
 INVOTECH	Invotech Scroll Compressor Specification
Comp Model	High Temperature Used Comp YW160T1-100

\*1 Compressor Basic Performance Specification

Model	YW160T1-100
Refrigerant	R407C
Cap(W) (a)	20480
Power Input (W) <sup>(a)</sup>	5320
Running Current (a) <sup>(a)</sup>	9.6
COP <sup>(a)</sup>	3.85
Rated Voltage (V)	380V
Phase-Hz	3 P - 50 HZ
Lowest Running Voltage (V)	342
Highest Running Voltage (V)	418
Lock Rotor Current <sup>(a)</sup>	65.0
Highest Running Current <sup>(b)</sup>	14.5
Motor Speed (R/Min) <sup>(c)</sup>	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) <sup>(d)</sup>	323
MOV (V) <sup>(e)</sup>	342
Motor Insulation Temperature	130°C
Resistance (Ω) (25 °c)	1.9( ± 10%)
Insulation And Voltage Resistance (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>	74
Maximal Vib (mm, Peak-Peak) <sup>(h)</sup>	<0.10
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 79dBA.
- 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 Need 20hrs 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	Sub cooling 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



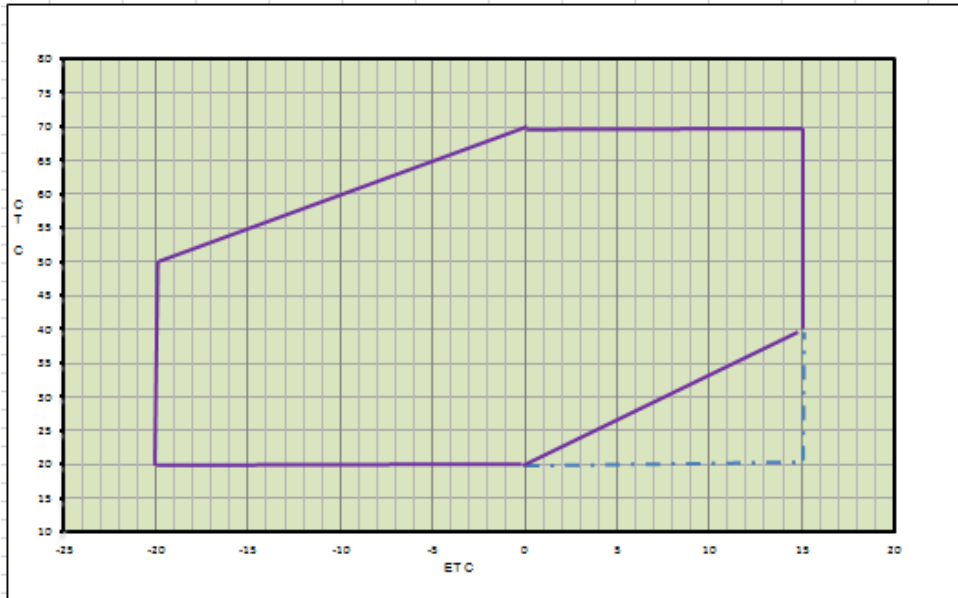
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## \*5 Compressor Running Envelop

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

YW160T1-100 Compressor Envelop



## \*6 Compressor Performance Sheet

Invotech Scroll Compressor YW160T1-100 Performance Sheet									
		-20	-15	-10	-5	0	5	10	15
Cap	70					17199	19762	22447	25408
	65				16206	17087	19954	22846	26064
	55		12669	13820	15598	18012	20593	23826	27351
	50	11159	12166	13650	15883	18391	21261	24371	27990
	45	10963	11890	13622	16221	18760	21578	24873	28608
	35	11167	12532	14302	16877	19573	22449	25966	29644
	25	9810	11154	14018	17531	20438	23274	24981	19914
Power	70					6746	6902	7261	7546
	65				5895	6069	6205	6527	6785
	55		4592	4779	4925	5145	5347	5539	5797
	50	4004	4180	4336	4624	4822	4954	5170	5453
	45	3670	3811	4100	4356	4472	4531	4773	5068
	35	3148	3370	3592	3815	3865	3972	4252	4534
	25	2631	2875	3118	3361	3459	3554	3666	2558

Cap And Power Is Under 11.1C Superheat, 8.3Csubcooling

Blue Area is transition only.