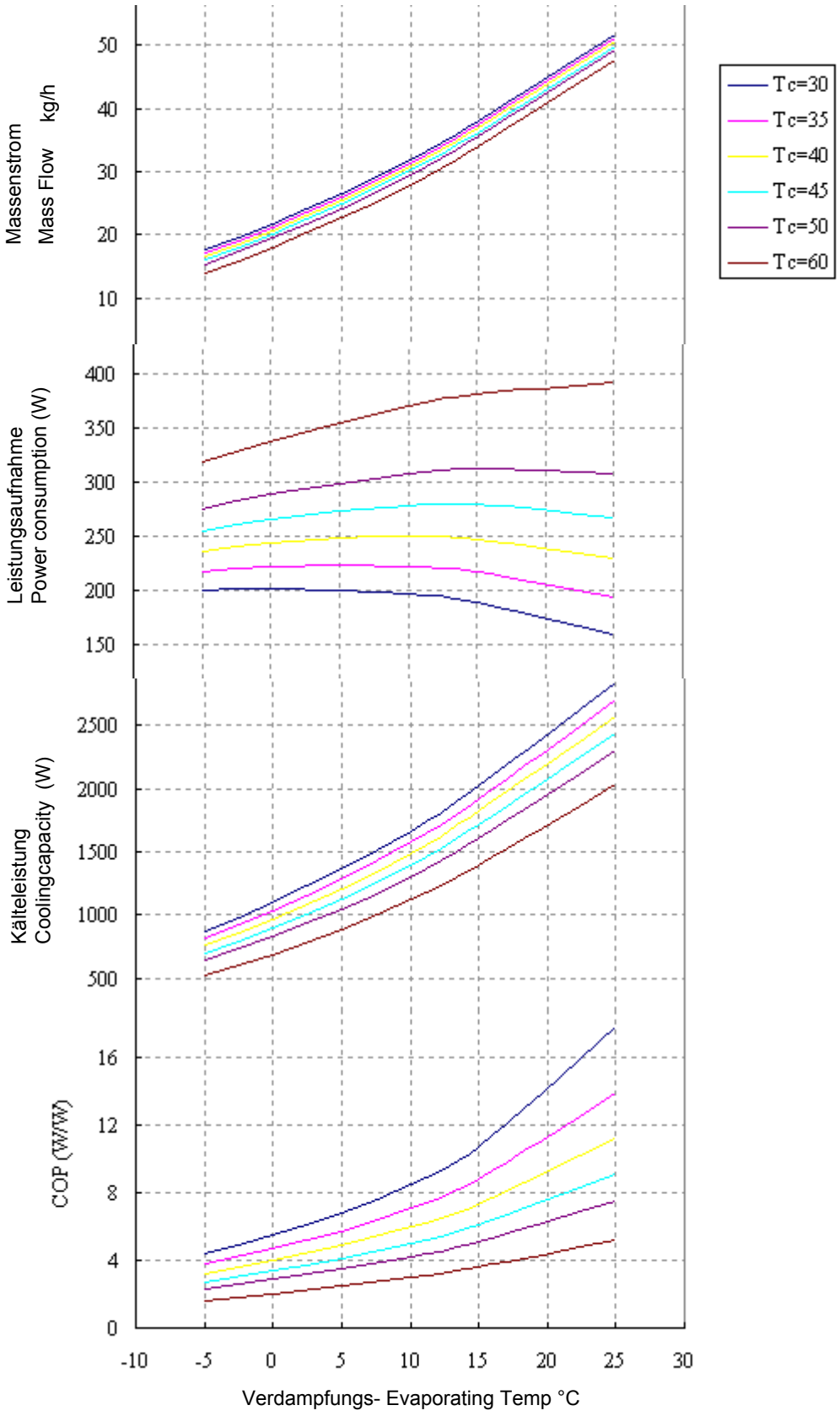
BSA804SD Leistungsdaten / Performance bei/at 3600min-1/RPM

Arbeitsbedingungen / Working Condition ： Überhitzung/Superheat Temp. 11.1K，
Unterkühlung / Subcooling Temp. 8.3K，Umgebungstemp./ Ambient Temp. 35℃

		-5	0	5	10	15	25
30	C	876.8	1101	1362	1667	2019	2836
	P	199.4	201.1	200.2	196.1	188.4	159.7
	M	17.65	21.76	26.47	31.85	37.95	51.68
	COP	4.397	5.472	6.804	8.501	10.72	17.76
35	C	817.6	1033	1284	1578	1917	2706
	P	217.6	221.9	223.7	222.4	217.4	193.9
	M	17.14	21.25	25.95	31.33	37.43	51.15
	COP	3.757	4.654	5.741	7.095	8.82	13.95
40	C	758.2	964.2	1206	1488	1815	2574
	P	236.2	243.3	248	249.6	247.6	230
	M	16.59	20.69	25.39	30.76	36.86	50.56
	COP	3.21	3.963	4.862	5.961	7.328	11.19
45	C	698.3	895.5	1127	1397	1710	2440
	P	255.4	265.4	273.1	277.9	279.1	267.9
	M	15.99	20.09	24.78	30.14	36.24	49.93
	COP	2.734	3.374	4.125	5.026	6.129	9.109
50	C	638.3	826	1047	1305	1606	2305
	P	275.5	288.4	299.2	307.3	311.9	307.6
	M	15.34	19.43	24.12	29.48	35.57	49.25
	COP	2.317	2.864	3.499	4.248	5.148	7.495
60	C	518.9	687.6	886.8	1121	1393	2032
	P	319.3	338.1	355.4	370.3	382	392.7
	M	13.88	17.96	22.64	27.99	34.06	47.72
	COP	1.625	2.034	2.495	3.027	3.647	5.174

C: Kälteleistung (W), P: Leistungsaufn (W), A: Stromaufn. (A), M: Massenstrom (kg/h)
C:Capacity (W) , P:Power (W), A:Current (A), M:Mass Flow (Kg/h)

BSA804SD Leistungsdaten / Performance bei/at 3600min-1/RPM



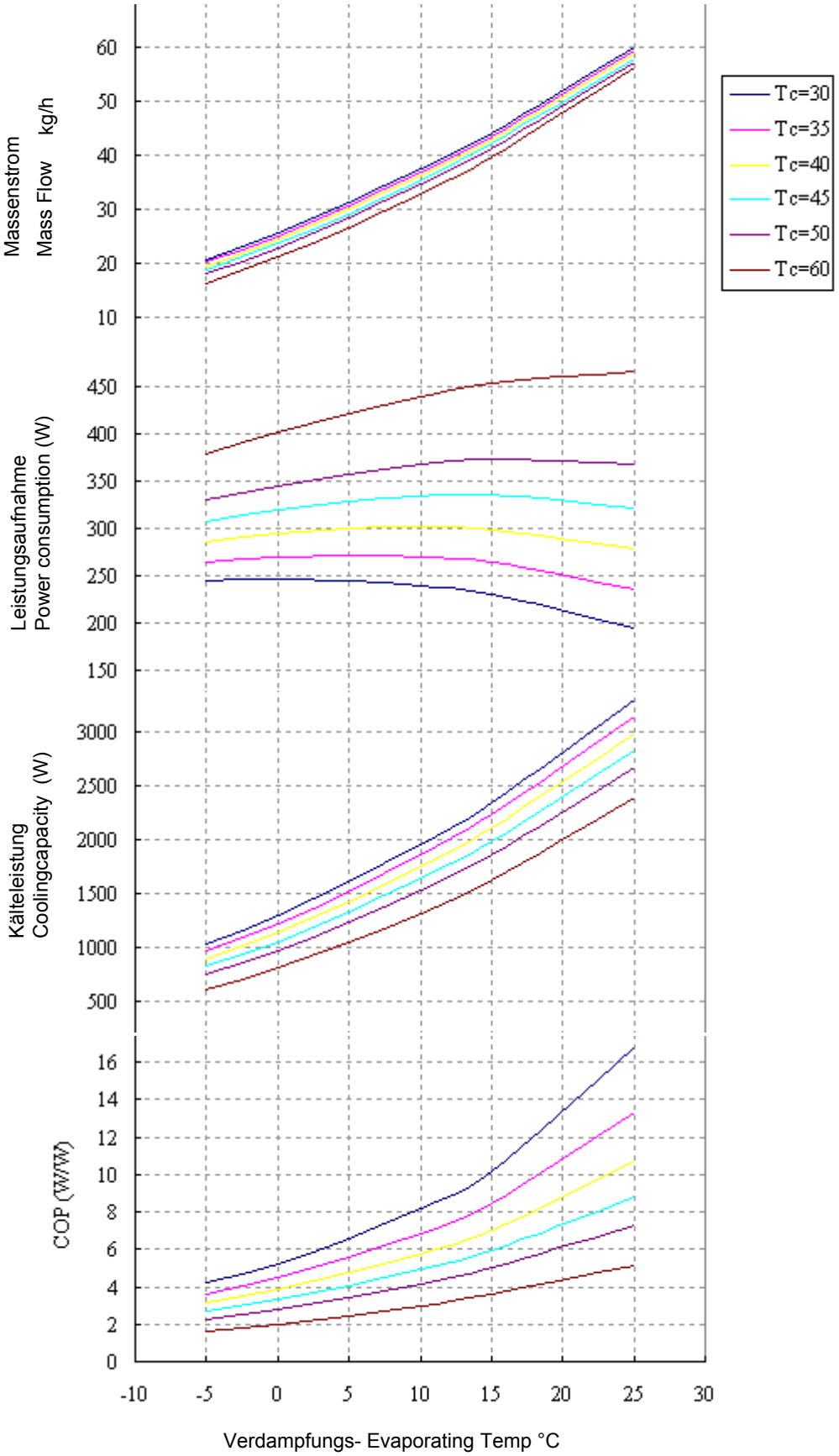
BSA804SD Leistungsdaten / Performance bei/at 4200min-1/RPM

Arbeitsbedingungen / Working Condition ： Überhitzung/Superheat Temp. 11.1K，
Unterkühlung / Subcooling Temp. 8.3K，Umgebungstemp./ Ambient Temp. 35℃

		-5	0	5	10	15	25
30	C	1031	1294	1602	1960	2348	3290
	P	243.8	245.8	244.7	239.7	230.3	195.2
	M	20.75	25.59	31.13	37.45	44.13	59.95
	COP	4.228	5.265	6.547	8.177	10.19	16.85
35	C	961.7	1215	1510	1855	2229	3138
	P	264.3	269.5	271.7	270.1	264	235.5
	M	20.16	24.99	30.52	36.83	43.51	59.32
	COP	3.639	4.507	5.559	6.868	8.443	13.33
40	C	891.7	1134	1418	1749	2109	2984
	P	285.3	293.8	299.5	301.5	299	277.8
	M	19.51	24.33	29.86	36.17	42.84	58.63
	COP	3.125	3.859	4.735	5.802	7.053	10.74
45	C	821.1	1053	1325	1643	1988	2829
	P	306.9	318.9	328.2	333.9	335.4	321.9
	M	18.8	23.62	29.14	35.45	42.11	57.89
	COP	2.675	3.301	4.036	4.92	5.926	8.789
50	C	750.7	971.4	1231	1535	1865	2672
	P	329.6	345	358	367.6	373.1	368
	M	18.04	22.85	28.37	34.66	41.32	57.08
	COP	2.278	2.816	3.439	4.175	4.999	7.261
60	C	610.1	808.5	1043	1318	1618	2397
	P	379.1	401.5	422	439.7	453.7	466.3
	M	16.32	21.12	26.62	32.91	39.55	56.29
	COP	1.609	2.014	2.471	2.997	3.566	5.14

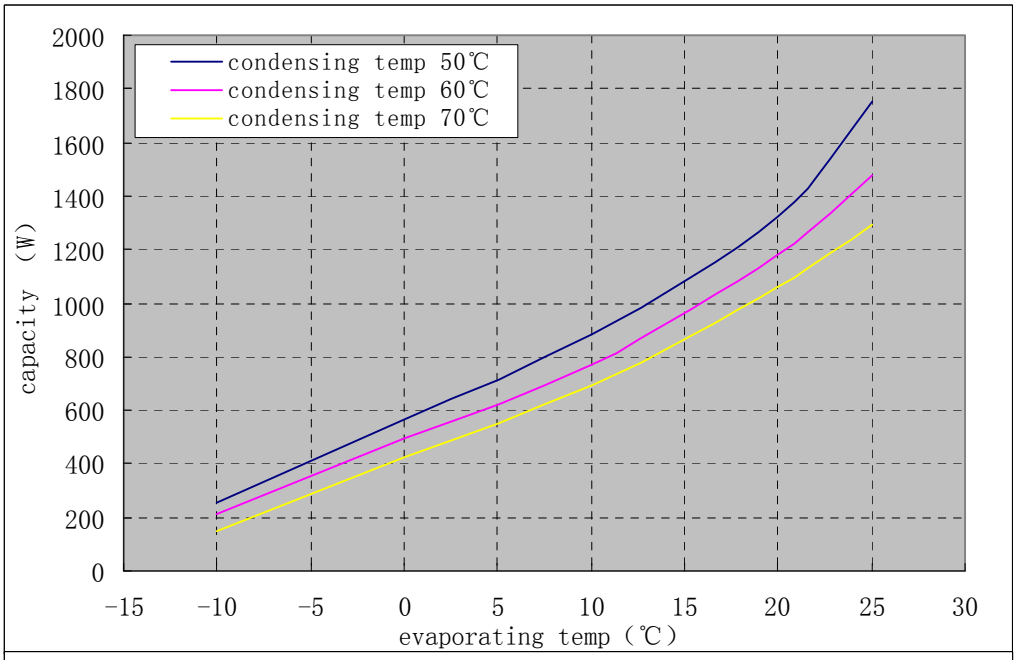
C: Kälteleistung (W), P: Leistungsaufn (W), A: Stromaufn. (A), M: Massenstrom (kg/h) C:Capacity (W) , P:Power (W), A:Current (A), M:Mass Flow (Kg/h)

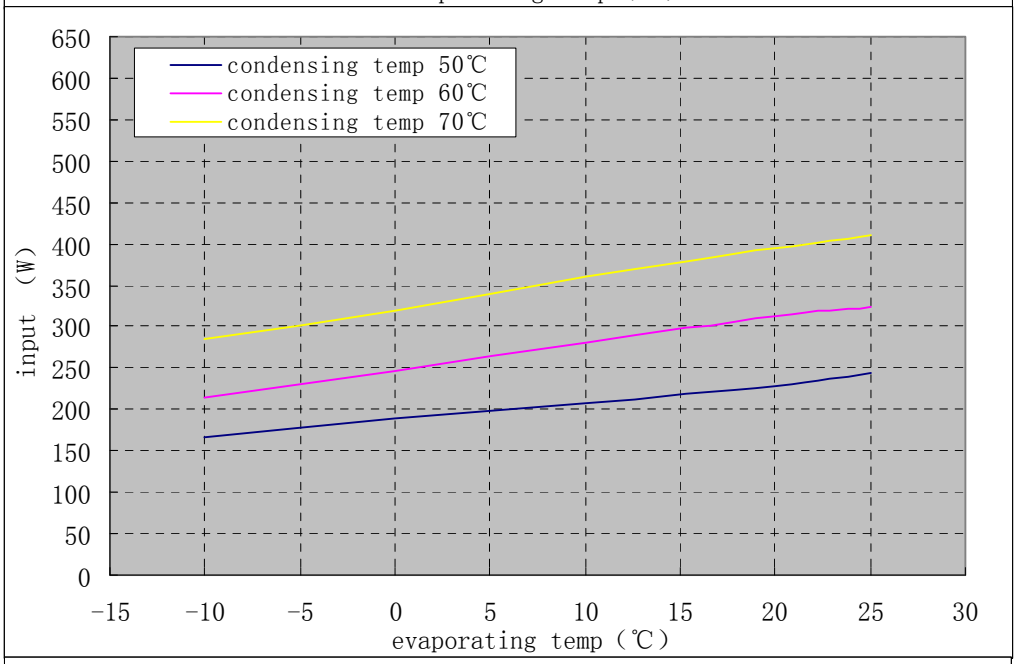
BSA804SD Leistungsdaten / Performance bei/at 4200min-1/RPM

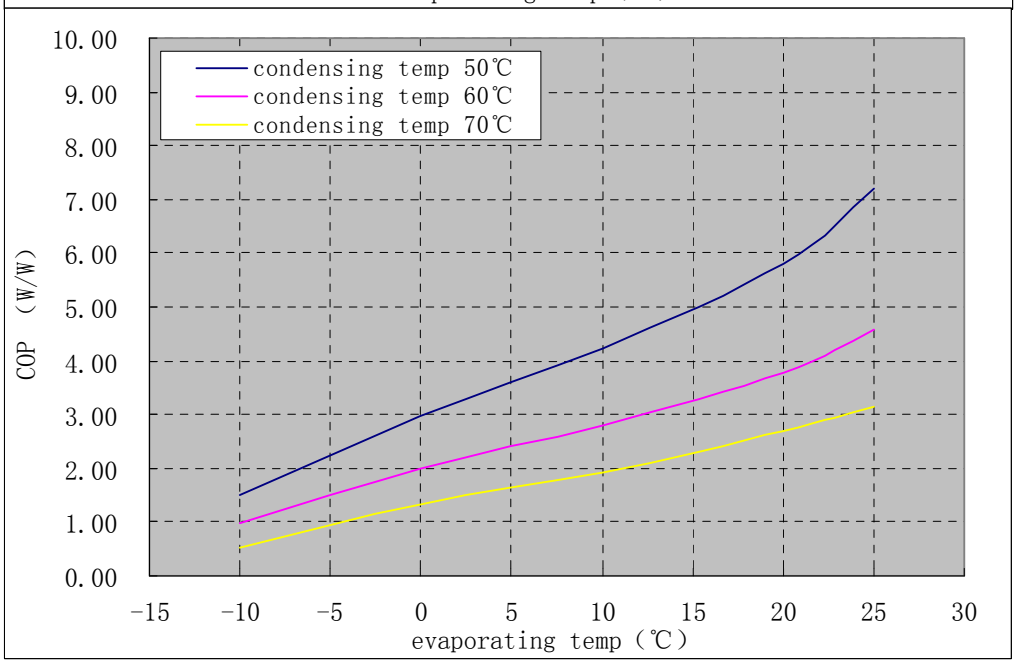


Hitachi Highly DC Kompressor
BSA804SD Leistungsdaten

2400 min-1

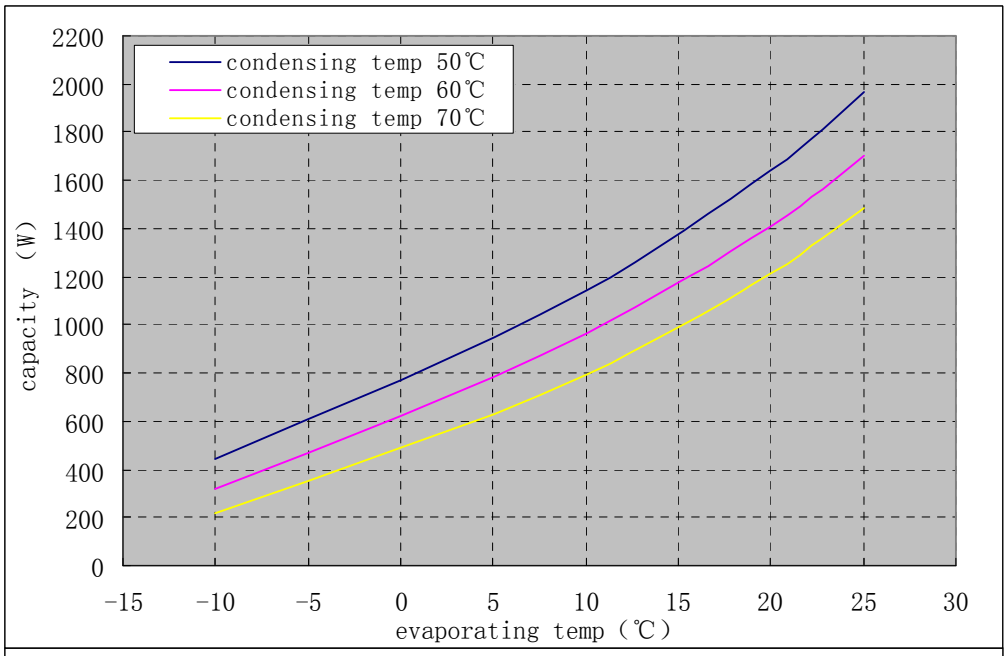


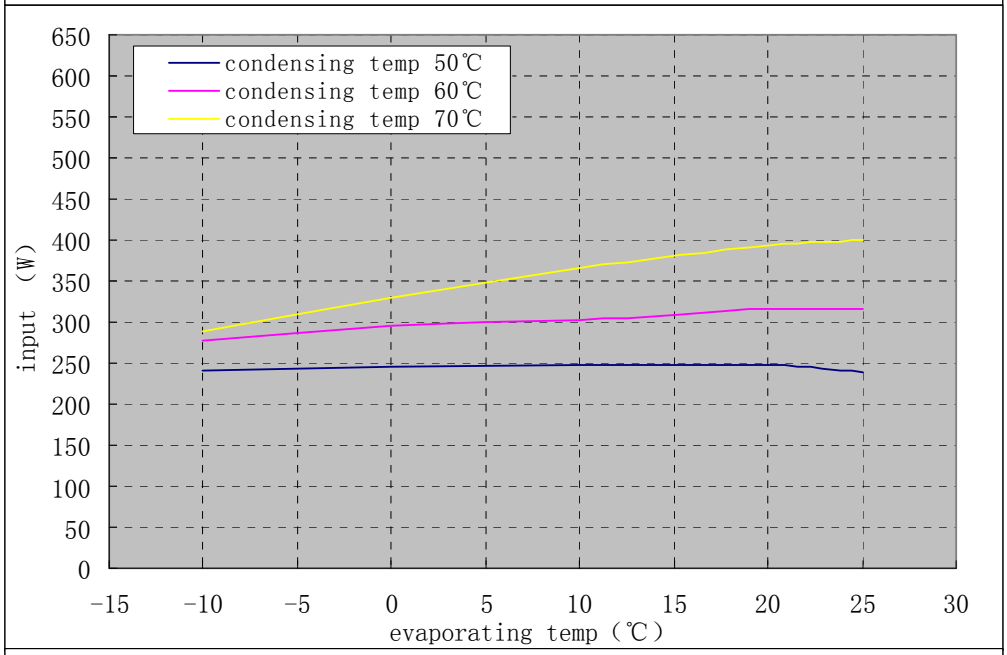


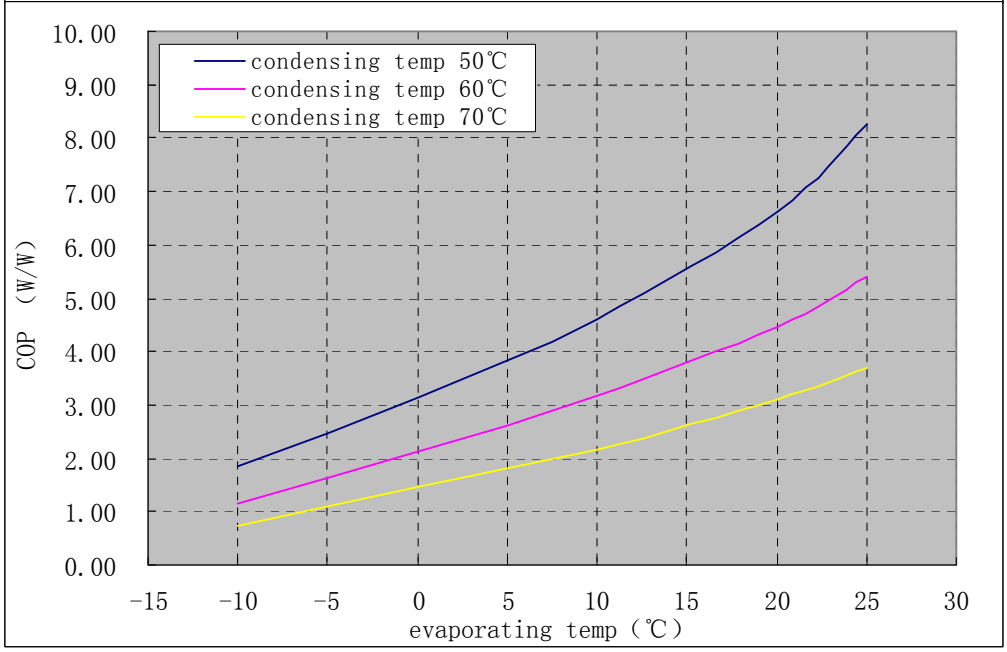


Hitachi Highly DC Kompressor
BSA804SD Leistungsdaten

3000 min-1

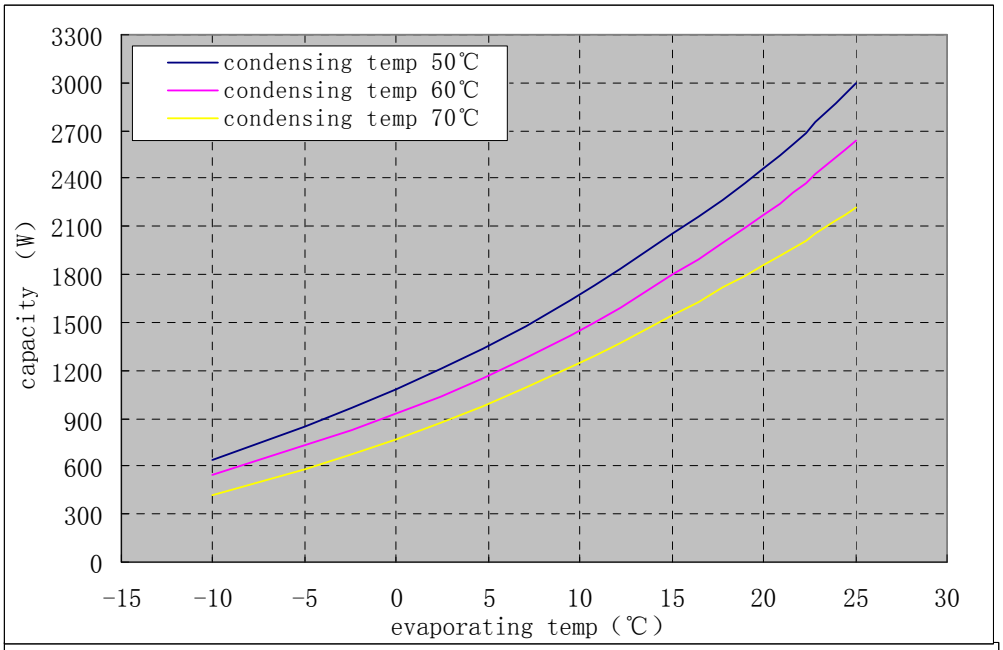


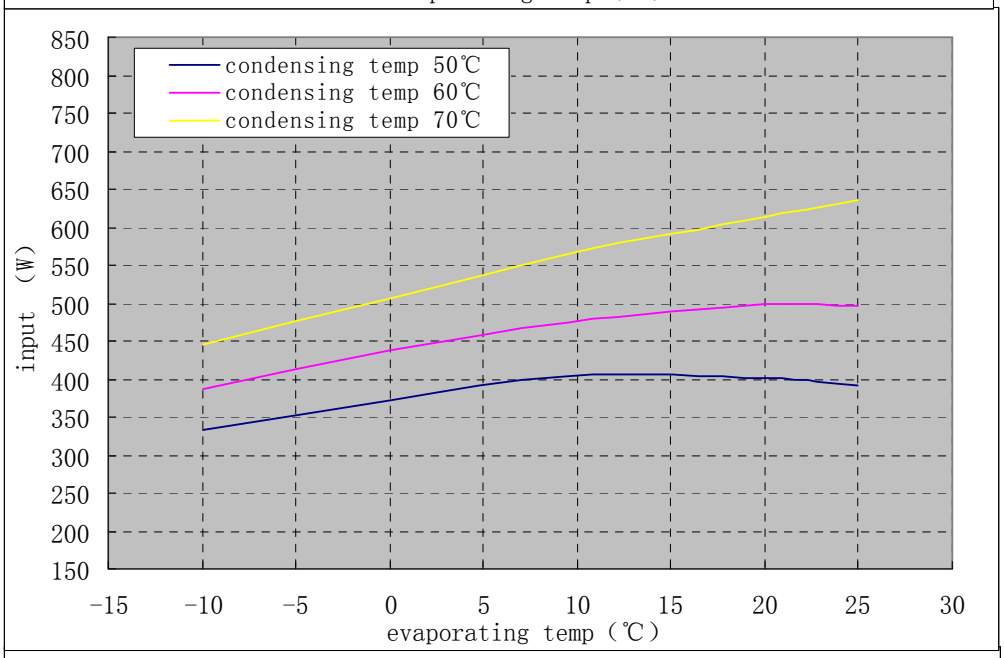


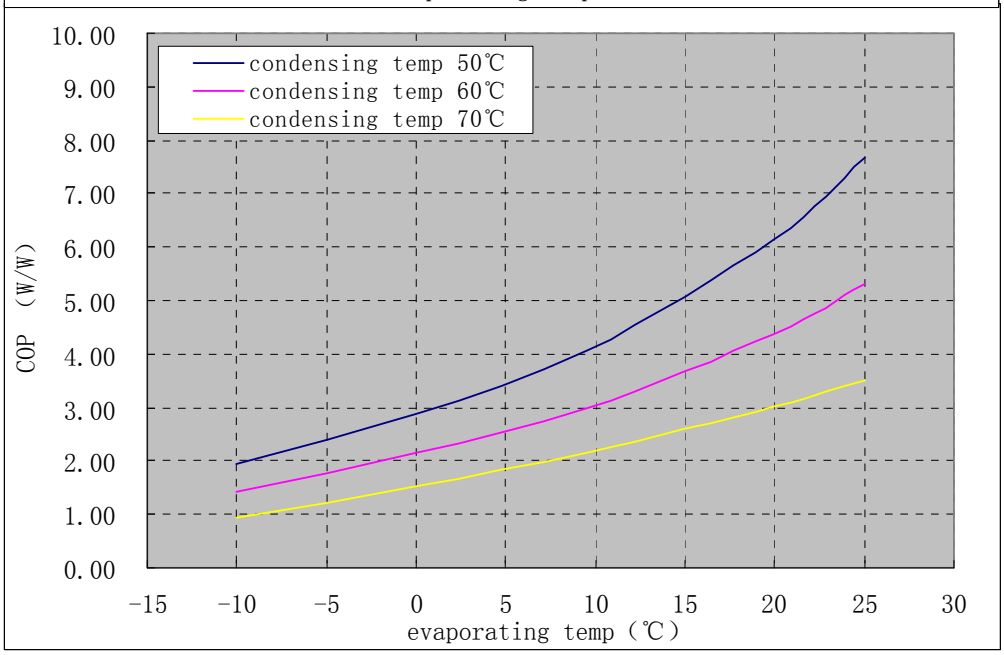


Hitachi Highly DC Kompressor
BSA804SD Leistungsdaten

4500 min-1

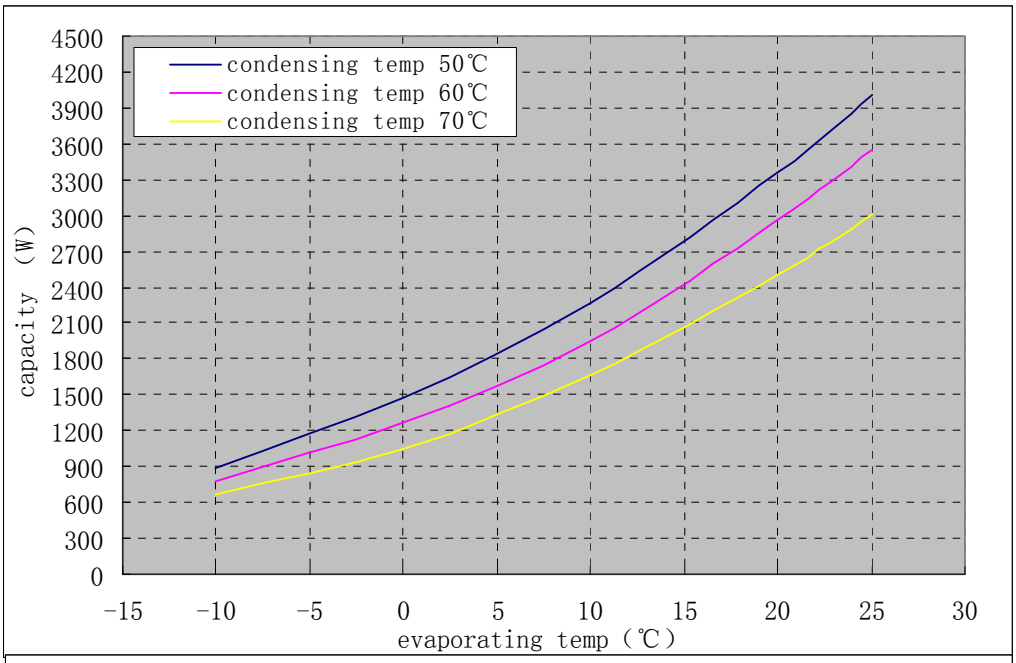


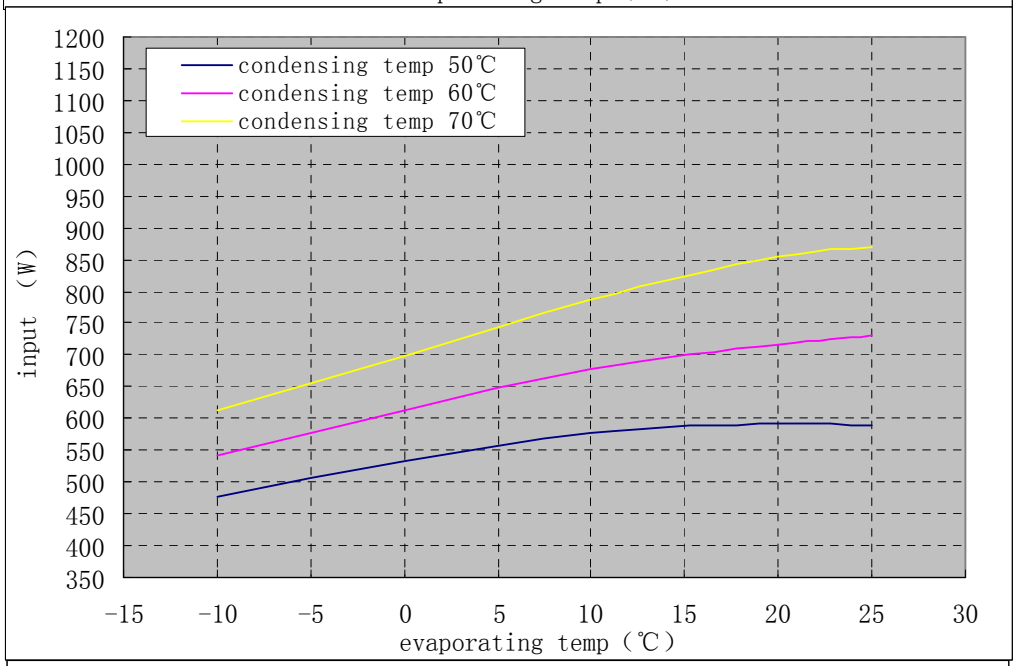


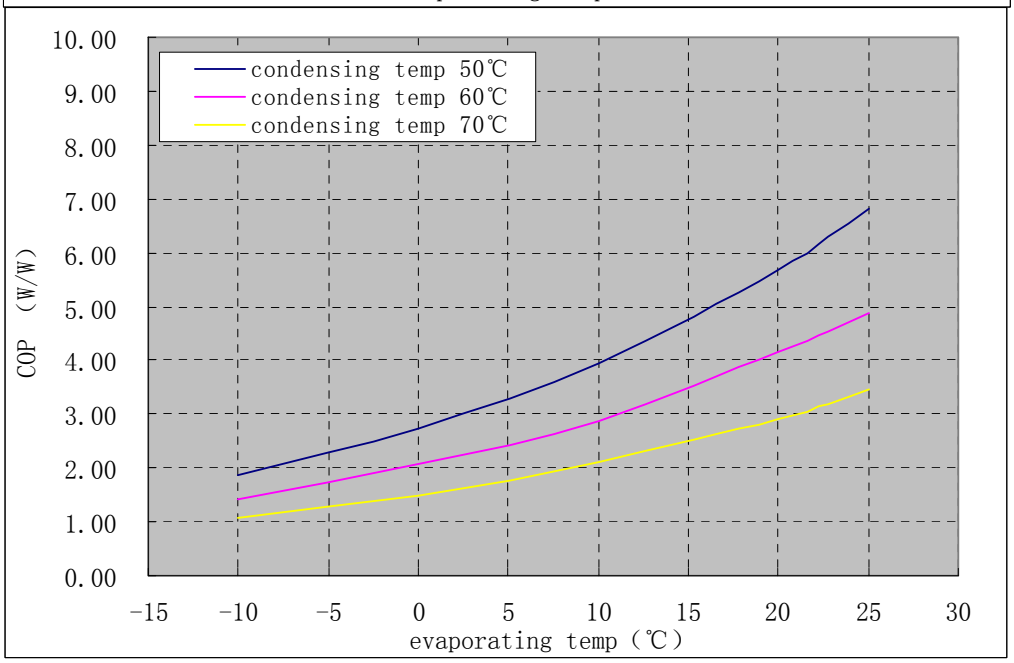


Hitachi Highly DC Kompressor
BSA804SD Leistungsdaten

6000 min-1



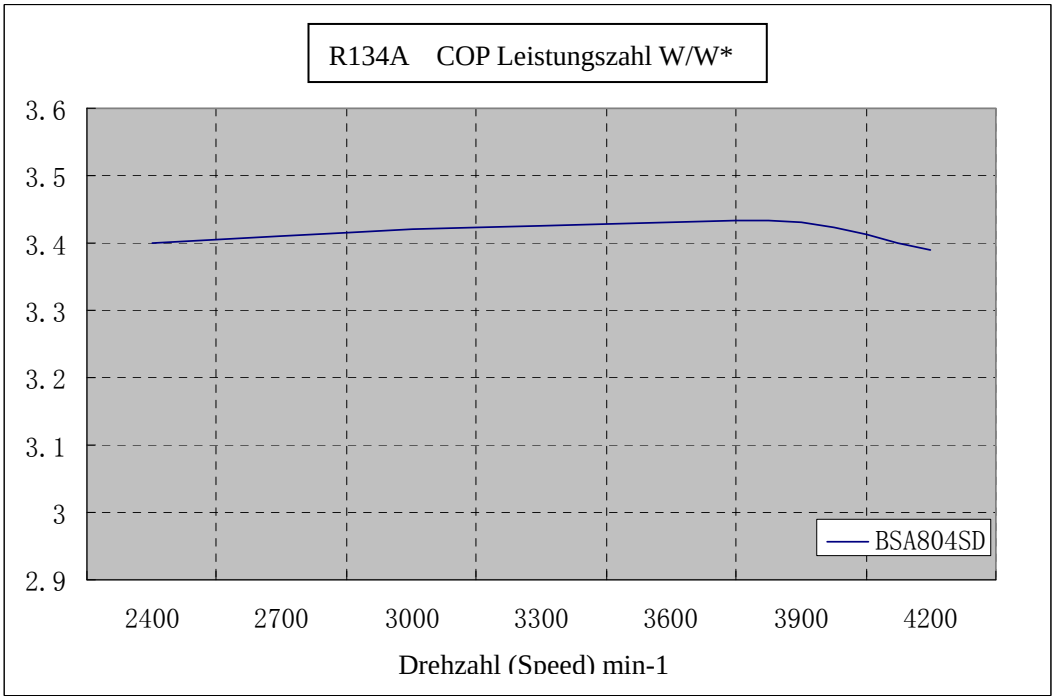


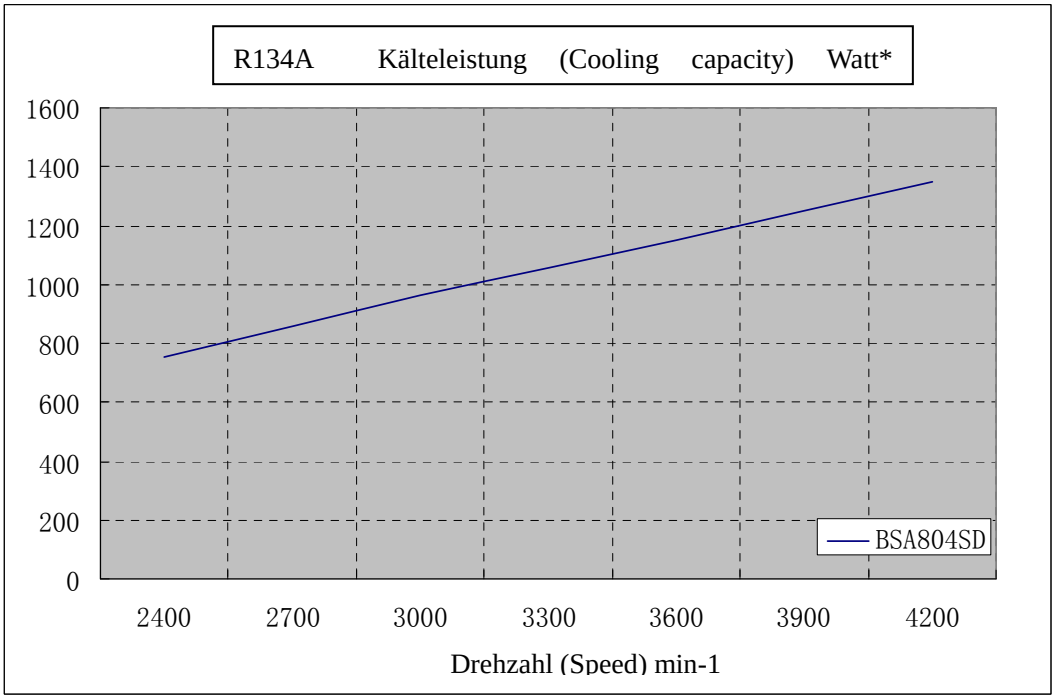


Hitachi Highly

BSA804SD

DC Rotary Kompressor





*Angaben unter ASHRAE Bedingungen