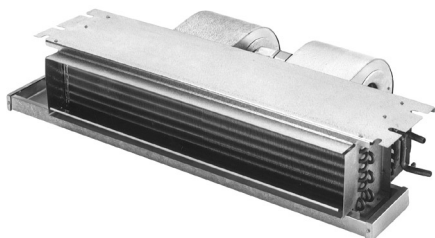


MEETS 2006
DOE REQUIREMENTS ⁽¹⁾



CDX-HW(-C) Series

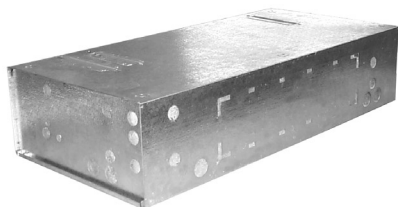
Horizontal Recessed
Ceiling Fan Coil
1 1/2 - 3 Tons Cooling
Up to 51,700 BTUH HW Heat



CDX-HW Fan Coil
(without enclosure)



Optional Access Panel
(non-louvered shown)



Optional Insulated Enclosure



Matching Access Panel for Enclosure
(non-louvered shown)

The space-saving **CDX-HW** series fan coil is only 10" high (11" with enclosure), thus allowing it to recess in a ceiling. Recessed ceiling fan coils save valuable floor space and eliminate costly "equipment" closets.

(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 approved indoor/outdoor matches, go to: www.firstco.com or contact the factory.

All **CDX-HW** fan coils include a 120/24V transformer and are completely prewired. A sloped drain pan allows positive drainage of condensate.

(-C) model: for **CDX-HW** fan coils installed within an enclosure, add "-C" after **CDX-HW**. For instance, ordering model **18CDX-HW-C** will include a **CDX-HW** fan coil factory installed in a # **9ECDX-01** enclosure and your choice of either a # **966** or **966-1** panel.

These fan coils are compatible with any source of hot water that doesn't exceed 180°F.

Standard Features:

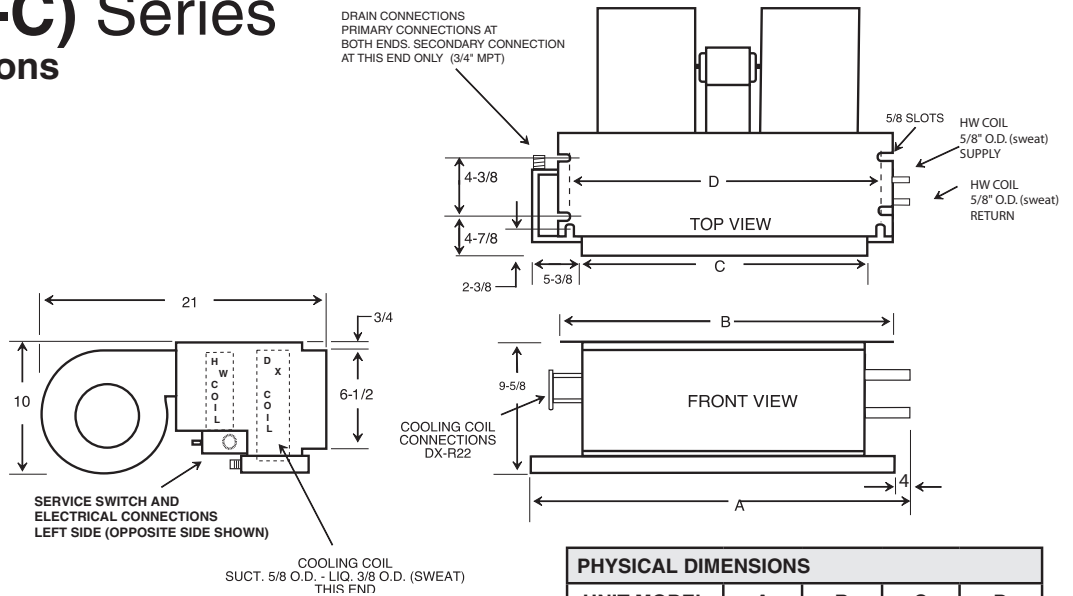
- **Factory installed service switch**
- **Freeze protector on HW coil**
- Two speed fan operation
- Drain pan has 3/4" NPT primary and secondary (overflow) fittings
- 120V motor, 24V controls
- Highly efficient copper tube/aluminum fin heating and cooling coils. Cooling coil has a piston-type metering device or factory or field installed R22 or R410A TXV's. Contact factory for correct match with outdoor unit.
- Insulated and coated galvanized steel drain pan is sloped for proper drainage

Optional Accessories:

- Attractive off-white return air / access panel with captive screws (panels can be field painted)
- Fully insulated enclosure with matching ceiling panel (enclosure can be pre-installed). Also allows for ducted return air.
- Factory or field installed TXV's
- Pump module - used when the hot water source is a gas-fired water heater (part # **940-3CV**) (field installed)
- Condensate overflow switch (field installed) (# **SS3**)
- Enclosure "Cap" kit - for above the ceiling installation (contact factory)

CDX-HW(-C) Series

1-1/2 through 3 tons



(See P. 4 for Model Numbers)

PHYSICAL DIMENSIONS				
UNIT MODEL	A	B	C	D
18/19CDX-HW	38-1/8	37-1/4	30-1/8	34-3/4
24/25CDX-HW	44-1/8	43-1/4	36-1/8	40-3/4
30/31CDX-HW	50-1/8	49-1/4	42-1/8	46-3/4
36/37CDX-HW	57-1/8	56-1/4	49-1/8	53-3/4

BLOWER DATA													
UNIT MODEL	MOTOR (1)		MOTOR HP 120(V)	MIN. CKT. AMPACITY	MAX. CKT. PROTECTION	CFM vs. EXTERNAL STATIC PRESSURE (3)							
	RPM	AMPS				0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40
18CDX-HW	1550	1.9	1/8	3	15	720	690	660	630	600	570	535	500
19CDX-HW	1550	2.3	1/5	3	15	710	680	650	620	590	560	530	500
24CDX-HW	1550	3.0	1/5	4	15	860	840	825	810	785	740	700	660
25CDX-HW	1550	3.6	1/4	5	15	880	840	800	760	720	680	640	600
30CDX-HW	1550	3.6	1/4	5	15	1050	1025	1000	970	930	890	845	800
31CDX-HW	1550	4.6	1/5	6	15	1100	1060	1020	980	930	880	830	780
36CDX-HW	1550	4.6	1/5	6	15	1340	1300	1250	1200	1150	1100	1050	1000
37CDX-HW	1550	4.6	1/5	6	15	1310	1260	1210	1160	1110	1060	1000	940

- (1) Units should not be applied to a system with less than 350 CFM/Ton airflow.
- (2) Motors are 120V and operate on high speed for cool and low speed for heating.
- (3) CFM vs. static at high motor speed.
- (4) Add .05 static when enclosure and/or ceiling panel are used.
- (5) 31, 36 and 37CDX-HW have two motors and four blowers.

PERFORMANCE DATA						
UNIT MODEL	NOMINAL COOLING BTUH	HEATING GPM	PRESS. DROP (FT. WTR)	BTUH (1000) AT ENTERING WATER TEMPERATURE		
				120°F	140°F	180°F
18/19CDX-HW	18,000	1	.66	10.1	14.1	22.0
		2	2.0	12.4	17.3	27.0
		3	3.3	13.3	18.4 (5)	28.8
24/25CDX-HW	24,000	2	2.1	15.4	21.4	33.5
		3	4.1	16.6	23.0 (5)	36.0
		4	6.6	17.2	23.9	37.4
30/31CDX-HW	30,000	2	2.2	18.2	25.3	39.6
		3	4.3	19.6	27.3 (5)	42.6
		4	6.8	20.6	28.6	44.7
36/37CDX-HW	36,000	2	2.8	20.4	28.4	44.3
		3	5.4	22.7	31.6 (5)	49.3
		4	8.5	23.8	33.1	51.7

NOTES:

1. Heat BTUH is at 70 degree EAT.
2. 120 degree and 180 degree data is supplied for boiler applications.
3. Heating BTUH output will not exceed output of water heater.
4. Approved for installation with 0" clearance to combustible material.
5. Use the capacities when First Co. "Flow Control Module" is used (# 940-3CV)

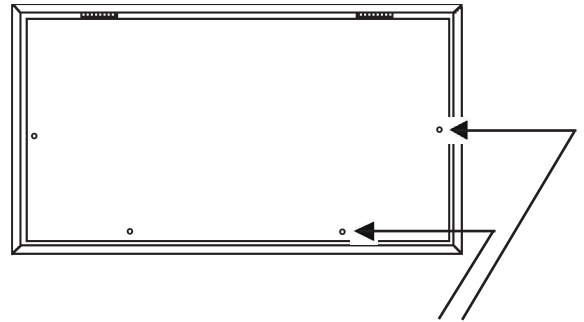
EXPANSION VALVE KITS (Heat Pump or cooling only) (FIELD INSTALLED)		
PART NO.	TYPE	FOR
9EVR22-2	R22	18 - 37CDX-HW (-C) (1-1/2 - 3 TON)
9EVR410-1	R410A	18 - 37CDX-HW (-C) (1-1/2 - 3 TON)

NOTES:

1. Above expansion valve kits are approved for both cooling only (non heat pump) or heat pump applications.
2. Valves are external equalizing, internal bleed.
3. Valves have screw-on connections.

Ceiling Access Panels - (For CDX-HW's installed without enclosure)

CEILING ACCESS PANELS						
FOR MODEL	PANEL NO.	DESCRIPTION	CEILING PANEL OPENING		PANEL FRAME DIMS. (OUTSIDE)	
18/19CDX-HW	966	LOUVERED	24-1/2	46	27-1/2	49
	966-1	NON-LOUVERED	24-1/2	46	27-1/2	49
24/25CDX-HW	967	LOUVERED	24-1/2	52-1/2	27-1/2	55-1/2
	967-1	NON-LOUVERED	24-1/2	52-1/2	27-1/2	55-1/2
30-37CDX-HW	967-4	LOUVERED	24-1/2	67-1/8	27-1/2	70-1/8
	967-5	NON-LOUVERED	24-1/2	67-1/8	27-1/2	70-1/8



captive screws now on all panels
(screws stay in panel when opened)



**966-1, 967-1,
967-5, 967-7**



966, 967, 967-4, 967-6, 967-8
(Louvers may differ from picture)
Louvered panels accept 20x20x1" filter
(field supplied)

Enclosures with Matching Ceiling Panels

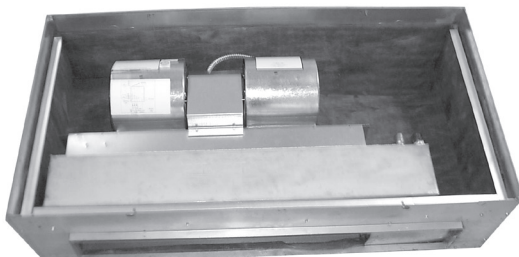
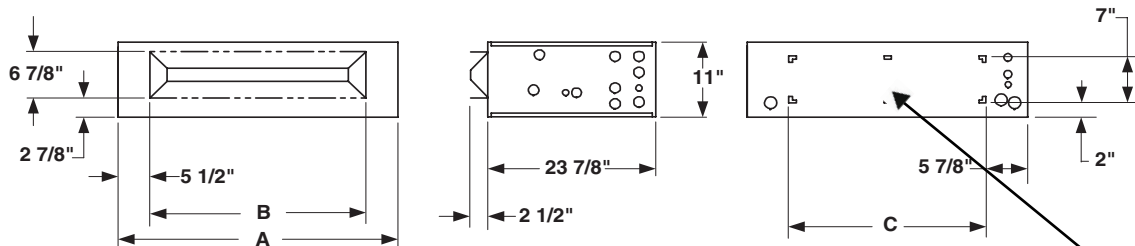
(Enclosures and panels are included as standard with ALL "-C" models or can be ordered separately as a knocked down kit for CDX-HW models)

ENCLOSURE DIMENSIONS					PANEL NO.	DESCRIPTION	CEILING PANEL OPENING		PANEL FRAME DIMS (OUTSIDE)	
FOR MODEL	ENCLOSURE	A	B	C			W	L	W	L
18/19CDX-HW	9ECDX01 (1)	45-3/4	30-7/8	34	966	LOUVERED	24-1/2	46	27-1/2	49
					966-1	NON-LOUVERED	24-1/2	46	27-1/2	49
24/25CDX-HW	9ECDX02 (1)	51-3/4	36-7/8	40	967	LOUVERED	24-1/2	52-1/2	27-1/2	55-1/2
					967-1	NON-LOUVERED	24-1/2	52-1/2	27-1/2	55-1/2
30/31CDX-HW	9ECDX03 (1)	58-1/2	42-7/8	46-3/4	967-6	LOUVERED	24-1/2	60	27-1/2	63
					967-7	NON-LOUVERED	24-1/2	60	27-1/2	63
36/37CDX-HW	9ECDX04 (1)	66-1/2	49-7/8	54-3/4	967-8	LOUVERED	24-1/2	67	27-1/2	70
					967-5	NON-LOUVERED	24-1/2	67	27-1/2	70

(See Panel Pictures Above)

NOTES:

- (1) These enclosures are shipped "Knocked Down" and must be field assembled.
- (2) Louvered is the "default" style and automatically shipped unless non-louvered is specified on order.



KNOCKOUT FOR DUCTED RETURN
(Ducted return requires remote filter grille
(field supplied) and non-louvered panel)

CDX-HW(-C) Series

1-1/2 through 3 tons

MODEL NUMBERS:

MODEL SIZE (BTU)	UNCASED (NO ENCLOSURE)			FACTORY INSTALLED ENCLOSURE		
	MODEL (PISTON)	FACTORY INSTALLED TXV'S		MODEL (PISTON)	FACTORY INSTALLED TXV'S	
		MODEL (R22 TXV)	MODEL (R410A TXV)		MODEL (R22 TXV)	MODEL (R410A TXV)
18,000	18CDX-HW	18CDX-HW W/R22 TXV	18CDX-HW W/R410A TXV	18CDX-HW-C	18CDX-HW-C W/R22 TXV	18CDX-HW-C W/R410A TXV
18,000	19CDX-HW	19CDX-HW W/R22 TXV	19CDX-HW W/R410A TXV	19CDX-HW-C	19CDX-HW-C W/R22 TXV	19CDX-HW-C W/R410A TXV
24,000	24CDX-HW	24CDX-HW W/R22 TXV	24CDX-HW W/R410A TXV	24CDX-HW-C	24CDX-HW-C W/R22 TXV	24CDX-HW-C W/R410A TXV
24,000	25CDX-HW	25CDX-HW W/R22 TXV	25CDX-HW W/R410A TXV	25CDX-HW-C	25CDX-HW-C W/R22 TXV	25CDX-HW-C W/R410A TXV
30,000	30CDX-HW	30CDX-HW W/R22 TXV	30CDX-HW W/R410A TXV	30CDX-HW-C	30CDX-HW-C W/R22 TXV	30CDX-HW-C W/R410A TXV
30,000	31CDX-HW	31CDX-HW W/R22 TXV	31CDX-HW W/R410A TXV	31CDX-HW-C	31CDX-HW-C W/R22 TXV	31CDX-HW-C W/R410A TXV
36,000	36CDX-HW	36CDX-HW W/R22 TXV	36CDX-HW W/R410A TXV	36CDX-HW-C	36CDX-HW-C W/R22 TXV	36CDX-HW-C W/R410A TXV
36,000	37CDX-HW	37CDX-HW W/R22 TXV	37CDX-HW W/R410A TXV	37CDX-HW-C	37CDX-HW-C W/R22 TXV	37CDX-HW-C W/R410A TXV

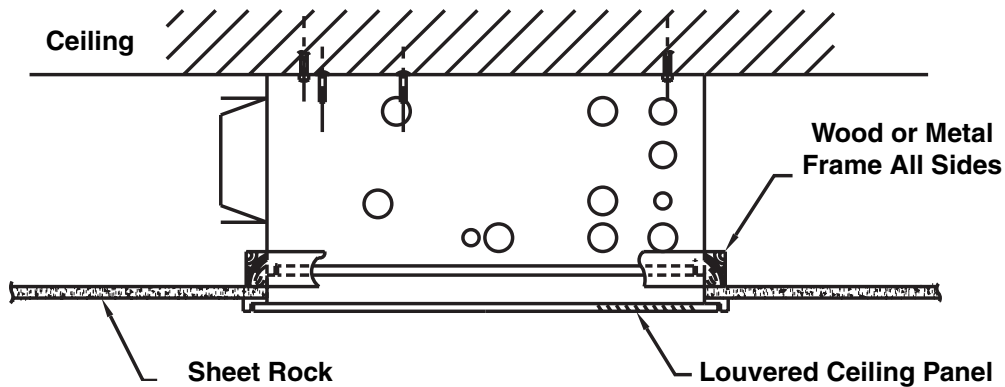
All TXV's are approved for cooling only or heat pump operation.

NOTE:

Expansion valve requirement depends on the selected outdoor unit.

Go to: www.firstco.com/efficiencyratings.aspx or contact the factory for assistance.

ENCLOSURE INSTALLATION SUPPORT FRAMING



ENCLOSURE CONNECTION LOCATIONS

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

