

RHC Series

Open Drive Reciprocating Compressors

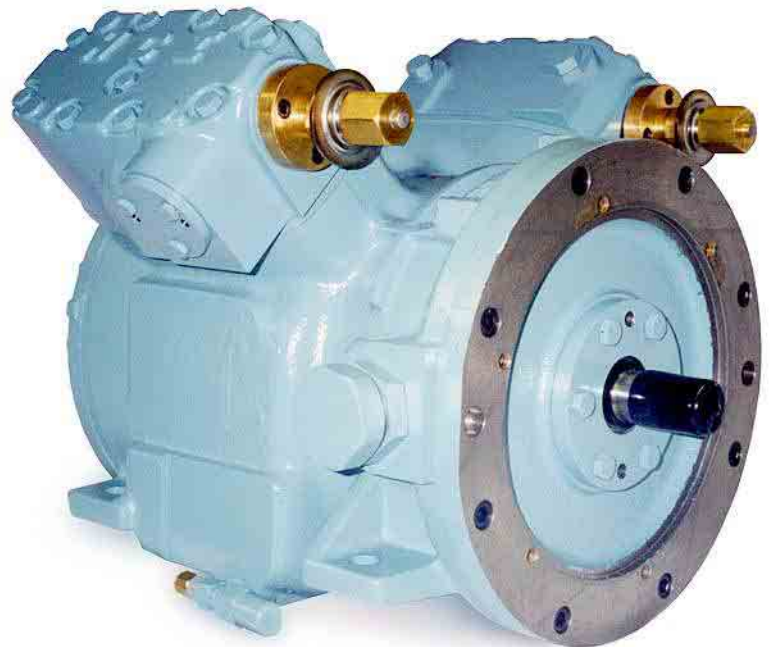
Sixteen Sizes

5-25 TR (850-2000 CFH)

3-4 Cylinder

5-15 HP

- Quiet Performance
- Low Profile
- Refrigerants: R22, R134a, R404A, R407C, R507 and other HFCs
- UL Recognized
- Models from -80°F (-62°C) to 50°F (10°C) SST
- Air Conditioning and Refrigeration Models
- 2-Stage Models Available
- Extremely Field Serviceable
- High Efficiency
- Ideal for Mass Transit



 **HARTFORD**[®]
C O M P R E S S O R S

Pioneers in Screw Compressor Technology



Company Information

Hartford Compressors Inc. designs, manufactures, and supports an extensive range of rotary screw compressors and reciprocating compressors for use in air conditioning and refrigeration systems. With decades of experience in developing innovative products for commercial, industrial, and marine applications, Hartford Compressors sets the standard for precision engineering, optimum performance, and customer satisfaction.

Hartford Compressors RHC reciprocating compressors deliver exceptional economy, reliability and low maintenance. Common motor and compressor housing eliminates redundant maintenance of belts, seals and motor bearings. Compared to an open-frame motor, RHC's suction gas-cooled motor runs at lower temperatures for trouble-free operation while also offering a smooth, quiet performance.

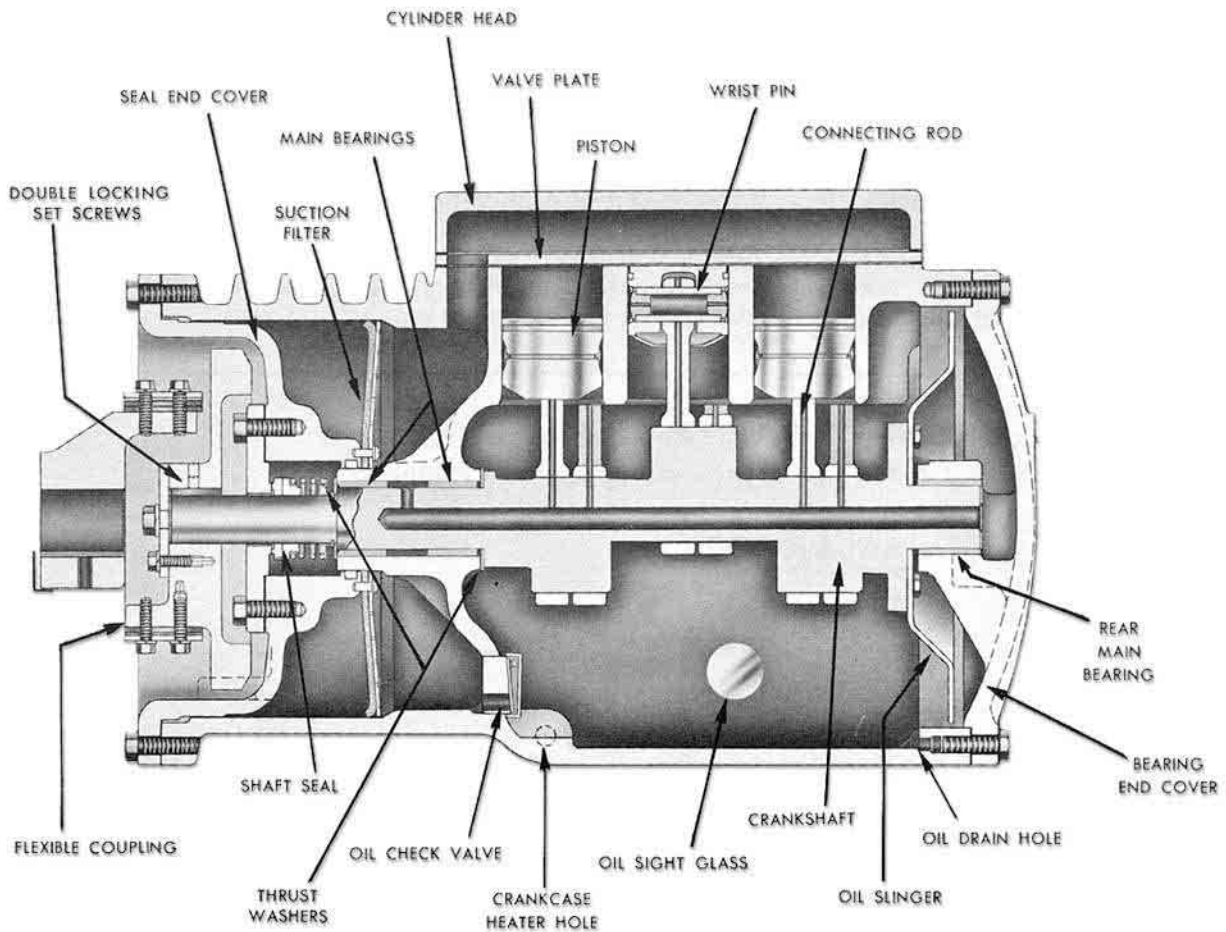
RHC 4-cylinder compressors feature an internal suction cutoff type of capacity control system. Unloading, recommended for high-temperature applications only, can be either internal pressure or electrically actuated.

Our latest generation of medium and large screw compressors have been designed for long life, low noise and vibration levels, improved reliability, and lower operating costs. They are compatible with environmentally friendly refrigerants and gases with zero ozone depletion potential (ODP) and zero global warming potential (GWP).

All of our products are engineering with the highest attention to detail. Whether choosing a standard model or one specially engineered, we provide needed features and benefits. With this philosophy, Hartford Compressors Inc. proudly presents the RHC Reciprocating Compressors which illustrate all aspects of engineering excellence.



Standard Features & Benefits



ADVANTAGES

- Quiet performance
- Field serviceable
- Easy to install
- Rugged
- Reliability & low maintenance
- Proven design
- Internal suction filter
- HFC compatible
- Asbestos free gaskets

FEATURES

- Oil pump standard on 7.5 HP
- Under 7.5 HP units are slinger or splash lubricated
- Bypass-type capacity control system
- Service valves included

Compressor Nomenclature

1370 D D R E A OEM 001 C

DISPLACEMENT (See Note 1)

850 = 850 CFH
 940 = 940 CFH
 1150 = 1150 CFH
 1370 = 1370 CFH
 1670 = 1670 CFH
 2000 = 2000 CFH

COMPRESSOR TYPE

D = Open Drive with Oil Pump

TEMPERATURE APPLICATION

D = High, Commercial & Low Temp.

REFRIGERANT

R = R22, R507, R404A,
 R407C, R410A & R134a

CONTROL VOLTAGE

C = 115/1/50-60
 J = 230/1/50-60
 0 = None

ELECTRICAL DESCRIPTION

Refer to IDT-ES-5 for
 Electrical Information

ASSEMBLY LEVEL

OEM = Original Equipment
 RMF = Remanufactured
 FRC = Field Replacement

(See Note 3) COMPRESSOR VERSION

A = Original Production Release
 (4/05)

UNLOADING

N = Non-Unloading
 E = Internal Electric Unloading

NOTES:

1. Displacement values listed are FT³/Hr @ 1750 RPM.
2. For Special Engineered compressors, indicated portion of model number is replaced by "SE" number.
 (example: 1370SE1000AOEM0010)
3. Absence of a compressor version digit indicates the compressor in question is a pre-production prototype.

Compressor Specifications

SELECTION INFORMATION						INSTALLATION DATA					
Recommended Motor Nominal HP	Refrigerant and Application Range			Comp. Displ. (CFH)	RHC Model	Comp. Weight (Lbs.)	Installed Dimensions (inches)			Service Valves	
	R22	R404A R507	R134a				Length	Width	Height	Suct. ODS	Disch. ODS
3				930	930DD	237	20 ³ / ₄	14 ¹ / ₄	12 ³ / ₄	1 ¹ / ₈	⁵ / ₈
5				846	850DD	247	22 ⁵ / ₈	14 ¹ / ₄	13 ⁷ / ₈	1 ³ / ₈	⁷ / ₈
				930	930DD	247					
				1,128	1130DD	247					
				1,356	1360DD	247					
7¹/₂				1,128	1130DD	252	22 ⁵ / ₈	14 ¹ / ₄	13 ⁷ / ₈	1 ³ / ₈	⁷ / ₈
				1,356	1360DD	252					
				1,680	1680DD	252	26 ¹³ / ₃₂	15 ³ / ₈	14 ⁵ / ₁₆	1 ⁵ / ₈	1 ¹ / ₈
				2,000	2000DD	252					
10				1,356	1360DD	257	25 ¹ / ₈	14 ¹ / ₄	13 ⁷ / ₈	1 ³ / ₈	⁷ / ₈
				1,680	1680DD	257	27 ⁵ / ₃₂	16 ³ / ₄	14 ⁵ / ₁₆	1 ⁵ / ₈	1 ¹ / ₈
15				2,000	2000DD	280	27 ⁵ / ₃₂	16 ³ / ₄	14 ⁵ / ₁₆	1 ⁵ / ₈	1 ¹ / ₈

RHC Open Drive Series

Capacity Information - R22

Conditions: 60 Hz, 1750 RPM, 25°F suction superheat, 10°F subcooling

			SATURATED SUCTION TEMPERATURE									
			20°F		30°F		40°F		50°F		55°F	
MODEL	CFH	SDT °F	CAP TR	PWR BHP	CAP TR	PWR BHP	CAP TR	PWR BHP	CAP TR	PWR BHP	CAP TR	PWR BHP
850DD	846	95	4.2	5.4	5.3	5.8	6.8	5.9	8.4	6.0	9.5	6.0
		105	4.0	5.8	5.0	6.1	6.3	6.5	7.8	6.7	8.8	6.8
		125	3.3	6.4	4.3	7.1	5.4	7.6	6.8	7.9	7.5	8.0
		145	2.7	7.1	3.7	7.8	4.6	8.5	**	**	**	**
1130DD	1,128	95	5.6	7.2	7.0	7.7	9.1	7.9	11.2	8.0	12.6	8.2
		105	5.3	7.7	6.7	8.2	8.4	8.6	10.4	8.9	11.6	9.0
		125	4.4	8.5	5.6	9.4	7.2	10.1	9.1	10.6	10.1	10.7
		145	3.6	9.5	4.9	10.3	6.0	11.3	**	**	**	**
1360DD	1,356	95	6.7	8.8	8.5	9.2	10.9	9.5	13.4	9.6	15.2	9.7
		105	6.4	9.2	8.1	9.8	10.1	10.3	12.5	10.8	14.0	10.9
		125	5.2	10.2	6.8	11.3	8.7	12.0	10.9	12.7	12.1	12.8
		145	4.3	11.3	5.8	12.5	7.3	13.7	**	**	**	**
1680DD	1,680	95	8.3	10.8	10.6	11.4	13.6	11.8	16.6	12.0	19.0	12.1
		105	8.0	11.4	10.0	12.2	12.4	12.8	15.8	13.3	17.3	13.4
		125	6.4	12.7	8.5	14.0	10.8	15.0	13.6	15.7	15.1	16.0
		145	5.3	14.0	7.2	15.5	9.1	16.9	**	**	**	**
2000DD	2,000	95	9.9	13.0	12.5	13.6	16.1	14.0	19.8	14.3	22.5	14.4
		105	9.5	13.6	11.9	14.5	14.9	15.4	18.5	15.8	20.6	16.1
		125	7.7	15.1	10.0	16.7	12.9	17.8	16.1	18.7	18.0	19.0
		145	6.3	16.8	8.6	18.4	10.8	20.2	**	**	**	**

** These conditions exceed maximum power input for continuous operation.

NOTE: **CFH** = Cubic Feet per Hour **SDT** = Saturated Discharge Temperature
CAP = Capacity **TR** = Tons Refrigeration
PWR = Power input required **BHP** = Brake Horsepower

Capacity Information - R134a

Conditions: 60 Hz, 1750 RPM, 25°F suction superheat, 10°F subcooling

		SATURATED SUCTION TEMPERATURE								
		20°F		30°F		40°F		50°F		
MODEL	CFH	SDT °F	CAP TR	PWR BHP	CAP TR	PWR BHP	CAP TR	PWR BHP	CAP TR	PWR BHP
1130DD	1,130	95	3.3	4.6	4.5	4.9	5.9	5.3	7.5	5.5
		105	3.1	4.7	4.1	5.0	5.5	5.5	6.9	5.8
		125	2.4	4.9	3.4	5.5	4.6	6.2	5.9	6.7
		145	1.8	5.0	2.7	5.8	3.5	6.7	4.7	7.6
1680DD	1,680	95	4.8	6.7	6.7	7.3	8.9	7.9	11.3	8.2
		105	4.4	6.8	6.0	7.6	8.3	8.3	10.3	8.6
		125	3.6	7.3	5.0	8.2	6.8	9.2	8.9	10.1
		145	2.8	7.6	4.0	8.6	5.2	10.0	7.0	11.3

NOTE: **CFH** = Cubic Feet per Hour **SDT** = Saturated Discharge Temperature
CAP = Capacity **TR** = Tons Refrigeration
PWR = Power input required **BHP** = Brake Horsepower

Typical Applications

- Ice Skating Rinks and Process Ice Production
- Air-Conditioning Chillers for Commercial buildings
- Refrigeration chillers for refrigerated warehouses
- Supermarkets
- Air-Conditioning and Process Chillers for military and passenger ships

. . . and so much more.

