



Product Data

AquaEdge® High-Efficiency
Variable Speed Screw Chiller
175 to 500 Nominal Tons
(615 to 1934 Nominal kW)



Model #: 23XRVB6B6EPJR351
Serial #: 1217Q25794

Year: 2017
Size: 300 Tons



23XRV
High-Efficiency Variable Speed Screw Chiller
with Greenspeed® Intelligence

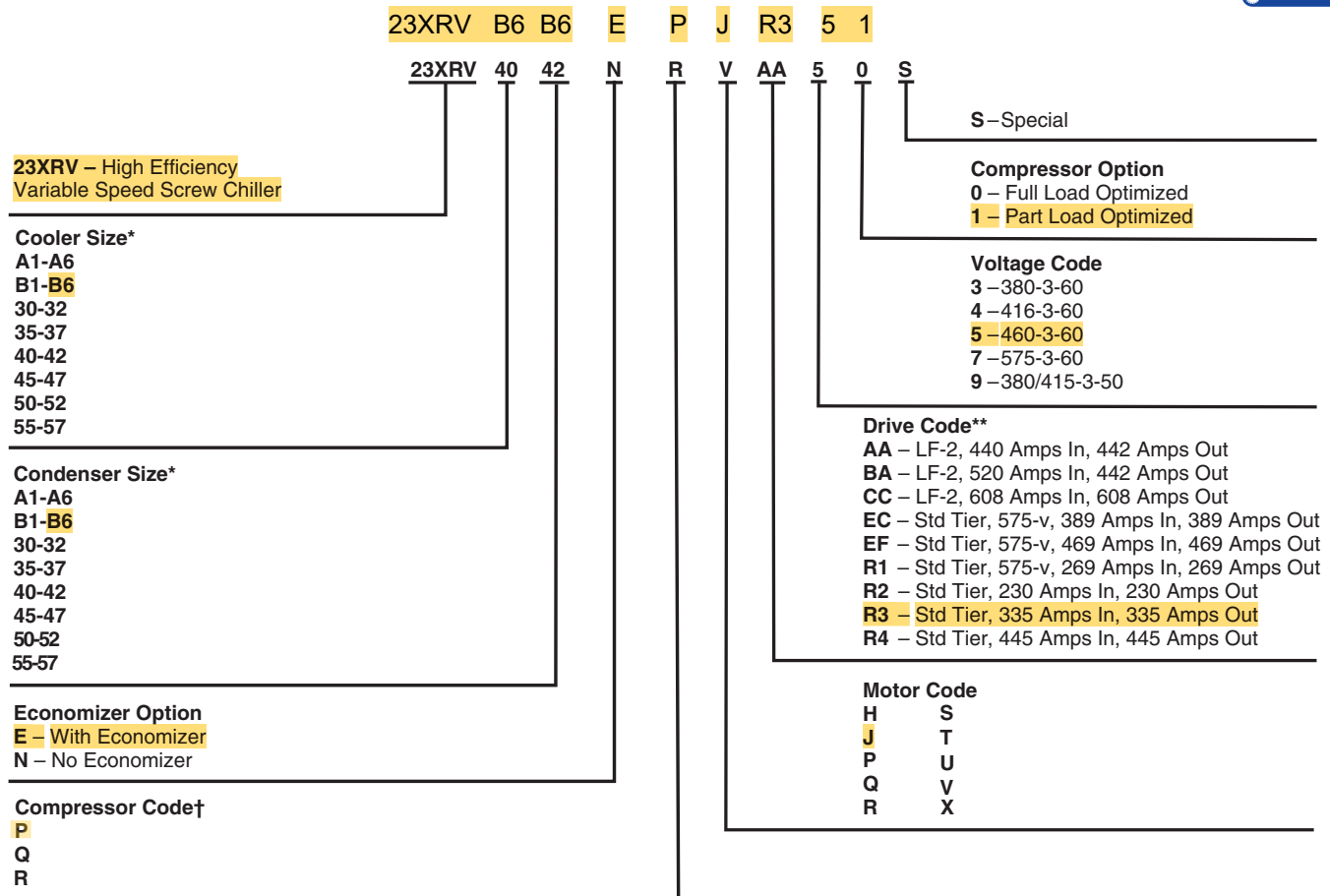
Shipping Weight: 14,784 lbs.
Operating Weight: 17,539 lbs.

L: 14' 9"

W: 3' 11"

H: 7' 5"

Model number nomenclature



* First character denotes frame size.

† Only H and J motors are used with P compressors. Only type V motors are used with Q compressors.

**Maximum limits only. Additional application limits apply that may reduce these ampacities.



Quality Assurance

ISO 9001:2008-certified processes

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

SEISMICOMPLIANT*

* Meets IBC 2006, ASCE-7-05, CBC 2007, and OSHPD seismic requirements.

23XRV COMPRESSOR AND MOTOR WEIGHTS

COMPRESSOR TYPE	MOTOR SIZE	ENGLISH				SI			
		Total Compressor Weight (lb)	Stator Weight (lb)	Rotor Weight (lb)	Motor Terminal Cover (lb)	Total Compressor Weight (kg)	Stator Weight (kg)	Rotor Weight (kg)	Motor Terminal Cover (kg)
P	H,J	3036	110	167	N/A	1377	50	76	N/A
Q	V	4090	370	193	39	1855	168	88	18
R	P,Q,R,S,T,U,V,X	4866	441	229	46	2207	200	104	21

MAXIMUM COMPONENT WEIGHTS

COMPONENT		FRAME 3 HEAT EXCHANGER		FRAME 4 HEAT EXCHANGER		FRAME 5 HEAT EXCHANGER		FRAME A HEAT EXCHANGER		FRAME B HEAT EXCHANGER	
		lb	kg	lb	kg	lb	kg	lb	kg	lb	kg
Isolation Valves		70	32	70	32	115	52	70	32	70	32
Suction Elbow	P Compressor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Q Compressor	159	72	187	85	184	83	N/A	N/A	N/A	N/A
	R Compressor	179	81	237	108	232	105	N/A	N/A	N/A	N/A
Discharge Elbow/Muffler	P Compressor	N/A	N/A	N/A	N/A	N/A	N/A	584	265	584	265
	Q Compressor	597	271	597	271	597	271	N/A	N/A	N/A	N/A
	R Compressor	747	339	747	339	747	339	N/A	N/A	N/A	N/A
Vaporizer and Oil Sump		700	318	700	318	700	318	700	318	700	318
Economizer		542	246	542	246	542	246	174	79	174	79

VFD (VARIABLE FREQUENCY DRIVE) WEIGHT TABLE

DRIVE TYPE	COMPRESSOR	VOLTAGE/Hz	AMPERAGE (A)	WEIGHT (lb)
Std. Tier	P	575/60	269	1200
	P/Q/R	480/60 & 380/400/415/50	230	998
			335 & 445	1200
	Q/R	575/60	389 & 469	1650
LF2	Q/R	380-415 50/60	440	1400
		440-480 50/60	440	1500
		380-415 & 440-480 50/60	520 & 608	1800

23XRV CODE 30-57 HEAT EXCHANGER WEIGHTS

CODE	ENGLISH						METRIC (SI)					
	Dry Rigging Weight (lb)*		Machine Charge				Dry Rigging Weight (kg)*		Machine Charge			
	Cooler Only	Cond. Only	Refrigerant Weight (lb)		Liquid Weight (lb)		Cooler Only	Cond. Only	Refrigerant Weight (kg)		Liquid Weight (kg)	
			With Economizer	Without Economizer	Cooler	Cond.			With Economizer	Without Economizer	Cooler	Cond.
30	4148	3617	800	650	464	464	1882	1641	363	295	210	210
31	4330	3818	800	650	531	542	1964	1732	363	295	241	246
32	4522	4023	800	650	601	621	2051	1825	363	295	273	282
35	4419	4529	910	760	511	513	2004	2054	413	345	232	233
36	4627	4758	910	760	587	602	2099	2158	413	345	266	274
37	4845	4992	910	760	667	692	2198	2264	413	345	303	314
40	5008	4962	900	825	863	915	2272	2251	408	375	391	415
41	5178	5155	900	825	930	995	2349	2338	408	375	422	451
42	5326	5347	900	825	990	1074	2416	2425	408	375	449	487
45	5463	5525	1015	960	938	998	2478	2506	460	436	425	453
46	5659	5747	1015	960	1014	1088	2567	2607	460	436	460	494
47	5830	5967	1015	960	1083	1179	2644	2707	460	436	491	535
50	5827	6013	1250	1100	1101	1225	2643	2727	567	499	499	556
51	6053	6206	1250	1100	1192	1304	2746	2815	567	499	541	591
52	6196	6387	1250	1100	1248	1379	2810	2897	567	499	566	626
55	6370	6708	1430	1280	1201	1339	2889	3043	649	581	545	607
56	6631	6930	1430	1280	1304	1429	3008	3143	649	581	591	648
57	6795	7138	1430	1280	1369	1514	3082	3238	649	581	621	687

LEGEND

COND — Condenser

*Rigging weights are for standard tubes of standard wall thickness (Super E3 and Spikefin 3, 0.025-in. [0.635 mm] wall).

NOTES:

1. Cooler includes the suction elbow and 1/2 the distribution piping weight.
2. Condenser includes float valve and sump, discharge elbow, and 1/2 the distribution piping weight.
3. All weights for standard 2-pass NIH (nozzle-in-head) design with Victaulic grooves.

23XRV COOLER FRAME SIZE A1-A6, B1-B6 HEAT EXCHANGER WEIGHTS

FRAME SIZE	ENGLISH			METRIC (SI)		
	Dry Rigging Wt* (lb)	Refrig. Wt (lb)	Water Wt (lb)	Dry Rigging Wt* (kg)	Refrig. Wt (kg)	Water Wt (kg)
A1	3240	270	394	1470	122	179
A2	3295	290	424	1495	132	192
A3	3395	310	477	1540	141	216
A4	3468	330	517	1573	150	235
A5	3582	360	578	1625	163	262
A6	3696	390	639	1677	177	290
B1	3481	305	450	1579	138	204
B2	3543	325	484	1607	147	220
B3	3658	355	545	1659	161	247
B4	3741	375	590	1696	170	268
B5	3871	415	660	1755	188	299
B6	4002	445	730	1815	202	331

*Rigging weights are for standard tubes of standard wall thickness (Super E3 and Spikefin 3, 0.025-in. [0.635 mm] wall).

NOTES:

1. Cooler includes the suction elbow and 1/2 the distribution piping weight.
2. Condenser includes float valve and sump, discharge elbow, and 1/2 the distribution piping weight.
3. All weights for standard 2-pass NIH (nozzle-in-head) design with Victaulic grooves.
4. For units with economizers add 20 lb (9 kg) to refrigerant weight.

23XRV CONDENSER FRAME SIZE A1-A6, B1-B6 HEAT EXCHANGER WEIGHTS

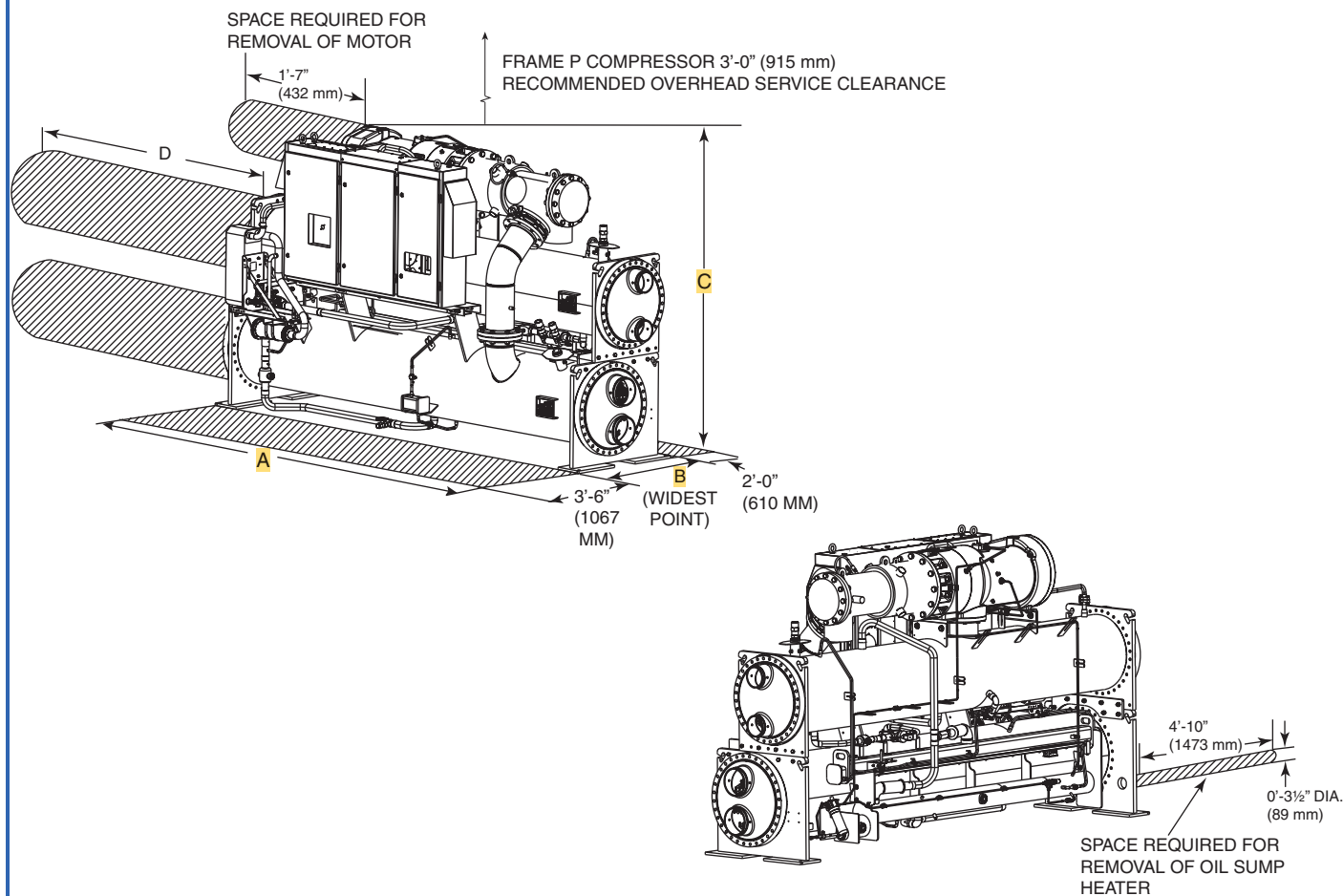
FRAME SIZE	ENGLISH			METRIC (SI)		
	Dry Rigging Wt* (lb)	Refrig. Wt (lb)	Water Wt (lb)	Dry Rigging Wt* (kg)	Refrig. Wt (kg)	Water Wt (kg)
A1	4124	550	394	1871	249	179
A2	4234	550	453	1921	249	205
A3	4334	550	507	1966	249	230
A4	4439	550	563	2014	249	255
A5	4580	550	639	2078	249	290
A6	4735	550	722	2148	249	327
B1	4410	625	450	2001	283	204
B2	4535	625	517	2057	283	235
B3	4649	625	579	2109	283	263
B4	4769	625	643	2163	283	292
B5	4931	625	730	2237	283	331
B6	5108	625	825	2317	283	374

*Rigging weights are for standard tubes of standard wall thickness (Super E3 and Spikefin 3, 0.025-in. [0.635 mm] wall).

NOTES:

1. Cooler includes the suction elbow and 1/2 the distribution piping weight.
2. Condenser includes float valve and sump, discharge elbow, and 1/2 the distribution piping weight.
3. All weights for standard 2-pass NIH (nozzle-in-head) design with Victaulic grooves.
4. For units with economizers add 20 lb (9 kg) to refrigerant weight.

23XRV HEAT EXCHANGER FRAME SIZES A,B DIMENSIONS (UNIT WITH P COMPRESSOR SHOWN)



23XRV HEAT EXCHANGER FRAME SIZES A,B DIMENSIONS (NOZZLE-IN-HEAD AND MARINE WATERBOXES)

HEAT EXCHANGER SIZE	A (Length)		B (Max. Width)		C (Height)		D Tube Removal Space	
	ft-in.	mm	ft-in.	mm	ft-in.	mm	ft-in.	mm
A	13- 1/2	3988	3- 10 ³ / ₈	1178	7- 5	2261	12- 8 1/4	3867
B	14- 9	4496	3- 10 ³ / ₈	1178	7- 5	2261	14- 4 3/4	4388

NOTES:

- 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.
- Allow at least 3 ft (915 mm) overhead clearance for service rigging for the compressor.
- Certified drawings available upon request.