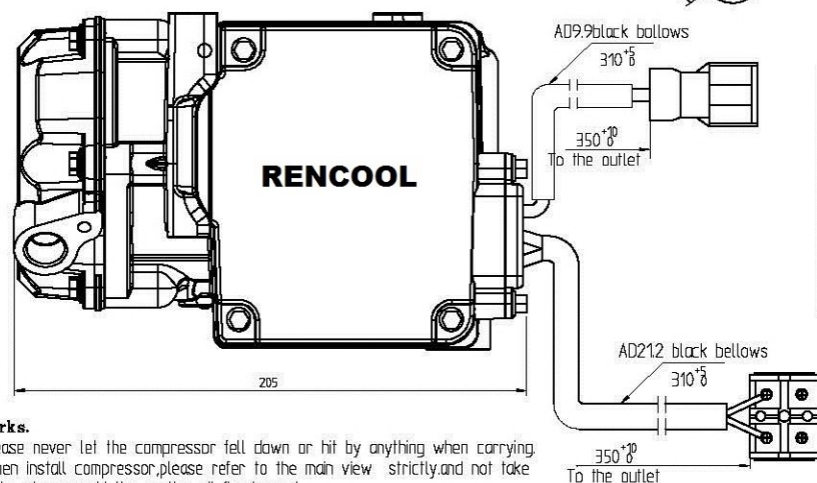
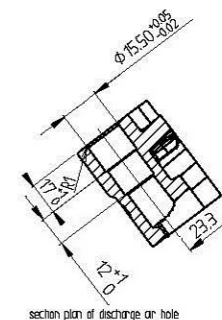
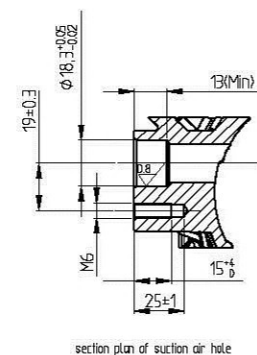
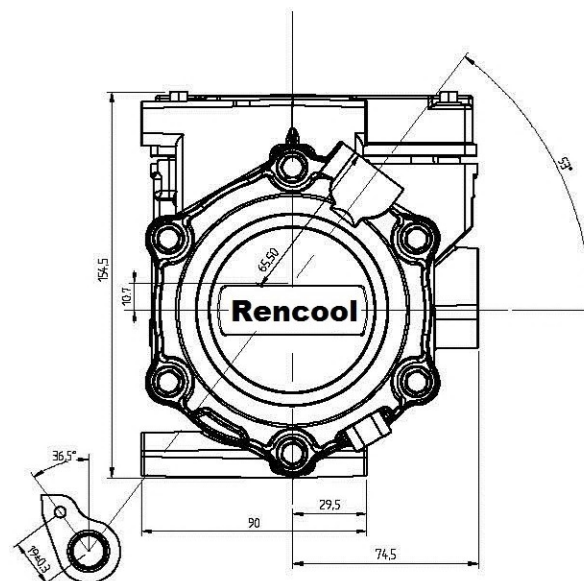
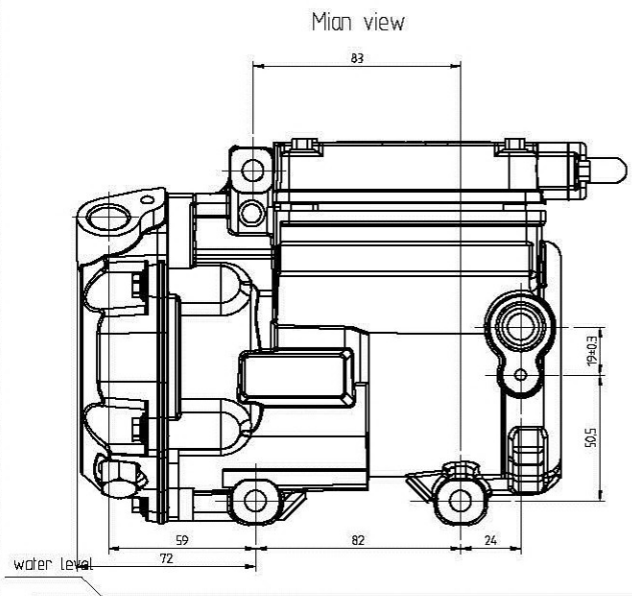


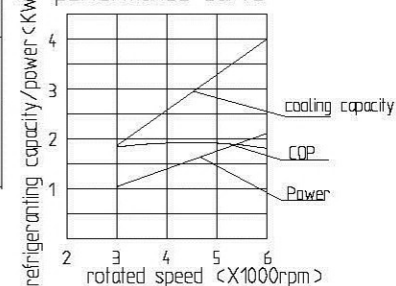


definition of external port			name of marking part
item	colour	definition of port	
1	red	24V DC positive pole input, voltage range 20V~31V DC	DGR60-02P-13
2	black	24V DC negative pole input	
1	red	1st gear	DJ7061Y -2-20
2	black	GND2 common port	
3	orange	3rd gear	
4	green	2nd gear	
5	NC		
6	NC		

compressor parameter	displacement	24cc
	oil	FVC 68D 100ml
	refrigerant	R134a
	rotated speed R/min	3000-4000-5000
	voltage range	DC 20V~31V
	Working environment temperature	-30℃~100℃

Test condition: $P_s=0.30\text{MPa(abs)}$ $P_d=1.57\text{MPa(abs)}$
 Super heating 10℃ super cooling 5℃
 refrigerant : R134a

performance curve



Remarks.

1. Please never let the compressor fell down or hit by anything when carrying.
2. when install compressor, please refer to the main view strictly and not take off the stopper, void the cooling oil flowing out.
3. After taking off the suction and discharge stopper, the compressor should be connected to the system within 10mins. and vacuumize it.
4. make the correct connection for power of positive and negative pole
5. According to the drawing strictly about power wire connector and signal wire connector, can't reverse connection, avoid damaging compressor control parts
6. It's forbidden to carry, pull, drag power wire connector and signal wire connector, avoid poor contact, impair its use.

2	drive assembly	331500E60224	1
1	Mechanism assembly	334011E60001	1
item	material name	material NO.	quantity

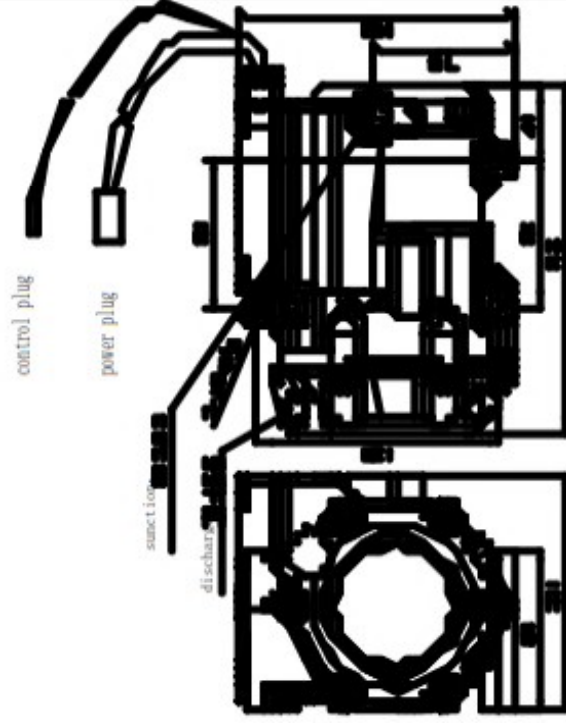
Yuse	
No.	334010E60224

Auto scroll compressor

compressor voltage: DC 24V

model: MD24A6-*****

compressor



performances

refrigerant capacity	3.15 kW	4.0 kW
	10800 BTU/hr	13700 BTU/hr
input power	2.17 kW	2.16 kW
current	91 A	90 A
test condition	Pd/Ps=1.47/0.19(MPa(G)) SC=5℃ SH=10℃ n=6000rpm	

usable range

evaporated temperature	-11℃ ~ +24℃	12℃ F ~ 70℃ F
condense temperature	+5℃ ~ +75℃	77℃ F ~ 167℃ F
compression ratio	8.0 MAX	8.0 MAX
refrigerant	R134a	R134a
start temperature	-30℃ ~ +70℃	-26℃ F ~ 158℃ F
working temperature	-32℃ ~ +100℃	-26℃ F ~ 212℃ F
store temperature	-40℃ ~ +105℃	-40℃ F ~ 221℃ F

compressor parameters

discharge capacity	24.0 cc/rev	24.0 cc/rev
weight	5.5 kg	5.5 kg
oil charge	100 cc	100 cc
refrigerant capacity	800 cc	800 cc
rotated range	1800rpm~6000rpm	1800rpm~6000rpm
safety valve pressure	4.0 MPa	4.0 MPa
cover protection level	IP 67	IP 67
motor coil temperature	120℃ MAX	248℃ F MAX
discharge temperature	115℃ MAX	239℃ F MAX

motor parameter

motor type	
rated torque	3.10 Nm
max torque	refer to Diagram

drive parameter

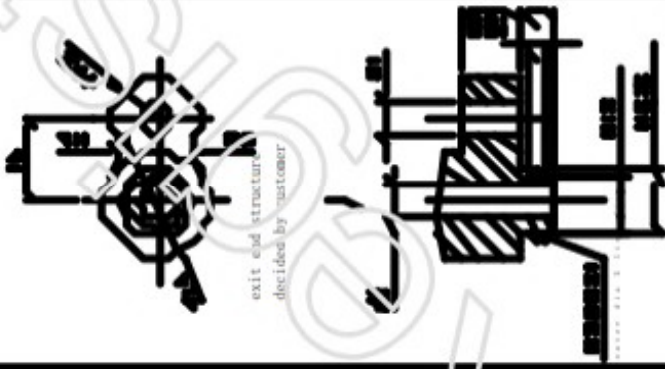
max power	2400 W	2400 W
working frequency	30Hz ~ 120Hz	30Hz ~ 120Hz
.....	100℃	212℃ F
over-voltage protection	20 V	20 V
under-voltage protection	31 V	31 V
.....	yes	yes

control method

control method	based on customer's requirements
common way	1. SCI serial
	2. PWM
	3. switch
	4. Potentiometer

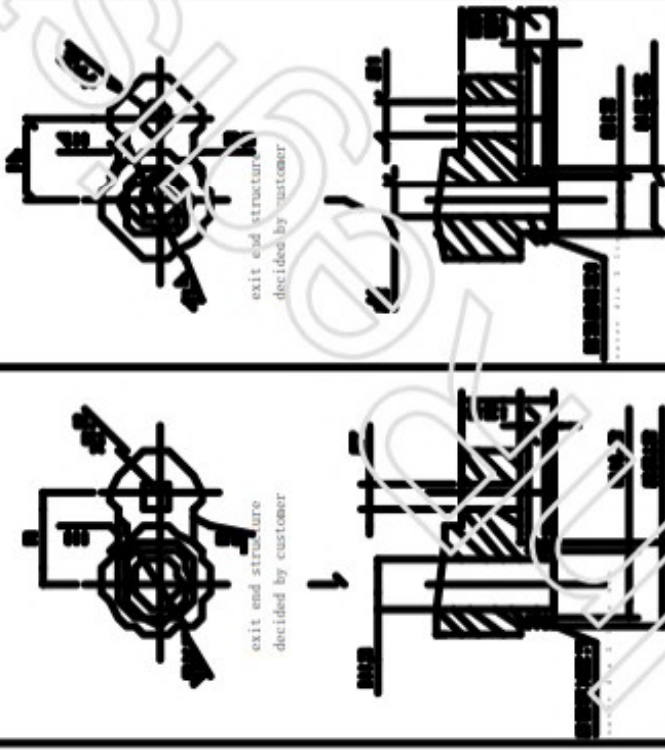
discharge

connector image



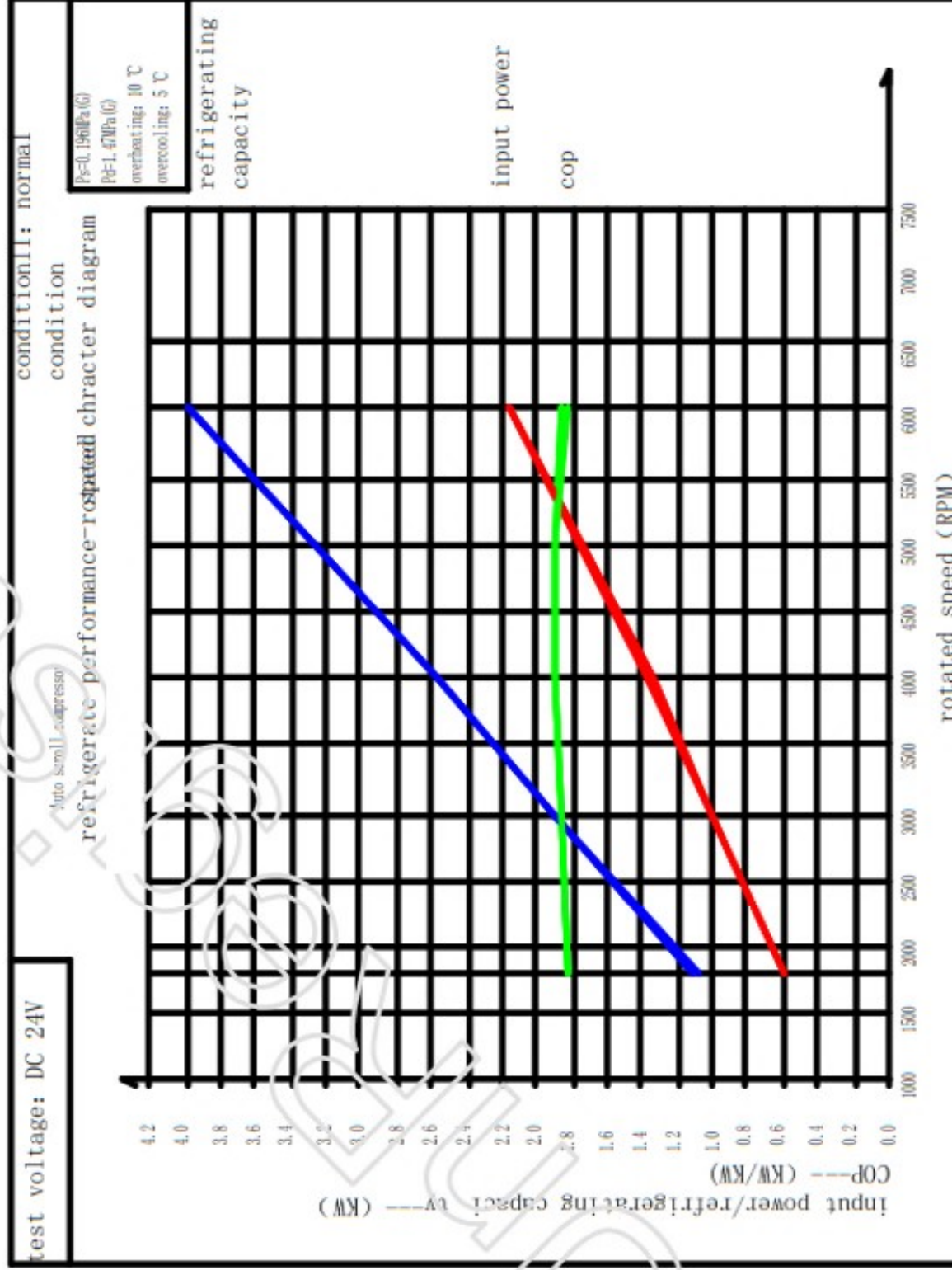
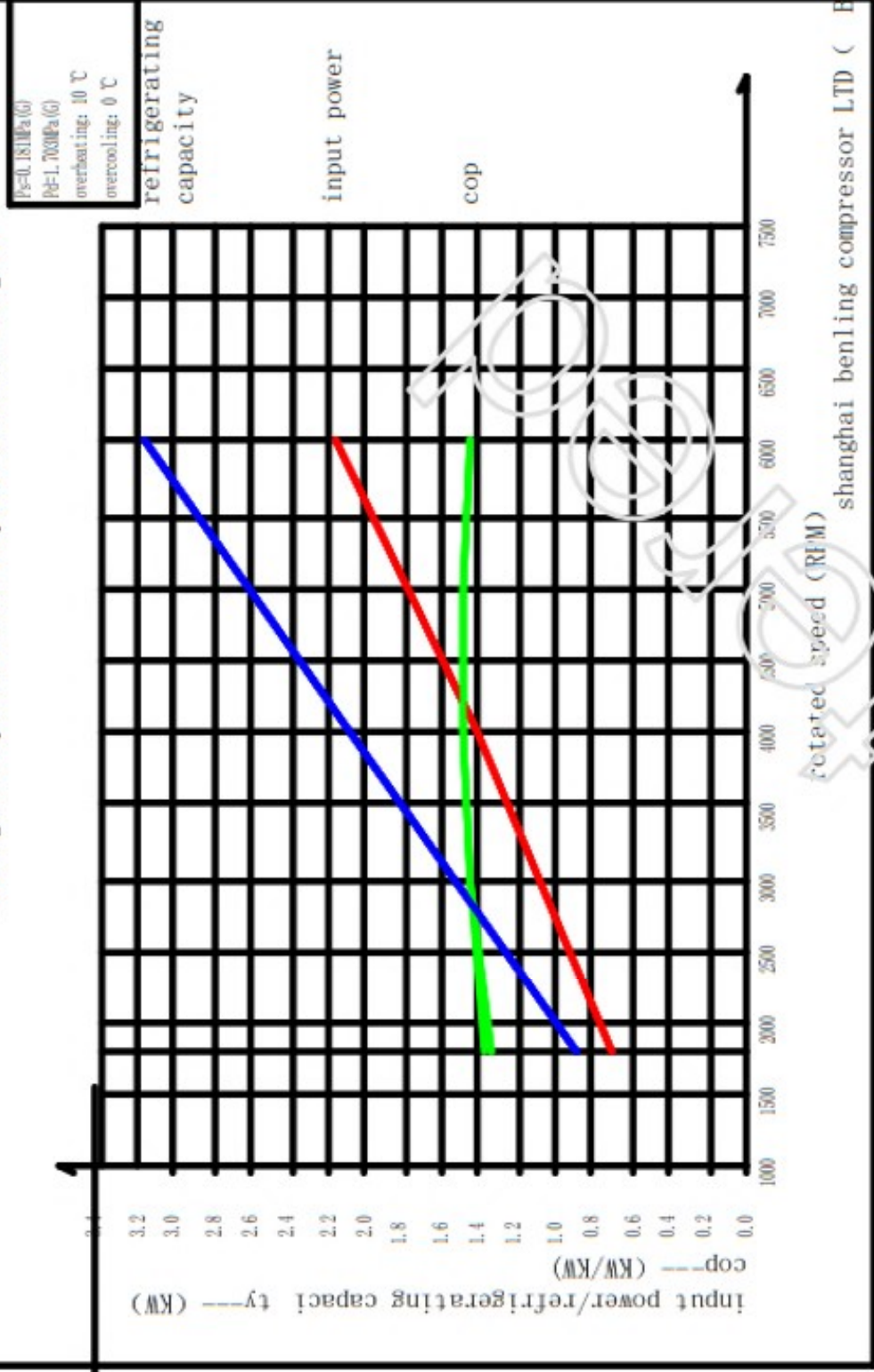
suction

connector image



circuit diagram

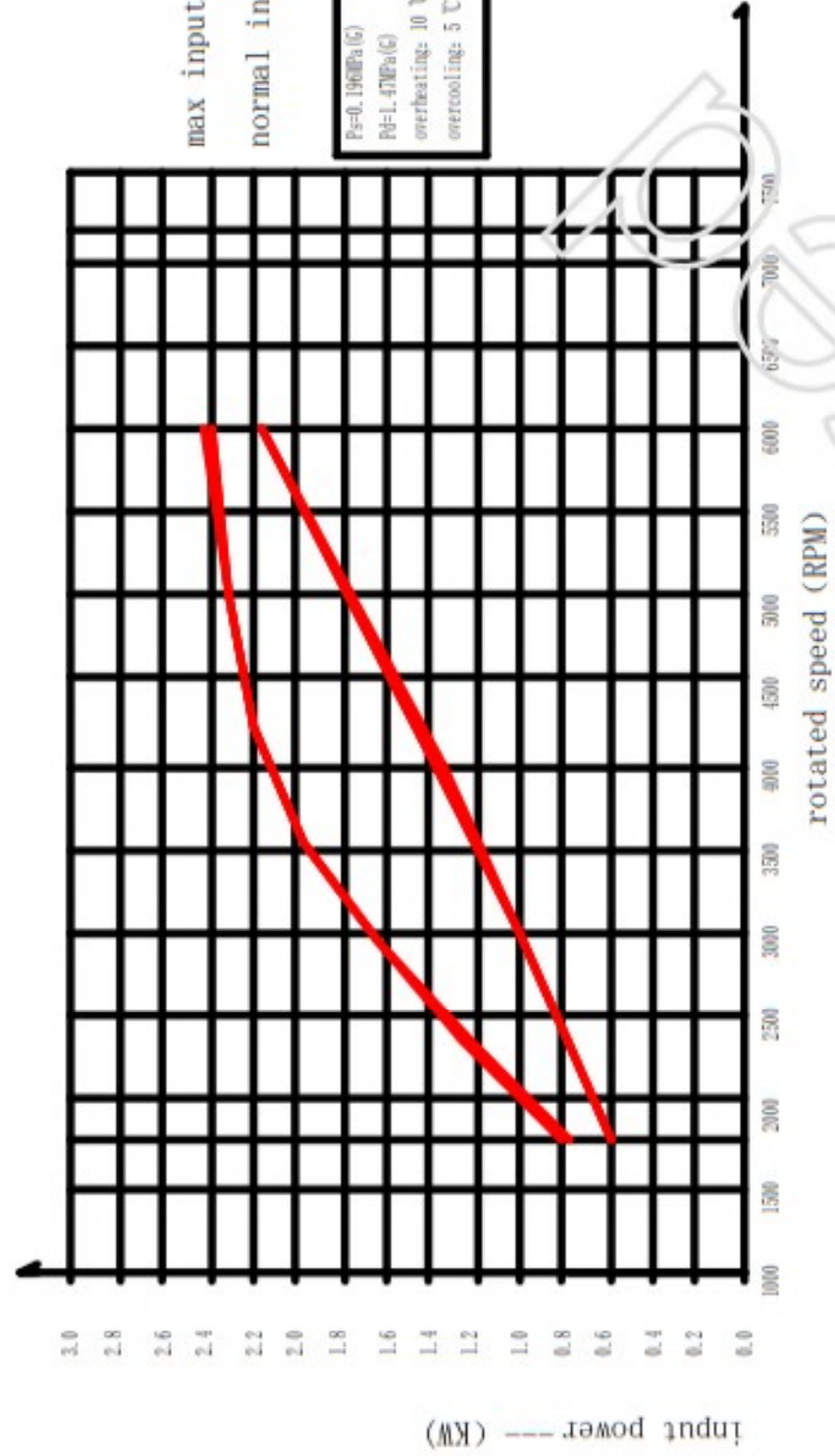




test voltage: DC 24V

Auto scroll compressor

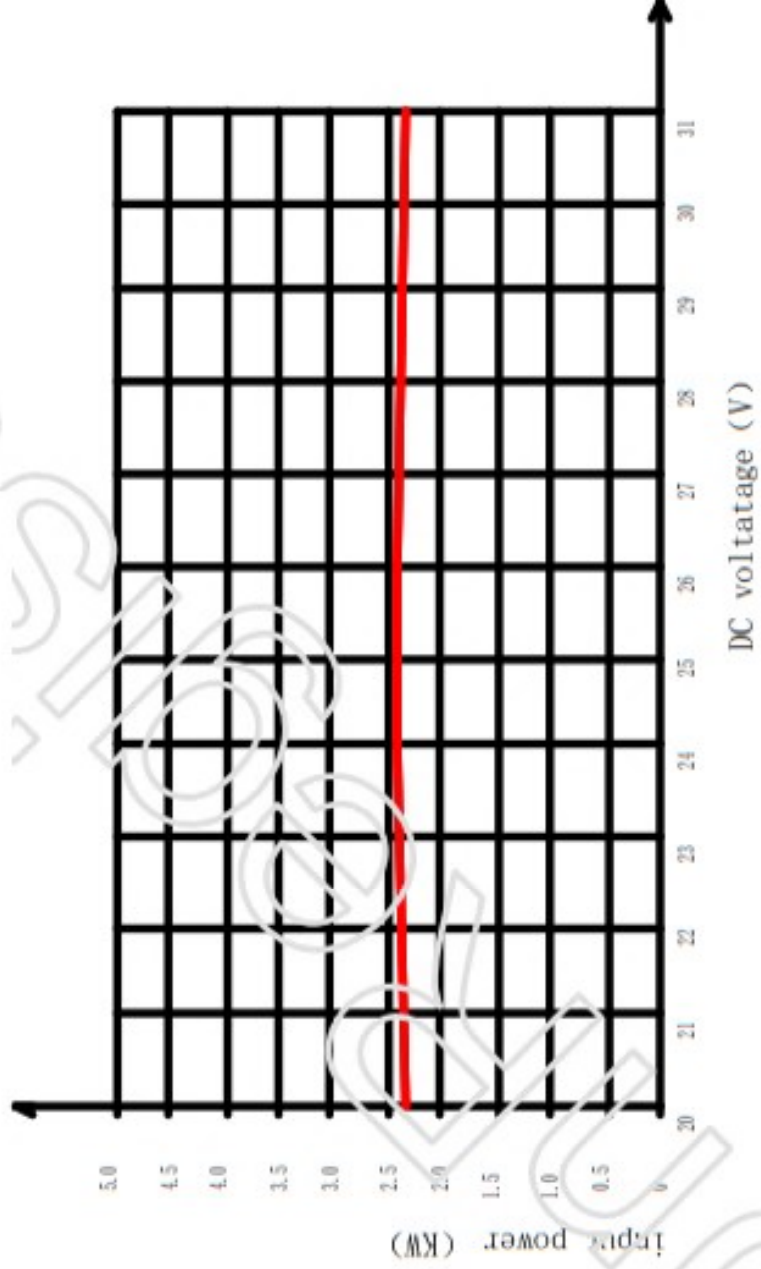
max input power-rotated speed character diagram



test rotated speed: 6000rpm

Auto scroll compressor

max input power-voltage performance diagram



refrigerating performance diagram

m of different condition

test voltage: DC 24V

refrigerant: R134a

rotated speed

d: 6000rpm

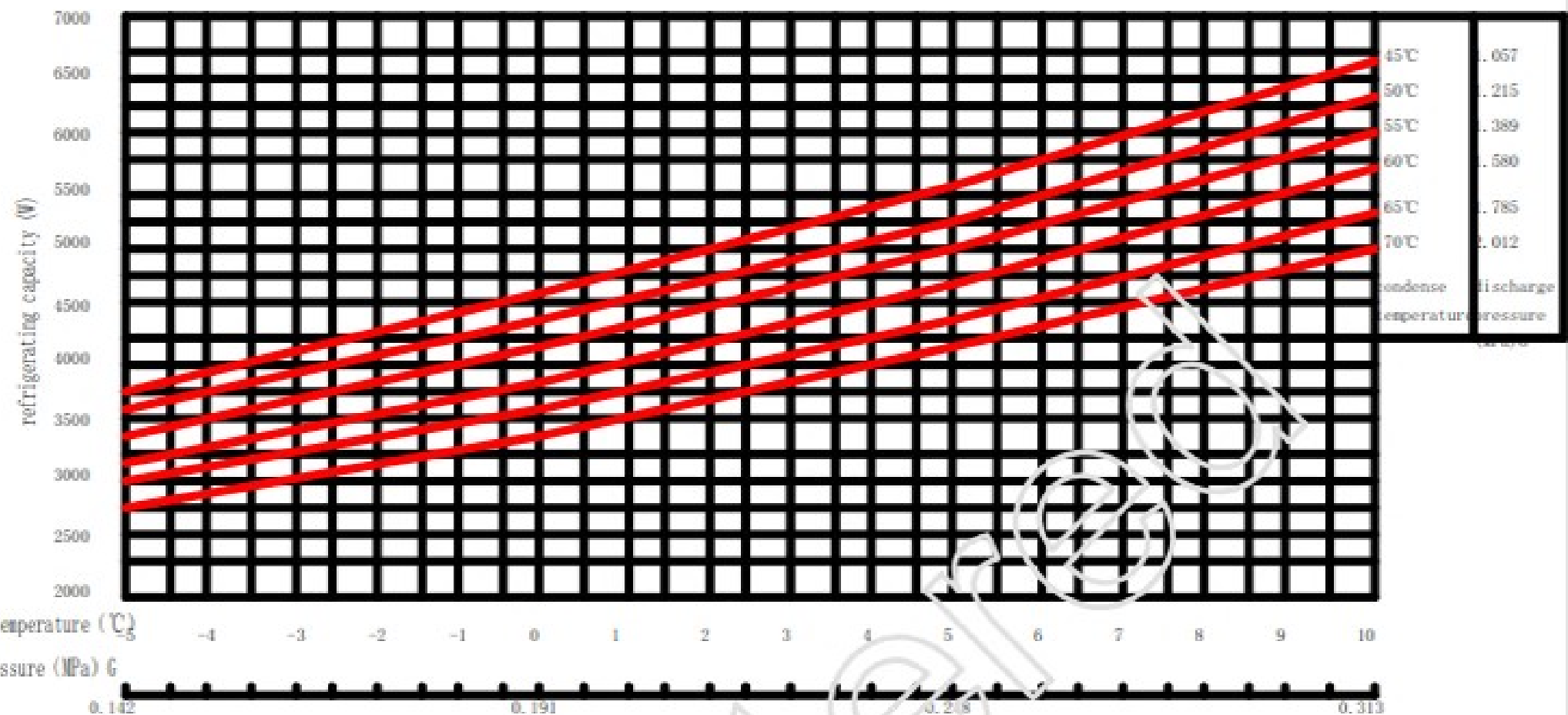


diagram based on following condition:
surrounding temperature: 65 °C

condition: overcooling 5 °C overheating 10 °C