

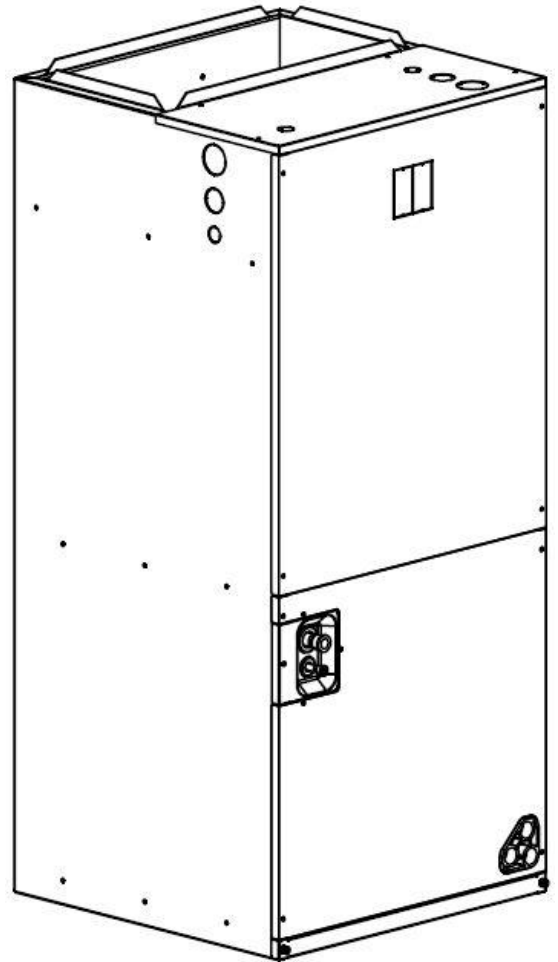


# E Series Air Handler Specifications

ECM BLOWER MOTOR  
R-410A TXV INSIDE

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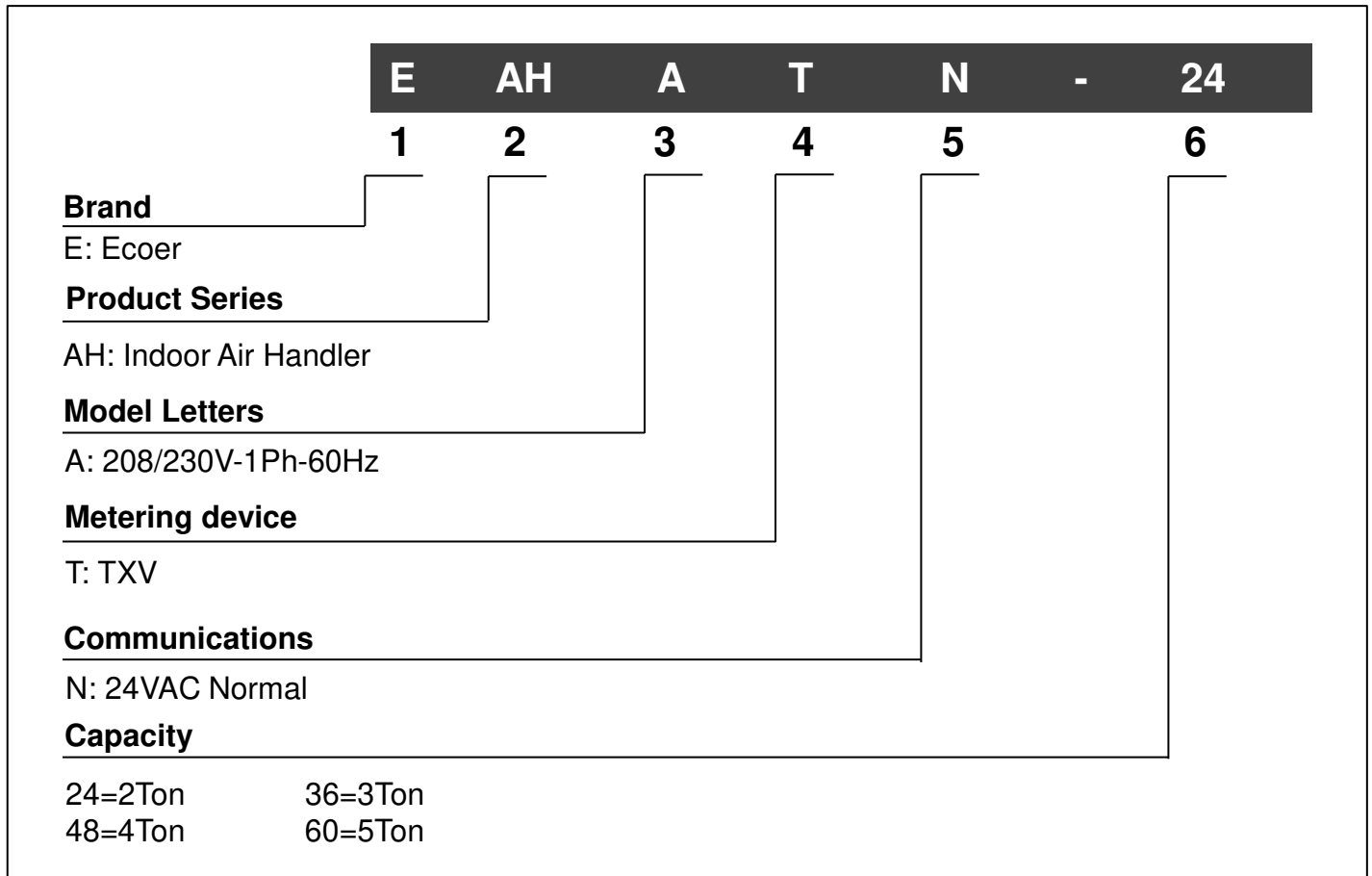


## ■ Standard Features

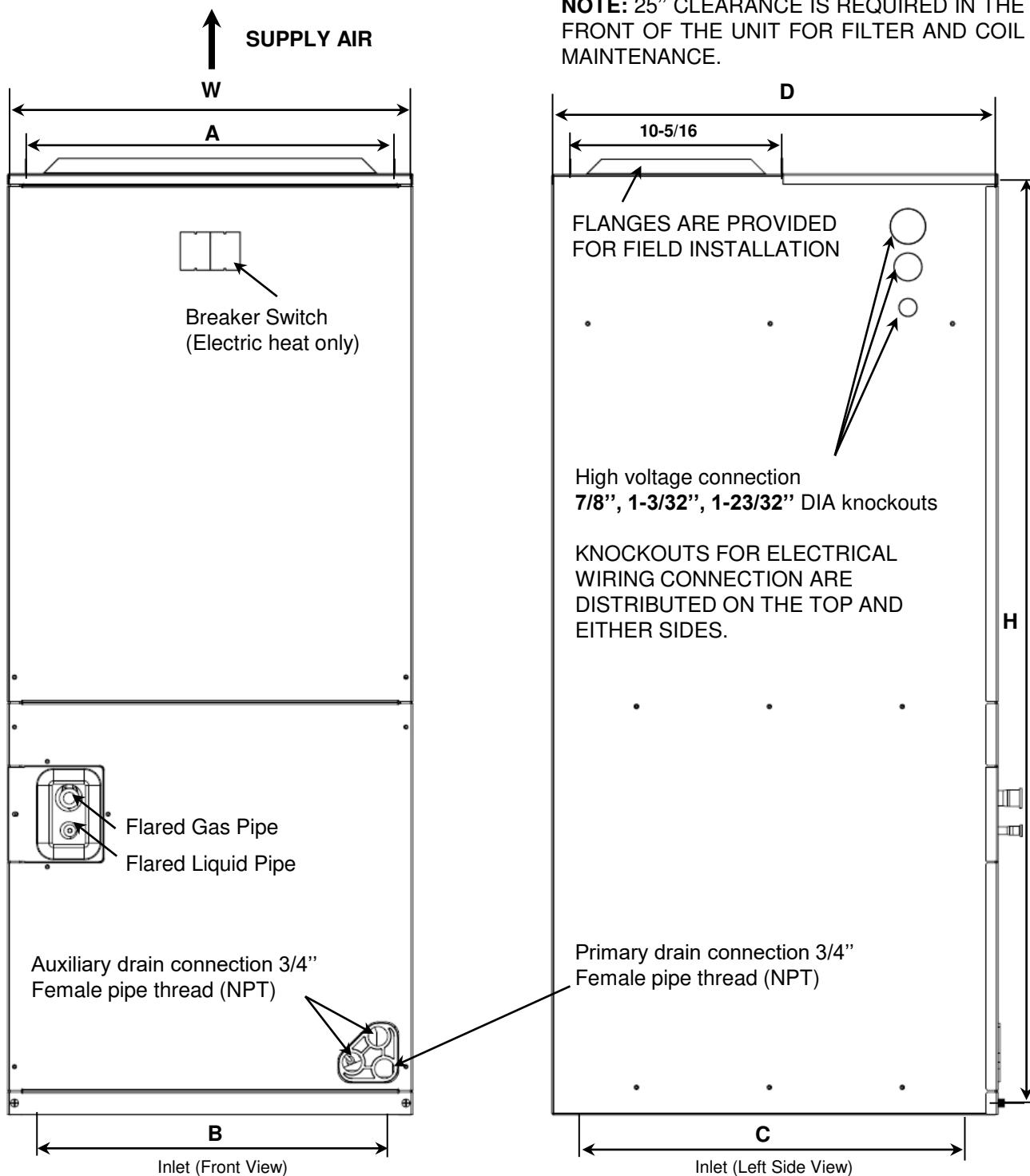
1. Multi-position installation. (*Vertical up-flow and horizontal right-flow*)
2. Multiple electrical entry locations.
3. Field installed electric heat kits 5, 10, 15, 20KW.
4. Two front panels (upper and lower) design for ease of maintenance.
5. Slide rail design for motor and coil for ease of installing and servicing.
6. Horizontal and vertical drain pan pre-installed.
7. Primary and secondary condensate drain fittings.
8. Two-stage fan control for better dehumidification.



# 1. Nomenclature



## 2. Dimensions



Model Size	Dimensions Inch [mm]					
	"H" in.[mm]	"W" in.[mm]	"D" in.[mm]	"A" in.[mm]	"B" in.[mm]	"C" in.[mm]
24 / 36	46-1/2" [1180]	21" [533]	21" [533]	19-1/4" [489]	13-7/8" [352]	16" [407]
48 / 60	56" [1422]	24-1/2" [622]	21" [533]	22-3/4" [578]	15-1/4" [388]	16" [407]

### 3. Product Specifications

Model Name	EAHATN-24	EAHATN-36	EAHATN-48	EAHATN-60
<b>Capacity <sup>1</sup></b>				
Nominal Cooling (BTU/h)	23400	34200	45000	54000
Nominal Heating (BTU/h)	24000	36000	47000	54000
<b>Blower</b>				
Diameter	10"	11"	11"	11"
Width	8"	10 <sup>5</sup> / <sub>8</sub> "	10 <sup>5</sup> / <sub>8</sub> "	10 <sup>5</sup> / <sub>8</sub> "
<b>Fan Motor</b>				
Horsepower (HP)	1/3	1/2	3/4	3/4
Full Load Ampacity	2.4	4.1	6.0	6.0
<b>Refrigeration System</b>				
Refrigerant Line Size				
Liquid Line Size (O.D.)	3/8"	3/8"	3/8"	3/8"
Suction Line Size (O.D.)	3/4"	3/4"	7/8"	7/8"
Refrigerant Connection Size				
Liquid Line Size (O.D.)	3/8"	3/8"	3/8"	3/8"
Suction Line Size (O.D.)	3/4"	3/4"	7/8"	7/8"
Metering Device	TXV	TXV	TXV	TXV
Heating Metering Device (ODU side)	EEV	EEV	EEV	EEV
<b>Coil Drain Connection (NPT)</b>	3/4"	3/4"	3/4"	3/4"
<b>Decibels (dB)</b>				
High Speed (Tap 5)	60	63	67	67
Medium High Speed (Tap 4)	57	61	63	63
Medium Speed (Tap 3)	53	58	61	61
<b>Electrical Data</b>				
Voltage-Phase-Hz	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60
Minimum Circuit Ampacity <sup>2</sup>	3.0	5.2	7.5	7.5
Max. Over-current Protection <sup>3</sup>	15	15	15	15
Volts Range	187~253	187~253	187~253	187~253
<b>Air Filter</b>				
Air Filter Size (in.) <sup>4</sup>	20×18	20×18	22×20	22×20
<b>Weight</b>				
Equipment Weight (lbs)	119	121	172	172
Ship Weight (lbs)	150	154	207	207

#### REMARKS:

1. Tested and rated in accordance with AHRI Standard 210/240-2017.
2. Wire size should be determined in accordance with National Electrical Codes.
3. Must use time-delay fuses or HACR-type circuit breakers of the same size as noted.
4. Sizes for units built on and prior to Dec 31, 2019 are different. Refer to the label on filter cover to install the correct one.

## 4. Blower Data

Airflow data is based on cooling performance at 230V with no electric heat and no filter. Airflow at 208V is approximately the same as 230V because the multi-tap ECM motor is a constant torque motor. The torque doesn't drop off at the speeds in which the motor operates.

Check the performance table for appropriate unit size selection. External static pressure should stay within the minimum and maximum limits shown in the table below in order to ensure proper airflow.

Model Number	Motor Speed		CFM (Watts)										
			External Static Pressure-Inches W.C.[KPa]										
			0 [0]	0.1 [.02]	0.16 [.04]	0.2 [.05]	0.3 [.07]	0.4 [.10]	0.5 [.12]	0.6 [.15]	0.7 [.17]	0.8 [.20]	
24	Tap (5)	SCFM	1062	1031	998	981	947	901	869	823	789	742	
		Watts	184	195	201	203	213	222	228	238	242	252	
	Tap (4)	SCFM	959	921	890	873	836	786	751	706	677	622	
		Watts	138	145	152	156	162	171	178	188	196	204	
	Tap (3)- factory	SCFM	855	825	790	769	733	679	646	595	560	494	
		Watts	101	111	118	120	126	134	141	151	156	166	
	Tap (2)	SCFM	777	750	712	692	656	599	566	498	466	412	
		Watts	80	89	96	98	104	113	119	127	135	145	
	Tap (1)	SCFM	694	663	620	599	562	499	455	390			
		Watts	60	68	74	76	82	89	95	104			
	36	Tap (5)	SCFM	1455	1409	1374	1355	1320	1266	1229	1173	1126	956
			Watts	293	300	306	309	316	326	331	338	346	370
Tap (4)		SCFM	1350	1302	1264	1242	1206	1145	1104	1038	897	824	
		Watts	238	243	254	257	260	271	277	286	303	308	
Tap (3)- factory		SCFM	1328	1281	1234	1215	1179	1118	1073	1007	862	798	
		Watts	226	232	239	242	250	259	264	278	292	298	
Tap (2)		SCFM	1235	1171	1130	1108	1062	1002	955	824	752	713	
		Watts	185	189	196	199	205	214	221	238	245	248	
Tap (1)		SCFM	1146	1091	1044	1022	982	908	823	748	708		
		Watts	150	156	163	167	174	184	196	202	207		
48		Tap (5)	SCFM	2144	2106	2072	2052	2015	1962	1924	1864	1823	1768
			Watts	627	632	639	643	649	661	670	681	684	696
	Tap (4)	SCFM	1999	1966	1933	1915	1875	1819	1775	1713	1672	1582	
		Watts	510	520	529	536	540	551	555	567	571	588	
	Tap (3)- factory	SCFM	1788	1746	1714	1695	1660	1606	1565	1499	1452	1355	
		Watts	367	374	389	393	404	422	429	440	449	458	
	Tap (2)	SCFM	1633	1596	1564	1554	1514	1467	1424	1342	1290	1231	
		Watts	292	300	311	318	329	343	354	376	382	391	
	Tap (1)	SCFM	1504	1468	1428	1408	1362	1298	1244	1182	1160	1081	
		Watts	228	242	250	255	264	279	291	309	318	327	
	60	Tap (5)	SCFM	2144	2106	2072	2052	2015	1962	1924	1864	1823	1768
			Watts	627	632	639	643	649	661	670	681	684	696
Tap (4)		SCFM	1999	1966	1933	1915	1875	1819	1775	1713	1672	1582	
		Watts	510	520	529	536	540	551	555	567	571	588	
Tap (3)- factory		SCFM	1788	1746	1714	1695	1660	1606	1565	1499	1452	1355	
		Watts	367	374	389	393	404	422	429	440	449	458	
Tap (2)		SCFM	1633	1596	1564	1554	1514	1467	1424	1342	1290	1231	
		Watts	292	300	311	318	329	343	354	376	382	391	
Tap (1)		SCFM	1504	1468	1428	1408	1362	1298	1244	1182	1160	1081	
		Watts	228	242	250	255	264	279	291	309	318	327	

Shaded boxes represent airflow outside the required 300-450 CFM/ton.

**NOTE:** G2 signal occupies Tap (1) reserved for Ecoer thermostat EST01 to get even better dehumidification control in cooling.

## 5. Electric Heat Kit

Kit Model	Description	24	36	48	60
E-EHK05	5kW Heat Kit, Double Pole Breaker	●	●	●	●
E-EHK10	10kW Heat Kit, Double Pole Breaker	●	●	●	●
E-EHK15	15kW Heat Kit, Double Pole Breaker	×	●	●	●
E-EHK20	20kW Heat Kit, Double Pole Breaker	×	×	●	●

Kit Model	AHU Model	Electric Heat (kW)	MIN. Circuit Ampacity		MAX. Fuse or Breaker (HACR) Ampacity		Fan Speed				
			240	208	240	208	1	2	3	4	5
E-EHK05	24	5	25	22	30	25	×	●	●	●	●
E-EHK10		10	49	43	60	50	×	×	●	●	●
E-EHK05	36	5	25	22	30	25	×	●	●	●	●
E-EHK10		10	49	43	60	50	×	×	●	●	●
E-EHK15		5+10	25+49	22+43	30+60	25+50	×	×	●	●	●
E-EHK05	48	5	25	22	30	25	×	●	●	●	●
E-EHK10		10	49	43	60	50	×	●	●	●	●
E-EHK15		5+10	25+49	22+43	30+60	25+50	×	×	●	●	●
E-EHK20		10+10	49+49	43+43	60+60	50+50	×	×	×	●	●
E-EHK05	60	5	25	22	30	25	×	●	●	●	●
E-EHK10		10	49	43	60	50	×	●	●	●	●
E-EHK15		5+10	25+49	22+43	30+60	25+50	×	×	●	●	●
E-EHK20		10+10	49+49	43+43	60+60	50+50	×	×	×	●	●

● means available    × means unavailable

Electric heat kits are suitable for air handler multiple position installation.



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