

# UCX-HW Series Wall / Closet Air Handlers 1 - 3.0 Tons Cooling or Heat Pump Up to 71,100 BTUH Hydronic Heat

These upflow air handlers are designed for use with today's higher efficiency split-system condensing units and heat pumps. All **UCX-HW** fan coils include a standard ECM motor. These motors offer the efficiency of a variable speed type ECM motor, but at a considerably lower cost.

The **UCX-HW** can be installed on a closet platform, hung on a closet wall, or recessed in a wall between the studs..

<sup>(1)</sup> 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: <u>www.firstco.com</u> or contact the factory.

### **Standard Features:**

- High efficiency standard ECM motor
- 120V motor, 24V controls
- Factory or field installed R-410A TXV (cooling or heat pump operation) (non-bleed type)
- Blower door shut-off switch
- Separate compartment for drain connections
- Hot water coil
- Easily accessible 1" throwaway filter

### Optional Features: (see Page 4)

- Optional features include wall panels with captive screws, condensate overflow switch, closet hanger bracket kit, and bottom return air kit.
  - Unique Feature In recessed wall applications utilizing the optional wall panel, the hot water coil can be removed without modifications to the drywall. To allow this feature, the top of the UCX-HW cabinet is notched for coil removal and the wall panel is 3" taller than the cabinet.

### UCX-HW Series Compatible with gas fired water heaters Up to 71,100 BTUH Hydronic Heat

(See P. 3 for Model Numbers)

PERFORMANC	PERFORMANCE DATA							
UNIT MODEL	NOMINAL COOLING BTUH	GPM (HEATING)	P.D. FT. WTR. COIL ONLY	HEATING BTUH (1000) AT ENTERING WATER TEMPERATURE				
				120°F	140°F	180°F		
		4.5	3.3	11.4	16.0	25.1		
12UCX-HW	12,000	3.5	2.1	11.1	15.6	24.5		
		2.5	1.2	10.8	15.1	23.7		
		4.5	3.3	19.1	26.8	42.1		
19/20UCX-HW	18,000	3.5	2.1	18.5	25.9	40.7		
		2.5	1.2	17.6	24.9	38.7		
25/26UCX-HW	24,000 / 18,000	4.5	3.3	22.9	32.1	50.4		
		3.5	2.1	22.1	31.0	48.7		
		2.5	1.2	20.8	29.2	45.9		
		4.5	3.3	26.1	36.5	57.3		
31UCX-HW	30,000 / 24,000	3.5	2.1	25.0	35.1	55.1		
		2.5	1.2	23.5	32.9	51.7		
		4.5	3.6	28.1	39.3	61.7		
32UCX-HW	30,000 / 24,000	3.5	2.4	26.9	37.7	59.2		
		2.5	1.3	25.2	35.3	55.4		
	36,000 / 30,000	4.5	3.6	30.9	43.2	67.9		
37UCX-HW		3.5	2.4	29.6	41.3	64.9		
		2.5	1.3	27.5	38.5	60.5		
		4.5	3.1	33.8	47.4	74.4		
38UCX-HW	36,000 / 30,000	3.5	1.7	32.3	45.3	71.1		
		2.5	0.8	30.0	42.1	66.1		

### NOTES:

1. Heating output will not exceed output of hot water source.

2. Approved for installation with 0" clearance to combustible materials.

3. Contact factory for correct matches with outdoor unit.

(1) Heat BTUH is at 70°F entering air temperature.

BLOWER DATA	BLOWER DATA											
UNIT			IOTOR	BUNNING	SPEED	CFM vs. EXTERNAL STATIC PRESSURE						
MODEL	H.P. (120V)	AMPS (120V)	BHP	AMPS	TAP	0.10	0.15	0.20	0.25	0.30	0.40	0.50
			.11	1.6	WHT	575	555	540	525	505	465	425
12UCX-HW	1/4	3.5	.09	1.3	GRY	525	505	490	470	450	405	360
			.04	0.5	VIO	300	275	250	225	200	155	
			.24	3.0	3	690	675	660	645	630	600	570
19/20UCX-HW	1/3	4.8	.21	2.6	2	650	630	610	590	570	540	510
			.16	1.7	1	530	510	490	470	450	420	390
			.36	4.1	3	880	865	850	835	820	790	760
25/26UCX-HW	1/2	6.8	.23	2.4	2	670	655	640	625	610	580	550
		.17	1.7	1	570	550	530	515	500	470	440	
			.50	5.1	3	930	910	890	870	850	810	760
31UCX-HW	31UCX-HW 1/2	6.8	.34	3.6	2	800	785	770	750	730	700	690
			.22	2.1	1	610	595	580	565	550	510	480
			.37	4.2	3	1010	1000	990	975	960	930	900
32UCX-HW	3/4	8.4	.24	2.6	2	790	775	760	745	730	700	670
			.20	2.0	1	700	685	670	650	630	600	560
			.75	6.7	3	1250	1230	1210	1190	1170	1120	1070
37UCX-HW	3/4	8.4	.49	5.5	2	1110	1095	1080	1065	1050	1020	990
			.37	4.0	1	940	925	910	895	880	850	820
			.47	5.6	3	1240	1230	1220	1205	1190	1160	1130
38UCX-HW	3/4	3/4 8.4 .38	.38	5.2	2	1100	1090	1080	1065	1050	1020	990
1			.25	2.3	1	860	845	830	815	800	760	730

#### NOTES:

1. Add nominal .05 static when optional wall panel is used.

2. Shaded rows are factory preset speeds.

3. Add .05 static if wall panel is used.

PHYSICAL DIMENSIONS								
UINT MODEL	Α	В	с	D	E	FILTER SIZE	LIQUID LINE	SUCTION LINE
12-25UCX-HW	22-1/8	18	43	18	12-1/2	18 X 18	3/8" O.D.	5/8" O.D.
26/31UCX-HW	22-1/8	18	43	18	12-1/2	18 X 20	3/8" O.D.	3/4" O.D.
32/37UCX-HW	22-1/8	21	43	18	15-1/2	18 X 24	3/8" O.D.	3/4" O.D.
38UCX-HW	28-1/8	21	46	24-1/8	15-3/4	24 X 24	3/8" O.D.	7/8" O.D.



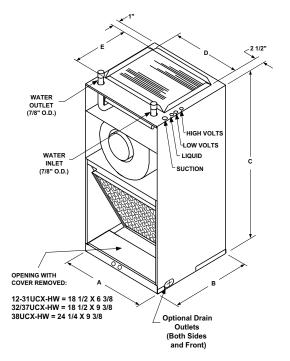
1. All coil connections are sweat



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.

> WARNING AVERTISSEMENT ADVERTENCIA Cancer and Reproductive Harm Cancer et Troubles de l'appareil reproducteur Cáncer y Daño Reproductivo www.P65Warnings.ca.goy LBY0057

UNIT	NOM. COOLING	MOTOR SPEED TAP CONNECTION			
MODEL	BTUH	HIGH SPD (VIO LEAD)	LOW SPD (GRY LEAD)		
12UCX-HW	12,000	GRY	VIO		
19/20UCX-HW	18,000	2	1		
25/26UCX-HW	18,000	2	1		
25/26UCX-HW	24,000	3	2		
31/32UCX-HW	24,000	2	1		
31/320CX-HW	30,000	3	2		
37/38UCX-HW	30,000	2	1		
37/380CX-HW	36,000	3	2		



## UCX-HW Series Compatible with gas fired water heaters Up to 71,100 BTUH Hydronic Heat

### **MODEL NUMBERS:**

MODEL SIZE (BTU COOLING)	MODEL (PISTON)	MODEL (R410 TXV)		
12,000	12UCX-HW	12UCX-HW R410 TXV		
18,000	19UCX-HW	19UCX-HW R410 TXV		
18,000	20UCX-HW	20UCX-HW R410 TXV		
24,000	25UCX-HW	25UCX-HW R410 TXV		
24,000	26UCX-HW	26UCX-HW R410 TXV		
30,000	31UCX-HW	31UCX-HW R410 TXV		
30,000	32UCX-HW	32UCX-HW R410 TXV		
36,000	37UCX-HW	37UCX-HW R410 TXV		
36,000	38UCX-HW	38UCX-HW R410 TXV		

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

### NOTE:

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

(See P. 4 for Optional Accessories)

ALL UCXQB OPTIONAL ACCESSORIES (FIELD INSTALLED)							
DESCRIPTION	PART NO.	FOR DIME		NSIONS			
	9PWUC03L	12-37UCX-HW	49-3/8 X 25-5/8	46-3/8 x 22-5/8			
WALL PANEL (1)	9PWUC04L	38UCX-HW	52-1/2 X 31-5/8 (Outside Frame)	49-1/2 X 28-5/8 (Inside Frame)			
	90PK3	12-37UCX-HW	1-3/4 X 22-1/8				
CLOSET BRKT.	90PK31	38UCX-HW	1-3/4 X 27-15/16				
BOTTOM RETURN	90PK5	12-37UCX-HW	20-7/16 X 22				
AIR KIT	90PK51	38UCX-HW	20-5/8 X 28				
CONDENSATE OVERFLOW SWITCH	SS3	ALL UCX-HW					
FREEZE (2) PROTECTOR	941-1	ALL UCX-HW					

### NOTES:

- (1) Wall panels are taller than the **UCX-HW** cabinet to allow access to hot water coil connections.
- (2) Energizes the pump if HW coil temperature falls below 40°.

EXPANSION VALVE KITS (Heat Pump or Cooling Only) (FIELD INSTALLED)					
PART NO.	TYPE	FOR			
9EVR410-1	R-410A	12 - 38UCX-HW (1-1/2 - 3 TON)			

### NOTES:

- 1. Expansion valve kits are approved for both cooling only
- (non heat pump) or heat pump applications.
- 2. Valves are non-bleed type.
- 3. Valves mount inside unit cabinet





Unit shown with front panel removed

Catalog No. UCX-HW918 (replaces UCX-HW0718)



Optional wall panel (Recessed wall application)



Condensate drain connections (With drain cover removed) (Male connections shown)



Unit shown with optional bottom return air kit (**# 90PK5**)