



HBX-120 PSC Series HBXX-120 ECM Series

Vertical / Horizontal
Cooling or Heat pump
1-1/2 - 5 tons

Description :

The HBX(X) series air handler is designed to offer the industry an air handler that includes every available feature as well as up to 15 SEER when matched with today's higher efficiency condensing units and heat pumps. The HBX(X) is completely factory assembled with a cooling coil, 120V motor, 24V transformer, horizontal drain pan, and throw away filter. All components are installed within a fully insulated, galvanized steel cabinet with an attractive epoxy finish with 2% or less leak loss.

(1) First Co's customer is ultimately responsible for confirming which fan coil models are compatible with selected outdoor unit(s) and which expansion valves (if any) are required. To determine certified indoor/outdoor matches, go to: www.firstco.com or contact the factory.

New Feature: Factory installed TXV kits (non-bleed type) for optimum cooling performance.

FEATURES:

1. 3-way airflow
2. Factory installed horizontal drain pan
3. Completely prewired with 0 electric heat
4. Compatible with major brands of split condensing units and heat pumps (Contact factory for correct match with outdoor unit)
5. Cabinet air leakage is no more than 2% when tested in accordance with ASHRAE 193.16
6. Factory installed filter
7. Attractive baked on finish
8. Copper tube cooling coils
9. Primary and secondary drain connections on cooling coil
10. Fully insulated and painted galvanized steel cabinet



HBX-120 PSC Series

HBXX-120 ECM Series

Cooling / Heat Pump

Efficiency:

The HBX(X) series air handler is the latest state-of-the-art air handler for heat pump or straight cool (DX) operation. Depending on the condensing unit or heat pump used, cooling efficiency is up to 15 SEER depending on the outdoor unit. Cooling coils have factory installed R410A TXV's and are circuited for cooling or heat pump operation.

First Co's customer is ultimately responsible for confirming which fan coil models are compatible with selected outdoor unit(s) and which expansion valves (if any) are required. To determine certified indoor/outdoor matches, go to:

<https://ratings.firstco.com/default.aspx> or contact the factory.

Components:

Each air handler includes a high efficiency cooling coil, pre-wired, 120V fan motor, 24V transformer, horizontal drain pan, and throw away filter.

Cabinets:

Cabinets are fully insulated and painted with an attractive, baked-on powder coating (light gray). Cabinet air leakage is no more than 2% when tested in accordance with ASHRAE 193.16

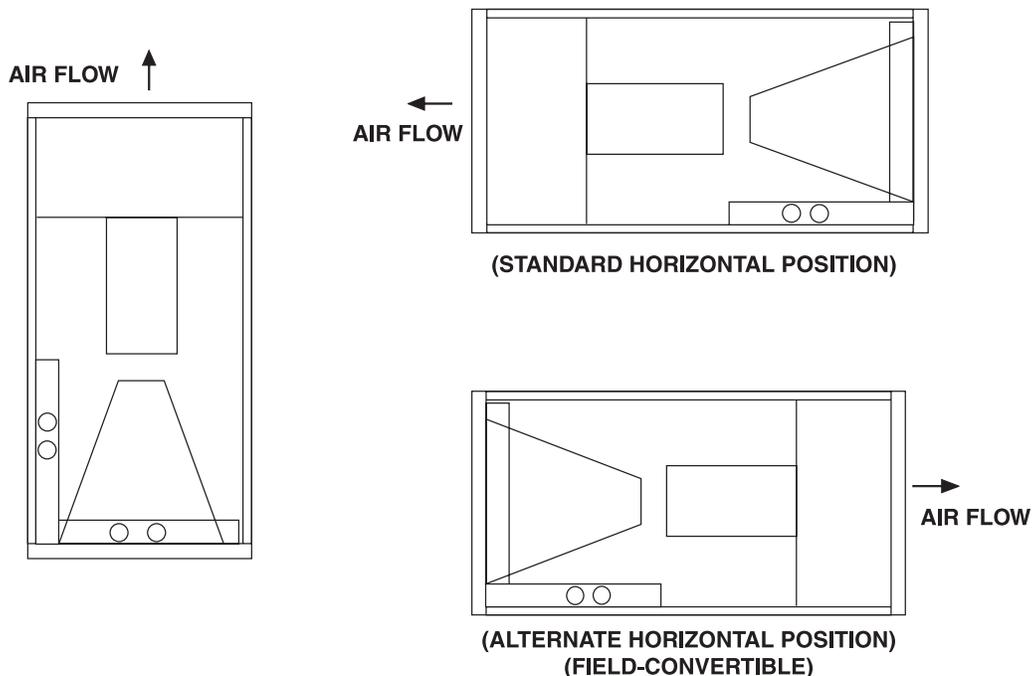
Installation:

No modification is required for vertical or horizontal (right-to-left) airflow. A horizontal drain pan is factory installed for right-to-left airflow and can be re-positioned within the cabinet to offer left-to-right airflow.

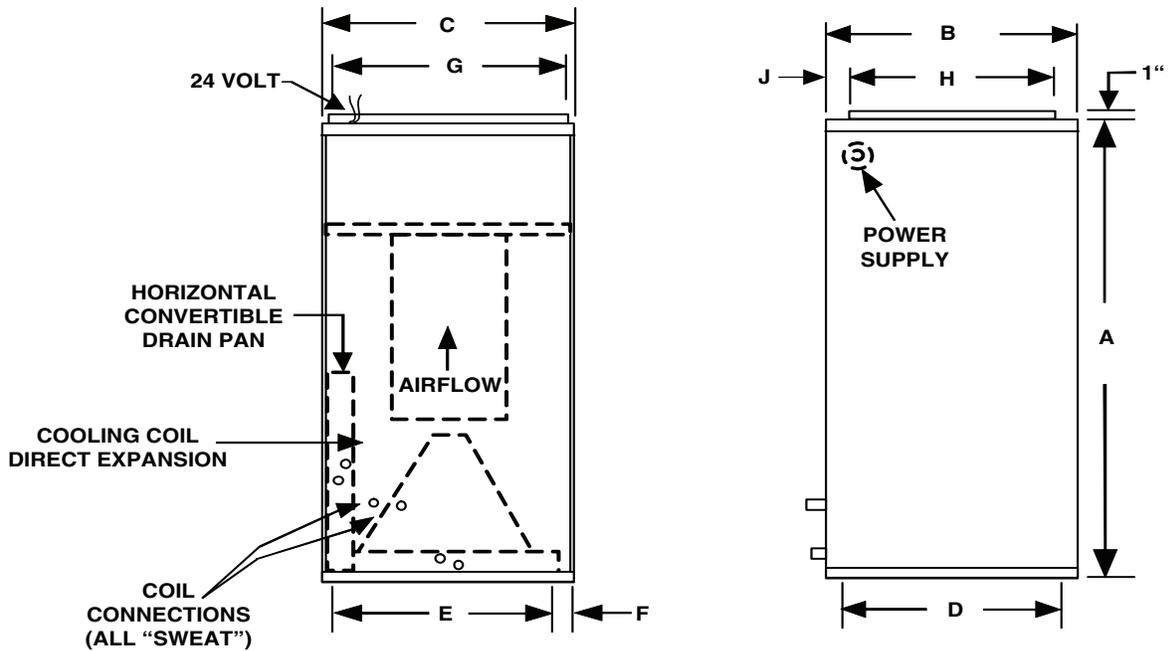
Accessories:

Accessories include cooling / heat pump R22 field mounted TXV kits. (P. 4)

3-WAY AIRFLOW



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PHYSICAL DIMENSIONS												
UNIT MODEL	A	B	C	D	E	F	G	H	J	LIQ. (SWEAT)	SUCT. (SWEAT)	FILTER
18HBX(X) 24HBX(X)	40	20	20	18-1/2	16	2	18	16	3	3/8	5/8	18 X 20 X 1
30HBX(X) 36HBX(X)	42	23	20	21-1/2	16	2	18	17	5	3/8	3/4	20 X 22 X 1
48HBX(X) 60HBX(X)	48	28	21-1/4	26-1/4	17	2	19-1/4	18-1/4	8-7/8	1/2	7/8	20 X 25 X 1

All TXV's are approved for cooling only or heat pump operation (non-bleed type).

(X) = ECM motor

NOTE:

Expansion valve requirement depends on the selected outdoor unit. Go to www.firstco.com under ratings or contact the factory for assistance.



ELECTRICAL AND CFM DATA

BLOWER DATA PSC Motor											
UNIT MODEL	Nom. Cooling tonnage	MOTOR HP (120V)	FLA	MCA	Max. Overload Protection	Motor Speed	CFM vs. EXTERNAL STATIC PRESSURE				
							0.1	0.2	0.3	0.4	0.5
18HBX	1.5	1/3	4.1	6.0	15	High	900	840	785	735	655
						M. High	855	805	755	695	605
						M. low	800	755	710	650	560
						Low	690	655	610	545	485
24HBX	1.5-2.0	1/3	4.1	6.0	15	High	920	855	785	715	635
						Med-HI	870	805	740	665	585
						Med-Low	795	725	665	605	530
						Low	670	620	570	510	430
30HBX	2.0-2.5	1/2	7.5	10	20	High	1485	1425	1360	1300	1225
						Medium	1405	1345	1285	1220	1160
						Low	1270	1230	1180	1120	1040
36HBX	2.5-3.0	1/2	7.5	10	20	High	1420	1360	1300	1240	1180
						Med-HI	1340	1280	1230	1175	1110
						Low	1225	1180	1140	1080	1025
48HBX	4-3.5	1	10.4	13	20	High	1820	1790	1750	1685	1620
						Medium	1460	1440	1405	1375	1330
						Low	1180	1170	1155	1125	1095
60HBX	4-5	1	10.4	13	20	High	1805	1760	1715	1650	1590
						Medium	1460	1440	1395	1355	1330
						Low	1165	1140	1125	1105	1065

BLOWER DATA ECM motor											
UNIT MODEL	MOTOR HP	SPEED TAP	MOTOR BHP	FLA	MCA	Max. Overload Protection	CFM vs. EXTERNAL STATIC PRESSURE				
							0.10	0.20	0.30	0.40	0.50
18HBXX	1/3	3	0.16	4.8	6.0	15	835	805	775	735	685
		1 & 2	0.10				655	630	590	545	505
24HBXX	1/3	4	0.19	4.8	6.0	15	945	875	800	730	640
		3	0.16				790	755	715	680	620
		1 & 2	0.11				625	575	540	485	450
30HBXX	1/2	3	0.22	6.8	9.0	15	1320	1285	1250	1220	1180
		1 & 2	0.17				1135	1100	1055	1030	995
36HBXX	1/2	4	0.30	6.8	9.0	15	1375	1350	1330	1300	1275
		3	0.23				1230	1205	1175	1145	1120
		1 & 2	0.17				1075	1040	1010	975	945
48HBXX	1	4	0.52	10.9	14.0	20	1730	1700	1665	1630	1585
		3	0.49				1685	1645	1600	1570	1525
		2	0.35				1440	1385	1345	1305	1255
		1	0.23				1170	1115	1060	1025	965
60HBXX	1	3	0.77	10.9	14.0	20	2015	1970	1935	1900	1865
		2	0.63				1870	1835	1790	1760	1715
		1	0.48				1655	1615	1575	1540	1495

NOTE: Use 48HBX for 3.5 ton applications and field convert to medium speed for cooling.

ACCESSORIES - (all field installed)

EXPANSION VALVE KITS for R22 (Field installed) (cooling only or heat pump)	
R22	
9EVR22-4	18/24HBX
9EVR22-5	30/36HBX
9EVR22-6	48/60HBX



NOTES:

- Above expansion valve kits are approved for both cooling only (non heat pump) and heat pump applications.
- Valves are non-bleed type. Field added. Hard start kit may be required.
- Valves have screw-on connections.

In keeping with its policy of continuous progress and product improvement, First Co. reserves the right to make changes without notice. Maintenance for all First Co. products is available under "Product Maintenance" at www.firstco.com.