

# HCX

#### Air Handler

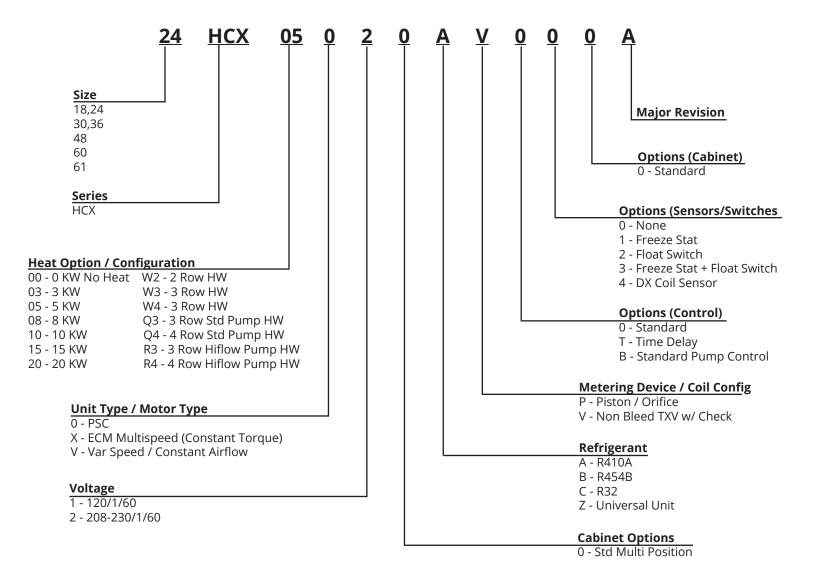
Upflow / Horizontal Heat Pump or DX - With Electric Heat 1-1/2 - 5 Tons Cooling 0 - 25 kW Electric Heat







# Nomenclature



# **HCX Series**

The **HCX** series air handler is designed to offer the industry an air handler that includes every available feature as well as up to **15 SEER2** when matched with today's higher efficiency condensing units and heat pumps. The **HCX** is completely factory assembled with a cooling coil, electric heat (except 0kW models), 240V motor, 24V transformer, horizontal drain pan, and throw away filter.

All components are installed within a fully insulated, galvanized steel cabinet with an attractive powder coated finish with **2% or less leak loss.** 

### **STANDARD FEATURES**

- 3-way airflow (except 60/61HCX)
- Factory installed horizontal drain pan
- Completely prewired with 0-25kW electric heat (except 0kW models)
- Compatible with major brands of **split condensing units** and **heat pumps** (Contact factory for correct match with outdoor unit)
- Piston-type metering device or factory or field installed R410A TXV (non-bleed type) on cooling coil
- Factory installed filter
- Attractive baked on finish
- Copper tube cooling coils
- Primary and secondary drain connections on cooling coil
- Fully insulated and painted galvanized steel cabinet
- Factory installed disconnect switch (over 10kW models)

### **Efficiency**

The HCX 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 SEER2 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 units(s) and which expansion valves (if any) are required. To determine certified indoor/outdoor matches, go to: <a href="https://www.ahridirectory.org">www.ahridirectory.org</a>

### Components

Each air handler includes a high efficiency cooling coil, pre-wired electric heat (except 0kW), service switch (over 10kW), 240V 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** 

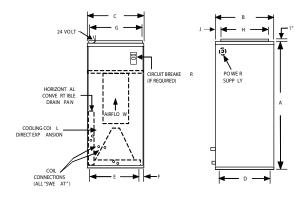
#### Installation

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.

### HCX



(See P. 5 for Model Numbers)

PHYSICAL DIMENSIONS												
UNIT MODEL	A	в	с	D	E	F	G	н	J	LIQ.	SUCT.	FILTER
18/24HCX**0	40	20	20	18-1/2	16	2	18	16	3	3/8	5/8	18 X 20 X 1
30/36HCX**0	42	23	20	21-1/2	16	2	18	17	5	3/8	3/4	20 X 22 X 1
48/60HCX**0	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
61HCX**0	54	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

ELECTRICAL DATA													
			(1)	ELECTRIC HEAT CAPACITY				TOTAL		MIN. CIR.		MAX. FUSE	
UNI MOD		NOM.	NOM. COOL	kW		втин		AMPS		AMPACITY		OR HACR BREAKER	
			BTUH	240V	208V	240V	208V	240V	208V	240V	208V	240V	208V
	-0			0	0	0	0	1.6	1.6	2	2	15	15
	-3			3	2.3	10,200	7,700	14	13	18	16	20	20
18HCX**0	-4	600	18,000	4	3	13,600	10,200	19	16	23	20	25	20
&	-5			5	3.8	17,000	13,000	23	20	28	25	30	25
24HCX**0	-6	800	24,000	6	4.5	20,500	15,400	27	24	36	29	40	30
	-8			8	6	27,300	20,500	35	31	46	38	50	40
	-10			10	7.5	34,100	25,600	44	38	54	47	60	50
	-0			0	0	0	0	2.5	2.5	3	3	15	15
30HCX**0	-5	1,000	30,000	5	3.8	17,000	13,000	24	21	30	26	30	30
8 8	-8			8	6	27,300	20,500	36	32	46	40	50	40
36HCX**0	-10	1,200	36,000	10	7.5	34,100	25,600	45	39	56	49	60	50
	(2) -15	1,200	50,000	15	11.3	51,100	38,500	45 21	39 18	56 26	49 23	60 30	50 25
	-0			0	0	0	0	3.5	3.5	5	5	15	15
	-5			5	3.8	17,000	13,000	25	22	30	27	30	30
	-8			8	6	27,300	20,500	37	33	47	40	50	40
	-10			10	7.5	34,100	25,600	46	40	57	50	60	50
48HCX**0	(2) <b>-15</b>	1,600	48,000	15	11.3	51,100	38,500	46 21	40 18	57 27	50 23	60 30	50 25
	(2) <b>-20</b>			20	15	68,200	51,100	46 42	40 36	57 53	50 46	60 60	50 50
	(2) <b>-25</b>			25	18.75	85,250	63,900	46 42 21	40 36 18	57 53 27	50 46 23	60 60 30	50 50 25
	-0			0	0	0	0	6.0	6.0	8	8	15	15
	-5			5	3.8	17,000	13,000	27	24	34	30	35	30
	-8			8	6	27,300	20,500	40	353	49	44	50	45
	-10			10	7.5	34,100	25,600	48	42	60	53	60	60
60HCX**0 & 61HCX**0	(2) <b>-15</b>	2,000	60,000	15	11.3	51,100	38,500	48 21	42 18	60 27	53 23	60 30	60 25
	(2) <b>-20</b>			20	15	68,200	51,100	48 42	42 36	60 53	53 46	60 60	60 50
	(2) <b>-25</b>			25	18.75	85,200	63,900	48 42 21	42 36 18	60 53 27	53 46 23	60 60 30	60 50 25



WARNING AVERTISSEMENT ADVERTENCIA Cancer and Reproductive Harm Cancer et Troubles de l'appareil reproducteur Cáncer y Daño Reproductivo www.P65Warnings.ca.gov

NOTES:

- 1. Nom. cooling at 45°F suction temp. 80°F DB / 67°F WB air on.
- 2. 15kW and 20kW models require 2 supply circuits. 25k models require 3 supply circuits.

supply circuits. 23k models require 5 supply circuits. 3. Units suitable for installation with 0" clearance to combustible material.

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

# HCX

	BLOWER DATA												
UNIT	FAN		MOTOR	CFM vs. EXTERNAL STATIC PRESSURE									
MODEL	SPEED	DUTY	DUTY	HP (240V)	0.10	0.15	0.20	0.25	0.30	0.40	0.50		
18HCX**0	LOW LOW	COOL HEAT	1/6	780 780	750 750	720 720	700 700	660 660	600 600	510 510			
24HCX**0	HIGH LOW	COOL HEAT	1/6	900 740	880 710	860 690	830 660	790 630	700 570	600 490			
30HCX**0	LOW LOW	COOL HEAT	1/3	1210 1210	1190 1190	1160 1160	1140 1140	1110 1110	1050 1050	990 990			
36HCX**0	HIGH LOW	COOL HEAT	1/3	1410 1170	1380 1150	1340 1130	1310 1100	1270 1080	1190 1030	1060 970			
48HCX**0	HIGH MWD. LOW	COOL COOL HEAT	1/2	1760 1490 1280	1730 1460 1260	1680 1430 1230	1640 1400 1210	1580 1370 1190	1480 1300 1130	1360 1210 1080			
60HCX**0	HIGH LOW	COOL HEAT	3/4	2130 1690	2110 1680	2090 1660	2060 1640	2025 1620	1930 1580	1820 1540			
61HCX**0	HIGH LOW	COOL HEAT	3/4	2175 1725	2150 1715	2130 1695	2100 1675	2065 1650	1970 1610	1855 1570			

**NOTE:** Use 48HCX\*\*0 for 3.5 ton applications and field convert to medium speed for cooling.

MODEL NU	MBERS	FACTORY INSTALLED TXV'S
MODEL SIZE (BTU)	MODEL (PISTON)	MODEL (R410A TXV)
18,000	18HCX**0	18HCX**0 R410A TXV
24,000	24HCX**0	24HCX**0 R410A TXV
30,000	30HCX**0	30HCX*00 R410A TXV
36,000	36HCX**0	36HCX**0 R410A TXV
42,000/48,000	48HCX**0	48HCX**0 R410A TXV
60,000	60/61HCX**0	60/61HCX**0 R410A TXV

All TXV's are approved for cooling only or

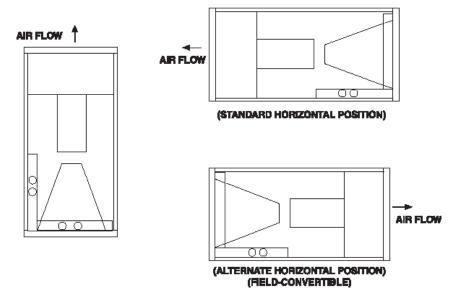
heat pump operation (non-bleed type).

#### (\*) = kW HEAT

#### NOTE:

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

### **3-WAY AIRFLOW**



### **ACCESSORIES** All Field Installed

EXPANSION VALVE KITS (Field installed) (cooling only or heat pump)						
R410A						
9EVR410-3	18/24HCX**0					
9EVR410-4	30/36HCX**0					
9EVR410-5	48/60/61HCX**0					

- 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.
- 3. Valves have screw-on connections.

In keeping with its policy of continuous progress and product improvemnt, First Co. reserves the right to make changes without notice.

Catalog HBX718 (Replaces HBX217)



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