



CWE(X)

Multi-Position Chilled Water Fan Coil

3-Speed, 24V Control

240V Multi-Speed Motor



STANDARD FEATURES

The **CWE(X)** is equipped with a control board that allows 24V **3-speed fan operation from a 3-speed wall mounted thermostat**.

Three compatible 3-speed thermostats are available from First Co.: manual changeover (#T420), auto changeover (#T421), and the all new "Autospeed 24V" (#T200 and #T201).

The T200/T201 Autospeed 24V provides maximum comfort and efficiency by **automatically varying the fan speed between High, Medium, and Low speeds**, depending on room temperature and desired thermostat setting.

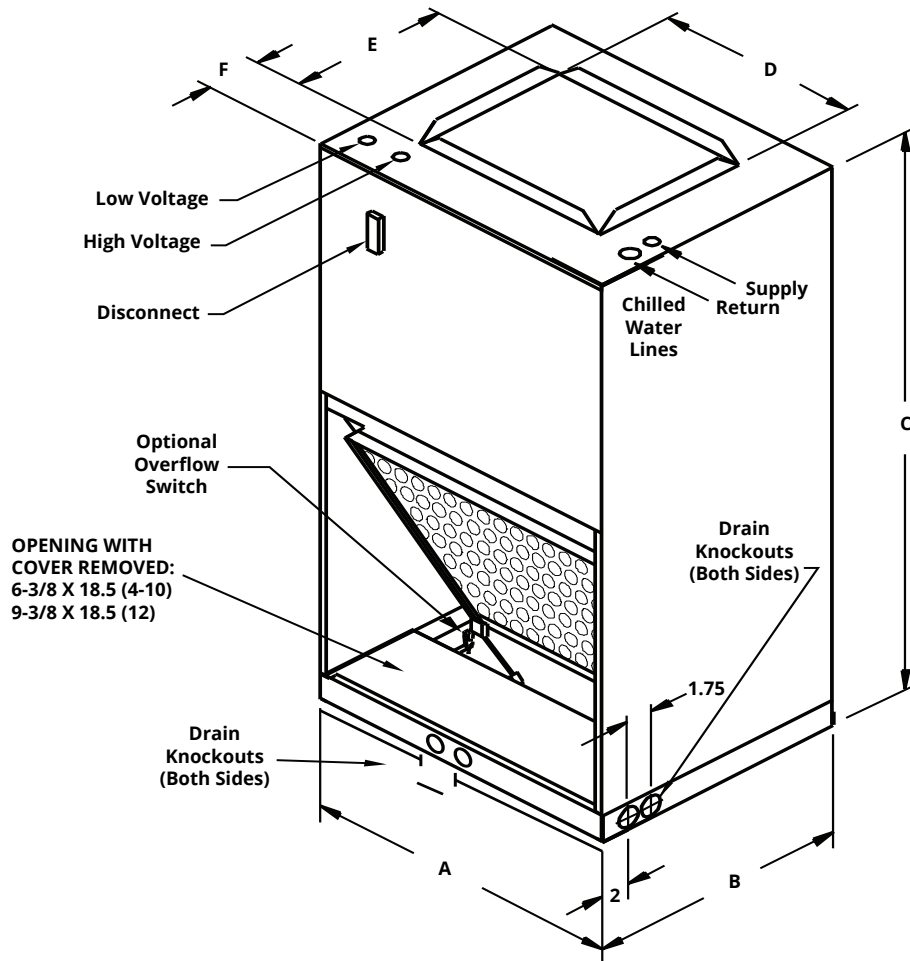
- **230/24V 3-speed control board**
- **Electrical service pullout** (not on 277V models)

CWX	Thru-Door
120/24V	NO
208/230/24V	YES
277/24V	NO
CWEX	
208/230/24V	YES

- Factory installed electric heat
- Non-corrosive thermoplastic drain pan, sloped for positive drainage
- Separate compartment for drain connections (allows the use of PVC drain piping)
- Drain pan has female primary and secondary fittings
- Easily accessible 1" filter
- Various optional factory installed valve packages
- Coil connections stub out top of unit

First Co's customer is ultimately responsible for confirming which fan coil models are compatible for their installation and application.
To determine certified performance, go to www.firstco.com or www.ahrirectory.org

Dimensions



PHYSICAL DIMENSIONS								
UNIT MODEL	A	B	C	D	E	F	FILTER SIZE	CHILLED WATER COIL CONNECTIONS
4 - 10CWE	22-1/8	15-1/8	40	14	10-1/2	3-5/8	18 X 18	5/8 O.D.
12CWE	22-1/8	18-1/8	43	14	13	3-5/8	18 X 20	5/8 O.D.

NOTES:

1. Coil connections are sweat and stub out top of unit

BLOWER DATA- PSC										
UNIT MODEL	MOTOR H.P. (230V)	MOTOR SPEED	CFM VS. EXTERNAL STATIC PRESSURE							
			0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40
4CWE	1/6	MED. HIGH	520	500	480	460	430	410	390	---
		MED. LOW	390	370	355	340	325	310	290	---
		LOW	310	290	270	250	235	220	195	---
6CWE	1/6	HIGH	610	600	590	580	570	560	545	---
		MED.HIGH	470	460	450	440	430	420	405	---
		MED. LOW	355	340	325	310	300	290	280	---
8CWE	1/6	HIGH	860	840	820	800	780	760	740	720
		MEDIUM	715	700	685	670	655	640	620	600
		LOW	590	580	565	550	540	530	515	500
10CWE	1/4	HIGH	1120	1100	1075	1050	1025	1000	970	940
		MEDIUM	910	900	880	860	845	830	810	790
		LOW	730	720	710	700	690	680	665	650
12CWE	1/4	HIGH	---	1160	1130	1100	1070	1040	1010	980
		MED-HIGH	---	1050	1030	1010	985	960	930	900
		MED-LOW	---	970	950	930	910	890	870	850

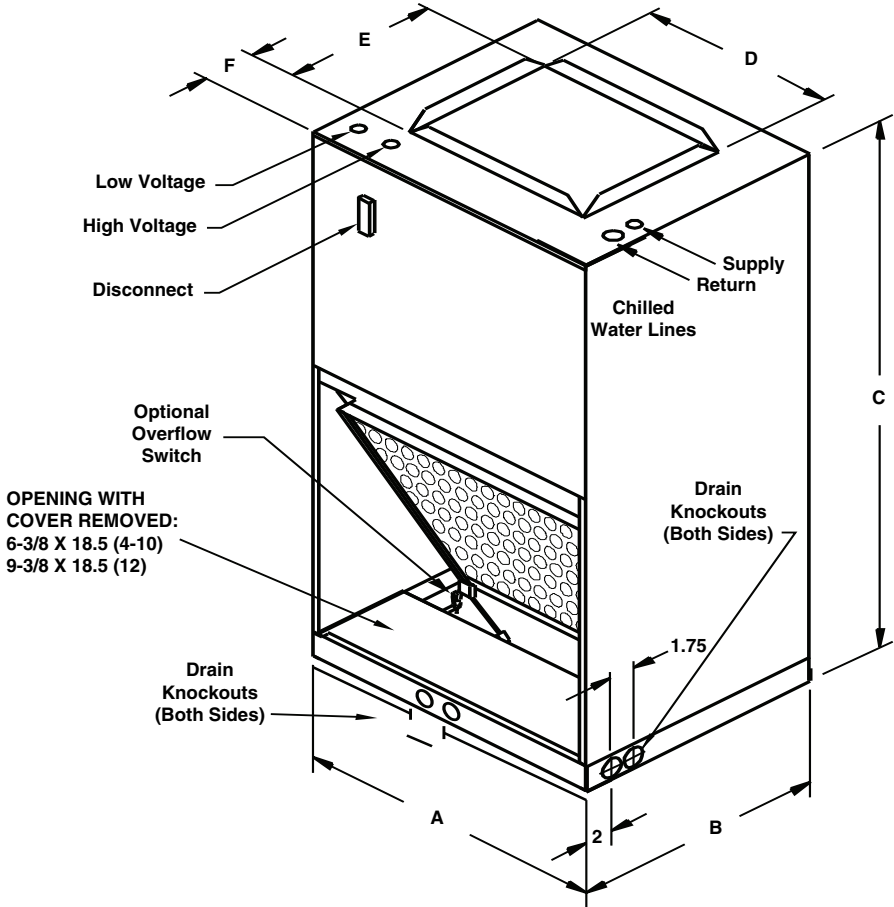


In keeping with its policy of continuous progress and product improvement, First Co. reserves the right to make changes without notice.

ELECTRICAL DATA																
UNIT MODEL	ELECTRIC HEAT CAPACITY						TOTAL AMPS			MIN. CIR. AMPACITY			MAX. OVERCURRENT PROTECTION			
	KW			BTUH			230V	208V	277V	230V	208V	277V	230V	208V	277V	
	230V	208V	277V	230V	208V	277V										
4CWE	0	0	0	0	0	0	1.1	---	1.2	---	---	---	---	---	---	---
	1	1	0.8	1	3400	2600	3400	5.3	4.7	4.8	7	6	6	15	15	15
	2	2	1.5	2	6800	5100	6800	9.4	8.3	8.4	12	11	11	15	15	15
	3	3	2.3	3	10200	7700	10200	13.6	11.9	12.0	17	15	15	20	15	15
	4	4	3.0	4	13600	10200	13600	17.8	15.5	15.6	23	20	20	25	20	20
6CWE	0	0	0	0	0	0	1.1	---	1.2	---	---	---	---	---	---	---
	2	2	1.5	2	6800	5100	6800	9.4	8.3	8.4	12	11	11	15	15	15
	3	3	2.3	3	10200	7700	10200	13.6	11.9	12.0	17	15	15	20	15	15
	4	4	3.0	4	13600	10200	13600	17.8	15.5	15.6	23	20	20	25	20	20
	5	5	3.8	5	17000	12800	17000	21.9	19.1	19.3	28	24	24	30	25	25
	6	6	4.5	6	20500	15400	20500	26.1	22.7	22.9	33	29	29	35	30	30
8CWE	0	0	0	0	0	0	1.7	---	1.2	---	---	---	---	---	---	---
	3	3	2.3	3	10200	7700	10200	14.2	12.5	12.0	18	16	15	20	20	15
	4	4	3.0	4	13600	10200	13600	18.4	16.1	15.6	23	21	20	25	25	20
	5	5	3.8	5	17000	12800	17000	22.5	19.7	19.3	29	25	24	30	25	25
	6	6	4.5	6	20500	15400	20500	26.7	23.3	22.9	34	30	29	35	30	30
	8	8	6.0	8	27300	20500	27300	35.0	30.5	30.1	44	39	38	50	40	40
10CWE	0	0	0	0	0	0	2.7	---	1.6	---	---	---	---	---	---	---
	3	3	2.3	3	10200	7700	10200	15.2	13.5	12.4	19	17	16	20	20	20
	5	5	3.8	5	17000	12800	17000	23.5	20.7	19.7	30	26	25	30	30	25
	6	6	4.5	6	20500	15400	20500	27.7	24.3	23.3	35	31	29	35	35	30
	8	8	6.0	8	27300	20500	27300	36.0	31.5	30.5	45	40	38	50	40	40
	10	10	7.5	10	34100	25600	34100	44.4	38.8	37.7	56	49	47	60	50	50
12CWE	0	0	0	0	0	0	2.5	---	1.6	---	---	---	---	---	---	---
	3	3	2.3	---	10,200	7,700	---	14.5	12.8	---	19	17	---	20	20	---
	5	5	3.8	---	17,000	12,800	---	22.8	20.0	---	29	26	---	30	30	---
	6	6	4.5	---	20,500	15,400	---	27.0	23.6	---	34	30	---	35	35	---
	8	8	6.0	---	27,300	20,500	---	35.3	30.9	---	45	39	---	50	40	---
10	10	7.5	---	34,100	25,600	---	43.7	38.1	---	55	48	---	60	50	---	

COOLING CAPACITY																	
UNIT MODEL	NOMINAL CFM	45 DEGREE ENTERING WATER								42 DEGREE ENTERING WATER							
		GPM	P.D. (Ft. Wtr.)	80F D.B. / 67F W.B.			75F D.B. / 63F W.B.			GPM	GPM (Ft. Wtr.)	80F D.B. / 67F W.B.		75F D.B. / 63F W.B.			
				TH	SH	TR	TH	SH	TR			TH	SH	TR			
4CWE	400	1.5	4.3	9.7	8.8	13.0	7.8	7.8	10.4	1.5	4.3	10.6	9.1	14.1	8.6	8.6	11.4
		2.5	10.5	12.0	9.6	9.6	9.2	8.5	7.4	2.5	10.5	13.1	10.0	10.5	10.0	8.8	8.0
		3.5	19.0	13.1	10.0	7.5	10.0	8.8	5.7	3.5	19.0	14.2	10.5	8.1	10.9	9.2	6.2
6CWE	600	3.0	5.0	17.3	13.1	11.5	13.2	11.5	8.8	3.5	6.7	20.0	14.1	11.4	15.3	12.3	8.7
		4.0	8.6	19.2	13.8	9.6	14.7	12.1	7.3	4.5	10.7	21.7	14.8	9.6	16.6	12.8	7.4
		5.0	13.0	20.4	14.3	8.2	15.6	12.5	6.2	5.5	15.5	22.8	15.2	8.3	17.4	13.2	6.3
8CWE	800	6.5	11.4	23.2	17.1	7.1	17.7	15.0	5.4	6.0	9.8	24.6	17.6	8.2	18.8	15.4	6.3
		7.5	14.8	24.2	17.4	6.5	18.5	15.3	4.9	7.0	13.1	25.8	18.1	7.4	19.7	15.8	5.6
		8.5	18.7	25.0	17.7	5.9	19.1	15.5	4.5	8.0	16.7	26.8	18.4	6.7	20.5	16.1	5.1
10CWE	1000	6.5	5.7	29.0	21.6	8.9	22.2	19.0	6.8	6.0	4.6	30.7	22.2	10.2	23.5	19.4	7.8
		8.0	8.2	31.0	22.3	7.8	23.7	19.5	5.9	8.0	8.2	33.8	23.4	8.5	25.8	20.4	6.5
		9.5	11.0	32.5	22.9	6.8	24.8	20.0	5.2	10.0	12.1	35.8	24.1	7.2	27.3	20.9	5.5
12CWE	1200	6.0	6.3	33.0	26.1	11.0	25.2	23.1	8.4	5.5	5.4	34.7	26.7	12.6	26.5	23.5	9.6
		7.5	9.5	36.1	27.3	9.6	27.6	24.0	7.4	7.0	8.4	38.3	28.1	10.9	29.3	24.6	8.4
		9.0	13.2	38.5	28.1	8.5	29.4	24.7	6.5	8.5	11.9	41.1	29.2	9.7	31.4	25.5	7.4

Dimensions



PHYSICAL DIMENSIONS								
UNIT MODEL	A	B	C	D	E	F	FILTER SIZE	CHILLED WATER COIL CONNECTIONS
4 - 10CWEX	22-1/8	15-1/8	40	14	10-1/2	3-5/8	18 X 18	5/8 O.D.
12CWEX	22-1/8	18-1/8	43	14	13	3-5/8	18 X 20	5/8 O.D.

NOTES:
 1. Coil connections are sweat and stub out top of unit

BLOWER DATA - ECM										
UNIT MODEL	MOTOR H.P. (230V)	SPEED TAPS	CFM VS. EXTERNAL STATIC PRESSURE							
			0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40
4CWEX	1/3	4	615	600	580	560	545	530	500	470
		3	515	500	485	470	450	430	415	400
		2	405	390	375	360	345	330	310	290
		1	340	320	300	280	260	230	225	190
6CWEX	1/3	4	755	740	725	710	695	680	660	640
		3	675	660	645	630	615	600	590	580
		2	520	500	480	460	450	440	425	410
		1	390	370	350	330	315	300	280	260
8CWEX	1/3	3	900	880	860	840	820	800	775	750
		2	705	690	680	670	655	640	625	610
		1	575	560	545	530	515	500	480	460
10CWEX	1/2	3	1050	1030	1010	990	970	950	925	900
		2	900	890	880	870	855	840	830	820
		1	750	740	730	720	710	700	680	660
12CWEX	1/2	3	1280	1260	1230	1220	1200	1180	1150	1120
		2	1115	1100	1085	1070	1055	1040	1030	1020
		1	960	950	940	930	915	900	885	870



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ELECTRICAL DATA										
UNIT MODEL	ELECTRIC HEAT CAPACITY				TOTAL AMPS		MIN. CIR. AMPACITY		MAX. OVERCURRENT PROTECTION	
	KW		BTUH		230V	208V	230V	208V	230V	208V
	230V	208V	230V	208V						
4CWEX	0	0	---	0	---	2.8	---	---	---	---
	1	1	0.8	3,400	2600	7.0	6.4	9	8	15
	2	2	1.5	6,800	5100	11.1	10.0	14	13	15
	3	3	2.3	10,200	7700	15.3	13.6	19	17	20
	4	4	3.0	13,600	10200	19.5	17.2	24	22	25
6CWEX	0	0	---	0	---	2.8	---	---	---	---
	2	2	1.5	6800	5100	11.1	10.0	14	13	15
	3	3	2.3	10200	7700	15.3	13.6	19	17	20
	4	4	3.0	13600	10200	19.5	17.2	24	22	25
	5	5	3.8	17000	12800	23.6	20.8	30	26	30
	6	6	4.5	20500	15400	27.8	24.4	35	31	35
8CWEX	0	0	---	0	---	2.8	---	---	---	---
	3	3	2.3	10200	7700	15.3	13.6	19	17	20
	4	4	3.0	13600	10200	19.5	17.2	24	22	25
	5	5	3.8	17000	12800	23.6	20.8	30	26	30
	6	6	4.5	20500	15400	27.8	24.4	35	31	35
	8	8	6.0	27300	20500	36.1	31.6	45	40	45
10CWEX	0	0	---	0	---	4.1	---	---	---	---
	3	3	2.3	10200	7700	16.6	14.9	21	19	25
	5	5	3.8	17000	12800	24.9	22.1	31	28	35
	6	6	4.5	20500	15400	29.1	25.7	36	32	40
	8	8	6.0	27300	20500	37.4	32.9	47	41	50
	10	10	7.5	34100	25600	45.8	40.2	57	5	60
12CWEX	0	0	---	0	---	4.1	---	---	---	---
	3	3	2.3	10200	7700	16.6	14.9	21	19	25
	5	5	3.8	17000	12800	24.9	22.1	31	28	35
	6	6	4.5	20500	15400	29.1	25.7	36	32	40
	8	8	6.0	27300	20500	37.4	32.9	47	41	50
	10	10	7.5	34100	25600	45.8	40.2	57	5	60

COOLING CAPACITY																	
UNIT MODEL	NOMINAL CFM	45 DEGREE ENTERING WATER									42 DEGREE ENTERING WATER						
		GPM	P.D. (Ft. Wtr.)	80F D.B. / 67F W.B.			75F D.B. / 63F W.B.			GPM	GPM (Ft. Wtr.)	80F D.B. / 67F W.B.			75F D.B. / 63F W.B.		
				TH	SH	TR	TH	SH	TR			TH	SH	TR	TH	SH	TR
4CWEX	400	1.5	4.3	9.7	8.8	13.0	7.8	7.8	10.4	1.5	4.3	10.6	9.1	14.1	8.6	8.6	11.4
		2.5	10.5	12.0	9.6	9.6	9.2	8.5	7.4	2.5	10.5	13.1	10.0	10.5	10.0	8.8	8.0
		3.5	19.0	13.1	10.0	7.5	10.0	8.8	5.7	3.5	19.0	14.2	10.5	8.1	10.9	9.2	6.2
6CWEX	600	3.0	5.0	17.3	13.1	11.5	13.2	11.5	8.8	3.5	6.7	20.0	14.1	11.4	15.3	12.3	8.7
		4.0	8.6	19.2	13.8	9.6	14.7	12.1	7.3	4.5	10.7	21.7	14.8	9.6	16.6	12.8	7.4
		5.0	13.0	20.4	14.3	8.2	15.6	12.5	6.2	5.5	15.5	22.8	15.2	8.3	17.4	13.2	6.3
8CWEX	800	6.5	11.4	23.2	17.1	7.1	17.7	15.0	5.4	6.0	9.8	24.6	17.6	8.2	18.8	15.4	6.3
		7.5	14.8	24.2	17.4	6.5	18.5	15.3	4.9	7.0	13.1	25.8	18.1	7.4	19.7	15.8	5.6
		8.5	18.7	25.0	17.7	5.9	19.1	15.5	4.5	8.0	16.7	26.8	18.4	6.7	20.5	16.1	5.1
10CWEX	1000	6.5	5.7	29.0	21.6	8.9	23.2	19.0	6.8	6.0	4.6	30.7	22.2	10.2	23.5	19.4	7.8
		8.0	8.2	31.0	22.3	7.8	23.7	19.5	5.9	8.0	8.2	33.8	23.4	8.5	25.8	20.4	6.5
		9.5	11.0	32.5	22.9	6.8	24.8	20.0	5.2	10.0	12.1	35.8	24.1	7.2	27.3	20.9	5.5
12CWEX	1200	6.0	6.3	33.0	26.1	11.0	25.2	23.1	8.4	5.5	5.4	34.7	26.7	12.6	26.5	23.5	9.6
		7.5	9.5	36.1	27.3	9.6	27.6	24.0	7.4	7.0	8.4	38.3	28.1	10.9	29.3	24.6	8.4
		9.0	13.2	38.5	28.1	8.5	29.4	24.7	6.5	8.5	11.9	41.1	29.2	9.7	31.4	25.5	7.4

ACCESSORIES

OPTIONAL ACCESSORIES (FIELD INSTALLED)			
DESCRIPTION	PART #	DIMENSIONS	
WALL PANEL (1)	9PWUC01L (4-10)	43-3/8 X 25-5/8 (Outside Frame)	40-3/8 X 22-5/8 (Inside Frame)
	9PWUC02L (12)	46-3/8 X 25-5/8 (Outside Frame)	43-3/8 X 22-5/8 (Inside Frame)
HANGER BRKT. SET	90PK3	1-1/2 X 22-1/8	---
RETURN AIR COVER	90PK4 (4-10)	19-13/16 X 22	---
	90PK5 (12)	21-5/8 X 22	---
CONDENSATE OVERFLOW SWITCH	SS3	---	---
WALL THERMOSTAT 3-SPD., MANUAL CHANGEOVER	T420 (120/230/277)	---	---
WALL THERMOSTAT 3-SPD., AUTO CHANGEOVER	T421 (120/230/277)	---	---
24V WALL THERMOSTAT 3-SPD., MANUAL CHANGEOVER (AUTOSPEED 24V)	T200 (24V)	---	---
24V WALL THERMOSTAT 3-SPD., AUTO CHANGEOVER (AUTOSPEED 24V)	T201 (24V)	---	---



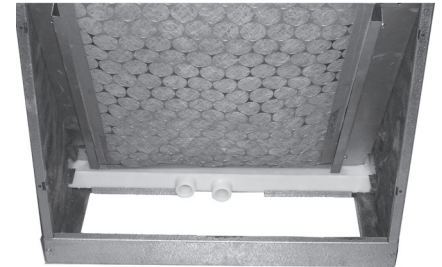
T200/T201
"AUTOSPEED 24V™"
THERMOSTAT



Optional wall panel
(Recessed wall application)



T420/T421
THERMOSTAT



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

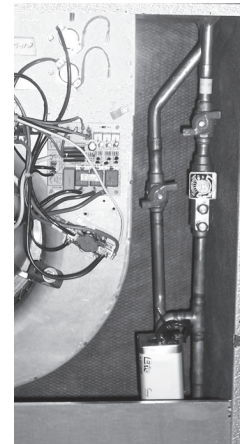
OPTIONAL VALVE CLUSTERS (Factory installed)	
PART #	DESCRIPTION
VALVE CLUSTER:	
9VCWNVM	No valves, stub kit only
9VCW2BVM	2 hand valves
9VCW22BM	2-way, valve body, 2 hand valves
9VCW23BM	3-way, valve body, 2 hand valves
POWER HEAD:	
911-111	24V

NOTES:

All models are available with or without factory installed valve clusters. Above are "standard" 2-way and 3-way valve clusters.. Contact the factory for other options such as circuit setters, strainers, auto-flow valves, etc.



Unit shown with optional
bottom return air kit
(#90PK4)



Unit shown with
an optional
valve package



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

Autospeed 24V™ Thermostats

(Part #'s T200/T201)

Accurate, Efficient, and Quiet Fan Coil Operation

The new Autospeed 24V™ thermostat (part's # T200 and T201) provides 24V AC single stage temperature control of 2 pipe and 4 pipe fan coil applications. The T200/T201 thermostat offers maximum comfort and efficiency by **automatically selecting the appropriate High, Medium, or Low fan speed**, depending on room temperature and thermostat temperature setting. This automatic fan speed control not only brings the room temperature to the desired set point quickly, it maintains the room temperature with the most efficient fan speed selection. Once the desired room temperature is achieved the fan coil operates on low speed for extremely quiet operation. The fan coil control board (which is factory installed in all CW units) is a circuit board that provides control of a 3-speed line voltage fan motor. The control board allows the thermostat to control the fan motor even though, by itself, the thermostat does not have the amperage capability nor the voltage rating capability to control the fan motor.



(T200 shown with wall plate)

T200/T201 Thermostat Features

- Compatible with 2 pipe and 4 pipe fan coils:
Series HBC/PHBC/RHBC/CHBC,
MB/MB-HW, HYB/PHYB, and CW/CW-HW
- Cycle fan or continuous fan operation
- **T200**-Manual Heat / Cool changeover switch
- **T201**-Automatic Heat / Cool changeover switch
- Large LED digital display
- Allows less expensive 24V control wiring from the fan coil to the thermostat, rather than larger, more expensive line voltage wiring.
- 3-speed fan operation, with speed indicator lights
- Fan speed determination:
 - If room temperature is 4 degrees (F.) off thermostat set point, fan will operate on High speed.
 - If 3 degrees off set point, fan will operate on Medium speed.
 - If within 2 degrees of set point, fan will operate on Low speed.
- One or 3 hour Auto override - Fan speed defaults to "Auto" mode after 1 hour if the user manually changes it to a particular fan speed.
- Temperature set range: 64-88 degrees F.
- Adjustable high and low temperature set points
- Selectable Fahrenheit / Centigrade display
- Power switch turns system off/on
- Requires 7-wire 24V thermostat wire
- No batteries required
- Set points are permanently retained in memory in case of power interruption
- Simple operation
- Mercury Free
- Wall plate included

DISPLAY CODES		
DISPLAY	STEADY	FLASHING
P1	Auto fan timer - 1 hour (default)	Auto fan timer - 3 hour
P2	Continuous fan (default)	Cycled fan
P3	°F (default)	°C
P4	Cycled fan standard	Cycled fan overdrive (default)
P5	Low temp limit 64 °F (default)	Low temp limit 67 °F
P6	Hi temp limit 88 °F (default)	Hi temp limit 84 °F



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JULY 2024