

FAN COILS

FCZ/FCZI-ASW

FAN COIL WITH ADIABATIC "RETRACTABLE STAND-ALONE"
HUMIDIFIER



AERMEC



FCZ-ASW

An environment where temperature and hu- midity are controlled for maximum well-being.

The FCZ-ASW series is the result of a cutting-edge design process; each unit is made in an automated, ultra-high tech production plant. The result represents the state of the art for fan coils: high-efficiency performance and total application flexibility.



FCZ-ASW

Key Points



Built-in humidifier.

Our humidifier integrated into the fan coil controls humidity and temperature, creating a perfect climate while avoiding the unpleasant sensation of dry air during heating.



Quality in harmony.

Exclusive design: high quality is evident, and perfectly in harmony with the setting.



The quietest.

Silent double-suction centrifugal fans and ultrasonic humidification assure comfort with maximum silence.



The best comfort.

The ambient temperature control by the fan coil and the action of the humidifier guarantee the best comfort at all times.



Maximum efficiency.

The lowest electrical consumption in the product category in any case guarantees that comfort settings are reached rapidly.



Extremely easy to use.

User-friendly control and adjustment make it extremely easy and intuitive to interact with the fan coil with humidifier.

Humidifier control in three simple steps

On/Off

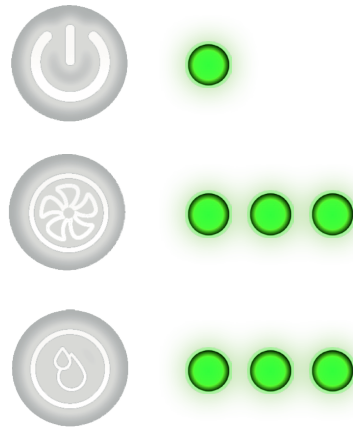
Button with LED for turning the humidifier on and off. The LED also acts as a power indicator.

High/Medium/Low speed

Button with LED to select the humidified air intake speeds in the room.

High/Medium/Low humidity setting

Button with LED for 3-level humidistat control.

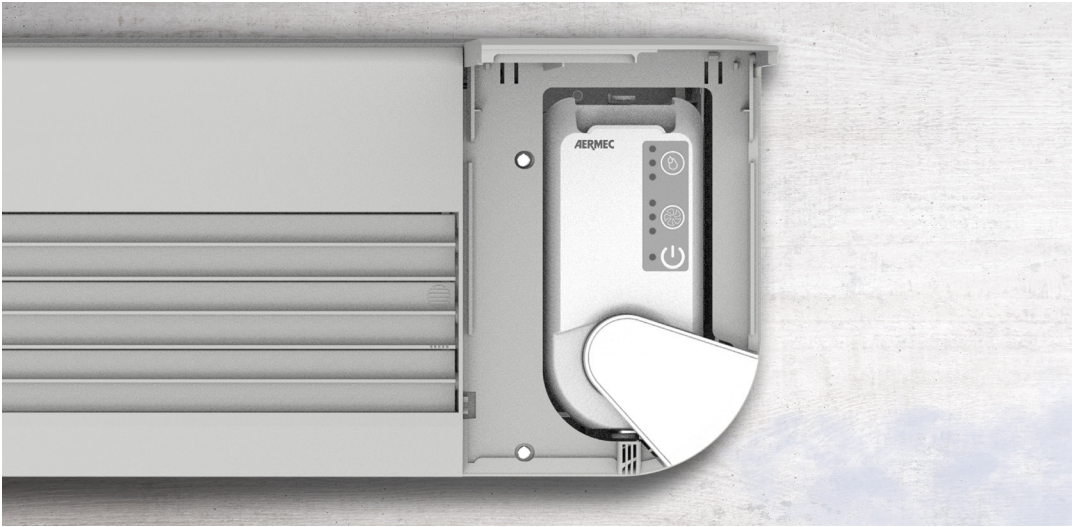


The adiabatic "stand-alone" ultrasonic humidifier (independent from the fan coil), out of sight and perfectly integrated into the fan coil unit (the humidified air passes through a slot masked by the fan coil door), guarantees precise and silent humidification of the environment.

It consists of a transparent tank, a feeding unit with a three-speed micro-fan and a piezoelectric transducer. The latter, thanks to ultrasonic technology, nebulises the demineralised water into micro-particles, creating a fine mist that evaporates quickly once in contact with the ambient air.

The electronic control makes it possible to set three humidity levels, adapting to any need, the integrated level sensor promptly signals the need to top up only demineralised water.





Details

01 | Shell

Protective metal cabinet with anti-corrosion polyester RAL 9003 paint, whereas the head with the air distribution grille is in RAL 7047 plastic.

02 | Electric motor

Asynchronous motors and brushless inverter motors are available. The latter assure 0-100% speed control. The absence of friction ensures energy efficiency, silent operation and reliability. Compared to asynchronous motors, energy consumption is reduced by more than 50% .

03 | Patented ventilation unit

The ABS auger ensures optimal air flow and total absence of sound propagation. The fan is made of an antistatic material that does not attract dust, keeping the unit clean over time. The interference-fit fan-shaft coupling completely eliminates all vibrations.

04 | Air delivery grille

the air delivery grille is optimised for the most efficient and silent air flow.

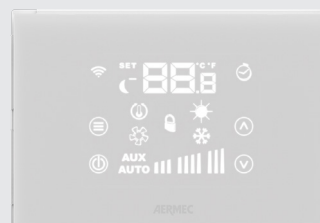


The Aermec range

The FCZ-ASW fan coil can be customised with a wide range of wall panels for the simple, complete control of all the functions:

- × Temperature and ventilation control.
- × Automatic / manual season changeover.
- × Control of up to 2 On/Off valves.
- × External contact management.
- × Internal air probe.
- × Water probe supplied for minimum and maximum controls.

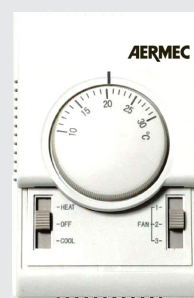
AER503



TX



WMT16

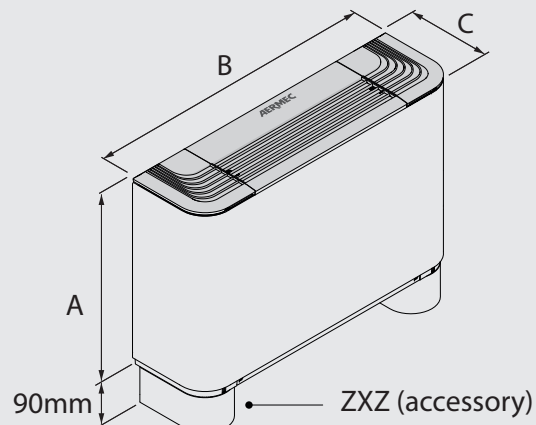
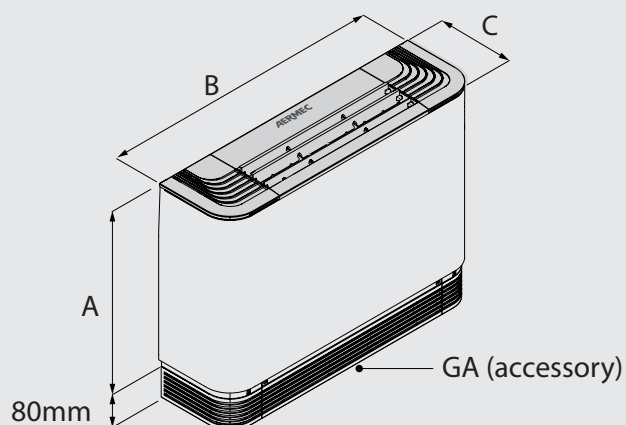


Size data

FCZ		100ASW	150ASW	200ASW	250ASW	300ASW	350ASW	400ASW	450ASW
A	mm	486	486	486	486	486	486	486	486
B	mm	640	640	750	750	980	980	1200	1200
C	mm	220	220	220	220	220	220	220	220
Weight*	kg	13	14	15	16	17	19	33	24

FCZ		500ASW	550ASW	600ASW	650ASW	700ASW	750ASW	800ASW	850ASW
A	mm	486	486	486	486	486	486	486	486
B	mm	1200	1200	1320	1320	1320	1320	1320	1320
C	mm	220	220	220	220	220	220	220	220
Weight*	kg	24	24	24	33	29	33	29	33

FCZ		900ASW	950ASW	1000ASW
A	mm	591	591	591
B	mm	1320	1320	1320
C	mm	220	220	220
Weight*	kg	34	34	34



Technical data FCZ/FCZI-ASW

	FCZ100ASW			FCZ150ASW			FCZ200ASW FCZI200ASW			FCZ250ASW FCZI250ASW			FCZ300ASW FCZI300ASW			FCZ350ASW FCZI350ASW			FCZ400ASW FCZI400ASW			FCZ450ASW FCZI450ASW			FCZ500ASW FCZI500ASW			FCZ550ASW FCZI550ASW		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H

Performance in heating mode 70°C / 60°C (1)

Heating capacity	kW	1.45	2.00	2.40	1.55	2.19	2.65	2.02	2.95	3.70	2.20	3.18	4.05	3.47	4.46	5.50	3.77	4.92	6.15	4.32	5.74	7.15	4.57	6.29	7.82	5.27	7.31	8.50	5.82	8.34	9.75
Water flow rate (services)	l/h	125	172	206	136	192	232	177	258	324	193	278	355	304	391	482	330	431	539	379	503	627	400	551	685	462	641	745	510	731	855
Pressure drop on service side	kPa	4	7	9	5	9	12	6	12	18	7	15	23	7	12	18	8	14	20	9	16	24	6	11	16	12	21	28	10	20	26

Performance in heating mode 45°C / 40°C (2)

Heating capacity	kW	0.72	0.99	1.19	0.77	1.09	1.31	1.00	1.46	1.84	1.09	1.58	2.01	1.72	2.21	2.73	1.87	2.44	3.06	2.14	2.85	3.55	2.27	3.12	3.88	2.62	3.63	4.22	2.89	4.14	4.85
Water flow rate (services)	l/h	126	173	207	134	189	229	174	254	319	190	274	350	299	385	475	325	425	531	373	495	617	394	543	675	455	631	734	502	720	842
Pressure drop on service side	kPa	4	7	10	5	9	12	6	12	18	8	15	22	8	12	18	8	14	20	10	16	24	6	11	16	12	21	28	10	20	26

Performance in cooling mode 7°C / 12°C

Cooling capacity	kW	0.65	0.84	1.00	0.80	1.06	1.27	0.89	1.28	1.60	1.06	1.55	1.94	1.68	2.17	2.65	1.89	2.46	3.02	2.20	2.92	3.60	2.41	3.21	4.03	2.68	3.69	4.25	2.91	4.13	4.79
Sensible cooling capacity	kW	0.51	0.69	0.83	0.57	0.80	0.97	0.71	1.05	1.33	0.79	1.20	1.52	1.26	1.65	2.04	1.33	1.76	2.18	1.59	2.14	2.67	1.69	2.30	2.90	1.94	2.73	3.18	2.07	2.98	3.49
Water flow rate (services)	l/h	112	144	172	138	182	219	153	221	275	182	267	334	288	374	456	350	460	560	379	503	619	414	552	694	460	634	731	501	711	824
Pressure drop on service side	kPa	4	6	8	6	12	13	6	12	18	8	17	25	8	13	18	11	18	25	10	16	24	9	15	22	13	22	29	12	22	28

	FCZ600ASW			FCZ650ASW			FCZ700ASW FCZI700ASW			FCZ750ASW FCZI750ASW			FCZ800ASW FCZI800ASW			FCZ850ASW FCZI850ASW			FCZ900ASW FCZI900ASW			FCZ950ASW FCZI950ASW			FCZ1000ASW		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H

Performance in heating mode 70°C / 60°C (1)

Heating capacity	kW	6.50	8.10	10.00	7.19	9.15	11.50	8.10	9.80	11.00	9.10	11.30	12.50	9.80	10.80	12.00	11.30	12.35	14.00	10.77	13.35	15.14	11.20	14.42	17.10	12.53	15.24	17.02
Water flow rate (services)	l/h	570	710	877	631	802	1008	710	860	964	798	991	1096	859	947	1052	991	1083	1227	945	1171	1328	982	1264	1500	1101	1337	1493
Pressure drop on service side	kPa	12	18	26	14	21	31	17	24	29	10	15	18	22	27	32	17	20	25	12	17	22	16	24	33	22	32	38

Performance in heating mode 45°C / 40°C (2)

Heating capacity	kW	3.32	4.03	4.97	3.57	4.55	5.72	4.03	4.87	5.47	4.52	5.62	6.21	4.87	5.37	5.97	5.62	6.14	6.96	5.35	6.64	7.53	5.57	7.17	8.50	6.24	7.58	8.46
Water flow rate (services)	l/h	561	699	863	621	790	993	699	846	950	786	975	1079	846	932	1036	975	1066	1209	930	1152	1307	967	1245	1476	1084	1316	1469
Pressure drop on service side	kPa	12	18	26	14	20	31	16	24	29	10	14	18	22	26	32	6	20	25	12	17	22	15	24	33	22	31	38

Performance in cooling mode 7°C / 12°C

Cooling capacity	kW	3.22	3.90	4.65	3.95	4.80	5.67	3.92	4.89	5.50	4.27	5.34	6.14	4.84	5.66	6.10	5.26	6.29	6.91	4.29	5.00	6.91	5.77	7.32	8.60	5.69	6.88	7.62
Sensible cooling capacity	kW	2.56	3.17	3.92	2.78	3.43	4.12	2.99	3.76	4.30	3.20	4.05	4.72	3.72	4.42	4.83	4.00	4.83	5.36	2.97	3.78	5.68	3.80	4.87	5.78	4.42	5.34	5.53
Water flow rate (services)	l/h	554	671	800	595	825	975	675	841	946	734	918	1056	833	974	1049	904	1082	1189	738	860	1189	992	1259	1479	979	1183	1311
Pressure drop on service side	kPa	14	19	26	15	21	28	16	24	30	10	14	18	20	26	30	14	20	23	10	12	22	15	22	30	22	31	36

(1) Room air 20°C D.B.; Water (in/out) 70°C/60°C

(2) Room air 20°C D.B.; Water (in/out) 45°C/40°C; EUROVENT

(3) Ambient air 27°C D.B./19°C W.B.; Water (in/out) 7°C/12°C; EUROVENT

(4) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

For further information, please refer to the selection programme or the technical documentation available at www.aermec.com

Aermec reserves the faculty at any time to implement any and all modifications it deems necessary for product improvement as well as any modification of related technical data.

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