

Air-Handlers



Wall / Closet Air Handler

1.5 - 3 Tons Cooling or Heat Pump Up to 72,400 BTUH Hydronic Heat (Without Pump)







These upflow air handlers are designed for use with today's higher efficiency split-system heat pump and condensing units.

All **UC-HW**'s include high efficiency cooling coils and seperate hot water coils.

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

The cabinet is made of galvanized steel and is fully insulated. The condensate pan is sloped to ensure proper drainage. Drain piping can enter from the bottom, front, left, or right side of the cabinet.

These fan coils are compatible with any source of hot water that doesn't exceed 180^o and is NSF/ ANSI certified for use with domestic water.

STANDARD FEATURES:

- 120V motor, 24V controls
- Cooper tube/aluminum fin heating and cooling coils
- Blower door shut-off switch
- Drain pan is sloped for positive drainage
- Separate compartment for drain connections
- Drain pan has 3/4" female primary and secondary fittings
- · Higher efficiency cooling coil
- Convenient equalizer connection for field or factory installed R410A TXV (non-bleed type)
- Easily accessible 1" filter
- Cabinet air leakage is no more than 2% when tested in accordance with ASHRAE 193.



Unit shown with optional louvered wall panel Recessed wall application



Unit shown with optional bottom return air kit

OPTIONAL FEATURES:

Optional features include Wall Panels with Captive Screws, factory or field installed TXV's (non-bleed type), Condensate Overflow Switch, Closet Hanger Bracket Kit, and Bottom Return Air Kit.

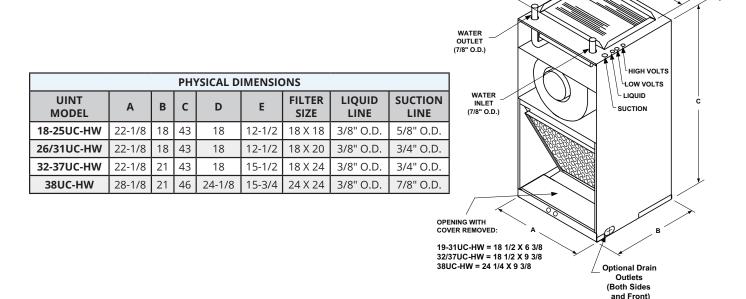
In recessed wall applications utilizing the optional wall panel, the hot water coil can be removed without modifications to the drywall. To allow this feature, the top of the **UC-HW** cabinet is notched for coil removal and the wall panel is 3" taller than the cabinet.

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 combinations, go to www.ahridirectory.org or www.firstco.com.

HEATING PERFORMANCE AND ELECTRICAL DATA										
UNIT MODEL	NOMINAL COOLING BTUH	P.D. (FT. WATER) (COIL ONLY)	HEATING BUTH (1000) AT ENTERING WATER TEMPERATURE (1) Delta-T 20°					MIN. CIRCUIT	MAX. FUSE OR HACR	
MODEL			120 ⁰ F	GPM	140 ^O F	GPM	180 ⁰ F	GPM	AMPACITY	BREAKER
18-20UC-HW	18,000	3.3 2.1 1.2	19.1 18.5 17.6	1.9 1.9 1.8	26.8 25.9 24.6	2.7 2.6 2.5	42.1 40.7 38.7	4.2 4.1 3.9	8	15
24-26UC-HW	24,000 / 18,000	3.3 2.1 1.2	22.9 22.1 20.8	2.3 2.2 2.1	32.1 31.0 29.2	3.2 3.1 2.9	50.4 48.7 45.9	5.0 4.9 4.6	8	15
31UC-HW	30,000 / 24,000	3.3 2.1 1.2	26.1 25.0 23.5	2.6 2.5 2.4	36.5 35.1 32.9	3.7 3.5 3.3	57.3 55.1 51.7	5.7 5.5 5.2	11	15
32UC-HW	30,000 / 24,000	3.6 2.4 1.3	28.1 26.9 25.2	2.8 2.7 2.5	39.3 37.7 35.3	3.9 3.8 3.5	61.7 59.2 55.4	6.2 5.9 5.5	11	15
36-38UC-HW	36,000 / 30,000	3.6 2.4 1.3	30.9 29.6 27.5	3.1 3.0 2.8	43.2 41.3 38.5	4.3 4.1 3.9	67.9 64.9 60.5	6.8 6.5 6.1	11	15

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 or go to www.ahridirectory.org or www.firstco.co/ratings
- (1) Heat BTUH is at 70°F entering air temperature. Based pm 20°F Delta -T. Velocity not to exceed 4ft./sec.





BLOWER DATA										
UNIT	MOTOR	MOTOR	FAN	CFM vs. EXTERNAL STATIC PRESSURE						
MODEL	H.P. (120V)	AMPS (120V)	SPEED	0.10	0.15	0.20	0.25	0.30	0.40	0.50
		5.4	MED-HIGH	790	775	760	745	730	700	670
18/19UC-HW	1/3		MED-LOW	710	695	680	665	650	630	610
			LOW	560	550	540	525	510	490	460
		5.4	MED-HIGH	770	750	730	710	690	650	610
20UC-HW	1/3		MED-LOW	690	675	660	645	630	590	550
			LOW	540	525	510	495	480	450	420
		5.4	HIGH	840	820	800	780	760	710	660
24/25UC-HW	1/3		MED-HIGH	770	750	730	710	690	650	610
			MED-LOW	690	665	660	645	630	590	550
	1/3	5.4	HIGH	860	845	830	810	790	750	700
26UC-HW			MED-HIGH	780	765	750	735	720	680	640
			MED-LOW	700	685	670	655	640	600	560
	1/2	8.1	HIGH	1070	1045	1020	995	970	920	850
31UC-HW			MED-HIGH	1020	1000	980	960	940	890	820
			MED-LOW	760	755	750	735	720	680	640
	1/2	8.1	MED-HIGH	1140	1110	1080	1050	1020	960	900
32UC-HW			MED-LOW	900	885	870	855	840	790	740
			LOW	650	645	640	635	630	610	580
36/37UC-HW	1/2	8.1	HIGH	1160	1135	1110	1080	1050	990	930
			MED-HIGH	1120	1095	1070	1045	1020	970	900
			MED-LOW	890	875	860	845	830	790	740
	1/2	8.1	HIGH	1400	1375	1350	1325	1300	1250	1200
38UC-HW			MED	1260	1245	1230	1210	1190	1150	1100
			LOW	1090	1080	1070	1055	1040	1010	970

NOTES:

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

2. Shaded areas are factory motor settings.

MODEL NUN	ADEDC.			
MODEL NON	IDEKS.	FACTORY INSTALLED TXV'S		
MODEL SIZE (BTU)	MODEL (PISTON)	MODEL (R-410A TXV)		
18,000	18UC-HW	18UC-HW R410A TXV		
18,000	19UC-HW	19UC-HW R410A TXV		
18,000	20UC-HW	20UC-HW R410A TXV		
24,000	24UC-HW	24UC-HW R410A TXV		
24,000	25UC-HW	25UC-HW R410A TXV		
24,000	26UC-HW	26UC-HW R410A TXV		
30,000	31UC-HW	31UC-HW R410A TXV		
30,000	32UC-HW	32UC-HW R410A TXV		
36,000	36UC-HW	36UC-HW R410A TXV		

37UC-HW

38UC-HW

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

37UC-HW R410A TXV

38UC-HW R410A TXV

NOTE:

36,000

36,000

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

(See P. 5 for Optional Accessories)



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

Accessories

ALL UC-HW OPTIONAL ACCESSORIES (FIELD INSTALLED)					
DESCRIPTION PART NO.		FOR	DIMEN	ISIONS	
	9PWUC03L	18-37UC-HW	49-3/8 X 25-5/8	46-3/8 x 22-5/8	
WALL PANEL (1)	9PWUC04L	38UC-HW	52-1/2 X 31-5/8 (Outside Frame)	49-1/2 X 28-5/8 (Inside Frame)	
SI OSET DOLG	90PK3	18-37UC-HW	1-3/4 X 22-1/8		
CLOSET BRKT.	90PK31	38UC-HW	1-3/4 X 27-15/16		
BOTTOM RETURN	90PK5	18-37UC-HW	20-7/16 X 22		
AIR KIT	90PK51	38UC-HW	20-5/8 X 28		
CONDENSATE OVERFLOW SS3 SWITCH		ALL UC-HW			
FREEZE (2) PROTECTOR 941-1		ALL UC-HW			



Optional wall panel Recessed wall application



NOTES:

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

EXPANSION VALVE KITS (Heat Pump or Cooling Only) (FIELD INSTALLED)				
PART NO.	TYPE	FOR		
9EVR410-1 R410A		18 - 38UC-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. Field added. Hard start kit may be required.
- 3. Valves mount inside unit cabinet



Condensate drain connections

(With drain cover removed) (Male connections shown)



Unit shown with optional bottom return air kit



Unit shown with front panel removed



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APRIL 2024