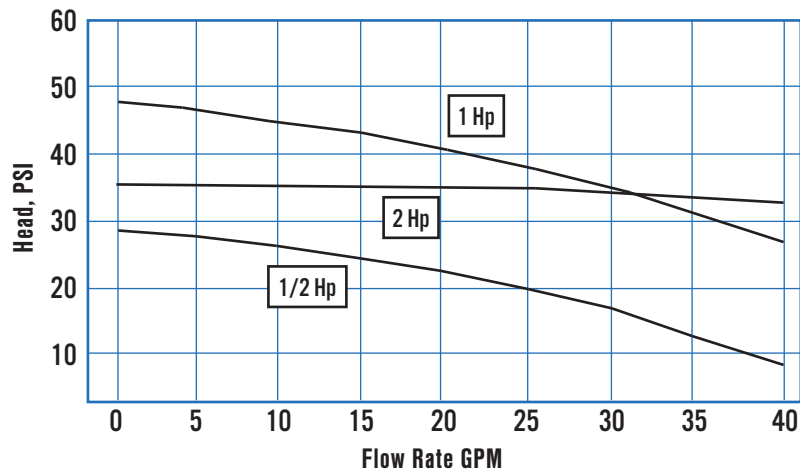
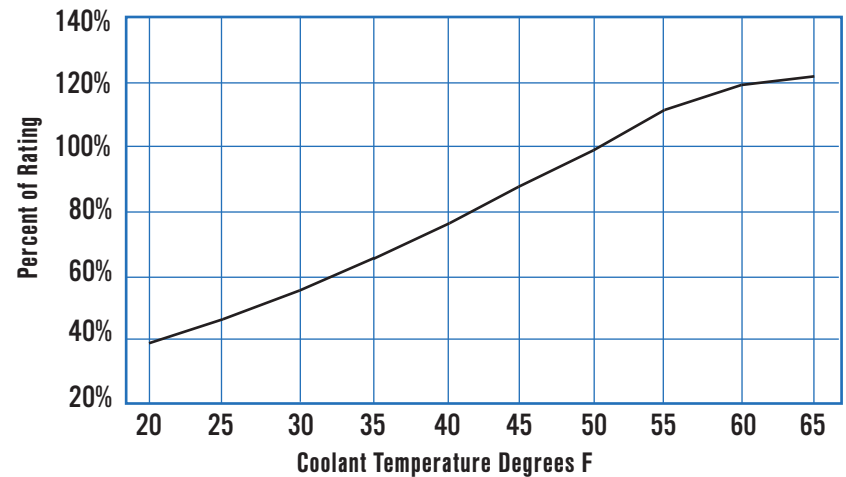


MODEL	UNITS	DS1/2AC	DS1AC	DS11/2AC	DS2AC	DS3AC	DS4AC	DS5AC	DS8AC	DS10AC	DS12AC
Capacity@ 50 F Coolant Temperature	Tons	0.4	0.9	1.5	2.0	3.0	4.1	5.0	7.2	9.20	11.1
Capacity@ 50 F Coolant Temperature	BTU/Hr	4,800	10,800	18,000	24,000	36,000	49,200	60,000	86,400	110,400	133,200
Capacity@ 50 F Coolant Temperature	Watts	1,400	1,360	5,270	7,032	10,550	14,400	17,580	25,300	32,3500	39,030
Compressor HP	HP	0.50	1.0	1.50	2.0	3.0	4.00	5.0	8.0	10.0	12.0
Condensator Fan	Qty/HP (Watts)	1/9W	1/50W	1/0.17	2/0.17	2/0.17	2/0.25	2/0.25	2/0.5	2/0.5	2/0.5
Condensator Air Flow	CFM	480	715	1,050	2,000	2,100	5,200	5,200	10,700	10,700	10,700
Standard Pump HP	HP	1/2	1/2	1/2	1/2	1/2	1/2	1	1	2	2
Full Load / Running Load Current											
115-1-60e	Amps	18.2/14.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
2081230V-1-60e	Amps	9.4/7.5	11.9/9.5	15.7/12.6	18.3/14.6	27.4/21.9	35.6/28.5	41.7/33.4	NA	NA	NA
208/230V-3-60e	Amps	NA	5.3/4.2	8.1/6.5	10.7 / 8.6	16.3/13.0	21.1/16.9	25.0/20.0	35.9/28.7	50.9/40.7	68.9/45.2
460-3-60	Amps	NA	2.6/2.2	3.9/3.01	5.2/4.2	7.7/6.2	9.6/7.7	11.4/9.1	17.5/14.2	23.2/19.1	32.2/025.6
Coolant Water Connectionse	Inches	3/4	3/4	3/4	3/4	1	1	10	1	1 1/2	1 1/2
Tank Size	Gal	6	6	6	6	6	6	19	19	19	19
Physical Size											
Length	Inches	34	36	36	42	42	50	50	52	52	52
Width	Inches	17	18	20	26	26	30	30	30	30	30
Height	Inches	33	39	39	39	39	48	48	65	65	65
Approx Shipping Wt	Pounds	300	350	420	500	540	700	725	880	960	1,020

Pump Performance



Derating Curve



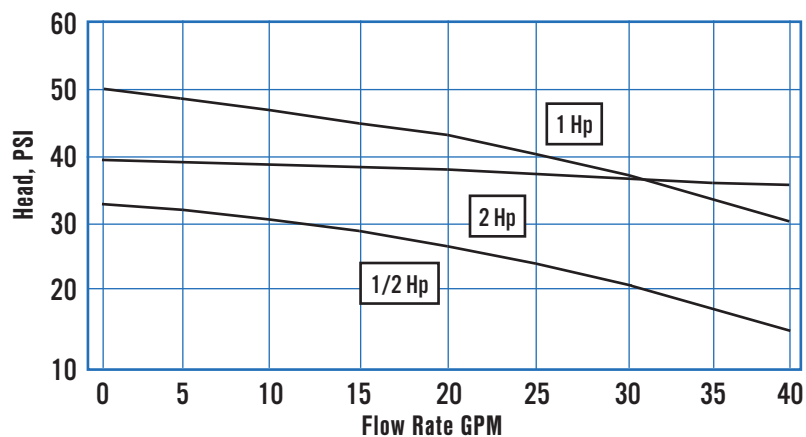


DS Remote Air Condensing Chillers

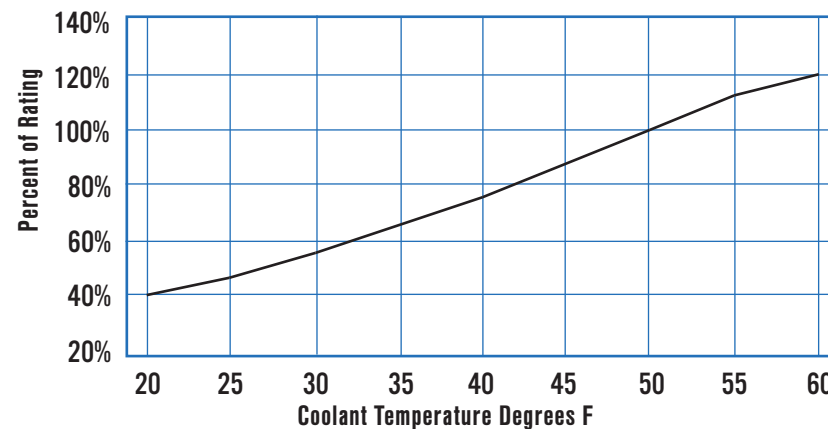


MODEL	UNITS	DS2ACS	DS3ACS	DS4ACS	DS5ACS	DS8ACS	DS10ACS	DS12ACS
Capacity@ 50 F Coolant Temperature	Tons	2.0	3.0	4.1	5.0	7.2	9.2	11.1
Capacity@ 50 F Coolant Temperature	BTU/Hr	24,000	36,000	149,200	60,000	86,400	110,400	133,200
Capacity @ 50 F Coolant Temperature	Watts	7,032	10,550	14,400	17,580	25,300	32,350	39,030
Compressor HP	HP	2.0	3.0	4.0	5.0	7.5	10.0	12.0
Standard Pump HP	HP	1/2	1/2	1/2	1	1	2	2
Process Connections	Inches	3/4	1	1	1	1	1.5	1.5
Full Load / Running Load Current								
2081230V-1-60	Amps	18.3/14.6	27.4/21.9	35.6/28.5	41.7/33.4	NA	NA	NA
2081230V-3-60	Amps	10.7/8.6	16.3/13.0	21.1/16.9	25.0/20.0	35.9/28.7	50.9/40.7	68.9/45.2
460-3-60	Amps	5.2/4.2	7.7/6.2	9.6 / 7.7	11.4/9.1	17.5/14.2	23.2/19.1	32.2/25.6
Tank Size	Gal	6	6	6	6	19	19	19
Physical Size								
Length	Inches	36	36	36	36	52	52	52
Width	Inches	22	22	22	22	28	28	28
Height	Inches	35	35	40	40	48	48	48
Weight	Pounds	430	480	580	600	735	790	790
Physical Size Outdoor Unit								
Length	Inches	40	40	40	40	42	82	82
Width	Inches	25	25	25	25	25	41	41
Height	Inches	32	32	32	32	40	40	40
Approx. Shipping Wt	Pounds	114	123	134	144	262	392	434

Pump Performance



Derating Curve



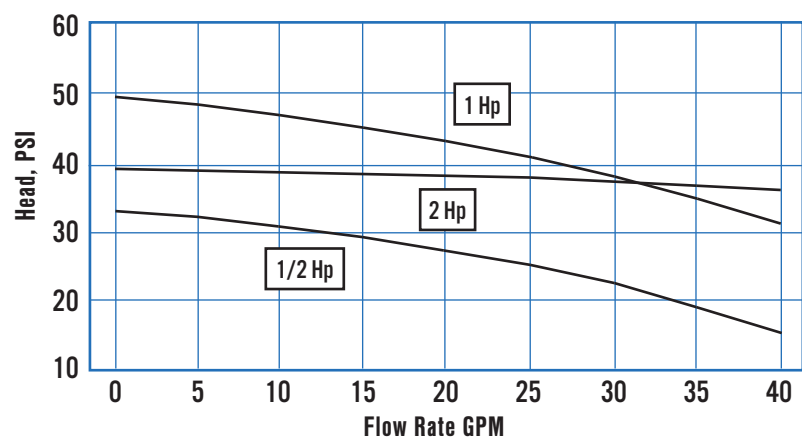


DS Air Cooled Chillers Operating on 50Hz

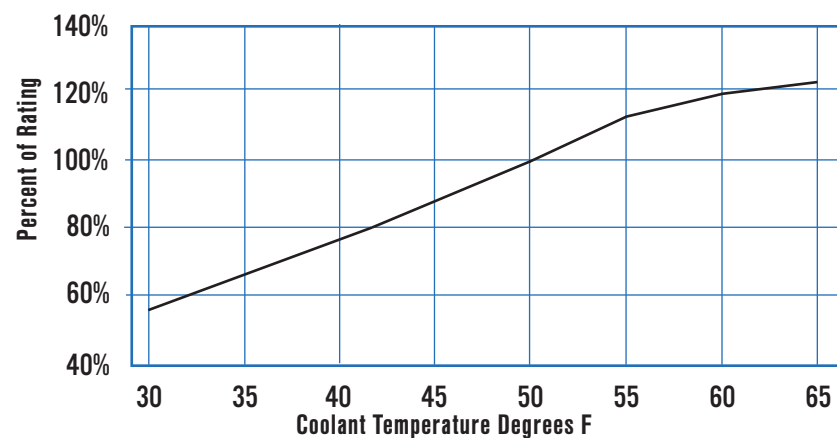


MODEL	UNITS	DS1/2AC	DS1AC	DS11/2AC	DS2AC	DS3AC	DS4AC	DS5AC	DS8AC	DS10AC	DS12AC
Capacity@ 50 F Coolant Temperature	Tons	0.33	0.75	1.25	1.67	2.50	3.42	4.17	6.00	7.67	9.25
Capacity@ 50 F Coolant Temperature	BTU/Hr	4,000	9,000	15,000	20,000	30,000	41,000	50,000	72,000	92,000	111,000
Capacity@ 50 F Coolant Temperature	Watts	1,172	2,637	4,395	5,860	8,790	12,013	14,650	21,096	26,956	32,523
Compressor HP	HP	0.50	1.0	1.5	2.0	3.0	4.0	5.0	8.0	10.0	12.0
Condensator Fan	Qty/HP (Watts)	1/9W	1/50W	1/0.17	2/0.17	2/0.17	2/0.25	2/0.25	2/0.5	2/0.5	2/0.5
Condensator Air Flow	CFM	480	715	1050	2000	2100	5200	5200	10700	10700	10700
Standard Pump HP	HP	1/2	1/2	1/2	1/2	1/2	1/2	1	1	2	2
Full Load / Running Load Current											
200V-1-50	Amps	9.4/7.5	11.9/9.5	15.7/12.6	18.3/14.6	27.4/21.9	35.6/28.5	41.7/33.4	NA	NA	NA
200-220V-3-50	Amps	NA	5.3/4.2	8.1/6.5	10.7 / 8.6	16.3/13.0	21.1/16.9	25.0/20.0	35.9/28.7	50.9/40.7	68.9/45.2
380-3-50	Amps	NA	2.6/2.2	3.9/3.1	5.2/4.2	7.7/6.2	9.6/7.7	11.4/9.1	17.5/14.2	23.27/19.1	32.2/25.6
Coolant Water Connectionse	Inches	3/4	3/4	3/4	3/4	1	1	10	1	1 1/2	11/2
Tank Size	Gal	6	6	6	6	6	6	6	19	19	19
Physical Size											
Length	Inches	34	36	36	42	42	50	50	52	52	52
Width	Inches	17	18	20	26	26	30	30	30	30	30
Height	Inches	33	39	39	39	39	48	48	65	65	65
Approx Shipping Wt	Pounds	300	350	420	500	540	700	725	880	960	1020

Pump Performance

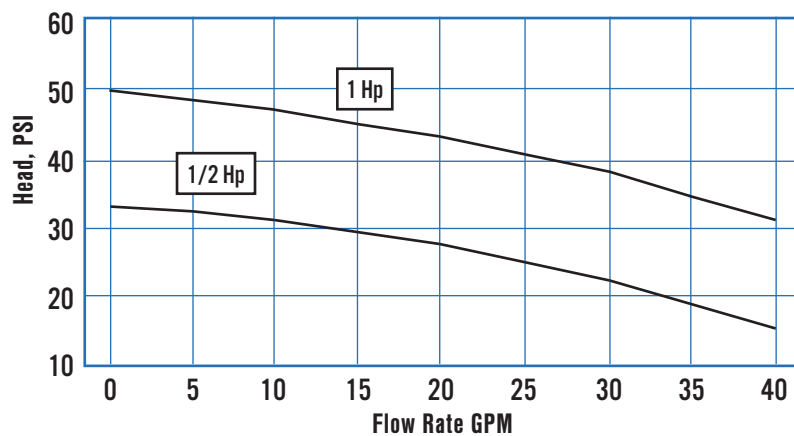


Derating Curve

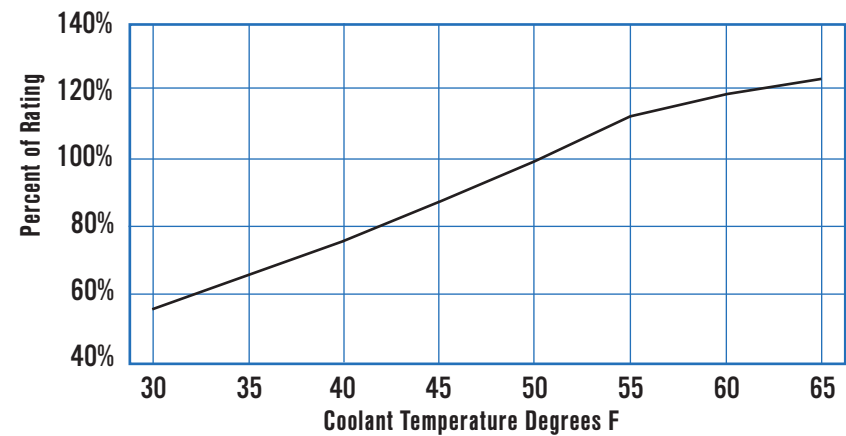


MODEL	UNITS	DSSACHE	DS1ACHE	DS1.5ACHE	DS1.5WCHE	DS2ACHE	DS2WCHE	DS3ACHE	DS3WCHE	DS5ACHE	DS5WCHE
Cooling											
Capacity@ 50 F Coolant Temperature	Tons	0.4	0.9	1.5	1.9	2.0	2.5	3.0	3.8	5.0	6.0
Capacity@ 50 F Coolant Temperature	BTU/Hr	4,800	10,800	18,000	22,000	24,000	30,000	36,000	45,600	60,000	72,000
Capacity@ 50 F Coolant Temperature	Watts	1,400	3,160	5,270	6,680	7,032	8,790	10,550	13,360	17,580	21,100
Heating											
Capacity (depends on voltage)	Watts	1,000-7,500	1,000-7,500	1,000-7,500	1,000-7,500	1,000-7,500	1,000-7,500	1,000-7,500	1,000-7,500	1,000-7,500	1,000-7,500
Compressor HP	HP	0.50	1.0	1.5	1.5	2.0	2.0	3.0	3.0	5.0	5.0
Standard Pump HP	HP	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1	1
Condenser Flow Rate											
City Water	CPM	-----	-----	-----	1.25	-----	1.5	-----	2.2	-----	4
Tower Water	CPM	-----	-----	-----	4.5	-----	6	-----	9	-----	15
Condenser Connections	Inches	-----	-----	-----	1/2	-----	1/2	-----	1/2	-----	3/4
Condenser Air Flow	CFM	480	715	1050	-----	2,000	-----	2,100	-----	2,500	-----
Process Connections	Inches	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	1	1
Tank Size	Gal	10	10	10	10	10	10	10	10	10	10
Physical Size											
Length	Inches	54	54	54	54	60	60	60	60	60	60
Width	Inches	20	20	24	24	28	28	28	28	32	24
Height	Inches	46	46	46	42	46	42	46	42	54	42
Approx Shipping Wt	Pounds	350	375	445	425	525	460	565	505	750	625

Pump Performance 1/2 and 1HP



Chiller Section Derating Curve



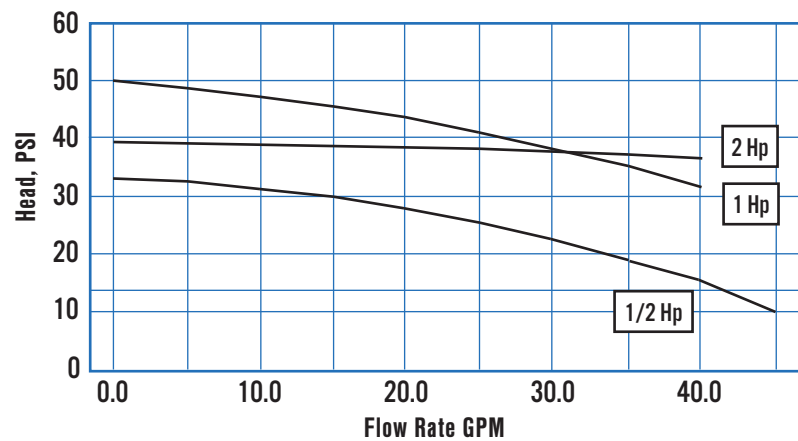


DS Water Cooled Chillers

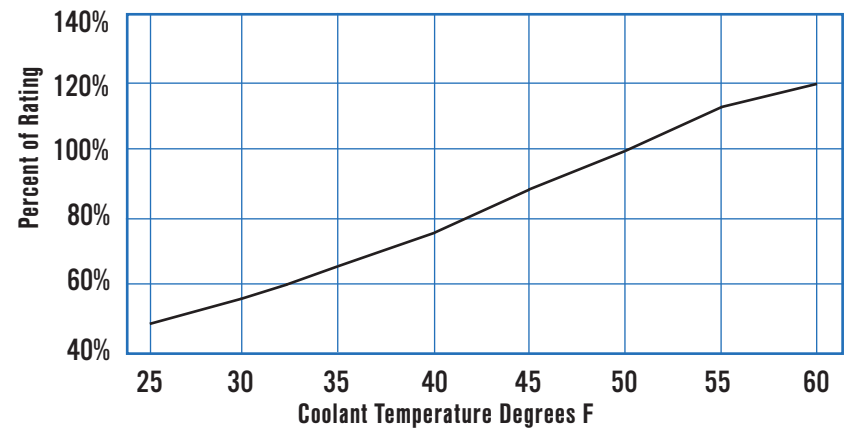


MODEL	UNITS	DS1WC	DS11/2WC	DS2WC	DS3WC	DS4WC	DS5WC	DS8WC	DS10WC	DS12WC
Capacity@ 50 F Coolant Temperature	Tons	1.1	1.9	2.5	3.8	4.6	6.0	8.3	10.3	12.0
Capacity@ 50 F Coolant Temperature	BTU/Hr	13,680	22,800	30,000	45,600	55,200	72,000	98,400	123,000	144,000
Capacity@ 50 F Coolant Temperature	Watts	4,008	6,680	8,790	13,360	16,170	21,100	29,200	36,000	42,100
Compressor HP	HP	1.0	1.5	2.0	3.0	4.0	5.0	7.5	10.0	12.0
Standard Pump HP	HP	1/2	1/2	1/2	1/2	1/2	1	1	2	2
Condensor Flow Rate										
City Water	GPM	0.75	1.25	1.5	2.2	3	4	6	7	8
Tower Water	GPM	2.7	4.5	6	9	12	15	22	26	30
Condenser Connections	Inches	1/2	1/2	1/2	1/2	3/4	3/4	3/4	1	1
Process Connections	Inches	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	1
Full Load I Running Load Current										
208/230V-1-60	Amps	9.6/8.1	15.7/12.7	18.3/14.6	27.4/21.9	35.6/28.7	41.7/33.4	-----	-----	-----
208/230V-3-60	Amps	-----	-----	10.7/8.6	16.3/13.0	24.9/19.9	25.0/19.9	33.3/26.5	49.3/39.0	59.1/46.8
460-3-60	Amps	-----	-----	5.2/4.2	7.7/6.2	9.6/7.7	11.4/9.1	15.2/12.1	22.3/18.1	26.8/21.7
Tank Size	Gal	6	6	6	6	6	19	19	19	19
Physical Size										
Length	Inches	36	36	36	36	36	36	52	52	52
Width	Inches	22	22	22	22	22	22	28	28	28
Height (frame & wheels)	Inches	35+4	35+4	35+4	35+4	40+4	40+4	48+5	48+5	48+5
Approx Shipping Wt	Pounds	380	400	430	480	580	600	735	790	790

Pump Performance 1/2 and 1HP



Derating Curve



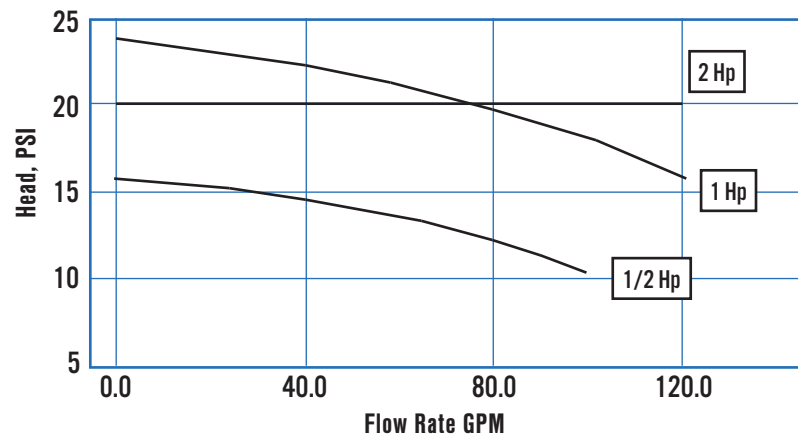


DS Water Cooled Chillers Operating on 50Hz



MODEL	UNITS	DS1WC	DS11/2WC	DS2WC	DS3WC	DS4WC	DS5WC	DS8WC	DS10WC	DS12WC
Capacity@ 50 F Coolant Temperature	Tons	0.9	1.6	2.1	3.2	3.8	5.0	6.9	8.5	10.0
Capacity@ 50 F Coolant Temperature	BTU/Hr	11,354	18,924	24,900	37,848	45,816	59,760	81,672	102,090	119,520
Capacity@ 50 F Coolant Temperature	Watts	3,327	5,544	7,296	11,089	13,421	17,513	24,236	29,880	34,943
Compressor HP	HP	1.0	1.5	2.0	3.0	4.0	5.0	7.5	10.0	10.0
Standard Pump HP	HP	1/2	1/2	1/2	1/2	1/2	1	1	2	2
Condensor Flow Rate										
City Water	GPM	0.75	1.25	1.5	2.2	3	4	6	7	8
Tower Water	GPM	2.7	4.5	6	9	12	15	22	26	30
Condenser Connections	Inches	1/2	1/2	1/2	1/2	3/4	3/4	3/4	1	1
Process Connections	Inches	3/4	3/4	3/4	1	1	1	1	1.5	1.5
Full Load Running Load Current										
208/230V-1-60	Amps	9.6/8.1	15.7/12.7	18.3/14.6	27.4/21.9	35.6/28.7	41.7/33.4	-----	-----	-----
208/230V-3-60	Amps	-----	-----	10.7/8.6	16.3/13.0	24.9/19.9	25.0/19.9	33.3/26.5	49.3/39.0	59.1/46.8
460-3-60	Amps	-----	-----	5.2/4.2	7.7/6.2	9.6/7.7	11.4/9.1	15.2/12.1	22.3/18.1	26.8/21.7
Tank Size	Gal	6	6	6	6	6	6	19	19	19
Physical Size										
Length	Inches	36	36	36	36	36	36	52	52	52
Width	Inches	22	22	22	22	22	22	28	28	28
Height (frame & wheels)	Inches	35+4	35+4	35+4	35+4	40+4	40+4	48+5	48+5	48+5
Approx Shipping Wt	Pounds	380	400	430	480	580	600	735	790	790

Pump Performance



Derating Curve

