

First Co.[®]

eco series

COOL-PAK
HP

Space Constrained Heat Pump
with Electric Heating

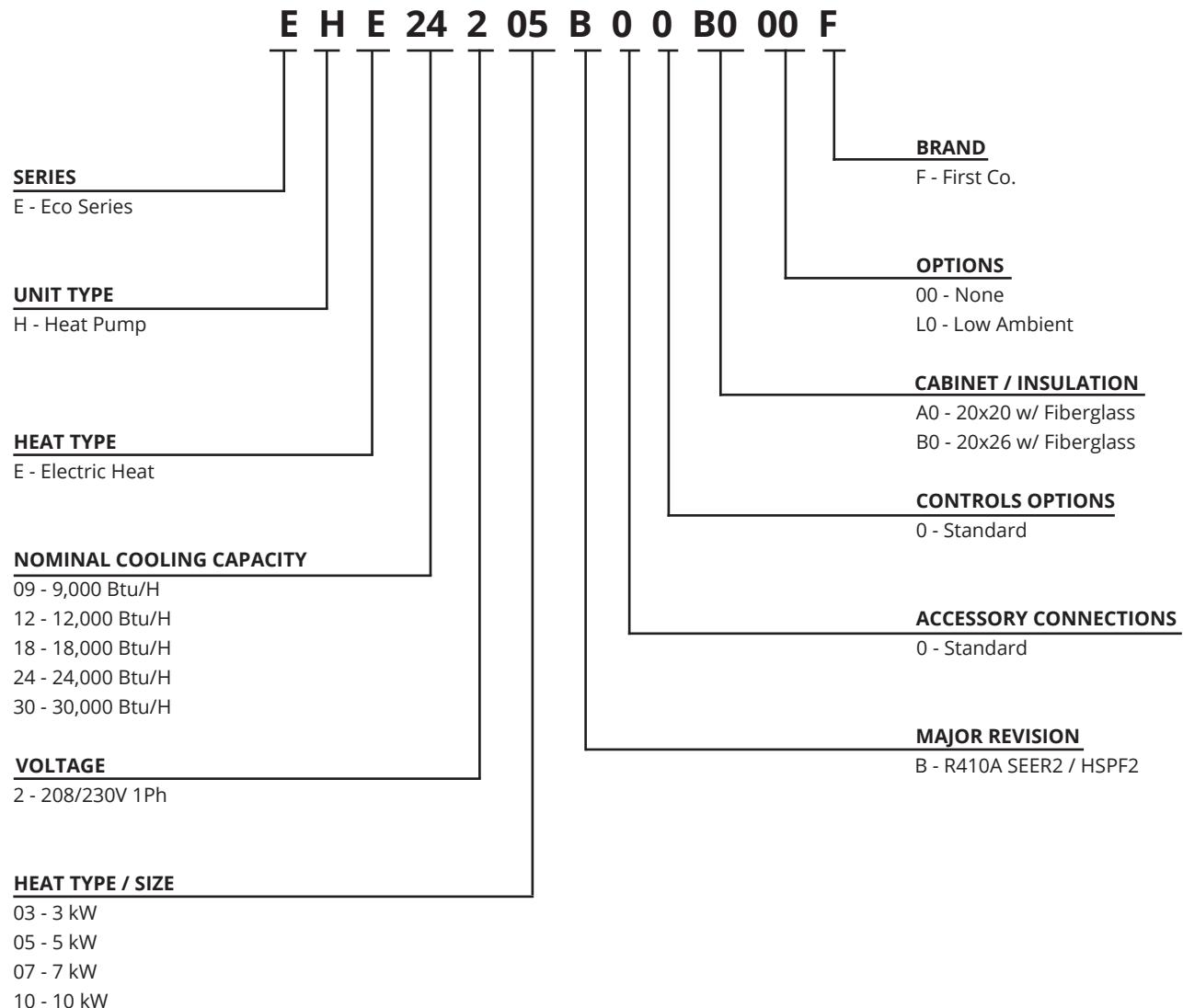
3/4 - 2.5 tons

3 - 10 kW Electric Heat

11.9 SEER2 & 6.3 HSPF2



Nomenclature



PRODUCT DESCRIPTION

- Space constrained low ambient heat pump with electric heating
- Pre-wired and pre-charged with R410a refrigerant, capable of delivering conditioned air to multiple rooms
- Easily installs into a closet or mechanical room on an exterior wall, utilizing a minimal amount of floor space
- Controlled by a standard low voltage thermostat with high and low temperature limits

APPLICATIONS

Hospitality, Apartments/Condominiums, Assisted Living/Memory Care, Student Housing, Senior Living and Modular/Prefabricated Buildings

STANDARD FEATURES

- Shipped ready for top supply and front return (with optional ducted return)
- Insulated compartment to improve cooling performance, reduce noise, and prevent sweating
- ECM indoor blower & outdoor fan motor to provide precise airflow selection and improve system efficiency
- High-efficiency single stage scroll and rotary compressors with double isolated compressor mount to lower compressor noise and vibration
- Larger evaporator coil with low face velocity for improved cooling performance
- Drain pan with corrosion resistant coating to drain condensate in cooling and heating operations
- Thermal expansion valve (TXV) for both cooling and heating to optimize performance
- Operates down to as low as 5°F ambient temperature with time-temperature defrost board with selectable defrost interval times
- High and low pressure switch protection
- Electric heat with automatic reset limit switch and non-resettable fuse link
- Filter brackets and disposable filter shipped with unit for field installation; no tool needed to replace filter
- Multi-function microprocessor control board
- Make up air vent when fully opened allows up to 50 cfm of ventilation air to be introduced into the closet
- Unit comes standard with one pull out service switch and one terminal block

WARNING:

This service switch does not de-energize the incoming power supply to the unit.

SERVICEABILITY FEATURES

- Easy access for in-place service of most components
- Pull out service switch for service and maintenance convenience
- All electrical components and control boards are serviceable from front of the unit

WARRANTY

Five (5) year limited warranty on parts and compressor.

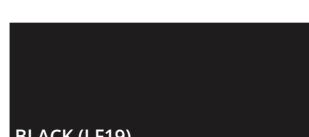
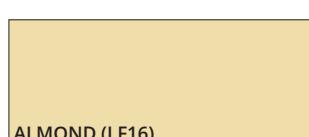
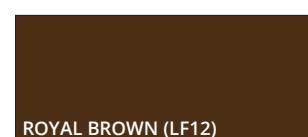
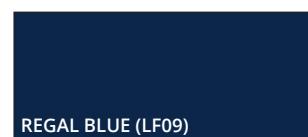
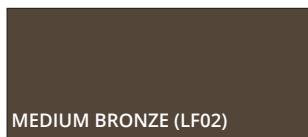
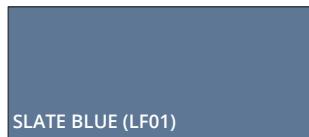
REQUIRED ACCESSORIES

- Weight bearing wall sleeves for various wall thicknesses from 5" to 20" shipped with weather and debris guard
- Wall sleeves have primary condensate drain connection with secondary overflow to building exterior
- Flush type aluminum louver with finish and paint options
- Standard low voltage heat pump thermostat with high and low temperature limits

OPTIONAL ACCESSORIES

- Interior Access Panels - Louvered or Solid – **Bone White only*** no custom color
- Wall sleeves with side access

STANDARD PAINT COLORS:



STANDARD UNIT FEATURES:

FILTER RACK

- Filter Brackets and a disposable filter ship with each unit to be field installed over the evaporator coil.
- **NOTE:** Do not use filters which will cause the total external static pressure, including ducts, louvers, registers, and filters to exceed 0.5 in. H₂O

MULTI-FUNCTION MICROPROCESSOR CONTROL BOARD

Evaporator coil low temperature protection – During the cooling mode, should the evaporator coil experience either a low temperature condition that could result in ice buildup on the coil or a reduced air flow situation, a temperature sensor attached to the coil will de-energize the unit. The sensor will re-energize the unit when the coil warms back up.

Random restart – When power is turned on after a power outage, a built-in random restart of 3-4 minutes prevents all compressors from restarting simultaneously.

Compressor restart delay – This delay ensures that system pressures are allowed to equalize before a compressor restart, which extends compressor life.

Fan delay – A fan delay allows the evaporator blower to continue running for up to 45 seconds after the thermostat is satisfied, which maximizes cooling performance.

SERVICE PULL OUT SWITCH

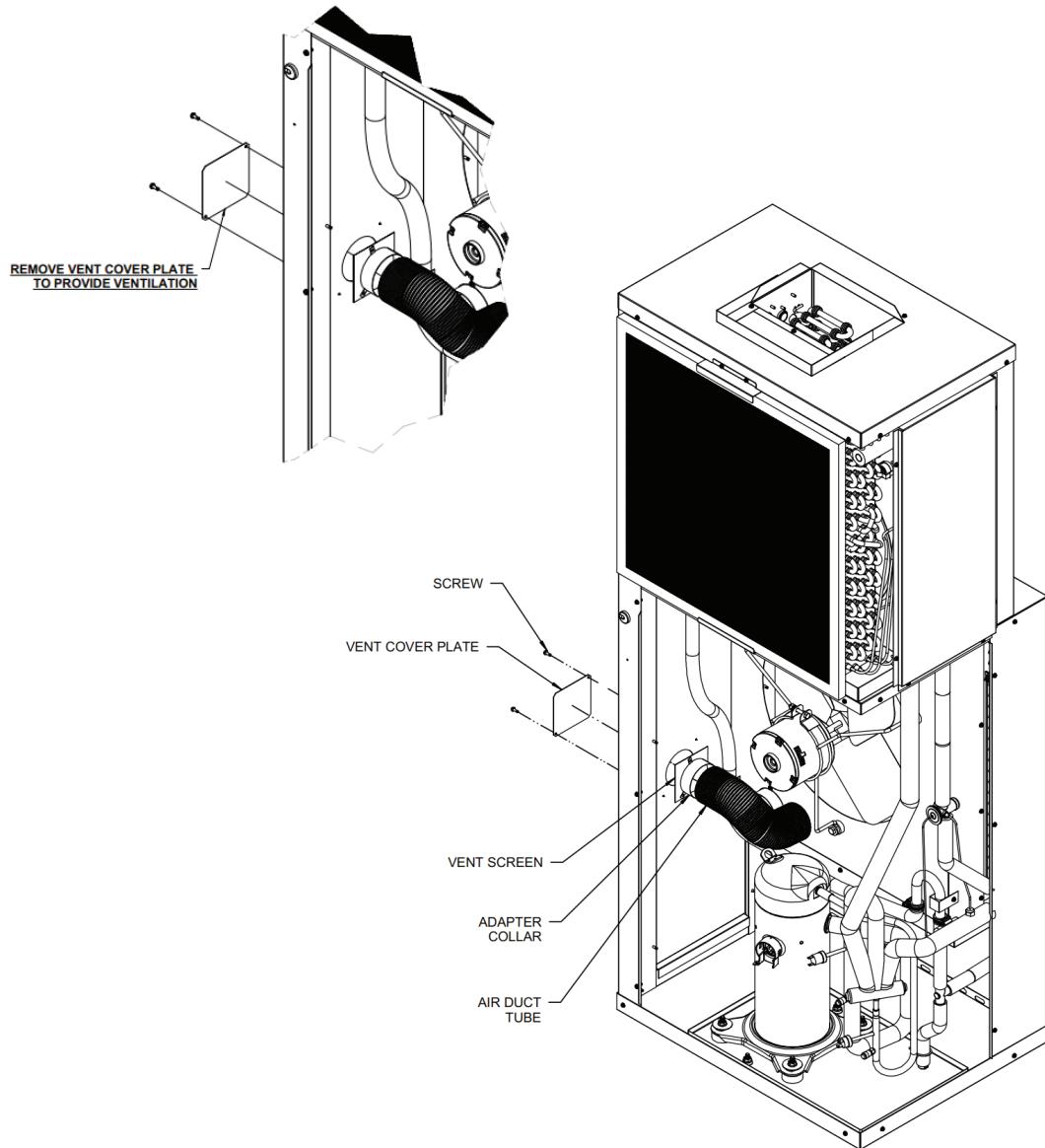
Provides a visible disconnecting means when performing maintenance; models with 7 and 10 kW electric heat also have terminal block.

WARNING: This service switch does not de-energize the incoming power supply to the unit.

VENTILATION AIR

One end of a 3" aluminum vent pipe is connected to the condenser venturi and the other end is connected to the side of the cabinet. A mesh screen and a metal plate on the side of the cabinet covers the opening of the vent pipe.

Up to 50 CFM of ventilation air is introduced into the equipment closet by removing the metal cover plate. The ventilation air mixes with the return air and is then pulled through the evaporator coil and into the supply duct. The cover plate can be reinstalled to partially close the ventilation air opening if less than 50 CFM is desired. An external source of negative pressure (i.e. a bathroom fan) could be used to introduce more than 50 CFM of ventilation air. Consult with factory for further details.



CONDENSATE SYSTEM

Primary Condensate

Factory installed drain line connects the evaporator drain pan to a vertical pipe connection in the unit base pan. Evaporator condensate is delivered from the unit to a catch tray in the wall sleeve and exits the sleeve through the 3/4" male NPT fitting. This design allows the plumber to completely pipe the drain to a condensate riser during the rough-in stage, thus eliminating condensate connection problems usually encountered when trying to connect the HVAC drain to the riser after the HVAC unit is installed in the closet. This features also allows the unit to be removed for service without disconnecting the condensate piping. This configuration does not require any additional closet space to make the drain connection, as do some competitive products.

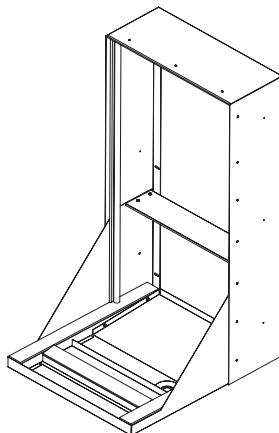
Secondary Condensate Overflow

If for any reason, the primary condensate riser becomes clogged, water will fill the catch tray and then be diverted through the sleeve to the exterior of the building, rather than be allowed to overflow into the closet or living area. Rain water entering the sleeve is automatically diverted to the 3/4" condensate drain.

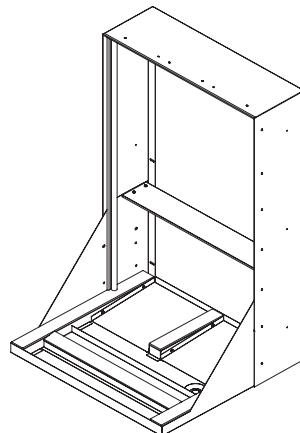
REQUIRED ACCESSORIES:

WALL SLEEVES

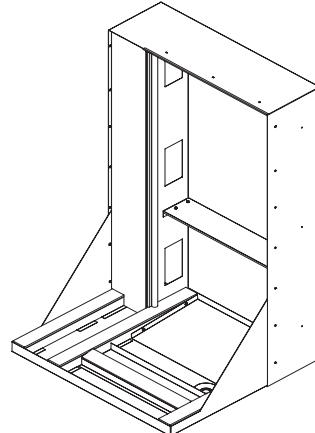
- Provided for installation during rough-in and when ready the unit is simply slid into the wall sleeve and connected to the ductwork and electrical.
- Weight bearing sleeve that supports the entire weight of the unit and provides a weather tight seal against wind and water infiltration.
- Four wall sleeve depths are available to accommodate wall thickness from 5" to 20".
- Includes a weather guard to cover the sleeve opening and a debris guard to cover wall sleeve base and drain during construction.



Standard Sleeve for 3/4 - 1.5 tons



Standard Sleeve for 2.0 - 2.5 tons



Oversized Sleeve for 3/4 - 1.5 tons to provide uniform exterior appearance

ACCESSORIES

SLEEVE AND LOUVER ACCESSORIES						
ACCESSORY	DESCRIPTION	DIMENSIONS (H x W x D)	STANDARD SLEEVES		SHIP WT. (EA) Lbs.	
			REAR INSTALL ¹	SIDE INSTALL ²	REAR ⁵	SIDE ⁵
SMALL CABINET "A" WALL SLEEVES	For 5" - 8" thick walls	43-3/4 x 21-3/8 x 26	936-1B	936-11B	59	64
	For 8" - 12" thick walls	43-3/4 x 21-3/8 x 30	936-2B	936-12B	63	73
	For 12" - 15" thick walls	43-3/4 x 21-3/8 x 33	936-3B	936-13B	68	73
	For 15" - 20" thick walls	43-3/4 x 21-3/8 x 38	936-4B	936-14B	75	80
LARGE CABINET "B" WALL SLEEVES	For 5" - 8" thick walls	43-3/4 x 27-3/8 x 26	985-1B	985-11B	63	68
	For 8" - 12" thick walls	43-3/4 x 27-3/8 x 30	985-2B	985-12B	68	73
	For 12" - 15" thick walls	43-3/4 x 27-3/8 x 33	985-3B	985-13B	75	80
	For 15" - 20" thick walls	43-3/4 x 27-3/8 x 38	985-4B	985-14B	79	84
SMALL CABINET "A" LARGE WALL SLEEVES WITH BLOCKOFF	For 5" - 8" thick walls	43-3/4 x 27-3/8 x 26	986-1B	986-11B	63	68
	For 8" - 12" thick walls	43-3/4 x 27-3/8 x 30	986-2B	986-12B	68	73
	For 12" - 15" thick walls	43-3/4 x 27-3/8 x 33	986-3B	986-13B	75	80
	For 15" - 20" thick walls	43-3/4 x 27-3/8 x 38	986-4B	986-14B	79	84
STANDARD LOUVERS CABINET "A" WALL SLEEVES	Custom Painting	44x22	G205S		12	
	For Field Painting	44x22	G205PPA		12	
	Anodized Aluminum	44x22	G205A		12	
STANDARD LOUVERS CABINET "B" LARGE WALL SLEEVES	Custom Painting	44x28	G216S		18	
	For Field Painting	44x28	G216PPA		18	
	Anodized Aluminum	44x28	G216A		18	

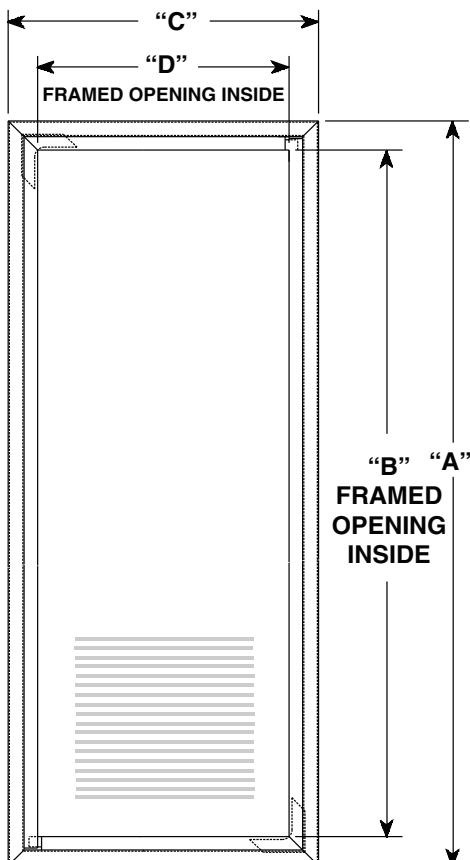
NOTES:

1. Rear install application provides better access to the unit and is recommended over side install wherever possible
2. Side install application requires different closet size and configuration. Contact factory for further information
3. S indicates custom color, to be provided by customer. Minimum order quantity is 15 per color, if less than 15 set up fees will be applied
4. All wall sleeves are shipped two (2) per carton, fully assembled.

ACCESSORIES (CONTINUED)

THERMOSTATS					
Heat Pump (24V) Digital w/emergency heat cool - off - heat, auto - on w/limits-(6-wire)	4 x 5 (Horizontal)		T1220NC		
Programmable (5-2) St. Cool/Ht. Pump (24V) cool-off-heat, auto-on w/em. Ht. & limits (6-wire)	4 x 5 (Horizontal)		T2220NC		
Straight Cool or Heat Pump (24V) Digital Occupancy Sensor	4.3 x 5.7 (Horizontal)		T8532		

OPTIONAL ACCESSORIES (Field Installed)							
COMPONENT	DESCRIPTION	DIMENSIONS (H X W)		PART NUMBER	SHIP WT.	COMES W/ FILTER	
ACCESS / RETURN AIR PANEL (3)(4)	LOUVERED (1)	FRAME	OPENING	931-11	55	20 x 24 x 1	
		87 X 31	84 X 28			NO	
	NON-LOUVERED (2)	87 X 31	84 X 28	931-12		20 x 24 x 1	
	LOUVERED (1)	82 X 31	79 X 28	931-13		NO	
ACCESS / RETURN AIR PANEL (3)(4)	NON-LOUVERED (2)	82 X 31	79 X 28	931-14		20 x 24 x 1	
	LOUVERED (1)	FRAME	OPENING	931-15		NO	
		87 X 37	84 X 34			20 x 24 x 1	
	NON-LOUVERED (2)	87 X 37	84 X 34	931-16		NO	
9-18 INSULATION KIT	LOUVERED (1)	82 X 37	79 X 34	931-17	20 x 24 x 1	20 x 24 x 1	
	NON-LOUVERED (2)	82 X 37	79 X 34	931-18		NO	
24 INSULATION KIT	5/8" DUCTBOARD	N/A		91K01	---	---	
		N/A		91K02	---	---	



	PART NO.	"A"	"B"	"C"	"D"
	931-11(12)	87.00	84.00	31.00	28.00
	931-13(14)	82.00	79.00	31.00	28.00
*	931-15(16)	87.00	84.00	37.00	34.00
*	931-17(18)	82.00	79.00	37.00	34.00

* For rear installation use with size 24 or 30

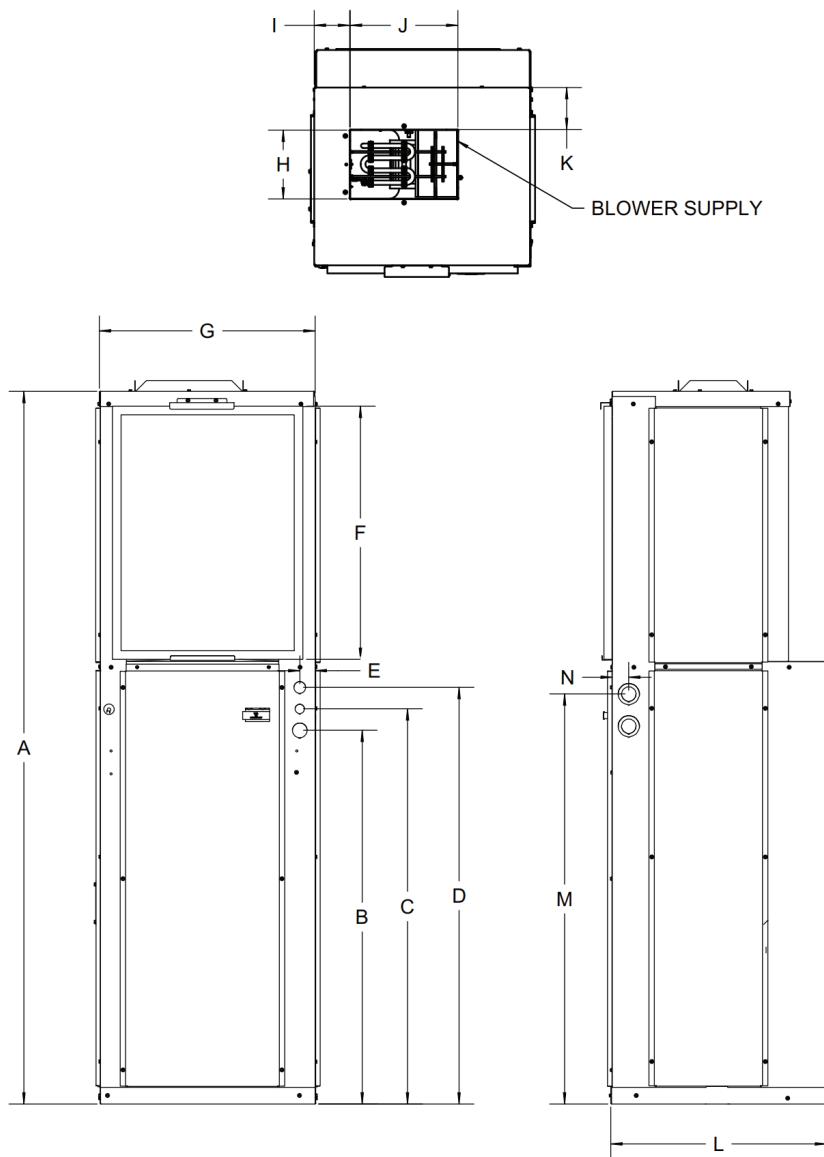
NOTE: A solid door or panel with a side wall return air louver will result in lower sound levels.

NOTES:

- (1) Includes 18 x 24 x 1 or 20 x 24 x 1 filter.
- (2) Requires external return air louver and unit mount filter.
- (3) Both panels are insulated for sound reduction and have tamperproof screws.
- (4) Panels are shipped ten per carton.

PHYSICAL DATA

Unit Dimensions



MODEL NUMBER	A	B	C	D	E	F	G	H	I	J	K	L	M	N
	CABINET DIMENSIONS							SUPPLY CONNECTIONS						
EHE09***B	66.5	34.9	36.9	38.9	1.4	23.6	20.9	6.4	3.3	10.0	3.9	20.1	38.2	1.6
EHE12***B	66.5	34.9	36.9	38.9	1.4	23.6	20.9	6.4	3.3	10.0	3.9	20.1	38.2	1.6
EHE18***B	66.5	34.9	36.9	38.9	1.4	23.6	20.9	6.4	3.3	10.0	3.9	20.1	38.2	1.6
EHE24***B	66.5	34.9	36.9	38.9	1.4	23.7	26.9	10.0	7.9	10.0	3.9	20.1	38.2	1.6
EHE30***B	66.5	34.9	36.9	38.9	1.4	23.7	26.9	10.0	7.9	10.0	3.9	20.1	38.2	1.6



BLOWER PERFORMANCE:

MODEL NUMBER	Motor Tap	in. H ₂ O STATIC PRESSURE									
		0.1		0.2		0.3		0.4		0.5	
		SCFM	WATTS	SCFM	WATTS	SCFM	WATTS	SCFM	WATTS	SCFM	WATTS
EHE09203B*	T1	308	45	290	47	272	48	254	48	235	47
	T2 ^C	352	58	334	60	316	60	298	60	279	60
	T3	390	70	372	72	354	73	336	73	317	73
	T4 ^H	453	95	435	97	417	98	399	98	380	98
EHE12203B*	T1	317	51	300	49	281	49	263	49	244	48
	T2 ^C	453	100	436	99	417	99	398	98	380	97
	T3	428	90	411	89	392	88	374	88	355	87
	T4 ^H	510	128	493	127	474	127	456	126	437	125
EHE12205B*	T1	317	51	300	49	281	49	263	49	244	48
	T2 ^C	453	100	436	99	417	99	398	98	380	97
	T3	428	90	411	89	392	88	374	88	355	87
	T4 ^H	552	152	535	151	516	151	498	150	479	149
EHE182203B*	T1	392	47	366	47	343	47	311	43	267	35
	T2 ^C	723	155	696	155	673	155	641	151	598	143
	T3	629	111	603	111	579	111	548	107	504	99
	T4 ^H	723	155	696	155	673	155	641	151	598	143
	T5	820	206	793	206	770	206	738	202	695	194
EHE182205B*	T1	392	47	366	47	343	47	311	43	267	35
	T2 ^C	723	155	696	155	673	155	641	151	598	143
	T3	629	111	603	111	579	111	548	107	504	99
	T4 ^H	723	155	696	155	673	155	641	151	598	143
	T5	820	206	793	206	770	206	738	202	695	194
EHE182207B*	T1	392	47	366	47	343	47	311	43	267	35
	T2 ^C	723	155	696	155	673	155	641	151	598	143
	T3	629	111	603	111	579	111	548	107	504	99
	T4 ^H	723	155	696	155	673	155	641	151	598	143
	T5	820	206	793	206	770	206	738	202	695	194

^C Factory Default Cooling and Heat Pump Airflow

^H Factory Default Electric Heat Airflow

T1 is reserved for Fan Only Operation (All models)

T2, T3 are reserved for cooling and heat pump operation only

T4 and T5 are reserved for electric heat operation only

Blower performance data based on a dry coil at 70°F DB EAT with a standard 1" clean air filter

Data is subject to change. Please verify most current information on www.firstco.com or www.AE-Air.com websites.

BLOWER PERFORMANCE (CONTINUED):

MODEL NUMBER	Motor Tap	in. H ₂ O STATIC PRESSURE									
		0.1		0.2		0.3		0.4		0.5	
		SCFM	WATTS	SCFM	WATTS	SCFM	WATTS	SCFM	WATTS	SCFM	WATTS
EHE24205B*	T1	399	45	369	46	338	44	305	41	267	37
	T2 ^C	883	222	853	222	822	220	789	218	751	213
	T3	788	167	758	167	727	166	694	163	656	159
	T4 ^H	883	222	853	222	822	220	789	218	751	213
	T5	940	265	909	265	878	264	846	261	807	257
EHE24207B*	T1	399	45	369	46	338	44	305	41	267	37
	T2 ^C	883	222	853	222	822	220	789	218	751	213
	T3	788	167	758	167	727	166	694	163	656	159
	T4 ^H	883	222	853	222	822	220	789	218	751	213
	T5	940	265	909	265	878	264	846	261	807	257
EHE24210B*	T1	399	45	369	46	338	44	305	41	267	37
	T2 ^C	883	222	853	222	822	220	789	218	751	213
	T3	788	167	758	167	727	166	694	163	656	159
	T4 ^H	900	233	870	233	839	232	806	229	767	225
	T5	940	265	909	265	878	264	846	261	807	257
EHE30205B*	T1	546	84	516	78	481	70	442	62	400	52
	T2 ^C	894	233	864	226	830	218	790	210	748	200
	T3	983	297	953	290	918	282	879	274	837	264
	T4 ^H	894	233	864	226	830	218	790	210	748	200
	T5	1002	315	972	309	938	301	898	292	856	282
EHE30207B*	T1	546	84	516	78	481	70	442	62	400	52
	T2 ^C	894	233	864	226	830	218	790	210	748	200
	T3	983	297	953	290	918	282	879	274	837	264
	T4 ^H	894	233	864	226	830	218	790	210	748	200
	T5	1002	315	972	309	938	301	898	292	856	282
EHE30210B*	T1	546	84	516	78	481	70	442	62	400	52
	T2 ^C	894	233	864	226	830	218	790	210	748	200
	T3	983	297	953	290	918	282	879	274	837	264
	T4 ^H	983	297	953	290	918	282	879	274	837	264
	T5	1002	315	972	309	938	301	898	292	856	282

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RATED COOLING & HEATING PERFORMANCE:

MODEL NUMBER	Rated Airflow SCFM	Cooling Capacity 95°F, BTU/H	EER2 95°F EER2	SEER2	Heating Capacity 47°F BTU/H	Heating Capacity 17°F, BTU/H	HSPF2
EHE092**B*	300	9000	10.5	11.9	8500	5200	6.3
EHE122**B*	390	11200	10.5	11.9	9300	5700	6.3
EHE182**B*	620	17500	10.5	11.9	16000	10300	6.3
EHE242**B*	780	22600	10.5	11.9	22000	13500	6.3
EHE302**B*	800	26600	10.0	11.9	25600	16000	6.3

Rating based off performance testing AHRI 210/240-2020

Ratings subject to change

For up to date rating see AHRI website www.AHRI.net.org

Electric Heat Ratings						
MODEL NUMBER	240V		230V		208V	
	kW	BTU/H	kW	BTU/H	kW	BTU/H
EHE09203B*	3	10250	2.76	9400	2.25	7700
EHE12203B*	3	10250	2.76	9400	2.25	7700
EHE12205B*	4.5	15350	4.14	14100	3.38	11500
EHE18203B*	3	10250	2.76	9400	2.25	7700
EHE18205B*	5	17050	4.60	15700	3.75	12800
EHE18207B*	7	23900	6.43	21950	5.25	17900
EHE18210B*	10	34100	9.19	31350	7.50	25600
EHE24205B*	5	17050	4.60	15700	3.75	12800
EHE24207B*	7	23900	6.43	21950	5.25	17900
EHE24210B*	10	34100	9.19	31350	7.50	25600
EHE30205B*	5	17050	4.60	15700	3.75	12800
EHE30207B*	7	23900	6.43	21950	5.25	17900
EHE30210B*	10	34100	9.19	31350	7.50	25600

7kW and 10kW heating value shown are for both stages of electric heat

Data is subject to change. Please verify most current information on www.firstco.com or www.AE-Air.com websites.

EXTENDED PERFORMANCE DATA:

Extended Heating Capacity, Compressor Only									
MODEL NUMBER	AIR FLOW	47/43		35/33		17/15		5/0	
		BTU/H	kW	BTU/H	kW	BTU/H	kW	BTU/H	kW
EHE092**B*	300	8800	0.8	7150	0.8	5790	0.8	4570	0.8
EHE122**B*	390	10600	0.9	8720	1.0	6020	0.8	4760	0.8
EHE182**B*	620	17380	1.5	14130	1.4	11450	1.4	9020	1.4
EHE242**B*	790	22600	1.8	18640	1.8	13700	1.7	11250	1.6
EHE302**B*	800	26150	2.2	20980	2.1	17220	2.0	14070	2.0

Capacities based off 70°F EAT at .3 in. H₂O of external static
 Airflow run at the default cooling blower speed tap
 Capacities include both stage of electric heat for 7kW and 10kW models

Extended Heating Data Compressor + Electric Heat																	
MODEL NUMBER	AIR FLOW SCFM	47/43				35/33				17/15				5/0			
		230V		208V		230V		208V		230V		208V		230V		208V	
		BTU/H	kW	BTU/H	kW												
EHE09203B*	430	18150	3.6	16450	2.3	16550	3.5	14800	3.0	15150	3.5	13450	3.0	13950	3.5	12250	3.0
EHE12203B*	470	20000	3.7	18250	3.2	18100	3.7	16400	3.2	15400	3.6	13700	3.1	14150	3.5	12450	3.0
EHE12205B*	510	26250	5.6	23400	4.7	24350	5.5	21500	4.7	21650	5.4	18800	4.6	20400	5.4	17550	4.6
EHE18203B*	670	26750	4.2	25050	3.7	23500	4.2	21800	3.7	20850	4.2	19100	3.7	18400	4.1	16700	3.6
EHE18205B*	670	33000	6.0	30150	5.2	29750	6.0	26900	5.2	27100	6.0	24250	5.2	24650	6.0	21800	5.1
EHE18207B*	670	39300	7.9	35300	6.7	36050	7.9	32050	6.7	33350	7.8	29350	6.7	30950	7.8	26950	6.6
EHE18210B*	800	48700	11.0	43000	9.0	45450	11.0	39750	8.9	42750	11.0	37050	8.9	40350	10.6	34650	8.9
EHE24205B*	820	38250	6.4	35400	5.6	34300	6.4	31450	5.6	29350	6.3	26500	5.4	26900	6.2	24050	5.4
EHE24207B*	820	44500	8.2	40500	7.0	40550	8.2	36550	7.1	35600	8.1	31600	6.9	33150	8.0	29150	6.9
EHE24210B*	820	53900	11.0	48200	9.3	49950	11.0	44250	9.3	45000	11.0	39300	9.2	42550	10.8	36850	9.1
EHE30205B*	820	41800	6.9	38950	6.0	36600	6.7	33750	5.9	32850	6.7	30000	5.8	29700	6.6	26850	5.7
EHE30207B*	820	48050	8.7	44050	7.5	42900	8.6	38900	7.4	39100	8.5	35150	7.3	36000	8.4	32000	7.2
EHE30210B*	910	57450	11.4	51750	9.8	52300	11.3	46600	9.7	48500	11.2	42800	9.6	45400	11.0	39700	9.5

Capacities based off 70°F EAT at .3 in. H₂O of external static
 Airflow run at the default heating blower speed tap
 Capacities include both stage of electric heat for 7kW and 10kW models

Data is subject to change. Please verify most current information on www.firstco.com or www.AE-Air.com websites.

EXTENDED PERFORMANCE DATA (CONTINUED):

MODEL NUMBER	Indoor Temp DB/WB	Airflow	Extended Cooling Performance								
			65.0			75.0			85.0		
			BTU/H	S/T	kW	BTU/H	S/T	kW	BTU/H	S/T	kW
EHE09*	75/57	300	9050	1.00	0.7	8700	1.00	0.8	8300	1.00	0.8
	75/63		10100	0.76	0.7	9600	0.78	0.8	9100	0.79	0.8
	80/67		11000	0.73	0.7	10450	0.74	0.8	9900	0.76	0.8
	85/72		12250	0.65	0.7	11650	0.66	0.8	11100	0.68	0.8
EHE12*	75/57	390	12150	1.00	0.8	11350	1.00	0.9	10800	1.00	0.9
	75/63		13000	0.75	0.8	12300	0.77	0.9	11550	0.79	0.9
	80/67		13900	0.72	0.8	13100	0.74	0.9	12350	0.76	0.9
	85/72		15300	0.62	0.8	14450	0.63	0.9	13650	0.65	0.9
EHE18*	75/57	620	18450	1.00	1.1	17600	1.00	1.3	16800	1.00	1.4
	75/63		19600	0.79	1.2	18600	0.81	1.3	17550	0.84	1.4
	80/67		20850	0.77	1.2	19850	0.79	1.3	18750	0.81	1.5
	85/72		22500	0.70	1.2	21400	0.72	1.4	20250	0.74	1.5
EHE24*	75/57	790	24350	1.00	1.6	23300	1.00	1.8	21700	1.00	2.2
	75/63		25850	0.75	1.7	24550	0.77	1.8	23250	0.79	2.0
	80/67		27600	0.73	1.7	26250	0.75	1.8	24800	0.76	2.0
	85/72		30100	0.66	1.7	28600	0.68	1.9	27050	0.69	2.0
EHE30*	75/57	800	26600	0.99	1.9	25600	1.00	2.0	24850	1.00	2.3
	75/63		29300	0.72	1.9	27900	0.74	2.1	26450	0.75	2.3
	80/67		31250	0.69	1.9	29750	0.71	2.1	28200	0.72	2.3
	85/72		33950	0.63	1.9	32250	0.64	2.1	30700	0.65	2.3

Extended cooling performance data tabulated based off test at rated Airflow at .3 in. H₂O of external static.

Data is subject to change. Please verify most current information on www.firstco.com or www.AE-Air.com websites.

EXTENDED PERFORMANCE DATA (CONTINUED):

MODEL NUMBER	Indoor Temp DB/WB	Airflow	Extended Cooling Performance								
			95.0			105.0			115.0		
			BTU/H	S/T	kW	BTU/H	S/T	kW	BTU/H	S/T	kW
EHE09*	75/57	300	7900	1.00	0.9	7500	1.00	1.0	7100	1.00	1.0
	75/63		8550	0.82	0.9	8050	0.84	1.0	7500	0.87	1.0
	80/67		9350	0.78	0.9	8800	0.81	1.0	8250	0.83	1.1
	85/72		10500	0.70	0.9	9900	0.72	1.0	9300	0.74	1.1
EHE12*	75/57	390	10200	1.00	1.1	9600	1.00	1.0	9000	1.00	1.2
	75/63		10850	0.81	1.1	10100	0.84	1.0	9350	0.88	1.2
	80/67		11600	0.78	1.1	10800	0.82	1.0	10050	0.85	1.2
	85/72		12750	0.67	1.1	11950	0.69	1.0	11050	0.72	1.2
EHE18*	75/57	620	15900	1.00	1.5	15050	1.00	1.7	14100	1.00	1.8
	75/63		16500	0.86	1.5	15500	0.90	1.7	14400	0.93	1.8
	80/67		17650	0.84	1.6	16500	0.87	1.7	15450	0.91	1.9
	85/72		19100	0.76	1.7	17900	0.79	1.8	16750	0.83	2.0
EHE24*	75/57	790	20650	1.00	2.3	19500	1.00	2.5	18300	1.00	2.9
	75/63		21850	0.81	2.3	20500	0.84	2.5	19050	0.87	2.9
	80/67		23450	0.79	2.3	21900	0.81	2.5	20450	0.84	2.9
	85/72		25550	0.71	2.3	23900	0.73	2.6	22050	0.75	2.9
EHE30*	75/57	800	23100	1.00	2.5	22000	1.00	2.7	20800	1.00	3.0
	75/63		24950	0.76	2.5	23500	0.79	2.8	22100	0.81	3.0
	80/67		26700	0.74	2.5	25150	0.76	2.8	23600	0.79	3.1
	85/72		28950	0.67	2.5	27300	0.69	2.8	25600	0.71	3.1

Extended cooling performance data tabulated based off test at rated Airflow at .3 in. H₂O of external static.

Data is subject to change. Please verify most current information on www.firstco.com or www.AE-Air.com websites.

ELECTRICAL DATA:

MODEL NUMBER	VOLTAGE	COMPRESSOR		OUTDOOR MOTOR		INDOOR MOTOR		MIN. CIRCUIT AMPACITY (MCA)				MAX. OVERCURRENT PROTECTION (MOP)				MIN VOLT.	MAX VOLT.		
		RLA	LRA	FLA	HP	FLA	HP	CIRCUIT 1* (L1-L2)		CIRCUIT 2* (L3-L4)		CIRCUIT 1* (L1-L2)		CIRCUIT 2* (L3-L4)					
								240V	208V	240V	208V	240V	208V	240V	208V				
EHE09203B*	208/230-1-60	4.4	20	2.3	1/4	2.3	1/4	26	24	-	-	30	25	-	-	197	252		
EHE12203B*	208/230-1-60	4.7	26	2.3	1/4	2.3	1/4	26	24	-	-	30	25	-	-	197	252		
EHE12205B*	208/230-1-60	4.7	26	2.3	1/4	2.3	1/4	34	31	-	-	35	35	-	-	197	252		
EHE18203B*	208/230-1-60	9	56	2.3	1/4	2.8	1/3	32	30	-	-	35	35	-	-	197	252		
EHE18205B*	208/230-1-60	9	56	2.3	1/4	2.8	1/3	40	36	-	-	45	40	-	-	197	252		
EHE18207B*	208/230-1-60	9	56	2.3	1/4	2.8	1/3	34	32	19	17	35	35	20	20	197	252		
EHE18210B*	208/230-1-60	9	56	2.3	1/4	2.8	1/3	40	36	30	26	40	40	30	30	197	252		
EHE24205B*	208/230-1-60	10.7	55	2.3	1/4	2.8	1/3	42	38	-	-	50	45	-	-	197	252		
EHE24207B*	208/230-1-60	10.7	55	2.3	1/4	2.8	1/3	37	34	19	17	40	40	20	20	197	252		
EHE24210B*	208/230-1-60	10.7	55	2.3	1/4	2.8	1/3	42	38	30	26	45	40	30	30	197	252		
EHE30205B*	208/230-1-60	12.8	68	2.8	1/3	4.1	1/2	45	41	-	-	60	45	-	-	197	252		
EHE30207B*	208/230-1-60	12.8	68	2.8	1/3	4.1	1/2	40	37	21	19	45	45	25	20	197	252		
EHE30210B*	208/230-1-60	12.8	68	2.8	1/3	4.1	1/2	45	41	31	28	50	45	35	30	197	252		

*Circuits 1 and 2 require separate sets of power wires connected to the unit, each backed by an independent circuit breaker.

For 3kW and 5kW models, Circuit 1 is used for compressor power, condenser fan power, evaporator motor power and first stage of electric heat

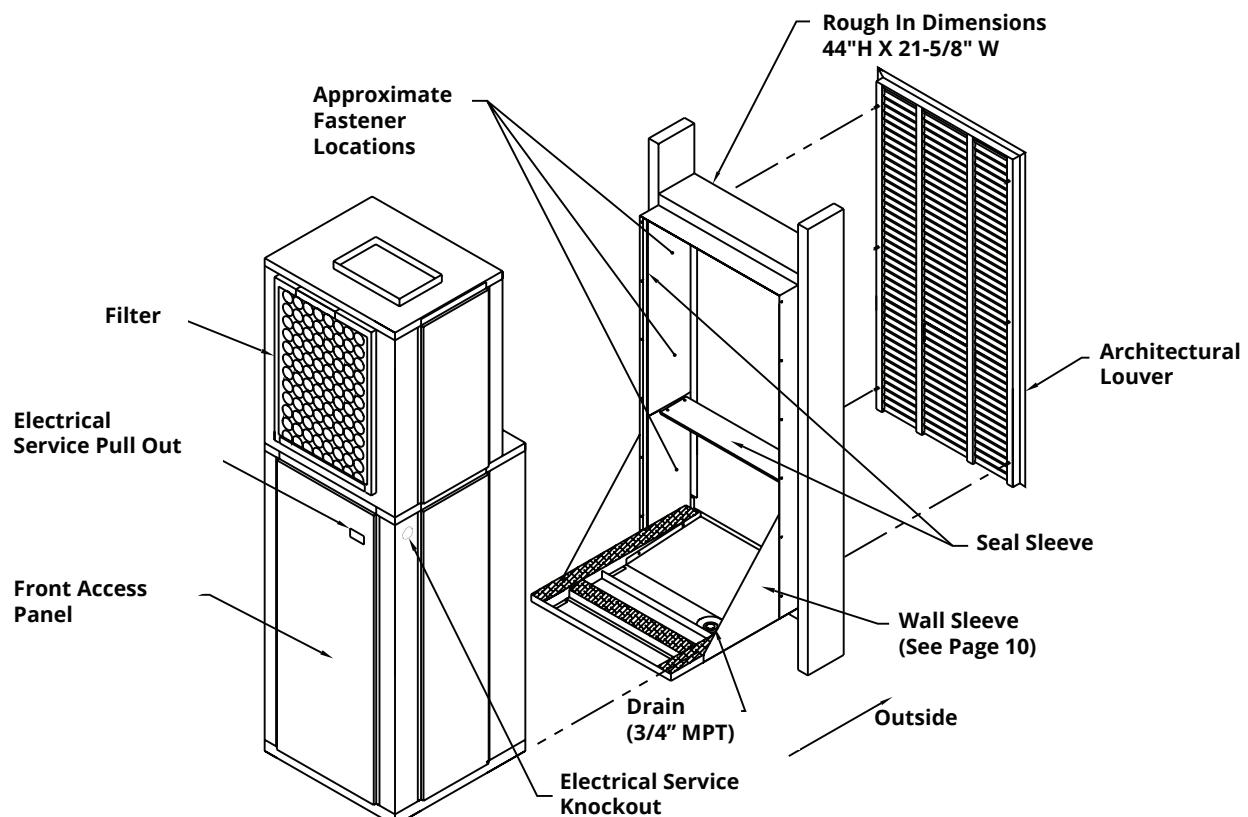
For 7kW and 10kW models, Circuit 1 is used for compressor power, condenser fan power and the first stage of electric heat. Circuit 2 is used for the 2nd stage of electric heat and the evaporator motor.

Refer to wiring diagrams in the EHE IOM for additional details.

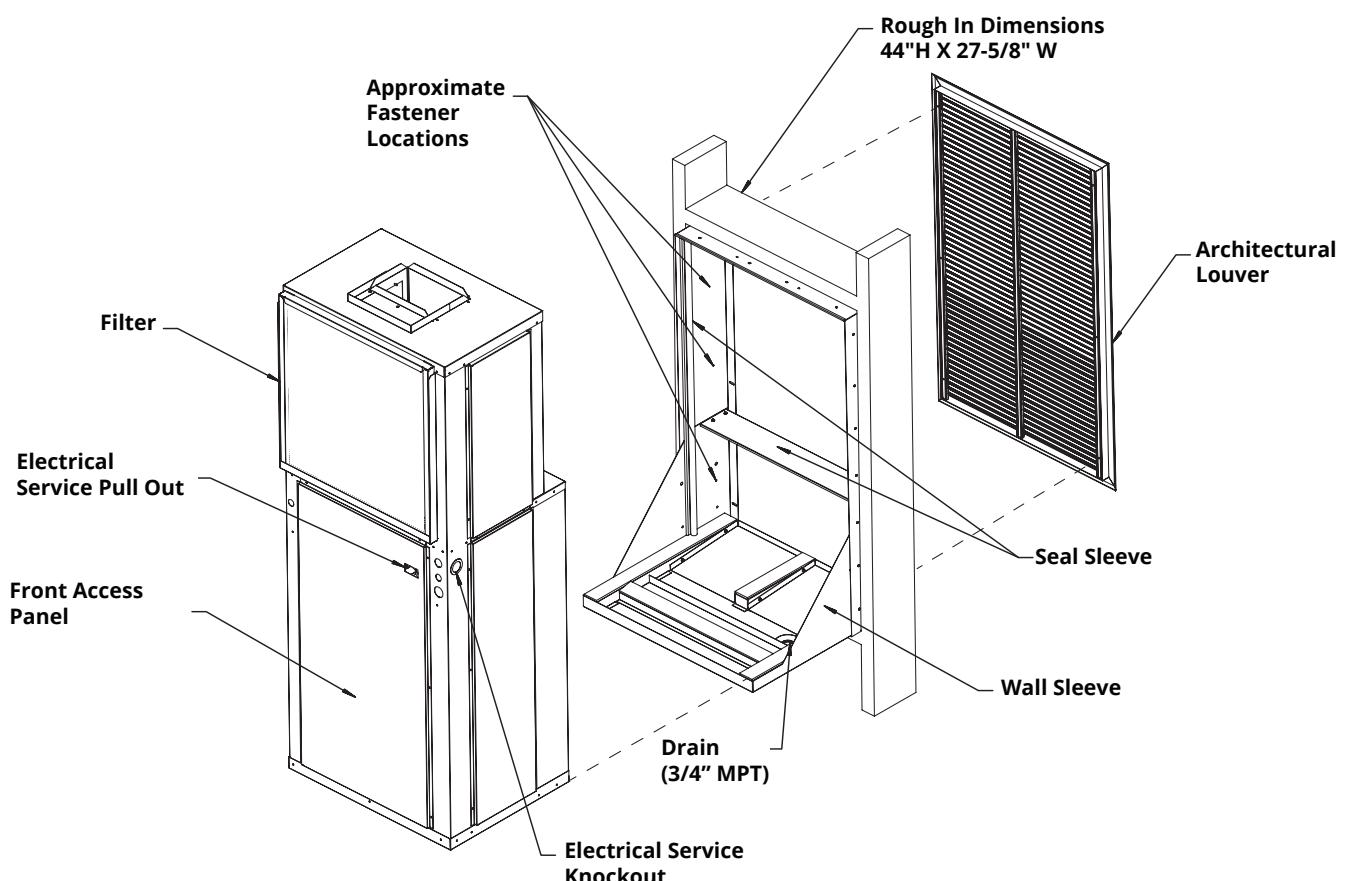
Wire size should be determined in accordance with National Electric Codes.

Units are rated for 208/230V, but MOP, MCA values are calculated at 208/240V.

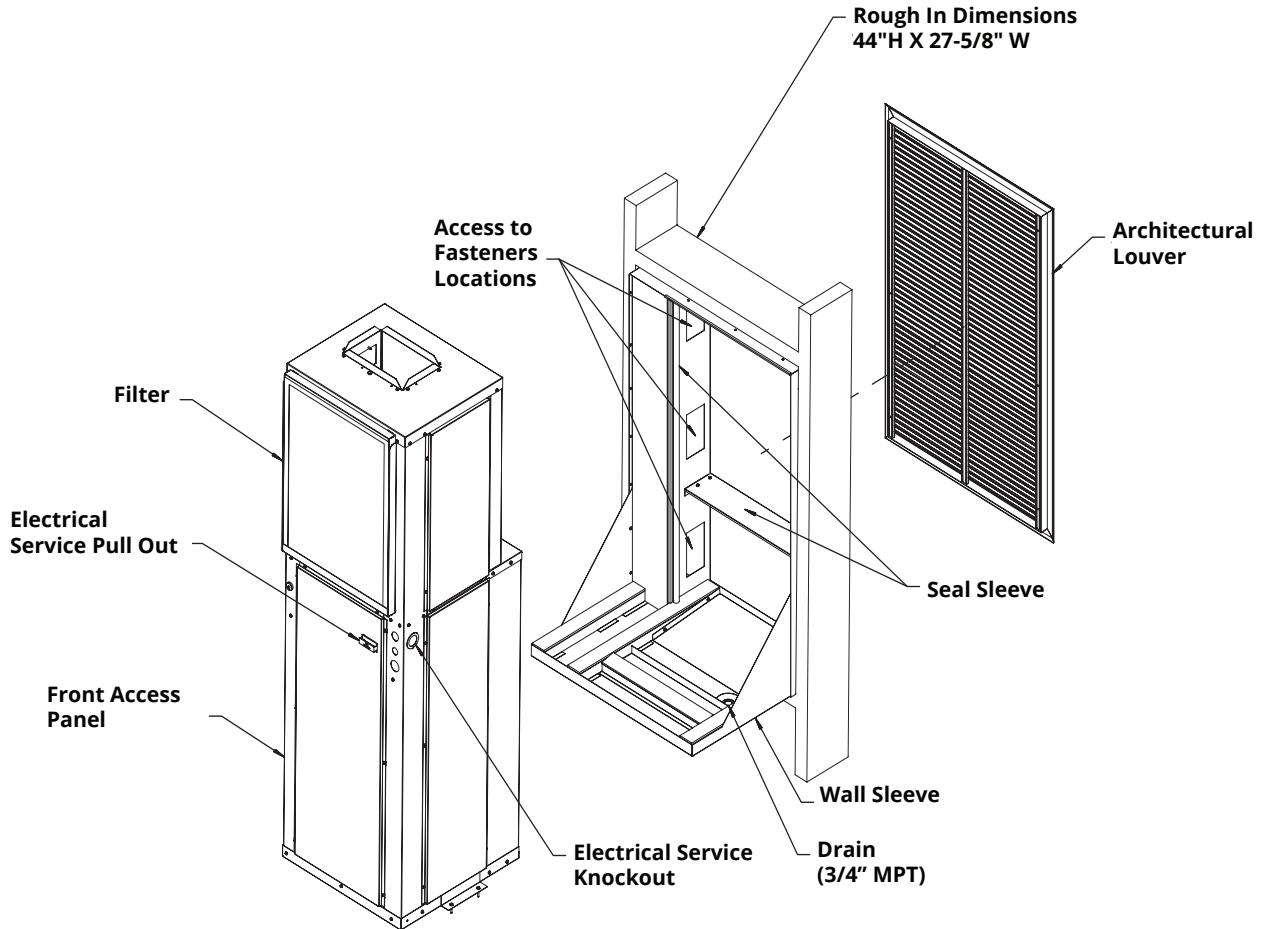
Data is subject to change. Please verify most current information on www.firstco.com or www.AE-Air.com websites.



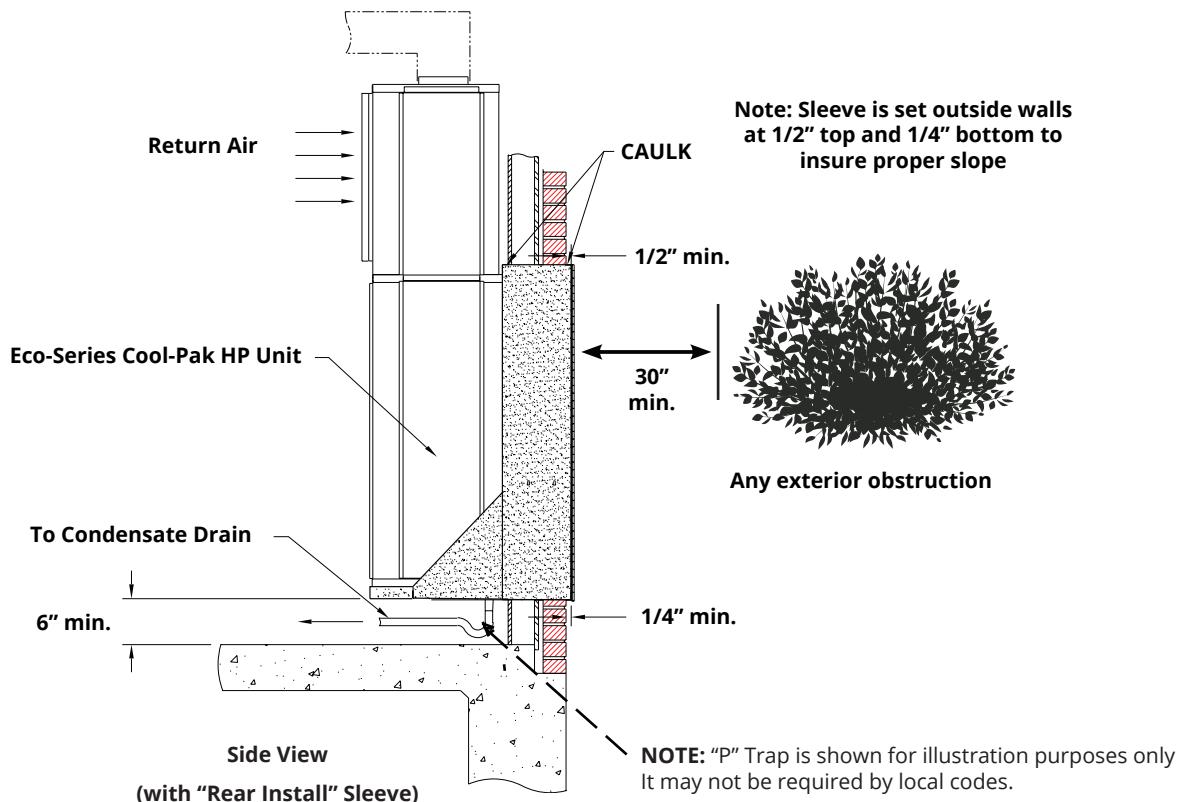
General Assembly for Standard Sleeve and Louver



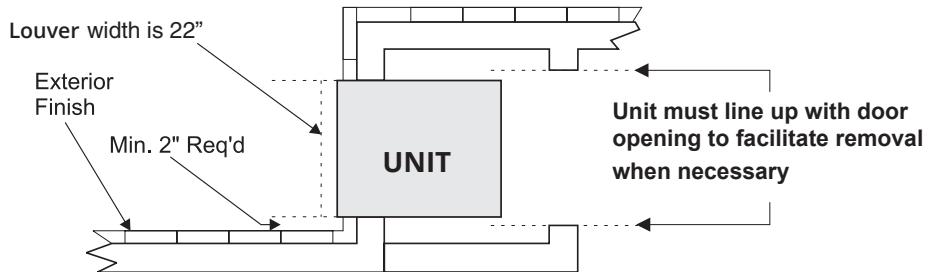
General Assembly for Large Sleeve and Louver Size 24



General Assembly for Large Sleeve and Louver for 09-18 Sizes with Block Off



CLOSET DIMENSIONS:



NOTES:

1. Sleeve rough-in opening is 44"(H) X 21-5/8"(W).
2. Bottom of opening should be approx. 6" above floor level.
3. Minimum 3" of clearance is required on all sides of the unit.

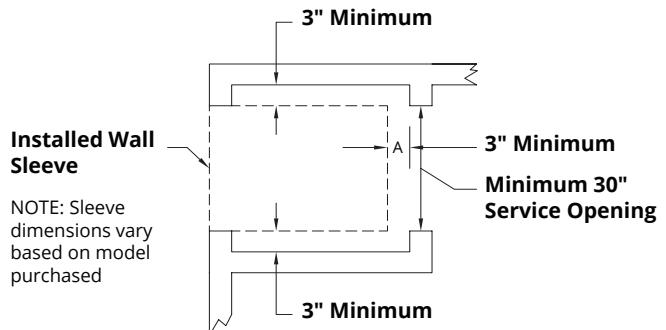
Rear Installation Detail for Small Sleeve 21" Wide (9-18 only)

INSTRUCTIONS:

To find the minimum closet depth (dimension "C"), use the following method:

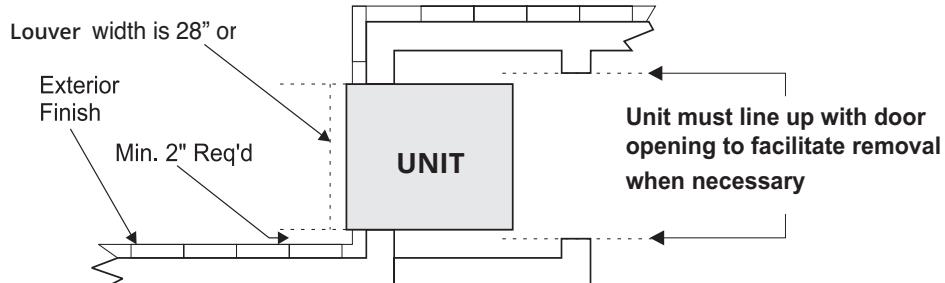
Determine dimension "A" which is the total finished wall thickness.

- For 5"-8" outside wall thickness, subtract "A" from 29".
("C" = 29 - "A")
- For 8"-12" outside wall thickness, subtract "A" from 33".
("C" = 33 - "A")
- For 12"-15" outside wall thickness, subtract "A" from 36".
("C" = 36 - "A")



NOTE: Provide minimum clearances as shown for interior closet dimensions.

Rear Installation Detail for Large Sleeve 27" Wide (24,30 Size or 9-18 with Blockoff)



NOTES:

1. Sleeve rough-in opening is 44"(H) X 27-5/8"(W).
2. Bottom of opening should be approx. 6" above floor level.
3. Minimum 3" of clearance is required on all sides of the unit.

CLOSET DIMENSIONS (CONT.):

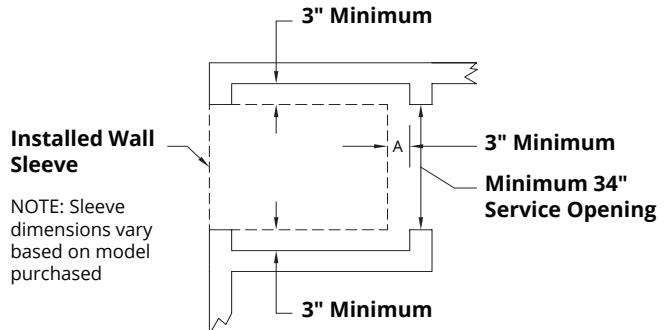
Rear Installation Detail for Large Sleeve 27" Wide (24,30 size or 9-18 with Blockoff)

INSTRUCTIONS:

To find the minimum closet depth (dimension "C"), use the following method:

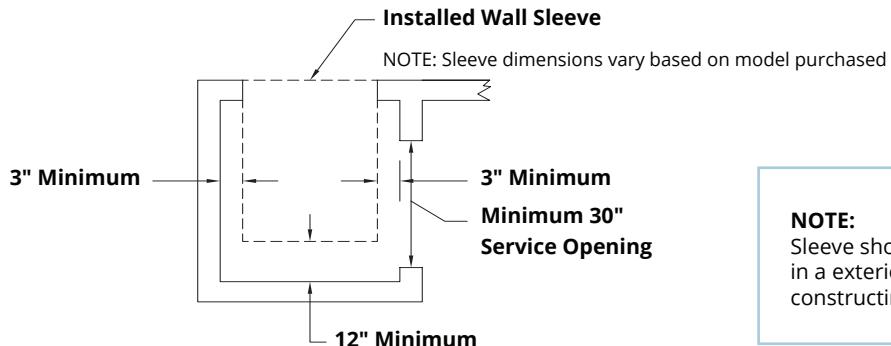
Determine dimension "A" which is the total finished wall thickness.

- For 5"-8" outside wall thickness, subtract "A" from 39".
("C" = 39 - "A")
- For 8"-12" outside wall thickness, subtract "A" from 43".
("C" = 43 - "A")
- For 12"-15" outside wall thickness, subtract "A" from 46".
("C" = 46 - "A")



NOTE: Provide minimum clearances as shown for interior closet dimensions.

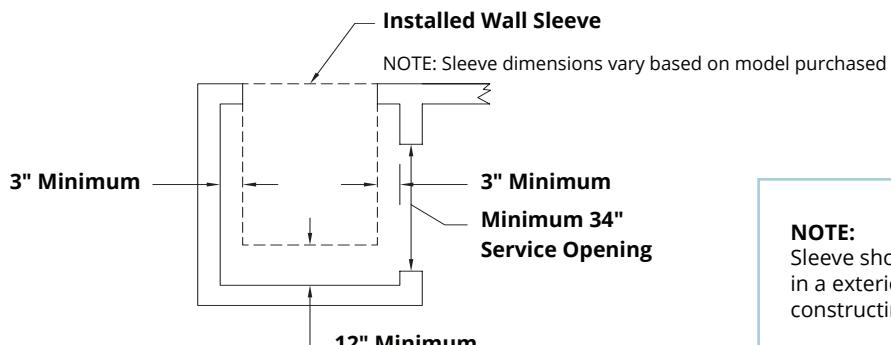
Side Installation Detail for Small Sleeve 21" Wide (9-18 size only)



Notes:

- Sleeve rough-in opening is 44"(H) X 21-5/8"(W).
- Bottom of opening should be approx. 6" above floor level.
- Minimum 3" of clearance is required on the sides of the unit and 12" clearance on the rear

Side Installation Detail for Large Sleeve 27" Wide (24 or 30 or 9-18 with Blockoff)



Notes:

- Sleeve rough-in opening is 44"(H) X 27-5/8"(W).
- Bottom of opening should be approx. 6" above floor level.
- Minimum 3" of clearance is required on the sides of the unit and 12" clearance on the rear of the unit .



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