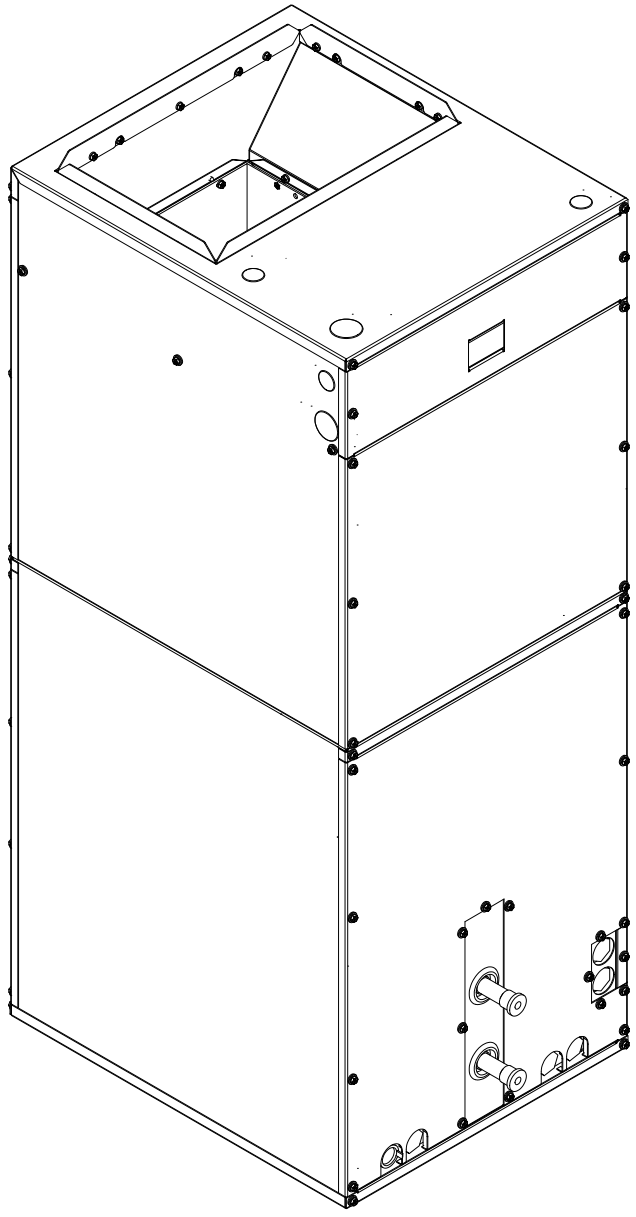
ENERTECH
ENERGY + TECHNOLOGY

Engineering Submittal Data

EAH MULTI-POSITION HYDRONIC AIR HANDLERS & EEH CASED HYDRONIC "A" COIL



Project Name: _____
Engineer: _____
Contractor: _____
Architect: _____
Date Received: _____
Date Submitted: _____

Unit Tag	Model Number
_____	_____
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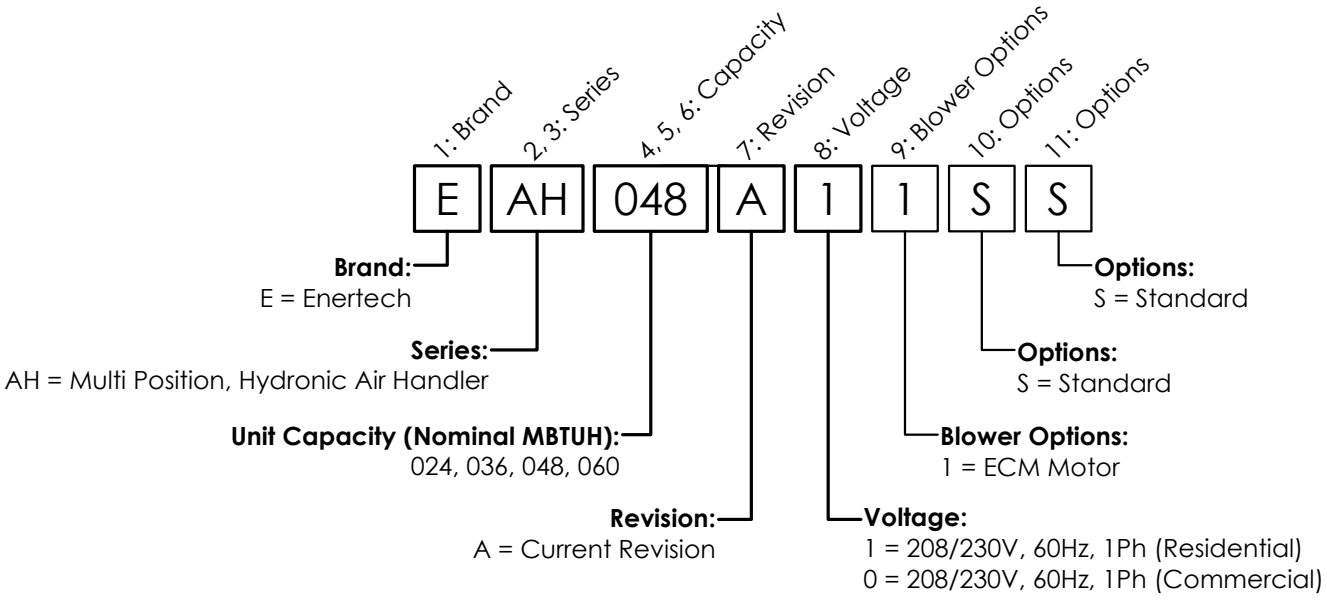
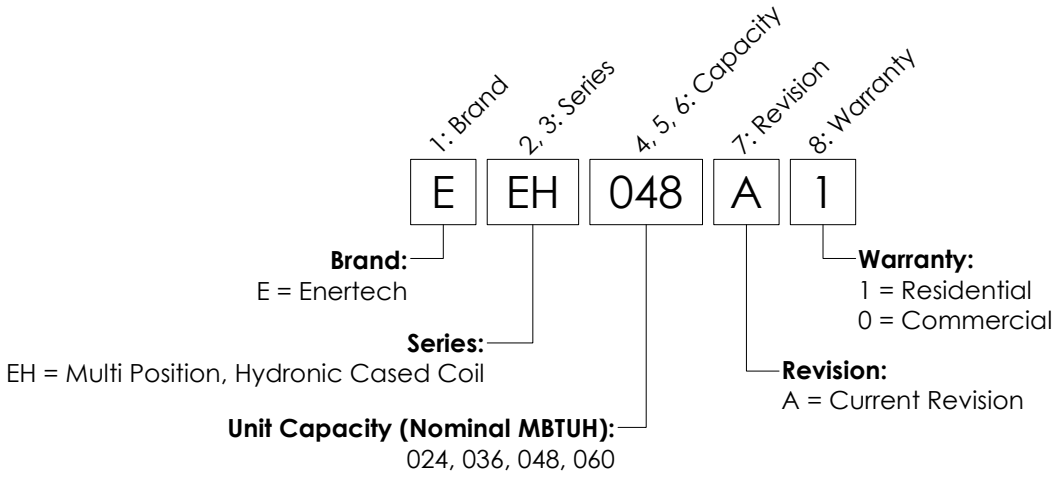
Notes:

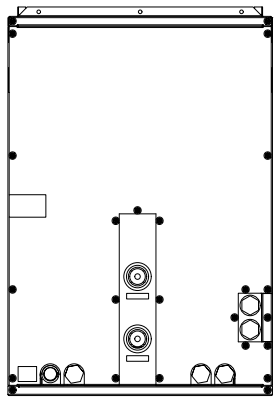
20D214-21NN

Nomenclature Decoder

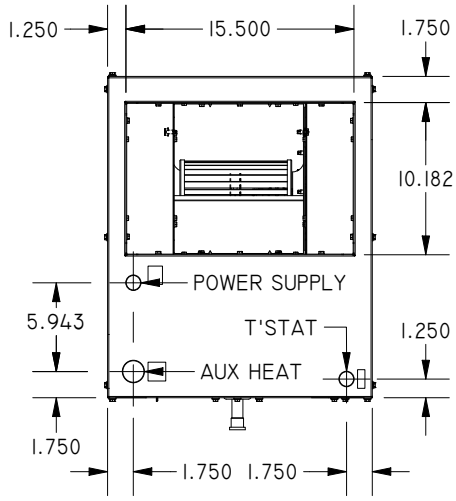


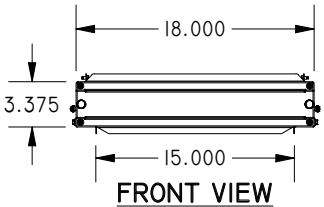


Dimensional Data : AH/EH 024

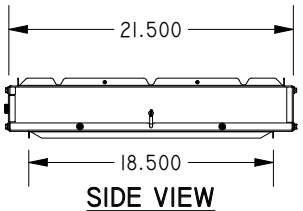


EEH024
(CASED COIL)
BLOWER SECTION REMOVED

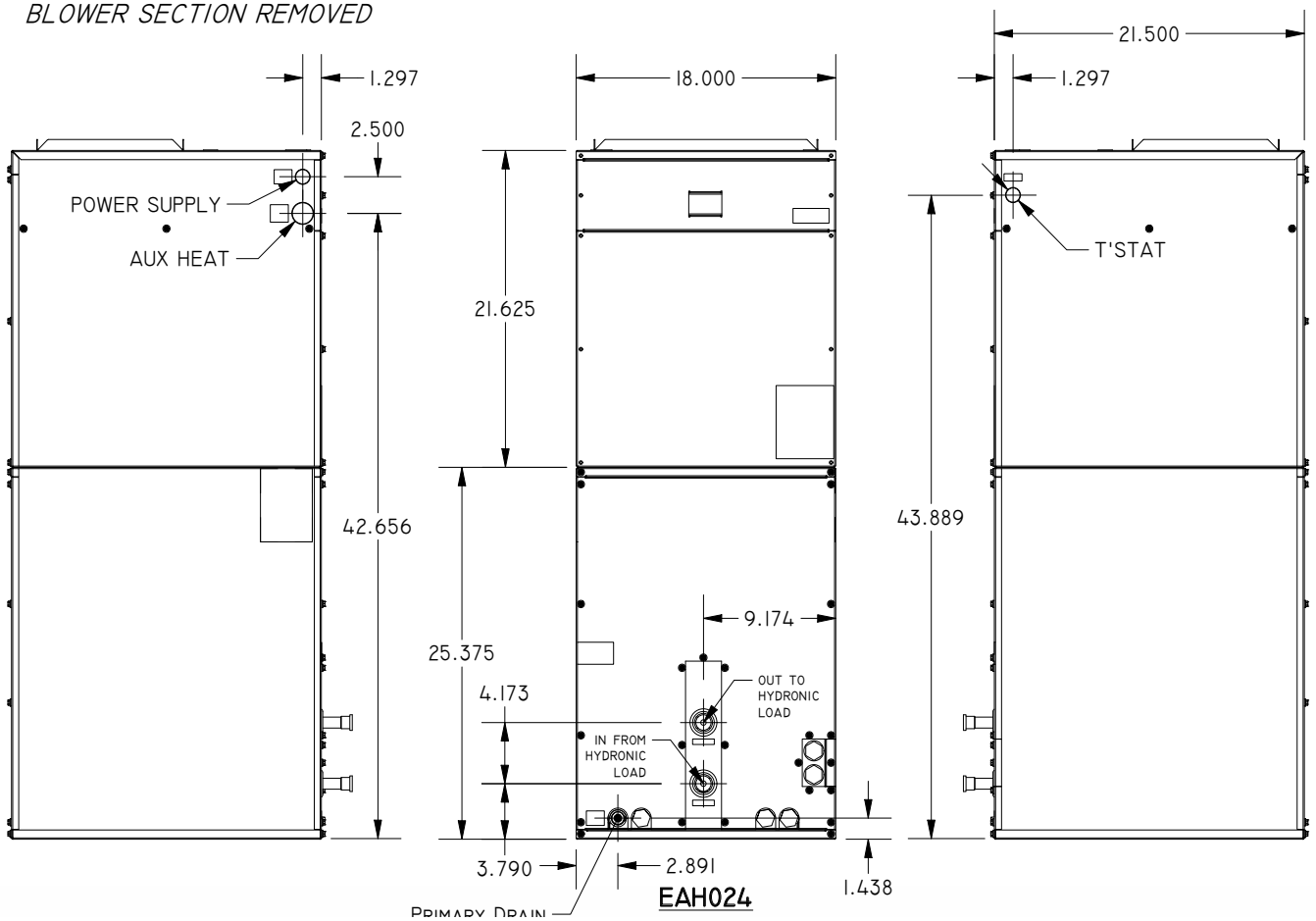




FRONT VIEW
*AFR1620A



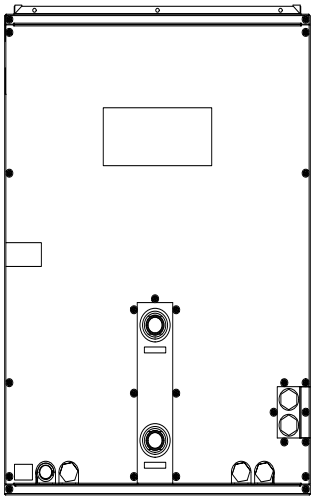
SIDE VIEW
*AFR1620A



EAH024

(EAH) Air Handler & (EEH) Cased Coil			AH Ship Weight	EH Ship Weight	*Accessory Filter Rack
Model	Hydronic Load Conn.	Electrical Knockouts			
024	3/4" O.D.	SIZED FOR 1/2" OR 1" CONDUIT	155 Lbs	80 Lbs	AFR1620A
036-048	1-1/8" O.D.		190 Lbs	95 Lbs	AFR2020A
060	1-1/8" O.D.		210 Lbs	100 Lbs	AFR2320A

Dimensional Data : AH/EH 036-048



EEH036-048
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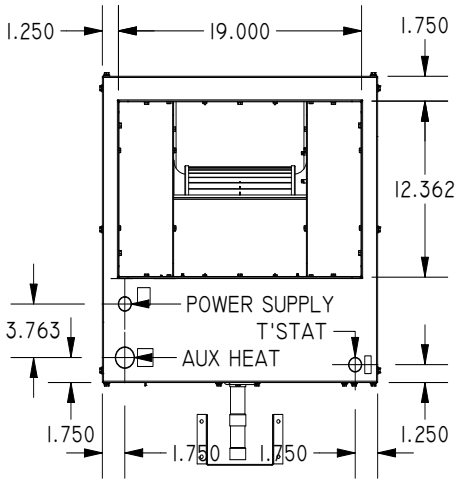
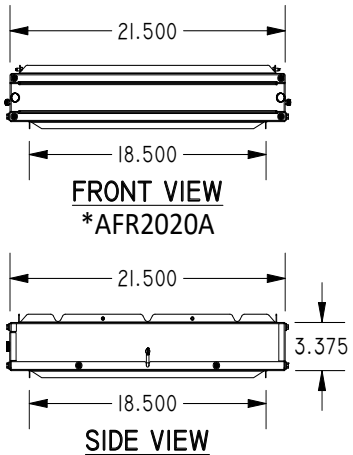
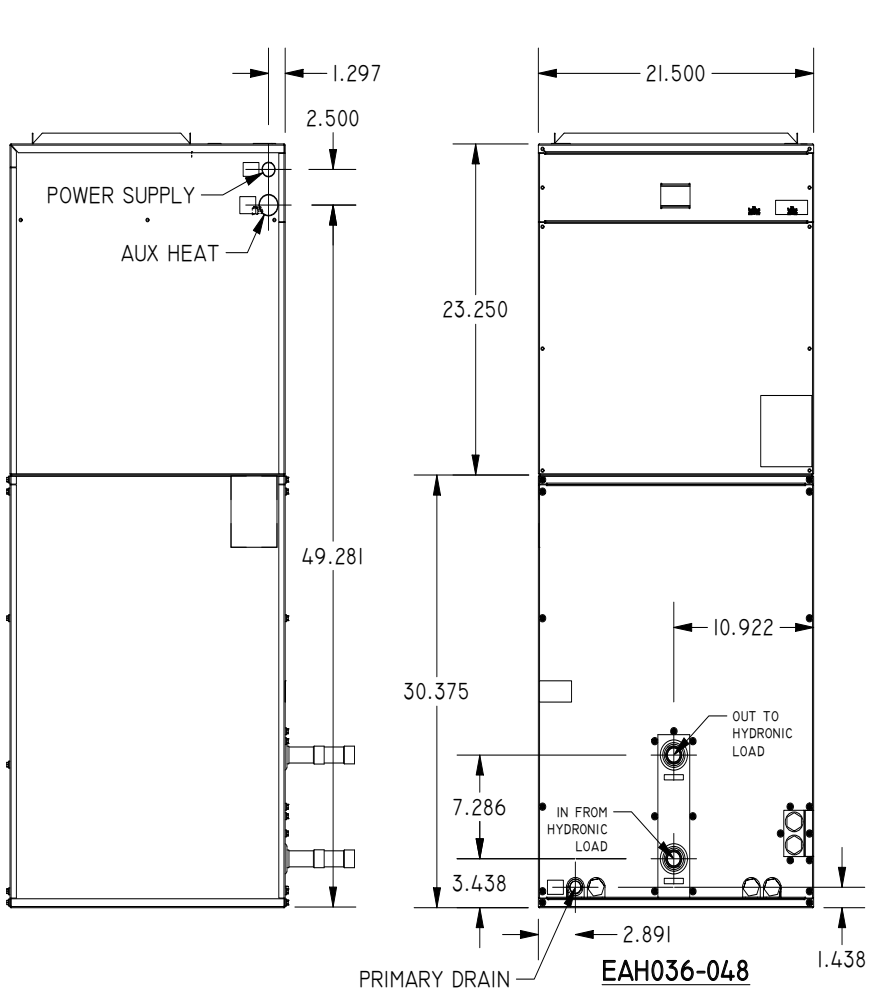
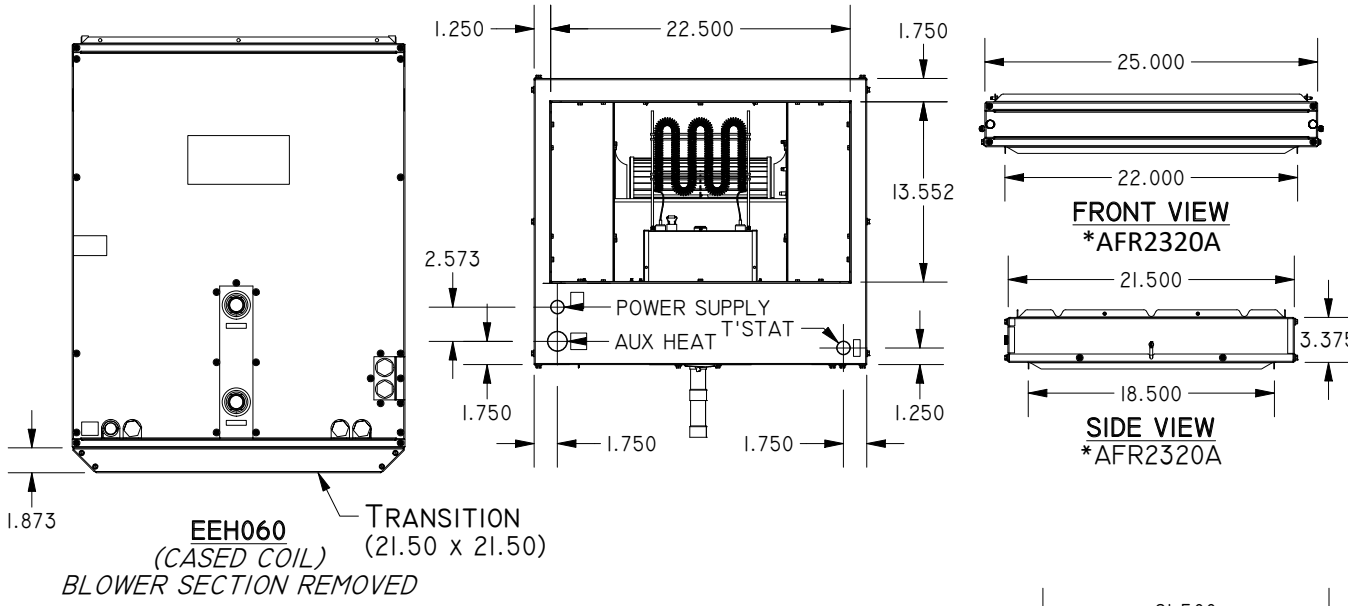


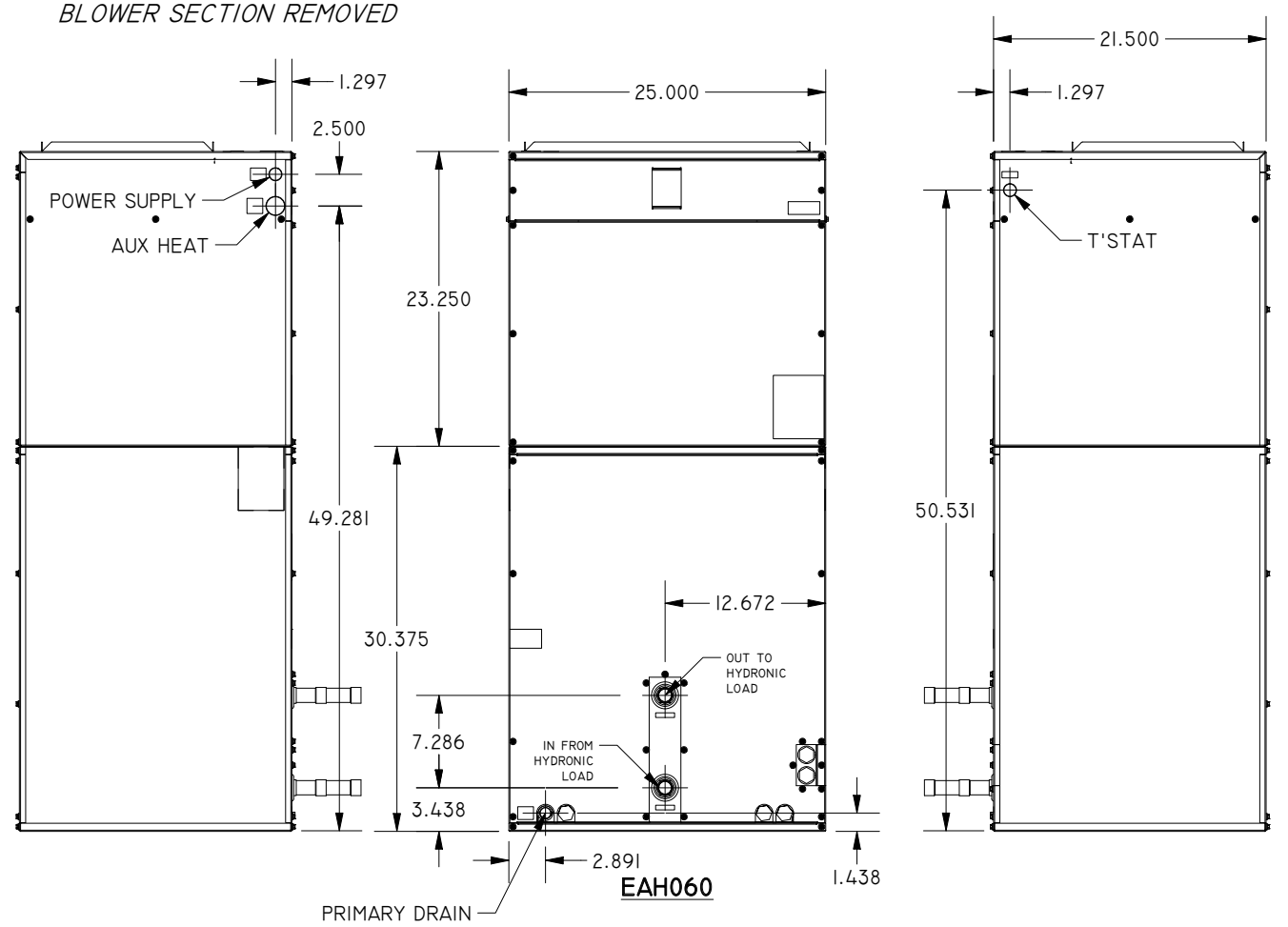




Dimensional Data : AH/EH 060



EEH060
(CASED COIL)
BLOWER SECTION REMOVED



EAH060

EAH Electrical Data

Model	Voltage Code	60 Hz Power		Fan Motor FLA	Total Unit FLA	Min Circuit AMPS	Max Brkr HACR
		Volts	Phase				
EAH024	01/11	208/230	1	3.9	3.9	4.9	15
EAH036	01/11	208/230	1	5.9	5.9	7.4	15
EAH048	01/11	208/230	1	5.9	5.9	7.4	15
EAH060	01/11	208/230	1	7.4	7.4	9.3	15

Notes:
1. All line and low voltage wiring must adhere to the National Electrical Code and local codes, whichever is the most stringent.
2. In determining the correct supply wire size and maximum length, reference NFPA 70, Section 310. If the calculation is close to the maximum allowable ampacity of a particular wire size, use the next size up. This will ensure that no adverse effects occur, such as light dimming and/or shortened compressor life.
3. Min/Max Voltage: 208/230/60 = 187-252

AHA Electric Heater Electrical Data

Technical Data 60Hz, Single Phase, w/ Circuit Breaker (*Single Point Connection)											
Heater Model	**Supply Circuit Number**	**Heat kW**		**Heater kW Per Circuit**		**FLA Total AMPS**		**MCA- Minimum Circuit Ampacity**		**MOCP Maximum Overcurrent Protective Device (AMPS) NEC 240.4(B)**	
		240	**208**	**240**	**208**	**240**	**208**	**240**	**208**	**240**	**208**
AHA051SA AHA051MA AHA051LA	Single	5	3.75	2.5	1.875	20.8	18.0	26.0	22.5	30	25
AHA101MA	Single	10	7.5	5	3.75	41.7	36.1	52.1	45.1	60	50
				5	3.75						
AHA151LA*	Single	15	11.25	5	3.75	62.5	54.1	78.1	67.6	80	70
				10	7.50						
Technical Data (US Customers ONLY!!) 60Hz, Single Phase, w/ Circuit Breaker- (Single Point Connection Removed)											
Heater Model	**Supply Circuit Number**	**Heat kW**		**Heater kW Per Circuit**		**FLA Total AMPS**		**MCA- Minimum Circuit Ampacity**		**MOCP Maximum Overcurrent Protective Device (AMPS) NEC 240.4(B)**	
		240	**208**	**240**	**208**	**240**	**208**	**240**	**208**	**240**	**208**
AHA151LA	L1/L2	15	11.25	5	3.75	20.8	18.0	26.0	22.5	30	25
	L3/L4			10	7.50	41.7	36.1	52.1	45.1	60	50

Available Options		
Electric Heat Model	**Description**	**EAH Models**
AHA051SA	5kW, 208/230V, 60HZ, 1 Phase, with Circuit Breaker	024
AHA101MA	10kW, 208/230V, 60HZ, 1 Phase, with Circuit Breaker	036-048
AHA151LA	15kW, 208/230V, 60HZ, 1 Phase, with Circuit Breaker and Single Point Connection	060
Note: 15kW heaters come with a single point connection jumper bar assembly factory installed.		

ECM Fan Performance Data

EAH Series ECM Fan Performance Data: One & Two-Stage Compressor Units

Model	Max ESP in. w.c.[2]	Program[3]	Heating Mode		Cooling Mode		Dehumidification Mode		Fan Only	AUX/EMG Heat[4]	DIP Switch Settings							
			1st	2nd	1st	2nd	1st	2nd			S1	S2	S3	S4	S5	S6	S7	S8
024	1.1	A	750	950	770	980	650	830	490	900	Off	Off	Off	Off	Off	Off	Off	Off
		B	**720**	**860**	**730**	**890**	**620**	**760**	**445**	**810**	**Off**	**Off**	**Off**	**On**	**Off**	**Off**	**Off**	**Off**
		C	600	740	620	770	530	650	385	675	On	Off	Off	Off	On	Off	Off	Off
		D	500	650	500	680			340	550	Off	On	On	Off	Off	On	Off	Off
036	1.2	A	1300	1700	1150	1450	980	1230	725	1650	On	Off	Off	Off	On	Off	Off	Off
		B	**1120**	**1440**	**1000**	**1270**	**850**	**1080**	**635**	**1410**	**Off**	**On**	**Off**	**Off**	**Off**	**On**	**Off**	**Off**
		C	1000	1250	850	1100	720	940	550	1270	Off	On	Off	On	Off	On	Off	Off
		D	850	1050	700	950			475	1050	On	On	Off	Off	On	On	Off	Off
048	1.0	A	1500	1900	1300	1700	1110	1450	850	1925	Off	Off	On	Off	Off	Off	Off	Off
		B	**1400**	**1820**	**1230**	**1590**	**1050**	**1350**	**795**	**1750**	**Off**	**Off**	**Off**	**Off**	**Off**	**Off**	**Off**	**Off**
		C	1200	1550	1100	1400	940	1190	700	1575	Off	Off	Off	On	Off	Off	Off	Off
		D	1150	1450	1000	1300			650	1485	On	Off	Off	On	On	Off	Off	Off
060	1.2	A	1600	1900	1700	2000	1450	1700	1000	1900	Off	Off	Off	On	Off	Off	Off	Off
		B	**1480**	**1750**	**1540**	**1830**	**1310**	**1560**	**915**	**1705**	**Off**	**On**	**On**	**Off**	**Off**	**On**	**Off**	**Off**
		C	1300	1550	1400	1650			825	1550	Off	On	Off	Off	Off	On	Off	Off
		D	1200	1400	1250	1500			750	1395	Off	On	Off	On	Off	On	Off	Off

Notes:

1. Program **B (Bold Type)** is factory settings and rated CFM. CFM is controlled within 5% up to the Max ESP.

2. Max ESP testing was done with dry coil.

3. Max ESP for AH024 through AH060 models with external electric heat is 0.8 in. w.c. Exceeding the Max ESP may result in nuisance trips of the electric heat. Thermal limits are rated at 100,000 cycles.

EAH Series Dehumidification Mode Options

DIP Switch		Mode	Operation
S9	S10		
ON	OFF	Normal	Dehumidification mode disabled (Normal Htg/Clg CFM)-- Factory setting.
OFF	ON	ODD	On Demand Dehumidification mode (humidistat input at terminal ODD)-- Humidistat
OFF	OFF	Constant Dehum	Constant Dehumidification mode (always uses dehum CFM for cooling and normal CFM
ON	ON	Not Used	Not an applicable selection.

Notes:

1. To enter dehumidification mode, ODD input should be 0 VAC; for normal cooling CFM, ODD input should be 24 VAC.

2. Heating CFM is not affected by dehumidification mode. When in dehumidification mode, cooling CFM is 85% of normal CFM.

AH024 - Performance Data

Model / Mode	EWT	EAT	GPM	WPD (psi/ft hd)	Program	CFM	HC
AH024 (HEATING)	100	70	2	1.03/2.38	A	950	15566
					B	860	14856
					C	740	13748
					D	650	12816
			4	1.97/4.54	A	950	20595
					B	860	19479
					C	740	17764
					D	650	16292
			6	3.52/8.14	A	950	23012
					B	860	21250
					C	740	19379
					D	650	17421
	110		2	1.07/2.48	A	950	20638
					B	860	19686
					C	740	18433
					D	650	17178
			4	1.95/4.51	A	950	27761
					B	860	26118
					C	740	23754
					D	650	21793
			6	3.51/8.10	A	950	30922
					B	860	28803
					C	740	25801
					D	650	23409
	120		2	1.09/2.52	A	950	25994
					B	860	24864
					C	740	23147
					D	650	21667
			4	1.98/4.56	A	950	34952
					B	860	32860
					C	740	29868
					D	650	27414
			6	3.51/8.11	A	950	39016
					B	860	36293
					C	740	32488
					D	650	28996

Model / Mode	EWT	EAT	GPM	WPD (psi/ft hd)	Program	CFM	TC	SC
AH024 (COOLING)	42	75/63	2	1.04/2.40	A	980	14765	12680
					B	890	14856	12255
					C	770	13839	11361
					D	680	12908	10625
			4	2.12/4.89	A	980	20590	16640
					B	890	19548	15604
					C	770	18010	14016
					D	680	16695	12677
			6	3.82/8.82	A	980	24851	18797
					B	890	23652	17550
					C	770	21673	15547
					D	680	20037	14030
	45		2	1.09/2.52	A	980	13331	12523
					B	890	12919	11336
					C	770	11938	10409
					D	680	11134	9740
			4	2.09/4.84	A	980	17781	15385
					B	890	16836	14399
					C	770	15427	12902
					D	680	14367	11721
			6	3.78/8.74	A	980	21495	17373
					B	890	20392	16212
					C	770	18716	14414
					D	680	17414	13000
	50		2	1.09/2.51	A	980	10760	9860
					B	890	10560	9362
					C	770	9793	8637
					D	680	9284	8148
			4	2.09/4.82	A	980	15053	13201
					B	890	14404	12509
					C	770	13072	11333
					D	680	12127	10437
			6	3.79/8.75	A	980	17960	15309
					B	890	17000	14411
					C	770	15443	12899
					D	680	13964	11577

1. Capacity data is based on 15% (by mass) methanol antifreeze solution.
2. Performance data accurate within ±15%.
3. Interpolation of unit performance data is permissible; extrapolation is not.
4. Performance data is a result of lab testing and is not related to warranty.
5. Due to variations in installation, actual unit performance may vary from the tabulated data.

AH036 - Performance Data

Model / Mode	EWT	EAT	GPM	WPD (psi/ft hd)	Program	CFM	HC
AH036 (HEATING)	100	70	3	0.81/1.87	A	1700	28185
					B	1440	25906
					C	1250	24428
					D	1050	22336
			6	1.44/3.33	A	1700	39321
					B	1440	35391
					C	1250	32629
					D	1050	28705
			9	2.46/5.68	A	1700	43769
					B	1440	38800
					C	1250	35481
					D	1050	30685
	110		3	0.79/1.83	A	1700	37249
					B	1440	35082
					C	1250	33201
					D	1050	30982
			6	1.41/3.27	A	1700	51911
					B	1440	47142
					C	1250	43729
					D	1050	38505
			9	2.44/5.63	A	1700	57928
					B	1440	51230
					C	1250	47202
					D	1050	42493
	120		3	0.83/1.92	A	1700	38115
					B	1440	43659
					C	1250	41472
					D	1050	37901
			6	1.40/3.23	A	1700	64512
					B	1440	57274
					C	1250	53029
					D	1050	46633
			9	2.41/5.56	A	1700	70957
					B	1440	62493
					C	1250	57222
					D	1050	49431

Model / Mode	EWT	EAT	GPM	WPD (psi/ft hd)	Program	CFM	TC	SC
AH036 (COOLING)	42	75/63	3	0.92/2.12	A	1450	25225	24319
					B	1270	24883	22497
					C	1100	23253	20185
					D	950	21737	18086
			6	1.61/3.71	A	1450	36169	29201
					B	1270	34717	27212
					C	1100	32512	24698
					D	950	30288	22368
			9	2.64/6.10	A	1450	44306	32930
					B	1270	42131	30531
					C	1100	39041	27512
					D	950	35891	24757
	45		3	0.91/2.11	A	1450	22302	22302
					B	1270	22376	21220
					C	1100	20867	19019
					D	950	19206	16894
			6	1.60/3.71	A	1450	31923	27263
					B	1270	30409	25430
					C	1100	28536	23067
					D	950	26714	20861
			9	2.62/6.05	A	1450	39026	30739
					B	1270	37103	28377
					C	1100	34164	25498
					D	950	31503	22877
	50		3	0.91/2.11	A	1450	18540	18540
					B	1270	18357	18103
					C	1100	16887	16439
					D	950	15848	15141
			6	1.56/3.61	A	1450	25350	23689
					B	1270	24345	22282
					C	1100	22360	20199
					D	950	20722	18247
			9	2.61/6.03	A	1450	29964	26685
					B	1270	28514	24684
					C	1100	26254	22120
					D	950	24021	19724

1. Capacity data is based on 15% (by mass) methanol antifreeze solution.
2. Performance data accurate within ±15%.
3. Interpolation of unit performance data is permissible; extrapolation is not.
4. Performance data is a result of lab testing and is not related to warranty.
5. Due to variations in installation, actual unit performance may vary from the tabulated data.

AH048 - Performance Data

Model / Mode	EWT	EAT	GPM	WPD (psi/ft hd)	Program	CFM	HC
AH048 (HEATING)	100	70	4	1.05/2.43	A	1900	32497
					B	1820	31679
					C	1550	30826
					D	1450	30151
			8	2.02/4.66	A	1900	42006
					B	1820	41641
					C	1550	41267
					D	1450	39193
			12	3.72/8.59	A	1900	45451
					B	1820	45057
					C	1550	44804
					D	1450	42081
	110		4	1.03/2.37	A	1900	43569
					B	1820	41719
					C	1550	41445
					D	1450	39730
			8	1.97/4.55	A	1900	55377
					B	1820	54947
					C	1550	54486
					D	1450	51662
			12	3.67/8.48	A	1900	59697
					B	1820	59212
					C	1550	58824
					D	1450	55601
	120		4	1.02/2.37	A	1900	52450
					B	1820	52011
					C	1550	51756
					D	1450	49972
			8	1.94/4.48	A	1900	68147
					B	1820	68004
					C	1550	67683
					D	1450	64080
			12	3.63/8.40	A	1900	73306
					B	1820	72976
					C	1550	72891
					D	1450	68527

Model / Mode	EWT	EAT	GPM	WPD (psi/ft hd)	Program	CFM	TC	SC
AH048 (COOLING)	42	75/63	4	1.16/2.67	A	1700	29430	27204
					B	1590	28828	27224
					C	1400	27809	24951
					D	1300	27297	24271
			8	2.22/5.12	A	1700	42136	34018
					B	1590	41128	32997
					C	1400	39119	30267
					D	1300	37856	28852
			12	4.12/9.53	A	1700	51459	37758
					B	1590	50289	36694
					C	1400	46878	33526
					D	1300	46506	32471
	45		4	1.18/2.72	A	1700	26306	25259
					B	1590	25383	25304
					C	1400	24285	24190
					D	1300	24069	23361
			8	2.21/5.11	A	1700	37259	32015
					B	1590	36458	31194
					C	1400	34056	28152
					D	1300	33169	27022
			12	4.09/9.46	A	1700	45459	35524
					B	1590	44382	34259
					C	1400	41301	31109
					D	1300	40142	29842
	50		4	1.17/2.71	A	1700	21069	20867
					B	1590	19924	19924
					C	1400	19416	19416
					D	1300	18956	18956
			8	2.20/5.07	A	1700	29187	27987
					B	1590	28467	26856
					C	1400	27144	25083
					D	1300	25992	24151
			12	4.09/9.45	A	1700	34830	31138
					B	1590	33953	30133
					C	1400	31414	27469
					D	1300	30424	26312

1. Capacity data is based on 15% (by mass) methanol antifreeze solution.
2. Performance data accurate within ±15%.
3. Interpolation of unit performance data is permissible; extrapolation is not.
4. Performance data is a result of lab testing and is not related to warranty.
5. Due to variations in installation, actual unit performance may vary from the tabulated data.

AH060 - Performance Data

Model / Mode	EWT	EAT	GPM	WPD (psi/ft hd)	Program	CFM	HC
AH060 (HEATING)	100	70	5	1.26/2.90	A	1900	36135
					B	1750	33822
					C	1550	33420
					D	1400	30533
			10	2.18/5.03	A	1900	49609
					B	1750	45793
					C	1550	41999
					D	1400	38516
			15	3.90/9.00	A	1900	53492
					B	1750	49184
					C	1550	45065
					D	1400	40943
	110		5	1.26/2.91	A	1900	51632
					B	1750	46484
					C	1550	43137
					D	1400	40450
			10	2.07/4.78	A	1900	65582
					B	1750	60008
					C	1550	55597
					D	1400	50928
			15	3.76/8.70	A	1900	70240
					B	1750	64954
					C	1550	59342
					D	1400	53831
	120		5	1.10/2.54	A	1900	63560
					B	1750	57480
					C	1550	54263
					D	1400	50369
			10	1.99/4.59	A	1900	81483
					B	1750	74873
					C	1550	69312
					D	1400	63540
			15	3.64/8.40	A	1900	87462
					B	1750	79879
					C	1550	73330
					D	1400	66664

Model / Mode	EWT	EAT	GPM	WPD (psi/ft hd)	Program	CFM	TC	SC
AH060 (COOLING)	42	75/63	5	1.09/2.51	A	2000	34903	31689
					B	1830	34537	30042
					C	1650	34098	29982
					D	1500	32857	28115
			10	2.25/5.21	A	2000	51642	40863
					B	1830	49418	38898
					C	1650	47130	36096
					D	1500	44995	33573
			15	4.18/9.66	A	2000	62844	45568
					B	1830	61871	44735
					C	1650	57893	41389
					D	1500	54665	38139
	45		5	1.09/2.51	A	2000	30852	29181
					B	1830	30711	29166
					C	1650	29712	29129
					D	1500	28670	27025
			10	2.24/5.18	A	2000	44398	37797
					B	1830	44198	36583
					C	1650	41612	33923
					D	1500	39800	31475
			15	4.17/9.62	A	2000	56158	42809
					B	1830	54221	41045
					C	1650	50888	37897
					D	1500	47828	34914
	50		5	1.10/2.55	A	2000	24550	24550
					B	1830	25164	25009
					C	1650	23500	23500
					D	1500	22688	22688
			10	2.23/5.14	A	2000	34755	32879
					B	1830	33633	31559
					C	1650	32260	29676
					D	1500	30588	27615
			15	4.15/9.58	A	2000	42391	36958
					B	1830	41265	35585
					C	1650	38540	32753
					D	1500	36213	30131

1. Capacity data is based on 15% (by mass) methanol antifreeze solution.
2. Performance data accurate within ±15%.
3. Interpolation of unit performance data is permissible; extrapolation is not.
4. Performance data is a result of lab testing and is not related to warranty.
5. Due to variations in installation, actual unit performance may vary from the tabulated data.

Revision Table

Date	Description of Revision	Page
27JUNE2023	ADDED NOTES TO PERFORMANCE DATA	9-12
24OCT2022	AH/EH Unit Revision A EDSM created	ALL

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