

# HH50 Series

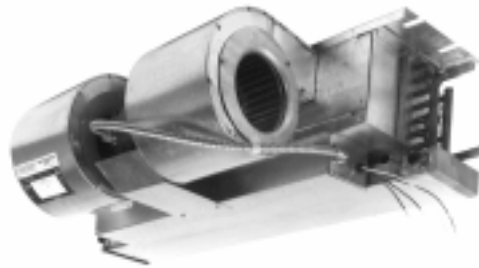
Horizontal Fan Coil - 50Hz  
Chilled Water / Electric Heat  
300 - 1400 CFM, 2 - 12 KW



## Description :

The **HH50** series fan coil is a completely factory assembled chilled water fan coil with factory installed electric heat. It is designed for minimum installation cost and optimum serviceability. The space - saving **HH50** is only 10" high (without R/A plenum) and is engineered to provide easy access for service and maintenance of the entire assembly. All standard models include 220V-50Hz 3-speed PSC motor, controls, insulated drain pan, and copper tube coil. Two versions are available: The **HH50A** series includes a 24/220V transformer, relay, and contactor for low voltage control. The **HH50B** series includes a 220V contactor for line voltage control.

**Designed especially for the 220V / 50 Cycle Markets**



## FEATURES:

1. Factory installed **heating element(s)**
2. Insulated **drain pan**
3. **High efficiency** copper tube coil
4. 24/220V transformer, relay, and contactor for **low voltage control** ("A" model) or contactor for **line voltage control** ("B" model)
5. **Primary and secondary** condensate drain connections
6. **3 speed** motors ("A" model factory wired for High-Med. operation)
7. **Galvanized steel** construction
8. Manual **air vents** on all coils

## OPTIONS: (contact factory)

1. Factory installed return air plenums with filters (insulated) (See Page 3)
2. Factory or field installed motorized valve / hand valve clusters (24V for "A" models and 220V/50 for "B" models)
3. Aquastats, thermostats, rubber grommets, etc.
4. Drip pan extension for factory installed valve clusters (field installed)
5. Ceiling access / return air grilles (See Page 4)

ELECTRICAL DATA					
MODEL	HEATING		TOTAL AMPS (1)	MIN. CIR. AMPACITY	MAX. FUSE
	kW	BTUH			
3HHS50A or B	2	6,820	9.3	12	15
	3	10,230	13.5	17	20
	4	13,640	17.6	23	25
	5	17,050	21.8	28	30
4HHS50	3	10,230	13.3	17	20
	5	17,050	21.6	27	30
	6	20,460	25.8	33	35
6HHS50	3	10,230	14.1	18	20
	5	17,050	22.4	28	30
	6	20,460	26.6	34	35
	8	27,280	34.9	44	45
8HH50	5	17,050	22.8	30	30
	6	20,460	27.0	36	40
	8	27,280	35.3	45	45
	10	34,100	43.6	55	60
10HH50	5	17,050	22.8	30	30
	6	20,460	27.0	35	35
	8	27,280	35.3	45	45
	10	34,100	43.6	55	60
12HH50	5	17,050	23.6	30	30
	6	20,460	27.8	35	35
	8	27,280	36.1	46	50
	10	34,100	44.5	56	60
	12	40,920	27.8	35	35
			25.0	32	35

- (1) Includes motors and heaters  
(2) Contact factory for other kW ratings.

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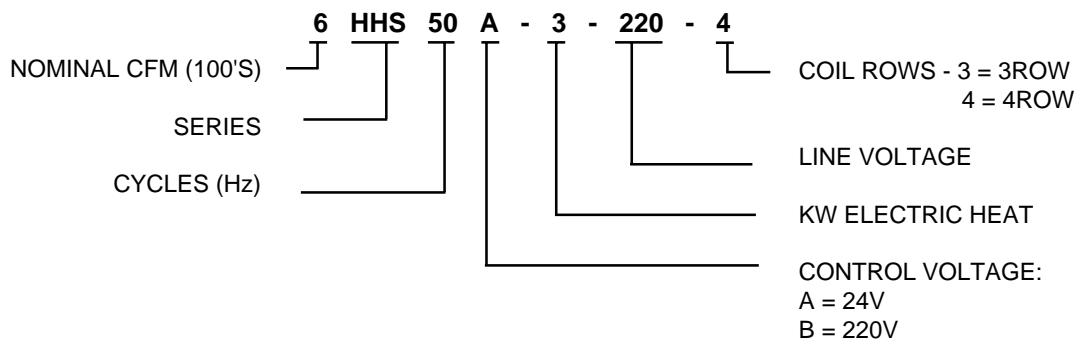
**NOTE:**

Above information based on high fan speed, standard air at dry coil operation, 10°F water temperature rise, entering air 80°F DB, 67°F WB entering water at 45°F.

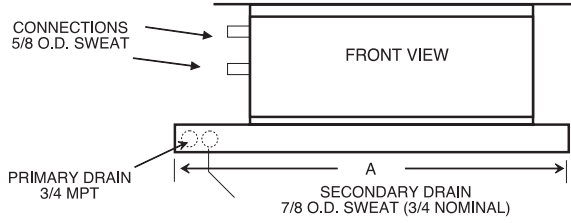
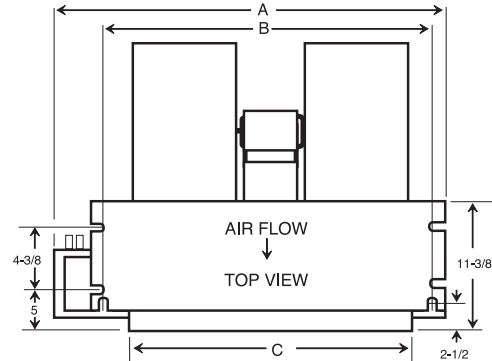
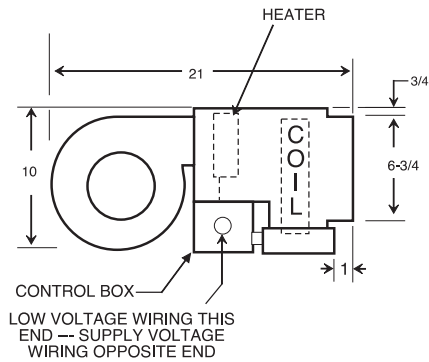
COOLING / HEATING CAPACITIES (HH50A & B)						
MODEL (CFM)	COIL ROWS	GPM	P.D (FT. WTR)	TOTAL (1) COOLING	SENSIBLE COOLING	WATER (2) HEATING CAPACITY
3HHS50 (300)	3	1.0	1.4	6,100	4,300	20,200
		1.5	3.0	7,300	5,000	21,800
		2.0	5.0	8,300	5,400	22,600
	4	1.0	1.8	7,300	4,900	22,600
		1.5	3.7	8,100	5,200	24,400
		2.0	6.4	8,800	5,500	25,300
4HHS50 (400)	3	1.5	4.3	11,000	8,000	34,000
		2.0	7.0	12,000	8,500	35,600
		2.5	10.0	12,700	8,800	36,700
	4	1.5	6.0	13,000	8,500	36,100
		2.0	10.0	14,000	8,700	37,800
		2.5	14.0	15,000	8,900	39,000
6HHS50 (600)	3	3.0	5.8	15,000	10,400	43,000
		4.0	9.5	16,400	10,800	48,700
		5.0	14.0	17,600	11,200	50,200
	4	3.0	4.0	15,600	11,000	50,900
		4.0	6.5	17,200	11,500	52,400
		5.0	9.5	18,200	11,800	54,100
8HH50 (800)	3	4.0	5.4	20,600	16,000	57,000
		5.0	8.0	22,200	16,700	59,700
		6.0	11.0	23,200	17,200	60,000
	4	4.0	6.5	22,600	16,600	63,000
		5.0	10.0	24,600	17,400	66,000
		6.0	13.5	26,000	17,900	67,100
10HH50 (1000)	3	5.5	10.0	26,200	20,200	70,100
		6.5	13.8	27,800	21,000	74,000
		7.5	18.0	29,200	21,500	75,500
	4	5.5	7.6	29,000	21,500	77,300
		6.5	10.5	31,000	22,200	81,500
		7.5	13.6	32,400	22,700	83,100
12HH50 (1200)	3	6.5	9.2	29,600	22,400	80,500
		8.0	13.3	31,600	23,100	82,700
		9.5	18.1	32,900	23,600	84,000
	4	6.5	11.5	35,400	26,200	94,500
		8.0	16.5	37,800	27,100	97,100
		9.5	22.3	39,400	27,700	98,600

- (1) Cooling at 80°F DB/67°F WB, 45°F Entering Water Temperature.  
(2) Heating at 70°F DB/180°F Entering Water Temperature.

**MODEL NUMBERING SYSTEM**



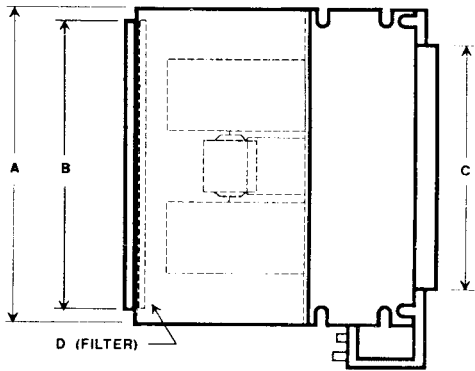
BLOWER DATA (HH50A & B)										
UNIT MODEL	FAN SPEED	MAX. RPM	AMPS	H.P.	CFM vs. EXTERNAL STATIC PRESSURE					
					0.05	0.10	0.15	0.20	0.25	0.30
3HHS50	HIGH	1300	0.60	1/20	325	305	285	265	240	215
	MED				250	235	215	195	175	140
	LOW				170	150	130	110	85	50
4HHS50	HIGH	1300	0.30	1/25	450	410	370	330	290	240
	MED				360	320	290	250	200	150
	LOW				290	250	210	170	130	80
6HHS50	HIGH	1300	0.80	1/10	640	600	565	520	475	420
	MED				525	495	460	420	370	310
	LOW				440	415	380	345	300	250
8HH50	HIGH	1400	1.6	1/4	830	790	750	700	660	610
	MED				740	700	660	620	580	535
	LOW				645	610	580	545	505	465
10HH50	HIGH	1400	1.6	1/4	1055	1010	970	925	880	830
	MED				835	805	775	735	695	650
	LOW				655	630	605	580	550	510
12HH50	HIGH	1400	3.4	1/3	1260	1215	1160	1110	1050	1000
	MED				1060	1025	985	940	900	850
	LOW				900	880	855	820	795	750



NOTE: RIGHT HAND MODEL SHOWN - LEFT HAND MODEL HAS DRAIN AND PIPING CONNECTIONS ON OPPOSITE SIDE OF FAN COIL.

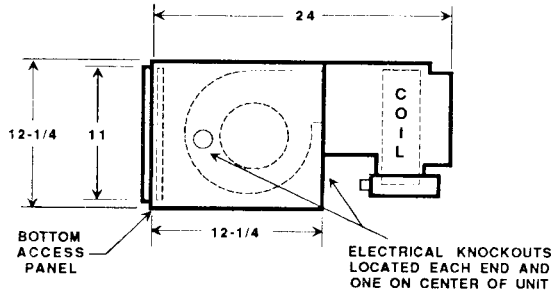
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PHYSICAL DIMENSIONS (LESS PLENUM)					
UNIT MODEL	A	B	C	NO. OF MOTORS	NO. OF BLOWERS
3HHS50	25	19-11/16	15	1	1
4HHS50, 6HHS50 8HH50	40	34-11/16	30	1	2
10HH50	46	40-11/16	36	1	2
12HH50	52	46-11/16	42	1	2



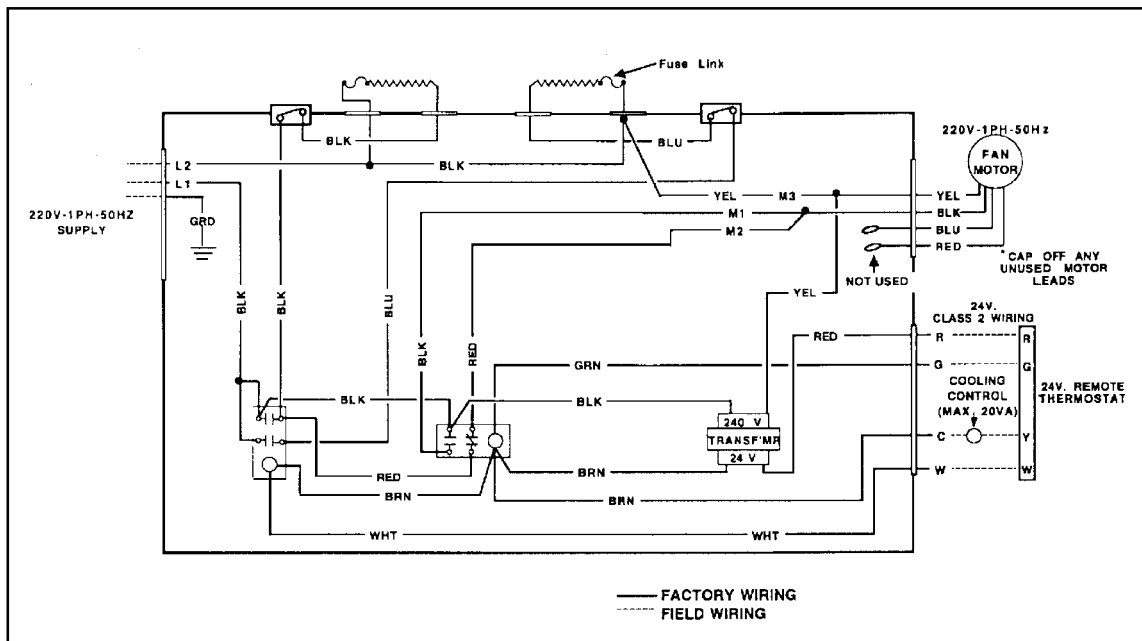
PLENUM DATA					
PLENUM PART NO.	MODEL	A	B	C	D (FILTER)
918-1	3HHS	19-1/4	14	15	12 X 16 X 1
918-2	4 & 6 HHS 8HH	34-1/4	29	30	12 X 31 X 1
918-3	10HH	40-1/4	35	36	12 X 37 X 1
918-4	12HH	46-1/4	41	42	14 X 43 X 1

- NOTE:**
1. Return plenums are insulated
  2. All plenums include throw away filter
  3. Return plenums are only available as a factory installed option

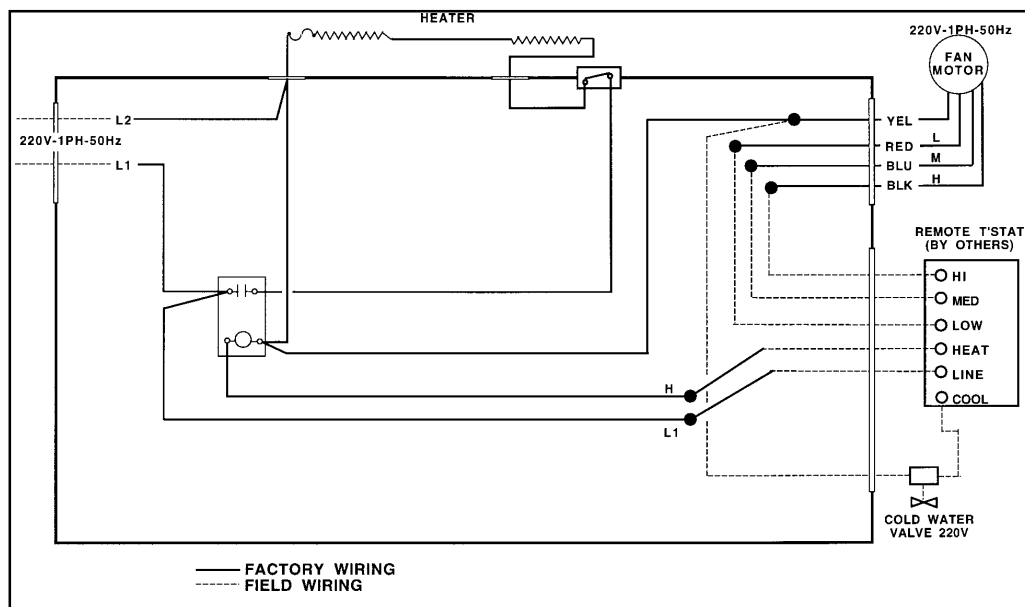


Plenum Dimensions

# TYPICAL WIRING DIAGRAMS:



HH50A



HH50B



Typical Valve Cluster

CEILING ACCESS PANELS			
PART NO.	FRAME DIMENSION	TYPE	FOR FIRST CO. FAN COIL MODELS
965	27-1/2 X 43	LOUVERED	3HHS, 4HHS, 6HHS
965-1	27-1/2 X 43	SOLID	
966	27-1/2 X 49	LOUVERED	8HH
966-1	27-1/2 X 49	SOLID	
967	27-1/2 X 55-1/2	LOUVERED	10HH
967-1	27-1/2 X 55-1/2	SOLID	

**NOTES:**

1. Panels are surface mount and coated with white baked on epoxy paint
2. Filter clips are provided on louvered models (no filter)
3. Panel doors are hinged

THERMOSTATS and ACCESSORIES		
PART NO.	DESCRIPTION	FOR USE WITH
E332-1	3 SPEED WALL SWITCH (3) WITH NO OFF POSITION	HH50B SERIES
919-1	EXTENDED DRIP PAN	HH50A & B SERIES WITH VALVES
CP34	ISOLATION RUBBER	HH50A & B SERIES

**NOTES:**

1. See Page 3 for return plenums
2. For motorized valves and factory mounted valve clusters, consult factory
3. 3-speed switch should **not** be used on dual element air handlers (above 6kW)