First Co.®

eco series COOL-PAK HP

Space Constrained Heat Pump with Electric Heating

3/4 - 2.5 Tons

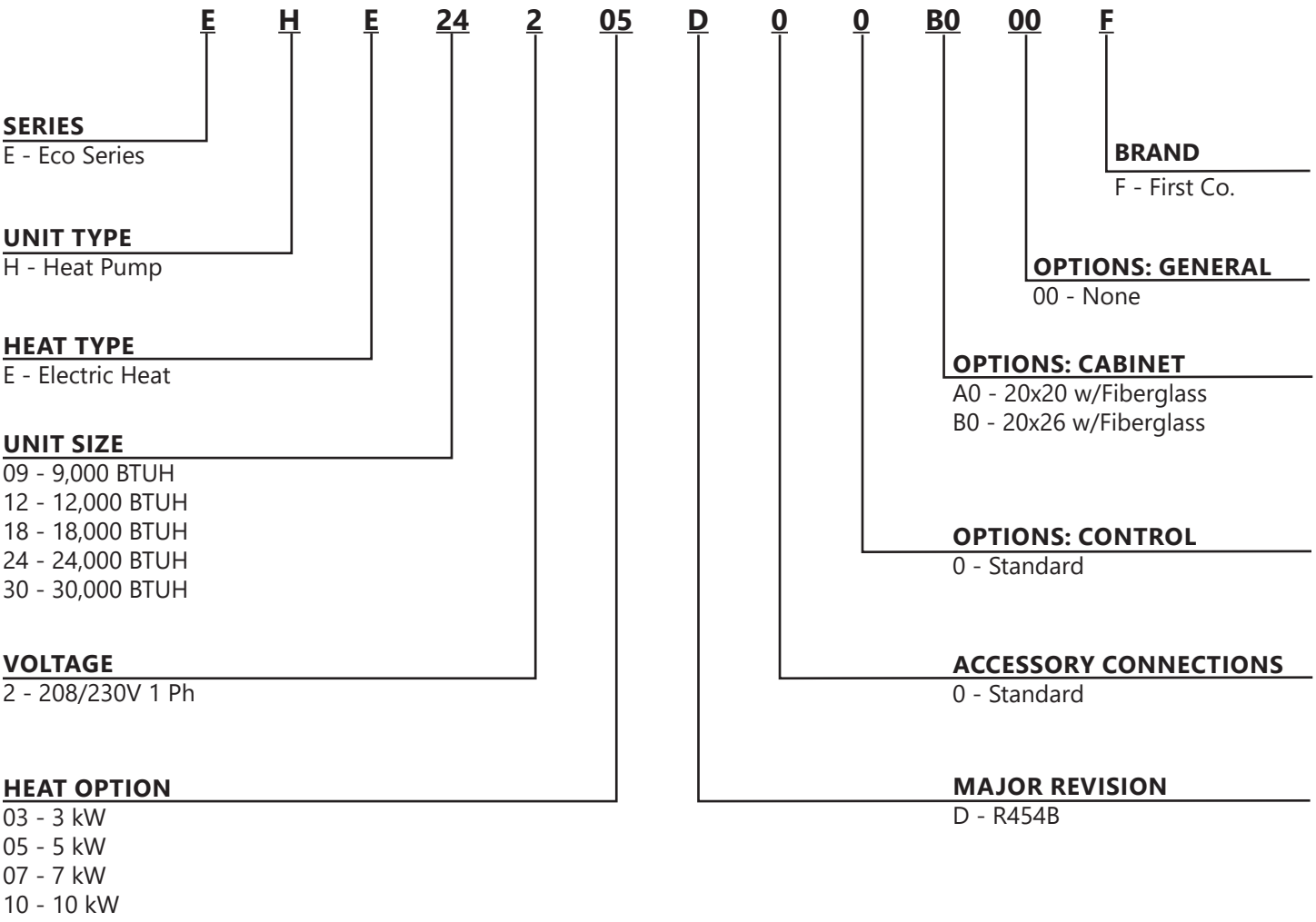
3 - 10 kW Electric Heat

11.7 SEER2

R454B

AHRI CERTIFIED®
www.ahridirectory.org
Unitary Small AC
AHRI Standard 210/240
Certification applies only when the complete system is listed with AHRI.

NOMENCLATURE



ECO SERIES COOL-PAK HP

SPACE CONSTRAINED HEAT PUMP W/ELECTRIC HEATING

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 reduce compressor noise and vibration. ***(Two Stage Scroll available for reduced cabinet size 2-ton unit.)***
- 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 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)
- Units charged with over 4lbs of refrigerant have factory installed leak mitigation sensors

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

LIMITED WARRANTY

5 Years Compressor, 5 Years parts

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SPACE CONSTRAINED HEAT PUMP W/ELECTRIC HEATING

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 thermostat with high and low temperature limits

OPTIONAL ACCESSORIES

CUSTOM COLOR LOUVERS

STANDARD PAINT COLORS

Custom color options available

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

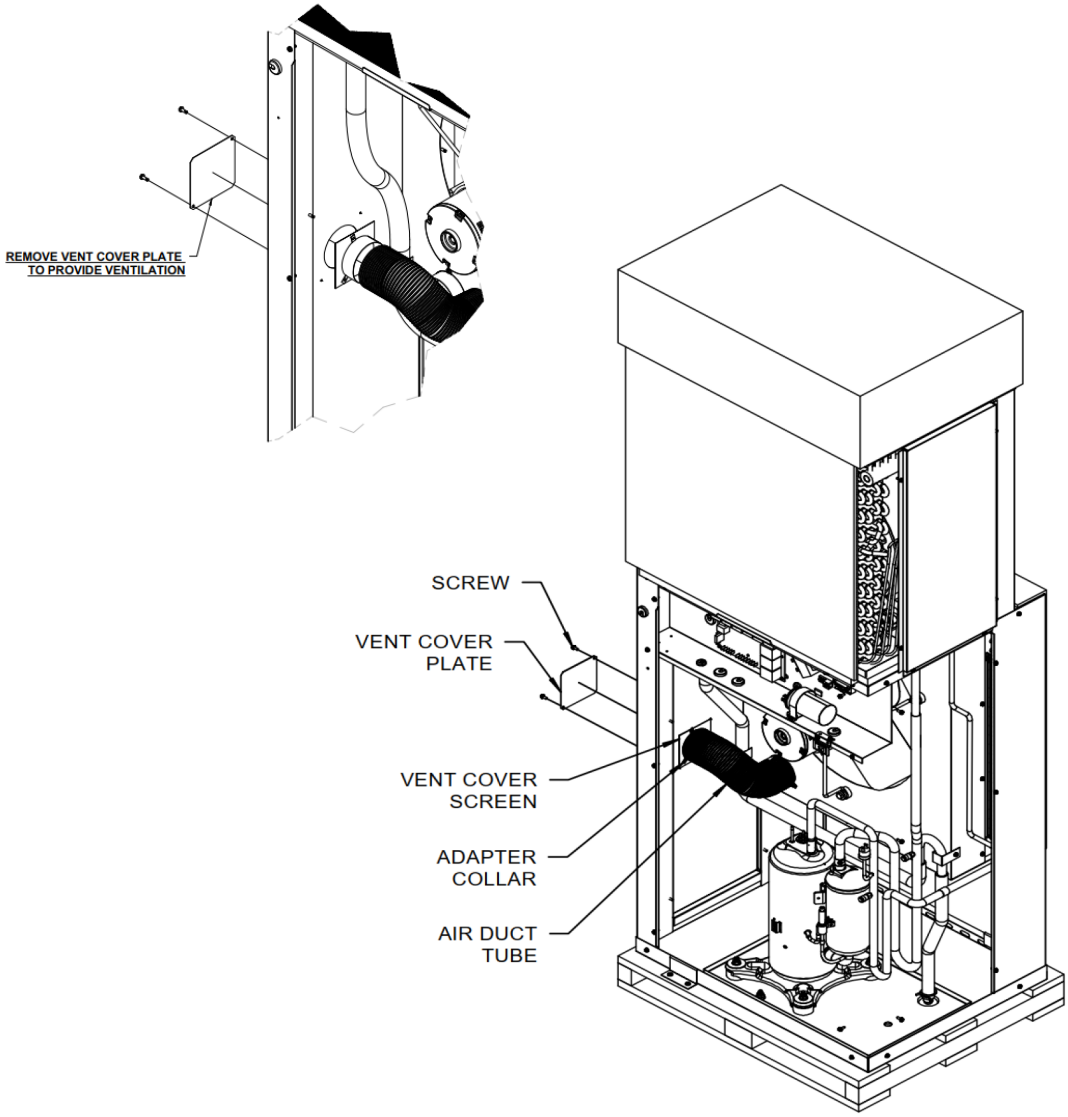
Provides a visible disconnecting means when performing maintenance; models with 10 kW electric heat also have terminal block.

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

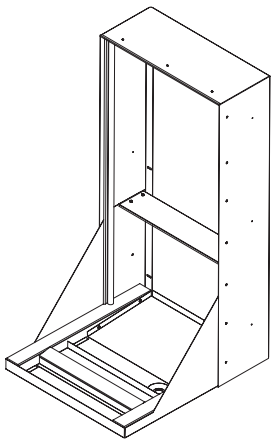
Factory installed drain line connects the evaporator drain pan to a vertical pipe connection in the unit base pan. Evaporator condensate is delivered from the unit to a catch tray in the wall sleeve and exits the sleeve through the 3/4" male NPT fitting. This design allows the plumber to completely pipe 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 feature 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

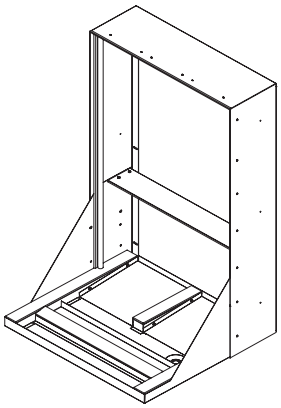
If for any reason the primary condensate riser becomes clogged, water will fill the catch tray and then be diverted through the sleeve to the exterior of the building, rather than be allowed to overflow into the closet or living area. Rain water entering the sleeve is automatically diverted to the 3/4"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

REQUIRED ACCESSORIES:
WALL SLEEVES

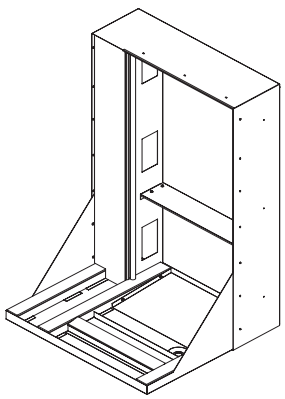
- Provided for installation during rough-in and when ready the unit is simply slid into the wall sleeve and connected to the ductwork and electrical.
- Weight bearing sleeve that supports the entire weight of the unit and provides a weather tight seal against wind and water infiltration.
- Four wall 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.
- Outdoor Louver - Standard colors, custom color, field painted, clear andonized



Standard Sleeve
for 3/4 - 2 tons



Standard Sleeve
for 2.0 - 2.5 tons



Oversized Sleeve
for 3/4 - 2 tons to provide uniform exterior appearance

ECO SERIES COOL-PAK HP

SPACE CONSTRAINED HEAT PUMP W/ELECTRIC HEATING

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.

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	

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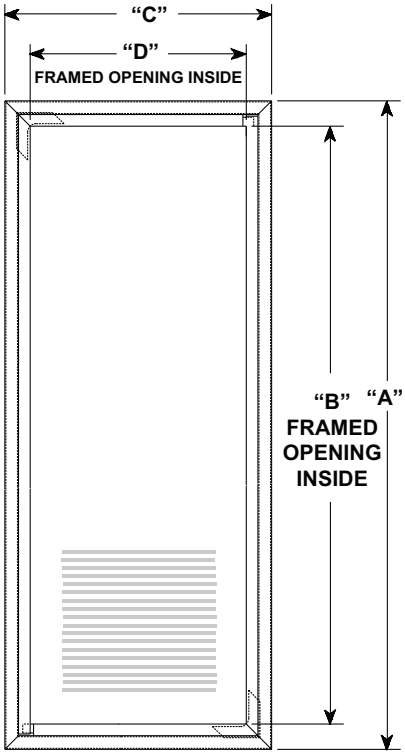
SPACE CONSTRAINED HEAT PUMP W/ELECTRIC HEATING

ACCESSORIES (CONT'D)

OPTIONAL ACCESSORIES (FIELD INSTALLED)						
COMPONENT	DESCRIPTION	DIMENSIONS (H X W)		PART NUMBER	SHIPPING WEIGHT	EQUIPPED WITH 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			
	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)	LOUVERED (1)	FRAME	OPENING	931-15		20 x 24 x 1
		87 X 37	84 X 34			
	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
9-24A INSULATION KIT	5/8" DUCTBOARD	N/A		91K01	---	---
24B-30 INSULATION KIT				91K02	---	---



*** 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.

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

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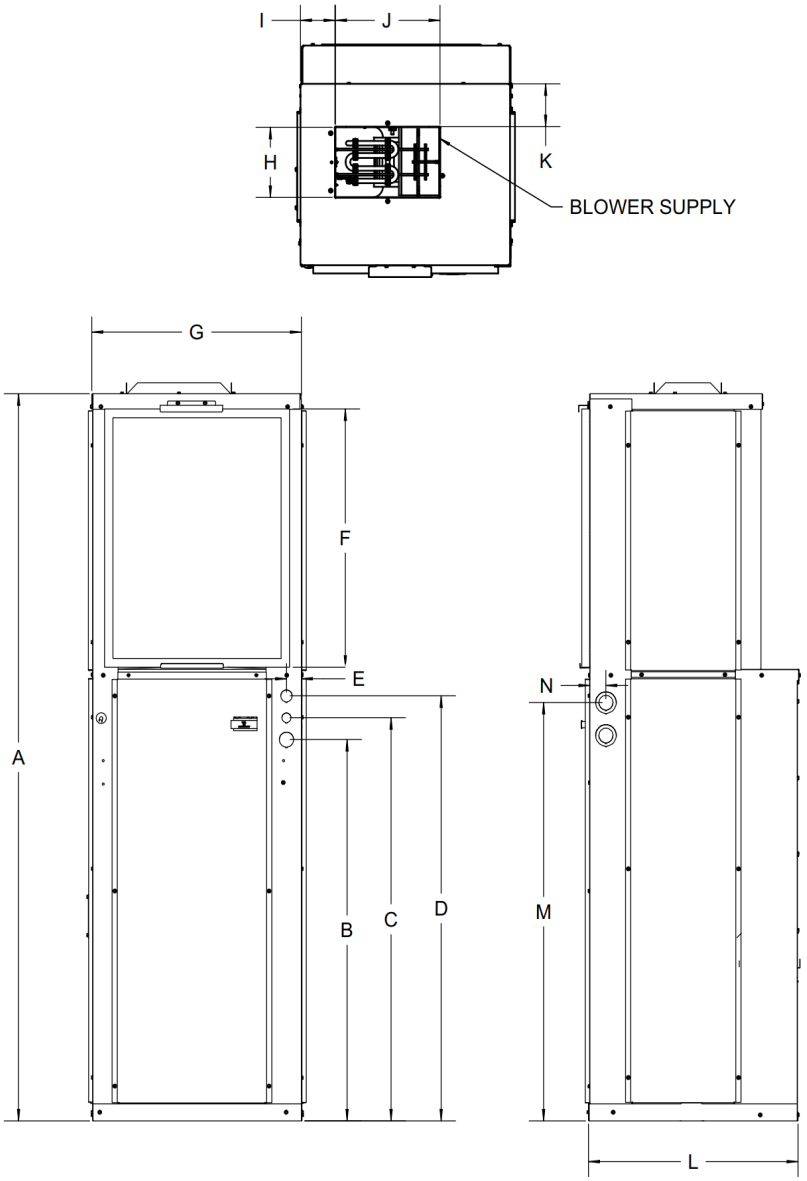
ACCESSORIES

UNIT DIMENSIONS



MODEL NUMBER	A	B	C	D	E	F	G	H	I	J	K	L	M	N
	CABINET DIMENSIONS							SUPPLY CONNECTIONS						
EHE09***A	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***A	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***A	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***A	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

NOTE:
24A is for the smaller cabinet.

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SPACE CONSTRAINED HEAT PUMP W/ELECTRIC HEATING

BLOWER PERFORMANCE

MODEL	Motor Tap	Motor Speed	IWC STATIC PRESSURE									
			0.10		0.20		0.30		0.40		0.50	
			SCFM	W	SCFM	W	SCFM	W	SCFM	W	SCFM	W
EHE09203*A	1	T1	317	51	300	49	281	49	263	49	244	48
	2	T2[C]	358	64	341	63	322	62	303	62	285	61
	3	T3	459	103	441	102	423	101	404	101	385	100
	4	T4[H]	395	77	378	76	359	75	340	75	322	74
EHE12203*A	1	T1	358	64	341	63	322	62	303	62	285	61
	2	T2[C]	459	103	441	102	423	101	404	101	385	100
	3	T3	552	152	535	151	516	151	498	150	479	149
	4	T4[H]	510	128	493	127	474	127	456	126	437	125
EHE12205*A	1	T1	358	64	341	63	322	62	303	62	285	61
	2	T2[C]	459	103	441	102	423	101	404	101	385	100
	3	T3	552	152	535	151	516	151	498	150	479	149
	4	T4[H]	510	128	493	127	474	127	456	126	437	125
EHE182203*A	1	T1	392	47	366	47	343	47	311	43	267	35
	2	T2[H]	629	111	603	111	579	111	548	107	504	99
	3	T3	820	206	793	206	770	206	738	202	695	194
	4	T4[C]	723	155	696	155	673	155	641	151	598	143
	5	T5	820	206	793	206	770	206	738	202	695	194
EHE182205*A	1	T1	392	47	366	47	343	47	311	43	267	35
	2	T2[H]	629	111	603	111	579	111	548	107	504	99
	3	T3	820	206	793	206	770	206	738	202	695	194
	4	T4[C]	723	155	696	155	673	155	641	151	598	143
	5	T5	820	206	793	206	770	206	738	202	695	194
EHE182207*A	1	T1	371	36	351	43	330	50	310	57	292	64
	2	T2H	623	101	603	107	582	114	562	122	543	129
	3	T3	802	179	782	186	762	193	742	200	723	207
	4	T4[C]	709	134	689	141	669	148	649	155	630	162
	5	T5	802	179	782	186	762	193	742	200	723	207
EHE182210*A	1	T1	371	36	351	43	330	50	310	57	292	64
	2	T2[H]	623	101	603	107	582	114	562	122	543	129
	3	T3	802	179	782	186	762	193	742	200	723	207
	4	T4[C]	709	134	689	141	669	148	649	155	630	162
	5	T5	945	269	925	276	904	283	884	290	865	297
EHE24205*A	1	T1	573	89	546	88	523	89	491	85	448	77
	2	T2[H]	820	206	793	206	770	206	738	202	695	194
	3	T3[Clow]	703	145	676	145	653	145	621	141	578	133
	4	T4[Chigh]	904	253	878	253	854	253	823	249	779	241
	5	T5	945	277	918	277	895	278	863	274	820	265

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.
24A is for the smaller cabinet.
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.

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SPACE CONSTRAINED HEAT PUMP W/ELECTRIC HEATING

BLOWER PERFORMANCE (CONT'D)

MODEL	Motor Tap	Motor Speed	IWC STATIC PRESSURE									
			0.10		0.20		0.30		0.40		0.50	
			SCFM	W	SCFM	W	SCFM	W	SCFM	W	SCFM	W
EHE24207*A	1	T1	569	84	549	90	528	97	508	105	489	111
	2	T2[H]	802	179	782	186	762	193	742	200	723	207
	3	T3[Clow]	691	126	671	133	650	140	630	147	612	154
	4	T4[Chigh]	899	237	879	244	858	251	838	258	819	265
	5	T5	963	283	943	290	922	297	902	304	883	311
EHE24210*A	1	T1	569	84	549	90	528	97	508	105	489	111
	2	T2[H]	878	224	858	230	837	237	817	245	798	251
	3	T3[Clow]	691	126	671	133	650	140	630	147	612	154
	4	T4[Chigh]	899	237	879	244	858	251	838	258	819	265
	5	T5	963	283	943	290	922	297	902	304	883	311
EHE24205*B	1	T1	523	70	493	70	462	69	429	66	391	62
	2	T2[H]	864	209	834	210	803	208	770	206	732	201
	3	T3	940	265	909	265	878	264	846	261	807	257
	4	T4[C]	864	209	834	210	803	208	770	206	732	201
	5	T5	966	291	936	291	905	289	872	287	834	282
EHE24207*B	1	T1	523	70	493	70	462	69	429	66	391	62
	2	T2[H]	864	209	834	210	803	208	770	206	732	201
	3	T3	940	265	909	265	878	264	846	261	807	257
	4	T4[C]	864	209	834	210	803	208	770	206	732	201
	5	T5	966	291	936	291	905	289	872	287	834	282
EHE24210*B	1	T1	523	70	493	70	462	69	429	66	391	62
	2	T2[H]	864	209	834	210	803	208	770	206	732	201
	3	T3	940	265	909	265	878	264	846	261	807	257
	4	T4[C]	864	209	834	210	803	208	770	206	732	201
	5	T5	966	291	936	291	905	289	872	287	834	282
EHE30205*B	1	T1	525	68	502	75	479	81	456	87	436	94
	2	T2[H]	864	205	842	211	818	217	796	224	775	231
	3	T3	943	256	921	262	897	268	875	274	854	281
	4	T4[C]	864	205	842	211	818	217	796	224	775	231
	5	T5	969	274	946	280	923	286	901	293	880	299
EHE30207*B	1	T1	637	136	614	137	586	134	557	128	527	122
	2	T2[H]	1032	338	1009	339	981	336	952	330	922	324
	3	T3	1098	395	1074	396	1047	393	1017	387	987	381
	4	T4[C]	1032	338	1009	339	981	336	952	330	922	324
	5	T5	1165	465	1142	466	1114	462	1085	457	1055	450
EHE30210*B	1	T1	637	136	614	137	586	134	557	128	527	122
	2	T2[H]	1032	338	1009	339	981	336	952	330	922	324
	3	T3	1098	395	1074	396	1047	393	1017	387	987	381
	4	T4[C]	1032	338	1009	339	981	336	952	330	922	324
	5	T5	1165	465	1142	466	1114	462	1085	457	1055	450

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Blower performance data based on a dry coil at 70°F DB EAT with a standard 1" clean air filter.
24A is for the smaller cabinet
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SPACE CONSTRAINED HEAT PUMP W/ELECTRIC HEATING

RATED COOLING & HEATING PERFORMANCE

Model	Rated Airflow SCFM	Cooling Capacity 95°F, BTUH	EER2 95°F	SEER2	Heating Capacity 47°F, BTUH	Heating Capacity 17°F, BTUH	HSPF2
EHE09*D**	300	9000	10.0	11.9	8800	5000	6.3
EHE12*D**	400	11500	10.0	11.9	11100	5300	6.3
EHE18*D**	600	17500	10.0	11.9	16500	10000	6.3
EHE24A*D**	800/600	22400	10.0	11.9	22400	14500	6.3
EHE24B*D**	800	24500	10.0	11.9	23600	14500	6.3
EHE30*D**	950	26500	10.0	11.9	25400	16000	6.3

NOTE:
24A is for the smaller cabinet.
Ratings subject to change

Electric Heat Ratings						
Model	**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.

ECO SERIES COOL-PAK HP

SPACE CONSTRAINED HEAT PUMP W/ELECTRIC HEATING

EXTENDED PERFORMANCE DATA

EXTENDED HEATING CAPACITY, COMPRESSOR ONLY													
MODEL	Air Flow SCFM	47/43			35/33			17/15			5/0		
		Net Capacity	Power Input	Outlet Dry Bulb	Net Capacity	Power Input	Outlet Dry Bulb	Net Capacity	Power Input	Outlet Dry Bulb	Net Capacity	Power Input	Outlet Dry Bulb
		BTUH	W	°F	BTUH	W	°F	BTUH	W	°F	BTUH	W	°F
EHE09*A	300	8800	800	93	7000	760	90	5000	690	84	4000	670	81
EHE12*A	400	11100	900	99	8700	870	93	6800	830	88	5300	760	83
EHE18*A	600	16500	1400	95	12800	1380	90	10000	1250	85	8000	1200	82
EHE24*A	800/600	22500	1940	95	17000	1850	91	14500	1810	86	12000	1770	83
EHE24*B	800	23600	1920	98	18400	1850	92	14500	1750	87	12200	1700	81
EHE30*B	900	25400	2190	96	21000	2150	92	16000	2070	86	13000	2030	83

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	Heater Size, 240V kW	47/43		35/33		17/15		5/0	
		Net Capacity	Power Input	Net Capacity	Power Input	Net Capacity	Power Input	Net Capacity	Power Input
		BTU/H	W	BTU/H	W	BTU/H	W	BTU/H	W
EHE09203*D	3	19030	3800	17230	3760	15230	3690	14230	3670
EHE12203*D	3	21330	3900	18930	3870	17030	3830	15530	3760
EHE12205*D	5	28160	5900	25760	5870	23860	5830	22360	5760
EHE18203*D	3	26730	4400	23030	4380	20230	4250	18230	4200
EHE18205*D	5	33560	6400	29860	6380	27060	6250	25060	6200
EHE18207*D	7	40380	8400	36680	8380	33880	8250	31880	8200
EHE18210*D	9.5	48910	10900	45210	10880	42410	10750	40410	10700
EHE24205*D	5	39560	6940	34060	6850	31560	6810	29060	6770
EHE24207*D	7	46380	8940	40880	8850	38380	8810	35880	8770
EHE24210*D	9.5	54910	11440	49410	11350	46910	11310	44410	11270
EHE24205*D	5	40660	6920	35460	6850	31560	6750	29260	6770
EHE24207*D	7	47480	8920	42280	8850	38380	8750	36080	8770
EHE24210*D	9.5	56010	11420	50810	11350	46910	11250	44610	11270
EHE30205*D	5	42460	7190	38060	7150	33060	7070	30060	7030
EHE30207*D	7	49280	9190	44880	9150	39880	9070	36880	9030
EHE30210*D	9.5	57810	11690	53410	11650	48410	11570	45410	11530

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.

ECO SERIES COOL-PAK HP

SPACE CONSTRAINED HEAT PUMP W/ELECTRIC HEATING

EXTENDED PERFORMANCE DATA (CONT'D)

EXTENDED COOLING PERFORMANCE										
Model	Indoor Temp DB/WB	Outdoor Temperature °F								
		65.0			75.0			85.0		
		BTUH	S/T	W	BTUH	S/T	W	BTUH	S/T	W
EHE09*A	75/57	8700	1.00	500	8350	1.00	600	7950	1.00	600
	75/63	9750	0.76	500	9250	0.80	600	8750	0.79	600
	80/67	10650	0.73	500	10100	0.70	600	9550	0.76	600
	85/72	11900	0.65	500	11300	0.70	600	10750	0.68	600
EHE12*A	75/57	12050	1	690	11250	1	790	10700	1	790
	75/63	12900	0.75	690	12200	0.77	790	11450	0.79	790
	80/67	13800	0.72	690	13000	0.74	790	12250	0.76	790
	85/72	15200	0.62	690	14350	0.63	790	13550	0.65	790
EHE18*A	75/57	18300	1	1100	17450	1	1300	16650	1	1400
	75/63	19450	0.79	1200	18450	0.81	1300	17400	0.84	1400
	80/67	20700	0.77	1200	19700	0.79	1300	18600	0.81	1500
	85/72	22350	0.7	1100	21250	0.72	1300	20100	0.74	1400
EHE24*A	75/57	23300	1	1700	22250	1	1900	20650	1	2300
	75/63	24800	0.75	1800	23500	0.77	1900	22200	0.79	2100
	80/67	26550	0.73	1800	25200	0.75	1900	23750	0.76	2100
	85/72	29050	0.66	1800	27550	0.68	2000	26000	0.69	2100
EHE24*B	75/57	25400	1	1600	24350	1	1900	22750	1	2100
	75/63	26900	0.72	1600	25600	0.74	1900	24300	0.76	2100
	80/67	28650	0.71	1600	27300	0.73	1900	25850	0.74	2100
	85/72	31150	0.64	1600	29650	0.66	1900	28100	0.67	2100
EHE30*B	75/57	26400	0.99	1800	25400	1	1900	24650	1	2200
	75/63	29100	0.72	1800	27700	0.74	2000	26250	0.75	2200
	80/67	31050	0.69	1900	29550	0.71	2100	28000	0.72	2300
	85/72	33750	0.63	1900	32050	0.64	2100	30500	0.65	2300

Extended cooling performance data tabulated based off test at rated Airflow at .3 in. H_2O of external static.
24A is for the smaller cabinet
Data is subject to change. Please verify most current information on www.firstco.com.

ECO SERIES COOL-PAK HP

SPACE CONSTRAINED HEAT PUMP W/ELECTRIC HEATING

EXTENDED PERFORMANCE DATA (CONT'D)

EXTENDED COOLING PERFORMANCE										
Model	Indoor Temp DB/WB	Outdoor Temperature°F								
		95.0			105.0			115.0		
		BTUH	S/T	W	BTUH	S/T	W	BTUH	S/T	W
EHE09*A	75/57	7550	1.00	740	7150	1.00	800	6750	1.00	800
	75/63	8200	0.82	740	7700	0.84	800	7150	0.87	800
	80/67	9000	0.82	740	8450	0.81	800	7900	0.83	900
	85/72	10150	0.70	740	9550	0.72	800	8950	0.74	900
EHE12*A	75/57	10100	1	990	9500	1	890	8900	1	1090
	75/63	10750	0.81	990	10000	0.84	890	9250	0.88	1090
	80/67	11500	0.76	990	10700	0.82	890	9950	0.85	1090
	85/72	12650	0.67	990	11850	0.69	890	10950	0.72	1090
EHE18*A	75/57	15750	1	1500	14900	1	1700	13950	1	1800
	75/63	16350	0.86	1500	15350	0.9	1700	14250	0.93	1800
	80/67	17500	0.76	1600	16350	0.87	1700	15300	0.91	1900
	85/72	18950	0.76	1600	17750	0.79	1700	16600	0.83	1900
EHE24*A	75/57	19600	1	2400	18450	1	2600	17250	1	3000
	75/63	20800	0.81	2400	19450	0.84	2600	18000	0.87	3000
	80/67	22400	0.79	2400	20850	0.81	2600	19400	0.84	3000
	85/72	24500	0.71	2400	22850	0.73	2700	21000	0.75	3000
EHE24*B	75/57	21700	1	2400	20550	1	2500	19100	1	2800
	75/63	22900	0.78	2400	21550	0.81	2500	20000	0.84	2800
	80/67	24500	0.77	2400	22950	0.79	2500	21300	0.82	2800
	85/72	26600	0.69	2400	24950	0.71	2500	23200	0.73	2800
EHE30*B	75/57	22900	1	2400	21800	1	2600	20600	1	2900
	75/63	24750	0.76	2400	23300	0.79	2700	21900	0.81	2900
	80/67	26500	0.79	2500	24950	0.76	2800	23400	0.79	3100
	85/72	28750	0.67	2500	27100	0.69	2800	25400	0.71	3100

Extended cooling performance data tabulated based off test at rated Airflow at .3 in. H_2O of external static.
24A is for the smaller cabinet
Data is subject to change. Please verify most current information on www.firstco.com.

ECO SERIES COOL-PAK HP

SPACE CONSTRAINED HEAT PUMP W/ELECTRIC HEATING

ELECTRICAL DATA

MODEL	Voltage	Compressor		OUTDOOR MOTOR		INDOOR MOTOR		MIN. CIRCUIT AMPACITY (MCA)				MAX. OVERCURRENT PROTECTION			
								CIRCUIT 1* (L1-L2)		CIRCUIT 2* (L3-L4)		CIRCUIT 1* (L1-L2)		CIRCUIT 2* (L3-L4)	
		RLA	LRA	FLA	HP	FLA	HP	240V	208V	240V	208V	240V	208V	240V	208V
EHE09203*A	208/230-1-60	4	22	2.3	1/4	2.3	1/4	25	23	0	0	30	25	0	0
EHE12203*A	208/230-1-60	4.6	25	2.3	1/4	2.3	1/4	26	24	0	0	30	25	0	0
EHE12205*A	208/230-1-60	4.6	25	2.3	1/4	2.3	1/4	34	31	0	0	35	35	0	0
EHE18203*A	208/230-1-60	7.6	36	2.3	1/4	2.8	1/3	30	28	0	0	35	30	0	0
EHE18205*A	208/230-1-60	7.6	36	2.3	1/4	2.8	1/3	41	37	0	0	45	40	0	0
EHE18207*A	208/230-1-60	7.6	36	2.3	1/4	2.8	1/3	51	46	0	0	55	50	0	0
EHE18210*A	208/230-1-60	7.6	36	2.3	1/4	2.8	1/3	15	15	49	43	15	15	50	45
EHE24205*A	208/230-1-60	10.2	58	2.3	1/4	2.8	1/3	44	40	0	0	45	45	0	0
EHE24207*A	208/230-1-60	10.2	58	2.3	1/4	2.8	1/3	54	49	0	0	55	50	0	0
EHE24210*A	208/230-1-60	10.2	58	2.3	1/4	2.8	1/3	18	18	49	43	25	25	50	45
EHE24205*B	208/230-1-60	9.6	52	2.3	1/4	2.8	1/3	43	40	0	0	45	40	0	0
EHE24207*B	208/230-1-60	9.6	52	2.3	1/4	2.8	1/3	54	49	0	0	55	50	0	0
EHE24210*B	208/230-1-60	9.6	52	2.3	1/4	2.8	1/3	17	17	49	43	20	20	50	45
EHE30205*B	208/230-1-60	10.5	71	2.8	1/3	4.1	1/2	46	43	0	0	50	45	0	0
EHE30207*B	208/230-1-60	10.5	71	2.8	1/3	4.1	1/2	56	52	0	0	60	55	0	0
EHE30210*B	208/230-1-60	10.5	71	2.8	1/3	4.1	1/2	20	20	49	43	25	25	50	45

*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.

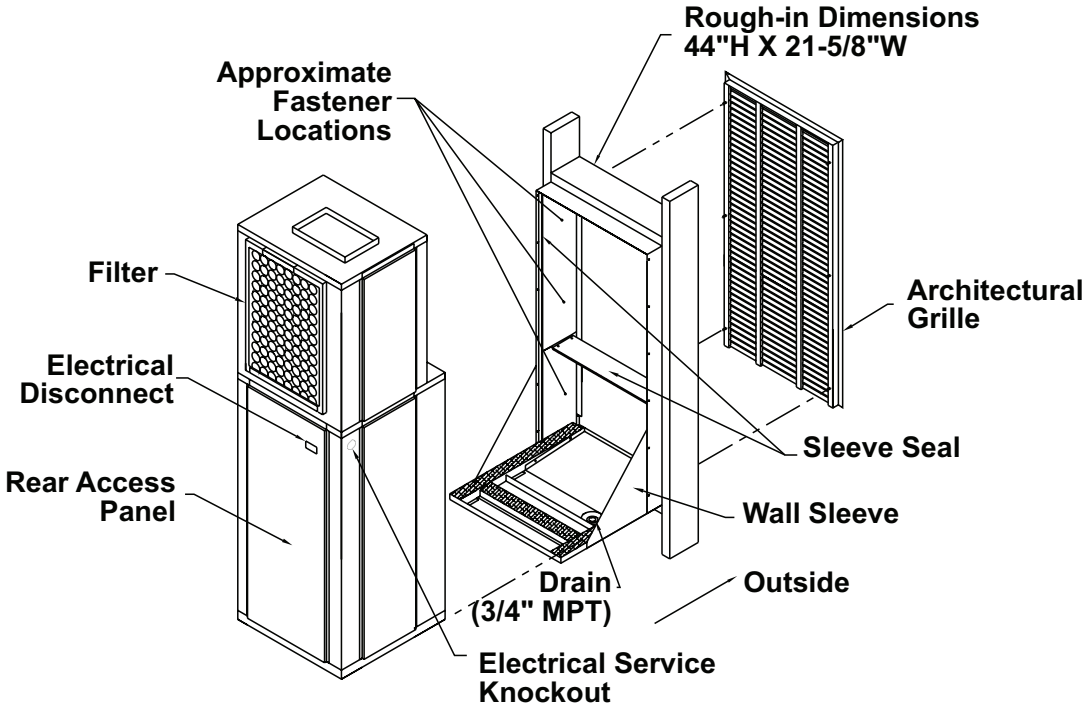
Units are rated for 208/230V, but MOP, MCA values are calculated at 208/240V.

Data is subject to change. Please verify most current information on www.firstco.com.

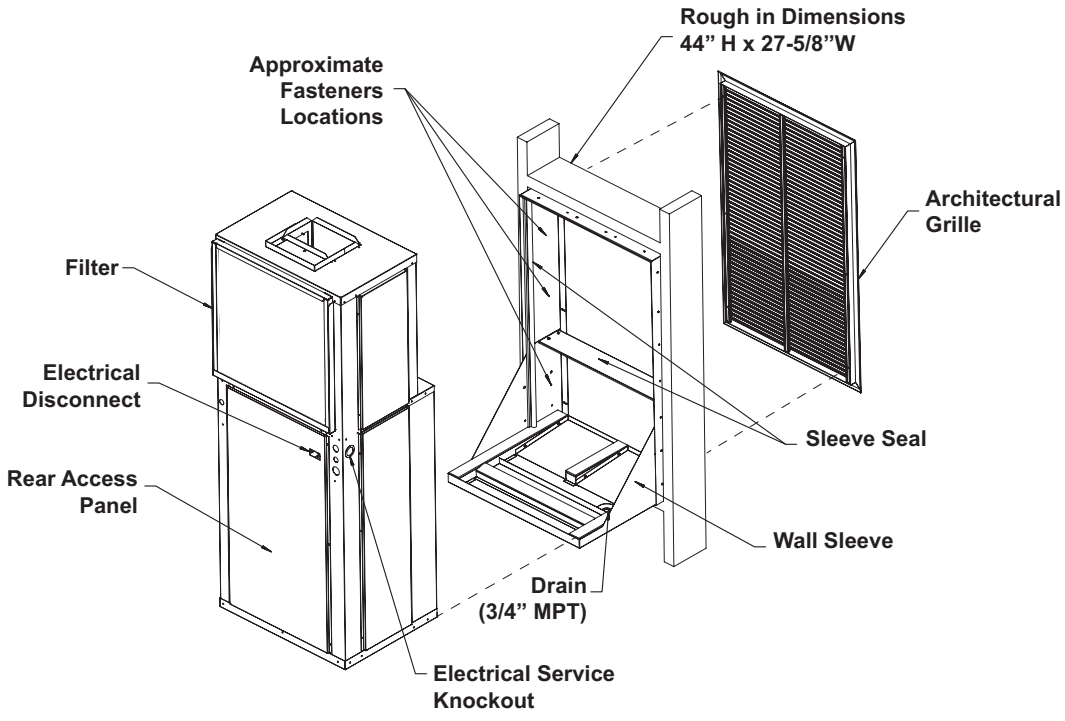
ECO SERIES COOL-PAK HP

SPACE CONSTRAINED HEAT PUMP W/ELECTRIC HEATING

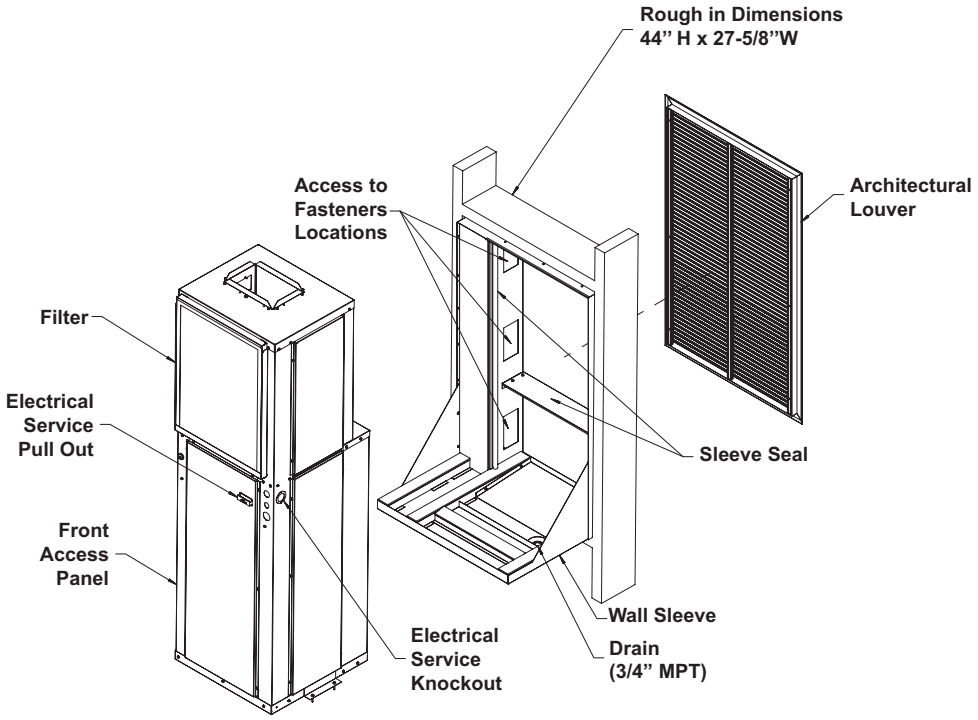
GENERAL ASSEMBLY FOR STANDARD SLEEVE AND LOUVER

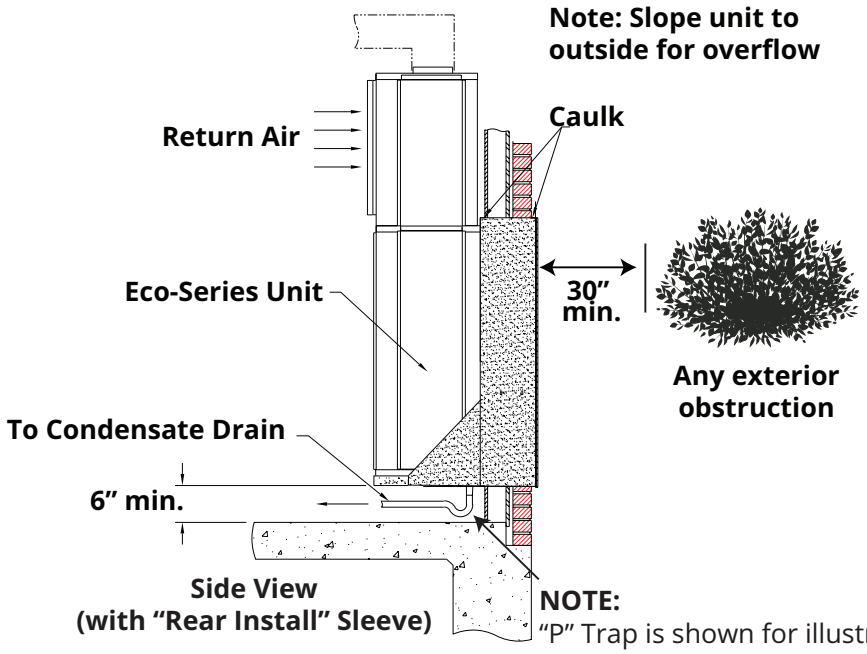


GENERAL ASSEMBLY FOR LARGE SLEEVE AND LOUVER SIZE 24B - 30



GENERAL ASSEMBLY FOR LARGE SLEEVE AND LOUVER FOR 09 - 24A SIZES WITH BLOCK OFF





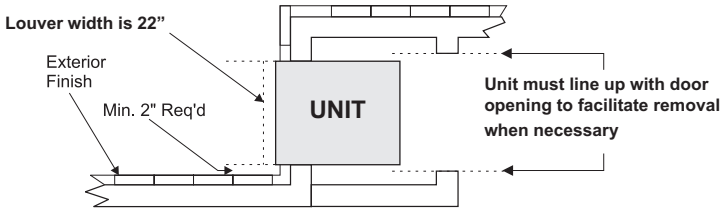
NOTE:
"P" Trap is shown for illustration purposes only.
It may not be required by local codes.

ECO SERIES COOL-PAK HP

SPACE CONSTRAINED HEAT PUMP W/ELECTRIC HEATING

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 (9-24A ONLY)

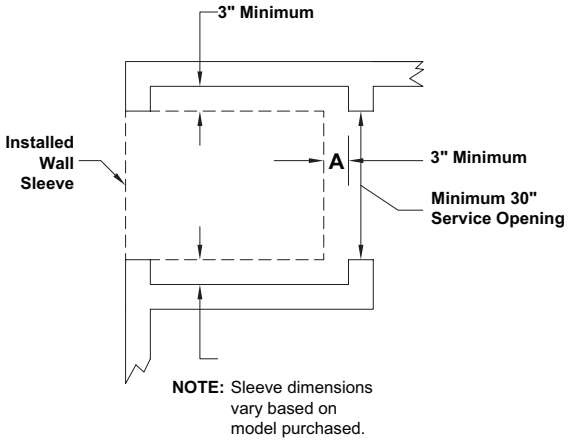
INSTRUCTIONS:

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")**

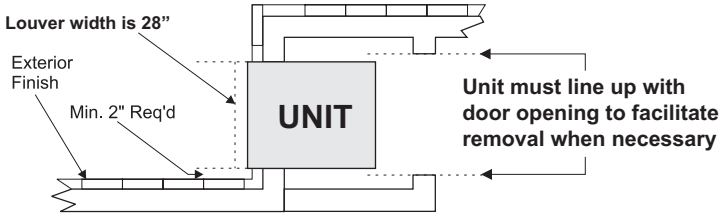
NOTE: Provide minimum clearances as shown for interior closet dimensions.



REAR INSTALLATION

DETAIL FOR LARGE SLEEVE 27" WIDE (24B, 30 SIZE OR 9-24A 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



ECO SERIES COOL-PAK HP

SPACE CONSTRAINED HEAT PUMP W/ELECTRIC HEATING

CLOSET DIMENSIONS (CONT'D)
REAR INSTALLATION
DETAIL FOR LARGE SLEEVE 27" WIDE (24B, 30 SIZE OR 9-24A WITH BLOCKOFF)

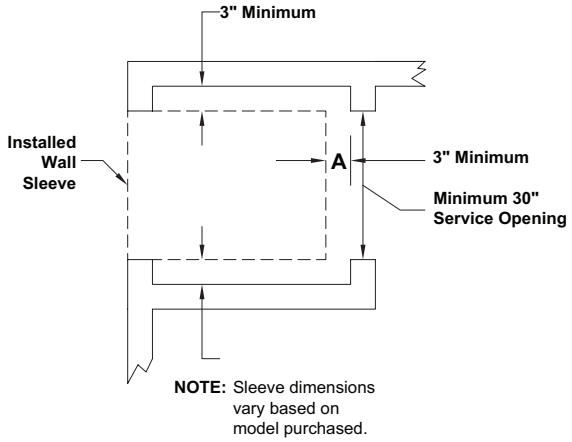
INSTRUCTIONS:

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

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

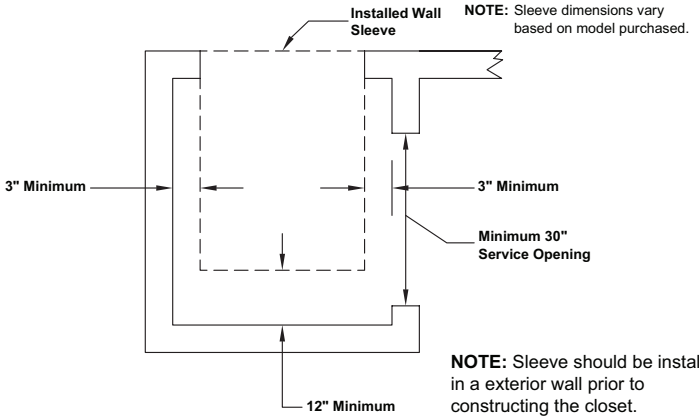
- For 5"-8" outside wall thickness, subtract "A" from 39". **("C" = 39 - "A")**
- For 8"-12" outside wall thickness, subtract "A" from 43". **("C" = 43 - "A")**
- For 12"-15" outside wall thickness, subtract "A" from 46". **("C" = 46 - "A")**

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



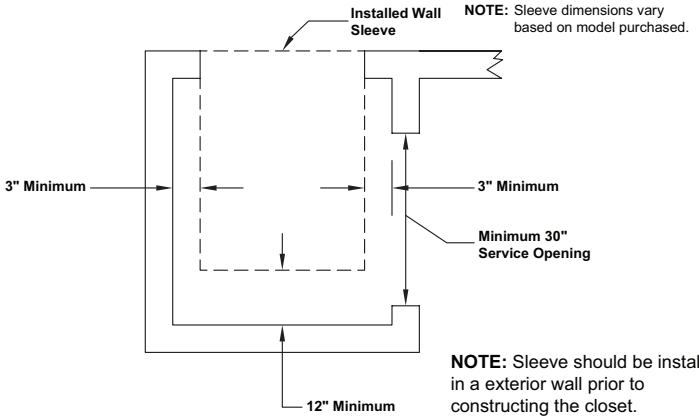
SIDE INSTALLATION
DETAIL FOR SMALL SLEEVE 21" WIDE (9-24A SIZE ONLY)

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 and 12" clearance on the rear.



SIDE INSTALLATION
DETAIL FOR SMALL SLEEVE 27" WIDE (24B, 30 SIZE OR 9-24A WITH BLOCK OFF)

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 and 12" clearance on the rear.



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