
 INVOTECH	Invotech Scroll Compressor Specification
Comp Model	Water Heater Used Comp YW320T1-100

*1 Compressor Basic Performance Specification

Model	YW320T1-100
Refrigerant	R407C
Cap(W) (a)	41285
Power Input (W) ^(a)	10565
Running Current (a) ^(a)	18.2
COP ^(a)	3.91
Rated Voltage (V)	380V
Phase-Hz	3 P - 50 HZ
Lowest Running Voltage (V)	342
Highest Running Voltage (V)	418
Lock Rotor Current ^(a)	121
Highest Running Current ^(b)	28.0
Motor Speed (R/Min) ^(c)	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) ^(d)	323
MOV (V) ^(e)	342
Motor Insulation Temperature	130°C
Resistance (Ω) (25 °c)	1.06(± 10%)
Insulation And Voltage Resistance (V)	2500
Leakage Current (ma)	<5
Insulation Resistance(MΩ)	>20
Ground Resistance(Ω)	<0.1
Oil Circulation (%) ^(f)	Less Than 1%
Sound (Sound Power) ^(g)	77
Maximal Vib (mm, Peak-Peak) ^(h)	<0.12
Maximal Moisture (mg)	< 500
Maximal Impurity (mg)	< 100
Highest Running Pressure	
High Side (Mpa)	3.0
Low Side (Mpa)	2.0

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Instruction For Performance Specification Running Condition

- a) Test Condition: First Rated Running Point
- b) Test Condition: ET:15C, CT:70C, Running Voltage @ 90% Rated Voltage
- c) Test Condition: 380V, 50HZ, First Rated Running Point
- d) Discharge Pressure / Suction Pressure= Refrigerant Saturation Pressure @40C (Absolute Pressure) .
- e) Test Condition: Suction Pressure / Discharge Pressure = Refrigerant Saturation Pressure @15 C / Refrigerant Saturation Pressure @70C, Superheat 11.9C, Sub cooling 8.3C
- f) Mass Flow Under First Rated Point
- g) ARI Condition, Average Of Sound Power , Maximal Sound Power Is Less Than 5dba Added.
- h) Ari Condition, Maximal Displacement Under Normal Direction When Compressor Running.

*2 Standard Configuration:

- Ground Screw
- Welded Suction Fitting And Discharge Fitting
- Square Terminal Box Cover
- Without Liquid Injection and Without Vapour Injection
- Without Oil Sight Glass
- Mount Kits(4 Sets)

*3 Test Condition (380V, 50 HZ), Allowed Normal Specification Tolerance Is $\pm 5\%$
(Performance And Sound Test Neede20hrs Break In Running)

Seq	Parameter	First Rated Running Point	Second Rated Running Point
1	Evaporating T	5.0	7.2
2	Condensing T	55.0	54.4
3	Ambient T	35.0	35.0
4	Return Gas T	16.1	18.3
5	Superheat K	11.1	11.1
6	Subcooling K	8.3	8.3

*4 Internal Protection Parts

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



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*5 Compressor Running Envelop

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



*6 Compressor Performance Sheet

Invotech Scroll Compressor YW320T1-100 Performance Sheet									
		-20	-15	-10	-5	0	5	10	15
Heating Cap (Cooling Cap +Power)	70					33314	38047	43326	49103
	65				29978	34050	38708	43951	49890
	55		22841	26381	30384	34850	39924	45678	52187
	50	19819	22908	26522	30659	35319	40617	46621	53409
	45	19977	23041	26690	30985	35835	41350	47604	54667
	35	20062	23246	27138	31737	36957	42898	49635	57239
	25	20367	23598	27659	32550	38123	44476	51679	59808
Power	70					13598	13965	14264	14717
	65				13155	13202	13223	13216	13525
	55		10337	10399	10435	10443	10481	10568	10931
	50	8990	9117	9216	9289	9329	9402	9528	9914
	45	7952	8097	8215	8305	8370	8472	8633	9040
	35	6289	6451	6586	6694	6793	6937	7146	7584
	25	4951	5109	5240	5344	5452	5614	5850	6297

Cap And Power Is Under 11.1C Superheat, 8.3Csubcooling

Blue Area is transition only.