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

R454B

Nomenclature

E H E 24 2 05 D 0 0 B0 00 F

SERIES
E - Eco Series

UNIT TYPE
H - Heat Pump

HEAT TYPE
E - Electric Heat

NOMINAL COOLING CAPACITY
09 - 9,000 Btu/H
12 - 12,000 Btu/H
18 - 18,000 Btu/H
24 - 24,000 Btu/H
30 - 30,000 Btu/H

VOLTAGE
2 - 208/230V 1Ph

HEAT TYPE / SIZE
00 - No Heat
03 - 3 kW
05 - 5 kW
07 - 7 kW
10 - 10 kW

MAJOR REVISION
D - R454B Initial Release

ACCESSORY CONNECTIONS
0 - Standard

CONTROLS OPTIONS
0 - Standard

CABINET / INSULATION
A0 - 20x20 w/ Fiberglass
B0 - 20x26 w/ Fiberglass

OPTIONS
00 - None

BRAND
F - First Co.

PRODUCT DESCRIPTION

- Space constrained low ambient heat pump with electric heating
- Pre-wired and pre-charged with R-454B 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 (only on the 10KW units)
- Refrigerant leak mitigation on units over 4lbs of charge

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
- 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. H_2O

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 delay 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

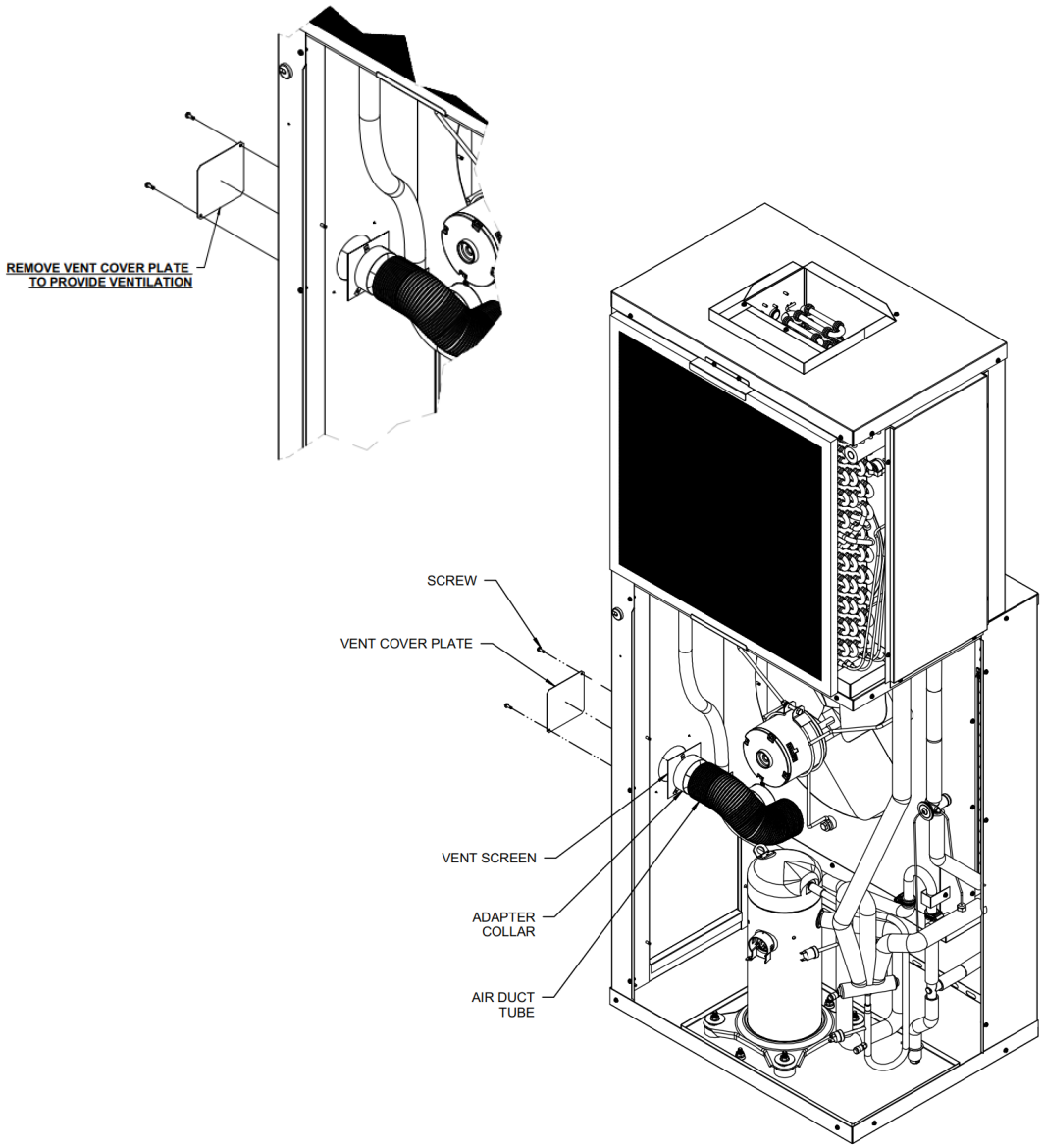
Provides a visible disconnecting means when performing maintenance; models with 10 kW electric heat also have terminal block.

WARNING: The incoming conductors of the service switch remain energized when the service switch is pulled out. Always disconnect power at the main source as well as the service switch before servicing.

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.

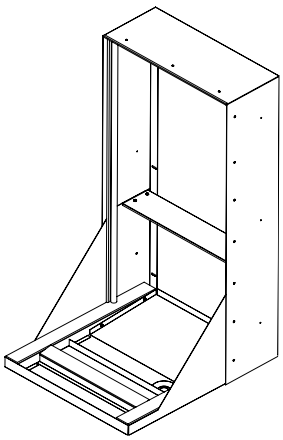
Secondary Condensate Overflow

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.

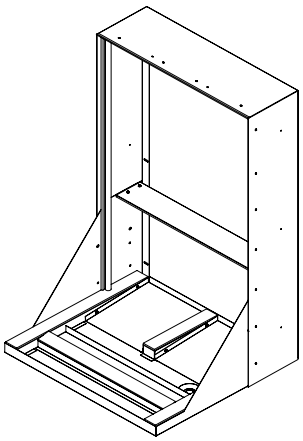
REQUIRED ACCESSORIES:

WALL SLEEVES

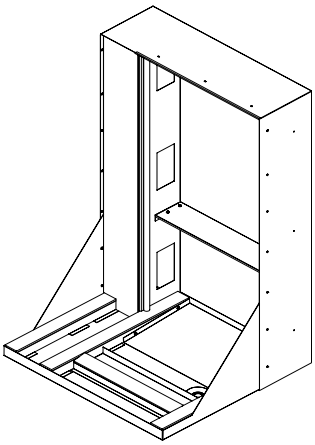
- Provided for installation during rough-in and when ready the unit is simply slid into the wall sleeve and connected to the ductwork and electrical.
- Weight bearing sleeve that supports the entire weight of the unit and provides a weather tight seal against wind and water infiltration.
- Four wall 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	

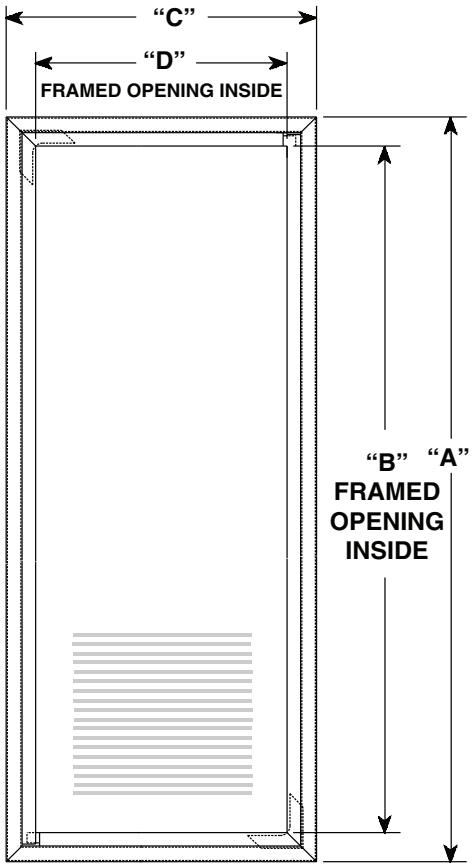
NOTES:

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. Wind resistant sleeves require the usage of a wind resistant louver
4. 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
5. 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)		FRAME	OPENING		55	
	LOUVERED (1)	87 X 31	84 X 28	**931-11**		20 x 24 x 1
	NON-LOUVERED (2)	87 X 31	84 X 28	**931-12**		NO
	LOUVERED (1)	82 X 31	79 X 28	**931-13**		20 x 24 x 1
	NON-LOUVERED (2)	82 X 31	79 X 28	**931-14**		NO
ACCESS / RETURN AIR PANEL (3)(4)		FRAME	OPENING			
	LOUVERED (1)	87 X 37	84 X 34	**931-15**		20 x 24 x 1
	NON-LOUVERED (2)	87 X 37	84 X 34	**931-16**		NO
	LOUVERED (1)	82 X 37	79 X 34	**931-17**		20 x 24 x 1
	NON-LOUVERED (2)	82 X 37	79 X 34	**931-18**		NO
9-18 INSULATION KIT	5/8" DUCTBOARD	N/A		**91K01**	---	---
24 INSULATION KIT				**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**

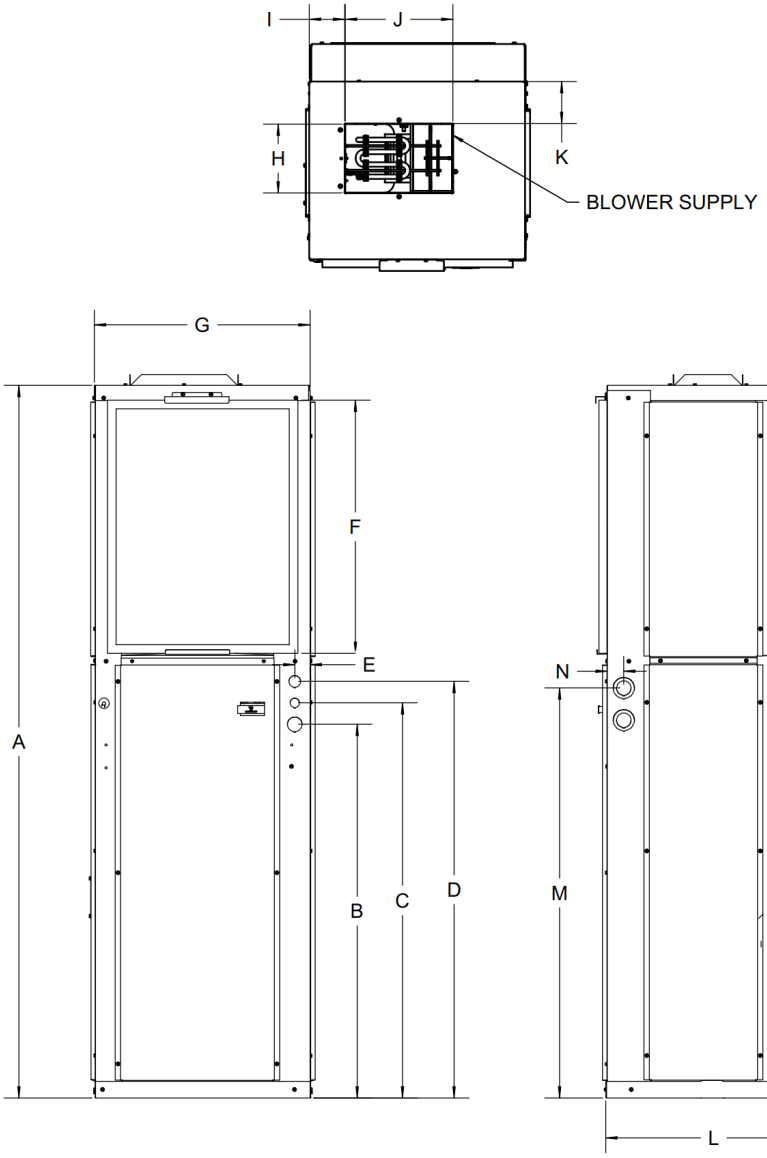
NOTE: A solid door or panel with a side wall return air louver will result in lower sound levels.

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_2O 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_2O 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
EHE092B**	350	9000	10.5	11.9	9000	5000	6.3
EHE122B**	400	11200	10.5	11.9	10600	6000	6.3
EHE182B**	600	17500	10.5	11.9	16600	10500	6.3
EHE242B**	800	23500	10.5	11.9	23000	14000	6.3
EHE302B**	900	26600	10.0	11.9	26000	16200	6.3

Ratings subject to change

Electric Heat Ratings						
MODEL NUMBER	240V		230V		208V	
	kW	BTU/H	kW	BTU/H	kW	BTU/H
EHE09203*	3	10250	2.8	9450	2.3	7700
EHE12203*	3	10250	2.8	9450	2.3	7700
EHE12205*	4.5	15400	4.1	14150	3.4	11550
EHE18203*	3	10250	2.8	9450	2.3	7700
EHE18205*	5	17100	4.6	15700	3.8	12800
EHE18207*	7	23900	6.4	22000	5.3	17950
EHE18210*	9.5	32450	8.7	29850	7.1	24350
EHE24205*	5	17100	4.6	15700	3.8	12800
EHE24207*	7	23900	6.4	22000	5.3	17950
EHE24210*	9.5	32450	8.7	29850	7.1	24350
EHE30205*	5	17100	4.6	15700	3.8	12800
EHE30207*	7	23900	6.4	22000	5.3	17950
EHE30210*	9.5	32450	8.7	29850	7.1	24350

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
EHE09*	350	9000	0.8	7000	0.8	5000	0.7	4000	0.7
EHE12*	400	10600	0.9	8600	0.9	6000	0.8	4500	0.8
EHE18*	600	16600	1.4	12400	1.3	10500	1.3	8000	1.2
EHE24*	800	23000	1.9	18400	1.8	14000	1.7	11500	1.6
EHE30*	900	26000	2.2	21200	2.1	16200	2.1	13000	2.0

Capacities based off 70°F EAT at .3 in. H_2O 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			
		240V		208V		240V		208V		240V		208V		240V		208V	
		BTU/H	kW	BTU/H	kW	BTU/H	kW	BTU/H	kW	BTU/H	kW	BTU/H	kW	BTU/H	kW	BTU/H	kW
EHE09203*	350	19200	3.80	16650	3.05	17200	3.80	14650	3.05	15200	3.70	12650	2.95	14200	3.70	11650	2.95
EHE12203*	450	20800	3.90	18250	3.15	18800	3.90	16250	3.15	16200	3.80	13650	3.05	14700	3.80	12150	3.05
EHE12205*	450	25950	5.40	22100	4.28	23950	5.40	20100	4.28	21350	5.30	17500	4.18	19850	5.30	16000	4.18
EHE18203*	650	26800	4.40	24250	3.65	22600	4.30	20050	3.55	20700	4.30	18150	3.55	18200	4.20	15650	3.45
EHE18205*	650	33650	6.40	29350	5.15	29450	6.30	25150	5.05	27550	6.30	23250	5.05	25050	6.20	20750	4.95
EHE18207*	650	40450	8.40	34500	6.65	36250	8.30	30300	6.55	34350	8.30	28400	6.55	31850	8.20	25900	6.45
EHE18210*	700	49000	10.90	40900	8.53	44800	10.80	36700	8.43	42900	10.80	34800	8.43	40400	10.70	32300	8.33
EHE24205*	850	40050	6.90	35750	5.65	35450	6.80	31150	5.55	31050	6.70	26750	5.45	28550	6.60	24250	5.35
EHE24207*	850	46850	8.90	40900	7.15	42250	8.80	36300	7.05	37850	8.70	31900	6.95	35350	8.60	29400	6.85
EHE24210*	900	55400	11.40	47300	9.03	50800	11.30	42700	8.93	46400	11.20	38300	8.83	43900	11.10	35800	8.73
EHE30205*	900	43050	7.20	38750	5.95	38250	7.10	33950	5.85	33250	7.10	28950	5.85	30050	7.00	25750	5.75
EHE30207*	900	49850	9.20	43900	7.45	45050	9.10	39100	7.35	40050	9.10	34100	7.35	36850	9.00	30900	7.25
EHE30210*	950	58400	11.70	50300	9.33	53600	11.60	45500	9.23	48600	11.60	40500	9.23	45400	11.50	37300	9.13

Capacities based off 70°F EAT at .3 in. H_2O 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)

Exteded Cooling Performance												
Model	Indoor Temp DB/ WB	Airflow	Outdoor Temperature °F								
			65.0			75.0			85.0		
			BTUH	S/T	W	BTUH	S/T	W	BTUH	S/T	W
EHE09	75/57	350	9100	1.00	600	8700	1.00	700	8300	1.00	800
	75/63		10200	0.76	600	9700	0.78	700	9100	0.79	800
	80/67		11100	0.73	600	10600	0.74	700	10000	0.76	800
	85/72		12300	0.65	600	11700	0.66	700	11200	0.68	800
EHE12	75/57	400	12200	1.00	800	11300	1.00	900	10800	1.00	900
	75/63		12900	0.75	800	12200	0.77	900	11500	0.79	1000
	80/67		13900	0.72	800	13100	0.74	900	12300	0.76	1000
	85/72		15200	0.62	800	14400	0.63	900	13600	0.65	900
EHE18	75/57	600	18100	1.00	1100	17300	1.00	1200	16400	1.00	1400
	75/63		19200	0.79	1100	18200	0.81	1300	17200	0.84	1400
	80/67		20400	0.77	1200	19500	0.79	1300	18400	0.81	1500
	85/72		22100	0.70	1200	21000	0.72	1400	19900	0.74	1500
EHE24	75/57	800	24800	1.00	1700	23700	1.00	1900	22100	1.00	2100
	75/63		26300	0.75	1700	25000	0.77	1900	23600	0.79	2100
	80/67		28100	0.73	1700	26700	0.75	1900	25300	0.76	2100
	85/72		30700	0.66	1700	29100	0.68	1900	27500	0.69	2100
EHE30	75/57	900	26700	0.99	1900	25700	1.00	2100	24900	1.00	2300
	75/63		29400	0.72	1900	28000	0.74	2100	26500	0.75	2300
	80/67		31300	0.69	1900	29800	0.71	2100	28300	0.72	2300
	85/72		34100	0.63	1900	32300	0.64	2100	30800	0.65	2300

Extended cooling performance data tabulated based off test at rated Airflow at .3 in. H_2O 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)

Exteded Cooling Performance												
Model	**Indoor Temp DB/ WB**	**Airflow**	95.0			105.0			115.0			
			BTUH	S/T	W	BTUH	S/T	W	BTUH	S/T	W	
EHE09	75/57	350	7900	1.00	800	7500	1.00	900	7100	1.00	1000	
	75/63		8600	0.82	800	8100	0.84	900	7500	0.87	1000	
	80/67		9400	0.78	800	8900	0.81	900	8300	0.83	1000	
	85/72		10600	0.70	900	9900	0.72	1000	9300	0.74	1000	
EHE12	75/57	400	10200	1.00	1000	9600	1.00	1100	9000	1.00	1200	
	75/63		10800	0.81	1000	10000	0.84	1100	9300	0.88	1200	
	80/67		11600	0.78	1000	10800	0.82	1100	10000	0.85	1200	
	85/72		12700	0.67	1000	11900	0.69	1100	11000	0.72	1300	
EHE18	75/57	600	15600	1.00	1500	14700	1.00	1700	13800	1.00	1800	
	75/63		16200	0.86	1500	15200	0.90	1700	14100	0.93	1800	
	80/67		17300	0.84	1600	16200	0.87	1700	15100	0.91	1900	
	85/72		18700	0.76	1700	17500	0.79	1800	16400	0.83	2000	
EHE24	75/57	800	21000	1.00	2300	19800	1.00	2600	18600	1.00	3000	
	75/63		22200	0.81	2300	20900	0.84	2600	19400	0.87	3000	
	80/67		23800	0.79	2400	22300	0.81	2600	20800	0.84	3000	
	85/72		26000	0.71	2400	24300	0.73	2700	22400	0.75	3000	
EHE30	75/57	900	23100	1.00	2500	22000	1.00	2700	20800	1.00	3000	
	75/63		25000	0.76	2500	23500	0.79	2800	22100	0.81	3000	
	80/67		26800	0.74	2500	25200	0.76	2800	23600	0.79	3100	
	85/72		29000	0.67	2500	27300	0.69	2800	25600	0.71	3100	

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				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		
EHE09203*	208/230-1-60	3.9	-	2.3	1/4	2.3	1/4	25	23	-	-	30	25	-	-	197	252
EHE12203*	208/230-1-60	4.8	-	2.3	1/4	2.3	1/4	26	24	-	-	30	25	-	-	197	252
EHE12205*	208/230-1-60	4.8	-	2.3	1/4	2.3	1/4	34	31	-	-	35	35	-	-	197	252
EHE18203*	208/230-1-60	7.5	-	2.3	1/4	2.8	1/3	30	28	-	-	35	30	-	-	197	252
EHE18205*	208/230-1-60	7.5	-	2.3	1/4	2.8	1/3	41	37	-	-	45	40	-	-	197	252
EHE18207*	208/230-1-60	7.5	-	2.3	1/4	2.8	1/3	51	46	-	-	55	50	-	-	197	252
EHE18210*	208/230-1-60	7.5	-	2.3	1/4	2.8	1/3	14	14	49	43	15	15	50	45	197	252
EHE24205*	208/230-1-60	11.4	51	2.3	1/4	2.8	1/3	45	42	-	-	50	45	-	-	197	252
EHE24207*	208/230-1-60	11.4	51	2.3	1/4	2.8	1/3	56	51	-	-	60	55	-	-	197	252
EHE24210*	208/230-1-60	11.4	51	2.3	1/4	2.8	1/3	19	19	49	43	25	25	50	45	197	252
EHE30205*	208/230-1-60	11.7	71	2.8	1/3	4.1	1/2	48	44	-	-	50	45	-	-	197	252
EHE30207*	208/230-1-60	11.7	71	2.8	1/3	4.1	1/2	58	53	-	-	60	55	-	-	197	252
EHE30210*	208/230-1-60	11.7	71	2.8	1/3	4.1	1/2	22	22	49	43	25	25	50	45	197	252

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

For 3kW, 5kW, and 7kW models, Circuit 1 is used for compressor power, condenser fan power, evaporator motor power and first stage of electric heat

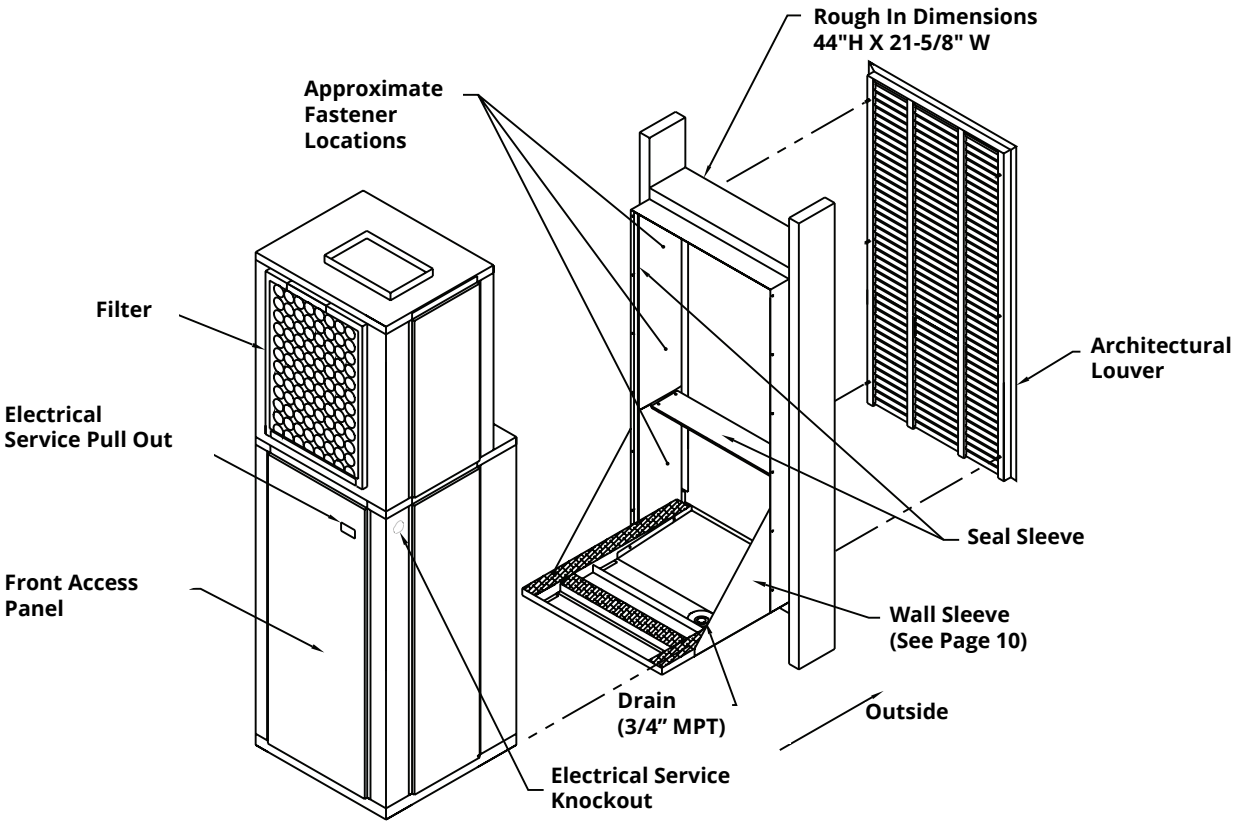
10kW models, Circuit 1 is used for compressor power, condenser fan power and the first stage of electric heat, and the evaporator motor. Circuit 2 is used for the 2nd stage of electric heat.

Refer to wiring diagrams In the EHE Installation and Operation Manual for additional details.

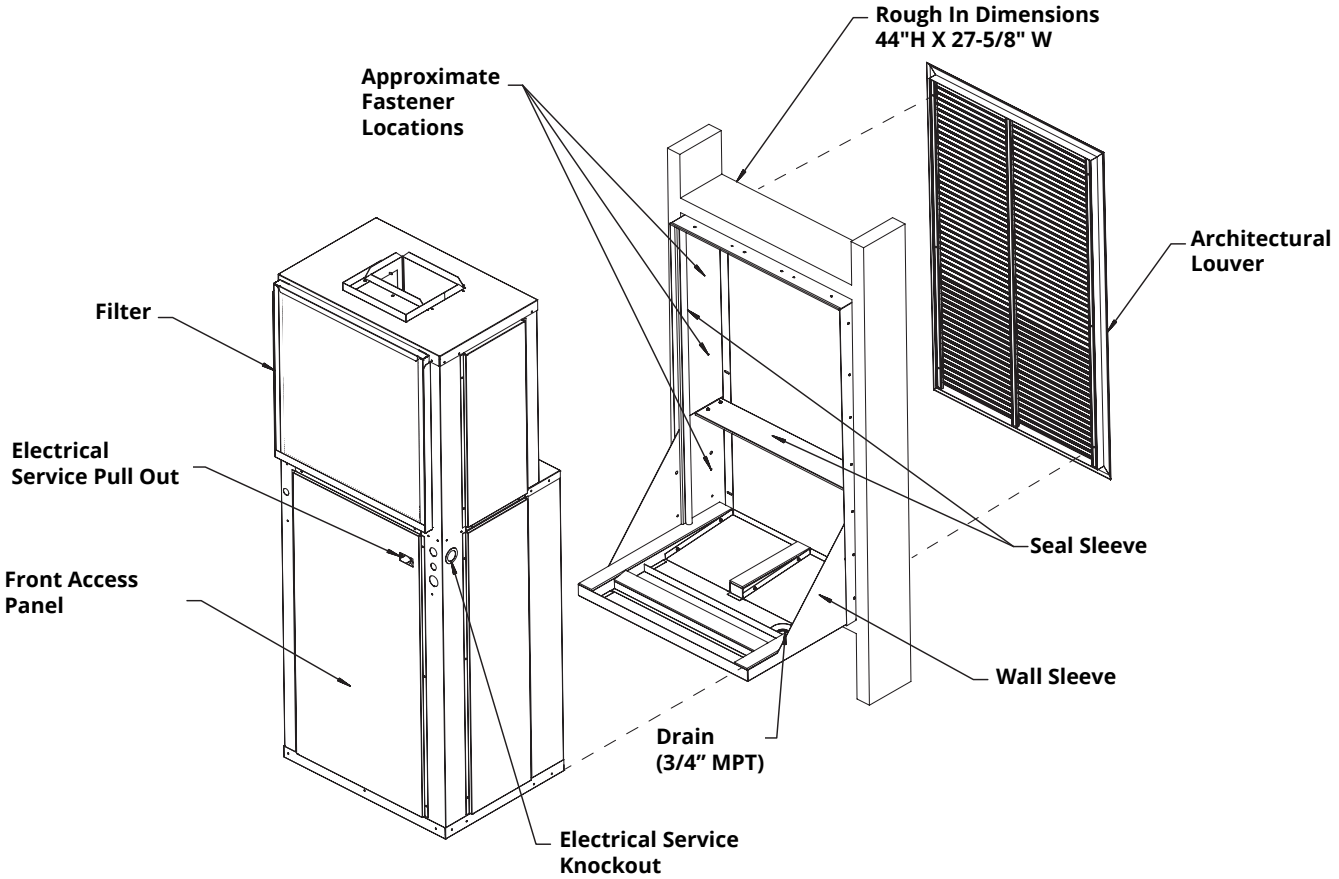
Wire size should be determined in accordance with National Electric Codes.

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

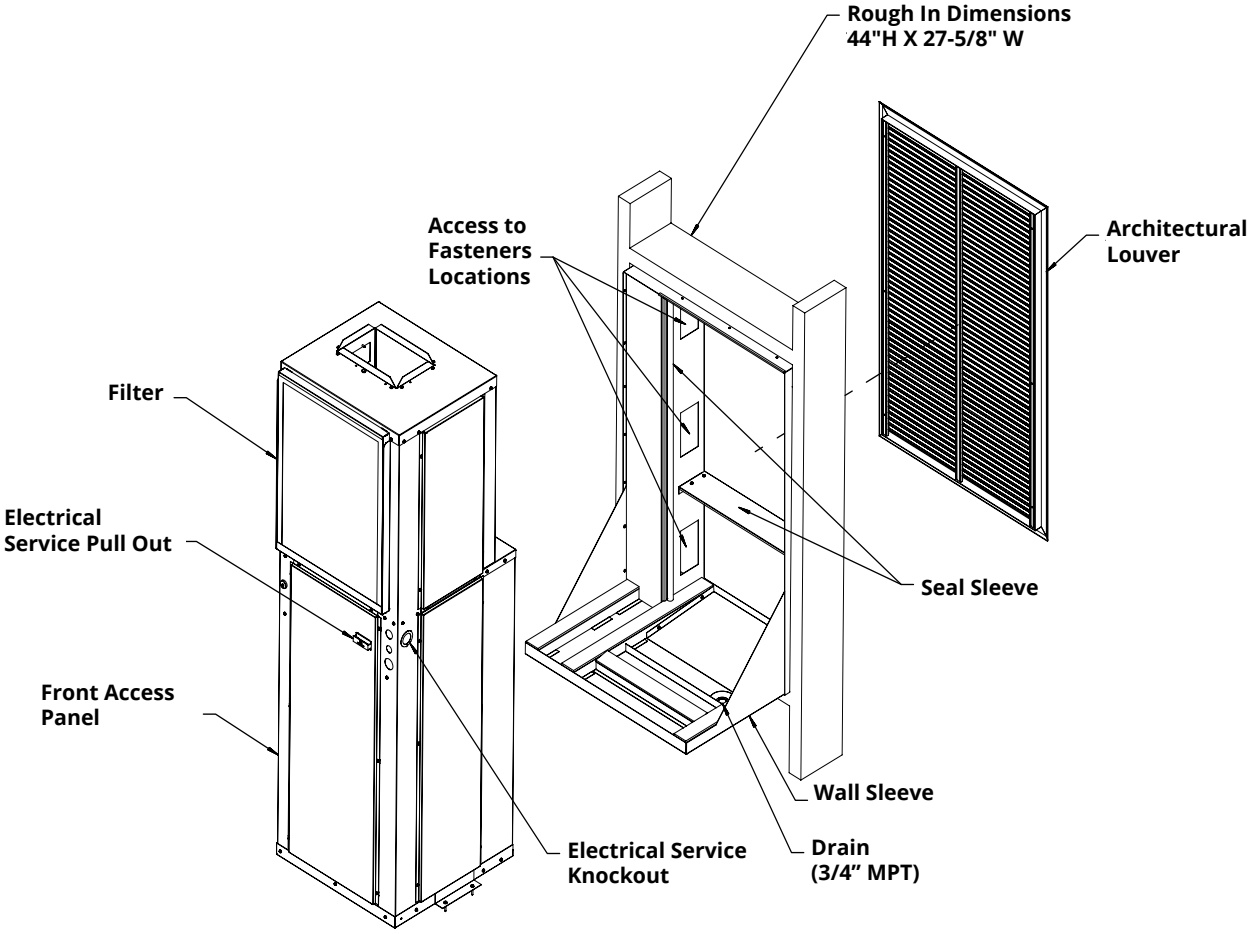
Data is subject to change. Please verify most current information on www.firstco.com or www.AE-Air.com websites.



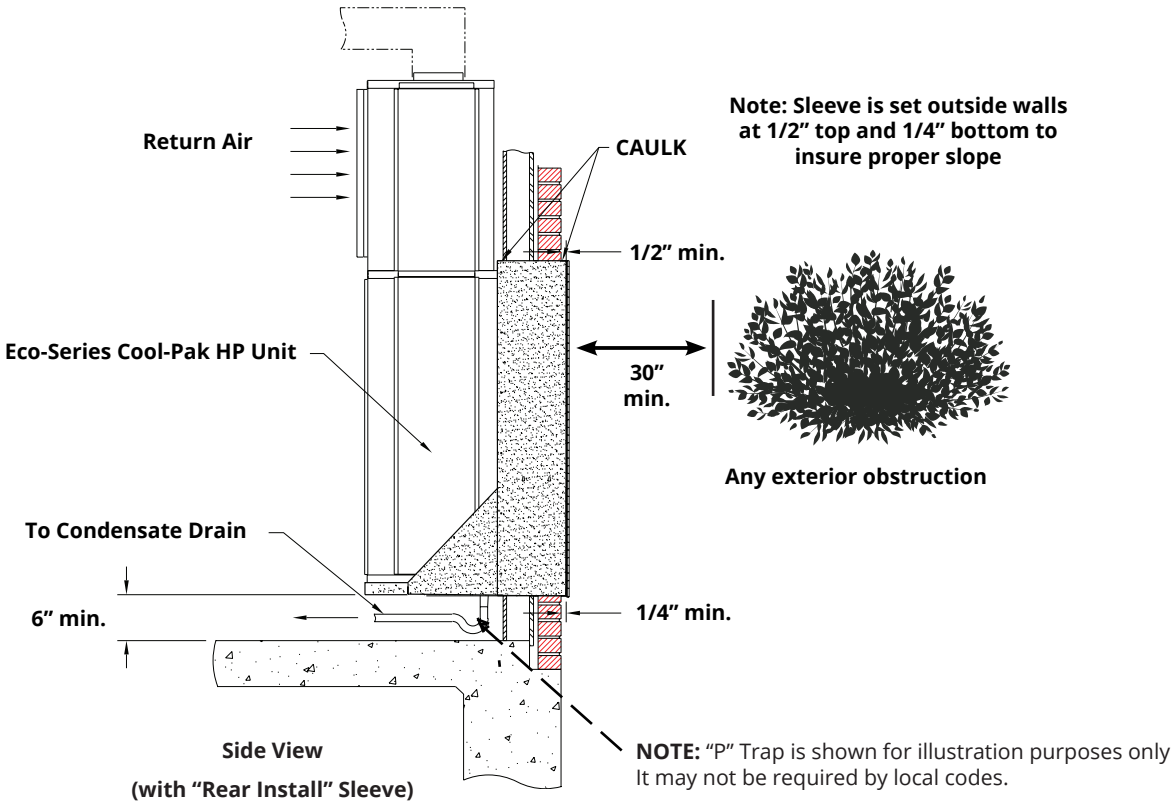
General Assembly for Standard Sleeve and Louver



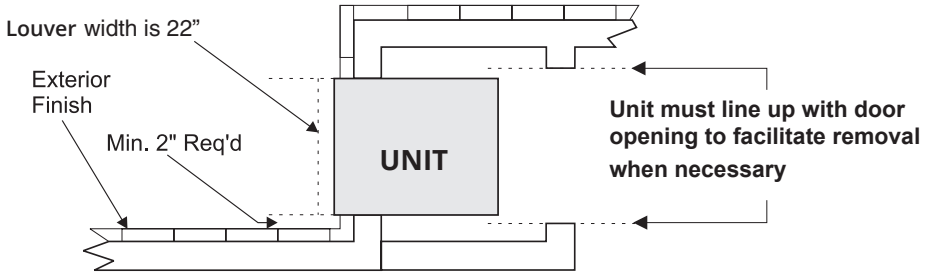
General Assembly for Large Sleeve and Louver Size 24



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.
4. Note Wind Resistant Louver is 3/4” larger

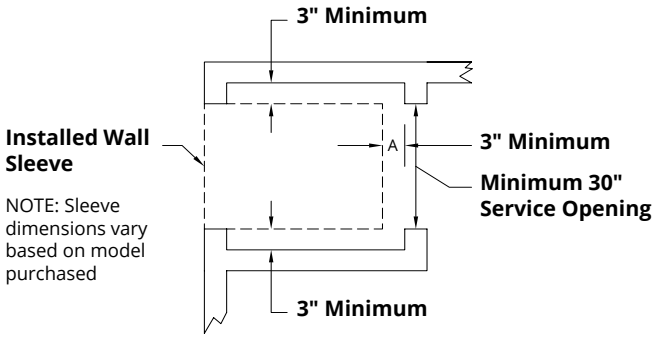
Rear Installation *Detail for Small Sleeve 21" Wide (9-18 only)*

INSTRUCTIONS:

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

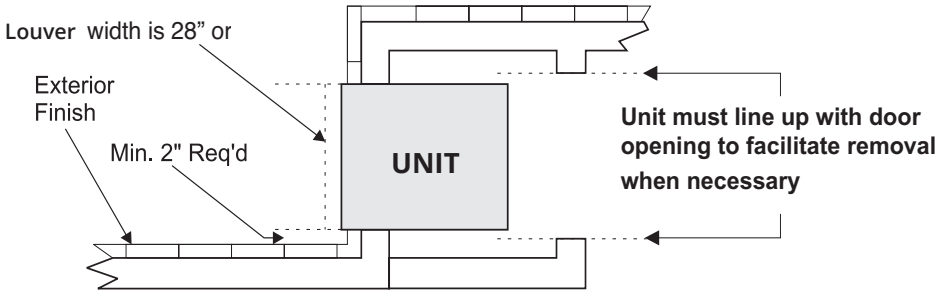
Determine dimension “A” which is the total finished wall thickness.

- 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.
4. Note Wind Resistant Louver is 3/4” larger

CLOSET DIMENSIONS (CONT.):

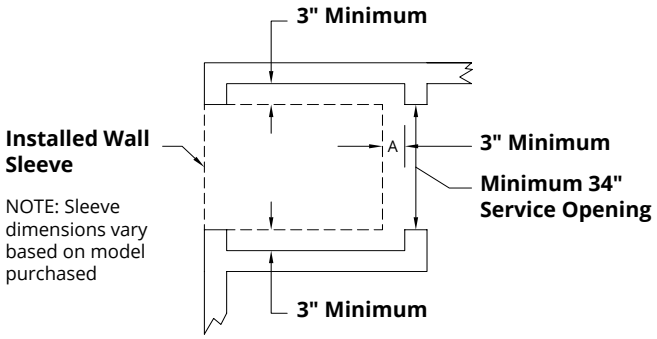
Rear Installation *Detail for Large Sleeve 27" Wide (24,30 size or 9-18 with Blockoff)*

INSTRUCTIONS:

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

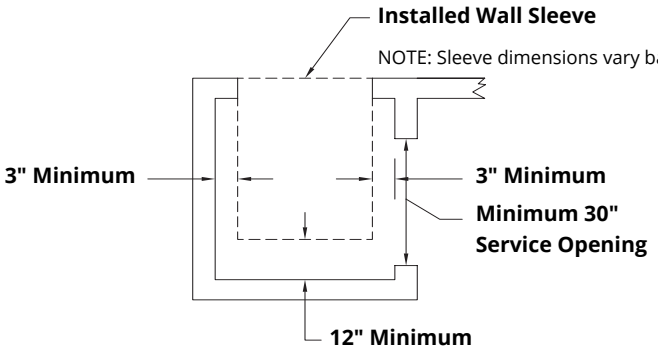
Determine dimension "A" which is the total finished wall thickness.

- 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.

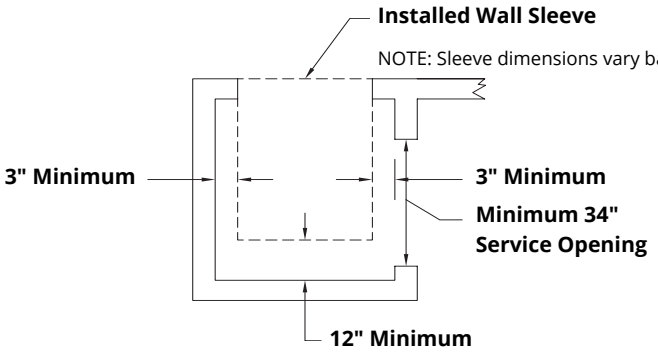
Side Installation *Detail for Small Sleeve 21" Wide (9-18 size only)*



NOTE:
Sleeve should be installed in a exterior wall prior to constructing the closet.

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 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)*



NOTE:
Sleeve should be installed in a exterior wall prior to constructing the closet.

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 the sides of the unit and 12" clearance on the rear of the unit .

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