

## Designed For Use with Tankless Water Heaters!

NEW MODEL  
ADDED (38)



# UCQBR Series

## Wall / Closet Air Handlers

1.5 - 3.0 Tons Cooling or Heat Pump  
Up to 55,000 BTUH Hydronic Heat



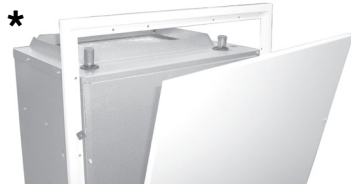
(Standard Unit shown)  
(Closet application - Front Return Air)



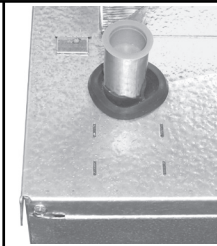
Unit shown with optional  
bottom return air kit

### New! non-swaged strait pipe connections.

#### \* Accessible HW Connections



Unit shown with optional louvered wall panel  
(Recessed wall application)



The UCQBR series air handlers are designed specifically for use with tankless water heaters. These air handlers allow high efficiency tankless water heaters to be used for *two* jobs instead of one . . . . providing domestic hot water *and* high efficiency space heating! They are compatible with most of today's higher efficiency split-system R-410A heat pumps and condensing units. (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](http://www.firstco.com) or contact the factory.

These air handlers can be installed on a closet platform, hung on a closet wall, or recessed in a wall between the studs.

Important: In order for the UCQBR's to operate properly with tankless water heaters, the hot water coils must be piped to the tankless heaters according to the tankless manufacturer's instructions. Contact the water heater manufacturer for required accessories and piping requirements, as well as water heater sizing information.

The UCQBR air handlers include a special circulating pump designed for tankless heaters, HW check valve, air purge valve, hot water coil, cooling coil, and multi-function circuit board.

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

#### Standard Features:

- Multi-function micro-processor circuit board with:
  - Automatic pump timer (heating mode) - pump purges the HW coil for 60 seconds every six hours. Note: State of MA, .248 CMR code of the state of MA requires a pump timer. (60 seconds every 6 hours)
  - Blower-on fan delay (heating mode) - preheats the HW coil for 45 seconds.
  - Blower-off fan delay (heating and cooling modes) - blower continues to operate for 45 seconds after thermostat is satisfied for increased efficiency.
  - Cabinet air leakage is no more than 2% when tested in accordance with ASHRAE 193

- Freeze protector on HW coil
- 120V motor, 24V controls
- Blower door shut-off switch
- Separate compartment for drain connections
- Drain pan has 3/4" female primary and secondary fittings
- Higher efficiency cooling coil with installed R-410A TXV (non-bleed type)
- Special circulating pump with unique, easy access anti-siphon check valve and air purge valve
- Easily accessible 1" 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 New 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 UCQBR cabinet is notched for coil removal and the wall panel is 3" taller than the cabinet.

# UCQBR Series

(See P. 3 for Model Numbers)

PERFORMANCE DATA																
UNIT MODEL	NOMINAL CFM	HEATING GPM (NOM.)	HEATING BTUH (1000) AT ENTERING WATER TEMPERATURE (1) Delta-T 20°F & GPM										TOTAL AMPS (MOTOR) (120V)	TOTAL AMPS (PUMP) (120V)	MIN CIRCUIT AMPACITY	MAX CIRCUIT PROTECTION
			120°F	GPM	130°F	GPM	140°F	GPM	150°F	GPM	160°F	GPM				
19UCQBR	600	4	16.9	1.7	20.3	2	23.7	2.4	27.1	2.7	30.5	3.1	5.4	.84	6	15
20UCQBR	600	4	16.9	1.7	20.3	2	23.7	2.4	27.1	2.7	30.5	3.1	5.4	.84	6	15
25UCQBR	690	4	20.6	2.1	24.7	2.5	28.8	2.9	32.9	3.3	37	3.7	5.4	.84	8	15
26UCQBR	700	4	20.8	2.1	24.9	2.5	29.1	2.9	33.3	3.3	37.4	3.7	5.4	.84	8	15
31UCQBR	940	4	24.8	2.5	29.7	3	34.7	3.5	39.7	4	44.6	4.5	8.1	.84	8	15
32UCQBR	840	4	24.8	2.5	29.8	3	34.8	3.5	39.9	4	44.8	4.5	8.1	.84	11	15
37UCQBR	1020	4	27.8	2.8	33.4	3.3	39	3.9	44.6	4.5	50.2	5	8.1	.84	11	15
38UCQBR	1050	4	27.8	2.8	33.4	3.3	39	3.9	44.6	4.5	50.2	5	8.1	.84	11	15

**NOTES:**

- (1) Heat BTUH is at 70°F entering air temperature.
- (2) Based on 20°F Delta-T. Velocity not to exceed 4ft./sec.
- (3) Heat BTUH output will not exceed output of water water source.

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

**NOTES:**

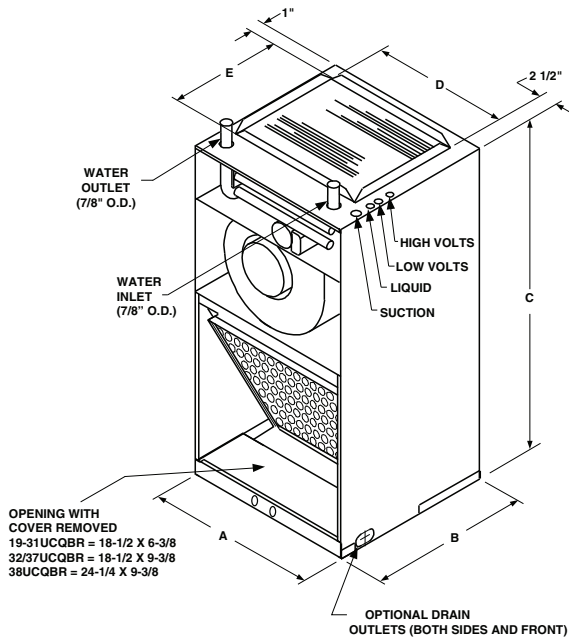
- 1. Add nominal .05 static when optional wall panel is used.
- 2. Shaded rows are factory preset speeds.

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](http://www.firstco.com).



NSF/ANSI  
169:2016

# UCQBR Series



PHYSICAL DIMENSIONS								
UNIT MODEL	A	B	C	D	E	FILTER SIZE	LIQUID LINE	SUCTION LINE
19-25UCQBR	22-1/8	18	43	18	12-1/2	18 X 18	3/8" O.D.	5/8" O.D.
26/31UCQBR	22-1/8	18	43	18	12-1/2	18 X 20	3/8" O.D.	3/4" O.D.
32/37UCQBR	22-1/8	21	43	18	15-1/2	18 X 24	3/8" O.D.	3/4" O.D.
38UCQBR	28-1/8	21	46	24-1/8	15-3/4	24 X 24	3/8" O.D.	7/8" O.D.

**NOTES:**

1. All coil connections are sweat

## MODEL NUMBERS:

MODEL SIZE (BTUH COOLING)	MODEL NUMBER
18,000	19UCQBR R410 TXV
18,000	20UCQBR R410 TXV
24,000	25UCQBR R410 TXV
24,000	26UCQBR R410 TXV
30,000	31UCQBR R410 TXV
30,000	32UCQBR R410 TXV
36,000	37UCQBR R410 TXV
36,000	38UCQBR R410 TXV

**NOTES:**

1. TXV's are approved for cooling or heat pump operation.
2. TXV's are non-bleed type. A field installed hard start kit may be required.

(See P. 4 for Optional Accessories)



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

**NOTES:**

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

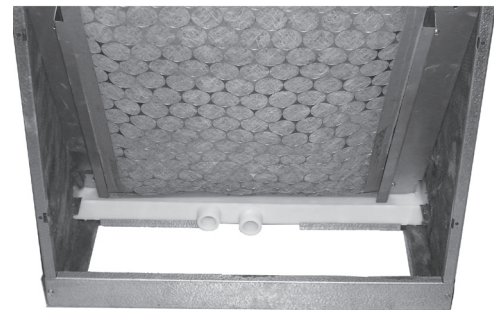
EXPANSION VALVE KITS (Heat Pump or Cooling Only) (FIELD INSTALLED)		
PART NO.	TYPE	FOR
9EVR410-1	R-410A	12 - 38UCQBR (1-1/2 - 3 TON)

**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



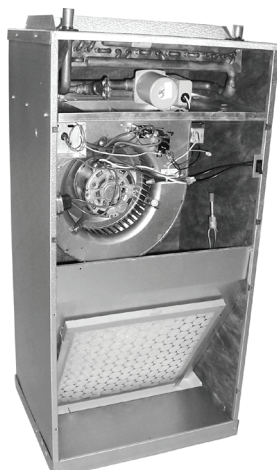
Optional wall panel  
(Recessed wall application)



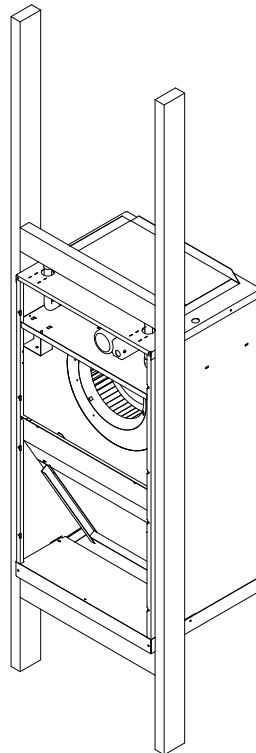
Condensate drain connections  
(With drain cover removed)  
(Thermoplastic pan shown)



Condensate Overflow Switch  
#SS3



Unit shown with front panel removed



Typical recessed wall installation



Unit shown with optional bottom return air kit