Model number nomenclature

19XRV 21 22 2 4 7 BH H 64

19XR– 52 51 4 7 3 DG H 64 –

Description
19XR– — High Efficiency Semi-Hermetic Centrifugal Liquid Chiller
19XRV — High Efficiency Semi-Hermetic Centrifugal Liquid Chiller with Unit-Mounted VFD

Cooler Size*
10-12 (Frame 1)
15-17 (Frame 1)
20-22 (Frame 2)
30-32 (Frame 3)
35-37 (Frame 3)
40-42 (Frame 4)
45-47 (Frame 4)
50-54 (Frame 5)
5A-5C (Frame 5)†
55-59 (Frame 5)
5F-5H (Frame 5)†
5K-5R (Frame 5)**
5T-5Z (Frame 5)**
60-64 (Frame 6)
6K-6R (Frame 6)**
65-69 (Frame 6)
6T-6Z (Frame 6)**
70-74 (Frame 7)
7K-7R (Frame 7)**
75-79 (Frame 7)
7T-7Z (Frame 7)**
80-84 (Frame 8)
8K-8R (Frame 8)**
85-89 (Frame 8)
8T-8Z (Frame 8)**

Condenser Size*
10-12 (Frame 1)
15-17 (Frame 1)
20-22 (Frame 2)
30-32 (Frame 3)
35-37 (Frame 3)
40-42 (Frame 4)
45-47 (Frame 4)
50-54 (Frame 5)
55-59 (Frame 5)
60-64 (Frame 6)
65-69 (Frame 6)
70-74 (Frame 7)
75-79 (Frame 7)
80-84 (Frame 8)
85-89 (Frame 8)

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
52	400-3-50
53	3000-3-50
54	3300-3-50
55	6300-3-50
5A	10000-3-50
5B	11000-3-50
6A	11000-3-60
6B	10000-3-60
6C	13800-3-60

Motor Efficiency Code
Compressor Frame 2, 3, 4, 5
H — High Efficiency
S — Standard Efficiency

Compressor Frame E
A,B,C,D,E— A-E Gear Ratio

Motor Code††

Impeller Diameter

Impeller Shroud

Compressor Frame
2, 3, 4, 5 — Single-Stage
E — Two-Stage

ASME 'U' Stamp

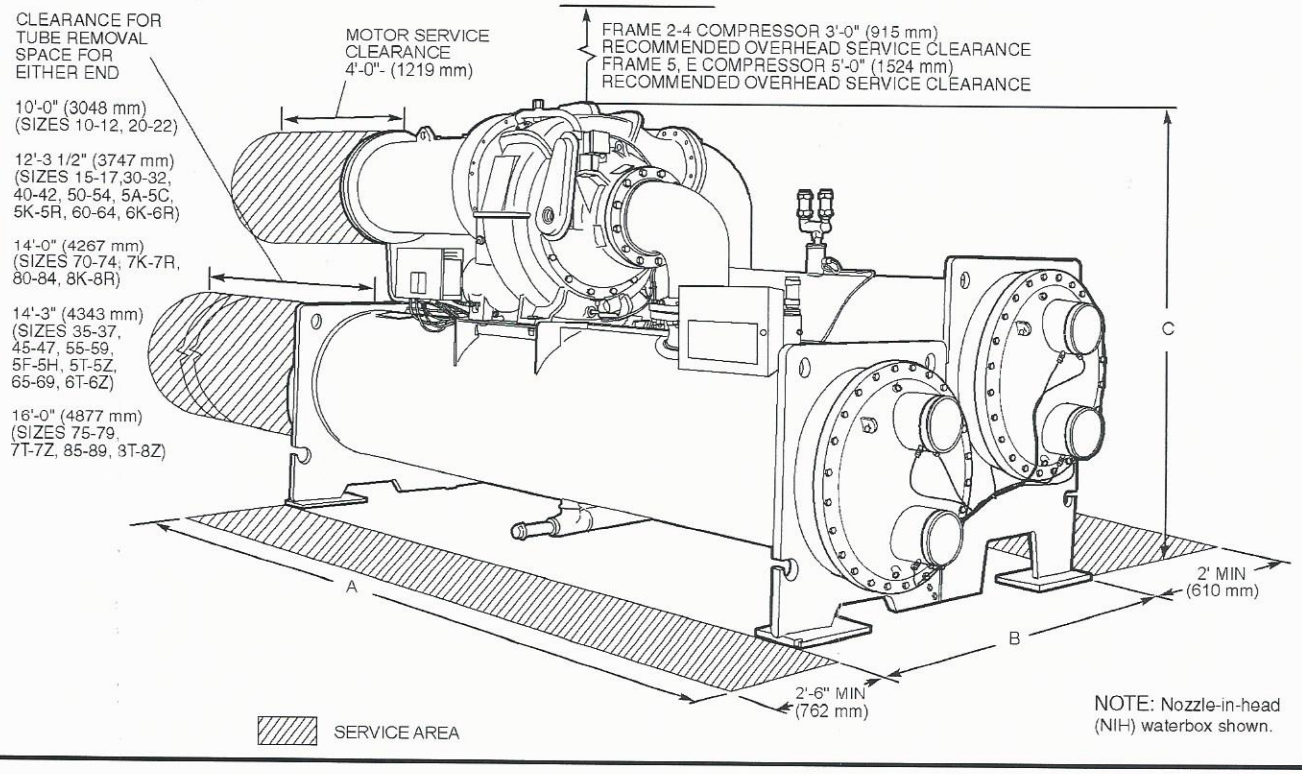
AHRI (Air Conditioning, Heating, and Refrigeration Institute) Performance Certified

*Frame sizes 1 through 6 available on single-stage units only.
†Refer to 19XR, 19XRV Computer Selection Program for details on these sizes.
** Frame sizes with K-R and T-Z are with 1 in. OD evaporator tubing.
††Refer to the 19XR, 19XRV Computer Selection Program for motor size details.

SEISMICOMPLIANT

* Meets IBC 2006, ASCE-7-05, CBC 2007, and OSHPD seismic requirements. Seismic rating available on select models.

19XR,XRV DIMENSIONS



19XR,XRV DIMENSIONS (Marine Waterbox)

HEAT EXCHANGER SIZE	A (Length, Marine Waterbox)				19XR B WIDTH		19XRV B WIDTH		19XR,XRV C HEIGHT
	2-Pass*		1 or 3-Pass†						
	ft-in.	mm	ft-in.	mm	ft-in.	mm	ft-in.	mm	
10 to 12	NA	NA	NA	NA	NA	NA	NA	NA	
15 to 17	NA	NA	NA	NA	NA	NA	NA	NA	
20 to 22	12- 5 1/2	3797	14- 1 1/4	4299	6- 1 1/16	1856	6- 1 1/16	1856	
30 to 32	14- 9	4496	16- 4 3/4	4997	6- 1 1/16	1856	6- 1 1/16	1856	
35 to 37	16- 5 1/2	5017	18- 1 1/4	5518	6- 1 1/16	1856	6- 1 1/16	1856	
40 to 42	15- 2 3/4	4642	16- 8 1/4	5086	6- 3 1/4	1911	6- 3 1/4	1911	
45 to 47	16- 11 1/4	5163	18- 4 3/4	5607	6- 3 1/4	1911	6- 3 1/4	1911	
50 to 54, 5K to 5R	15- 3 1/2	4661	16- 8 1/2	5093	6- 8 7/8	2054	6- 8 7/8	2054	
5A to 5C	15- 3 1/2	4661	16- 8 1/2	5093	6- 8 7/8	2054	6- 8 7/8	2054	See Note 6
55 to 59, 5T to 5Z	17- 0	5182	18- 5	5613	6- 8 7/8	2054	6- 8 7/8	2054	
5F to 5H	17- 0	5182	18- 5	5613	6- 8 7/8	2054	6- 8 7/8	2054	
60 to 64, 6K to 6R	15- 4 1/8	4677	16- 8 3/4	5099	6- 11 3/4	2127	6- 11 3/4	2127	
65 to 69, 6T to 6Z	17- 0 5/8	5197	18- 5 1/4	5620	6- 11 3/4	2127	6- 11 3/4	2127	
70 to 74, 7K to 7R	18- 3 5/8	5579	19- 9 3/4	6039	8- 8 1/8	2645	9- 6 3/8	2905	
75 to 79, 7T to 7Z	20- 3 5/8	6188	21- 9 3/4	6649	8- 8 1/8	2645	9- 6 3/8	2905	
80 to 84, 8K to 8R	18- 4	5583	19- 10 1/2	6058	9- 5 5/8	2886	10- 5	3175	
85 to 89, 8T to 8Z	20- 4	6198	21- 10 1/2	6668	9- 5 5/8	2886	10- 5	3175	

*Assumes both cooler and condenser nozzles on same end of chiller.
†1 or 3-pass length applies if cooler is a 1 or 3-pass design.
NOTES:

1. Service access should be provided per American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) 15, latest edition, National Fire Protection Association (NFPA) 70, and local safety code.
2. Allow at least 3 ft (915 mm) overhead clearance for service rigging for frame 2-4 compressor. Overhead clearance for service rigging frame 5 and frame E compressor should be 5 ft (1524 mm).
3. Dimensions are approximate. Certified drawings available upon request.
4. Marine waterboxes may add 6 in. (152 mm) to the width of the machine. See certified drawings for details.
5. 'A' length dimensions shown are for standard 150 psig (1034 kPa) design and Victaulic connections. The 300 psig (2068 kPa) design and/or flanges will add length. See certified drawings.
6. 19XR,XRV heights can vary depending on the configuration. Check 19XR,XRV certified drawings for height information.
7. Not all waterbox/pass combinations are available with unit-mounted VFD (variable frequency drive). Check selection program for availability.

Physical data

19XR,XRV COMPRESSOR AND MOTOR WEIGHTS*— STANDARD AND HIGH-EFFICIENCY MOTORS

COMPRESSOR FRAME SIZE 2†

MOTOR CODE	ENGLISH						SI					
	Compressor Weight** (lb)	60 Hz		50 Hz		End Bell Cover Weight (lb)	Compressor Weight** (kg)	60 Hz		50 Hz		End Bell Cover Weight (kg)
		Stator Weight†† (lb)	Rotor Weight (lb)	Stator Weight†† (lb)	Rotor Weight (lb)			Stator Weight†† (kg)	Rotor Weight (kg)	Stator Weight†† (kg)	Rotor Weight (kg)	
STANDARD-EFFICIENCY MOTORS / LOW VOLTAGE (200-575 v)												
BDS	2300	900	190	915	205	185	1043	408	86	415	93	84
BES	2300	915	200	965	220	185	1043	415	91	438	100	84
BFS	2300	975	215	1000	230	185	1043	442	98	454	104	84
BGS	2300	1000	230	1060	250	185	1043	454	104	481	113	84
BHS	2300	1030	240	1105	265	185	1043	467	109	501	120	84
BJS	2300	1105	265	—	—	185	1043	501	120	—	—	84
HIGH-EFFICIENCY MOTORS / LOW VOLTAGE (200-575 v)												
BDH	2300	1030	240	1030	240	185	1043	467	109	467	109	84
BEH	2300	1070	250	1070	250	185	1043	485	113	485	113	84
BFH	2300	1120	265	1120	265	185	1043	508	120	508	120	84
BGH	2300	1175	290	1175	290	185	1043	533	132	533	132	84
BHH	2300	1175	290	1175	290	185	1043	533	132	533	132	84
BJH	2300	1175	290	—	—	185	1043	533	132	—	—	84
JBH	2300	1003	226	1063	248	185	1043	455	103	482	112	84
JCH	2300	1063	248	1113	263	185	1043	482	112	505	119	84
JDH	2300	1113	263	1149	278	185	1043	505	119	521	126	84
JEH	2300	1149	278	1196	295	185	1043	521	126	542	134	84
JFH	2300	1196	295	—	—	185	1043	542	134	—	—	84

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

†See Model Number Nomenclature on page 6.

**Compressor aerodynamic component weight only, motor weight not included. Applicable to standard compressors only. For high lift compressors, contact Carrier Chiller Marketing for weights.

††Stator weight includes the stator and shell.