# 1.Specification

## 1.1 Compressor

| | |
|---|---|
| Compressor Model Name | GPT330PAA |
| Compressor Type | Hermetic Motor Compressor |
| Compression Type | Rotary ( 2 Piston Type ) |
| Displacement | 33.0 ㎤ / rev |
| Refrigerant | R410A |
| Oil / Oil Charging Amount | FVC68D(PVE) / 1200 ±10 cc |
| Nitrogen Gas Holding Pressure | 0.8 ± 0.2 kg / ㎠G |
| Painting | Black Color Paint |
| Net Weight ( Including Oil ) | 25. 0 kg |
| Suction Tube I.D. | Φ 16.0 |
| Discharge Tube I.D. | Φ 9.7 |

## 1.2 Motor

| | | |
|---|---|---|
| Motor Type / Starting Type | Single Phase Induction Motor / PSC | |
| Pole / Rated Output | 2 Pole / 2,080 watts | |
| Power Source | 1 Ph 220-240 volt 50 Hz | |
| Rated Revolution | 2,870/2,890 rpm | |
| Insulation Class | E Class | |
| Winding Resistance at 25 °C | Main | 1.20 ± 7% ohms |
| | Sub | 1.76 ± 7% ohms |

## 1.3 Performance

| | | at 220 V | at 240 V |
|---|---|---|---|
| Cooling Capacity ( ±5% ) | [ BTU/h] | 28,300 | 28,500 |
| | [ watts] | 8,294 | 8,353 |
| Power Input (±5%) | [ watts] | 2,748 | 2,850 |
| EER ( ±5%) | [ BTU/Whr] | 10.3 | 10.0 |
| Running Current | [A] | 12.5 | 12.1 |
| Locked Rotor Ampere | [A] | - | 64 |
| Sound Level | [ dB(A)] | | 77 Max |
| Vibration | [ gal ] | | 1,000 gal ↓ |

## 1.4 Voltage Range

| Starting Condition | Specification | Pressure Condition |
|---|---|---|
| at Normal Condition | start at 85% of Rated Voltage ( 187 Volt ) | Ps / Pd = 9.12 / 33.45 kg/cm$^2$G |
| at Overload Condition | start at 90% of Rated Voltage (198 Volt ) | Ps / Pd = 10 / 42 kg/cm$^2$G |

※) Rating Conditions

Cond. Temp. : 54.4 ºC ( 130 ºF )
Evap. Temp. : 7.2 ºC ( 45 ºF )
Return Gas Temp. : 35.0 ºC ( 95 ºF )
Liquid Temp. : 46.1 ºC ( 115 ºF )
Ambient Temp. : 35.0 ºC ( 95 ºF )

1.6 Electrical Component

| Part Name | Specification |
|---|---|
| Running Capacitor | 60 MFD / 440 VAC |
| Overload Protector | INTERNAL |

# 2.Delivered Parts List

| Parts Name | Type ( Model ) | Q'ty | Parts Dwg. NO. | Supply | |
|---|---|---|---|---|---|
| Compressor | GPT330PAA | 1 | TBZ34637101 | (YES) | NO |
| O.L.P | INTERNAL | 1 | - | YES | (NO) |
| Cover, Terminal | - | 1 | 3550U - L005B | (YES) | NO |
| Gasket | - | 1 | 4986U - L004A | (YES) | NO |
| Nut, Hexagon Flange | - | 1 | 1NFZU - L001A | (YES) | NO |
| Washer, Plain Cover | - | 1 | 1WPZU - L001A | (YES) | NO |
| Grommet | - | 3 | 4022U - L005B | (YES) | NO |
| Bolt, Stud | - | 3 | 1BSZU - L002B | YES | (NO) |
| Washer, Plain | - | 3 | 1WPZU - L003A | YES | (NO) |
| Nut, Hexagon | - | 3 | 1NHZU - L001A | YES | (NO) |
| Capacitor | - | 1 | -- | YES | (NO) |

※ ) Refer to attached drawings

# 3.Operating Limit

| | | |
|---|---|---|
| Discharge Pressure | [ kgf / ㎠ G ] | 42.0 Max. |
| Suction Pressure | [ kgf / ㎠ G ] | 4.0 ~ 12.0 |
| Discharge Temp. | [ ℃ ] | 115 Max. |
| Motor Coil Temp. | [ ℃ ] | 135 Max. |

| | |
|---|---|
| Refrigerant Charge Limit | [Cooling Only] 2,950g Max.(*K≥0.4,**Oil Dilution Rate=0.25)<br>*Must apply the accumulator in effective volume 990cc to use a GPT330PAA.A21EMB<br>[Heat Pump] 2,000g Max.(*K≥0.6,**Oil Dilution Rate=0.25)<br>*Must apply the accumulator in effective volume 990cc to use a GPT330PAA.A21EMB<br>[Heat Pump Maximum Charge] 2,250g Max.<br>*Must check oil level test and get lowest oil level at least to use Max. 2,250g with a GPT330PAA.A21EMB |
| Liquid Refrigerant Back | System should be designed not to allow the liquid to go back to compressor which cause knocking noise , current increase or undesirable vibration. |
| Stress In Suction & Discharge Piping Surface ( Include Accumulator ) | 150 kgf / ㎠ Max. |
| Fan Motor in Application | • Fan motor of condenser must be operating when compressor is operating.<br>• When OLP of compressor closes , fan motor of condenser should be operating.<br>• In case system has intentional fan stop , compressor should be operated within limits of system application. |
| On / Off Interval | Running Interval Min. 6 Minutes.<br>On / Off = 3 Minutes / 3 Minutes |
| Voltage Range ( Standard Condition ) | Rated Voltage - 15%, +10% |
| Frequency Range | Rated Frequency ± 2% |
| Pressure Difference at Starting | When starting , discharge pressure is balanced with suction pressure within 0.05 ㎫. |
| Tilt in Operation | The allowable tilt of the compressor in operation shall be 5˚ or less. |