

"AUTOSPEED 24V" CONTROL



Product Specifications

HYB Series
PHYB Series

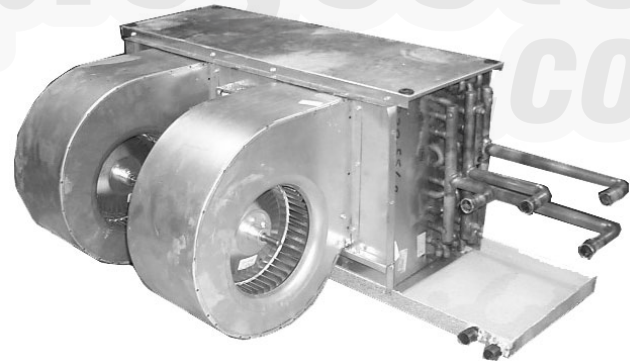
Lo Boy Horizontal
Hydronic
Fan Coils
500-2000 CFM

120V/1/60Hz
220-240V/1/50/60Hz
Available in 3, 4, and 5 ton

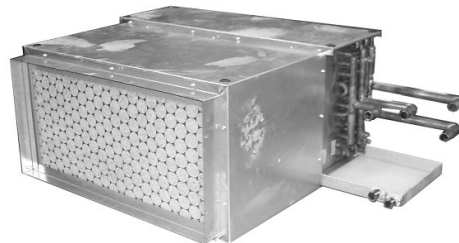
HYB Series Horizontal Concealed
PHYB Series - Horizontal Concealed w/Plenum

"AUTOSPEED 24V" CONTROL PACKAGE (With 24V, Automatic 3-speed fan selection)

- Quiet Operation
- Low Silhouette (16-1/2")
- Compact Design
- Durable Construction
- 4 speed direct drive motors



HYB Series



PHYB Series

TABLE OF CONTENTS

Cooling Data.....	3
Heating Data.....	4
Capacity Factors.....	4
HYB Blower Data 120V/1/60Hz.....	5
PHYB Blower Data 120V/1/60Hz	5
HYB Blower Data 220-240/1/50/60Hz.....	6
PHYB Blower Data 220-240/1/50/60Hz	6
HYB Dimensions / Submittal Data.....	8
PHYB Dimensions / Submittal Data.....	8
Valves & Individual Components.....	9
Optional 24V Control Package.....	10
Guide Specifications	11

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.

COOLING DATA

(P)HYB-3 (3-Row Coil) All capacities are based on nominal CFM.

COOLING CAPACITY (1000 BTUH)																
MODEL (CFM)	45° ENTERING WATER								42° ENTERING WATER							
	GPM	P.D. (FT. WTR.)	80° DB 67° WB			75° DB 63° WB			GPM	P.D. (FT. WTR.)	80° DB 67° WB			75° DB 63° WB		
			TH	SH	TR	TH	SH	TR			TH	SH	TR	TH	SH	TR
12HYB-3 (1200)	5	2.6	30.1	24.2	12.0	23.0	21.4	9.2	6	3.6	35.5	26.2	11.8	27.1	23.0	9.0
	7	4.7	34.5	25.8	10.0	26.4	22.7	7.5	8	6.0	39.3	27.6	9.8	30.0	24.1	7.5
	9	7.4	37.3	26.9	8.3	28.5	23.5	6.3	10	9.0	41.7	28.5	8.3	31.8	24.8	6.4
16HYB-3 (1600)	6	1.8	37.6	31.4	12.5	32.5	32.5	10.8	7	2.4	44.1	33.8	12.6	33.7	29.8	9.6
	9	3.7	44.9	34.1	10.0	34.3	30.0	7.6	10	4.5	50.9	36.3	10.2	38.9	31.8	7.8
	12	6.3	49.4	35.8	8.2	37.8	31.3	6.3	13	7.3	55.1	37.9	8.5	42.1	33.0	6.5
20HYB-3 (2000)	8	2.1	54.8	39.5	11.9	35.0	35.0	8.5	10	3.2	57.5	43.1	11.5	43.9	37.9	8.8
	11	3.8	57.7	42.1	10.0	41.9	37.1	7.6	13	5.2	63.5	45.3	9.8	48.5	39.6	7.5
	14	5.9	59.7	43.9	8.5	45.6	38.5	6.5	16	7.6	67.7	46.9	8.5	51.7	40.9	6.5

TH - Total Heat

SH - Sensible Heat

TR - Water Temperature Rise

(P)HYB-4 (4-Row Coil) All capacities are based on nominal CFM.

COOLING CAPACITY (1000 BTUH)																
MODEL (CFM)	45° ENTERING WATER								42° ENTERING WATER							
	GPM	P.D. (FT. WTR.)	80° DB 67° WB			75° DB 63° WB			GPM	P.D. (FT. WTR.)	80° DB 67° WB			75° DB 63° WB		
			TH	SH	TR	TH	SH	TR			TH	SH	TR	TH	SH	TR
12HYB-4 (1200)	6.5	5.2	39.3	29.5	12.1	30.0	25.8	9.2	7.5	6.7	45.0	31.7	12.0	34.4	27.6	9.2
	8.5	8.5	42.9	30.8	10.1	32.8	26.9	7.7	9.5	10.4	48.2	32.9	10.1	36.8	28.5	7.7
	11.5	14.7	45.9	32.0	8.0	35.1	27.8	6.1	13.0	18.4	51.0	34.0	8.0	39.0	29.4	6.0
16HYB-4 (1600)	8.5	4.2	51.3	38.9	12.1	39.2	34.1	9.2	10.0	5.6	59.4	41.9	11.9	45.4	36.6	9.1
	11.5	7.3	57.0	41.1	9.9	43.5	35.9	7.6	13.0	9.1	64.3	43.9	9.9	49.1	38.1	7.6
	15.0	11.8	61.0	42.6	8.1	46.6	37.1	6.2	17.0	14.9	68.0	45.3	8.0	51.9	39.2	6.1
20HYB-4 (2000)	10.5	4.6	62.8	48.1	12.0	48.0	42.3	9.1	12.0	5.9	72.1	51.7	12.0	55.1	45.1	9.2
	14.0	7.7	69.8	50.7	10.0	53.3	44.4	7.7	16.0	9.8	79.1	54.3	9.9	60.4	47.2	7.6
	19.0	13.4	75.7	53.0	8.0	57.8	46.1	6.1	21.0	16.0	84.1	56.3	8.0	64.3	48.7	6.1

TH - Total Heat

SH - Sensible Heat

TR - Water Temperature Rise

(P)HYB-6 (6-Row Coil) All capacities are based on nominal CFM.

COOLING CAPACITY (1000 BTUH)																
MODEL (CFM)	45° ENTERING WATER								42° ENTERING WATER							
	GPM	P.D. (FT. WTR.)	80° DB 67° WB			75° DB 63° WB			GPM	P.D. (FT. WTR.)	80° DB 67° WB			75° DB 63° WB		
			TH	SH	TR	TH	SH	TR			TH	SH	TR	TH	SH	TR
12HYB-6 (1200)	8.0	10.2	48.0	33.0	12.0	36.7	28.6	9.2	9.0	12.6	54.1	35.4	12.0	41.3	30.5	9.2
	10.0	15.3	50.9	34.1	10.2	38.9	29.5	7.8	11.5	19.1	57.0	36.6	9.9	43.6	31.4	7.6
	13.0	24.6	53.3	35.1	8.2	40.7	30.3	6.3	14.5	30.1	59.0	37.4	8.1	45.1	32.1	6.2
16HYB-6 (1600)	10.5	7.3	63.0	43.6	12.0	48.1	37.9	9.2	12.0	9.2	71.6	47.0	11.9	54.7	40.5	9.1
	13.5	11.4	67.7	45.0	10.0	51.7	39.3	7.7	15.0	13.8	75.6	48.6	10.1	57.7	41.8	7.7
	18.0	19.2	71.6	47.0	8.0	54.7	40.5	6.1	20.0	23.2	79.2	50.1	7.9	60.5	42.9	6.0
20HYB-6 (2000)	12.0	9.1	77.5	54.0	11.9	59.2	46.9	9.1	14.5	11.1	87.5	58.0	12.1	66.8	50.0	9.2
	17.0	14.9	83.9	56.5	9.9	64.1	48.9	7.5	19.0	18.2	93.9	60.5	9.9	71.7	52.0	7.5
	22.0	23.8	88.6	58.4	8.1	67.6	50.4	6.1	24.5	29.0	98.1	62.3	8.0	74.9	53.4	6.1

TH - Total Heat

SH - Sensible Heat

TR - Water Temperature Rise

HEATING DATA

(P)HYB-3 (3-Row Coil / 2-Pipe)

HEATING CAPACITY (1000 BTUH)						
MODEL (CFM)	GPM	P.D. (FT. WTR.)	ENTERING WATER TEMP.			
			180°F	160°F	140°F	120°F
12HYB-3 (1200)	7	4.7	96	78	61	43
	10	9.0	100	82	63	45
	13	14.4	101	83	64	46
16HYB-3 (1600)	10	4.5	129	105	82	59
	13	7.3	133	109	85	60
	15	9.5	135	110	86	61
20HYB-3 (2000)	12	4.5	159	130	101	72
	16	7.6	165	135	105	75
	20	11.5	168	137	107	76

NOTES:

1. Ratings at 70 degree entering air temp.
2. Contact factory for capacities at other conditions

(P)HYB-1 (1-Row Coil / 4-Pipe)

HEATING CAPACITY (1000 BTUH)						
MODEL (CFM)	GPM	P.D. (FT. WTR.)	ENTERING WATER TEMP.			
			180°F	160°F	140°F	120°F
12HYB (1200)	1.0	1.8	30	24	19	14
	2.5	8.7	39	32	25	18
	4.0	19.8	42	34	27	19
16HYB (1600)	1.0	2.5	38	31	24	17
	2.5	11.8	49	40	31	22
	4.0	26.1	54	44	34	24
20HYB (2000)	1.0	3.1	45	37	29	20
	2.5	14.6	58	47	37	26
	4.0	32.4	65	53	41	30

NOTES:

1. Ratings at 70 degree entering air temp.
2. Contact factory for capacities at other conditions

(P)HYB-4 (4-Row Coil / 2-Pipe)

HEATING CAPACITY (1000 BTUH)						
MODEL (CFM)	GPM	P.D. (FT. WTR.)	ENTERING WATER TEMP.			
			180°F	160°F	140°F	120°F
12HYB-4 (1200)	6	4.5	107	88	68	49
	8	7.6	111	91	71	50
	10	15.9	115	94	73	52
16HYB-4 (1600)	8	3.7	142	116	90	64
	12	7.9	150	123	95	68
	15	11.8	153	125	97	70
20HYB-4 (2000)	10	4.2	176	144	112	80
	14	7.7	185	151	118	84
	18	12.2	190	155	121	86

NOTES:

1. Ratings at 70 degree entering air temp.
2. Contact factory for capacities at other conditions

(P)HYB-2 (2-Row Coil / 4-Pipe)

HEATING CAPACITY (1000 BTUH)						
MODEL (CFM)	GPM	P.D. (FT. WTR.)	ENTERING WATER TEMP.			
			180°F	160°F	140°F	120°F
12HYB (1200)	4	1.5	69	56	44	31
	8	5.2	77	63	49	35
	12	11.0	80	65	51	36
16HYB (1600)	8	2.7	99	81	63	45
	12	5.5	105	86	67	48
	16	9.3	108	88	69	49
20HYB (2000)	12	4.1	126	103	80	57
	16	6.7	131	107	83	60
	20	10.0	134	110	85	61

NOTES:

1. Ratings at 70 degree entering air temp.
2. Contact factory for capacities at other conditions

(P)HYB-6 (6-Row Coil / 2-Pipe)

HEATING CAPACITY (1000 BTUH)						
MODEL (CFM)	GPM	P.D. (FT. WTR.)	ENTERING WATER TEMP.			
			180°F	160°F	140°F	120°F
12HYB-6 (1200)	8	10.2	124	101	79	56
	10	15.3	127	104	81	58
	14	28.2	130	106	83	59
16HYB-6 (1600)	10	6.7	165	135	105	75
	14	12.2	171	140	109	78
	18	19.2	174	142	111	79
20HYB-6 (2000)	12	7.9	203	166	129	92
	17	14.9	212	173	135	96
	22	23.8	216	177	137	98

NOTES:

1. Ratings at 70 degree entering air temp.
2. Contact factory for capacities at other conditions

CFM FACTORS			
% NOMINAL CFM	TOTAL COOLING	SENSIBLE COOLING	HEATING
50	0.68	0.60	0.58
75	0.85	0.81	0.81
100	1.00	1.00	1.00
125	1.12	1.17	1.16
150	1.21	1.33	1.18

HYB Series

HYB BLOWER DATA (4-row coil)											
UNIT MODEL	HP	AMPS*	MIN. CKT. AMPACITY	MAX. CKT. PROTECTION	CFM vs. EXTERNAL STATIC PRESSURE						
					BLOWER SPEED	0.10	0.20	0.30	0.40	0.50	0.60
12HYB4	1/5	5.2	7	15	HIGH	1595	1510	1410	1310	1180	1010
					MED. HI	1310	1250	1190	1100	1000	850
					MED. LOW	1010	980	940	860	760	640
					LOW	690	640	580	510	440	340
16HYB4	1/5	5.2	7	15	HIGH	1820	1740	1660	1560	1440	1300
					MED. HI	1420	1380	1320	1260	1160	1040
					MED. LOW	1060	1020	960	900	800	700
					LOW	720	660	580	500	400	260
20HYB4	1/4	8.8	12	15	HIGH	2510	2240	2260	2120	1960	1760
					MED. HI	2040	2040	1960	1850	1720	1540
					MED. LOW	1580	1580	1540	1480	1380	1180
					LOW	1200	1190	1160	1100	1010	880

120V-1PH-60HZ

* Amps is total for (2) motors

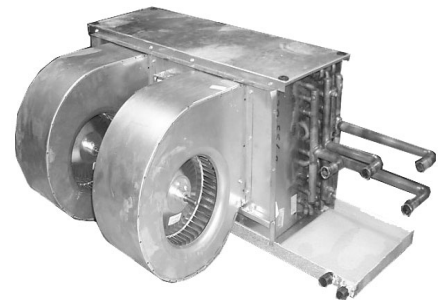
3-row coil - add 0.05 to ESP shown

6-row coil - deduct 0.10 from ESP shown



FEATURES:

1. Manual air vents
2. 4-speed direct drive motors
3. 1/2" copper tubing
4. Primary and secondary condensate drains on one end
5. 120/1/60Hz. motors (2)
6. 3-row and 6-row models available
7. Rubber isolation grommets
8. Insulated and coated drain pan



PHYB Series

PHYB BLOWER DATA (4-row coil)											
UNIT MODEL	HP	AMPS*	MIN. CKT. AMPACITY	MAX. CKT. PROTECTION	CFM vs. EXTERNAL STATIC PRESSURE						
					BLOWER SPEED	0.10	0.20	0.30	0.40	0.50	0.60
12PHYB4	1/5	5.2	7	15	HIGH	1400	1320	1220	1110	980	820
					MED. HI	1220	1150	1080	980	860	710
					MED. LOW	980	930	860	790	680	560
					LOW	600	600	550	490	420	340
16PHYB4	1/5	5.2	7	15	HIGH	1700	1620	1520	1420	1290	1130
					MED. HI	1370	1320	1260	1180	1060	910
					MED. LOW	1030	980	920	850	760	640
					LOW	690	630	560	480	380	230
20PHYB4	1/4	8.8	12	15	HIGH	2160	2160	2020	1880	1720	1520
					MED. HI	2000	1900	1800	1680	1520	1310
					MED. LOW	1570	1520	1470	1380	1240	1000
					LOW	1170	1140	1100	1040	940	800

120V-1PH-60HZ

* Amps is total for (2) motors

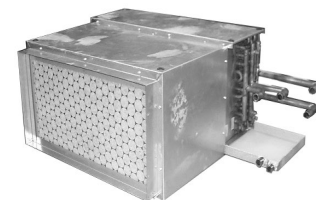
3-row coil - add 0.05 to ESP shown

6-row coil - deduct 0.10 from ESP shown



FEATURES:

1. Manual air vents
2. 4-speed direct drive motors
3. 1/2" copper tubing
4. Primary and secondary condensate drains on one end
5. Return air plenum - field convertible from end return to bottom return
6. Throw away filter
7. 120/1/60Hz. motors (2)
8. 3-row and 6-row models available
9. Rubber isolation grommets
10. Insulated and coated drain pan



HYB Series (50/60Hz.)

HYB50 BLOWER DATA (4-row coil)											
UNIT MODEL	HP	AMPS*	CFM vs. EXTERNAL STATIC PRESSURE								
			MIN. CKT. AMPACITY	MAX. CKT. PROTECTION	BLOWER SPEED	0.10	0.20	0.30	0.40	0.50	0.60
12HYB-4	1/5	4.4	7	15	HIGH	1600	1540	1470	1410	1340	1250
					MED. HI	1280	1220	1170	1110	1040	970
					MED. LOW	1000	940	880	820	750	680
					LOW	670	610	540	470	400	320
16HYB-4	1/5	4.4	7	15	HIGH	1820	1770	1710	1650	1580	1480
					MED. HI	1350	1300	1230	1150	1060	
					MED. LOW	1040	960	890	810	720	
					LOW	640	550	460	360	260	
20HYB-4	1/4	6.0	12	15	HIGH	2340	2340	2250	2150	2040	1920
					MED. HI	1830	1830	1760	1680	1580	1480
					MED. LOW	1500	1500	1440	1360	1260	1160
					LOW	1140	1140	1060	960	880	760

220-240V-1PH-50/60Hz

3-row coil - add 0.05 to ESP shown

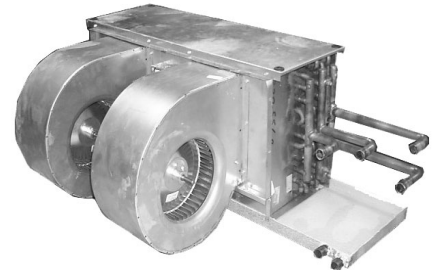
* Amps is total for (2) motors

6-row coil - deduct 0.10 from ESP shown



FEATURES:

1. Manual air vents
2. 4-speed direct drive motors
3. 1/2" copper tubing
4. Primary and secondary condensate drains on one end
5. 220-240/1/50/60Hz. motors (2)
6. 3-row and 6-row models available
7. Rubber isolation grommets
8. Insulated and coated drain pan



PHYB Series (50/60Hz. with plenum)

HYB50 BLOWER DATA (4-row coil)											
UNIT MODEL	HP	AMPS*	MIN. CKT. AMPACITY	MAX. CKT. PROTECTION	CFM vs. EXTERNAL STATIC PRESSURE						
					BLOWER SPEED	0.10	0.20	0.30	0.40	0.50	0.60
12PHYB-4	1/5	4.4	7	15	HIGH	1500	1440	1370	1300	1220	1130
					MED. HI	1230	1180	1120	1060	990	900
					MED. LOW	970	920	860	800	720	650
					LOW	650	580	520	450	390	320
16PHYB-4	1/5	4.4	7	15	HIGH	1730	1690	1610	1530	1440	1330
					MED. HI	1350	1300	1220	1150	1070	960
					MED. LOW	1050	990	920	850	770	670
					LOW	700	630	540	460	370	290
20PHYB-4	1/4	6.0	12	15	HIGH	2240	2140	2030	1930	1810	1680
					MED. HI	1830	1740	1650	1550	1430	1300
					MED. LOW	1530	1450	1370	1280	1180	1070
					LOW	1160	1080	990	900	800	680

220-240V-1PH-50/60Hz

3-row coil - add 0.05 to ESP shown

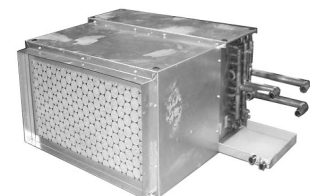
* Amps is total for (2) motors

6-row coil - deduct 0.10 from ESP shown



FEATURES:

1. Manual air vents
2. 4-speed direct drive motors
3. 1/2" copper tubing
4. Primary and secondary condensate drains on one end
5. Return air plenum - field convertible from end return to bottom return
6. Throw away filter
7. 220-240V/1/50/60Hz. motors (2)
8. 3-row and 6-row models available
9. Rubber isolation grommets
10. Insulated and coated drain pan



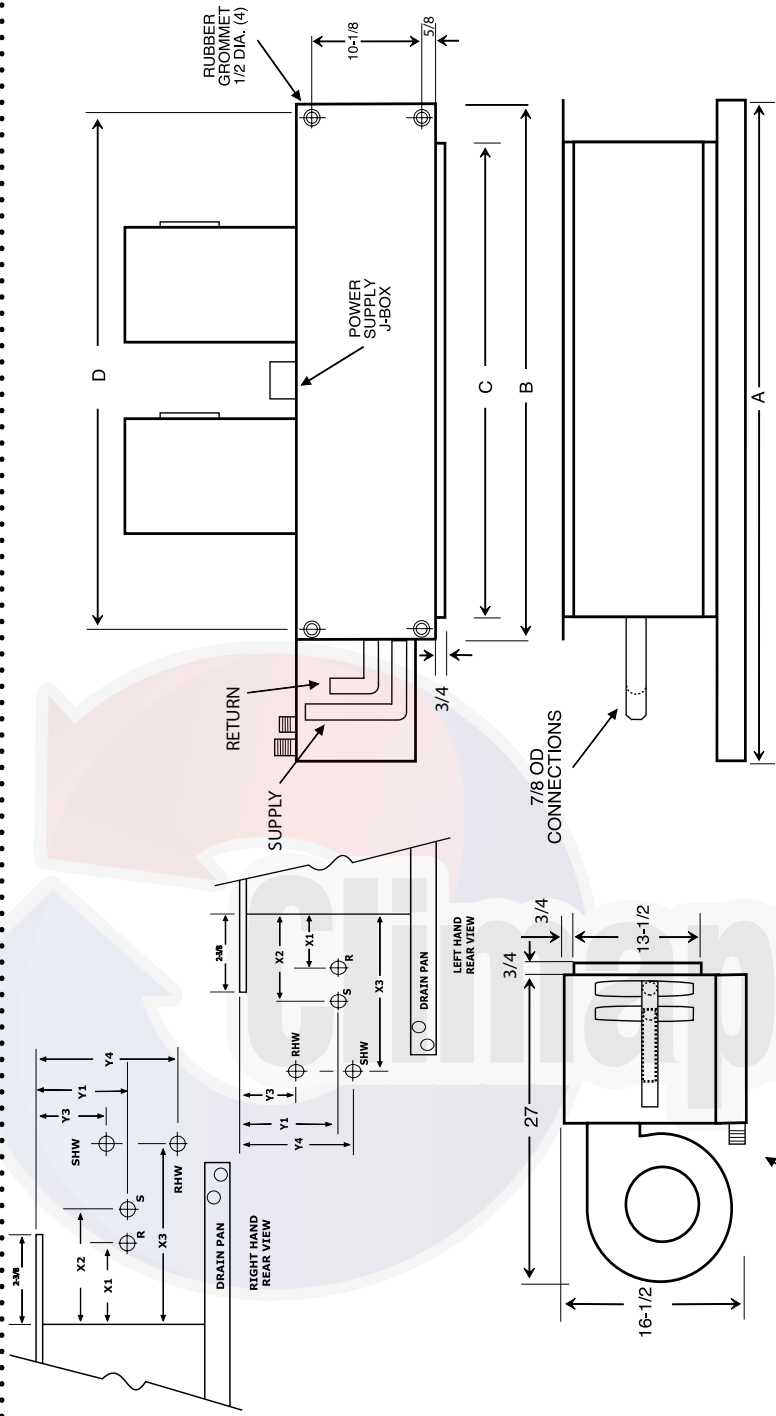
- NOTES:**
- 1) ALL DIMENSIONS IN INCHES.
 - 2) COIL CONNECTION TOLERANCE $\pm 1/4"$.
 - 3) RIGHT HAND UNIT SHOWN, LEFT HAND MIRROR IMAGE.

1. Manual air vents
2. 4-speed direct drive motors
3. 1/2" copper tubing
4. Primary and secondary condensate drains on one end
5. 3-row and 6-row models available
6. Rubber isolation grommets
7. Insulated and coated drain pan



SHIPPING WEIGHTS	
MODEL	WEIGHT (lbs.)
12HYB	105
16HYB	150
20HYB	160

GENERAL DIMENSIONS				
MODEL	A	B	C	D
12HYB	41	32-1/2	28	31-1/4
16HYB	51	42-1/2	38	41-1/4
20HYB	60	51-1/2	47	50-1/4



3/4 MPT DRAIN
PRIMARY AND
SECONDARY

HYB PIPE LOCATIONS					
RIGHT HAND	X1	Y1	X2	Y3	Y4
3 ROW	5-1/4	7-9/16	8-1/4	---	---
4 ROW	5-1/4	7-9/16	8-1/4	---	---
6 ROW	5-1/4	7-9/16	8-1/4	---	---
3/1 ROW	5-1/4	7-9/16	8-1/4	13-1/4	5-7/16
3/2 ROW	5-1/4	7-9/16	8-1/4	13-1/4	6-1/16
4/1 ROW	5-1/4	7-9/16	8-1/4	13-1/4	6-1/16
4/2 ROW	5-1/4	7-9/16	8-1/4	13-1/4	6-1/16

HYB PIPE LOCATIONS					
LEFT HAND	X1	Y1	X2	Y3	Y4
3 ROW	5-1/4	7-9/16	8-1/4	---	---
4 ROW	5-1/4	7-9/16	8-1/4	---	---
6 ROW	5-1/4	7-9/16	8-1/4	---	---
3/1 ROW	5-1/4	7-9/16	8-1/4	13-1/4	5-7/16
3/2 ROW	5-1/4	7-9/16	8-1/4	13-1/4	6-1/16
4/1 ROW	5-1/4	7-9/16	8-1/4	13-1/4	6-1/16
4/2 ROW	5-1/4	7-9/16	8-1/4	13-1/4	6-1/16

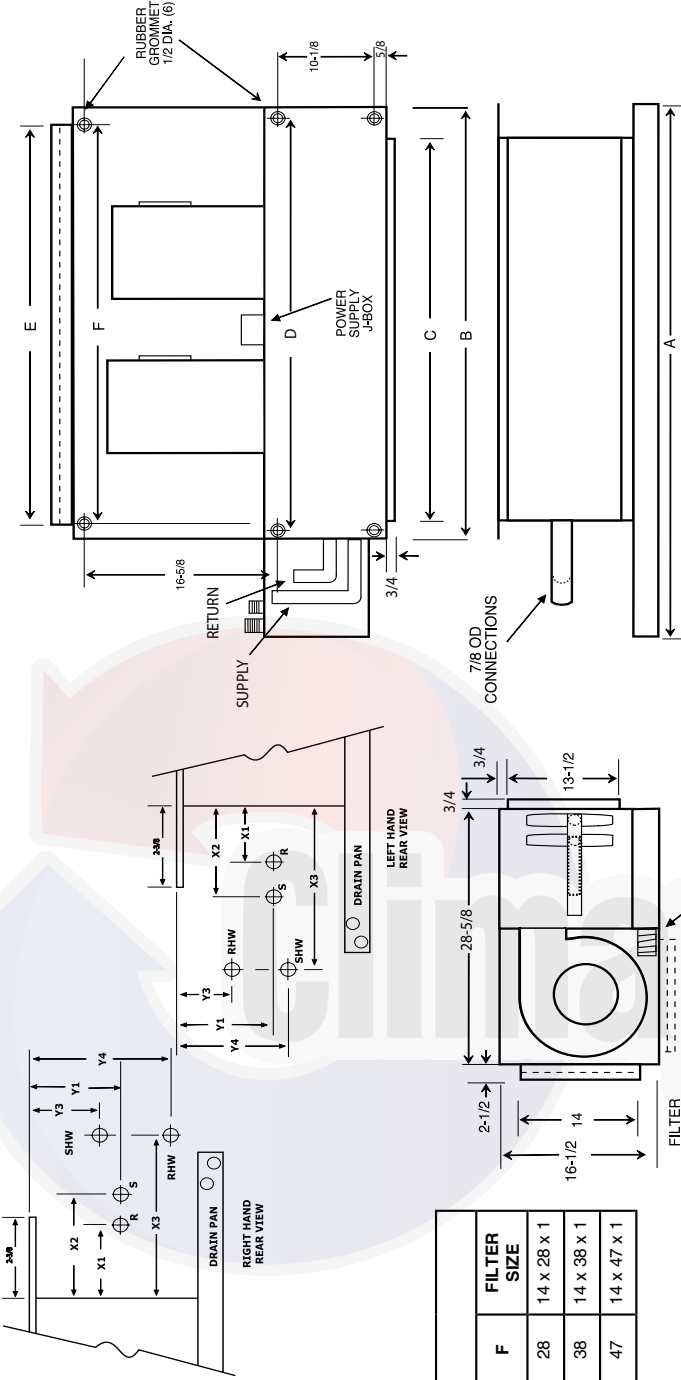
PRODUCT DRAWING
 FAN COIL UNITS
 MODEL **HYB**
 NOT FOR CONSTRUCTION

Project Name: _____
 Location: _____
 Engineer: _____
 Contractor: _____
 For: REFERENCE

Quote Date: _____
 Rev. Date: _____
 Form No.: _____
 Dwg. Lev.: _____
 Dwg. Scale: NTS



- NOTES:**
 1) ALL DIMENSIONS IN INCHES.
 2) COIL CONNECTION TOLERANCE $\pm 1/4"$.
 3) RIGHT HAND UNIT SHOWN, LEFT HAND MIRROR IMAGE.



GENERAL DIMENSIONS						
MODEL	A	B	C	D	E	F
12PHYB	41	32-1/2	28	31-1/4	28-1/4	28
16PHYB	51	42-1/2	38	41-1/4	38-1/4	38
20PHYB	60	51-1/2	47	50-1/4	47-1/4	47

SHIPPING WEIGHTS	
MODEL	WEIGHT (lbs.)
12PHYB	125
16PHYB	170
20PHYB	180

- Manual air vents
- 4-speed direct drive motors
- 1/2" copper tubing
- Primary and secondary condensate drains on one end
- Return air plenum - field convertible from end return to bottom return
- Throwaway filter
- 3-row and 6-row models available
- Rubber isolation grommets
- Insulated and coated drain pan

PHYB PIPE LOCATIONS						
RIGHT HAND	X1	X2	X3	X4	Y1	Y4
3 ROW	5-1/4	8-1/4	---	---	7-9/16	---
4 ROW	5-1/4	8-1/4	---	---	7-9/16	---
6 ROW	5-1/4	8-1/4	---	---	7-9/16	---
3/1 ROW	5-1/4	8-1/4	13-1/4	---	7-9/16	9-11/16
3/2 ROW	5-1/4	8-1/4	13-1/4	---	7-9/16	9-1/16
4/1 ROW	5-1/4	8-1/4	13-1/4	---	7-9/16	9-1/16
4/2 ROW	5-1/4	8-1/4	13-1/4	---	7-9/16	9-1/16

PHYB PIPE LOCATIONS						
LEFT HAND	X1	X2	X3	X4	Y1	Y4
3 ROW	5-1/4	8-1/4	---	---	7-9/16	---
4 ROW	5-1/4	8-1/4	---	---	7-9/16	---
6 ROW	5-1/4	8-1/4	---	---	7-9/16	---
3/1 ROW	5-1/4	8-1/4	13-1/4	---	7-9/16	8-7/16
3/2 ROW	5-1/4	8-1/4	13-1/4	---	7-9/16	9-1/16
4/1 ROW	5-1/4	8-1/4	13-1/4	---	7-9/16	9-1/16
4/2 ROW	5-1/4	8-1/4	13-1/4	---	7-9/16	9-1/16

- Project Name:**
Location:
Engineer:
Contractor:
For: REFERENCE

- Sold To:**
Cust Purch Order #:

- Quote Date:**
Rev. Date:
Form No.:
Dwg. Lev.:
Dwg. Scale: NTS

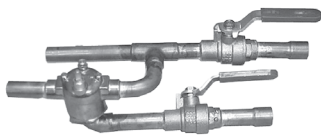
PRODUCT DRAWING
 FAN COIL UNITS
 MODEL PHYB
 NOT FOR CONSTRUCTION



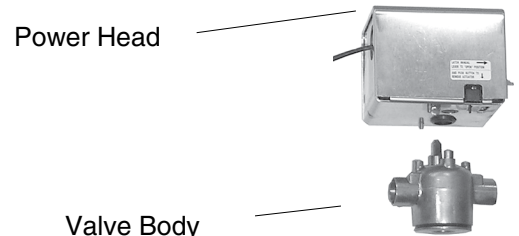
VALVE CLUSTERS AND INDIVIDUAL COMPONENTS: (field installed)

Assembled Valve Clusters: (factory-assembled and field installed) Components are factory piped together (**order power heads separately**). Contact factory for other valve clusters.

	Right Hand	Left Hand	Description (all 3/4") - For HYB,PHYB
2 pipe	9VBR2BV	9VBL2BV	2-pipe, 2 hand valves only
	9VBR2BC	9VBL2BC	2-pipe, 1 hand valve and circuit setter
	9VBR22B	9VBL22B	2-pipe, one 2-way valve body and 2 hand valves
	9VBR22C	9VBL22C	2-pipe, one 2-way valve body, 1 hand valve and circuit setter
	9VBR23B	9VBL23B	2-pipe, one 3-way valve body and 2 hand valves
	9VBR23D	9VBL23D	2-pipe, one 3-way valve body, 2 hand valves and aquastat
	9VBR23C	9VBL23C	2-pipe, one 3-way valve body, 1 hand valve and circuit setter
	9VBR23BC	9VBL23BC	2-pipe, one 3-way valve body and 3 hand valves
	9VBR23DC	9VBL23DC	2-pipe, one 3-way valve body, 3 hand valves and aquastat
4 pipe	9VBR4BV	9VBL4BV	4-pipe, 4 hand valves only
	9VBR42B	9VBL42B	4-pipe, two 2-way valve bodies and 4 hand valves
	9VBL42C	9VBL42C	4-pipe, two 2-way valve bodies, 2 hand valves and 2 circuit setters
	9VBR43B	9VBL43B	4-pipe, two 3-way valve bodies and 4 hand valves
	9VBR43BC	9VBL43BC	4-pipe, two 3-way valve bodies and 6 hand valves
Power Heads: (two power heads required for 4-pipe) - For all units			
E50131180		24V	
E50132180		110V/50Hz - 120V/60 Hz	
E50137180		277V	
E50138180		220V/50 Hz – 230V/60 Hz	
Separate Valve Bodies: (order power heads separately)			
E421317	3/4" 2-way - For HYB, PHYB		
E431317	3/4" 3-way - For HYB, PHYB		
Hand Valves: (Combination balance / shut-off) (2 usually req'd per coil)			
CP90	3/4"		
Circuit setters and Strainers			
CP6011	3/4" Circuit setter (Taco)		
CP6031	3/4" Strainer (Kitz)		
945-8	Disconnect (120V)		

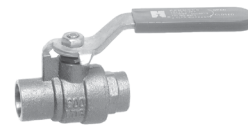


Assembled Valve Cluster (3-way)



Power Head

Valve Body



CP90

The “Autospeed 24V™” “ Control Package

All HBC/PHBC/RHBC/CHBC fan coils are now available with the “Autospeed 24V™” control package option.

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** is a circuit board that provides control of a 3-speed line voltage (120, 208-240, or 277V), (50 or 60 cycle) fan motor. The control board allows the thermostat to control the fan motor even though, by itself, the thermostat does not have the current or voltage rating capability to control the fan motor.

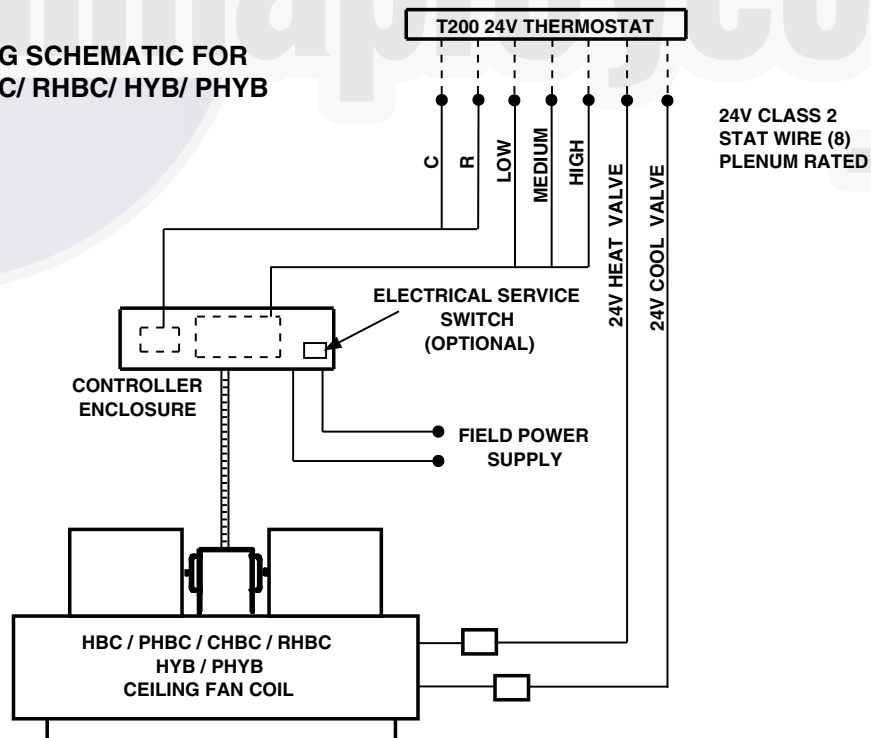
With the “Autospeed 24V™” option, a “Controller Enclosure” is factory installed on each fan coil, which includes the control board, transformer, and service switch.

Continuous or Fan-Cycle operation

T200 = Manual Changeover

T201 = Automatic Changeover

**TYPICAL WIRING SCHEMATIC FOR
HBC/ PHBC/ CHBC/ RHBC/ HYB/ PHYB**



TYPICAL 4 PIPE SHOWN

Guide Specifications - Lo Boy Fan Coils

Furnish and install First Co. horizontal fan coils as indicated on the plans and specifications. Types, sizes, and performance shall be as indicated in the schedule.

Basic Unit

All units shall be manufactured with heavy gauge galvanized steel to resist corrosion.

All piping, drain, and wiring connections shall be readily accessible. Mounting holes with rubber grommets shall be provided to save installation time and expense.

Electrical Box

Unit shall have an electrical box providing a single location for line voltage field wiring connections.

Coils

Coils shall have high efficiency aluminum fins with mechanically expanded 1/2" O.D. copper tubes. All coils shall have a manual air vent. Coil performance shall be as indicated in the schedule.

Fan Assembly

Fans shall be centrifugal, forward curved, and dynamically balanced for smooth, quiet operation. Fan housings shall be fabricated of heavy gauge galvanized steel and be easily removed, thus allowing complete service access to the fans and motors.

Motors

All units shall have (120/1/60) (220-240V/1/50/60Hz) four speed motors with permanently lubricated sleeve bearings, permanent split capacitor, inherent thermal overload protection with automatic reset, and resilient rubber motor mounts.

Drain Pan

Drain pans shall be insulated to prevent sweating. Drain pans shall be coated to reduce corrosion. Threaded primary and secondary drain connections shall be factory installed.

Return Plenum / Filter

All **PHYB** models shall have factory installed return air plenums. These plenums shall be capable of being field converted from end return to bottom return. One inch throwaway filters shall be installed within the plenums.

