

## Technical Data

### Type: Two-stage Compressor with Speed-up Gearing

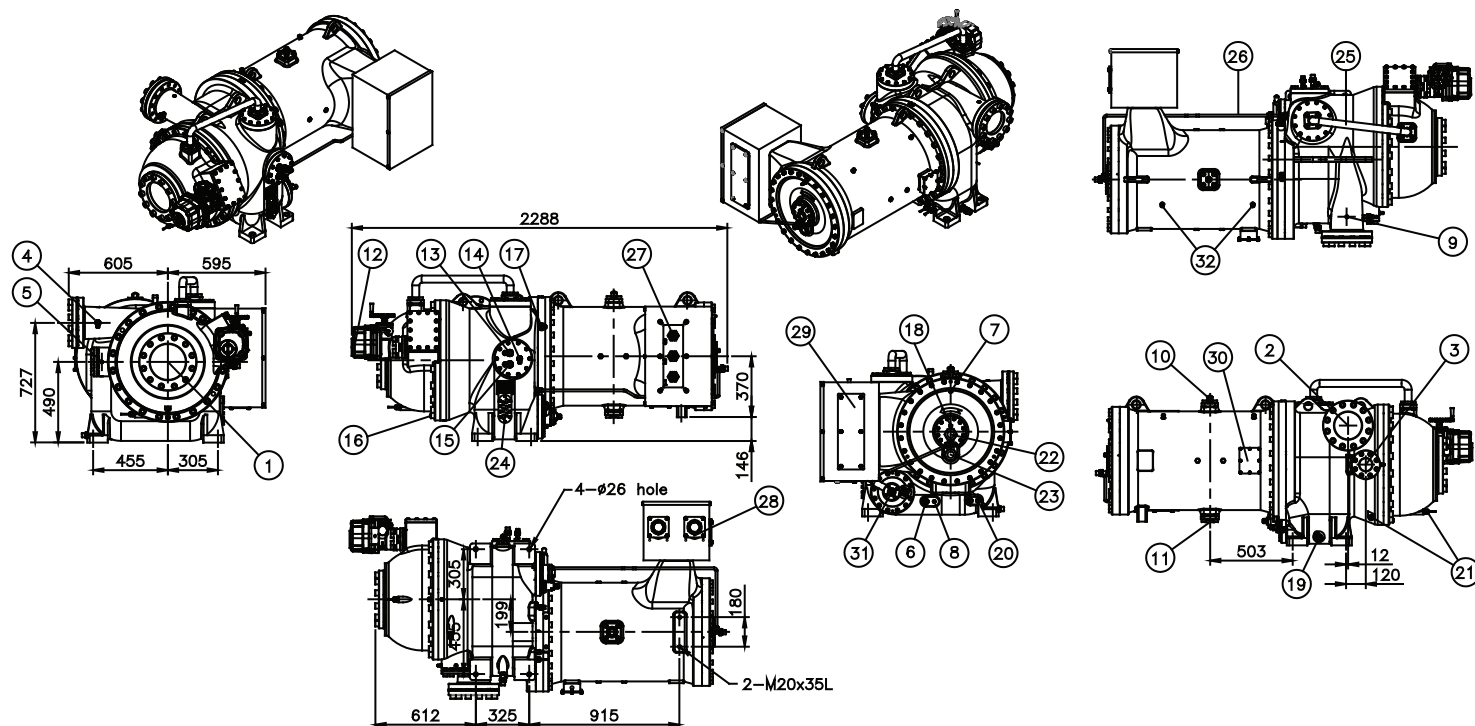
| Model                     |                          |         | RT-120                          |      | RT-130 |      | RT-140 |      | RT-160      |      | RT-180 |      | RT-200 |      | RT-240 |      | RT-260 |      | RT-280 |      |  |
|---------------------------|--------------------------|---------|---------------------------------|------|--------|------|--------|------|-------------|------|--------|------|--------|------|--------|------|--------|------|--------|------|--|
| Refrigerant               | Type                     |         | R134a                           |      |        |      |        |      |             |      |        |      |        |      |        |      |        |      |        |      |  |
| Compressor                | Type                     |         | Two-Stage with Speed-up Gearing |      |        |      |        |      |             |      |        |      |        |      |        |      |        |      |        |      |  |
|                           | Pressure Ratio           |         | LP                              | HP   | LP     | HP   | LP     | HP   | LP          | HP   | LP     | HP   | LP     | HP   | LP     | HP   | LP     | HP   | LP     | HP   |  |
|                           |                          |         | 1.59                            | 1.68 | 1.59   | 1.68 | 1.59   | 1.68 | 1.62        | 1.56 | 1.62   | 1.56 | 1.62   | 1.56 | 1.6    | 1.66 | 1.6    | 1.66 | 1.6    | 1.66 |  |
|                           | Mass Flow Rate           | Kg/sec  | 11.1                            | 12.6 | 12.1   | 13.7 | 13.1   | 14.8 | 14.4        | 15.9 | 16.5   | 18.2 | 18.4   | 20.4 | 20.1   | 22.7 | 22.1   | 24.9 | 24.1   | 27.7 |  |
|                           | Volume Flow (Suction)    | m3/hr   | 2292                            | 1653 | 2501   | 1804 | 2708   | 1954 | 2970        | 2066 | 3405   | 2364 | 3810   | 2645 | 4158   | 2968 | 4571   | 3263 | 4987   | 3560 |  |
|                           | Rated Speed              | rpm     | 11,700                          |      | 12,000 |      | 12,000 |      | 9,400       |      | 8,900  |      |        |      | 8,222  |      |        |      |        |      |  |
|                           | Inlet Guide Vane Control |         | 0~100% Continuous               |      |        |      |        |      |             |      |        |      |        |      |        |      |        |      |        |      |  |
| Transmission              | Type                     |         | Helical Gear                    |      |        |      |        |      |             |      |        |      |        |      |        |      |        |      |        |      |  |
|                           | Lubrication              |         | Built-in Oil Pump               |      |        |      |        |      |             |      |        |      |        |      |        |      |        |      |        |      |  |
|                           | Lubricant Charge         | Liter   | 60                              |      |        |      |        |      | 70          |      |        |      |        |      |        |      |        |      |        |      |  |
| Motor                     | Type                     |         | 3 Phase, 2 Pole, Induction      |      |        |      |        |      |             |      |        |      |        |      |        |      |        |      |        |      |  |
|                           | Starting                 |         | Y-Δ Starting, Direct Starting   |      |        |      |        |      |             |      |        |      |        |      |        |      |        |      |        |      |  |
|                           | Voltage(50/60Hz)         | v       | 380~460, 10k/6k/4k/3k           |      |        |      |        |      |             |      |        |      |        |      |        |      |        |      |        |      |  |
|                           | Insulation               |         | Class F                         |      |        |      |        |      |             |      |        |      |        |      |        |      |        |      |        |      |  |
|                           | Protection               |         | PTC, PT100/PT1000               |      |        |      |        |      |             |      |        |      |        |      |        |      |        |      |        |      |  |
| Oil heater                |                          | kw      | 2*0.5                           |      |        |      |        |      |             |      |        |      |        |      |        |      |        |      |        |      |  |
| Dimension(L*W*H)          |                          | m       | 2.3*1.2*1.0                     |      |        |      |        |      | 2.6*1.3*1.1 |      |        |      |        |      |        |      |        |      |        |      |  |
| Weight                    |                          | kg      | 3,500                           |      |        |      |        |      | 4,500       |      |        |      |        |      | 4,500  |      |        |      |        |      |  |
| Hydrostatic Pressure Test |                          | kg/cm2g | 42                              |      |        |      |        |      |             |      |        |      |        |      |        |      |        |      |        |      |  |

## Applicable Power

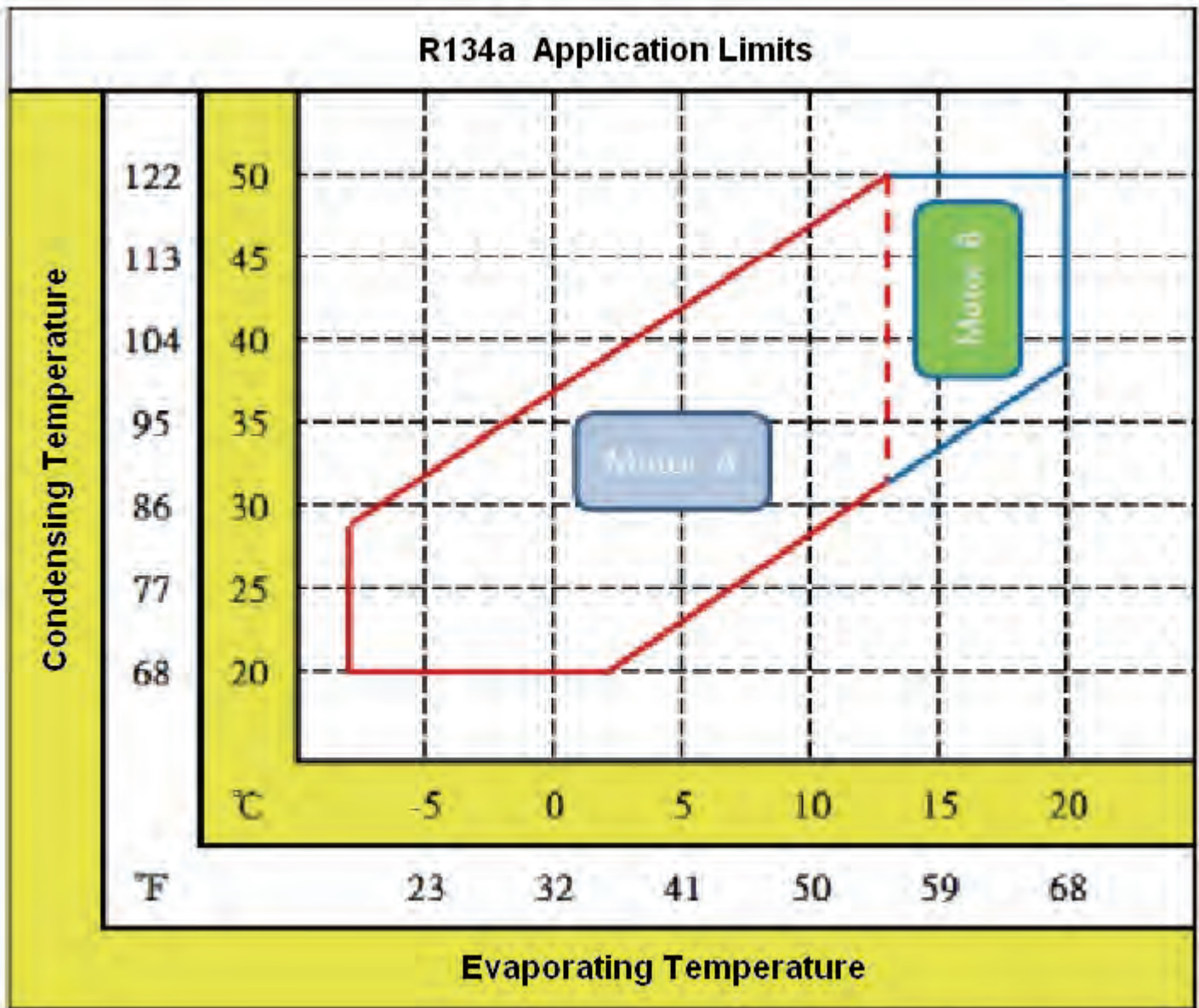
| Voltage   | RT-120~140 | RT-160~280 |
|-----------|------------|------------|
| 380V      | ○          | Optional   |
| 3kV/3.3kV | ○          | ○          |
| 6kV/6.6kV | ○          | ○          |
| 10kV      | ○          | ○          |

## RT-120~140 Outline

| No. | Name                               | Specification     | No. | Name                             | Specification             |
|-----|------------------------------------|-------------------|-----|----------------------------------|---------------------------|
| 1   | Suction flange                     | 8" 20k (JIS)      | 17  | Oil connection (gearbox)         | 3/8" FL                   |
| 2   | Discharge flange                   | 6" 20k (JIS)      | 18  | Oil connection (motor)           | 1/4" FL                   |
| 3   | Economizer connection              | 2 1/2" 20k (JIS)  | 19  | Oil drain valve                  | 1/4" FL                   |
| 4   | Pressure connection(discharge)     | 1/4"FL            | 20  | Oil heater (2*500w)              | 220V                      |
| 5   | Pressure connection(ECO)           | 1/4"FL            | 21  | Refrigerant heater (2*300w)      | 220V                      |
| 6   | Pressure connection(Oil tank)      | 1/4"FL            | 22  | Sight glass (motor)              |                           |
| 7   | Pressure connection(motor)         | 1/4"FL            | 23  | Sight glass (ref.level)          |                           |
| 8   | Temperature sensor(Oil tank)       | Pt100             | 24  | Sight glass (oil level)          |                           |
| 9   | Discharge temperature thermistor   | PTC (optional)    | 25  | Refrigerant return pipe          | 1 1/4" steel coptional    |
| 10  | Motor cooling connection(inlet)    | 3/4" FL           | 26  | Oil return pipe                  | 1/2"                      |
| 11  | Motor cooling conneciotion(outlet) | 1 1/8" copper     | 27  | Power bolt                       | 5/8-11UNF                 |
| 12  | Actuator (IGV volume control)      | 220V/1φ/50/60Hz   | 28  | Cable box flange                 | 2*3"                      |
| 13  | Angle valve                        | 1/2" FL, optional | 29  | Cable box flange                 | 380*80                    |
| 14  | Eva. Oil return connection         | 1/4" FL           | 30  | Motor temperature sensor         | PTC&3*Pt100/Pt1000        |
| 15  | IGV oil return connection(inlet)   | 1/2" FL           | 31  | Oil pump outlet                  | 1" steel/380v/3φ/50/60Hz  |
| 16  | IGV oil return connection(outlet)  | 3/8" FL           | 32  | Motor cooling connection (inlet) | 1/4"FL (for motor B only) |



## Application Limits



Note : Actuator (IGV) : 100%~50%