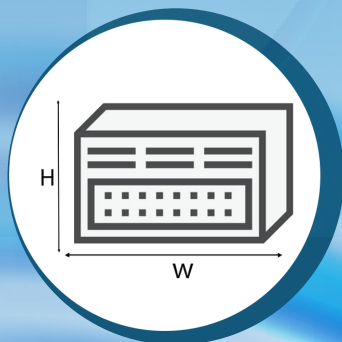




# Fan coil



Customizable  
Dimensions



Low Noise



High Efficiency

# Fan coil

## Introduction

A fan coil is an indoor unit of a heating and cooling system. It controls your home environment by moving air inside your home and can also affect your indoor humidity. As a complement to your air conditioner or heat pump, our variable-speed fan coil units can give you premium comfort and energy-saving performance. With an optional electric heat strip,

## Key points of AEE fan coil units:

### 1. Function:

Fan coil units are designed to provide both heating and cooling to different zones or rooms within a building. They can be connected to a central HVAC system and are typically controlled by a thermostat or a building management system.

### 2. Installation:

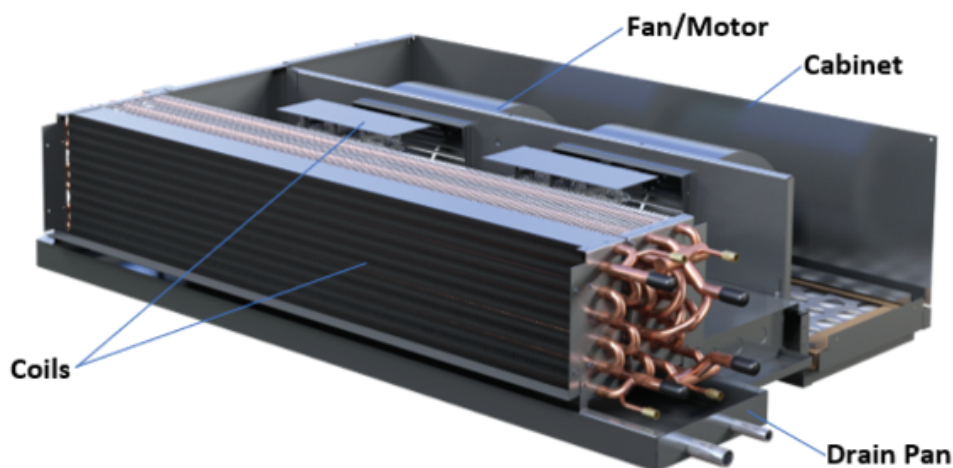
Fan coil units are installed in a dedicated space, such as a ceiling void or mechanical room, with access to the supply and return ductwork. They are connected to the ducts, which distribute the conditioned air to various areas of the building through diffusers or grilles.

### 3. Air Distribution:

The system allows for the even distribution of conditioned air throughout the building. The air is drawn into the fan coil unit, where it passes over a heating or cooling coil, and then it is pushed into the ductwork for distribution. The conditioned air is released into individual rooms through adjustable vents or diffusers.

### 4. Energy Efficiency:

Fan coil units can be designed with energy-efficient features, such as variable speed fans and advanced control systems. These features help optimize energy consumption based on the specific cooling or heating requirements of different zones, resulting in energy savings.





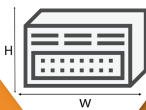
### High Efficiency

By using modern controllers, high-tech compressors and high quality fans, the efficiency of device has been increased as much as possible.



### Low Noise

The sound of device has been controlled as much as possible by using resistant body, standard and high quality fans and noise insulations.



### Customizable Dimensions

It can be possible to change the dimensions of devices with maintaining the quality due to the limitations in small spaces in every project.

## Components of AEE fan coil

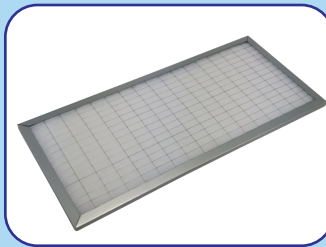
### Body:

Structure is high quality galvanized sheets which are joined to each other with screw.



### Filter:

Filter in according to current world standards is made of propylene (PP). Its efficiency is more than aluminum filters and less pressure drop. It is washable and has long life.



### Pan:

Pan is insulated on inside or outside surface to prevent condensation with 4mm thickness insulation.



**Fan:**

fan are centrifuge and made of galvanized. They are balanced statically and dynamically and have minimum noise level. **Arad Energy Ers**a Used High quality brand of fan like Yillida.



**Insulation:**

the EPS insulation is used to prevent loss of energy and reduce the noise. The thickness of elastomeric insulation is 4 mm in fan coil models HR, SV, SB and 10 mm thickness of EPS insulation in cassette types.

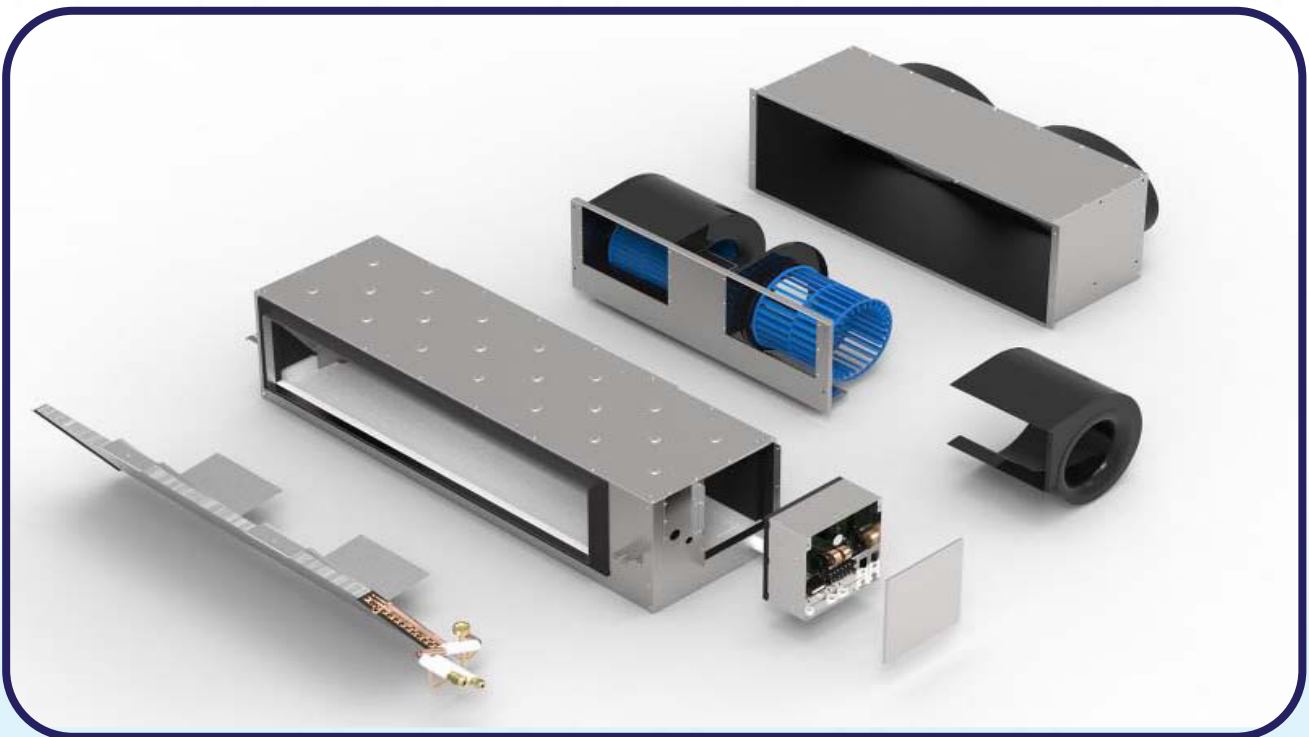
**Coil:**

Coil is made of copper tube 3/8" with aluminum fin and brass collector. the coil is 3 row with 14 fpi fin, it shall be rinsed with a special degreasing solution after manufacture and hydro tested in 190psig pressure.

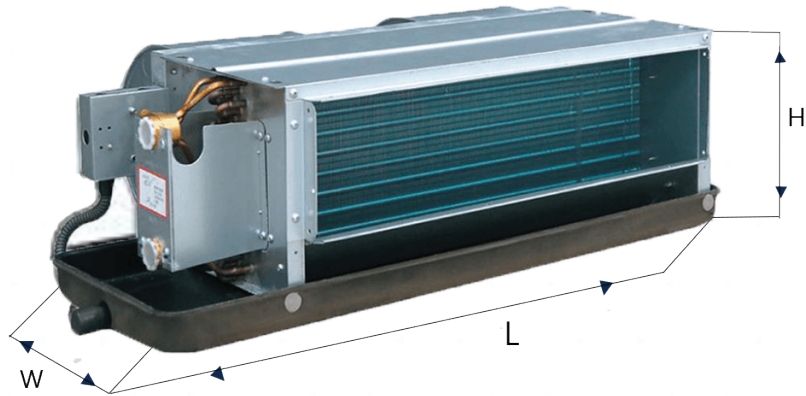


### Electro Motor:

Electro Motor that is used in fan coils is single shaft or double shaft with three speeds (low, medium and high) with thermal Class B and IP 20. They have thermal protection, if the device is overheated; the fan is turned off and switched on after cooling. **Arad Energy Ers**a Used high quality Italian brand of electromotor like SISME.

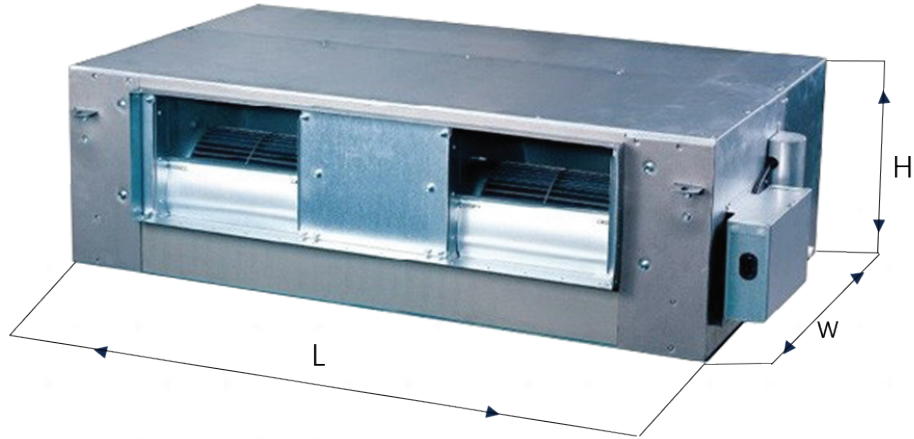


## Concealed Fan coil



Model			Concealed Fan coil						
			AEE-CFC-200	AEE-CFC-300	AEE-CFC-400	AEE-CFC-500	AEE-CFC-600	AEE-CFC-800	AEE-CFC-1000
Air Flow	High	m <sup>3</sup> /h	428	619	813	988	1058	1560	1983
		CFM	252	364	478	581	622	918	1166
	Med	m <sup>3</sup> /h	364	526	691	840	899	1326	1686
		CFM	214	309.5	406.5	494	529	780	991.5
	Low	m <sup>3</sup> /h	278	402	528	642	688	1014	1298
		CFM	164	237	311	378	405	596	758
Cooling Capacity	High	kW	2.06	2.98	4.02	4.5	5.31	7.46	8.61
	Med		1.69	2.44	3.30	3.69	4.35	6.12	7.06
	Low		1.31	1.89	2.55	2.86	3.37	4.74	5.47
Heating Capacity	High	kW	3.403	5.299	6.372	7.812	9.211	12.112	15.587
	Med		2.81	4.37	5.26	6.44	7.60	9.99	12.86
	Low		2.13	3.31	3.98	4.88	5.76	7.57	9.74
Water Flow		l/h	365	520	699	760	930	1333	1500
Water Press Drop		kPa	12.3	9.3	16.8	21.6	32.5	20.5	28
Sound Level	Max.	dB(A)	34	36	39	43	44	46	47
	Med.		28	28	33	37	38	41	42
	Min.		23	24	27	29	30	32	32
Size	Length	mm	935	1085	1085	1285	1285	1535	1735
	Width		526	526	526	526	526	526	526
	Height		230	230	230	230	230	230	230
Motor		220V/50HZ/60HZ/1PH							
Input	W	32	42	72	80	91	151	161	

# Ducted Fan coil



Model			Ducted Fan coil							
			AEE-DFC-6	AEE-DFC-8	AEE-DFC-10	AEE-DFC-12	AEE-DFC-14	AEE-DFC-16	AEE-DFC-18	AEE-DFC-20
Performance										
Nominal Air Flow	High	cu. m/h	1010	1335	1737	2134	2466	2786	3230	3560
		CFM	594	785	1022	1255	1451	1639	1900	2094
	Med	cu. m/h	869	1148	1494	1835	2121	2396	2778	3062
		CFM	511	675	879	1083	1248	1409	1634	1801
Low	cu. m/h	677	894	1164	1430	1652	1867	2164	2385	
	CFM	398	526	685	841	972	1098	1273	1403	
Nominal Cooling Capacity	High	kW	4.40	5.91	7.88	9.05	10.90	12.68	14.22	16.49
	Med		3.83	5.14	6.85	7.87	9.49	11.03	12.37	14.35
	Low		3.13	4.20	5.59	6.42	7.74	9.00	10.09	11.71
Nominal Heating Capacity	High	kW	7.83	10.07	13.11	15.65	18.83	20.14	22.52	26.21
	Med		6.89	8.87	11.54	13.77	16.58	17.72	19.82	23.07
	Low		6.03	7.76	10.10	12.06	14.51	15.65	17.34	20.81
Water Flow Rate (High)	m <sup>3</sup> /h	0.42	0.56	0.75	0.86	1.04	1.21	1.36	1.58	
	GPM	1.85	2.49	3.31	3.80	4.58	5.33	5.98	6.93	
Water Press Drop	kPa	6.74	7.36	8.21	8.89	9.65	10.95	12.95	16.09	
	Ft.wg	2.21	2.41	2.69	2.92	3.16	3.59	4.25	5.27	



Design to Implementation



24-hour Support



Fragments' High Quality



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