



Specification		Notes
Standard model	YH200C1-100(Preliminary)	Base model
Extended model		
Extended model		

Revision record			
Version	Reviser	Description	Date

\_\_\_\_\_  
Checked

\_\_\_\_\_  
Date

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Approved

\_\_\_\_\_  
Date



\*1 Compressor Basic Performance Specificatio

Model	YH200C1-100
Refrigerant	R410A
Displacement m <sup>3</sup> /h (cm <sup>3</sup> /rev)	13.0 (74.6)
Cap (W) <sup>(a)</sup>	19600
Input Power(W) <sup>(a)</sup>	6200
Running Current(A) <sup>(a)</sup>	11.6
COP <sup>(a)</sup>	3.16
Rated Voltage (V)	380V
Phase- Hertz	3 P - 50 HZ
Lowest Running Voltage (V)	342
Highest Running Voltage (V)	418
Lock Rotor Current (A)	85.0
Highest Running Current <sup>(b)</sup> (A)	17.1
Motor Speed (r/min) <sup>(c)</sup>	2900
Compressor Weight With Oil (kg)	38
Oil	POE (Coefficient Of Viscosity32)
Oil Charge (First Charge, L)	1.60
(Recharge, L)	1.45
Oil Circulation (%) <sup>(f)</sup>	<1%
Sound (Sound Power) <sup>(g)</sup>	70
Max Running Sound (Sound Power)	75
Maximum Vib (mm, Peak-Peak) <sup>(h)</sup>	<0.12
Maximum Moisture (mg)	< 500
Maximum Impurity (mg)	< 100
Lowest Voltage Start (V) <sup>(d)</sup>	323
MOV (V) <sup>(e)</sup>	342
1.2 Motor Specifications	
Motor Type	Induction motor
Pole	2
Motor Insulation Temperature °C	130
Resistance (Ω) @ 25 °C	1.8 ( ± 10%)
Insulation Voltage (V)	2000
Leakage Current (mA)	<5
Insulation Resistance (MΩ)	>20
Ground Resistance (Ω)	<0.1
1.3 Safe Running Conditions	
Highest Running Pressure	
High Side (Mpa)	4.3



Low Side (Mpa)	2.0
Max Discharge Temperature	125°C
Compressor Start-off Revolution	Above 3min

NOTES:

- a) Test Condition: First Rated Running Point
- b) Test Condition: ET 11.9°C, CT 65.5°C, Running @ 90% Rated Voltage
- c) Test Condition: First Rated Running Point
- d) Discharge Pressure / Suction Pressure = Refrigerant Saturation Pressure @40°C (Absolute Pressure)
- e) Test Condition: Suction Pressure / Discharge Pressure = Refrigerant Saturation Pressure @11.9 °C / Refrigerant Saturation Pressure @65.5°C, Superheat 11.9°C, Subcooling 8.3°C
- f) Mass Flow Under First Rated Point
- g) Running @ Rated Condition, Average Of Sound Power
- h) Running @ Rated Condition, Maximum Displacement Under Normal Direction When Compressor Running

\*3 Test Condition (380V, 50 HZ), Capacity And COP Allowed Normal Specification Tolerance Is - 5%, Power And Current Allowed Normal Specification Tolerance Is + 5% (Performance And Sound Test after 48hrs Break-In-Run)

Seq	Parameter	First Rated Running Point
1	Evaporating T	7.2
2	Condensing T	54.4
3	Ambient T	35.0
4	Return Gas T	18.3
5	Superheat K	11.1
6	Subcooling K	8.3

\*4 Internal Protection Parts

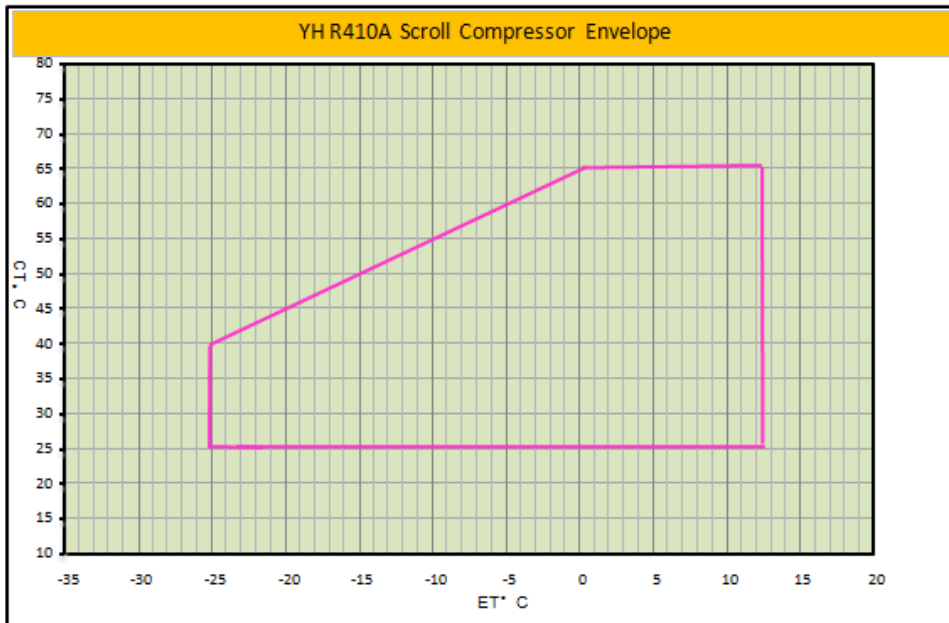
- Internal Motor Protector
- Internal Pressure Release Valve Protection  
Pressure Release Valve Open Range: 3.97--4.31Mpa

\*5 Standard Configuration:

YH200C1-100			
Accessory	Description	P/N	PCS
1	Mat	070-0003-00	4
2	Sleeve	010-0014-00	4

\*6 Compressor Running Envelop

In This Envelop, All Of The Test Condition Under The Degree Of Superheat 11.1°C, 8.3°C Sub cooling.



\*7 Compressor Performance Sheet

Invotech YH200C1-100 compressor performance sheet								
		-20	-15	-10	-5	0	5	10
cooling cap	65					12217	14960	18115
	55			10107	12469	15106	18123	21626
	50		8839	11076	13519	16274	19447	23144
	45	7460	9616	11909	14447	17333	20676	24579
	40	8113	10301	12664	15308	18339	21864	25988
	35	8717	10949	13395	16159	19348	23068	27425
	25	10001	12362	15012	18056	21600	25750	30612
power	65					8362	8276	8214
	55			6613	6520	6438	6374	6336
	50		5924	5838	5756	5686	5635	5611
	45	5321	5247	5172	5102	5046	5010	5002
	40	4720	4658	4595	4539	4498	4479	4489
	35	4184	4135	4087	4047	4023	4021	4050
	25	3228	3210	3195	3191	3205	3245	3317

Cap And Power Is Under 11.1°C Return Gas Temperature, 8.3°C subcooling  
X-axis Ordinate Is Evaporating T (°C), Y-axis Ordinates Is Condensing T (°C)  
Blue Area is transition only.

\*8 Notes

- 1) The compressor should not be used to be operated under vacuum, compress air, run without load or reverse;
- 2) The compressor should not be opened in the atmosphere for more than 15 minutes;
- 3) The compressor continuous running time should be more than 10minutes, the duration between two start-ups shall exceed three minutes, the compressor should not start/stop frequently to avoiding oil being pumped together with the refrigerant;
- 4) Before starting, discharge pressure – suction pressure $\leq$ 0.3Mpa;
- 5) The running voltage shall be within  $\pm 10\%$  of the rated voltage;
- 6) In low temperature application, because lots of refrigerant may migrate to the compressor cavity, deposit at the bottom of the compressor, it may cause the problem of lubrication and oil return, it is better to install the crankshaft heating device;
- 7) The system should set basic protection of pressure, temperature, over-current, phase-loss and oil return device etc.
- 8) Do not put the compressor horizontally or put it upside down.

\*9. Compressor Outline Dimensions

