

ASTON SERIES CHILLER

COMMERCIAL UNITS



AFFORDABLE RENEWABLE CLEAN

YOU WANT THE MOST FOR THE LEAST. AND WE'VE GOT IT.

You're interested in being the most efficient possible — providing extremely comfortable water-to-water heating and cooling while costing you less. GeoStar units will provide just that, we pride ourselves on our dedication to innovation and quality.

The Aston Series Chiller is at the high efficiencies of today's technology, the Aston Series Chiller utilizes environmentally friendly R-410A refrigerant and use two single-speed scroll compressors. This unit is available in a wide selection of capacities in compact cabinet sizes allowing passage through most doors for easy installation. Using the Johnson Controls FX10 microprocessor allows the unit to achieve maximum performance, and enables easy connection to a Building Automation System with optional Open N2, BacNet, or LonWorks protocols. The Aston Series Chiller brazed plate heat exchangers are constructed with 316 stainless steel ensuring you for long life.

ASTON SERIES CHILLER SIZES AND PERFORMANCE

SIZE

8-50 TONS

EFFICIENCY

2.8-3.7 COP

15.8-22.5 EER



ENCLOSURE DIMENSIONS

MODEL	A	B	C
096 - 240	53.0"	22.5"	38.0"
360	64.2"	23.9"	50.0"
540	71.0"	23.9"	52.4"

WITHOUT ENCLOSURE DIMENSIONS

MODEL	A	B	C
096 - 240	51.0"	22.5"	38.0"
360	63.2"	22.5"	50.0"
540	70.0"	22.5"	52.0"

PRIMARY FEATURES

✓ FLEXIBILITY:

- Designed to operate with entering source temperatures (EST) of 20° to 90°F in heating and 30° to 120°F in cooling. Entering load temperatures (ELT) can range from 60° to 120°F in heating, and from 30° to 110°F in cooling.
- Hot and chilled water from the same machine
- Modularized design for optimum capacity matching and staging
- Compact size allows passage through most doors
- Fast response lessens system changeover time on two-pipe fan-coil systems

- Replacement for low efficiency water-cooled chillers
- Replacement for electric boilers
- Used for tempering of outside air, process heating and cooling operations

✓ OPTIONS:

- Voltages 208-230/60/3 (8-30 ton only), 460/60/3, 575/60/3
- Sound attenuation enclosure package
- Communication cards for N2 Open, Lonworks or BacNet

✓ CONTROL:

- All unit functions controlled by FX10 microprocessor
- Optional communications with BacNet, LonWorks, or N2 Open Building Automation Systems
- User interface to aid in unit setup and diagnostics
- For more information, refer to the Submittal Data, Specification Catalog, or Installation Manual

✓ EFFICIENCY:

- High cooling EERs
- High heating COPs



✓ QUALITY:

- 316 stainless steel plate with cupronickel brazed heat exchangers
- Long-life hermetic scroll compressors
- Bidirectional thermostatic expansion valves
- Heavy duty liquid fittings accept Victaulic couplings
- Environmentally friendly R-410A
- Compressor control module
- Liquid line filter-dryers
- 24 VAC-75 VA controls transformer with circuit breaker
- Structural steel frame with optional acoustic cabinet
- Phase Guard

✓ ACCESSORIES (FIELD INSTALLED):

- Connection Kit: Victaulic to 2" FPT
- Connection Kit: Victaulic to bolted flange
- Optional heavy duty isolation springs

AHRI/ASHRAE/ISO 13256-2 WATER TO WATER RATINGS - 60 HZ

English (IP) Units

Model	Capacity Modulation	Flow Rate		Water Loop Heat Pump				Ground Water Heat Pump				Ground Loop Heat Pump			
				Cooling EST 86°F ELT 53.6°F		Heating EST 68°F ELT 104°F		Cooling EST 59°F ELT 53.6°F		Heating EST 50°F ELT 104°F		Cooling Full EST 77°F Part EST 68°F ELT 53.6°F		Heating Full EST 32°F Part ELT 41°F ELT 104°F	
		Sgpm	Lgpm	Capacity Btuh	EER Btuh/W	Capacity Btuh	COP	Capacity Btuh	EER Btuh/W	Capacity Btuh	COP	Capacity Btuh	EER Btuh/W	Capacity Btuh	COP
096	Full	23	23	95,000	14.8	127,000	4.1	108,000	23.0	106,000	3.4	102,000	17.2	84,000	3.1
	Part	23	23	52,000	16.3	68,000	4.7	59,000	25.5	56,000	3.8	57,000	22.5	49,000	3.5
108	Full	28	28	105,000	14.2	145,000	4.0	125,000	22.0	120,000	3.3	116,000	16.5	95,000	3.0
	Part	28	28	60,000	15.8	78,000	4.5	67,000	24.0	64,000	3.8	65,000	21.5	56,000	3.4
120	Full	32	32	128,000	13.8	175,000	3.8	151,000	21.0	145,000	3.2	139,000	16.0	115,000	2.8
	Part	32	32	72,000	15.4	94,000	4.3	79,000	22.5	78,000	3.7	78,000	20.5	68,000	3.1
140	Full	36	36	143,000	14.5	193,000	4.2	166,000	22.5	160,000	3.8	155,000	17.0	127,000	3.1
	Part	36	36	79,000	15.5	103,000	4.7	89,000	23.4	83,000	4.2	87,000	21.0	75,000	3.5
180	Full	45	45	170,000	14.0	209,000	3.9	183,000	20.0	189,000	3.5	177,000	15.8	153,000	2.8
	Part	45	45	89,000	15.0	110,000	4.2	100,000	19.8	98,000	3.8	98,000	18.8	89,000	3.1
210	Full	52	52	202,000	14.8	257,000	4.2	227,000	21.8	219,000	3.8	212,000	17.0	173,000	3.1
	Part	52	52	107,000	15.5	136,000	4.7	122,000	23.8	116,000	4.2	120,000	20.8	91,000	3.4
240	Full	60	60	222,000	13.3	286,000	3.9	257,000	20.0	244,000	3.5	242,000	15.5	193,000	2.8
	Part	60	60	117,000	13.9	150,000	4.3	137,000	21.0	123,000	3.8	132,000	18.7	102,000	3.0
360	Full	86	86	335,000	14.3	452,600	4.3	na	na	na	na	351,000	16.2	296,500	3.2
	Part	86	86	175,000	15.1	237,600	4.6	na	na	na	na	191,500	19.6	170,000	3.5
540	Full	135	135	533,400	14.5	691,200	4.3	na	na	na	na	558,500	16.4	485,800	3.3
	Part	135	135	277,300	15.2	359,400	4.5	na	na	na	na	302,800	19.5	282,600	3.7

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Metric (SI) Units

Model	Capacity Modulation	Flow Rate		Water Loop Heat Pump				Ground Water Heat Pump				Ground Loop Heat Pump			
				Cooling EST 30°C ELT 12°C		Heating EST 5°C ELT 40°C		Cooling EST 15°C ELT 12°C		Heating EST 10°C ELT 40°C		Cooling Full EST 25°C Part EST 20°C ELT 12°C		Heating Full EST 0°C Part ELT 5°C ELT 40°C	
		Source L/S	Load L/S	Capacity Watts	EER (W/W)	Capacity Watts	COP	Capacity Watts	EER (W/W)	Capacity Watts	COP	Capacity Watts	EER (W/W)	Capacity Watts	COP
096	Full	1.5	1.5	27,843	4.3	37,222	4.1	31,653	6.7	31,067	3.4	29,894	5.0	24,619	3.1
	Part	1.5	1.5	15,240	4.8	19,950	4.7	17,292	7.5	16,413	3.8	16,706	6.6	14,361	3.5
108	Full	1.8	1.8	30,774	4.2	42,497	4.0	36,655	6.4	35,170	3.3	33,998	4.8	27,843	3.0
	Part	1.8	1.8	17,585	4.6	22,860	4.5	19,637	7.0	18,757	3.8	19,050	6.3	16,413	3.4
120	Full	2.0	2.0	37,515	4.0	51,290	3.8	44,256	6.2	42,497	3.2	40,739	4.7	33,705	2.8
	Part	2.0	2.0	21,102	4.5	27,550	4.3	23,154	6.6	22,860	3.7	22,860	6.0	19,930	3.1
140	Full	2.3	2.3	41,911	4.2	56,565	4.2	48,652	6.6	46,893	3.8	45,428	5.0	37,222	3.1
	Part	2.3	2.3	23,154	4.5	30,188	4.7	26,084	6.9	24,326	4.2	25,498	6.2	21,981	3.5
180	Full	2.8	2.8	49,824	4.1	61,254	3.9	53,634	5.9	55,393	3.5	51,876	4.6	44,842	2.8
	Part	2.8	2.8	26,084	4.4	32,239	4.2	29,308	5.8	28,722	3.8	28,722	5.5	26,084	3.1
210	Full	3.3	3.3	59,203	4.3	75,322	4.2	66,530	6.4	64,185	3.8	62,134	5.0	50,703	3.1
	Part	3.3	3.3	31,360	4.5	39,859	4.7	35,756	7.0	33,998	4.2	35,170	6.1	26,671	3.4
240	Full	3.8	3.8	65,064	3.9	83,822	3.9	75,322	5.9	71,512	3.5	70,926	4.5	56,565	2.8
	Part	3.8	3.8	34,291	4.1	43,962	4.3	40,152	6.2	36,049	3.8	38,687	5.5	29,894	3.0
360	Full	5.4	5.4	98,183	4.2	132,649	4.3	na	na	na	na	102,872	4.7	86,899	3.2
	Part	5.4	5.4	51,290	4.4	69,637	4.6	na	na	na	na	56,125	5.7	49,824	3.5
540	Full	8.5	8.5	156,331	4.2	202,579	4.3	na	na	na	na	163,687	4.8	142,380	3.3
	Part	8.5	8.5	81,272	4.5	105,334	4.5	na	na	na	na	88,746	5.7	82,825	3.7

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