

Invotech Scroll Compressor Specification

Comp Model

Air-condition Used Comp YH175T1-100

^{*1} Compressor Basic Performance Specification

Model	YH175T1-100			
Refrigerant	R407C			
Cap (W) ^(a)	16800			
Power Input (W) ^(a)	5030			
Running Current (A) ^(a)	9.1			
Coefficient Of Performance (COP) (a)	3.34			
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)	13.6			
Motor Speed(R/Min) ^(c)	2900			
Comp Weight With Oil (Kg)	33			
Oil	3GS (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)	70			
Maximum Vib (mm, Peak-Peak) ^(h)	<0.10			
Maximum Moisture (mg)	< 500			
Maximum Impurity (mg)	< 100			
Highest Running Pressure				
High Side (Mpa)	3.0			
Low Side (Mpa)	2.0			

Version: 002

Revised Date: 2013-12-06



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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 °C / Refrigerant Saturation Pressure @65.5 °C, Superheat 11.9 °C, Sub cooling 8.3 °C
- f) Mass Flow Under First Rated Point
- g) Running @ First Rated Running Point, Average Of Sound Power, Maximum Sound Power Is Less Than 75 dB(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))

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

Pressure Release Valve Open Range: 2.76--3.10Mpa

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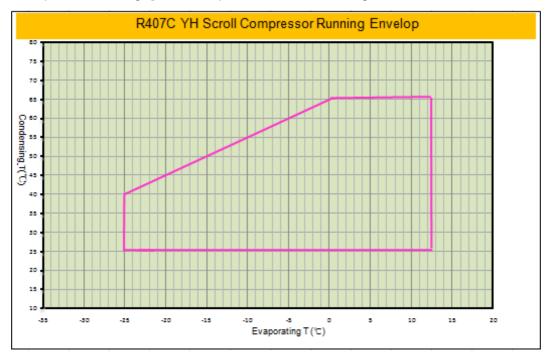
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*5 Compressor Running Envelope

Compressor Running @ 11.1℃ Superheat, 8.3℃ Subcooling



*6 Compressor Performance Data Sheet

Invotech YH175T1-100 Performance Sheet									
	工况	-20	-15	-10	-5	0	5	10	
Capacity W	65					11152	14033	16941	
	55			9342	10919	13023	15563	18984	
	50		7361	9625	11520	13733	16646	19934	
	45	6529	7830	9839	12139	14462	17400	20867	
	40	6757	8300	10453	12752	15180	18130	21705	
	35	6986	8769	11067	13364	15899	18860	22543	
	25	7214	9239	11263	14497	17184	20130	22129	
Power ₩	65					6157	5941	5943	
	55			4961	4996	5220	5119	5043	
	50		4384	4500	4691	4893	4743	4707	
	45	3930	3998	4255	4419	4537	4339	4346	
	40	3650	3766	3992	4145	4229	4071	4109	
	35	3370	3535	3729	3870	3921	3803	3872	
	25	2817	3015	3236	3410	3510	3403	3338	

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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