

Big 4 Series

Open Drive Reciprocating Compressors

Six Sizes

15-60 TR (55-111 CFM)
3-4 Cylinder
20-60 HP

- Quiet Performance
- Field Serviceable
- Easy to Install
- Refrigerants: R22, R134a, R404A and R507
- UL Recognized
- Models from -40°F (-40°C) to 55°F (13°C) SST
- Internal Suction Filter
- Rugged, Reliable & Low Maintenance
- Proven Design



Pioneers in Screw Compressor Technology



Big 4 Open Drive Series

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 Big 4 reciprocating compressors offer unmatched performance in low-commercial and high-temperature applications. Semi-hermetic and open-drive models include crank-case heaters, oil pump and an internal pressure relief valve. Low-temperature models also include a discharge temperature thermostat and an oil cooler with a desuperheating TX valve. Semi-hermetic models feature an across-the-line or part-wind motor and built-in thermal protection.

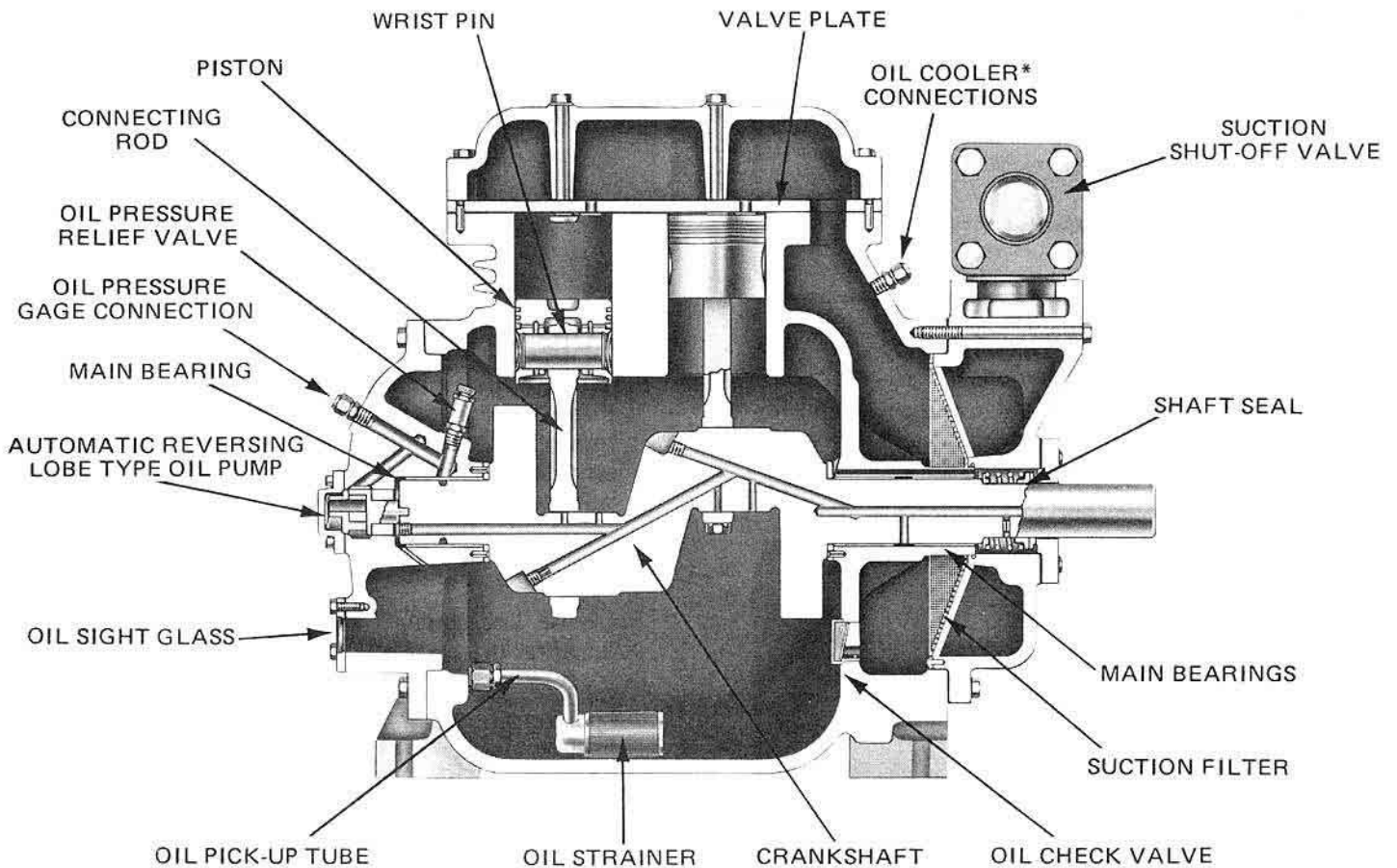
Capacity control is standard on all semi-hermetic and open-drive R-22 compressors for high-temperature applications; it is optional on commercial temperature models. Low-temperature units are not available with capacity control.

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 Big 4 which illustrates all aspects of engineering excellence.



Standard Advantages & Benefits



* "L" Models only or when applicable.

ADVANTAGES

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

FEATURES

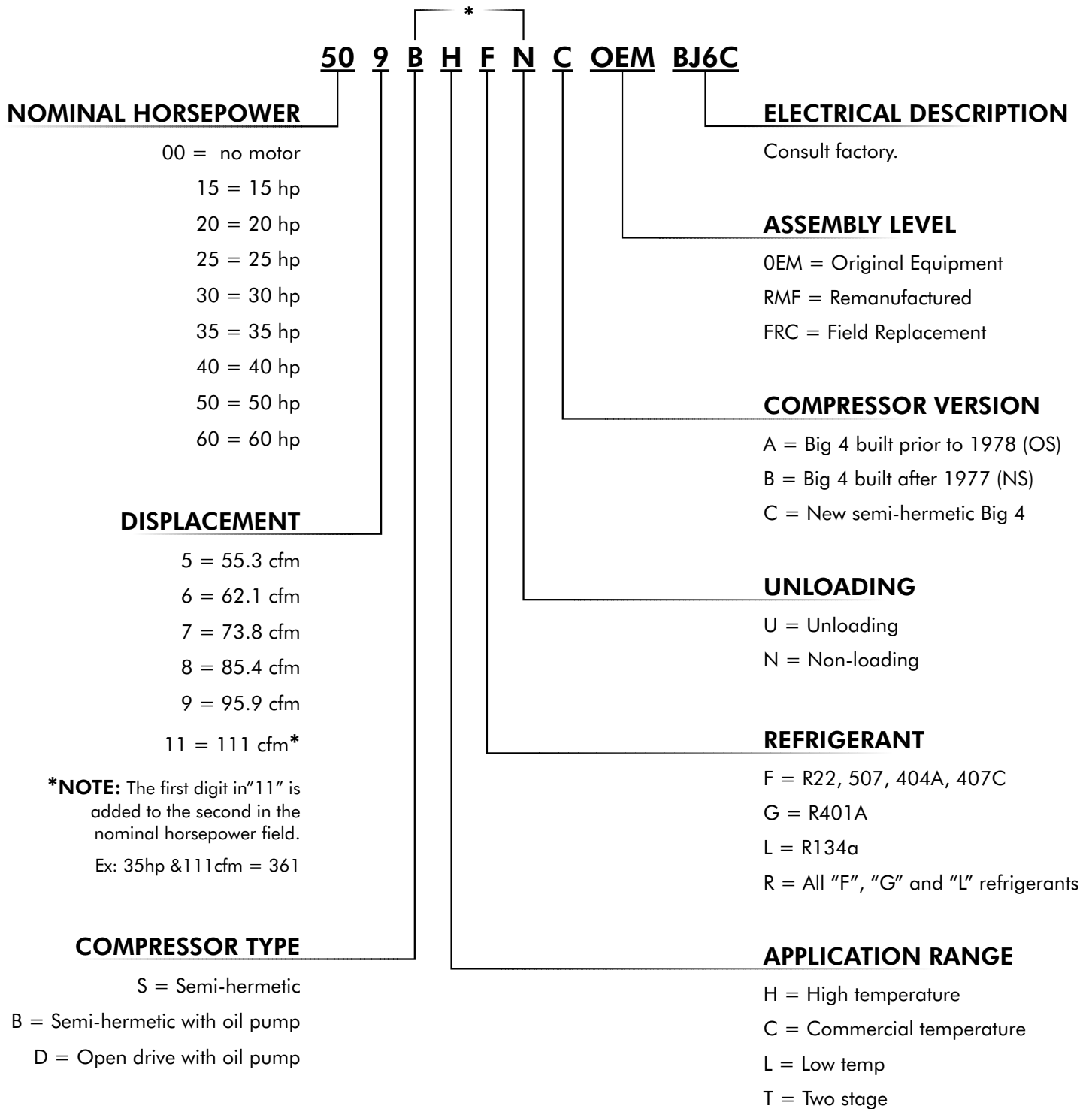
- High strength nodular-iron crankshaft
- Oil pump with internal pressure relief valve standard on all models
- Low temperature models include oil cooler with desuperheating TX valve and discharge thermostat
- Capacity control unloading standard on high temperature applications
- Optional capacity unloading on commercial temp models
- Robertshaw motor protection
- Service valves included

Big 4 Open Drive Series

Compressor Specifications

Compressor Model	Displacement		Refrigerant R-	Valve Size in Inches		Approx. Net Weight	Water Cooled HP Required			Air Cooled HP Required		
	60 HZ	50 HZ		Suction ODS	Disch. ODS		R134a	R-22	Models	R134a	R-22	DLFN Models R404A R507
	CFM	M3/Min.										
155DLFN	55.3	1.30	404A/507	2 ⁷ / ₈	1 ³ / ₈	525	—	20	20	—	20	20
157DCN	73.8	1.74	134a	2 ⁵ / ₈	1 ³ / ₈	535	20	—	—	25	—	—
205DCFN	55.3	1.30	22	2 ⁷ / ₈	1 ³ / ₈	525	—	25	—	—	25	—
216DLFN	62.1	1.50	404A/507	2 ⁷ / ₈	1 ³ / ₈	545	—	25	25	—	25	25
207DHN	73.8	1.74	134a	2 ⁵ / ₈	1 ³ / ₈	535	20	—	—	25	—	—
208DCN	85.4	2.02	134a	2 ⁵ / ₈	1 ³ / ₈	530	25	—	—	25	—	—
255DHF/N	55.3	1.30	22	2 ⁷ / ₈	1 ³ / ₈	525	—	25	—	—	30	—
266DCFN	62.1	1.50	22	2 ⁷ / ₈	1 ³ / ₈	545	—	25	—	—	30	—
257DLFN	73.8	1.74	404A/507	2 ⁷ / ₈	1 ³ / ₈	535	—	30	30	—	30	30
258DHN	85.4	2.02	134a	2 ⁵ / ₈	1 ³ / ₈	530	25	—	—	30	—	—
259DCN	96.0	2.27	134a	2 ⁵ / ₈	1 ³ / ₈	520	25	—	—	30	—	—
316DHF/N	62.1	1.50	22	2 ⁷ / ₈	1 ³ / ₈	545	—	30	—	—	40	—
307DCFN	73.8	1.74	22	2 ⁵ / ₈	1 ³ / ₈	535	—	30	—	—	40	—
308DLFN	85.4	2.02	404A/507	2 ⁵ / ₈	1 ³ / ₈	530	—	40	40	—	40	40
309DHN	96.0	2.27	134a	2 ⁵ / ₈	1 ³ / ₈	520	30	—	—	40	—	—
311DCN	111.0	2.54	134a	2 ⁵ / ₈	1 ³ / ₈	510	30	—	—	40	—	—
357DHF/N	73.8	1.74	22	2 ⁵ / ₈	1 ³ / ₈	535	—	40	—	—	50	—
358DCFN	85.4	2.02	22	2 ⁵ / ₈	1 ³ / ₈	530	—	40	—	—	50	—
359DLFN	96.0	2.27	404A/507	2 ⁵ / ₈	1 ³ / ₈	520	—	—	40	—	—	40
361DHN	111.0	2.54	134a	2 ⁵ / ₈	1 ³ / ₈	510	40	—	—	40	—	—
408DHF/N	85.4	2.02	22	2 ⁵ / ₈	1 ³ / ₈	530	—	40	—	—	50	—
409DCFN	96.0	2.27	22	2 ⁵ / ₈	1 ³ / ₈	520	—	40	—	—	50	—
411DLFN	111.0	2.54	404A/507	2 ⁵ / ₈	1 ³ / ₈	510	—	50	50	—	50	50
509DHF/N	96.0	2.27	22	2 ⁵ / ₈	1 ³ / ₈	520	—	50	—	—	50	—
511DCFN	111.0	2.54	22	2 ⁵ / ₈	1 ³ / ₈	510	—	50	—	—	50	—
511DHF/N	111.0	2.62	404A/507	2 ⁵ / ₈	1 ³ / ₈	510	—	50	—	—	60	—

Compressor Nomenclature



* For special-engineered compressors, the indicated portion of the model number is replaced by the "SE Number"
Example: 509SE1676C0EMBJ6C

Big 4 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	CFM	SDT °F	CAP TR	PWR BHP	CAP TR	PWR BHP	CAP TR	PWR BHP	CAP TR	PWR BHP	CAP TR	PWR BHP
005DHF	55.1	95	16.8	21.5	22.1	23.3	27.5	24.8	33.4	25.6	40.5	25.7
		105	15.1	22.7	20.2	24.8	25.1	26.9	30.7	28.2	34.0	28.7
		125	12.4	24.5	16.7	27.4	21.2	30.5	25.7	32.8	29.3	33.4
		145	9.7	26.0	13.3	29.5	16.8	33.4	21.3	36.7	24.4	38.0
006DHF	62.1	95	19.0	24.2	24.9	26.3	31.0	28.0	37.5	28.7	45.5	28.9
		105	17.0	25.6	22.7	28.0	28.3	30.2	34.6	31.8	39.9	32.3
		125	14.0	27.6	18.8	30.8	23.8	34.3	28.9	36.8	32.1	37.6
		145	11.0	29.3	15.0	33.2	19.0	37.6	24.0	41.4	27.5	42.8
007DHF	73.8	95	22.6	28.8	29.7	31.2	36.8	33.2	44.6	34.2	54.0	34.4
		105	20.2	30.4	27.0	33.2	33.6	36.0	41.0	37.8	45.5	38.4
		125	16.6	32.8	22.4	36.6	28.3	40.8	34.5	43.8	39.2	44.6
		145	13.1	34.8	17.8	39.6	22.6	44.6	28.5	49.2	32.7	51.0
008DHF	85.4	95	26.1	33.4	34.3	36.1	42.7	38.4	51.6	39.6	62.5	39.8
		105	23.3	35.2	31.2	40.1	38.9	41.6	47.5	43.7	52.6	44.4
		125	19.2	37.9	25.8	42.4	32.7	47.2	39.9	50.6	45.4	51.5
		145	15.1	40.2	20.6	45.8	26.1	51.6	32.9	56.9	**	**
009DHF	96.0	95	29.4	37.4	38.7	40.6	47.8	43.2	58.0	44.5	70.2	44.8
		105	26.2	39.5	35.1	43.2	43.6	46.8	53.4	49.2	59.1	49.9
		125	21.6	42.6	29.1	47.5	36.8	53.0	44.8	56.9	51.0	58.0
		145	17.0	45.2	23.2	51.5	29.4	58.0	37.0	64.0	42.6	66.2
011DHF	111.0	95	34.0	43.3	44.4	46.9	55.4	49.9	67.1	51.4	81.2	51.7
		105	30.3	45.6	40.6	49.9	50.5	54.1	61.8	56.8	68.4	57.7
		125	25.1	49.2	33.6	55.0	42.6	61.3	51.8	65.9	59.0	67.1
		145	19.7	52.3	26.8	59.5	33.9	67.1	40.9	73.9	49.2	76.7

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

NOTE: CAP = Tons Refrigeration
PWR = Brake Horsepower

Capacity Information - R404a

Conditions: 60 Hz, 1750 RPM, 25°F suction superheat, 0°F subcooling

			SATURATED SUCTION TEMPERATURE									
			-40°F		-30°F		-20°F		-10°F		0°F	
MODEL	CFM	SDT °F	CAP TR	PWR BHP	CAP TR	PWR BHP	CAP TR	PWR BHP	CAP TR	PWR BHP	CAP TR	PWR BHP
005DLFN	55.1	95	2.6	11.8	3.7	14.6	5.2	17.9	7.1	20.9	9.9	23.3
		105	2.2	11.3	3.1	14.3	4.4	17.5	6.2	20.8	8.5	23.4
		115	1.7	10.8	2.7	13.9	3.8	17.3	5.2	20.6	7.1	23.6
		125	1.3	10.4	2.2	13.4	3.0	16.9	4.2	20.5	5.7	23.8
006DLFN	62.1	95	2.9	13.2	4.1	16.6	5.8	20.2	8.1	23.5	11.2	26.3
		105	2.4	13.2	3.6	16.1	5.1	19.8	7.0	23.4	9.6	26.5
		115	1.8	12.4	3.0	15.6	4.3	19.6	5.9	23.2	8.0	26.8
		125	1.4	12.0	2.4	15.1	3.5	19.2	4.8	23.0	6.5	26.9
007DLFN	73.8	95	3.6	15.7	4.9	19.7	6.9	24.0	9.6	28.0	13.3	31.2
		105	3.0	15.1	4.2	19.1	6.0	23.6	8.3	27.7	11.3	31.4
		115	2.4	14.5	3.6	18.5	5.1	23.2	7.0	27.6	9.5	31.7
		125	1.7	13.9	2.9	18.0	4.1	22.8	5.7	27.5	7.7	31.9
008DLFN	85.4	95	4.1	18.2	5.6	22.7	8.0	27.7	11.1	32.3	15.3	36.1
		105	3.3	17.5	4.9	22.1	6.9	27.2	9.6	32.2	13.2	36.4
		115	2.7	16.9	4.1	21.5	5.8	26.8	8.1	31.9	11.0	36.7
		125	1.9	16.2	3.3	20.9	4.8	26.3	6.6	31.8	8.9	37.0
009DLFN	96	95	4.5	20.4	6.4	25.6	9.0	31.1	12.5	36.4	17.3	40.6
		105	3.8	19.7	5.5	24.8	7.8	30.6	9.9	36.1	11.1	40.6
		115	3.0	19.0	4.6	24.1	6.5	30.1	9.2	36.0	12.4	41.3
		125	2.3	18.1	3.8	23.4	5.3	29.6	9.1	35.8	10.0	41.5
011DLFN	111	95	5.3	23.6	7.3	29.5	10.4	36.0	14.5	42.0	20.0	46.9
		105	4.3	22.8	6.4	28.8	9.1	35.4	12.6	41.8	17.2	47.2
		115	3.5	21.8	5.0	28.0	7.5	34.8	10.6	41.5	14.5	47.5
		125	2.6	21.0	4.3	27.1	6.2	34.2	8.5	41.3	11.6	48.0

NOTE: CAP = Tons Refrigeration
PWR = Brake Horsepower

Big 4 Open Drive Series

Capacity Information - R507

Conditions: 60 Hz, 1750 RPM, 25°F suction superheat, 0°F subcooling

			SATURATED SUCTION TEMPERATURE									
			-40°F		-30°F		-20°F		-10°F		0°F	
MODEL	CFM	SDT °F	CAP TR	PWR BHP	CAP TR	PWR BHP	CAP TR	PWR BHP	CAP TR	PWR BHP	CAP TR	PWR BHP
005DLFN	55.1	95	2.6	11.5	4.1	14.5	5.8	17.6	7.9	19.9	10.2	22.6
		105	2.2	11.3	3.6	14.0	5.2	17.5	6.8	20.4	8.8	23.6
		115	1.8	10.8	2.9	13.7	4.4	17.4	6.0	20.9	7.8	24.6
		125	1.4	10.1	2.4	13.1	3.6	17.3	5.0	21.4	6.5	25.7
006DLFN	62.1	95	3.0	13.1	4.6	16.4	6.6	19.8	8.9	22.4	11.5	25.6
		105	2.6	12.7	4.0	15.8	5.8	19.7	7.8	23.0	9.9	26.8
		115	2.2	12.0	3.3	15.5	5.0	19.5	6.9	23.5	8.7	28.0
		125	1.6	11.4	2.7	14.8	4.1	19.4	5.7	24.1	7.4	29.2
007DLFN	73.8	95	3.7	15.6	5.5	19.6	7.8	23.5	10.6	26.6	13.7	30.2
		105	3.1	15.1	4.7	18.8	6.8	23.4	9.3	27.3	11.8	31.7
		115	2.6	14.5	4.0	18.2	5.9	23.3	8.1	28.0	10.4	33.2
		125	1.9	13.6	3.2	17.5	4.8	23.2	6.4	28.7	8.8	34.7
008DLFN	85.4	95	4.2	18.0	6.3	22.6	8.9	27.2	12.3	31.0	15.8	35.0
		105	3.7	17.5	5.4	21.7	7.9	27.4	10.7	31.7	13.7	36.7
		115	2.9	16.9	4.6	21.4	6.9	27.6	9.4	32.4	12.1	38.4
		125	2.2	15.7	3.7	20.4	5.6	26.8	7.9	33.2	10.2	40.1
009DLFN	96	95	4.7	20.2	7.0	25.4	10.1	30.6	13.8	34.8	17.8	39.5
		105	4.1	19.7	6.2	24.4	8.9	30.5	12.0	35.6	15.3	41.3
		115	3.3	18.8	5.1	24.0	7.7	30.4	10.5	36.4	13.6	43.0
		125	2.4	17.6	4.2	22.8	6.3	30.2	8.8	37.2	11.5	45.1
011DLFN	111	95	5.4	23.4	8.2	29.4	11.7	35.4	16.0	40.2	20.5	45.6
		105	4.7	22.8	7.2	28.2	10.3	35.2	13.9	41.2	17.8	48.1
		115	3.9	21.8	6.0	27.6	8.8	35.0	12.2	42.2	15.7	49.2
		125	2.8	20.4	4.9	26.4	7.3	34.8	10.2	43.2	13.3	52.2

NOTE: CAP = Tons Refrigeration
PWR = 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.



HARTFORD[®]
C O M P R E S S O R S

Pioneers in Screw Compressor Technology

Hartford Compressors Inc.

179 South Street • West Hartford, CT 06110 USA

Phone: 860-249-8671 • Fax: 860-548-1705

Website: <http://www.hartfordcompressors.com>

Email: cserv@hartfordcompressors.com

©2003 Hartford Compressors Inc. All rights reserved.