

# High-Wall



## Hydronic High-Wall Fan Coil



This High-Wall Unit is designed to meet and exceed demanding requirements for efficiency, quiet operation and good looks.

The sleek profile and elegantly styled cabinet complements any interior design theme, and the microprocessor assures accurate environmental control.

The maintenance is facilitated by the fact that all components are accessible opening the frontal panel.

- Cooling capacity ranging from 1.68 kW to 4.38
- Air flow ranging from 290 m<sup>3</sup>/h to 876
- Heating capacity ranging from 1.98 kW to 5.3.

Possibility to use in association with infrared handset control or with wall pad.



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## Cabinet

the cosmetically attractive cabinet is constructed of durable flame resistant acrylonitrile-butadiene-styrene (ABS) plastic. The silver white color and rounded corners provide its contemporary appearance.

## Water Coil

the water coil has a large heat transfer surface and utilizes the latest technology in fin profile. It combines an advanced technology approach with the security of a traditional tube thickness design. The water coil is also equipped with an air vent valve and a water purge valve.

## Integral Hoses

an integral hose is a synthetic elastomer tube, with stainless steel outer braiding and brass connectors, which enables quick, low cost connections with no brazing.

## Air Grille Distribution

all High-wall units are equipped with both deflector blades and independent directional vanes, enabling supply air to be automatically distributed, and air flow and direction customized.

## Microprocessor Control

The main design features include:

- FCEER rating class: A/B.
- FCCOP rating class: B/C.
- High efficiency brushless DC motor with PID algorithmic processing in auto-mode.
- 2-pipe, 2-pipe and booster electric heat, 2-pipe and primary electric heat, 4-pipe with ACHPS High Performance System.
- Cool, Heat, Auto, Dehumidifier and Fan modes.
- Sleep, Auto-Fan, Daily Timer, Auto-Restart with memory functions.
- User friendly remote control handset.
- Heat and cool temperature protections and safety cut out.
- 2-way and 3-way on/off valve control.
- Addressable control and error diagnostics (Master-Slave) for sub-networks of up to 32 units, with IR handset as global control interface.
- Wired wall pad controller (optional) with 7-day programmable timer, real-time clock, network control (global and addressable) and error diagnostics.
- Manual control panel in cabinet.
- Auxiliary switch for cooling and heating signal.
- Occupancy (remote on/off) contacts / economy mode contacts.
- Open Modbus communication protocol.
- Local PC host control solution (optional).



new

## Auxiliary Coil

High Performance System

This innovative system gives the possibility to use the fancoil of the High Wall series with one single coil in a 4 pipe system. By this way the main coil with 4 rows can receive water from the system at lower temperature than usual for getting an equivalent or even higher capacity.

For instance the feeding water temperature can be 45°C instead of the usual 70-60°C with a relevant energy saving.

The system **ACHPS**, with its combination of special valves and thermostat, provides also the by-pass of the water in the fancoil maintaining a constant pressure in the system.

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Standard EC fan motor  
for low power input



## Blower and Motor

the High-wall unit incorporates only specially designed and tested high power-factor, permanent split capacitor type blower motors, allowing the tangential blower wheel to provide optimum performance in air-flow-efficiency and quiet operation.

## Filters

washable, easy-to-remove, fine mesh air filters are standard to all High-wall models. Tabs located on the front of the unit can be unsnapped, allowing the filter to be easily slid downward and removed. No tools are required, nor are dismantling of any equipment.

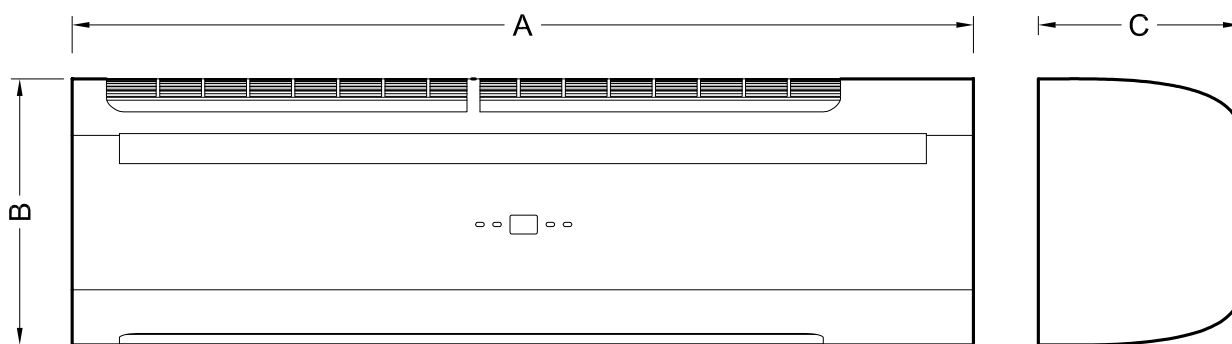
TECHNICAL DATA	speed	SWC-12-ECM	SWC-18-ECM
Air flow	1 max m <sup>3</sup> /h	500	876
	2 med m <sup>3</sup> /h	370	740
	3 min m <sup>3</sup> /h	290	570
Total cooling (a)	1 max kW	2.59	4.38
	2 med kW	2.03	3.84
	3 min kW	1.68	3.12
Sensible cooling (a)	1 max kW	1.88	3.18
	2 med kW	1.46	2.78
	3 min kW	1.2	2.24
Pressure drop (a)	1 max kPa	10	19.4
Heating capacity (b)	1 max kW	3.12	5.25
	2 med kW	2.44	4.58
	3 min kW	1.98	3.68
Pressure drop (b)	1 max kPa	9	16
Sound power	1 max dB(A)	46	57
	2 med dB(A)	38	51
	3 min dB(A)	35	45
Sound pressure (c)	1 max dB(A)	37,6	48,6
	2 med dB(A)	29,6	42,6
	3 min dB(A)	26,6	36,6
Fan power absorption	1 max W	13	30
	1 max A	0.142	0.272

(a) Room 27°C - 47% R.H. Water temp. (in/out): 7/12°C

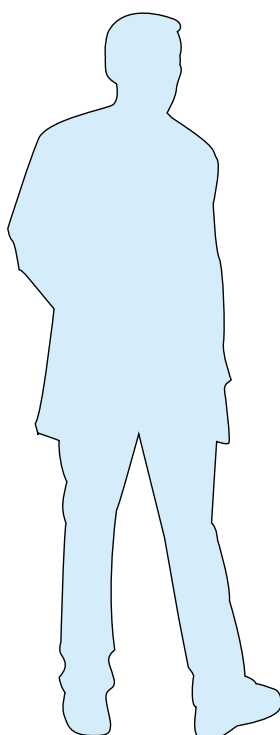
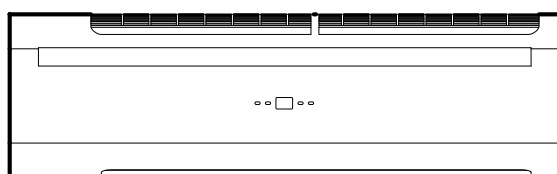
(b) Room 20°C Water temp. In: 50°C, same water flow conditioning

(c) Sound pressure: reflecting surface at 1,5m, in a 100m<sup>3</sup> room with reverberation time of 0,3s

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	SIZE	SWC-12-ECM	SWC-18-ECM
Dimensions	A mm	875	875
	B mm	300	300
	C mm	220	220
Weight	Kg	13	14



The High Wall fan coils are the result of decades of experience in the field and summarize the technical solutions adopted, all the suggestions and demands of installers and endusers.

They are therefore the ideal answer for a lot of requests in the field of airconditioning.

The technical staff is focused to the constant search for the highest quality components looking for high reliability and durability.



**Aerfor S.r.l.**  
Via Contarina n. 11  
35028 - Piove di Sacco - Padova - Italy

Tel +39 389 2939160  
fax +39 049 5806928  
e-mail : [info@aerfor.com](mailto:info@aerfor.com)  
Pec: [aerfor@registerpec.it](mailto:aerfor@registerpec.it)  
PIVA 02703580304  
R.E.A. : RO-159632

[www.aerfor.com](http://www.aerfor.com)