
	Invotech Scroll Compressor Specification
Comp Model	Refrigeration Used Comp YM125E1G-100

\*1 Compressor Basic Performance Specification

Model	YM125E1G-100
Refrigerant	R404A
Cap(W) <sup>(a)</sup>	12750
Displacement(m <sup>3</sup> /h)	20.1
Power Input (W) <sup>(a)</sup>	6070
Running Current (A) <sup>(a)</sup>	11.8
COP <sup>(a)</sup>	2.10
Rated Voltage (V)	380V
Phase-Hz	3 P - 50 HZ
Lowest Running Voltage (V)	342
Highest Running Voltage (V)	418
Lock Rotor Current (A)	117
Highest Running Current (A) <sup>(b)</sup>	17.3
Motor Speed (R/Min) <sup>(c)</sup>	2900
Comp Weight With Oil (kg)	53
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)	1.09( ± 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>	75
Maximal Vib (mm, Peak-Peak) <sup>(h)</sup>	<0.12
Maximal Moisture (mg)	< 500
Maximal Impurity (mg)	< 100
Highest Running Pressure	
High Side (Mpa)	3.2
Low Side (Mpa)	2.0

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#### Instruction For Performance Specification Running Condition

- Test Condition: First Rated Running Point
- Test Condition: ET:11.9C, CT:65.5C, Running Voltage @ 90% Rated Voltage
- Test Condition: 380V, 50HZ, First Rated Running Point
- Discharge Pressure / Suction Pressure= Refrigerant Saturation Pressure @ 40C (Absolute Pressure) .
- Test Condition: Suction Pressure / Discharge Pressure = Refrigerant Saturation Pressure @11.9 C / Refrigerant Saturation Pressure @65.5 C, Superheat 11.9C, Sub cooling 8.3C
- Mass Flow Under First Rated Point
- First Rated Running Condition, Average Of Sound Power , Maximal Sound Power Is Less Than 5dba Added.
- First Rated Running 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
- With 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<sup>(e)</sup> )

Seq	Parameter	First Rated Running Point
1	Evaporating T	-6.7
2	Condensing T	48.9
3	Ambient T	35.0
4	Return Gas T	4.4
5	Superheat K	11.1
6	Sub cooling K	0

#### \*4 Internal Protection Parts

- Internal Protector Protection



## Invotech Scroll Compressor Specification

Comp Model

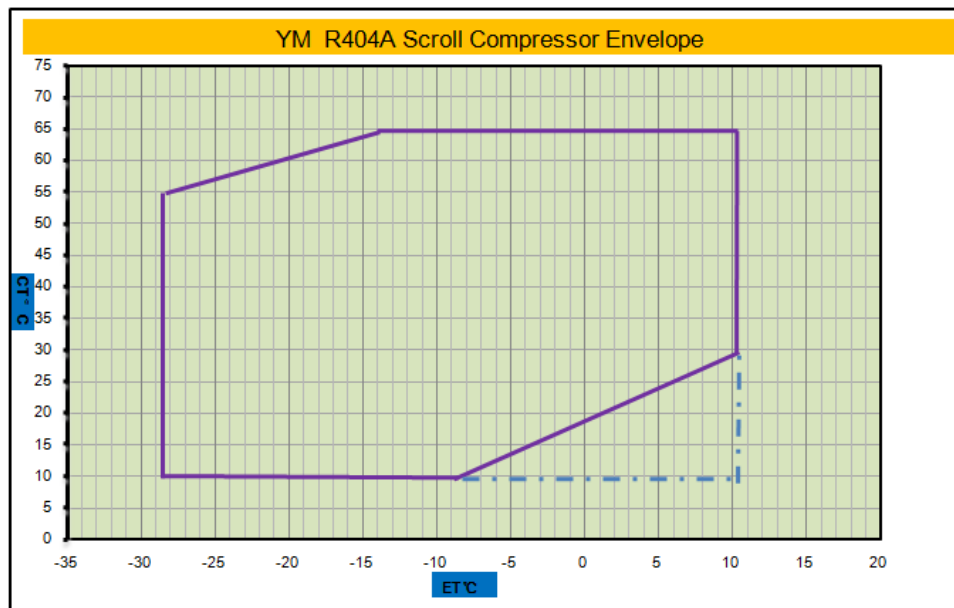
Refrigeration Used Comp YM125E1G-100

- Internal Pressure Release Valve Protection

Pressure Release Valve Open Range: 2.76--3.10Mpa

### \*5 Compressor Running Envelop

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



### \*6 Compressor Performance Sheet

Invotech Scroll Compressor YM125E1G-100 Performance Sheet										
		-30	-25	-20	-15	-10	-5	0	5	10
Cap w	60			5983	7153	8921	10760	12959	15525	18091
	50	4069	5783	7497	9084	11151	13415	16038	19119	22200
	40	5553	7282	9010	11015	13382	16069	19117	22712	26308
	30	6324	8424	10524	12732	15540	18580	22052	26162	30273
Power w	60			7981	8001	8012	8032	8075	8084	8087
	50	6469	6510	6552	6559	6562	6587	6532	6594	6654
	40	5203	5239	5270	5275	5285	5295	5322	5354	5398
	30	4146	4177	4205	4209	4254	4318	4345	4404	4482

Cap And Power Is Under 20C Return Gas, 0 C Sub cooling.