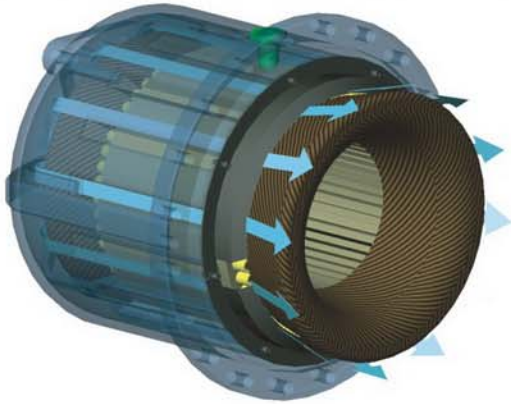


New generation of innovative design
Screw compressor dedicated to
R134a, R22, R407, R404, R507

High-efficiency Model RC2 Series Screw Compressor



Highlights of RC2 Series Screw Compressor

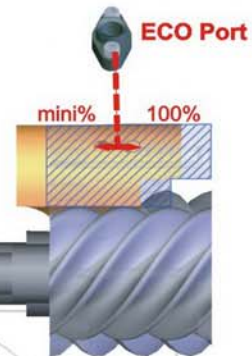


High-efficiency Motor

- Available for part winding start or star delta start
- Custom-made for specified voltage and frequency of power
- Two options A & B according to operation condition and type of refrigerant
- Optimal design of slot inside motor casing
- Patented motor-cooling design in ducts of refrigerant flow encompassing stator provides best dissipation of heat
- Sliding-fit stator easier for installation and removal

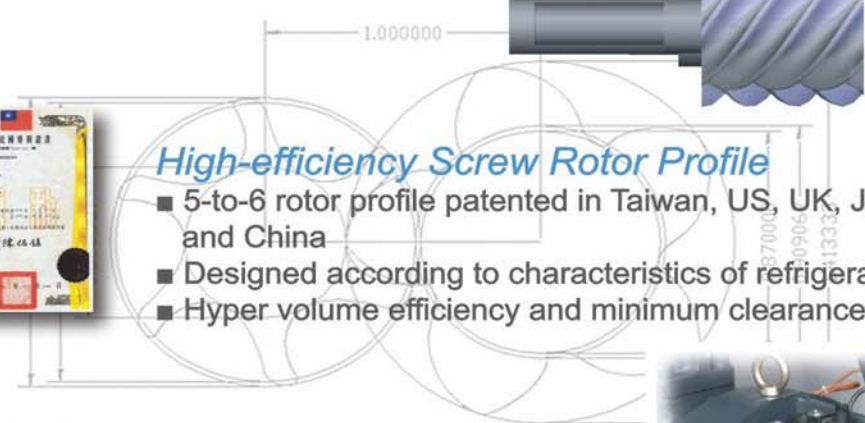
Economizer Operation With Floating ECO Port

- Enhance cooling capacity as well as energy efficiency
- Sustain optimum medium pressure by vapor injection through specially-designed slots in slide valve and compression casing
- Effective under partial load and full load



High-efficiency Screw Rotor Profile

- 5-to-6 rotor profile patented in Taiwan, US, UK, Japan and China
- Designed according to characteristics of refrigerants
- Hyper volume efficiency and minimum clearance



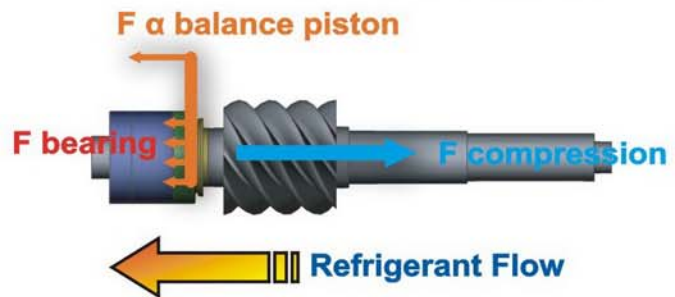
Dual Capacity Control

- Flange-on solenoid coil easy for installation
- 3-step / 4-step or continuous (33%~100% / 25%~100%) capacity control system
- Interchangeable by varying control logic without modification of solenoid valves



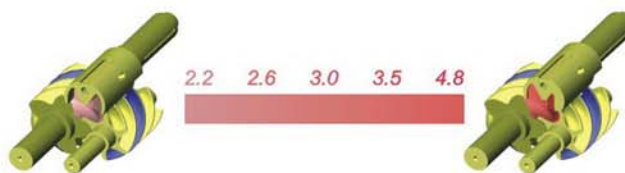
Durable Bearing Structure

- 11 high-quality bearings (radial and axial resistance)
- Additional two bearings for backward rotation
- α balance piston against axial thrust
- Heavy-duty design
- Resulted in longer bearing life compared to traditional 9-bearing design



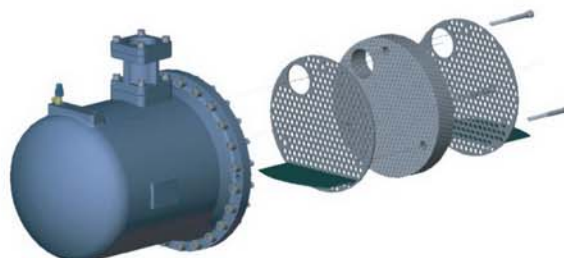
Wide VI Selection

- Built-in volume ratio (VI)-2.2, 2.6, 3.0, 3.5, 4.8
- Exactly match pressure ratio without over- or under-compression
- Suitable for separate applications like refrigeration, water-cooled chiller, air-cooled chiller and heat pump



High-performance Integral Oil Separator

- Detachable demister for cleaning
- Finer size of mesh
- Low pressure drop and oil carry-over



Total Protection & Accessories

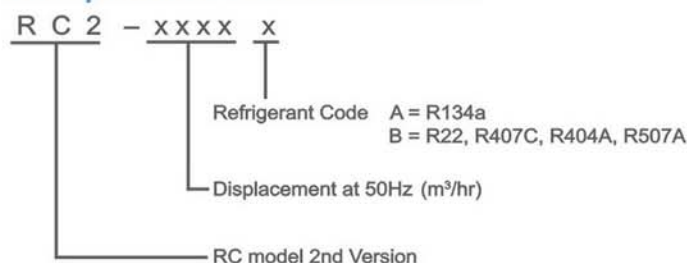
1. Motor Temperature Sensor :
 - "Built-in"PT100 or 1000Ω installed in motor winding
 - Accurately reflect corresponding resistance (convert to temperature of motor)
 - Controller can precisely regulate Liquid injection and refrigerant volume accordingly.
2. Discharge Temperature Sensor & Motor Temperature Thermistor
 - Totally integrated
 - Effectively protect compressor in advance when any abnormal alarm occurs
3. Liquid Injection and Oil Cooler Function (Port & Stop Pin)
 - Both available on every Hanbell screw compressor. (Optional)
4. Oil Level and Flow Switch
 - Ensure sufficient lubricant in compressor for better lubrication, capacity control, cooling and sealing
5. Heater (150W & 300W)
 - Increase lubricant's flow-ability when compressor restarts after long-term stop.
6. Pressure Differential Port
 - Easily detect clog in cartridge of oil filter
 - Assure smooth circulation of oil system



Other Advantages

- Low noise level and minute vibration
- Fewer quantity of parts in screw compressor than those in reciprocating compressor
- Easy for maintenance and overhaul
- Compact geometry easy for layout

Compressor Nomenclature



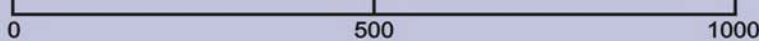
Approval and Certification

- Production by SOP conformed to major quality standards
- Approved by ISO 9001-2000, UL, CE(PED), Electronic Apparatus for Explosive Atmospheres(EX, China), Lloyd's Register (Vessel) , Symbol of Excellence in Taiwan

Technical Data RC2-A

| MODEL | COMPRESSOR | | | | Type | MOTOR | | | | | | Lubricant charge gal | Oil Heater W | Hydrostatic Pressure Test psi | WEIGHT lb | |
|-----------|---------------------------|--------------------------|-----|------------------|--------|-------------------------|-------------|-------------|------|---------------------------------|------------|-------------------------|-----------------|----------------------------------|--------------|------|
| | Displacement 60 / 50Hz | Rated Speed 60 / 50Hz | VI | Cap. Control (%) | | Nominal Hp 60Hz 50Hz | Starting-Up | Voltage (V) | | Insulation | Protection | | | | | |
| | | | | STEP | | | | STEPLESS | 60Hz | | | | | | | 50Hz |
| RC2-100A | 69/58 | | | 33, 66, 100 | 33~100 | 23 | 19 | | | | | 1.9 | | | 606 | |
| RC2-140A | 97/81 | | | 33, 66, 100 | 33~100 | 32 | 26 | | | | | 1.9 | | | 617 | |
| RC2-170A | 122/101 | | | 25, 50, 75, 100 | 25~100 | 40 | 33 | | | | | 1.9 | | | 816 | |
| RC2-180A | 127/106 | | | 33, 66, 100 | 33~100 | 42 | 35 | | | | | 1.9 | | | 661 | |
| RC2-200A | 137/114 | | | 25, 50, 75, 100 | 25~100 | 45 | 37 | | | | | 2.1 | | | 926 | |
| RC2-230A | 163/135 | | | 35, 50, 75, 100 | 35~100 | 53 | 44 | | | | | 3.7 | | | 1190 | |
| RC2-260A | 182/151 | | | 25, 50, 75, 100 | 25~100 | 59 | 49 | | | | | 3.7 | | | 1202 | |
| RC2-300A | 207/172 | | | 25, 50, 75, 100 | 25~100 | 67 | 56 | Y-Δ | | | | 4.2 | | | 1301 | |
| RC2-310A | 218/181 | | | 35, 50, 75, 100 | 35~100 | 71 | 59 | PWS | | | | 4.2 | | | 1268 | |
| RC2-320A | 226/188 | | | 25, 50, 75, 100 | 25~100 | 72 | 60 | DOL | | | | 4.2 | | | 1312 | |
| RC2-340A | 240/200 | | | 35, 50, 75, 100 | 35~100 | 77 | 64 | | | | | 4.2 | | | 1323 | |
| RC2-370A | 259/215 | | 2.2 | 35, 50, 75, 100 | 35~100 | 84 | 70 | | | | | 4.2 | 150/300 | | 1345 | |
| RC2-410A | 288/240 | | 2.6 | 25, 50, 75, 100 | 25~100 | 93 | 78 | | | | | 4.0 | | | 1609 | |
| RC2-470A | 334/277 | 3550/2950 | 3.0 | 25, 50, 75, 100 | 25~100 | 108 | 90 | | | 380 400 415 | Class F | 4.8 | | 597 | 1764 | |
| RC2-510A | 360/299 | | 3.5 | 35, 50, 75, 100 | 35~100 | 117 | 98 | | | | | 5.3 | | | 1676 | |
| RC2-550A | 388/323 | | 4.8 | 25, 50, 75, 100 | 25~100 | 126 | 105 | | | | | 6.1 | | | 1808 | |
| RC2-580A | 413/343 | | | 35, 50, 75, 100 | 35~100 | 131 | 109 | | | | | 5.3 | | | 1775 | |
| RC2-610A | 433/360 | | | 25, 50, 75, 100 | 25~100 | 135 | 113 | | | | | 6.1 | | | 2083 | |
| RC2-620A | 438/364 | | | 35, 50, 75, 100 | 35~100 | 137 | 114 | | | 380 440 460 480 575 | | 6.1 | | | 1874 | |
| RC2-710A | 505/420 | | | 35, 50, 75, 100 | 35~100 | 158 | 131 | | | | | 7.4 | | | 2423 | |
| RC2-790A | 560/466 | | | 30, 50, 75, 100 | 30~100 | 175 | 146 | | | | | 7.4 | | | 2513 | |
| RC2-830A | 584/486 | | | 30, 50, 75, 100 | 30~100 | 183 | 152 | Y-Δ | | | | 7.4 | | | 2535 | |
| RC2-930A | 657/547 | | | 35, 50, 75, 100 | 35~100 | 212 | 176 | DOL | | | | 7.4 | | | 2601 | |
| RC2-1090A | 771/641 | | | 35, 50, 75, 100 | 35~100 | 247 | 205 | | | | | -- | -- | | 3086 | |
| RC2-1280A | 903/751 | | | 30, 50, 75, 100 | 30~100 | 286 | 238 | | | | | -- | -- | | 3417 | |
| RC2-1520A | 1078/896 | | | 25, 50, 75, 100 | 25~100 | 331 | 275 | | | | | -- | -- | | 3527 | |

Unit : CFM



Technical Data RC2-B

| MODEL | COMPRESSOR | | | | MOTOR | | | | | | Lubricant charge gal | Oil Heater W | Hydrostatic Pressure Test psi | WEIGHT lb | | | |
|-----------|---------------------------|--------------------------|-----|------------------|----------|---|------------|------|-------------------|--|-------------------------|-----------------|----------------------------------|--------------|------------|------------|------|
| | Displacement 60 / 50Hz | Rated Speed 60 / 50Hz | VI | Cap. Control (%) | | Type | Nominal Hp | | Starting-Up | Voltage (V) | | | | | Insulation | Protection | |
| | | | | STEP | STEPLESS | | 60Hz | 50Hz | | 60Hz | | | | | | | 50Hz |
| RC2-100B | 69/58 | | | 33, 66, 100 | 33~100 | 3 Phase, 2 Pole, Squirrel Cage, Induction Motor | 38 | 31 | Y-△ PWS DOL | 208 220 230 380 440 460 480 575 | Class F | PTC Protection | 150/300 | 1.9 | 617 | | |
| RC2-140B | 97/81 | | | 33, 66, 100 | 33~100 | | 50 | 41 | | | | | | 1.9 | 628 | | |
| RC2-170B | 122/101 | | | 25, 50, 75, 100 | 25~100 | | 63 | 52 | | | | | | 1.9 | 838 | | |
| RC2-180B | 127/106 | | | 33, 66, 100 | 33~100 | | 66 | 55 | | | | | | 1.9 | 739 | | |
| RC2-200B | 137/114 | | | 25, 50, 75, 100 | 25~100 | | 70 | 58 | | | | | | 2.1 | 937 | | |
| RC2-230B | 163/135 | | | 35, 50, 75, 100 | 35~100 | | 81 | 67 | | | | | | 3.7 | 1224 | | |
| RC2-260B | 182/151 | | | 25, 50, 75, 100 | 25~100 | | 90 | 75 | | | | | | 3.7 | 1235 | | |
| RC2-300B | 207/172 | | | 25, 50, 75, 100 | 25~100 | | 107 | 89 | | | | | | 4.2 | 1323 | | |
| RC2-310B | 218/181 | | | 35, 50, 75, 100 | 35~100 | | 110 | 91 | | | | | | 4.2 | 1279 | | |
| RC2-320B | 226/188 | | | 25, 50, 75, 100 | 25~100 | | 114 | 94 | | | | | | 4.2 | 1323 | | |
| RC2-340B | 240/200 | | | 35, 50, 75, 100 | 35~100 | | 121 | 101 | | 4.2 | 1367 | | | | | | |
| RC2-370B | 259/215 | | 2.2 | 35, 50, 75, 100 | 35~100 | | 130 | 108 | | 4.2 | 1411 | | | | | | |
| RC2-410B | 288/240 | | 2.6 | 25, 50, 75, 100 | 25~100 | | 146 | 121 | | 4.0 | 1631 | | | | | | |
| RC2-470B | 334/277 | 3550/2950 | 3.0 | 25, 50, 75, 100 | 25~100 | | 170 | 141 | | 4.8 | 1786 | | | | | | |
| RC2-510B | 360/299 | | 3.5 | 35, 50, 75, 100 | 35~100 | | 183 | 152 | | 5.3 | 1720 | | | | | | |
| RC2-550B | 388/323 | | 4.8 | 25, 50, 75, 100 | 25~100 | | 195 | 162 | | 6.1 | 1874 | | | | | | |
| RC2-580B | 413/343 | | | 35, 50, 75, 100 | 35~100 | | 210 | 175 | | 5.3 | 1852 | | | | | | |
| RC2-610B | 433/360 | | | 25, 50, 75, 100 | 25~100 | | 214 | 178 | | 6.1 | 2116 | | | | | | |
| RC2-620B | 438/364 | | | 35, 50, 75, 100 | 35~100 | | 220 | 183 | | 6.1 | 1940 | | | | | | |
| RC2-710B | 505/420 | | | 35, 50, 75, 100 | 35~100 | | 250 | 208 | | 7.4 | 2423 | | | | | | |
| RC2-790B | 560/466 | | | 30, 50, 75, 100 | 30~100 | 276 | 230 | 7.4 | 2601 | | | | | | | | |
| RC2-830B | 584/486 | | | 30, 50, 75, 100 | 30~100 | 290 | 234 | 7.4 | 2679 | | | | | | | | |
| RC2-930B | 657/547 | | | 35, 50, 75, 100 | 35~100 | 334 | 278 | 7.4 | 2734 | | | | | | | | |
| RC2-1090B | 771/641 | | | 35, 50, 75, 100 | 35~100 | 402 | 335 | -- | -- | 3153 | | | | | | | |
| RC2-1280B | 903/751 | | | 30, 50, 75, 100 | 30~100 | 471 | 392 | -- | -- | 3483 | | | | | | | |
| RC2-1520B | 1078/896 | | | 25, 50, 75, 100 | 25~100 | 534 | 443 | -- | -- | 3594 | | | | | | | |

Unit : CFM

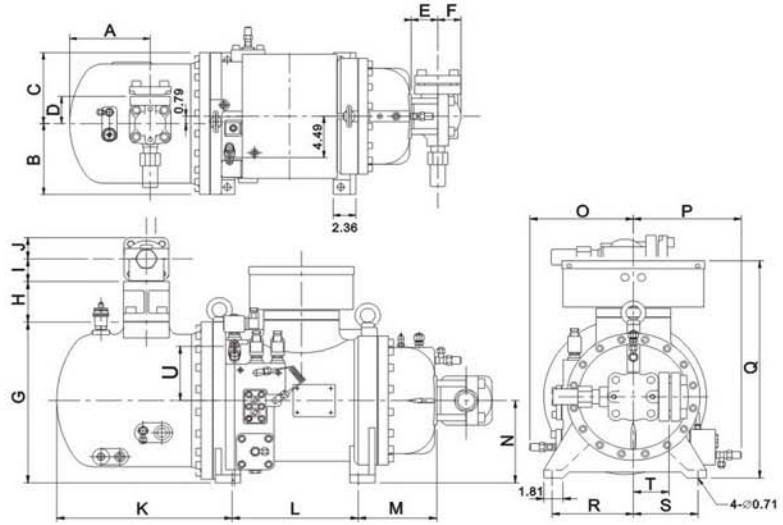
0

500

1000

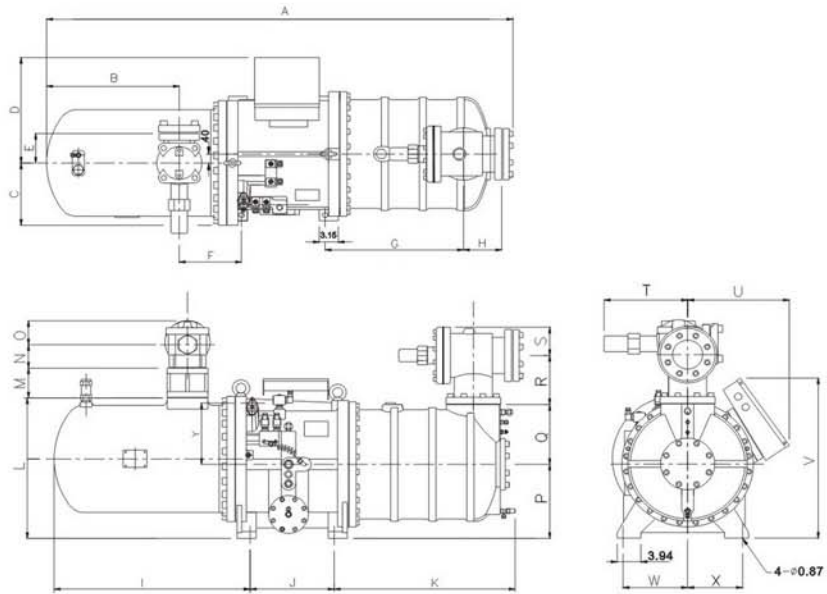
RC2-100~RC2-180 Outline

Note: Numbers in red indicate dimensions in which RC2-B differs from RC2-A (A / B)



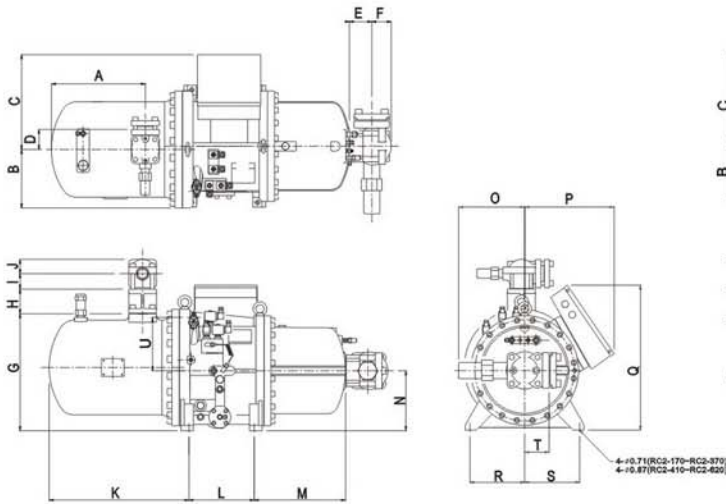
| Model | Dimensions | | | | | | | | | | | | | | | | | | | Unit: Inch | |
|---------|------------|------|------|------|------|------|-------|------|------|------|-------|-------|------|------|------|-------|-------|------|------|------------|------|
| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U |
| RC2-100 | 8.39 | 7.72 | 7.72 | 2.95 | 2.76 | 2.40 | 15.75 | 3.98 | 2.22 | 2.09 | 16.40 | 11.81 | 7.34 | 8.07 | 9.80 | 10.24 | 21.59 | 7.72 | 6.14 | 3.39 | 5.31 |
| RC2-140 | 8.39 | 7.72 | 7.72 | 2.95 | 2.76 | 2.40 | 15.75 | 3.98 | 2.22 | 2.09 | 16.40 | 11.81 | 7.34 | 8.07 | 9.80 | 10.24 | 21.59 | 7.72 | 6.14 | 3.39 | 5.31 |
| RC2-180 | 11.14 | 7.72 | 7.72 | 2.95 | 2.76 | 2.40 | 16.14 | 3.98 | 2.22 | 2.09 | 19.15 | 15.20 | 7.72 | 8.07 | 9.45 | 10.24 | 21.59 | 7.72 | 6.14 | 3.74 | 4.84 |

RC2-610~RC2-930 Outline

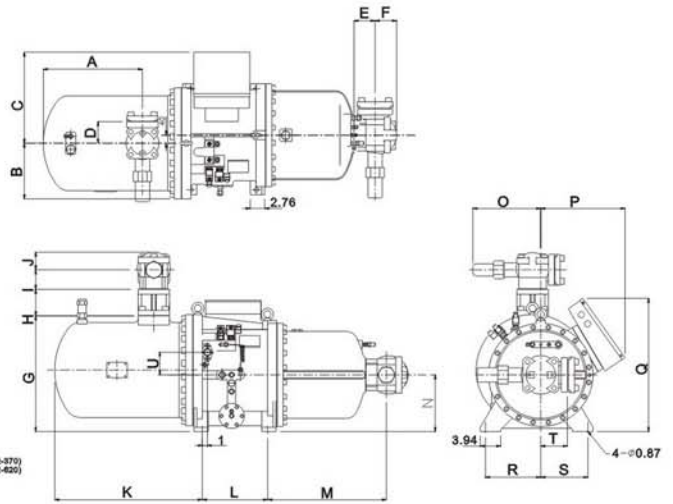


| Model | Dimensions | | | | | | | | | | | | | | | | | | | Unit: Inch | | | | | |
|---------|-----------------|-------|-------|-------|------|-------|-----------------|------|-------|-------|-----------------|-------|------|------|------|-------|-------|------|------|------------|-------|-------|-------|------|-------|
| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y |
| RC2-610 | 71.36 | 19.06 | 10.83 | 18.35 | 4.21 | 9.94 | 20.26 | 6.34 | 29.00 | 13.90 | 27.17 | 24.29 | 5.18 | 3.80 | 3.46 | 12.80 | 10.35 | 8.48 | 4.88 | 13.03 | 16.77 | 27.60 | 10.63 | 9.06 | 10.59 |
| RC2-710 | 74.74 /77.50 | 22.05 | 10.83 | 18.35 | 5.12 | 10.33 | 20.26 /23.01 | 6.34 | 32.38 | 13.90 | 27.17 /29.92 | 24.29 | 5.18 | 4.06 | 4.13 | 12.80 | 10.35 | 8.48 | 4.88 | 13.78 | 16.77 | 27.60 | 10.63 | 9.06 | 10.59 |
| RC2-790 | 77.30 /80.06 | 22.05 | 10.83 | 18.35 | 5.12 | 10.33 | 20.26 /23.01 | 6.34 | 32.38 | 16.46 | 27.17 /29.92 | 24.29 | 5.18 | 4.06 | 4.13 | 12.80 | 10.35 | 8.48 | 4.88 | 13.78 | 16.77 | 27.60 | 10.63 | 9.06 | 9.06 |
| RC2-830 | 77.30 /80.06 | 22.05 | 10.83 | 18.35 | 5.12 | 10.33 | 20.26 /23.01 | 6.34 | 32.38 | 16.46 | 27.17 /29.92 | 24.29 | 5.18 | 4.06 | 4.13 | 12.80 | 10.35 | 8.48 | 4.88 | 13.78 | 16.77 | 27.60 | 10.63 | 9.06 | 9.06 |
| RC2-930 | 80.06 /82.18 | 22.05 | 10.83 | 18.35 | 5.12 | 10.33 | 23.01 /26.14 | 6.34 | 32.38 | 16.46 | 29.92 /32.05 | 24.29 | 5.18 | 4.06 | 4.13 | 12.80 | 10.35 | 8.48 | 4.88 | 13.78 | 16.77 | 27.60 | 10.63 | 9.06 | 9.06 |

RC2-170~RC2-580 Outline

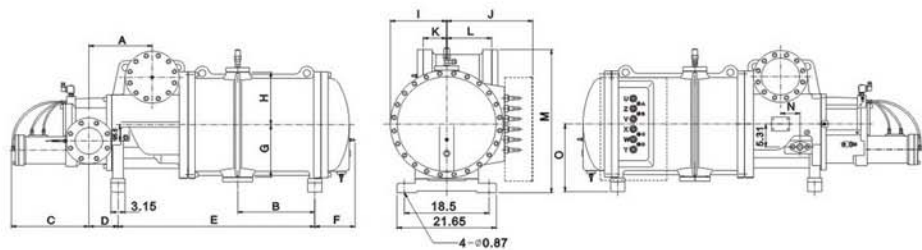


RC2-550 & RC2-620 Outline



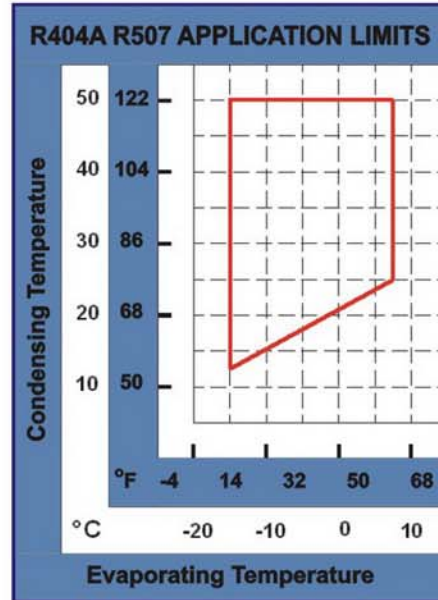
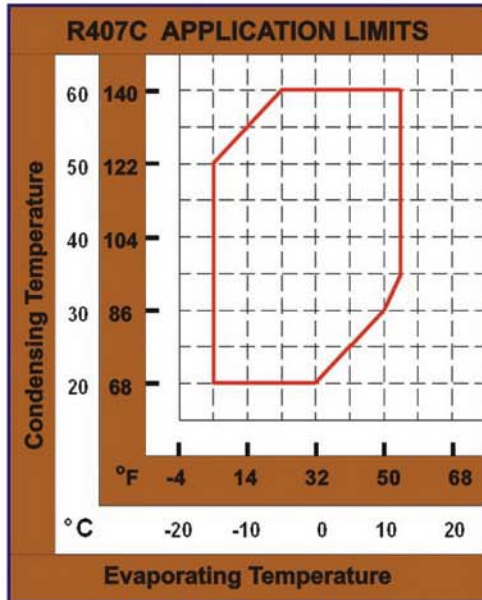
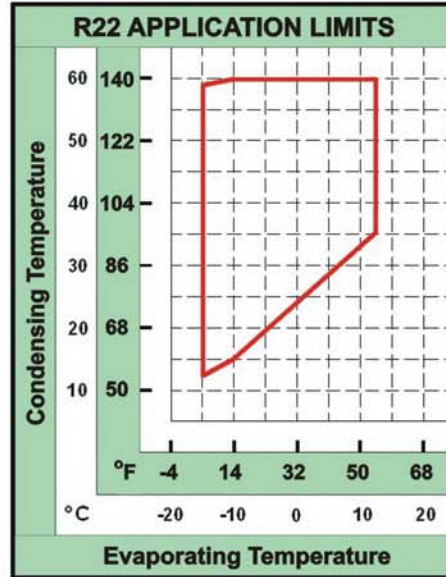
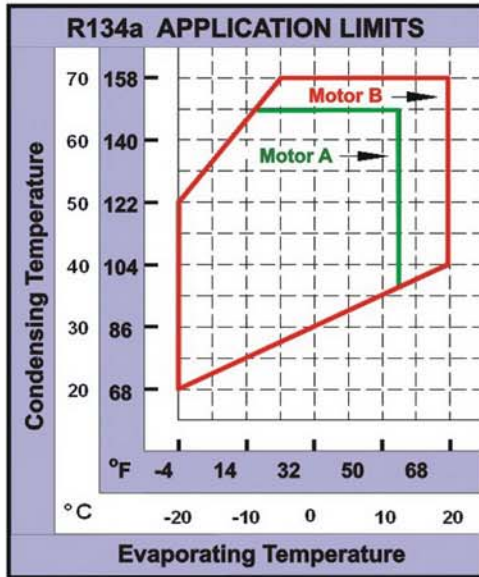
| Model | Dimensions | | | | | | | | | | | | | | | | | | | | Unit: Inch | |
|---------|------------|-------|-------|------|------|------|-------|------|------|------|-------|-------|-----------------|-------|-------|-------|-------|-------|------|------|------------|--|
| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | |
| RC2-170 | 12.20 | 9.02 | 14.88 | 2.95 | 3.23 | 2.72 | 17.60 | 3.98 | 2.24 | 2.09 | 19.72 | 7.87 | 13.42 | 8.86 | 9.65 | 14.25 | 23.31 | 8.86 | 8.86 | 3.74 | 7.72 | |
| RC2-200 | 13.58 | 9.02 | 14.88 | 2.95 | 3.23 | 2.72 | 17.60 | 3.98 | 2.24 | 2.09 | 21.10 | 8.98 | 13.42 /15.20 | 8.86 | 9.65 | 14.25 | 23.31 | 8.86 | 8.86 | 3.74 | 7.72 | |
| RC2-230 | 14.37 | 9.84 | 15.94 | 3.39 | 3.82 | 3.35 | 19.76 | 4.17 | 2.64 | 2.40 | 22.32 | 9.88 | 15.71 | 10.12 | 11.38 | 15.39 | 24.57 | 9.45 | 9.45 | 4.21 | 8.86 | |
| RC2-260 | 14.37 | 9.84 | 15.94 | 3.39 | 3.82 | 3.35 | 19.76 | 4.17 | 2.64 | 2.40 | 22.32 | 9.88 | 15.71 | 10.12 | 11.38 | 15.39 | 24.57 | 9.45 | 9.45 | 4.21 | 8.86 | |
| RC2-300 | 16.06 | 9.84 | 15.94 | 3.39 | 3.82 | 3.35 | 19.76 | 4.17 | 2.64 | 2.40 | 24.02 | 11.22 | 13.35 /17.48 | 10.12 | 11.38 | 15.39 | 24.57 | 9.45 | 9.45 | 4.21 | 9.02 | |
| RC2-310 | 14.37 | 9.84 | 15.94 | 3.39 | 3.82 | 3.35 | 19.76 | 4.17 | 2.64 | 2.40 | 24.02 | 9.88 | 17.48 | 10.12 | 11.38 | 15.39 | 24.57 | 9.45 | 9.45 | 4.21 | 8.86 | |
| RC2-320 | 16.06 | 9.84 | 15.94 | 3.39 | 3.82 | 3.35 | 19.76 | 4.17 | 2.64 | 2.40 | 24.02 | 11.22 | 15.71 /17.48 | 10.12 | 11.38 | 15.39 | 24.57 | 9.45 | 9.45 | 4.21 | 9.02 | |
| RC2-340 | 16.06 | 9.84 | 15.94 | 3.74 | 4.06 | 4.13 | 19.76 | 4.76 | 3.19 | 2.72 | 24.02 | 11.22 | 17.60 /19.37 | 10.12 | 12.20 | 15.39 | 24.57 | 9.45 | 9.45 | 5.12 | 8.98 | |
| RC2-370 | 16.06 | 9.84 | 15.94 | 3.74 | 4.06 | 4.13 | 19.76 | 4.76 | 3.19 | 2.72 | 24.02 | 11.22 | 17.60 /19.37 | 10.12 | 12.20 | 15.39 | 24.57 | 9.45 | 9.45 | 5.12 | 8.98 | |
| RC2-410 | 15.43 | 10.83 | 17.83 | 3.74 | 4.06 | 4.13 | 21.77 | 4.72 | 3.19 | 2.72 | 24.13 | 11.34 | 17.05 | 10.83 | 12.40 | 16.26 | 25.79 | 10.63 | 9.06 | 5.12 | 10.04 | |
| RC2-470 | 17.32 | 10.83 | 17.83 | 3.74 | 4.06 | 4.13 | 21.77 | 4.72 | 3.19 | 2.72 | 26.02 | 12.60 | 17.05 /18.82 | 10.83 | 12.40 | 16.26 | 25.79 | 10.63 | 9.06 | 5.12 | 10.04 | |
| RC2-510 | 18.31 | 10.83 | 17.83 | 4.21 | 4.06 | 4.13 | 22.05 | 5.18 | 3.80 | 3.46 | 27.40 | 11.34 | 19.06 | 10.83 | 13.03 | 16.26 | 25.79 | 10.63 | 9.06 | 5.12 | 10.00 | |
| RC2-550 | 19.06 | 10.83 | 17.78 | 4.21 | 4.06 | 4.13 | 22.52 | 5.18 | 3.80 | 3.46 | 28.35 | 12.60 | 22.83 /21.10 | 11.02 | 13.03 | 16.20 | 25.94 | 10.63 | 9.06 | 5.12 | 4.41 | |
| RC2-580 | 18.31 | 10.83 | 17.83 | 4.21 | 4.06 | 4.13 | 22.05 | 5.18 | 3.80 | 3.46 | 27.40 | 12.60 | 19.06 | 10.83 | 13.03 | 16.26 | 25.79 | 10.63 | 9.06 | 5.12 | 10.04 | |
| RC2-620 | 19.06 | 10.83 | 17.78 | 4.21 | 8.66 | 4.88 | 22.52 | 5.18 | 3.80 | 3.46 | 28.35 | 12.60 | 20.67 | 11.02 | 13.03 | 16.20 | 25.94 | 10.63 | 9.06 | 6.34 | 4.41 | |

RC2-1090~RC2-1520 Outline



| Model | Dimensions | | | | | | | | | | | | | | | Unit: inch | |
|----------|------------|-------|-------|------|-----------------|------|-------|-------|-------|-------|------|-------|-------|------|-------|------------|--|
| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | | |
| RC2-1090 | 14.07 | 17.13 | 17.20 | 6.50 | 43.70 | 8.98 | 12.17 | 12.17 | 12.30 | 18.82 | 5.12 | 9.84 | 32.68 | 4.33 | 15.65 | | |
| RC2-1280 | 15.08 | 17.13 | 20.55 | 6.50 | 45.67 /43.50 | 8.98 | 12.17 | 12.17 | 12.30 | 18.82 | 5.20 | 10.43 | 34.35 | 5.24 | 15.65 | | |
| RC2-1520 | 15.08 | 17.13 | 20.55 | 6.50 | 45.67 /43.50 | 8.98 | 12.17 | 12.17 | 12.30 | 18.82 | 5.20 | 10.43 | 34.35 | 5.24 | 15.65 | | |

Application Limits



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