



Product Data

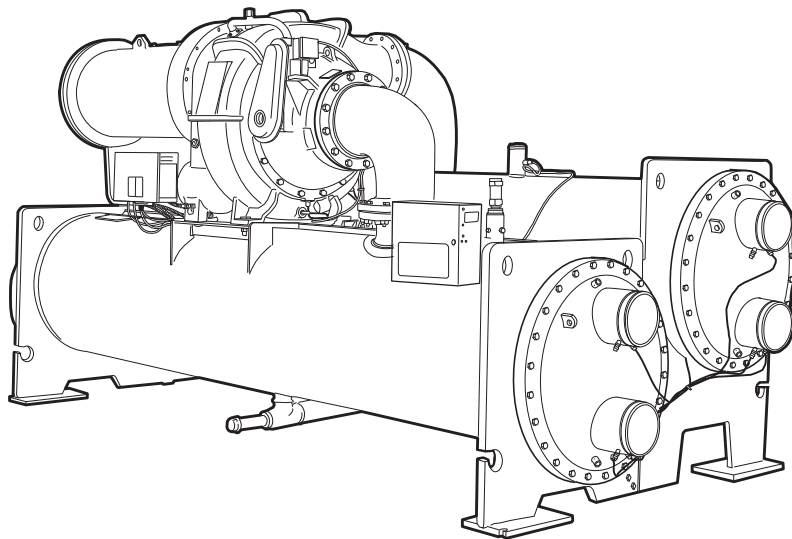
19XR, XRV High-Efficiency Hermetic Centrifugal Liquid Chiller 50/60 Hz HFC-134a

19XR — 200 to 1500 Nominal Tons (703 to 5275 kW)
19XRV — 200 to 800 Nominal Tons (703 to 2813 kW)

Model #: 19XR-3232352CNH66-
Serial #: 3903Q68483

2003
450 Tons

Evergreen™ CHILLERS



19XR, XRV

L: 14' 4"
W: 5' 8"
H: 6' 10"

Approximate Weight: 16,975 lbs

Carrier's family of Evergreen™ centrifugal chillers frees owners from concerns over scheduled refrigerant phaseouts. The Evergreen 19XR, XRV chiller's 0.1% annual leak rate is the lowest published in our industry. The ability to store the entire charge of refrigerant inside the chiller minimizes the change of leaks during refrigerant transfer for maintenance.

The Carrier-designed Evergreen family of chillers enables chiller plants to achieve superior efficiencies obtained at true operating conditions without compromising the environment. Therefore, the effects of potential direct or indirect global warming are greatly diminished.

Features/Benefits

The Evergreen chillers feature:

High efficiency — Today's owners of chilled water plants demand high efficiency from their chillers. Per ARI 550/590-2003, chillers operate at design conditions less than one percent of the time. As a result, superior part-load efficiency is required for today's chilled water applications. The Evergreen 19XRV centrifugal chiller, equipped with a factory-installed variable speed drive, maximizes chiller efficiency by optimizing compressor operation. Electric power consumption drops dramatically when the motor speed slows. The 19XRV chiller delivers industry-leading integrated part-load values (IPLV).

Environmental leadership — Carrier has long been committed to the environment and its sustainability. Evergreen chillers provide our customers with a high-efficiency, chlorine-free

Model number nomenclature



19XR-32 32 352 CN H 66-

19XR 52 51 473 DG H 64 -

Description

● 19XR — High Efficiency Hermetic Centrifugal Liquid Chiller ●

19XRV — Ultra High Efficiency Variable Speed Hermetic Centrifugal Liquid Chiller

Cooler Size

- 10-12 (Frame 1 XR)
- 15-17 (Frame 1 XR)
- 20-22 (Frame 2 XR)
- 30-32 (Frame 3 XR) ●
- 35-37 (Frame 3 XR)
- 40-42 (Frame 4 XR)
- 45-47 (Frame 4 XR)
- 50-52 (Frame 5 XR)
- 5A-5C (Frame 5 XR)*
- 5F-5H (Frame 5XR)*
- 60-62 (Frame 6 XR)
- 65-67 (Frame 6 XR)
- 70-72 (Frame 7 XR)
- 75-77 (Frame 7 XR)
- 80-82 (Frame 8 XR)
- 85-87 (Frame 8 XR)

Condenser Size

- 10-12 (Frame 1 XR)
- 15-17 (Frame 1 XR)
- 20-22 (Frame 2 XR)
- 30-32 (Frame 3 XR) ●
- 35-37 (Frame 3 XR)
- 40-42 (Frame 4 XR)
- 45-47 (Frame 4 XR)
- 50-52 (Frame 5 XR)
- 55-57 (Frame 5 XR)
- 60-62 (Frame 6 XR)
- 65-67 (Frame 6 XR)
- 70-72 (Frame 7 XR)
- 75-77 (Frame 7 XR)
- 80-82 (Frame 8 XR)
- 85-87 (Frame 8 XR)

Compressor Code

● (First Digit Indicates Compressor Frame Size) ●

Special Order Indicator

- — Standard ●
- S — Special Order

Motor Voltage Code

Code	Volts-Phase-Hertz
60	200-3-60
61	230-3-60
62	380-3-60
63	416-3-60
64	460-3-60
65	575-3-60
● 66	● 2400-3-60 ●
67	3300-3-60
68	4160-3-60
69	6900-3-60
50	230-3-50
51	346-3-50
52	400-3-50
53	3000-3-50
54	3300-3-50
55	6300-3-50

Motor Efficiency Code

- H — High Efficiency ●
- S — Standard Efficiency

Motor Code

BD	CD	DB	EH
BE	CE	DC	EJ
BF	CL	DD	EK
BG	CM	DE	EL
● BH	● CN	● DF	EM
BJ	CP	DG	EN
	CQ	DH	EP
	CR	DJ	EQ
		DK	

*Refer to 19XR, 19XRV Computer Selection Program for details on these sizes.



ASME
'U' Stamp



ARI (Air Conditioning
and Refrigeration
Institute)
Performance Certified

Physical data



19XR COMPRESSOR AND MOTOR WEIGHTS*— STANDARD AND HIGH EFFICIENCY MOTORS COMPRESSOR FRAME SIZE 2†, LOW VOLTAGE MOTORS

MOTOR SIZE	ENGLISH						SI					
	Compressor Weight** (lb)	Stator Weight†† (lb)		Rotor Weight (lb)		End Bell Cover (lb)	Compressor Weight (kg)	Stator Weight (kg)		Rotor Weight (kg)		End Bell Cover (kg)
		60 Hz	50 Hz	60 Hz	50 Hz			60 Hz	50 Hz	60 Hz	50 Hz	
BD	2340	1030	1030	240	240	185	1061	467	467	109	109	84
BE	2340	1070	1070	250	250	185	1061	485	485	113	113	84
BF	2340	1120	1120	265	265	185	1061	508	508	120	120	84
BG	2340	1175	1175	290	290	185	1061	533	533	132	132	84
BH	2340	1175	1175	290	290	185	1061	533	533	132	132	84
BJ	2340	1175	N/A	290	N/A	185	1061	533	N/A	132	N/A	84

COMPRESSOR FRAME SIZE 3†, LOW AND MEDIUM VOLTAGE MOTORS

MOTOR SIZE	ENGLISH						SI					
	Compressor Weight** (lb)	Stator Weight†† (lb)		Rotor Weight (lb)		End Bell Cover (lb)	Compressor Weight (kg)	Stator Weight (kg)		Rotor Weight (kg)		End Bell Cover (kg)
		60 Hz	50 Hz	60 Hz	50 Hz			60 Hz	50 Hz	60 Hz	50 Hz	
CD	2810	1286	1358	258	273	274	1160	583	616	117	124	125
CE	2810	1305	1377	265	281	274	1160	592	624	120	127	125
CL	2810	1324	1435	280	296	274	1160	600	651	127	134	125
CM	2810	1347	1455	303	303	274	1160	611	660	137	137	125
CN	2810	1358	1467	316	316	274	1160	616	665	143	143	125
CP	2810	1401	1479	329	316	274	1160	635	671	149	143	125
CQ	2810	1455	1479	329	316	274	1160	660	671	149	152	125
CR	2810	1979	—	329	—	274	1161	671	—	149	—	125

COMPRESSOR FRAME SIZE 4†, LOW AND MEDIUM VOLTAGE MOTORS***

MOTOR SIZE	ENGLISH						SI					
	Compressor Weight** (lb) Fixed Diffuser/ Split Ring Diffuser	Stator Weight†† (lb)		Rotor Weight (lb)		End Bell Cover (lb)	Compressor Weight (kg)	Stator Weight (kg)		Rotor Weight (kg)		End Bell Cover (kg)
		60 Hz	50 Hz	60 Hz	50 Hz			60 Hz	50 Hz	60 Hz	50 Hz	
DB	3420/4210	1665	1725	361	391	236	1532	755	782	164	177	107
DC	3420/4210	1681	1737	391	404	236	1532	762	788	177	183	107
DD	3420/4210	1977	2069	536	596	318	1532	897	938	243	248	144
DE	3420/4210	2018	2089	550	550	318	1532	915	948	249	248	144
DF	3420/4210	2100	2139	575	567	318	1532	952	970	261	257	144
DG	3420/4210	2187	2153	599	599	318	1532	992	977	272	272	144
DH	3420/4210	2203	2207	604	604	318	1532	999	1001	274	274	144
DJ	3420/4210	2228	2305	614	614	318	1532	1011	1046	279	279	144
DK	3420/4210	2248	—	614	—	318	1533	1020	—	279	—	144

*Total compressor weight is the sum of the compressor aerodynamic components (compressor weight column), stator, rotor, and end bell cover weights.

†Compressor size number is the first digit of the compressor code. See Model Number Nomenclature on page 4.

**Compressor aerodynamic component weight only. Does not include motor weight.

††Stator weight includes the stator and shell.

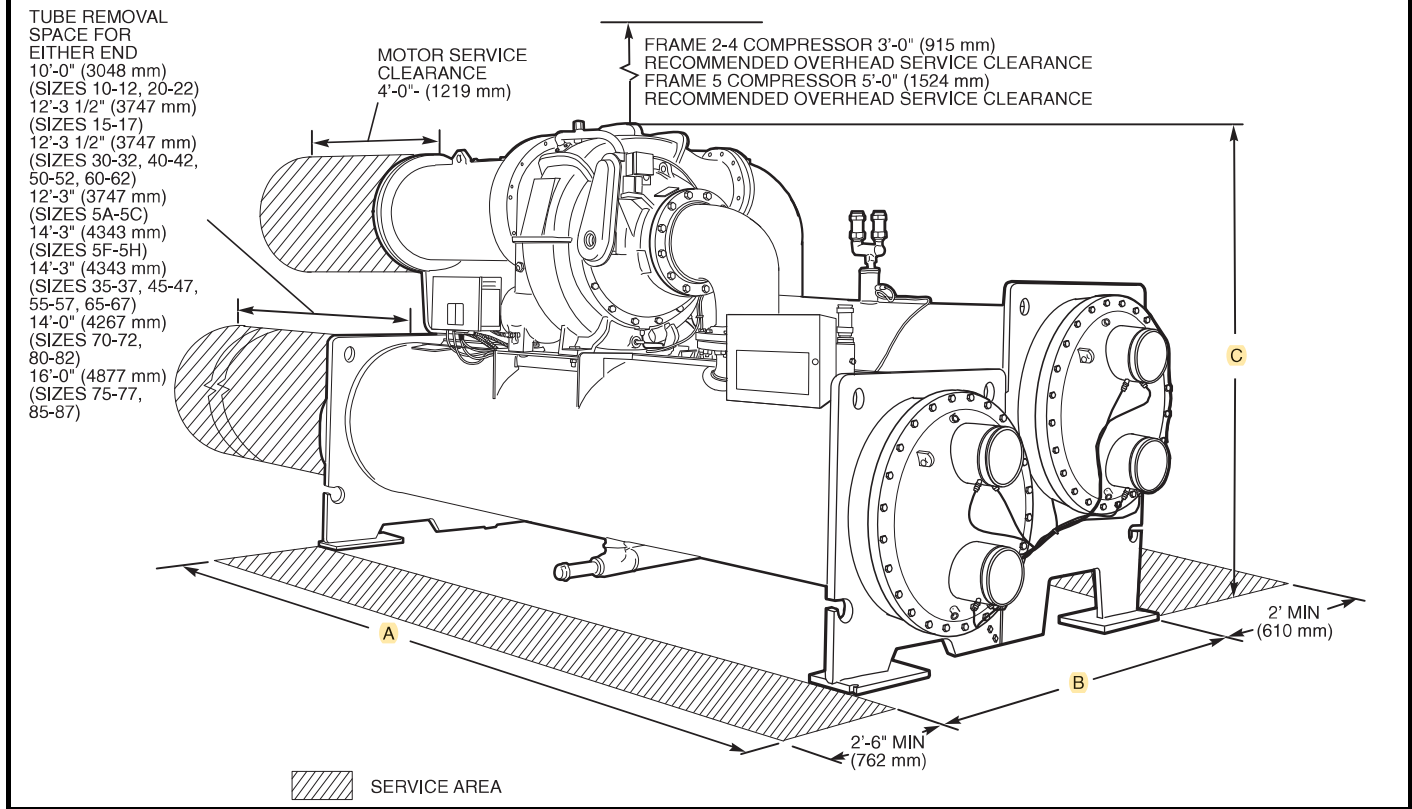
***For high-voltage motors, add the following: 300 lb (136 kg) to stator, 150 lb (68 kg) to rotor, and 40 lb (18 kg) to end bell.

NOTE: Standard-efficiency motor designations are followed by the letter S (e.g., BDS); high-efficiency motor designations are followed by the letter H (e.g., BDH). See Model Number Nomenclature on page 4.

Dimensions



19XR DIMENSIONS



19XR DIMENSIONS (NOZZLE-IN-HEAD WATERBOX)

HEAT EXCHANGER SIZE	A (Length, with Nozzle-in-Head Waterbox)						B (Width)		19XR C (Height)		19XR C (Height)	
	1-Pass		2-Pass*		3-Pass		ft-in.	mm	ft-in.	mm	ft-in.	mm
	ft-in.	mm	ft-in.	mm	ft-in.	mm						
10 to 12	11-11	3632	11- 4	3454	11-11	3632	5- 27/8	1597	6- 1 1/4	1861	7-3	2210
15 to 17	14- 2 1/2	4331	13- 7 1/2	4153	14- 2 1/2	4331	5- 27/8	1597	6- 1 1/4	1861	7-3	2210
20 to 22	11-11 3/4	3651	11- 4 3/4	3473	11-11 3/4	3651	5- 67/16	1688	6- 3 1/4	1911	7-10 1/4	2394
30 to 32	14- 3 1/4	4350	13- 8 1/4	4172	14- 3 1/4	4350	5- 7 3/16	1707	6- 9 5/8	2073	7-6 3/4	2305
35 to 37	15-11 3/4	4870	15- 4 3/4	4693	15-11 3/4	4870	5- 7 3/16	1707	6- 9 5/8	2073	7-6 3/4	2305
40 to 42	14- 9	4496	14- 3 1/8	4347	14- 6	4420	6- 3 1/8	1908	7- 0 3/4	2153	7-11	2413
45 to 47	16- 5 1/2	5017	15-11 5/8	4867	16- 2 1/2	4940	6- 3 1/8	1908	7- 0 3/4	2153	7-11	2413
50 to 52	14-10	4521	14- 4 1/2	4382	14- 6 1/2	4432	6- 8 7/8	2054	7- 2 3/8	2194	8-6 3/4	2610
5A to 5C	14-10	4521	14- 4 1/2	4382	14- 6 1/2	4432	6- 8 7/8	2054	7- 2 3/8	2194	8-6 3/4	2610
55 to 57	16- 6 1/2	5042	16- 1	4902	16- 3	4953	6- 8 7/8	2054	7- 2 3/8	2194	8-6 3/4	2610
5F to 5H	16- 6 1/2	5042	16- 1	4902	16- 3	4953	6- 8 7/8	2054	7- 2 3/8	2194	8-6 3/4	2610
60 to 62	14-11	4547	14- 5 1/4	4400	14- 7	4445	6- 0 5/8	2124	7- 4 3/8	2245	8-9 7/8	2689
65 to 67	16- 7 1/2	5067	16- 1 3/4	4921	16- 3 1/2	4966	6- 0 5/8	2124	7- 4 3/8	2245	8-9 7/8	2689
70 to 72	17- 0 1/2	5194	16-11	5156	16- 9 1/4	5112	7-11 1/2	2426	9- 9 1/2	2972	—	—
75 to 77	19- 0 1/2	5804	18-11	5766	18- 9 1/4	5721	7-11 1/2	2426	9- 9 1/2	2972	—	—
80 to 82	17- 3 1/2	5271	17- 0 1/2	5194	16- 9 1/2	5118	8-10 3/4	2711	9-11 1/4	3029	—	—
85 to 87	19- 3 1/2	5880	19- 0 1/2	5804	18- 9 1/2	5728	8-10 3/4	2711	9-11 1/4	3029	—	—

*Assumes both cooler and condenser nozzles on same end of chiller.

NOTES:

- Service access should be provided per American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE) 15, latest edition, National Fire Protection Association (NFPA) 70, and local safety code.
- Allow at least 3 ft (915 mm) overhead clearance for service rigging for frame 2-4 compressor. Overhead clearance for service rigging for frame 5 compressor should be 5 ft (1524 mm).
- Dimensions are approximate. Certified drawings available upon request.
- Marine waterboxes may add 6 in., to the width of the machine. See certified drawings for details.
- 'A' length dimensions shown are for standard 150 psi design and victaulic connections. The 300 psi design and/or flanges will add length. See certified drawings.
- 19XRV height — check certified drawings.
- Not all waterbox/pass combinations are available with unit-mounted VFD. Check selection program and Drawing Manager for availability.