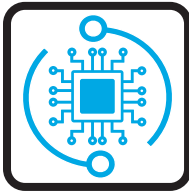


PHW - HIGHWALL FAN COIL



FEATURES



CONTROL FLEXIBILITY

Two types of control system: Intelligent control board (I-Control) controlled via Infra-red handset and/or Intelligent wired wall pad or Flexible control (W-Control) permitting operation with external thermostat applications both controls allows configuration for 2 or 4-pipe settings.



INTEGRATED VALVES

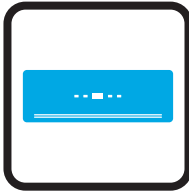
Optional 2 or 3-way both On/Off and modulating thermoelectric integrated valves located in a new position for easier maintenance. Synthetic elastomer tubes with stainless steel outer braiding and brass connectors, to enable quick and low-cost connections with no brazing.



EFFICIENT EC MOTOR

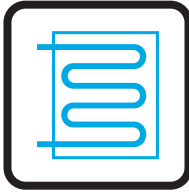
EC motors allow the tangential blower wheel to operate at optimum airflow performance, energy efficiency and quiet operation. EC motors include driven control PCB, constant torque, permanent magnet and 3 speeds pre-set or modulating with a 0-10 VDC signal for precise air balancing control.

CASING



New stylish design built of durable flame-resistant ABS white color plastic, with rounded corners to give modern aesthetics and integrated LED display. Housed in only two casing sizes, to allow consistency and uniformity on projects where multiple units are required.

WATER COILS



Built with seamless copper tubes and headers, mechanically expanded into corrugated aluminium fin material for a permanent primary to secondary surface bond. Tested at 500 psi, with maximum operating limits at 300 psi.

READY TO INSTALL



The PHW range is offered as a complete package including standard items such as internal drain pan, NBR insulation, and MERV 4 filter. Furthermore, we offer multiple optional accessories.

KEY POINTS

- High latent performance- dehumidification
- Auto Dynamic Balancing with I-control
- Easy maintenance accessibility



ACCESSORIES

- IR Handset or Wired Wall Pad (Available with I-Control)
- Thermostat Controller (Available with W-Control)
- 2 or 3 Way On/Off & Modulating Valves
- Integrated Sauermann Condensate Pump
- Electric heater up to 1.5kW

*Please refer to page 86 for further information and accessories.

TECHNICAL SPECIFICATIONS

Hydronic Highwall, 2 pipe with **EC Motor**

UNIT GENERAL SPECS	PHW-[Size]-V-AECM			200	300	400	500	600	750	
	Configuration			2-pipe						
	Number of Fan Blowers			Single						
	Power Supply (V/Ph/Hz)			208-240/1/60 or 110-120/1/60						
AIR	Total Air Flow	H	CFM	223	323	400	464	617	735	
		M		159	223	323	353	500	600	
		L		118	159	200	224	300	353	
COOLING	Cooling Capacity	H	BTU/Hr	6243	8499	11136	14767	17017	22200	
		M		4824	6479	9606	12102	14381	18927	
		L		3800	4939	6564	8508	9774	12577	
	Sensible Cooling Capacity	H		4255	5869	7657	9980	11587	15126	
		M		3241	4391	6522	8048	9670	12708	
		L		2507	3295	4367	5538	6427	8251	
		HEATING		Heating Capacity	H	BTU/Hr	9705	13212	17311	22957
M	7499		10072		14933		18813	22357	29422	
L	5908		7678		10205		13226	15195	19552	
	Max. Electric Heater Capacity @ 115V		kw	0.5		0.75				
	Max. Electric Heater Capacity @ 220V			1		1.5				
SOUND	Pressure Level (H/M/L)		dB(A)	33/27/25	42/33/27	47/42/27	50/45/33	50.2/45.3/32	53/48/36	
	Power Level (H/M/L)			42/36/34	51/42/36	56/51/36	59/54/42	59.2/54.3/41	62/57/45	
ELECTRICAL	Power Input	H	W	13	20	30	38	50	65	
		M		9	13	20	25	31	40	
		L		7	9	11	13	12	16	
	Running Current 115V (H)		A	0.31	0.23	0.38	0.52	0.52	0.7	
	Running Current 220V (H)			0.16	0.12	0.2	0.27	0.27	0.36	
HYDRONIC	Cooling Water Flow Rate	H	GPM	1.23	1.7	2.2	2.9	3.4	4.4	
		M		0.95	1.3	1.9	2.4	2.8	3.7	
		L		0.75	1	1.3	1.7	1.9	2.5	
	Cooling Pressure Drop	H	Ft. hd.	2.69	2.6	3.9	5.3	8.7	15	
		M		1.69	1.6	3	3.7	6.4	11.3	
		L		1.1	1	1.5	2	3.2	5.4	
	Heating Water Flow Rate	H	GPM	Same as cooling water flow rate						
		M								
		L								
	Heating Pressure Drop	H	Ft. hd.	2.42	2.3	3.5	4.8	7.8	13.5	
		M		1.52	1.4	2.7	3.4	5.8	10.1	
		L		0.99	0.9	1.4	1.8	2.9	4.9	
	Water Content		Gal	0.02	0.14	0.14	0.22	0.28	0.27	

TESTING CONDITIONS (RATED AT AHRI STANDARD 440):

a. Cooling mode (2-pipe/ 4-pipe):

- Return air temperature: DB 80°F/WB 67°F
- Inlet/ outlet water temperature: 45°F/ 55°F

b. Heating mode (2-pipe):

- Return air temperature: 70°F
- Inlet water temperature: 140°F
- Water flow-rate: Same as cooling mode

(All dimensions are approximate within 1/16 of an inch of those indicated)

TECHNICAL SPECIFICATIONS

Hydronic Highwall, 4 pipe with **EC Motor**

UNIT GENERAL SPECS	PHW-[Size]-P-AECM			500	750
	Configuration			4-pipe	
	Number of Fan Blowers			Single	
	Power Supply (V/Ph/Hz)			208-240/1/60 or 110-120/1/60	
AIR	Total Air Flow	H	CFM	464	735
		M		353	600
		L		224	353
COOLING	Cooling Capacity	H	BTU/Hr	10623	16566
		M		8706	14124
		L		6120	9385
	Sensible Cooling Capacity	H		7099	11067
		M		5725	9297
		L		3939	6036
		HEATING		Heating Capacity	H
M	7156		10693		
L	5036		7156		
SOUND	Pressure Level (H/M/L)		dB(A)	38	65
	Power Level (H/M/L)			25	40
ELECTRICAL	Power Input	H	W	13	16
		M		0.52	0.7
		L		0.27	0.36
	Running Current 115V (H)		A	50/45/33	53/48/36
	Running Current 220V (H)			59/54/42	62/57/45
	HYDRONIC	Cooling Water Flow Rate	H	GPM	2.1
M			1.7		2.8
L			1.2		1.8
Cooling Pressure Drop		H	Ft. hd.	5.7	14.27
		M		4	10.71
		L		2.1	5.13
Heating Water Flow Rate		H	GPM	0.44	0.63
		M		0.78	1.16
		L		0.55	0.78
Heating Pressure Drop		H	Ft. hd.	0.6	1.15
		M		0.42	0.86
		L		0.22	0.42
Chilled Water Content		Gal	0.2	0.25	
Hot Water Content			0.076	0.095	

TESTING CONDITIONS (RATED AT AHRI STANDARD 440):

a. Cooling mode (2-pipe/ 4-pipe):

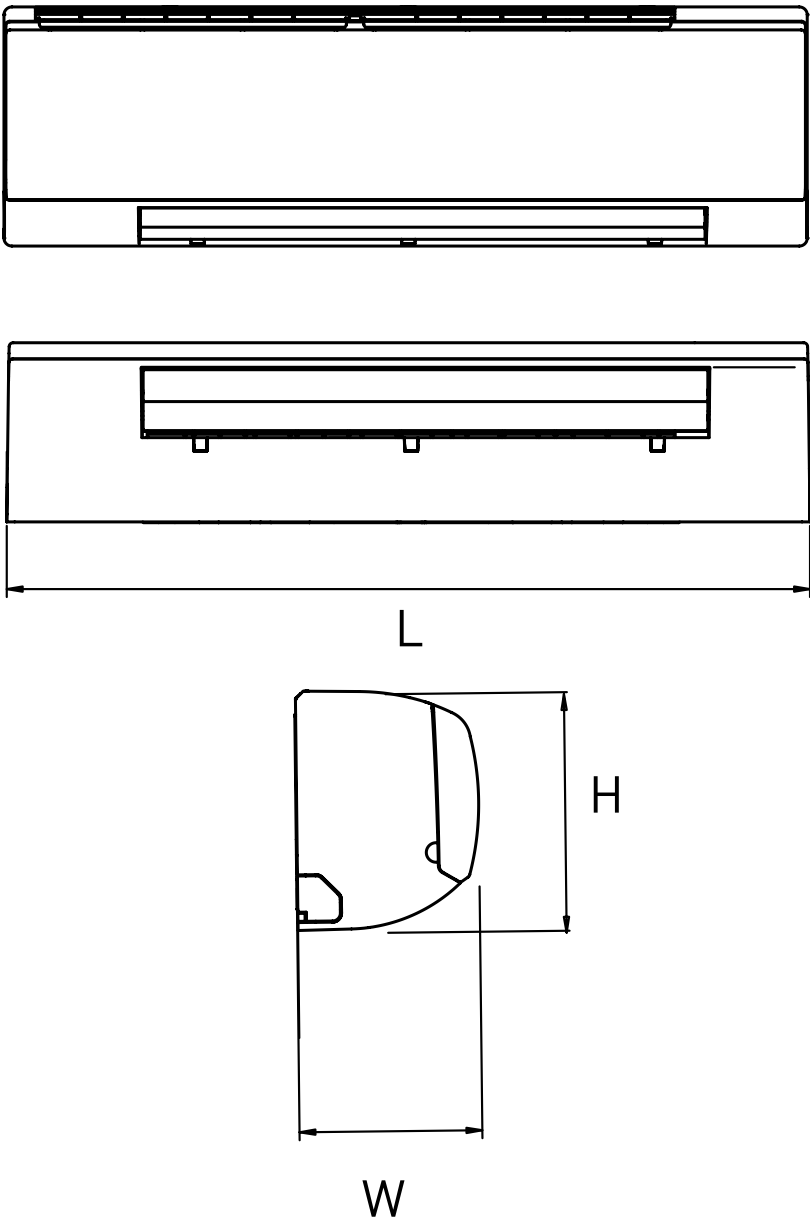
- Return air temperature: DB 80°F/WB 67°F
- Inlet/ outlet water temperature: 45°F/ 55°F

b. Heating mode (4-pipe):

- Return air temperature: 70°F
- Inlet water temperature: 180°F/140°F

(All dimensions are approximate within 1/16 of an inch of those indicated)

DIMENSIONAL DRAWINGS, DATA & WEIGHTS



PHW				200	300	400	500	600	750
CONSTRUCTION AND PACKING DATA	Water Connections	Type		MNPT (Threaded Male from the hose)					
		In	inch	1/2					
		Out		5/8					
	Condensate Drainage		inch	39 3/4				46 1/4	
	Dimensions	L		9 1/16					
		W		11 13/16					
		H							
WEIGHT	Net Weight	lbs		26.5	30.9	33.1	37.5	39.7	41.9