

Invotech Scroll Compressor Specification

Comp Model

Air-condition Used Comp YH175C1-100

^{*1} Compressor Basic Performance Specification

Model	YH175C1-100			
Refrigerant	R410A			
Displacement(m ³ /h)	11.5			
Cap (W) ^(a)	17300			
Power Input (W) (a)	5545			
Running Current (A) (a)	9.7			
Coefficient Of Performance (COP) (a)	3.12			
Rated Voltage (V)	380V			
Phase/Hertz	3P/50Hz			
Lowest Running Voltage (V)	342			
Highest Running Voltage (V)	418			
Lock Rotor Current (A)	65.0			
Highest Running Current (A) (b)	13.5			
Motor Speed(R/Min) ^(c)	2900			
Comp Weight With Oil (Kg)	33			
Oil	POE (Coefficient Of Viscosity 32)			
Oil Charge (First Charge, L)	1.40			
(Recharge, L)	1.25			
Lowest Voltage Start (V) ^(d)	323			
MOV (V) ^(e)	342			
Motor Insulation Temperature	130°C			
Resistance @ 25 ˚ℂ Ambient (Ω)	1.9(± 10%)			
Insulation Voltage (V)	2000			
Leakage Current (mA)	<5			
Insulation Resistance (mΩ)	>20			
Ground Resistance (Ω)	<0.1			
Oil Circulation (%) ^(f)	Less Than 1%			
Sound (Sound Power) ^(g)	69			
Maximum Vib (mm, Peak-Peak) ^(h)	<0.10			
Maximum Moisture (mg)	< 500			
Maximum Impurity (mg)	< 100			
Highest Running Pressure				
High Side (Mpa)	4.3			
Low Side (Mpa)	2.0			

Version: 001

Revised Date: 2014-11-25



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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: 380V, 50Hz, First Rated Running Point
- d) Discharge Pressure / Suction Pressure = Refrigerant Saturation Pressure
 @40℃ (Absolute Pressure)
- e) Test Condition: Suction Pressure / Discharge Pressure = Refrigerant Saturation Pressure @11.9 ℃ / Refrigerant Saturation Pressure @65.5℃, Superheat 11.9℃, Sub cooling 8.3℃
- f) Mass Flow Under First Rated Point
- g) Running @ First Rated Running Point, Average Of Sound Power, Maximum Sound Power Is Less Than 74dB(A)
- h) Running @ First Rated Running Point, Maximum Displacement Under Normal Direction When Compressor Running

*2 Standard Configuration:

- Ground Screw
- Welding Suction Fitting And Discharge Fitting
- Square Terminal Box Cover
- Without Liquid Injection Nor Vapour Injection
- Without Oil Sight Glass
- Mount Kits (4 Sets)
- *3 Test Condition (380V, 50 HZ), Capacity And COP Is No Less Than 95% Normal Specification, Power And Current Is No More Than 105% Normal Specification (Performance And Sound Test Need 24hrs Break In Running At Max Load Running Condition (e))

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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



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Pressure Release Valve Open Range: 3.97--4.31Mpa

*5 Compressor Running Envelope

Compressor Running @ 11.1 °C Superheat, 8.3 °C Subcooling



*6 Compressor Performance Data Sheet

Invotech Scroll Compressor YH175C1-100 Performance Sheet									
	工况	-20	-15	-10	-5	0	5	10	
Cap ₩	65					10207	12928	15801	
	55			8087	10854	13286	15854	18940	
	50		7129	9363	12000	14474	17131	20376	
	45	6079	8263	10321	12982	15554	18301	21759	
	40	6947	9100	11119	13909	16526	19472	23089	
	35	7843	9802	11864	14727	17498	20589	24419	
	25	8250	10504	12609	15545	18470	21706	25749	
Power₩	65					7052	7016	7016	
	55			5613	5614	5587	5559	5559	
	50		4961	4976	5001	4996	4970	4976	
	45	4459	4487	4447	4464	4459	4436	4452	
	40	3971	4013	3972	3987	3987	3972	3994	
	35	3553	3582	3546	3564	3569	3567	3600	
	25	3135	3151	3119	3141	3152	3162	3206	

Cap. And Power Data in Grey-green Area Is Tested @ 11.1 $^{\circ}$ C Superheat, 8.3 $^{\circ}$ C subcooling X-axis Ordinate Is Evaporating T ($^{\circ}$ C), Y-axis Ordinates Is Condensing T ($^{\circ}$ C)

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