

# InvoTech Scroll Compressor Specifications

Model

YH133T1-100

<sup>\*1</sup> Compressor Basic Performance Specifications

Model	YH133T1-100			
Refrigerant	R407C			
Cap (W) <sup>(a)</sup>	12770			
Power Input (W) <sup>(a)</sup>	3900			
Running Current (A) (a)	7.8			
Capacity Over Power (COP) <sup>(a)</sup>	3.27			
Rated Voltage (V)	380V			
Phase/Hertz	3P/50Hz			
Lowest Running Voltage (V)	342			
Highest Running Voltage (V)	418			
Lock Rotor Current (A) (a)	60.0			
Highest Running Current (A) (b)	10.6			
Motor Speed(R/Min) <sup>(c)</sup>	2900			
Comp Weight With Oil (Kg)	31			
Oil	3GS (Coefficient Of Viscosity 32)			
Oil Charge (First Charge, L)	1.40			
(Recharge, L)	1.25			
Lowest Voltage Start (V) <sup>(d)</sup>	323			
MOV (V) <sup>(e)</sup>	342			
Motor Insulation Temperature	130°C			
Resistance @ 25 °C Ambient (Ω)	2.45( ± 10%)			
Insulation Voltage (V)	2000			
Leakage Current (mA)	<5			
Insulation Resistance (mΩ)	>20			
Ground Resistance (Ω)	<0.1			
Oil Circulation (%) <sup>(f)</sup>	Less Than 1%			
Sound (Sound Power) <sup>(g)</sup>	69			
Maximum Vib (mm, Peak-Peak) <sup>(h)</sup>	<0.10			
Maximum Moisture (mg)	< 500			
Maximum Impurity (mg)	< 100			
Highest Running Pressure				
High Side (Mpa)	3.0			
Low Side (Mpa)	2.0			

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#### NOTES:

- a) Test Condition: First Rated Running Point
- b) Test Condition: ET 19.9°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℃, Subcooling 8.3℃
- f) Mass Flow Under First Rated Point
- g) Running @ ARI Condition, Average Of Sound Power, Maximum Sound Power Is Less Than 74 dB(A)
- h) Running @ ARI Condition, 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 Allowed Normal Specification Tolerance Is 5%, Power And Current Allowed Normal Specification Tolerance Is + 5% (Performance And Sound Test after 20hrs Break-In-Run)

Seq	Parameter	First Rated Running Point	Second Rated Running Point		
1	Evaporating T	7.2 ℃	7.2 ℃		
2	Condensing T	54.4 ℃	47.2 °C		
3	Ambient T	35.0 ℃	35.0 ℃		
4	Return Gas T	18.3 ℃	18.3 ℃		
5	Superheat K	11.1	11.1		
6	Subcooling K	8.3	8.3		

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#### \*4 Internal Protection Parts

Internal Motor Protector

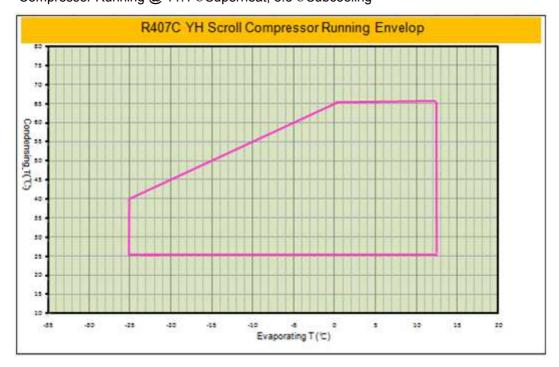


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Internal Pressure Release Valve
 Pressure Release Valve Open Range: 2.76--3.10Mpa

### \*5 Compressor Running Envelop Compressor Running @ 11.1°C Superheat, 8.3°C Subcooling



#### \*6 Compressor Performance Data Sheet

Invotech YH133T1-100 Performance Sheet										
	工况	-20	-15	-10	-5	0	5	10		
	65					8475	10665	12875		
	55			7100	8299	9897	11828	14428		
	50		5594	7315	8755	10437	12651	15150		
Capacity   W	45	4962	5951	7477	9226	10991	13224	15859		
"	40	5135	6308	7944	9691	11537	13779	16496		
	35	5309	6665	8411	10157	12083	14334	17133		
	25	5483	7021	8560	11017	13060	15298	16818		
	65					4747	4581	4582		
	55			3825	3852	4025	3947	3888		
	50		3381	3470	3617	3772	3657	3629		
Power ₩	45	3030	3082	3281	3407	3498	3345	3351		
	40	2814	2904	3078	3196	3261	3139	3168		
	35	2598	2726	2875	2984	3023	2932	2985		
	25	2172	2325	2495	2629	2706	2624	2573		

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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