



**Due to manufacturer's policy of continuous product improvement, the manufacturer reserves the right to make changes without notice. Drawings in this submittal are representations of the equipment shown. Contact the factory for specific unit drawings.**

## **TABLE OF CONTENTS**

<b>Nomenclature .....</b>	<b>2</b>
<b>Standard Features and Options .....</b>	<b>3</b>
<b>Typical System Layouts .....</b>	<b>4 - 6</b>
<b>Basic Plumbing Diagrams .....</b>	<b>7</b>
<b>Dimensional and Electrical Specifications ....</b>	<b>8</b>
<b>Submittal Drawings .....</b>	<b>9 - 18</b>
<b>Performance Tables .....</b>	<b>19-27</b>
<b>AuraCool Pressure Drop (Delta P) Tables .....</b>	<b>28</b>



## Nomenclature



**Example:** AES 70 T4 R1

AES Auracool Economizer System

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70 Nominal Capacity MBTUH Ex . 70 = 70,000 BTUH, etc.

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T4 Electrical Requirements:

- S2 = 208-230/1/60
- T3 = 208-230/3/60
- T4 = 460-480/3/60
- T5 = 575/3/60
- T9 = 380/3/50

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R1 Design Revision 1

**Notes:**

1. Nominal capacity ratings are based on 55F entering glycol, 40F entering air. P.G. glycol at 40% concentration. For more information on performance under a variety of operating conditions, see capacity tables.
2. If you are new to the AuraCool Economizer product line, review ALL information provided in order to make the proper selections. If you have any questions contact Legacy Chiller System Engineering.



## Standard Features and Options

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### Standard Features (all models)

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- ETL Listed
- Delta DSC/DAC 1146E microprocessor controlled
- BACNET compatible
- RJ-45 Ethernet port connection for easy network connection
- Belimo 3-WAY mixing valve
- Heavy Duty, fuse protected control transformers
- Commercial / Industrial grade control I/O's
- Durable galvanized steel construction
- High efficiency copper tube aluminum fin coils
- Heavy Duty base frame with fork lift slots
- Factory performance tested



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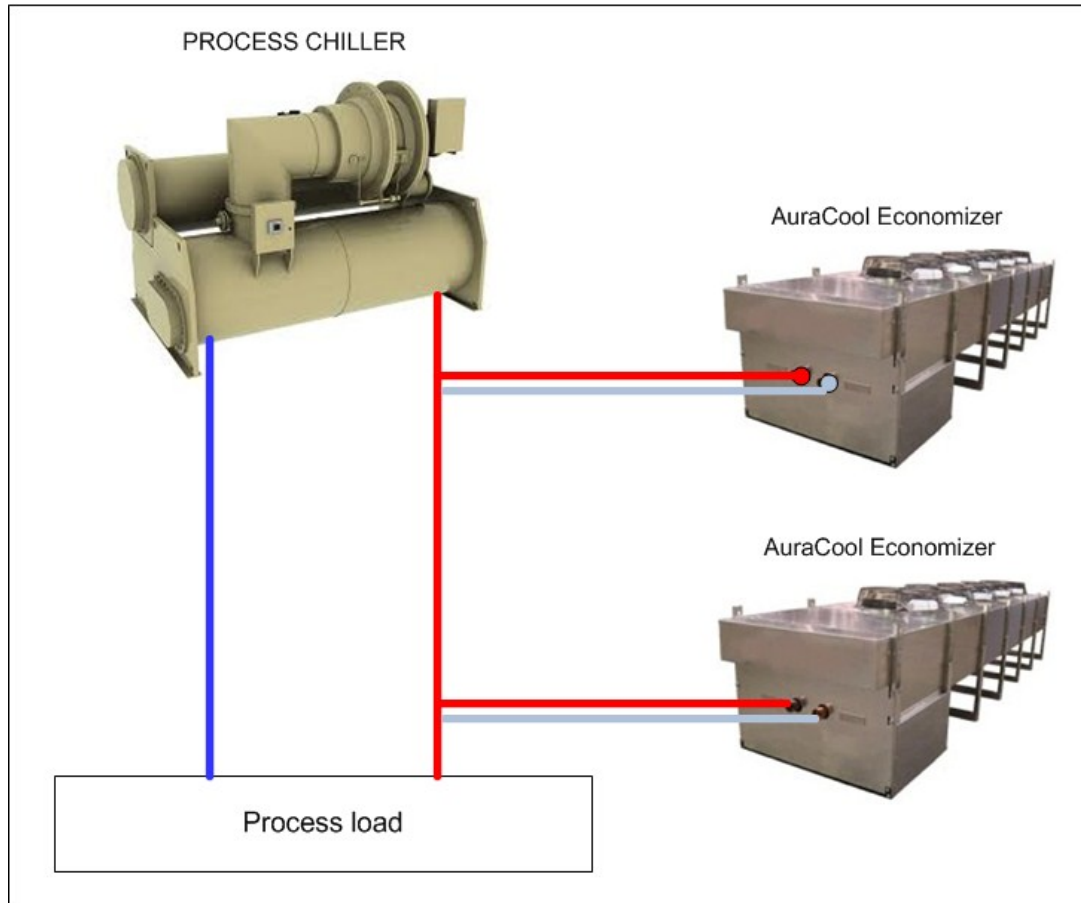
### Available Options (most models)

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- Delta HMI touch screen interface STANDARD firmware allowing easy onsite AuraCool Economizer performance review and edits.
- Delta HMI touch screen interface ENHANCED web server firmware. Connect your building's intranet to the HMI. Using a dedicated IP address and any standard Internet browser review and edit AuraCool Economizer performance from anywhere. Note, for access outside local gateway special firewall port forward will need to be programmed by building I.T. personnel.
- Legacy's ORCA LITE remote PC software package with USB security key
- Chiller interface card with input sensors



## Typical System Layouts - Chiller Parallel



**Parallel Configuration:** Since the AuraCool Economizer system can potentially be retrofit onto any process chiller application, a parallel plumbing configuration can be ideal.

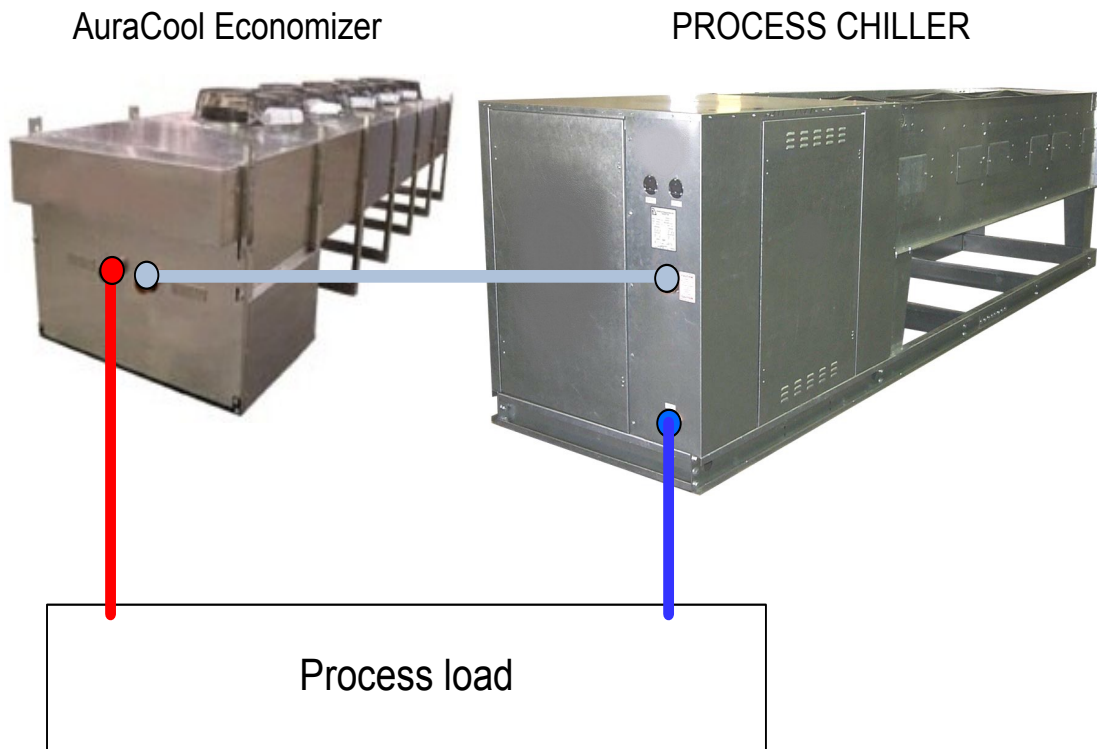
Additional items to consider for **PARALLEL** system layouts:

1. Estimated delta P calculations provided consider the AuraCool Economizer system ONLY. All other pressure drops including (but not limited to) chiller, process, piping, fittings and filters need to be accounted for when calculating externally mounted system pumps.
2. Selection of an optional booster pump should be considered to offset the Delta P of the AuraCool Economizer system.

**Always consider working with a qualified mechanical engineer to assure proper AuraCool Economizer and booster pump selections.**



## Typical System Layouts - Chiller Series



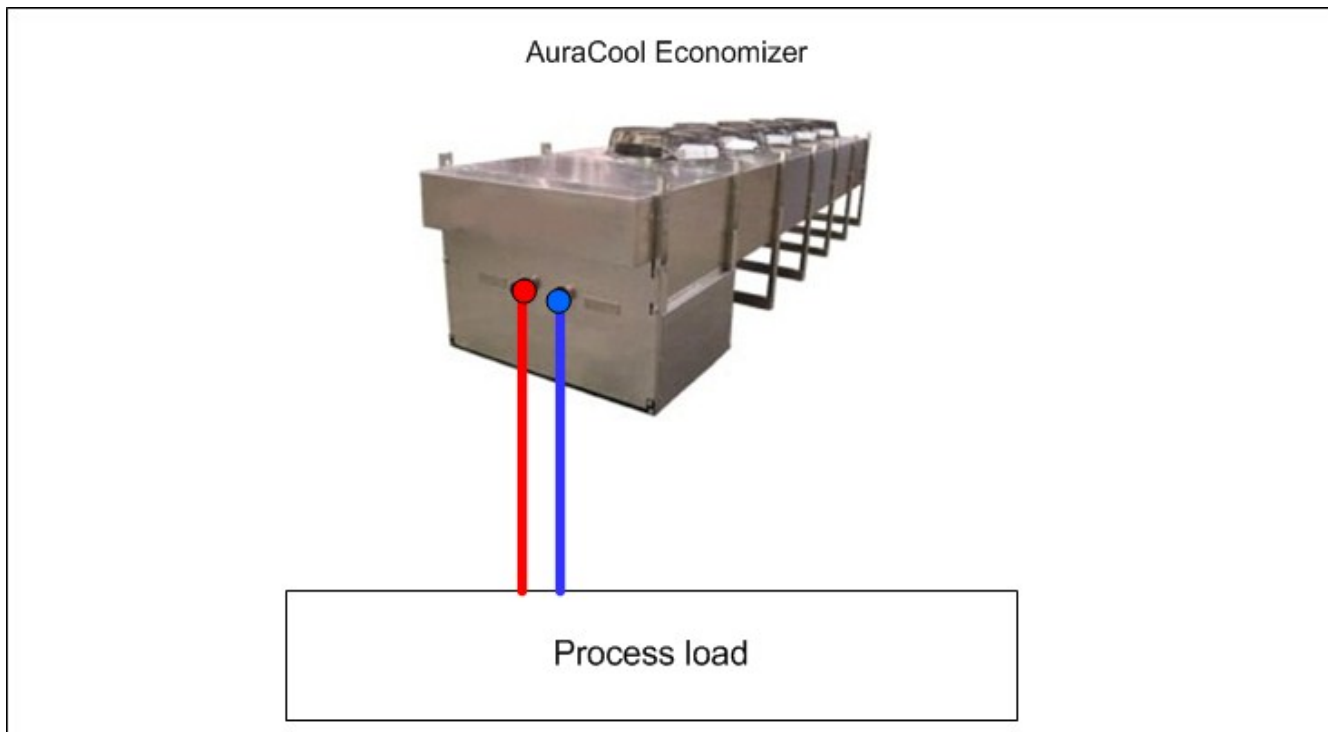
**Series Configuration:** For new design build projects, installing AuraCool Economizer Technology in series with process flow can be ideal provided Delta P through AuraCool is considered when selecting pumps. Please review Delta P tables for more information.

Additional items to consider for **SERIES** configuration:

1. During AuraCool valve change over between mechanical to economizer modes, variations in delta P through AuraCool will occur. Such variations can cause intermittent trips of chillers flow safety systems.
  2. Estimated delta P calculations provided consider the AuraCool Economizer system ONLY. All other pressure drops including (but not limited to) chiller, process, piping, fittings and filters need to be accounted for when calculating externally located system pumps.
  3. Selection of an AuraCool Economizer optional booster pump should be considered to offset the Delta P of the AuraCool system and to potentially boost flow should deficiencies exist in the external pumping system.
- Always consider working with a qualified mechanical engineer to assure proper AuraCool Economizer and booster pump selections.**



## Typical System Layouts - Process Primary Cooling



**Primary Cooling Configuration:** For high temperature process applications AuraCool Economizers can also be used as a primary cooling system provided that adequate Delta T exists between the process and the outdoor ambient air temperature. Since an AuraCool Economizers do not use mechanical refrigeration, it can accommodate inlet temperatures much higher than a chiller.

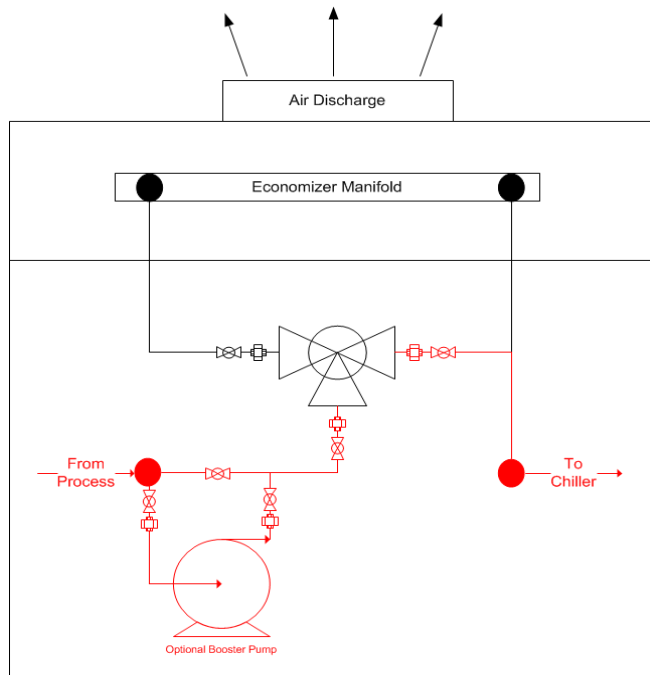
Additional items to consider for **Primary Cooling Configuration** system layouts:

1. Estimated delta P calculations provided consider the AuraCool Economizer system ONLY. All other pressure drops including (but not limited to) chiller, process, piping, fittings and filters need to be accounted for when calculating externally mounted system pumps.
2. When selecting an optional booster pump for a primary cooling configuration designers must consider:
  - A.External Pressure Drop: Booster pump selected must consider ALL external pressure drops.
  - B.System Volume: Minimum system volume of 3.0 x nominal AuraCool GPM is recommended. For nominal AuraCool Economizer GPM (by model) consult Delta P tables.

**Always consider working with a qualified mechanical engineer to assure proper AuraCool Economizer and booster pump selections.**

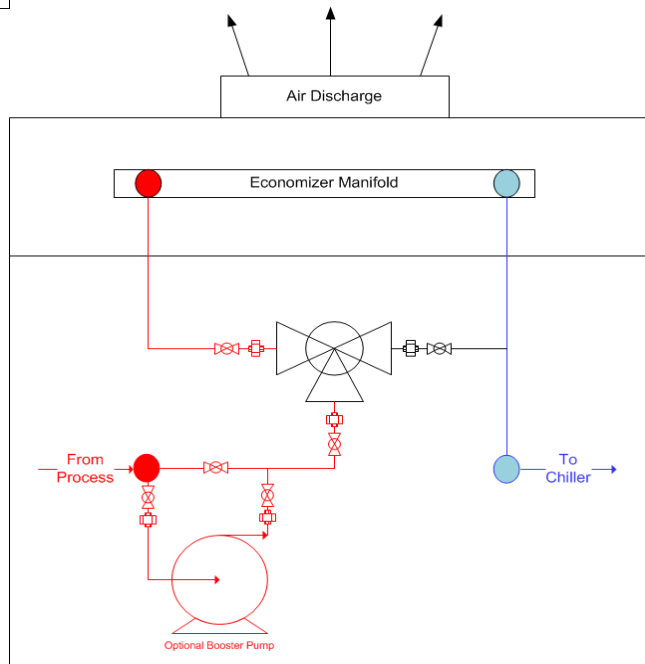


## Basic Plumbing Diagram



**Mechanical Cooling Mode:** The drawings to the LEFT shows the AuraCool Economizer running in mechanical cooling mode. When outdoor and process load conditions cannot provide an energy savings opportunity that exceed the operational cost to run powered devices, process fluid will simply continue down the chiller return line.

**Economizer Mode:** The drawings to the RIGHT shows AuraCool running in Economizer mode. When outdoor and process conditions provide an energy savings opportunity that exceed the operational cost to run powered devices, process fluid is automatically diverted from the chiller return line to exchange heat with ambient air. When in Economizer mode, all aspects of performance are stored within the AuraCool's advanced power electronics. Savings data can be recalled using Legacy's optional BacNet desktop interface of HMI touch pad.



# Dimensional and Electrical Specifications

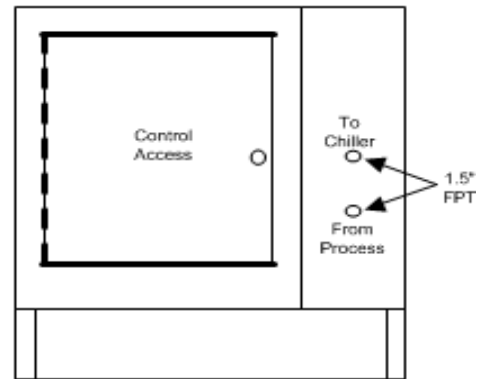
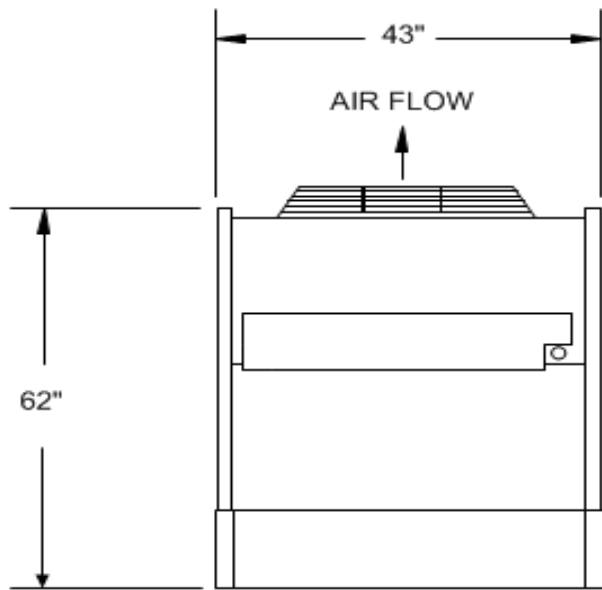
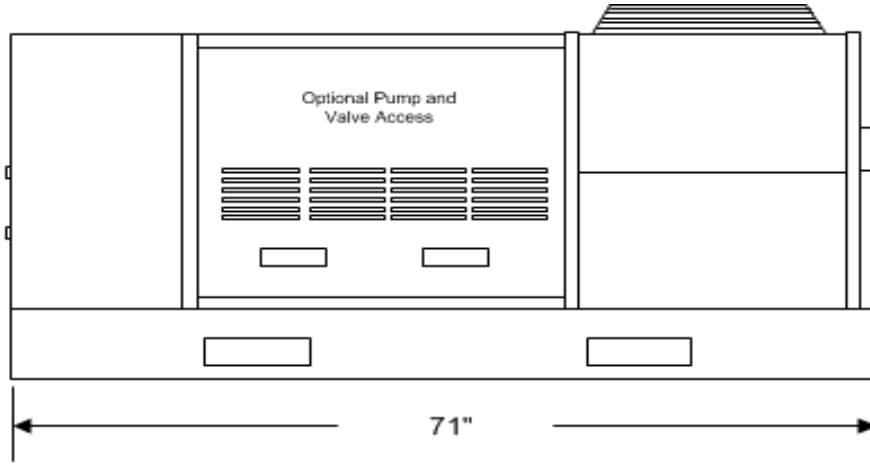
MODEL AES-	(1) BTUH	CFM	(2) Flow Rate	(3) Delta PSI	LENGT H IN.	WIDTH IN.	HEIGHT IN.	FLUID CONN.	ECONOMIZER FAN(S)			MCA	MOP	WT. LBS
									QTY	HP	FLA			
50-S2-R1	52,125	6,450	13	7.6	71	43	62	1.5" FPT	1	.50	3.9	15	15	371
50-T3-R1										.33	2.6			
50-T4-R1										.33	1.3			
120-S2-R1	120,875	20,500	30	6.1	185	43	62	1.5" FPT	3	.5	11.7	15	15	807
120-T3-R1										.33	7.8			
120-T4-R1										.33	3.9			
150-T3-R1	152,450	21,900	38	4.1	172	45	56	2.0" FPT	2	7.0	16	30	1,154	
150-T4-R1										3.5	15	15		
200-T3-R1	198,500	20,700	50	5.7	219	45	56	2.5" FPT	3	7.0	16	30	1,257	
200-T4-R1										3.5	15	15		
280-T3-R1	288,000	31,800	72	10.2	288	45	56	2.5" FPT	4	7.0	23	30	1,771	
280-T4-R1										3.5	15	20		
385-T3-R1	386,750	42,400	97	6.3	288	45	56	2.5" FPT	6	7.0	30	45	2,357	
385-T4-R1										3.5	15	20		
480-T3-R1	481,250	67,000	120	10.6	219	88	56	2.5" FPT	8	7.0	44	60	3400	
480-T4-R1										3.5	22	30		
600-T3-R1	601,500	74,500	151	10.3	291	88	56	2.5" FPT	8	7.0	58	70	4,485	
600-T4-R1										3.5	29	35		
735-T3-R1	737,250	71,310	185	10.5	426	88	56	2.5" FPT	12	7.0	58	70	4828	
735-T4-R1										3.5	29	35		
850-T3-R1	859,750	124,400	215	9.2	426	88	56	2.5" FPT	12	7.0	86	100	7,529	
850-T4-R1										3.5	43	50		



(1) All BTUH ratings are based on 55F inlet, 40F ambient, 30% propylene glycol (PG). (2) Nominal flow rate (GPM) is 3.0 times nominal cooling tonnage. (3) Delta P is calculated using standards of (1) & (2).



# Submittal Drawings

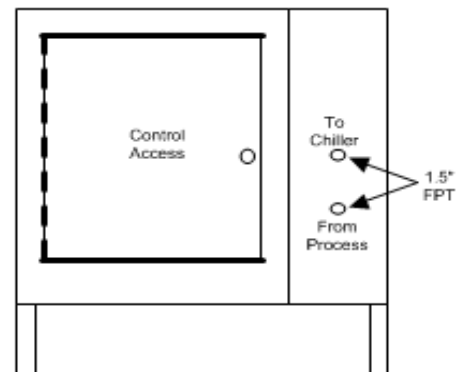
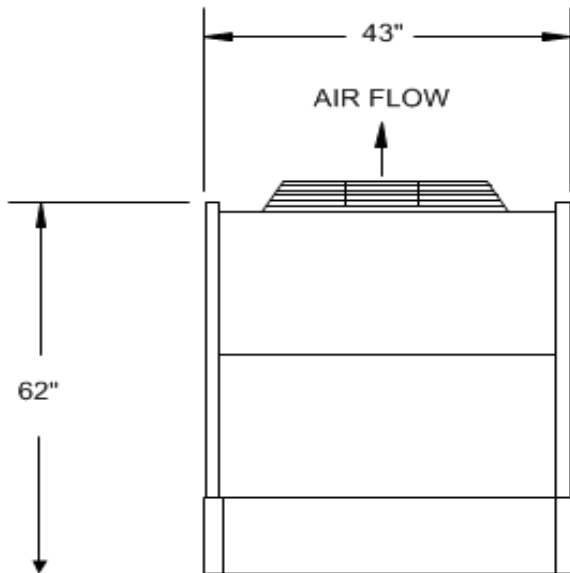
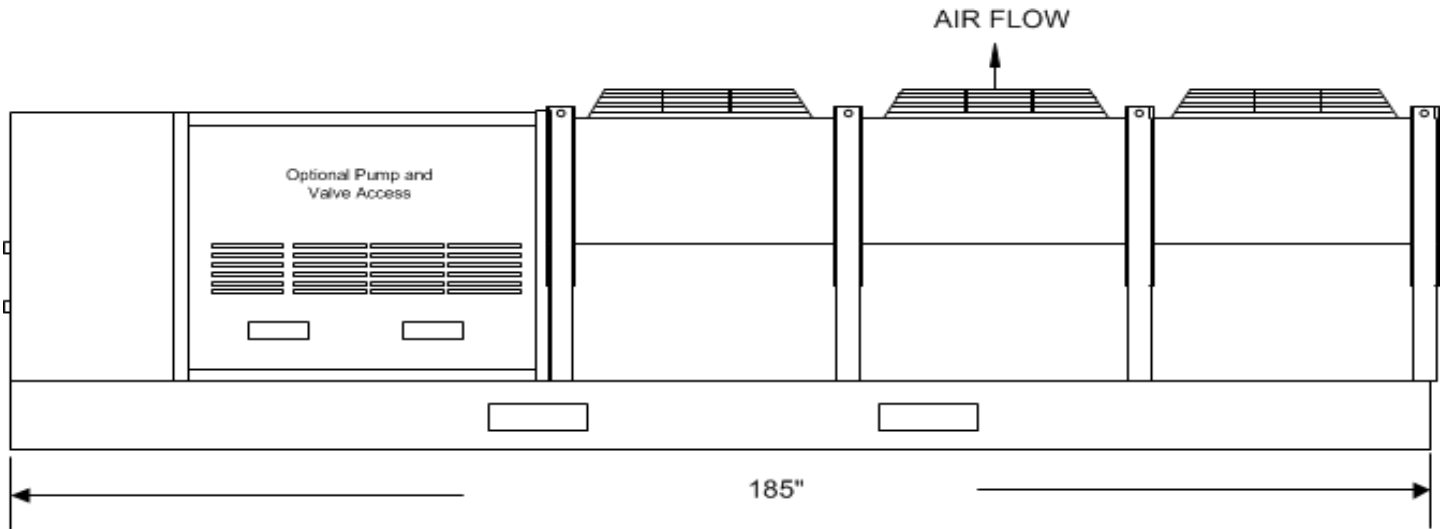
## Model: AES-50





				
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Drawn by: MKing	SIZE	FSCM NO	DWG NO	REV
Copyright – Legacy Chiller Systems 2011	SCALE	Not to scale	SHEET	1 1 OF 1

# Submittal Drawings

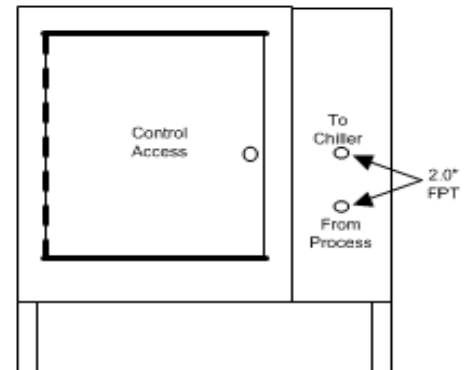
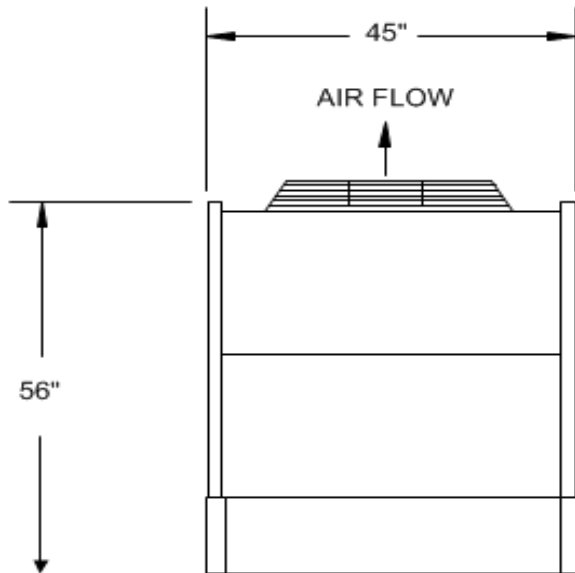
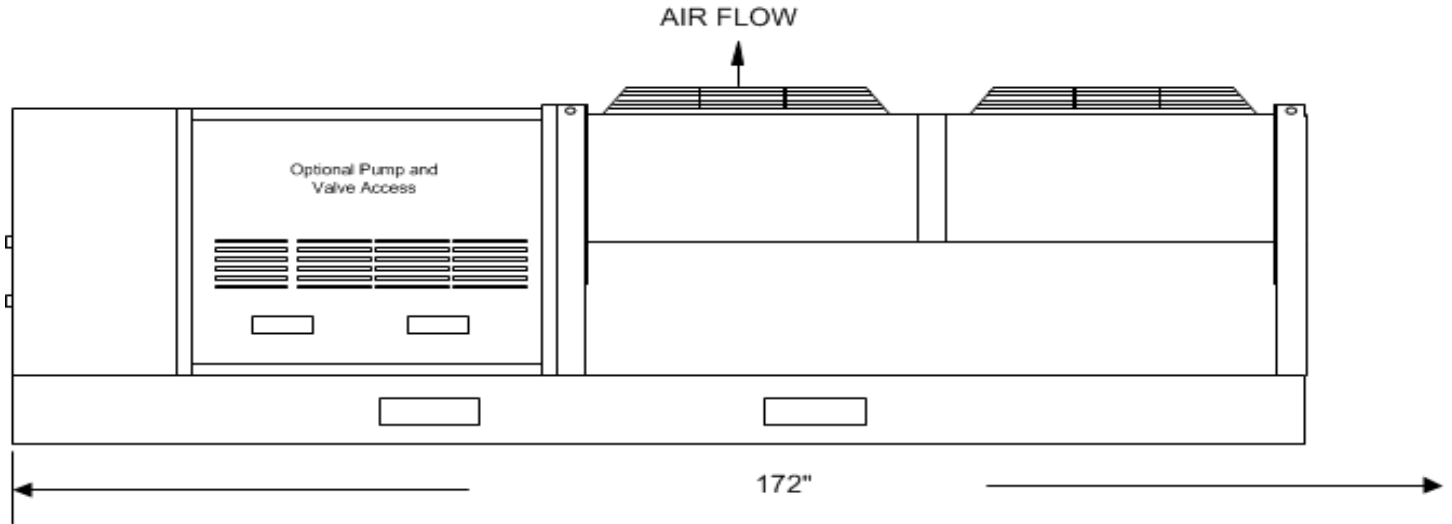
## Model: AES-120





				
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# Submittal Drawings

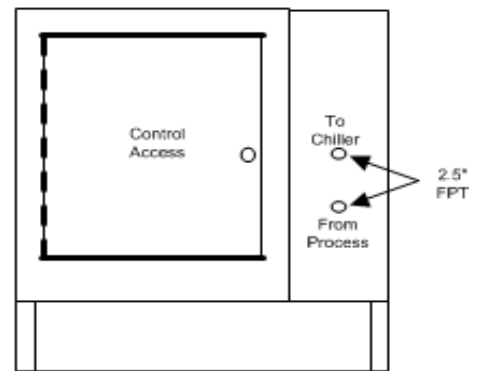
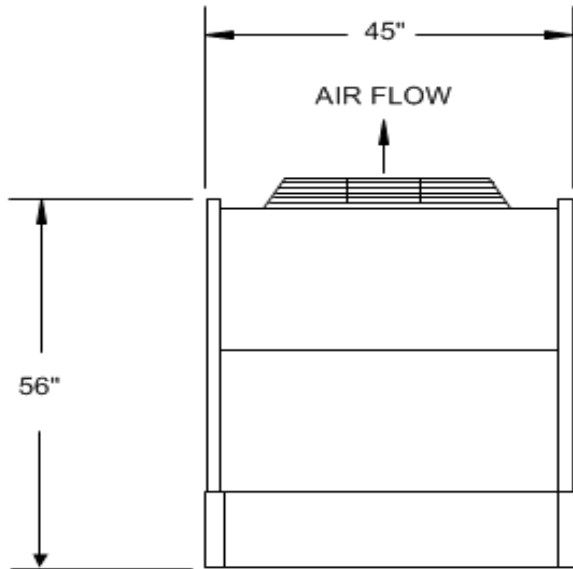
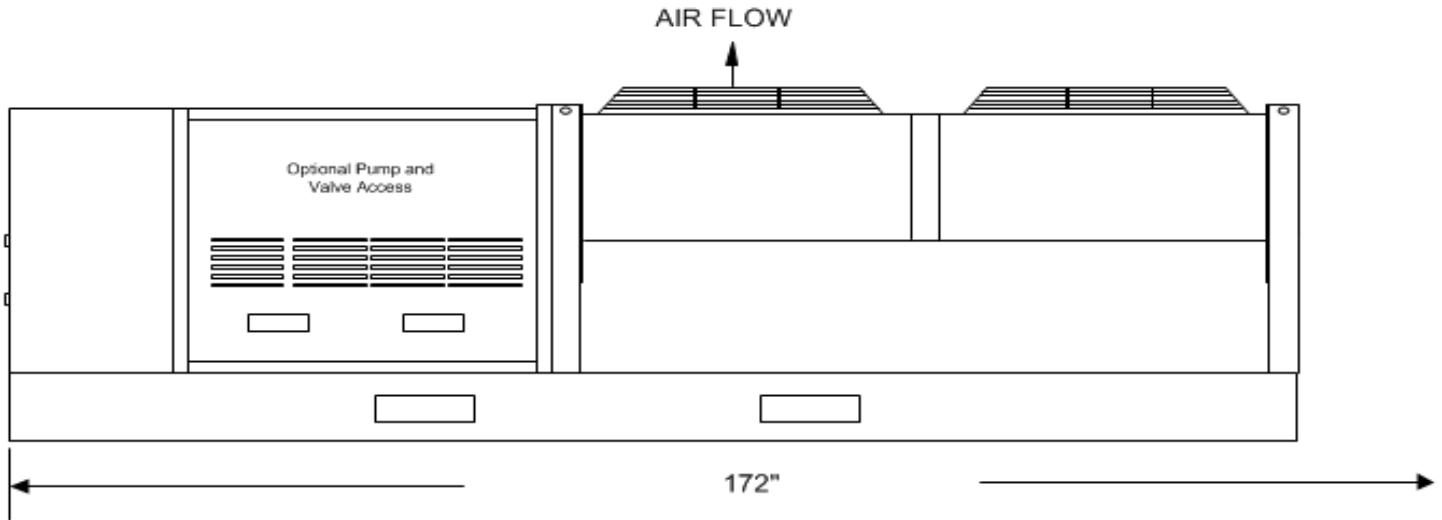
## Model: AES-150





				
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Drawn by: MKing Copyright – Legacy Chiller Systems 2011	SIZE	FSCM NO	DWG NO	REV 1
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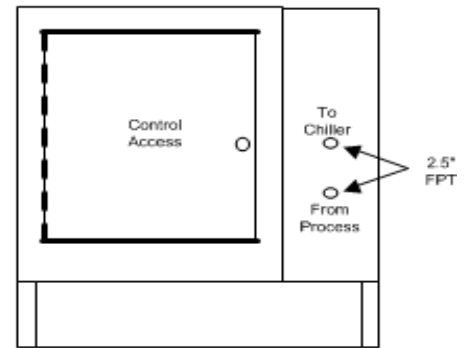
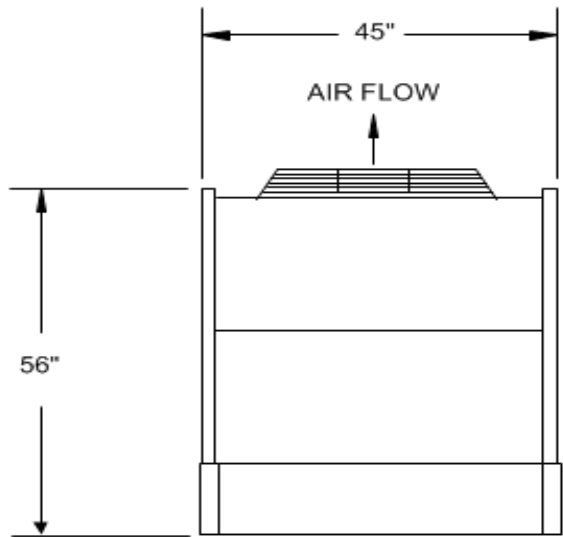
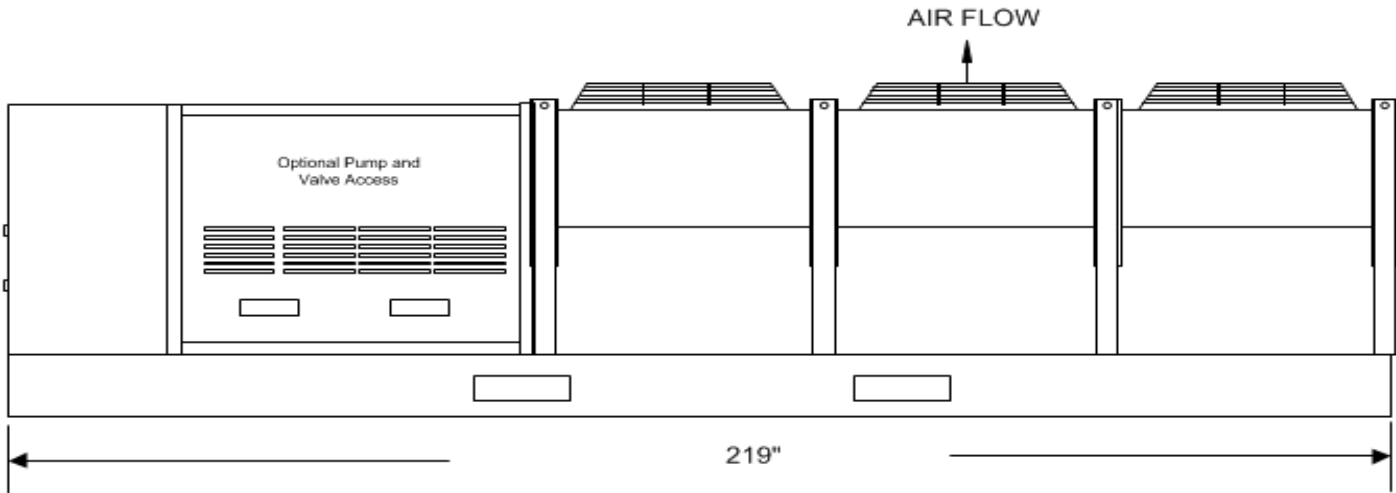
## Model: AES-200





				
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Copyright – Legacy Chiller Systems 2011	SCALE	Not to scale	SHEET	1 of 1

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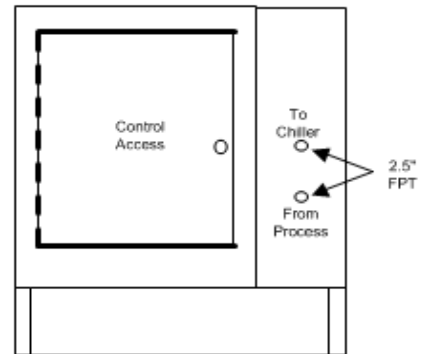
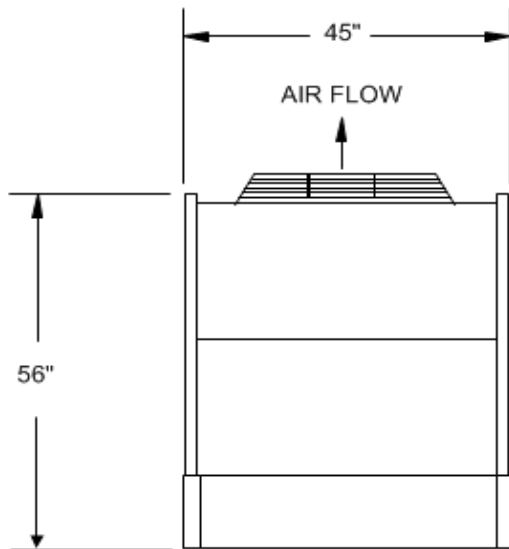
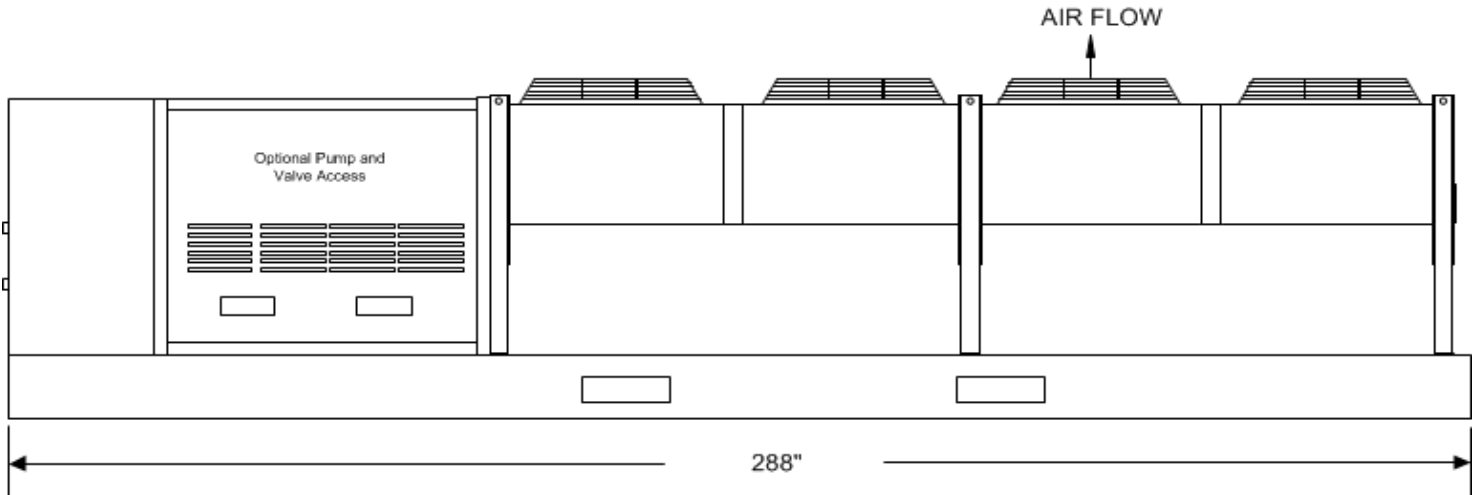
## Model: AES-280





				
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Copyright – Legacy Chiller Systems 2011	SCALE	Not to scale	SHEET	1 of 1

# Submittal Drawings

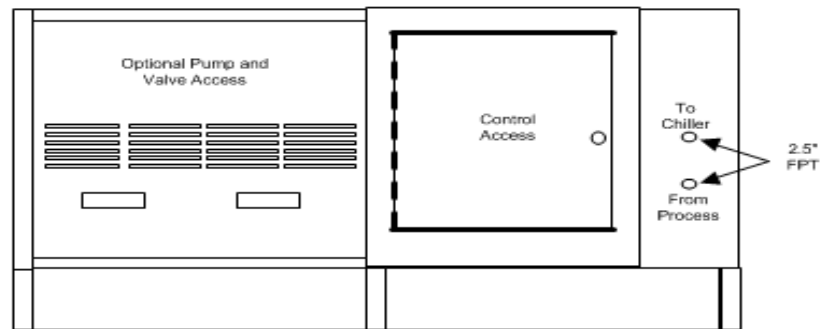
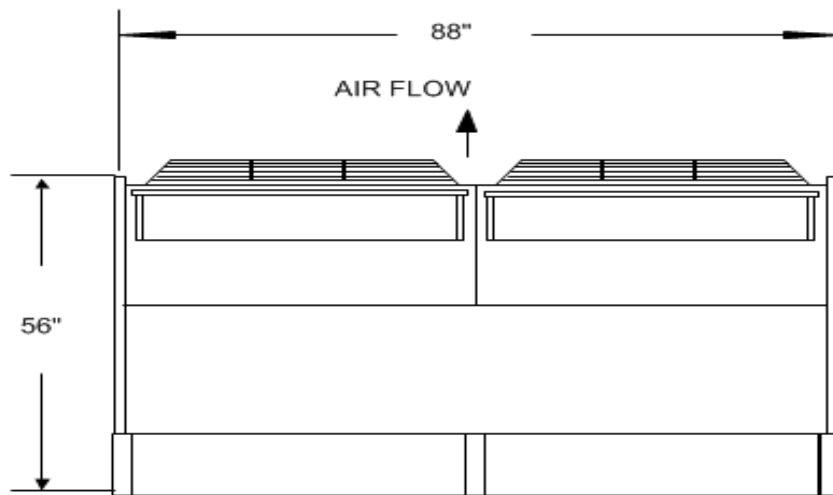
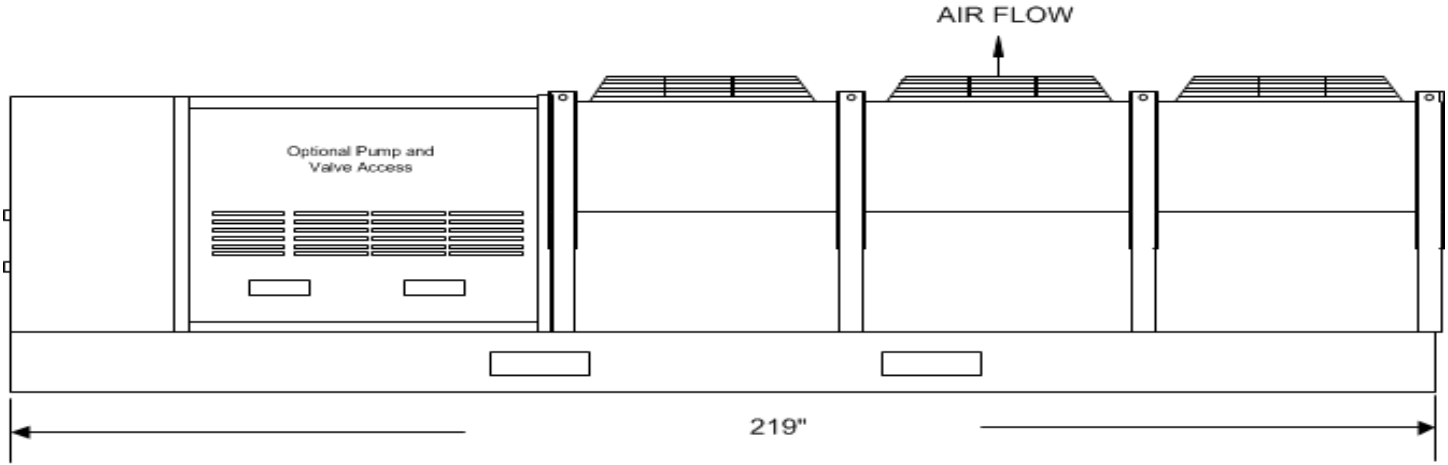
## Model: AES-385





				
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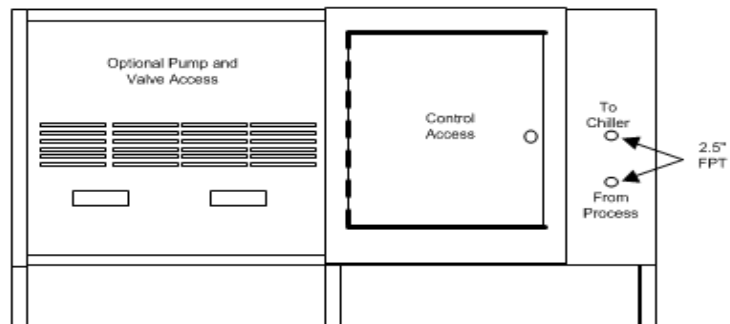
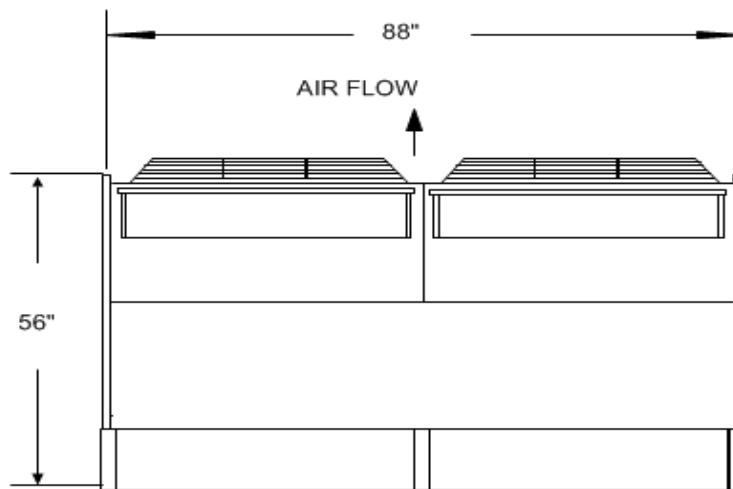
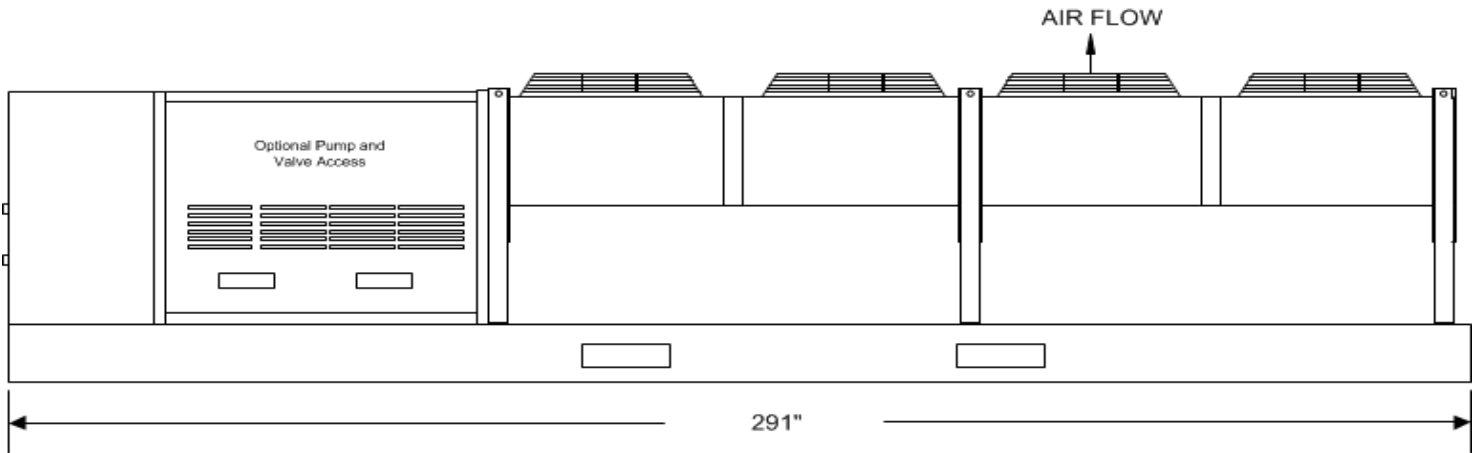
## Model: AES-480





				
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# Submittal Drawings

## Model: AES-600

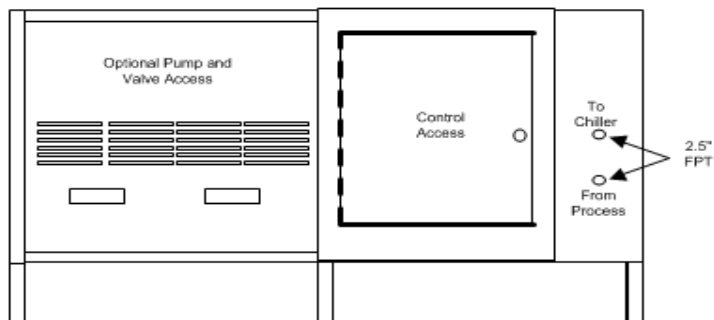
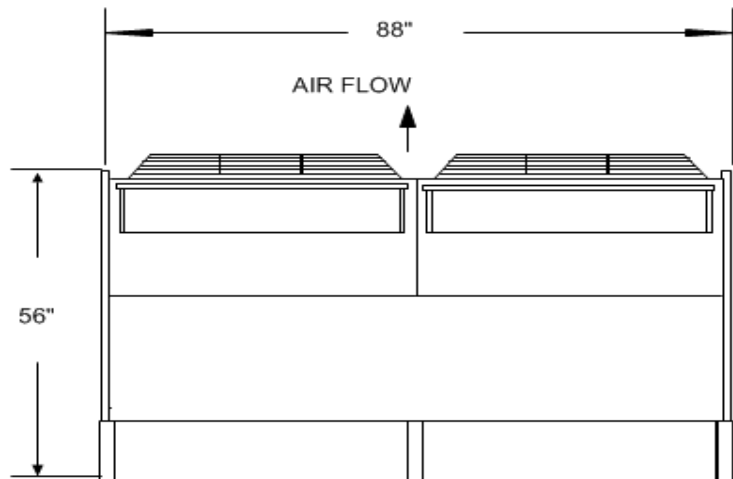
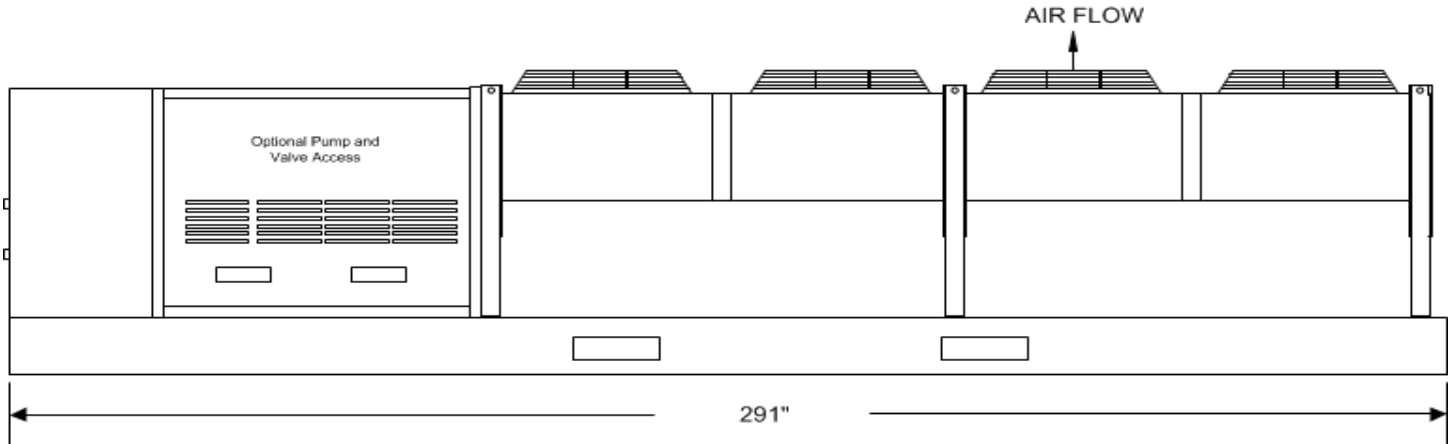




 <b>AURACOOL</b> ECONOMIZER TECHNOLOGY <small>®</small>	 <b>LEGACY CHILLER SYSTEMS</b>			
	<b>AuraCool Economizer System Mo#AES-600</b>			
Drawn by: MKing Copyright – Legacy Chiller Systems 2011	SIZE	FSCM NO	DWG NO	REV 1
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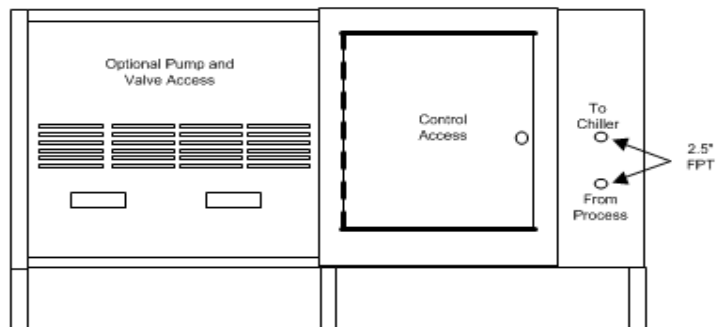
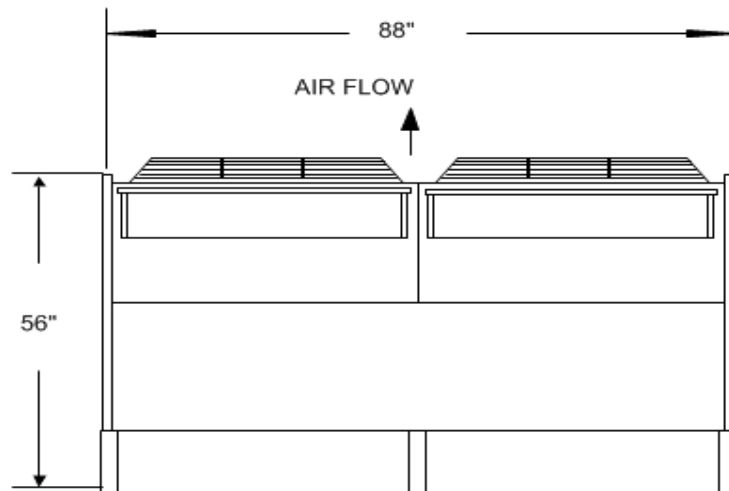
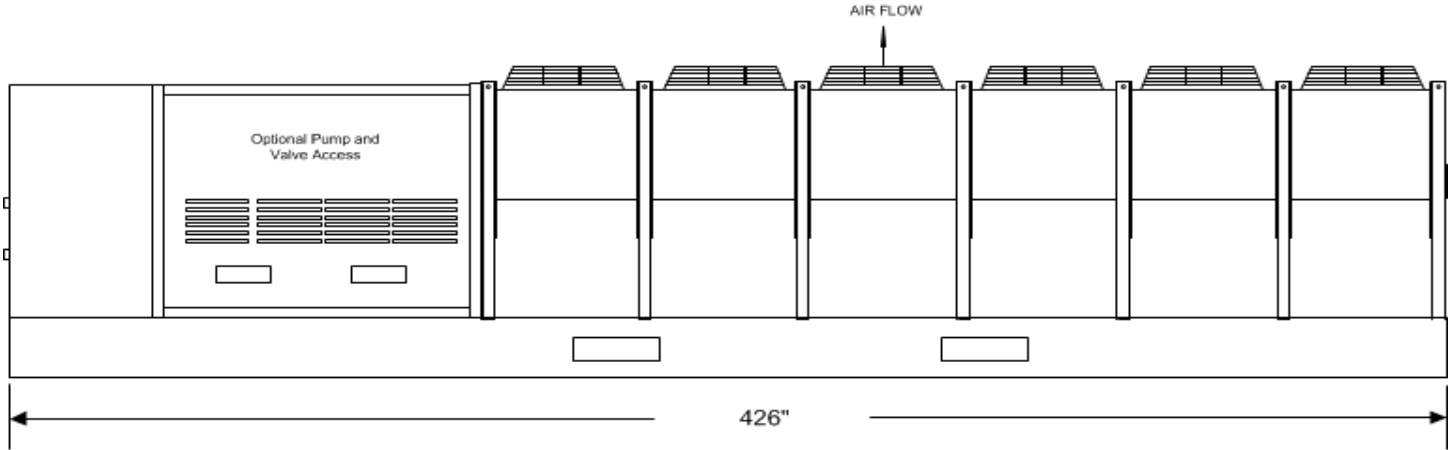
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# Submittal Drawings

## Model: AES-850

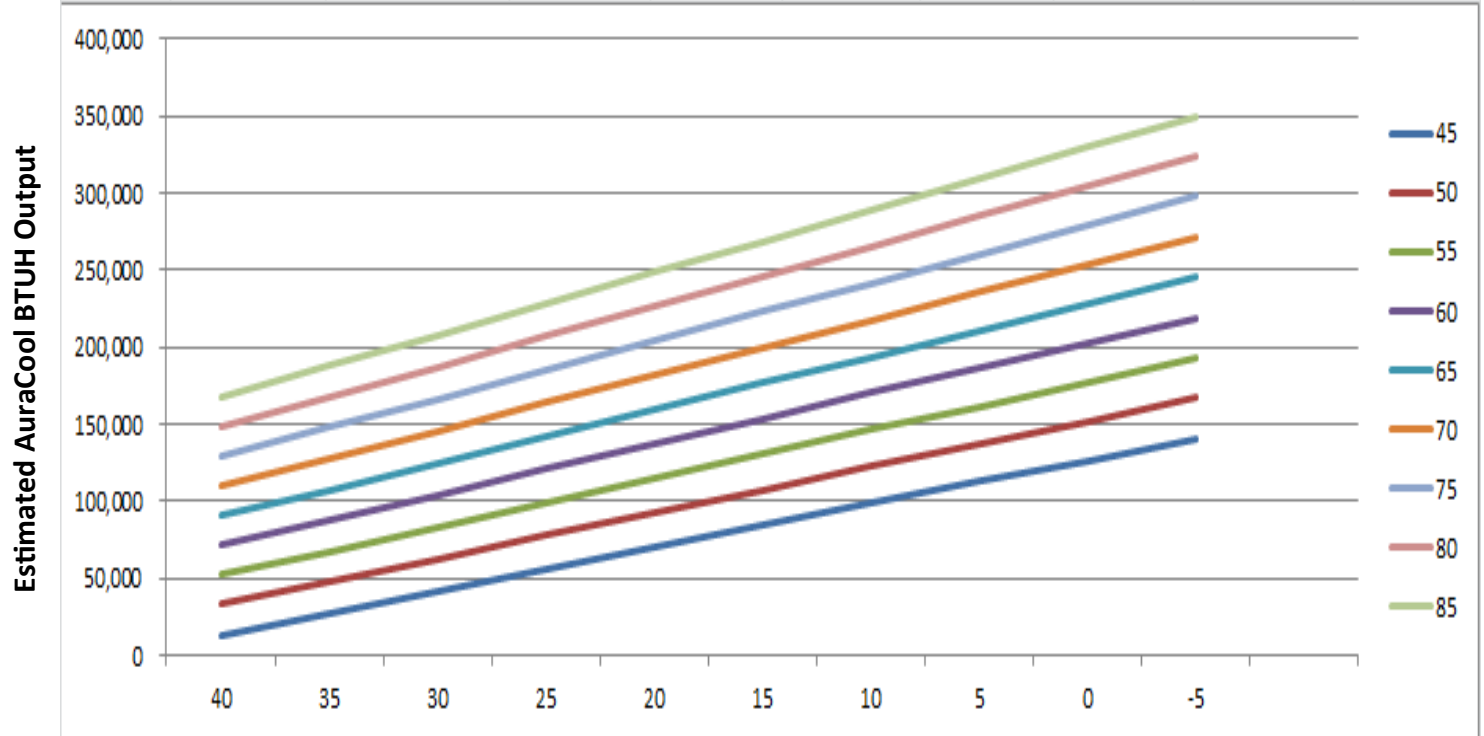


				
	<b>AuraCool Economizer System Mo#AES-850</b>			
Drawn by: MKing Copyright – Legacy Chiller Systems 2011	SIZE	FSCM NO	DWG NO	REV 1
	SCALE	Not to scale	SHEET	1 of 1

# Performance Table Model: AES-50

**AuraCool Inlet Fluid Temperature (F)**

	45	50	55	60	65	70	75	80	85
40	13,700	32,913	52,125	71,338	90,550	109,763	128,975	148,188	167,400
35	27,844	47,826	67,808	87,790	107,772	127,754	147,736	167,718	187,700
30	41,989	62,740	83,492	104,243	124,994	145,746	166,497	187,249	208,000
25	56,133	77,654	99,175	120,696	142,217	163,738	185,258	206,779	228,300
20	70,278	92,568	114,858	137,149	159,439	181,729	204,019	226,310	248,600
15	84,422	107,482	130,542	153,601	176,661	199,721	222,781	245,840	268,900
10	98,567	122,396	146,225	170,054	193,883	217,713	241,542	265,371	289,200
5	112,711	137,310	161,908	186,507	211,106	235,704	260,303	284,901	309,500
0	126,856	152,224	177,592	202,960	228,328	253,696	279,064	304,432	329,800
-5	141,000	167,138	193,275	219,413	245,550	271,688	297,825	323,963	350,100

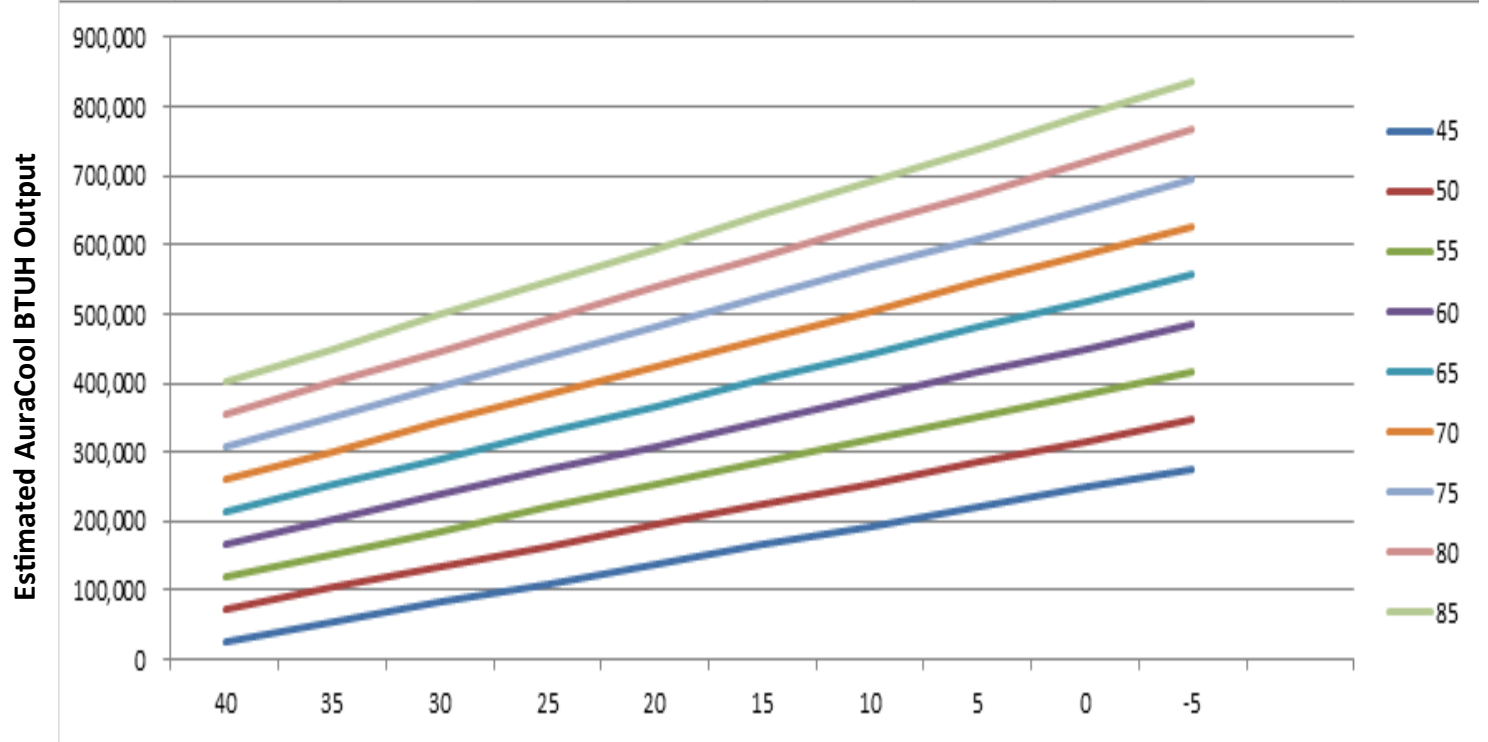


**Using this table:** The **RED** values in the table above represents the AuraCool Economizer inlet air temperature (F). The **BLUE** values in the table above represent your process fluid inlet temperature (F) to AuraCool. Within the performance table, we have marked the capacity standard for this model. All capacities were calculated using 30% Propylene Glycol (PG) at a nominal flow rate (GPM) of 3.0 times nominal cooling tonnage.

# Performance Table Model: AES-120

**AuraCool Inlet Fluid Temperature (F)**

	45	50	55	60	65	70	75	80	85
40	27,000	73,938	120,875	167,813	214,750	261,688	308,625	355,563	402,500
35	54,667	104,163	153,658	203,154	252,650	302,146	351,642	401,138	450,633
30	82,333	134,388	186,442	238,496	290,550	342,604	394,658	446,713	498,767
25	110,000	164,613	219,225	273,838	328,450	383,063	437,675	492,288	546,900
20	137,667	194,838	252,008	309,179	366,350	423,521	480,692	537,863	595,033
15	165,333	225,063	284,792	344,521	404,250	463,979	523,708	583,438	643,167
10	193,000	255,288	317,575	379,863	442,150	504,438	566,725	629,013	691,300
5	220,667	285,513	350,358	415,204	480,050	544,896	609,742	674,588	739,433
0	248,333	315,738	383,142	450,546	517,950	585,354	652,758	720,163	787,567
-5	276,000	345,963	415,925	485,888	555,850	625,813	695,775	765,738	835,700

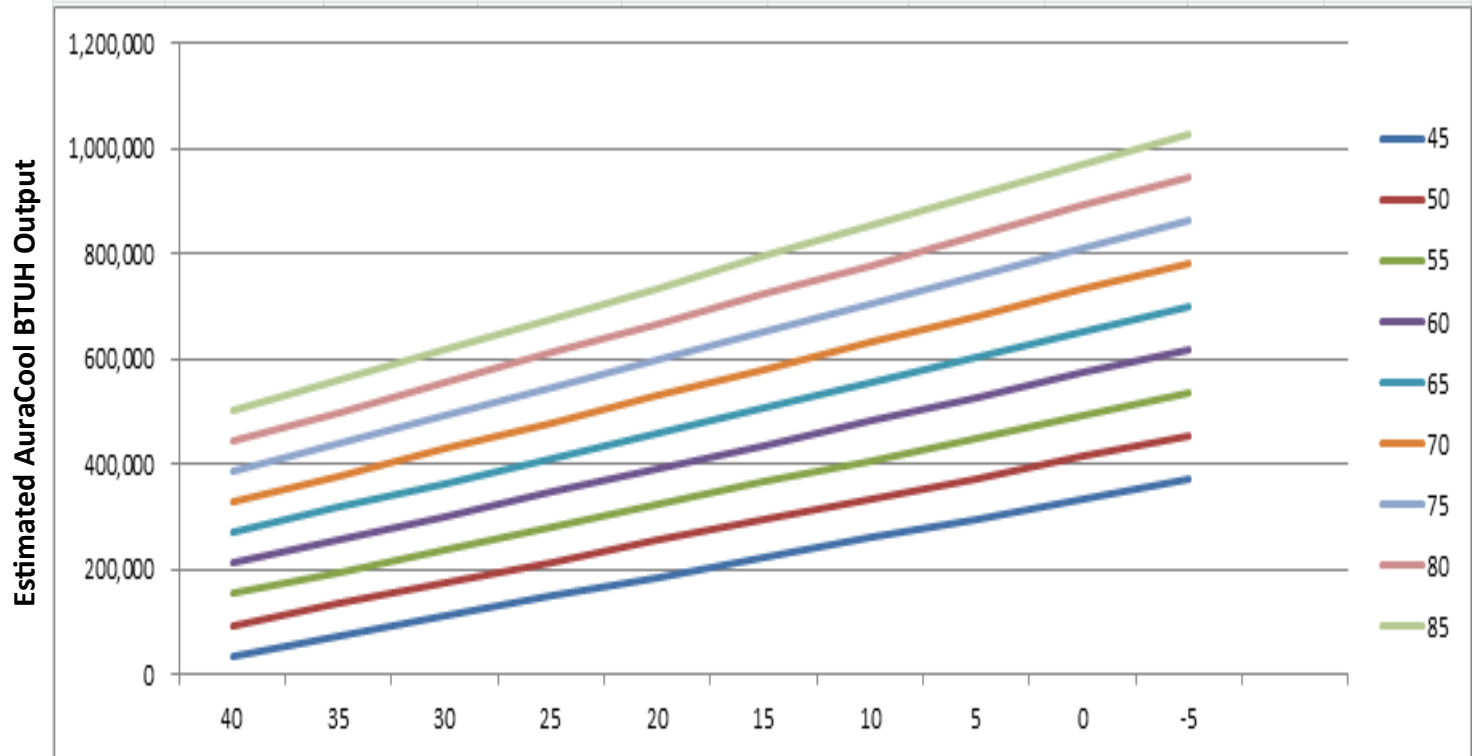


**Using this table:** The **RED** values in the table above represents the AuraCool Economizer inlet air temperature (F). The **BLUE** values in the table above represent your process fluid inlet temperature (F) to AuraCool. Within the performance table, we have marked the capacity standard for this model. All capacities were calculated using 30% Propylene Glycol (PG) at a nominal flow rate (GPM) of 3.0 times nominal cooling tonnage.

# Performance Table Model: AES-150

**AuraCool Inlet Fluid Temperature (F)**

	45	50	55	60	65	70	75	80	85
40	36,400	94,425	152,450	210,475	268,500	326,525	384,550	442,575	500,600
35	73,511	134,250	194,989	255,728	316,467	377,206	437,944	498,683	559,422
30	110,622	174,075	237,528	300,981	364,433	427,886	491,339	554,792	618,244
25	147,733	213,900	280,067	346,233	412,400	478,567	544,733	610,900	677,067
20	184,844	253,725	322,606	391,486	460,367	529,247	598,128	667,008	735,889
15	221,956	293,550	365,144	436,739	508,333	579,928	651,522	723,117	794,711
10	259,067	333,375	407,683	481,992	556,300	630,608	704,917	779,225	853,533
5	296,178	373,200	450,222	527,244	604,267	681,289	758,311	835,333	912,356
0	333,289	413,025	492,761	572,497	652,233	731,969	811,706	891,442	971,178
-5	370,400	452,850	535,300	617,750	700,200	782,650	865,100	947,550	1,030,000

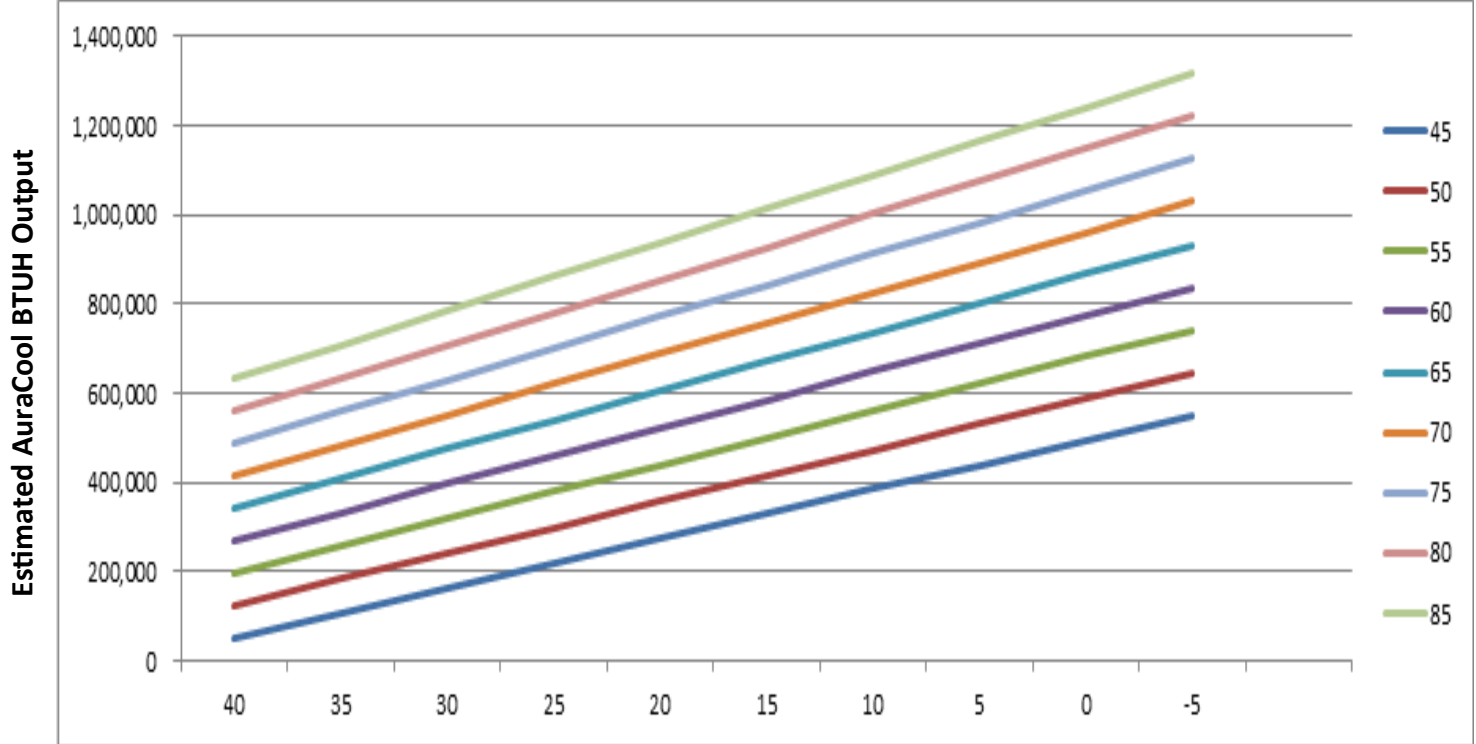


**Using this table:** The **RED** values in the table above represents the AuraCool Economizer inlet air temperature (F). The **BLUE** values in the table above represent your process fluid inlet temperature (F) to AuraCool. Within the performance table, we have marked the capacity standard for this model. All capacities were calculated using 30% Propylene Glycol (PG) at a nominal flow rate (GPM) of 3.0 times nominal cooling tonnage.

# Performance Table Model: AES-200

**AuraCool Inlet Fluid Temperature (F)**

AuraCool Inlet Air Temperature (F)	45	50	55	60	65	70	75	80	85
40	53,500	125,988	198,475	270,963	343,450	415,938	488,425	560,913	633,400
35	108,700	183,782	258,864	333,946	409,028	484,110	559,192	634,274	709,356
30	163,900	241,576	319,253	396,929	474,606	552,282	629,958	707,635	785,311
25	219,100	299,371	379,642	459,913	540,183	620,454	700,725	780,996	861,267
20	274,300	357,165	440,031	522,896	605,761	688,626	771,492	854,357	937,222
15	329,500	414,960	500,419	585,879	671,339	756,799	842,258	927,718	1,013,178
10	384,700	472,754	560,808	648,863	736,917	824,971	913,025	1,001,079	1,089,133
5	439,900	530,549	621,197	711,846	802,494	893,143	983,792	1,074,440	1,165,089
0	495,100	588,343	681,586	774,829	868,072	961,315	1,054,558	1,147,801	1,241,044
-5	550,300	646,138	741,975	837,813	933,650	1,029,488	1,125,325	1,221,163	1,317,000

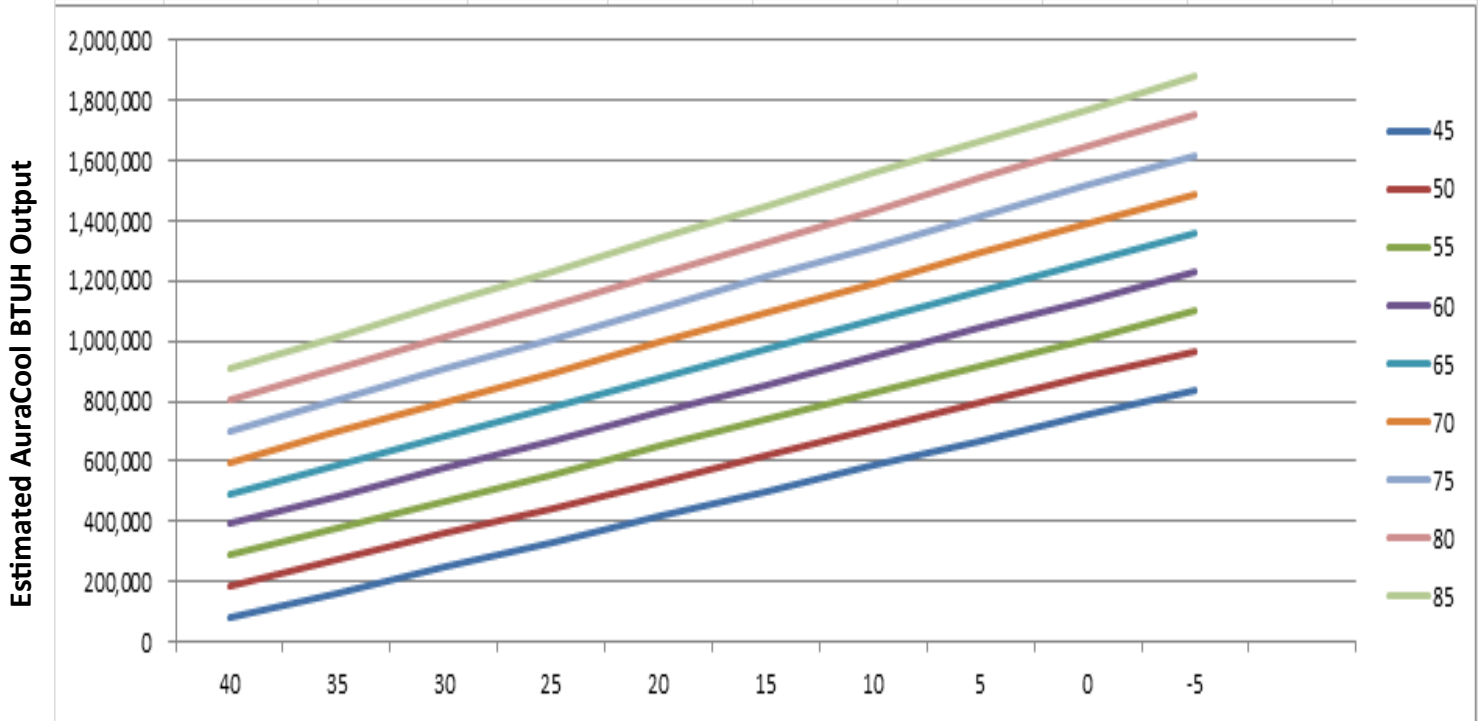


**Using this table:** The **RED** values in the table above represents the AuraCool Economizer inlet air temperature (F). The **BLUE** values in the table above represent your process fluid inlet temperature (F) to AuraCool. Within the performance table, we have marked the capacity standard for this model. All capacities were calculated using 30% Propylene Glycol (PG) at a nominal flow rate (GPM) of 3.0 times nominal cooling tonnage.

# Performance Table Model: AES-280

**AuraCool Inlet Fluid Temperature (F)**

	45	50	55	60	65	70	75	80	85
40	81,500	184,738	287,975	391,213	494,450	597,688	700,925	804,163	907,400
35	165,556	271,808	378,061	484,314	590,567	696,819	803,072	909,325	1,015,578
30	249,611	358,879	468,147	577,415	686,683	795,951	905,219	1,014,488	1,123,756
25	333,667	445,950	558,233	670,517	782,800	895,083	1,007,367	1,119,650	1,231,933
20	417,722	533,021	648,319	763,618	878,917	994,215	1,109,514	1,224,813	1,340,111
15	501,778	620,092	738,406	856,719	975,033	1,093,347	1,211,661	1,329,975	1,448,289
10	585,833	707,163	828,492	949,821	1,071,150	1,192,479	1,313,808	1,435,138	1,556,467
5	669,889	794,233	918,578	1,042,922	1,167,267	1,291,611	1,415,956	1,540,300	1,664,644
0	753,944	881,304	1,008,664	1,136,024	1,263,383	1,390,743	1,518,103	1,645,463	1,772,822
-5	838,000	968,375	1,098,750	1,229,125	1,359,500	1,489,875	1,620,250	1,750,625	1,881,000

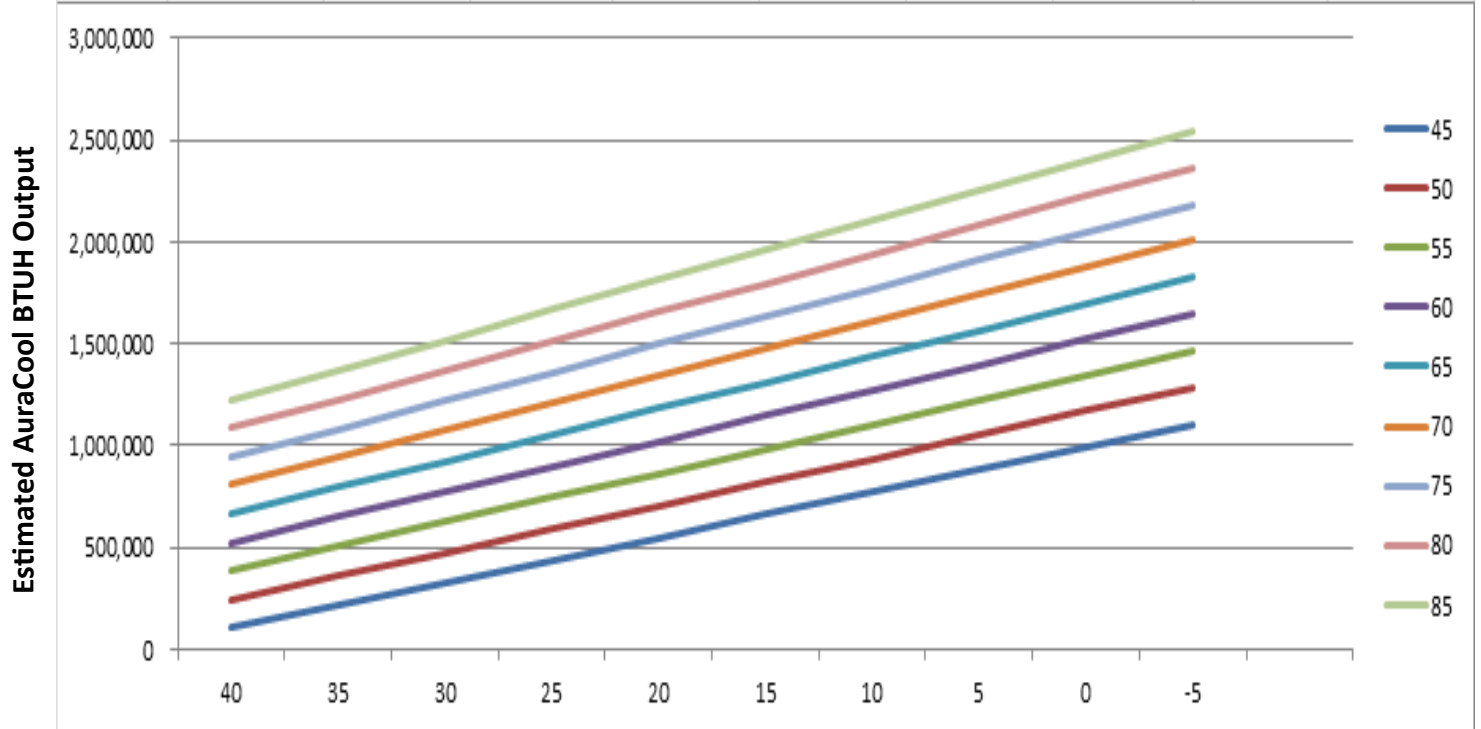


**Using this table:** The **RED** values in the table above represents the AuraCool Economizer inlet air temperature (F). The **BLUE** values in the table above represent your process fluid inlet temperature (F) to AuraCool. Within the performance table, we have marked the capacity standard for this model. All capacities were calculated using 30% Propylene Glycol (PG) at a nominal flow rate (GPM) of 3.0 times nominal cooling tonnage.

# Performance Table Model: AES-385

**AuraCool Inlet Fluid Temperature (F)**

AuraCool Inlet Air Temperature (F)	45	50	55	60	65	70	75	80	85
40	107,000	246,875	386,750	526,625	666,500	806,375	946,250	1,086,125	1,226,000
35	217,889	362,236	506,583	650,931	795,278	939,625	1,083,972	1,228,319	1,372,667
30	328,778	477,597	626,417	775,236	924,056	1,072,875	1,221,694	1,370,514	1,519,333
25	439,667	592,958	746,250	899,542	1,052,833	1,206,125	1,359,417	1,512,708	1,666,000
20	550,556	708,319	866,083	1,023,847	1,181,611	1,339,375	1,497,139	1,654,903	1,812,667
15	661,444	823,681	985,917	1,148,153	1,310,389	1,472,625	1,634,861	1,797,097	1,959,333
10	772,333	939,042	1,105,750	1,272,458	1,439,167	1,605,875	1,772,583	1,939,292	2,106,000
5	883,222	1,054,403	1,225,583	1,396,764	1,567,944	1,739,125	1,910,306	2,081,486	2,252,667
0	994,111	1,169,764	1,345,417	1,521,069	1,696,722	1,872,375	2,048,028	2,223,681	2,399,333
-5	1,105,000	1,285,125	1,465,250	1,645,375	1,825,500	2,005,625	2,185,750	2,365,875	2,546,000



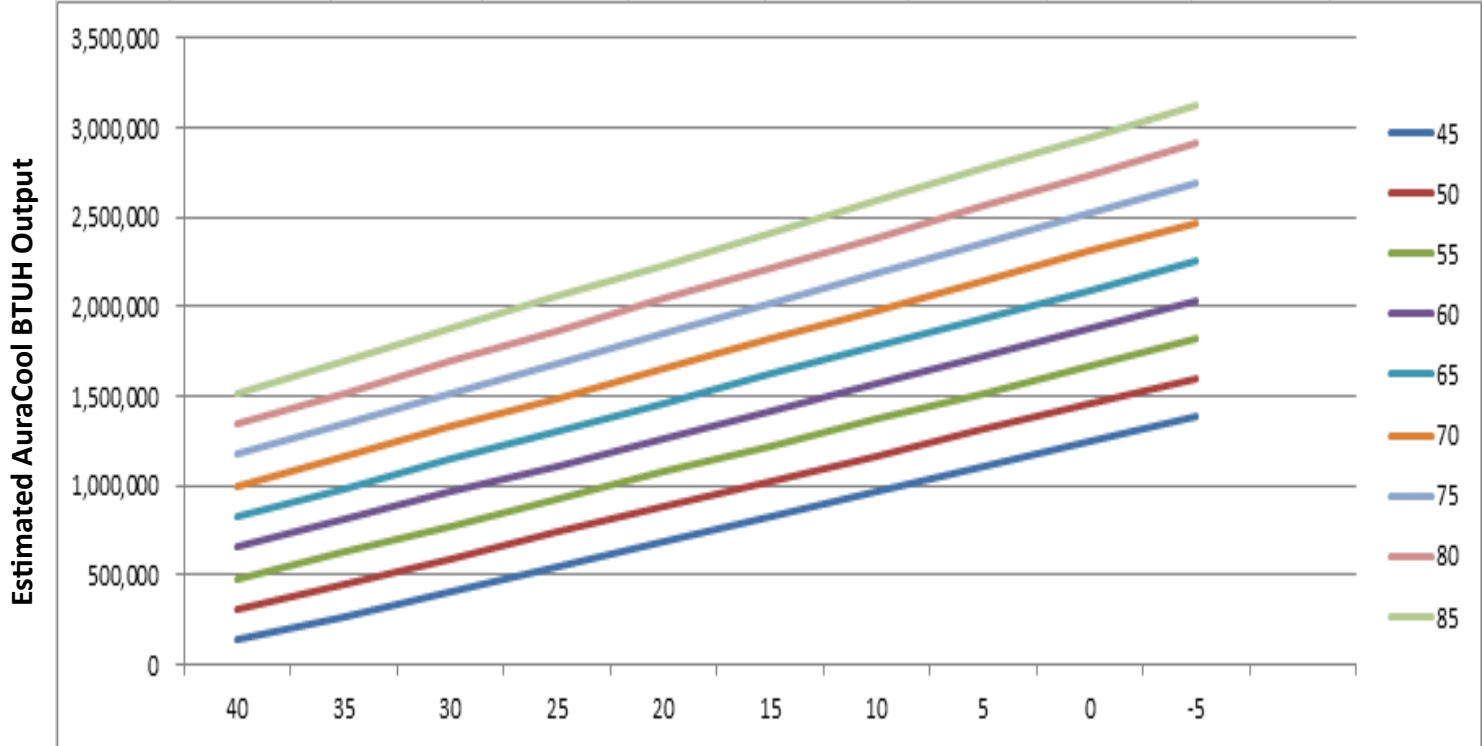
**Using this table:** The **RED** values in the table above represents the AuraCool Economizer inlet air temperature (F). The **BLUE** values in the table above represent your process fluid inlet temperature (F) to AuraCool. Within the performance table, we have marked the capacity standard for this model. All capacities were calculated using 30% Propylene Glycol (PG) at a nominal flow rate (GPM) of 3.0 times nominal cooling tonnage.



# Performance Table Model: AES-480

**AuraCool Inlet Fluid Temperature (F)**

AuraCool Inlet Air Temperature (F)	45	50	55	60	65	70	75	80	85
40	135,000	308,125	481,250	654,375	827,500	1,000,625	1,173,750	1,346,875	1,520,000
35	273,556	451,681	629,806	807,931	986,056	1,164,181	1,342,306	1,520,431	1,698,556
30	412,111	595,236	778,361	961,486	1,144,611	1,327,736	1,510,861	1,693,986	1,877,111
25	550,667	738,792	926,917	1,115,042	1,303,167	1,491,292	1,679,417	1,867,542	2,055,667
20	689,222	882,347	1,075,472	1,268,597	1,461,722	1,654,847	1,847,972	2,041,097	2,234,222
15	827,778	1,025,903	1,224,028	1,422,153	1,620,278	1,818,403	2,016,528	2,214,653	2,412,778
10	966,333	1,169,458	1,372,583	1,575,708	1,778,833	1,981,958	2,185,083	2,388,208	2,591,333
5	1,104,889	1,313,014	1,521,139	1,729,264	1,937,389	2,145,514	2,353,639	2,561,764	2,769,889
0	1,243,444	1,456,569	1,669,694	1,882,819	2,095,944	2,309,069	2,522,194	2,735,319	2,948,444
-5	1,382,000	1,600,125	1,818,250	2,036,375	2,254,500	2,472,625	2,690,750	2,908,875	3,127,000

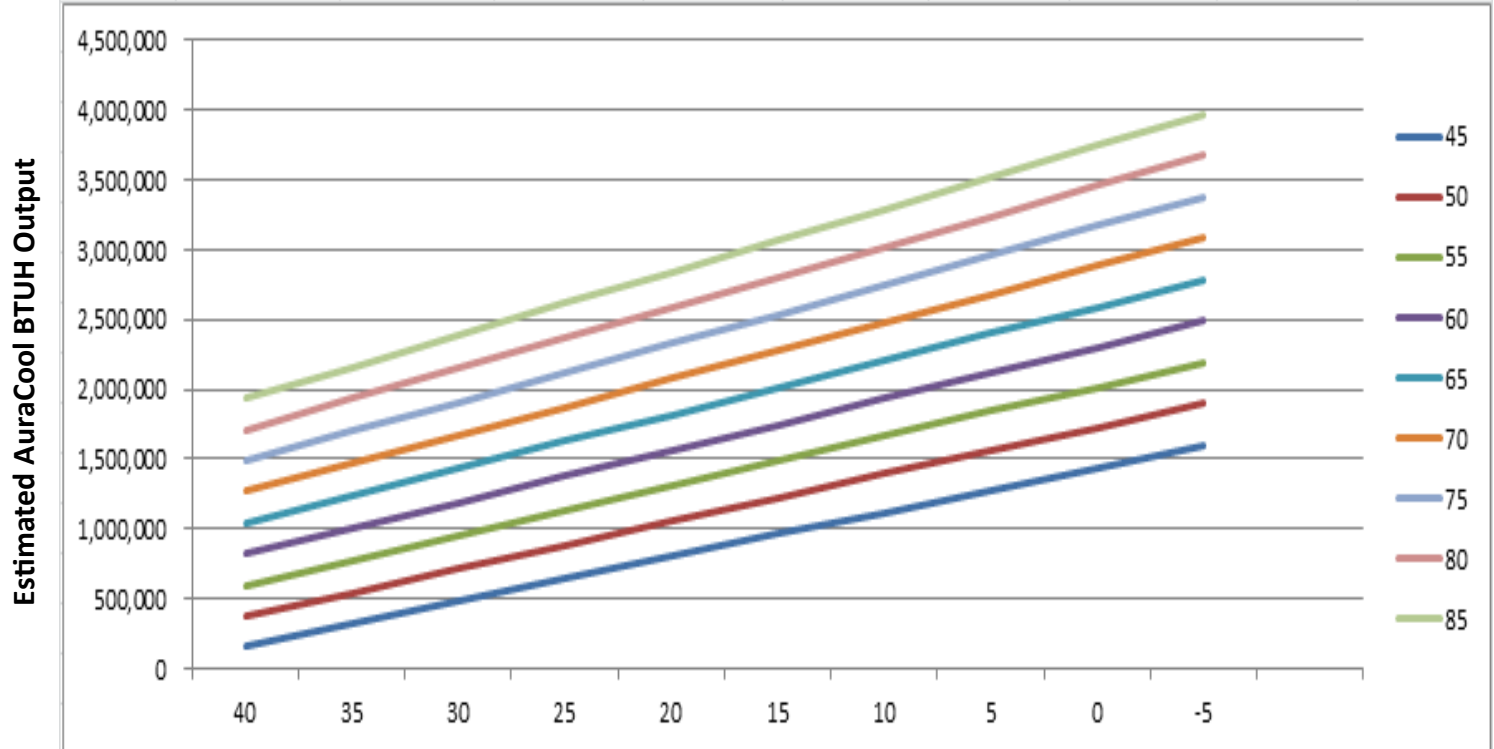


**Using this table:** The **RED** values in the table above represents the AuraCool Economizer inlet air temperature (F). The **BLUE** values in the table above represent your process fluid inlet temperature (F) to AuraCool. Within the performance table, we have marked the capacity standard for this model. All capacities were calculated using 30% Propylene Glycol (PG) at a nominal flow rate (GPM) of 3.0 times nominal cooling tonnage.

# Performance Table Model: AES-600

**AuraCool Inlet Fluid Temperature (F)**

AuraCool Inlet Air Temperature (F)	45	50	55	60	65	70	75	80	85
40	157,000	379,250	601,500	823,750	1,046,000	1,268,250	1,490,500	1,712,750	1,935,000
35	318,000	548,389	778,778	1,009,167	1,239,556	1,469,944	1,700,333	1,930,722	2,161,111
30	479,000	717,528	956,056	1,194,583	1,433,111	1,671,639	1,910,167	2,148,694	2,387,222
25	640,000	886,667	1,133,333	1,380,000	1,626,667	1,873,333	2,120,000	2,366,667	2,613,333
20	801,000	1,055,806	1,310,611	1,565,417	1,820,222	2,075,028	2,329,833	2,584,639	2,839,444
15	962,000	1,224,944	1,487,889	1,750,833	2,013,778	2,276,722	2,539,667	2,802,611	3,065,556
10	1,123,000	1,394,083	1,665,167	1,936,250	2,207,333	2,478,417	2,749,500	3,020,583	3,291,667
5	1,284,000	1,563,222	1,842,444	2,121,667	2,400,889	2,680,111	2,959,333	3,238,556	3,517,778
0	1,445,000	1,732,361	2,019,722	2,307,083	2,594,444	2,881,806	3,169,167	3,456,528	3,743,889
-5	1,606,000	1,901,500	2,197,000	2,492,500	2,788,000	3,083,500	3,379,000	3,674,500	3,970,000

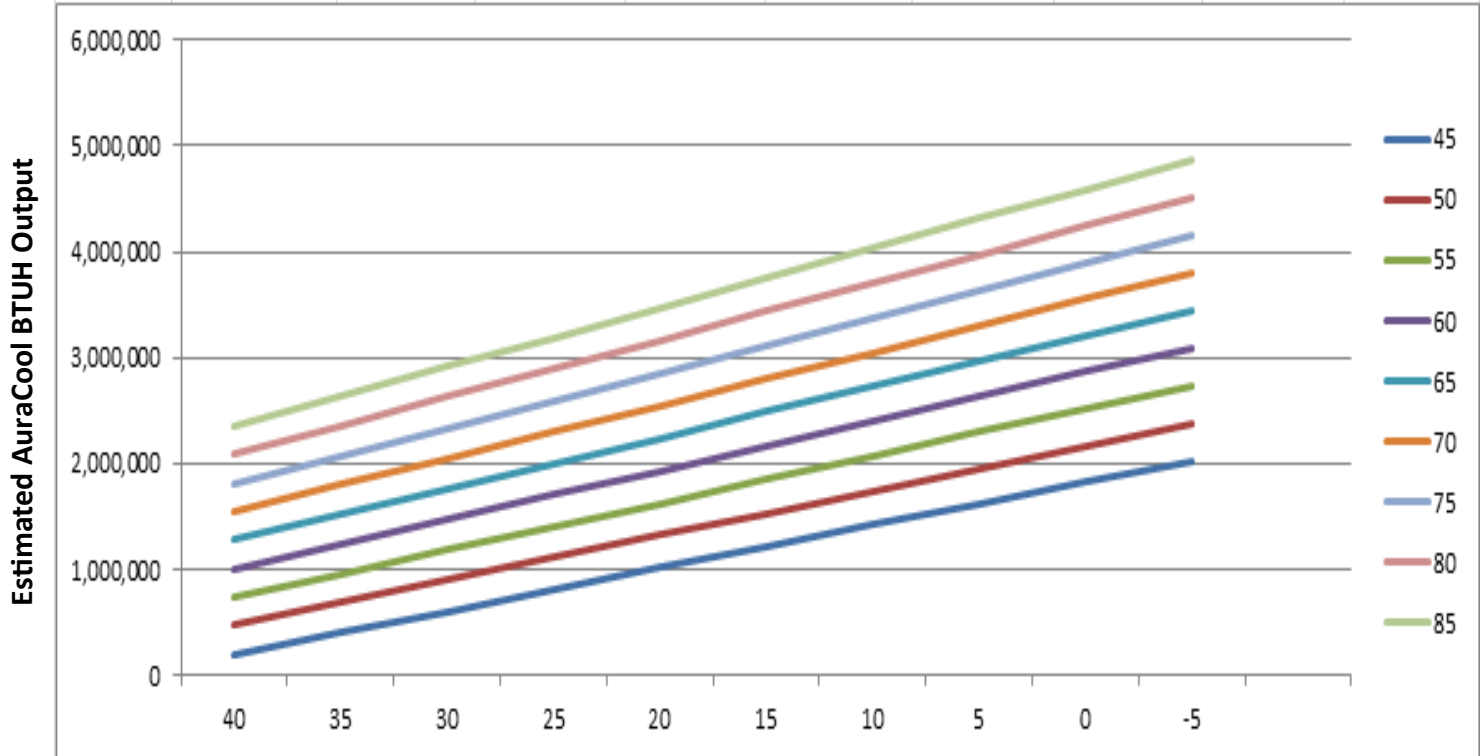


**Using this table:** The **RED** values in the table above represents the AuraCool Economizer inlet air temperature (F). The **BLUE** values in the table above represent your process fluid inlet temperature (F) to AuraCool. Within the performance table, we have marked the capacity standard for this model. All capacities were calculated using 30% Propylene Glycol (PG) at a nominal flow rate (GPM) of 3.0 times nominal cooling tonnage.

# Performance Table Model: AES-735

**AuraCool Inlet Fluid Temperature (F)**

AuraCool Inlet Air Temperature (F)	45	50	55	60	65	70	75	80	85
40	198,000	467,625	737,250	1,006,875	1,276,500	1,546,125	1,815,750	2,085,375	2,355,000
35	401,556	680,667	959,778	1,238,889	1,518,000	1,797,111	2,076,222	2,355,333	2,634,444
30	605,111	893,708	1,182,306	1,470,903	1,759,500	2,048,097	2,336,694	2,625,292	2,913,889
25	808,667	1,106,750	1,404,833	1,702,917	2,001,000	2,299,083	2,597,167	2,895,250	3,193,333
20	1,012,222	1,319,792	1,627,361	1,934,931	2,242,500	2,550,069	2,857,639	3,165,208	3,472,778
15	1,215,778	1,532,833	1,849,889	2,166,944	2,484,000	2,801,056	3,118,111	3,435,167	3,752,222
10	1,419,333	1,745,875	2,072,417	2,398,958	2,725,500	3,052,042	3,378,583	3,705,125	4,031,667
5	1,622,889	1,958,917	2,294,944	2,630,972	2,967,000	3,303,028	3,639,056	3,975,083	4,311,111
0	1,826,444	2,171,958	2,517,472	2,862,986	3,208,500	3,554,014	3,899,528	4,245,042	4,590,556
-5	2,030,000	2,385,000	2,740,000	3,095,000	3,450,000	3,805,000	4,160,000	4,515,000	4,870,000

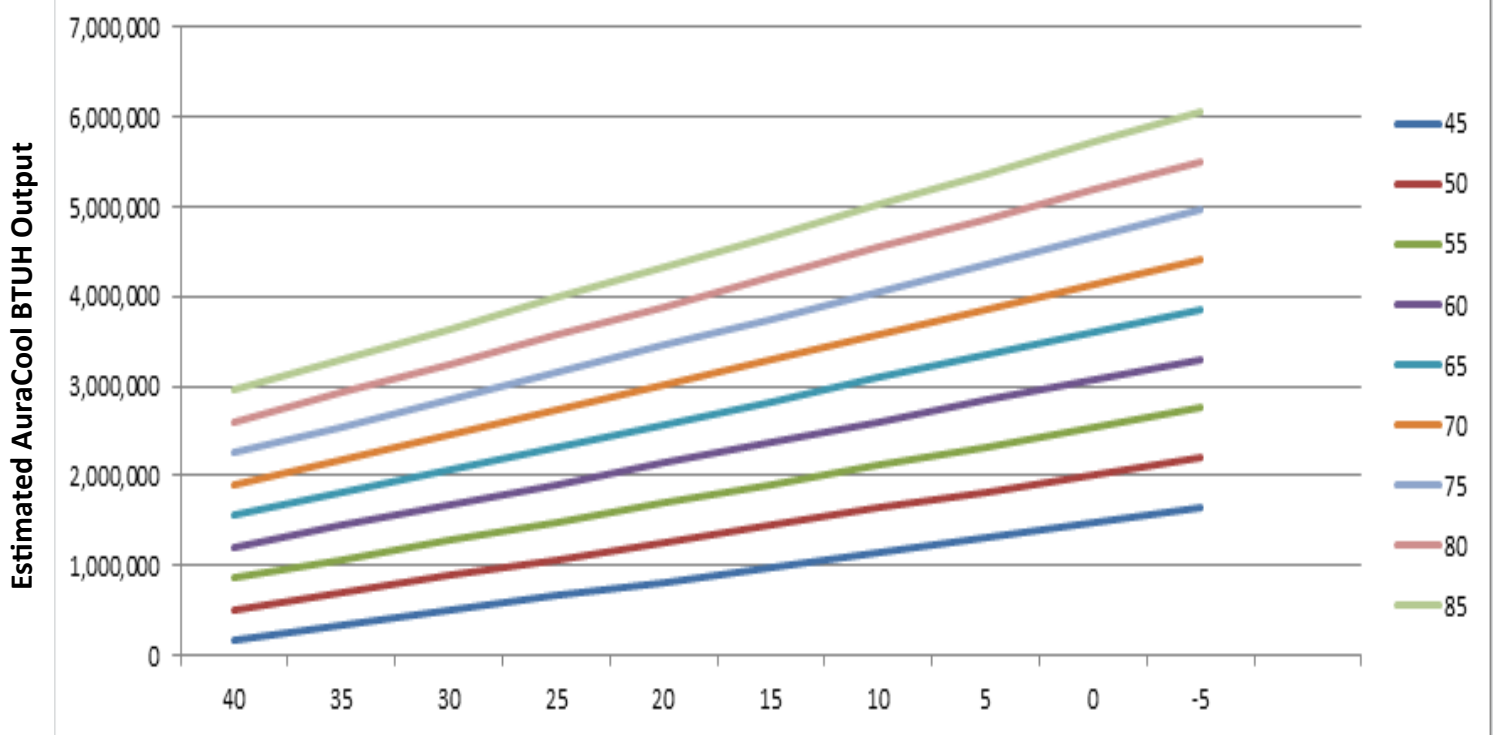


**Using this table:** The **RED** values in the table above represents the AuraCool Economizer inlet air temperature (F). The **BLUE** values in the table above represent your process fluid inlet temperature (F) to AuraCool. Within the performance table, we have marked the capacity standard for this model. All capacities were calculated using 30% Propylene Glycol (PG) at a nominal flow rate (GPM) of 3.0 times nominal cooling tonnage.

# Performance Table Model: AES-850

**AuraCool Inlet Fluid Temperature (F)**

AuraCool Inlet Air Temperature (F)	45	50	55	60	65	70	75	80	85
40	163,000	511,375	859,750	1,208,125	1,556,500	1,904,875	2,253,250	2,601,625	2,950,000
35	328,222	699,139	1,070,056	1,440,972	1,811,889	2,182,806	2,553,722	2,924,639	3,295,556
30	493,444	886,903	1,280,361	1,673,819	2,067,278	2,460,736	2,854,194	3,247,653	3,641,111
25	658,667	1,074,667	1,490,667	1,906,667	2,322,667	2,738,667	3,154,667	3,570,667	3,986,667
20	823,889	1,262,431	1,700,972	2,139,514	2,578,056	3,016,597	3,455,139	3,893,681	4,332,222
15	989,111	1,450,194	1,911,278	2,372,361	2,833,444	3,294,528	3,755,611	4,216,694	4,677,778
10	1,154,333	1,637,958	2,121,583	2,605,208	3,088,833	3,572,458	4,056,083	4,539,708	5,023,333
5	1,319,556	1,825,722	2,331,889	2,838,056	3,344,222	3,850,389	4,356,556	4,862,722	5,368,889
0	1,484,778	2,013,486	2,542,194	3,070,903	3,599,611	4,128,319	4,657,028	5,185,736	5,714,444
-5	1,650,000	2,201,250	2,752,500	3,303,750	3,855,000	4,406,250	4,957,500	5,508,750	6,060,000



**Using this table:** The **RED** values in the table above represents the AuraCool Economizer inlet air temperature (F). The **BLUE** values in the table above represent your process fluid inlet temperature (F) to AuraCool. Within the performance table, we have marked the capacity standard for this model. All capacities were calculated using 30% Propylene Glycol (PG) at a nominal flow rate (GPM) of 3.0 times nominal cooling tonnage.

# AuraCool Economizer Pressure Drop (Delta P) Tables

AuraCool Economizer pressure drops provided in the tables below are estimated and subject to change without notice. Nominal condition shown in BOLD on each chart. Please refer to Typical System Layouts page for more information on how Delta P can impact system performance.

		AuraCool - AES50 - GPM					
		6	8	<b>11</b>	14	17	21
P	25	2.09	2.46	2.83	3.19	3.56	3.92
	30	2.40	2.73	3.06	3.39	3.72	4.05
G	35	2.70	3.00	3.30	3.59	3.89	4.19
	40	3.01	3.27	<b>3.53</b>	3.79	4.05	4.32
%	45	3.31	3.54	3.77	3.99	4.22	4.45
	50	3.92	4.05	4.19	4.32	4.45	4.58

		AuraCool - AES120 - GPM					
		14	19	<b>25</b>	31	39	49
P	25	2.04	2.40	2.75	3.11	3.47	3.82
	30	2.34	2.66	2.98	3.30	3.63	3.95
G	35	2.63	2.92	3.21	3.50	3.79	4.08
	40	2.93	3.19	<b>3.44</b>	3.70	3.95	4.20
%	45	3.23	3.45	3.67	3.89	4.11	4.33
	50	3.82	3.95	4.08	4.20	4.33	4.46

		AuraCool - AES150 - GPM					
		18	24	<b>32</b>	40	50	63
P	25	0.97	1.14	1.31	1.48	1.65	1.82
	30	1.11	1.26	1.42	1.57	1.73	1.88
G	35	1.25	1.39	1.53	1.66	1.80	1.94
	40	1.39	1.52	<b>1.64</b>	1.76	1.88	2.00
%	45	1.54	1.64	1.75	1.85	1.96	2.06
	50	1.82	1.88	1.94	2.00	2.06	2.12

		AuraCool - AES200 - GPM					
		23	31	<b>41</b>	51	64	80
P	25	1.33	1.56	1.79	2.02	2.26	2.49
	30	1.52	1.73	1.94	2.15	2.36	2.57
G	35	1.71	1.90	2.09	2.28	2.47	2.65
	40	1.91	2.07	<b>2.24</b>	2.40	2.57	2.74
%	45	2.10	2.24	2.39	2.53	2.68	2.82
	50	2.49	2.57	2.65	2.74	2.82	2.90

		AuraCool - AES280 - GPM					
		34	45	<b>60</b>	75	94	117
P	25	3.01	3.54	4.07	4.59	5.12	5.65
	30	3.45	3.93	4.40	4.88	5.36	5.83
G	35	3.89	4.32	4.74	5.17	5.60	6.02
	40	4.33	4.71	<b>5.08</b>	5.46	5.83	6.21
%	45	4.77	5.09	5.42	5.75	6.07	6.40
	50	5.65	5.83	6.02	6.21	6.40	6.59

		AuraCool - AES385 - GPM					
		46	61	<b>81</b>	101	127	158
P	25	2.27	2.66	3.06	3.46	3.85	4.25
	30	2.60	2.96	3.31	3.67	4.03	4.39
G	35	2.93	3.25	3.57	3.89	4.21	4.53
	40	3.26	3.54	<b>3.82</b>	4.11	4.39	4.67
%	45	3.59	3.83	4.08	4.32	4.57	4.82
	50	4.25	4.39	4.53	4.67	4.82	4.96

		AuraCool - AES480 - GPM					
		56	75	<b>100</b>	125	156	195
P	25	4.56	5.36	6.16	6.95	7.75	8.55
	30	5.22	5.95	6.67	7.39	8.11	8.83
G	35	5.89	6.54	7.18	7.83	8.47	9.12
	40	6.55	7.12	<b>7.69</b>	8.26	8.83	9.40
%	45	7.22	7.71	8.21	8.70	9.20	9.69
	50	8.55	8.83	9.12	9.40	9.69	9.97

		AuraCool - AES600 - GPM					
		70	94	<b>125</b>	156	195	244
P	25	6.85	8.05	9.25	10.45	11.65	12.85
	30	7.85	8.94	10.02	11.11	12.19	13.28
G	35	8.85	9.82	10.79	11.77	12.74	13.71
	40	9.85	10.71	<b>11.57</b>	12.42	13.28	14.14
%	45	10.85	11.59	12.34	13.08	13.82	14.56
	50	12.85	13.28	13.71	14.14	14.56	14.99

		AuraCool - AES735 - GPM					
		87	116	<b>154</b>	193	241	301
P	25	8.09	9.51	10.92	12.34	13.75	15.17
	30	9.27	10.55	11.83	13.11	14.39	15.68
G	35	10.45	11.60	12.74	13.89	15.03	16.18
	40	11.63	12.64	<b>13.65</b>	14.66	15.68	16.69
%	45	12.81	13.69	14.56	15.44	16.32	17.19
	50	15.17	15.68	16.18	16.69	17.19	17.70

		AuraCool - AES850 - GPM					
		101	134	<b>179</b>	224	280	350
P	25	7.89	9.27	10.65	12.04	13.42	14.80
	30	9.04	10.29	11.54	12.79	14.04	15.29
G	35	10.19	11.31	12.43	13.55	14.67	15.78
	40	11.35	12.33	<b>13.32</b>	14.30	15.29	16.28
%	45	12.50	13.35	14.21	15.06	15.92	16.77
	50	14.80	15.29	15.78	16.28	16.77	17.26