

# Invotech Scroll Compressor Specification

## Comp Model

Air-condition Used Comp YH355C1-100

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

Model	YH355C1-100			
Refrigerant	R410A			
Cap (W) <sup>(a)</sup>	34800			
Displacement(m <sup>3</sup> /h)	22.9			
Power Input (W) <sup>(a)</sup>	10800			
Running Current (A) (a)	18.2			
Coefficient Of Performance (COP) (a)	3.22			
Rated Voltage (V)	380V			
Phase/Hertz	3P/50Hz			
Lowest Running Voltage (V)	342			
Highest Running Voltage (V)	418			
Lock Rotor Current (A)	121			
Highest Running Current (A) (b)	26.8			
Motor Speed(R/Min) <sup>(c)</sup>	2900			
Comp Weight With Oil (Kg)	54			
Oil	POE (Coefficient Of Viscosity 32)			
Oil Charge (First Charge, L)	2.70			
(Recharge, L)	2.60			
Lowest Voltage Start (V) <sup>(d)</sup>	323			
MOV (V) <sup>(e)</sup>	342			
Motor Insulation Temperature	130°C			
Resistance @ 25 °C Ambient (Ω)	1.06( ± 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>	73			
Maximum Vib (mm, Peak-Peak) <sup>(h)</sup>	<0.12			
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: 2014-10-08



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#### NOTES:

- a) Test Condition: First Rated Running Point
- b) Test Condition: ET 11.9℃, CT 65.5℃, 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  $^{\circ}$ C / Refrigerant Saturation Pressure @65.5 $^{\circ}$ C, Superheat 11.9 $^{\circ}$ C, Sub cooling 8.3 $^{\circ}$ C
- f) Mass Flow Under First Rated Point
- g) Running @ First Rated Running Point, Average Of Sound Power, Maximum Sound Power Is Less Than 78 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))

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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℃ Superheat, 8.3℃ Subcooling

### \*6 Compressor Performance Data Sheet

		Invotech Sci	roll Compres	sor YH355C	1-100 Perfor	mance Shee	t	10/10/20
	工况	-20	-15	-10	-5	0	5	10
Cap ₩	65	61	(e)		63	20163	25537	31212
	55			15974	21441	26244	31318	37413
	50		14082	18496	23704	28591	33840	40250
	45	12008	16323	20388	25644	30725	36152	42983
	40	13724	17976	21964	27475	32645	38464	45610
	35	15493	19363	23436	29091	34566	40671	48237
	25	16297	20750	24907	30708	36486	42878	50865
•						11111	11.01	
Power W	65	8			1.50	13524	13455	13455
	55			10764	10767	10715	10661	10661
	50		9515	9543	9592	9581	9532	9543
	45	8551	8605	8528	8562	8551	8508	8539
	40	7615	7696	7618	7646	7646	7618	7659
	35	6814	6870	6800	6835	6845	6841	6903
	25	6013	6044	5982	6023	6044	6065	6148

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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