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HANBELL SCREW COMPRESSORS

HVAC & Refrigeration Type
With Internal Oil Separator

**MICRO
CONTROL
SYSTEMS**

**Efficient, Quiet
& Cost Effective**



**Models Available
Over 500 Tons**

RC22 ~ RC24

339 Tons ~ 610 Tons

RC Series
HVAC & Refrigeration
Screw Compressors

CE



+5°F ~ +59°F
-15°C ~ +15°C

R22

R134a

R407C

R404A

R507

Compressor Features:

Multi-Nation Patents of High Efficiency Screw Rotor

The new 5:6 ratio high efficiency rotor profile is patented in Taiwan, US, UK, Japan and China. This new high volume, high efficiency rotor profile was designed specifically for modern refrigerant characteristics. The new higher efficiency is accomplished by using precision CNC machining centers, rotor milling machines, rotor grinding machines and cutter sharpening machines. Strict ISO 9001 process control and the use of precise inspection equipment, such as ZEISS 3D coordinate measuring equipment, ensures efficient, high quality, low noise, low vibration Hanbell RC Series Compressors for worldwide distribution.



CNC Cutter Measuring System



3D Coordinate Measuring-Male Rotor



High Efficiency Motor

High Efficiency Motor

Premium-grade low-loss core steel with the special RC motor cooling slot design plus the inner & outer refrigerant guide design pilots the cool suction refrigerant gas through the motor, providing the highest operating efficiency possible no matter how difficult the operating conditions.

CNC Cutter Sharpenor Machine

Overall Range of Volume Ratio (Vi)

The compressor Volume Ratio (Vi) is the ratio between the suction and discharge operating conditions and Hanbell can provide specific Vi ratios for special applications. The use of various refrigerants such as R22, R134a, R404A, R407C, plus widely varying operating conditions may require the use of specific Vi ratio compressors. There are several built-in volume ratios offered (Vi=2.2, 2.6, 3.0, 3.5, 4.8) to provide the most efficient compressor for the application.



- 2.2
- 2.6
- 3.0
- 3.5
- 4.8

Comprehensive Vi



B-Type Bearing System



Economizer, Liquid Injection, & Oil Cooler Ports

Long Life Bearings & High Reliability

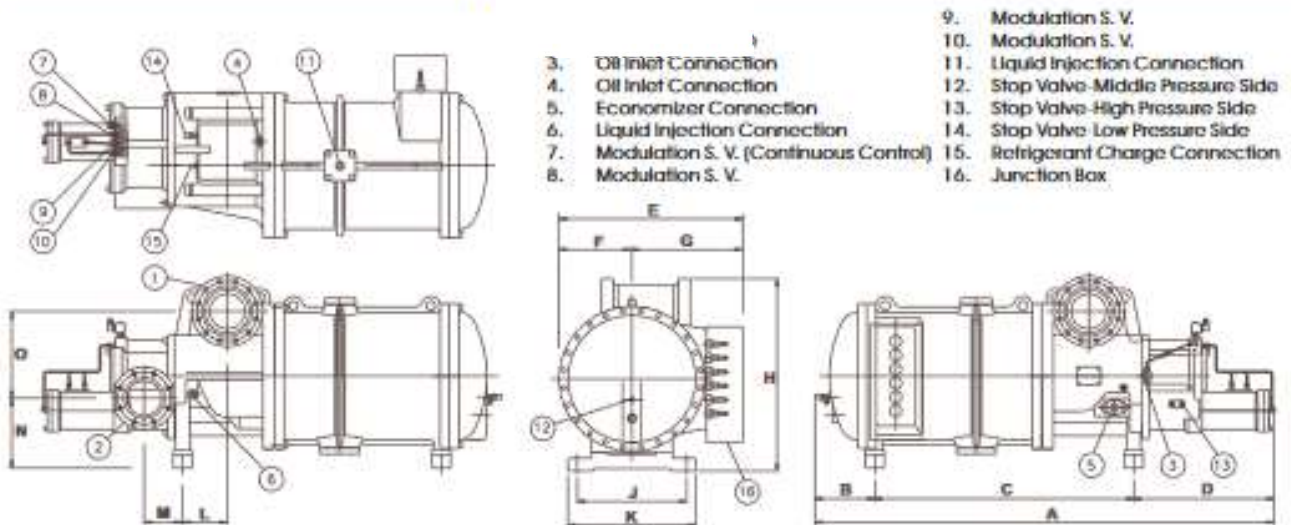
The RC Series Screw Compressor utilizes a combination of 11 B-Type bearings & the α -Type axial balance piston design for excellent bearing life and superior compressor reliability. Adding standard accessories such as economizer, liquid injection for compression chamber cooling, liquid injection for motor cooling and an oil cooler, when needed for specific applications, will increase performance and improve operating efficiency up to 8% plus further extend the compressor bearing life and compressor reliability.

Performance Data: R22 ~ 60Hz.

RC Series Model	Water/Evaporative Cooled Ratings						Air Cooled Ratings					
	35°F SST & 105°F SCT			45°F SST & 105°F SCT			35°F SST & 120°F SCT			45°F SST & 120°F SCT		
	Capacity	Power	EER	Capacity	Power	EER	Capacity	Power	EER	Capacity	Power	EER
Tons	kW	BTU/h/w	Tons	kW	BTU/h/w	Tons	kW	BTU/h/w	Tons	kW	BTU/h/w	
RC22	373.9	295.3	15.2	452.8	313.8	17.3	339.8	342.3	11.9	412.7	363.5	13.6
RC23	440.6	346.1	15.3	533.5	367.7	17.4	400.3	401.1	12.0	486.3	426.0	13.7
RC24	503.5	391.5	15.4	609.6	416.0	17.6	457.5	453.7	12.1	555.7	481.9	13.8

Physical Specifications:					
Description		RC22	RC23	RC24	
Compressor	Displacement @ 60Hz / 50Hz	CFH	46262 / 38457	52243 / 45097	64696 / 53749
	Rated Speed	RPM	60 Hz = 3550 & 50 Hz = 2950		
	Volume Ratios Available	V _i	2.2, 2.4, 2.6, 3.0, 3.5, 4.8		
	Capacity Control System	%	Continuous Capacity Control between 25% & 100%		
	Refrigerant		R22, R134a, R407C, R404A, R507A		
	Lubrication		Differential Pressure Feed Lubrication		
	Oil Heater Wattage	Watts	150 Watts		
	Lubricant Type	Mineral	SUN SUNISO - 5GS or CPI4214-320		
	Lubricant Type	POE	CPI SOLEST - 370		
	Hydrostatic Pressure Test	PSIG	600		
Suct. / Discharge Conn. Size	inches	5" L.P.S. / 6" L.P.S.	5" L.P.S. / 8" L.P.S.	5" L.P.S. / 8" L.P.S.	
Compressor Weights	Lbs.	1940	2690	2734	
Compressor Weights	kg	880	1220	1240	
Motor	Motor & Voltage Phase	Type	3 Phase, 2 Pole, Induction Motor		
	Starting Methods	YD	YD Starting ~ (60Hz. and 50Hz.)		
	Voltage Availability	60 / 50Hz	460/3/60, 575/3/60 - 60Hz. & 380/3/50, 400/3/50, 415/3/50 - 50Hz.		
	Insulation	Type	Class F		
	Protection	Type	PTC Protection		

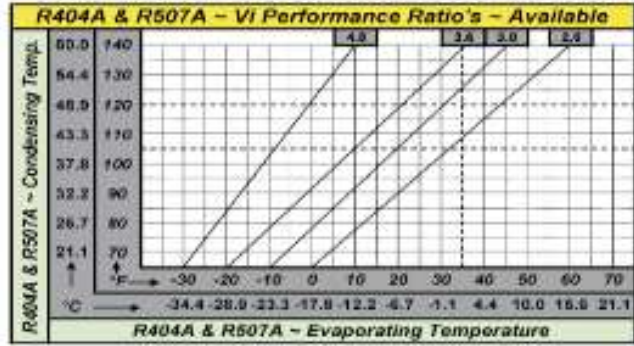
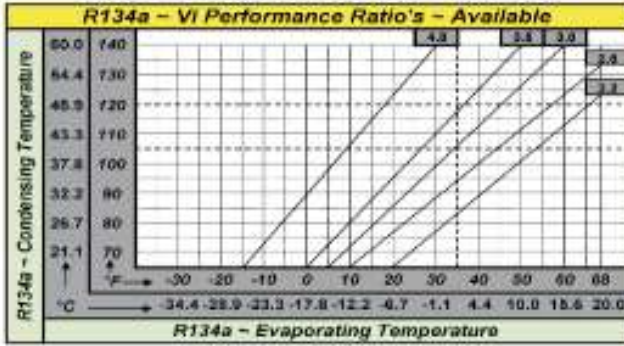
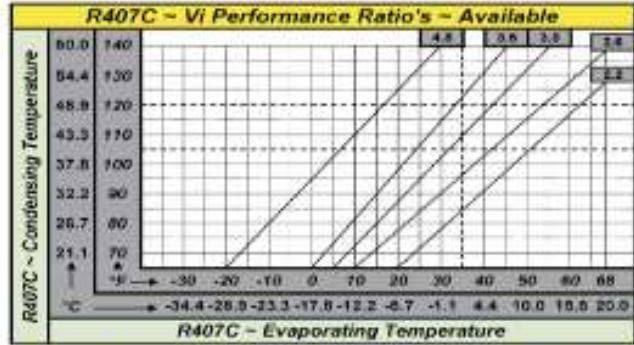
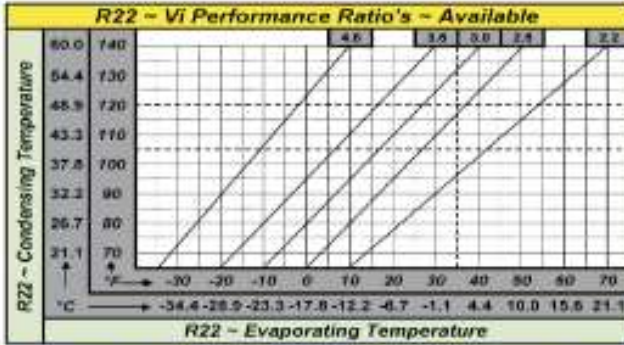
Compressor Dimensional Data:



Dimensions in Inches							
Converted from Metric "mm"							
Hanbell Models	A	B	C	D	E	F	G
RC22	76.38	8.98	43.70	23.70	31.12	12.30	18.82
RC23	82.09	11.54	43.50	27.05	33.05	13.27	19.78
RC24	82.09	11.54	43.50	27.05	33.05	13.27	19.78
Models	H	J	K	L	M	N	O
RC22	32.68	18.50	21.65	7.58	6.50	11.89	14.78
RC23	34.35	18.50	21.65	8.58	6.50	11.89	15.57
RC24	34.35	18.50	21.65	8.58	6.50	11.89	15.57



Hanbell Screw Compressor ~ Vi Compression Ratios ~ Available



“Hanbell Screw Compressors”

Designed for the challenges of **Commercial** and **Industrial** Applications
 High efficiency rotor profile **patented** in Taiwan, US, UK, Japan and China
 Manufactured and Inspected under ISO9001 **Quality Assurance** Program
 Ideal for **OEM** and **Retrofit** Applications
 Supports R22, R407C, R404A & R507a
 Optimized R134a Motors ~ Available



“Superior Quality Products and Services”
Hanbell Screw Compressors
 and **Microcomputer Control Solutions**
 from