



PHYSICAL SPECIFICATIONS

Model	ZKEW-D	10R	12R	15R	19R*	20R*	20T*	22T*	23R*	24R*	24T*
Cooling Capacity	TR	71.1	89.1	108.1	133.0	164.1	142.3	160.3	186.5	202.1	177.6
	kW	250.1	313.4	380.2	467.8	577.1	500.5	563.8	655.9	710.8	624.6
	10 ⁴ kcal/h	21.5	26.9	32.7	40.2	49.6	43.0	48.5	56.4	61.1	53.7
Min % Unit Capacity		25%	25%	25%	25%	25%	12.5%	12.5%	25%	25%	12.5%
Power		460/3P/60Hz									
Compressor											
Model (Qty)		1210(1)	1212(1)	1215(1)	1210(1)	1222(1)	1210(2)	1210(1)/ 1212(1)	1222(1)	1227(1)	1212 (2)
Power Input	kW	44	53	63	77	96	89.3	97.5	105	115	108
RLA, Each		78	104	129	126	154	78.0(2)	78.0/104.0	154	193	104.0(2)
LRA, Each		425	588	644	612	749	424.5(2)	424.5/588.0	749	923	588.0(2)
Evaporator											
Model		C3R	D2R	E2R	FAR	EAR	EAR	JAR	JAR	JBR	JBR
Connection Size	inches[mm]	5[127]	6[152]	6[152]	8[203]	6[152]	6[152]	8[203]	8[203]	8[203]	8[203]
Design Press. Water Side	psig[kPa]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]
Water Flow Rate	USgpm[m³/hr]	170.6[38.8]	213.8[48.6]	259.4[59.0]	320.0[72.7]	393.8[89.5]	342.8[77.9]	386.7[87.9]	447.6[101.7]	485.0[110.2]	427.6[97.2]
Evap. Pressure Drop	psig[kPa]	1.6[11.0]	1.7[11.7]	1.6[11.0]	2.0[13.8]	4.1[30.3]	3.3[22.8]	3.9[26.9]	4.2[28.9]	4.4[30.3]	3.7[25.5]
Condenser											
Model		B4R	B5R	C2R	D2R	5BR	5BR	5BR	5BR	5CR	5CR
Connection Size	inches[mm]	5[127]	5[127]	6[152]	6[152]	6[152]	6[152]	6[152]	6[152]	6[152]	6[152]
Design Press. Water Side	psig[kPa]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]
Water Flow Rate	USgpm[m³/hr]	213.3[48.5]	267.3[60.8]	324.3[73.7]	368.7[83.8]	492.3[111.9]	401.4[91.2]	457.8[104.0]	559.5[127.1]	606.3[137.8]	498.3[113.3]
Cond. Pressure Drop	psig[kPa]	2.0[13.8]	2.2[15.2]	2.3[15.8]	2.5[17.2]	4.0[27.5]	3.4[23.4]	4.3[29.6]	4.9[33.8]	4.4[30.3]	3.9[26.9]
Dimensions											
Length	inches[mm]	124 1/4 [3157]	124 1/4 [3157]	124 1/2 [3162]	132 3/16 [3358]	164 3/16 [4171]	152 3/16 [3866]	152 3/16 [3866]	164 3/16 [4171]	164 3/16 [4171]	152 3/16 [3866]
Width	inches[mm]	42 3/16 [1072]	45 3/16 [1148]	50 5/8 [1286]	70 [1778]	70 [1778]	52 3/8 [1330]	53 11/16 [1364]	70 [1778]	70 [1778]	53 11/16 [1364]
Height	inches[mm]	72 15/16 [1852]	72 15/16 [1852]	83 1/4 [2115]	71 1/4 [1810]	67 15/16 [1725]	78 7/8 [2003]	80 7/8 [2054]	70 3/16 [1783]	70 3/16 [1783]	80 7/8 [2054]
General Information											
Shipping Weight	lbs[kg]	4475[2030]	4696[2130]	5170[2345]	8576[3890]	10497[4761]	7981[3620]	8862[4020]	10915[4951]	11326[5137]	9669[4387]
Operating Weight	lbs[kg]	4805[2180]	4805[2180]	5622[2550]	9370[4250]	11173[5068]	8929[4050]	9700[4400]	11631[5276]	12118[5497]	10465[4747]
Approx. Refrig. Charge R134a	lbs[kg]	254[115]	320[145]	364[165]	419[190]	529[240]	529[240]	558[253]	558[253]	584[265]	584[265]

Model	ZKEW-D	27R*	27T*	30R*	30T*	36R	38T*	40T*	41R	46T*
Cooling Capacity	TR	220.8	197.0	248.6	213.5	292.4	270.5	330.4	332.2	375.5
	kW	776.6	692.8	874.3	750.9	1028.4	951.3	1162.0	1168.3	1320.6
	10 ⁴ kcal/h	66.8	59.6	75.2	64.6	88.4	81.8	99.9	100.5	113.6
Min % Unit Capacity		25%	12.5%	25%	12.5%	25%	12.5%	12.5%	25%	12.5%
Power		460/3P/60Hz								
Compressor										
Model (Qty)		1227(1)	1212(1)/ 1215(1)	1230(1)	1215(2)	2233(1)	1220(2)	1222(2)	2236(1)	1222(2)
Power Input	kW	124	115.9	143	127.4	162	151.5	185.7	184	207
RLA, Each		193	104.0/129.0	224	129.0(2)	259	126.0(2)	154.0(2)	309	154(2)
LRA, Each		923	588.0/643.5	1019	643.5(2)	1380	612.4(2)	748.5(2)	1821	749(2)
Evaporator										
Model		6DR	6DR	6ER	6ER	7CR	6CR	8BR	7BR	8DR
Connection Size	inches[mm]	8[203]	8[203]	8[203]	8[203]	8[203]	8[203]	10[254]	10[254]	10[254]
Design Press. Water Side	psig[kPa]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]
Water Flow Rate	USgpm[m³/hr]	529.9[120.4]	474.0[107.7]	596.6[135.6]	513.6[116.7]	701.8[159.5]	655.2[148.9]	798.8[181.5]	797.3[181.2]	901.2[204.8]
Evap. Press. Drop	psig[kPa]	3.8[26.2]	3.2[22.1]	4.3[29.3]	3.4[23.4]	4.6[31.7]	5.1[35.2]	4.7[32.4]	4.7[32.4]	5[34.5]
Condenser										
Model		6CR	6CR	1KR	1KR	RAR	K5R	M3R	M1R	M5R
Connection Size	inches[mm]	6[152]	6[152]	8[203]	8[203]	8[203]	8[203]	10[254]	10[254]	10[254]
Design Press. Water Side	psig[kPa]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]
Water Flow Rate	USgpm[m³/hr]	662.4[150.6]	547.0[124.3]	745.8[168.5]	596.4[135.5]	877.2[199.4]	749.4[170.3]	913.8[207.7]	996.6[226.5]	1126.5[256.0]
Cond. Press. Drop	psig[kPa]	4.7[32.4]	4.1[28.3]	4.5[31.1]	3.7[25.5]	4.9[33.8]	5.2[35.9]	4.8[33.1]	4.7[32.4]	4.6[31.7]
Dimensions										
Length	inches[mm]	164 3/16 [4171]	152 11/16 [3878]	164 3/16 [4171]	158 1/16 [4015]	174 3/16 [4425]	196 3/4 [4997]	196 3/4 [4997]	174 3/16 [4425]	196 3/4 [4997]
Width	inches[mm]	70[1778]	55 1/2[1410]	70[1778]	55 9/16[1412]	70[1778]	75[1905]	80[2032]	70[1778]	80[2032]
Height	inches[mm]	72 3/16 [1833]	87 3/8 [2219]	75 3/4 [1923]	87 3/8 [2219]	86 5/8 [2200]	78 [1981]	84 7/16 [2145]	86 5/8 [2200]	84 7/16 [2145]
General Information										
Shipping Weight	lbs[kg]	11962[5426]	10306[4676]	13075[5931]	11419[5181]	15205[6897]	14103[6397]	17414[7899]	16180[7339]	18211[8261]
Operating Weight	lbs[kg]	12833[5821]	11180[5071]	14052[6374]	12398[5624]	16473[7472]	15393[6982]	18673[8470]	17633[7998]	19863[9010]
Approx. Refrig. Charge R134a	lbs[kg]	705[320]	705[320]	750[340]	750[340]	981[445]	882[400]	1014[460]	1102[500]	1113[505]

*Optional compact footprint series is available. Unit height may be increased. Please consult factory for details.

- Notes: 1. This physical specifications table is based on Superior vessel models with the following operation condition: inlet/outlet cooled water temperature 54/44 °F, inlet/outlet cooling water temperature 85/95 °F, Fouling factor of evaporator 0.0001 hr.ft² °F/Btu, Fouling factor of condenser 0.00025 hr.ft² °F/Btu.
 2. Actual capacity will depend on the specified conditions. To consult nearest ODYNE sales office for computer selections
 3. Non-standard chillers can be designed according to different requirements.

PHYSICAL SPECIFICATIONS



Model	ZKEW-D	50T	54T	57T	60T	69	73	73T	75T	77
Cooling Capacity	TR	410	445	474.8	504.2	564	600.8	582.4	622.2	634.4
	kW	1442.0	1565.1	1669.9	1773.3	1983.6	2113.0	2048.3	2188.3	2231.2
	10 ⁶ kcal/h	124.0	134.6	143.6	152.5	170.6	181.7	176.2	188.2	191.9
Min % Unit Capacity		12.5%	12.5%	12.5%	12.5%	8.5%	8.5%	12.5%	12.5%	8.5%
Power		460/3P/60Hz								
Compressor										
Model (Qty)		1227(1)/ 1222(1)	1227(2)	1230(1)/ 1227(1)	1230(2)	1222(3)	1227(1)/ 1222(2)	2233(2)	2236(1)/ 2233(1)	1227(2)/ 1222(1)
Power Input	kW	226	245	263	281	320	338	327	349	358
RLA, Each		193/ 154	193(2)	224/ 193	224(2)	154(3)	193/ 154(2)	259(2)	309/ 259	193(2)/ 154
LRA, Each		923/ 749	923(2)	1019/ 923	1019(2)	749(3)	923/ 749(2)	1380(2)	1821/ 1380	923(2)/ 749
Evaporator										
Model		KBR	YAR	YBR	YCR	CGR	DBR	MAR	MBR	DCR
Connection Size	inches[mm]	10[254]	10[254]	10[254]	10[254]	10[254]	12[305]	12[305]	12[305]	12[305]
Design Press. Water Side	psig[kPa]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]
Water Flow Rate	USgpm[m ³ /hr]	984.0[223.6]	1068.0[242.7]	1139.5[259.0]	1210.1[275.0]	1353.6[307.6]	1441.9[327.7]	1397.8[317.7]	1493.3[339.4]	1522.6[346.0]
Evap. Press. Drop	psig[kPa]	4.9[33.8]	4.9[33.8]	5.1[35.1]	5.2[35.8]	6.3[43.4]	5.9[40.7]	5.6[38.6]	5.7[39.3]	6.0[41.34]
Condenser										
Model		T5R	YAR	YBR	YCR	1BR	1CR	JAR	JBR	1CR
Connection Size	inches[mm]	10[254]	10[254]	10[254]	10[254]	10[254]	10[254]	12[305]	12[305]	10[254]
Design Press. Water Side	psig[kPa]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]
Water Flow Rate	USgpm[m ³ /hr]	1230.0[279.7]	1335.0[303.4]	1424.4[323.7]	1512.6[343.8]	1692.0[384.6]	1802.4[409.6]	1747.2[397.1]	1866.6[424.2]	1903.2[432.5]
Cond. Press. Drop	psig[kPa]	4.9[33.8]	4.8[33.1]	4.9[33.8]	5[34.5]	5.5[37.9]	5.5[37.9]	5.8[40.0]	5.3[36.5]	5.7[39.3]
Dimensions										
Length	inches[mm]	196 3/4 [4997]	196 3/4 [4997]	196 3/4 [4997]	196 3/4 [4997]	213 3/4 [5429]	213 3/4 [5429]	206 3/4 [5251]	206 3/4 [5251]	213 3/4 [5429]
Width	inches[mm]	80[2032]	80[2032]	80[2032]	80[2032]	88[2235]	88[2235]	88[2235]	88[2235]	88[2235]
Height	inches[mm]	86 7/16 [2196]	86 11/16 [2202]	86 11/16 [2202]	86 11/16 [2202]	86 [2184]	86 [2184]	82 7/8 [2104]	82 7/8 [2104]	86 [2184]
General Information										
Shipping Weight	lbs[kg]	19928[9039]	21645[9818]	22456[10186]	23071[10465]	26280[11920]	29203[13246]	26820[12165]	27597[12518]	29665[13456]
Operating Weight	lbs[kg]	21688[9837]	23588[10699]	24486[11107]	25208[11434]	28807[13067]	31949[14492]	29144[13220]	30111[13686]	32458[14723]
Approx. Refrig. Charge R134a	lbs[kg]	1312[595]	1356[615]	1422[645]	1477[670]	1731[785]	1940[880]	1455[660]	1543[700]	2017[915]

Model	ZKEW-D	81	81T	84	87	90	108	113	118	123
Cooling Capacity	TR	668.1	665.3	697.3	726.1	753.7	875.8	916.6	953.7	998.2
	kW	2381.0	2339.9	2452.0	2553.7	2650.8	3080.2	3223.7	3354.2	3510.7
	10 ⁶ kcal/h	204.8	201.2	210.9	219.6	228.0	264.9	277.2	288.5	301.9
Min % Unit Capacity		8.5%	12.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%
Power		460/3P/60Hz								
Compressor										
Model (Qty)		1227(3)	2236(2)	1230(1)/ 1227(2)	1230(2)/ 1227(1)	1230(3)	2233(3)	2236(1)/ 2233(2)	2236(2)/ 2233(1)	2236(3)
Power Input	kW	377	369	394	411	429	494	517	539	558
RLA, Each		193(3)	309(2)	224/ 193(2)	224(2)/ 193	224(3)	259(3)	309/ 259(2)	309(2)/ 259	309(3)
LRA, Each		923(3)	1821(2)	1019/ 923(2)	1019(2)/ 923	1019(3)	1380(3)	1821/ 1380(2)	1821(2)/ 1380	1821(3)
Evaporator										
Model		N1R	NAR	PCR	PAR	PAR	SCR	SDR	TAR	TBR
Connection Size	inches[mm]	12[305]	12[305]	12[305]	12[305]	12[305]	14[356]	14[356]	14[356]	14[356]
Design Press. Water Side	psig[kPa]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]
Water Flow Rate	USgpm[m ³ /hr]	1603.2[364.4]	1596.7[362.9]	1672.6[380.1]	1742.6[396.1]	1808.9[411.1]	2101.9[477.7]	2199.8[500.0]	2288.9[520.2]	2395.7[544.5]
Evap. Press. Drop	psig[kPa]	6.1[42.0]	5.2[35.8]	5.5[37.9]	5.6[38.6]	6.2[42.7]	5.7[39.3]	5.8[40.0]	6.1[42.0]	5.1[35.1]
Condenser										
Model		7BR	KAR	7BR	7CR	8AR	9AR	9BR	WAR	WBR
Connection Size	inches[mm]	12[305]	12[305]	12[305]	12[305]	12[305]	14[356]	14[356]	14[356]	14[356]
Design Press. Water Side	psig[kPa]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]	150[1034]
Water Flow Rate	USgpm[m ³ /hr]	2004.0[455.5]	1995.9[453.6]	2090.7[475.2]	2178.3[495.1]	2261.1[513.9]	2627.4[597.1]	2749.8[625.0]	2861.1[650.3]	2994.6[680.6]
Cond. Press. Drop	psig[kPa]	5.2[35.8]	4.9[33.8]	5.6[38.6]	5.7[39.3]	5.6[38.6]	5.2[35.8]	5.0[34.5]	4.5[31.0]	4.3[29.6]
Dimensions										
Length	inches[mm]	213 3/4 [5429]	206 3/4 [5251]	213 3/4 [5429]	213 3/4 [5429]	213 3/4 [5429]	201 3/4 [5124]	201 3/4 [5124]	199 [5055]	199 [5055]
Width	inches[mm]	88[2235]	88[2235]	88[2235]	88[2235]	88[2235]	99[2515]	99[2515]	99[2515]	99[2515]
Height	inches[mm]	86 [2184]	86 7/8 [2206]	86 7/8 [2206]	86 7/8 [2206]	91 1/4 [2318]	127 15/16 [3249]	127 15/16 [3249]	129 9/16 [3291]	129 9/16 [3291]
General Information										
Shipping Weight	lbs[kg]	31856[14450]	29952[13586]	33704[15288]	34339[15576]	35538[16120]	41832[18975]	43084[19543]	47673[21624]	49160[22298]
Operating Weight	lbs[kg]	34889[15825]	32773[14866]	36873[16725]	37608[17059]	38920[17954]	44342[20113]	45669[20715]	50533[22921]	52109[23636]
Approx. Refrig. Charge R134a	lbs[kg]	2260[1025]	1808[820]	2635[1195]	2701[1225]	2701[1225]	2253[1022]	2392[1085]	2601[1180]	2833[1285]

Notes: 1. This physical specifications table is based on Superior vessel models with the following operation condition: inlet/outlet cooled water temperature 54/44 °F, inlet/outlet cooling water temperature 85/95 °F, Fouling factor of evaporator 0.0001 hr.ft² °F/Btu, Fouling factor of condenser 0.00025 hr.ft² °F/Btu.
 2. Actual capacity will depend on the specified conditions. To consult nearest ODYNE sales office for computer selections
 3. Non-standard chillers can be designed according to different requirements.