FCZ / FCZI

FAN COIL UNITS
FROM EUROPE'S LEADING SUPPLIER

Versions with or without housing for floor, wall, ceiling and ducted installation
Inverter & on-off configurations, Dualjet versions, Plasmacluster filter option

FCZ: Europe's favourite fan coil

Aermec is Europe's leading fan coil manufacturer, with over 4 million fan coils installed to date covering every continent worldwide.

FCZ is born from an advanced design process and manufactured within high technology production facilities, offering state-of-the-art technical solutions ensuring elevated performances and complete flexibility to all individual application needs.

A style icon

Elegant design, quality levels visible to the eye, always perfectly coordinated whatever the ambient.

The quietest Eurovent certified fan coil

Inverter control, patented fan design, noise levels down to 23 dB(A) at Eurovent conditions, quietest in range.

Highest comfort

0-100% inverter control minimizes temperature fluctuations, Dualjet for optimum seasonal comfort.

Low energy consumption

Eurovent certified power consumptions down to 4W; low temperature heating improves efficiency and comfort.

Easy to use

Choose between numerous control options, including programming directly from your smartphone.

Ecological

Allows 100% renewables integration and avoids the application of refrigerant in indoor ambients.

Air quality

Improve health and wellbeing with Aermec's unique air filtration technologies, including Plasmacluster ionization.

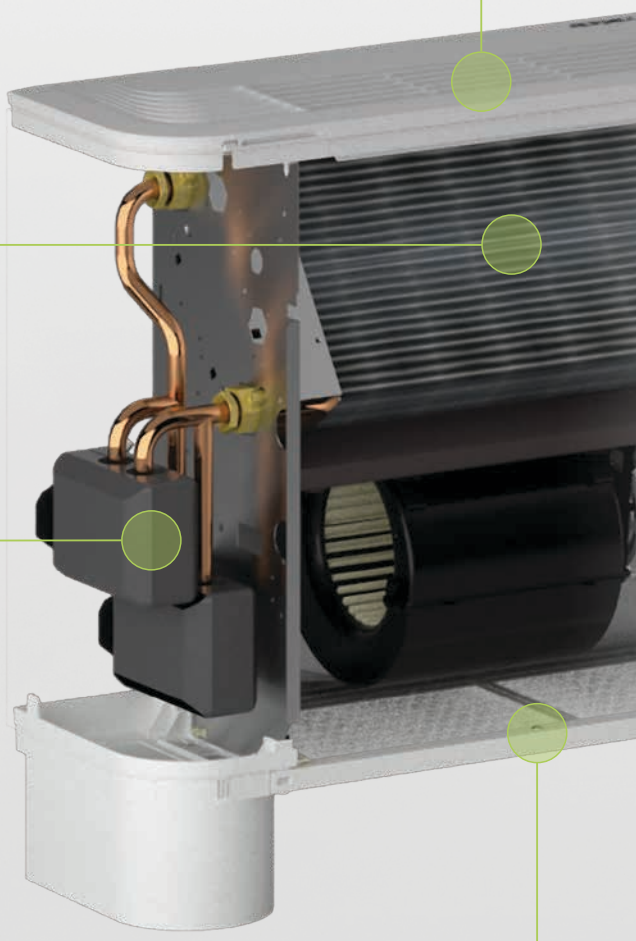
FCZ: wins on detail

Air outlet grille

Fixed and adjustable grilles, with CFD optimized air flow, are available. The adjustable grille features louvres for both directions; closing them automatically switches the unit off and prevents dust infiltrations.

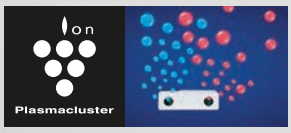
Heat exchanger

FCZ features a generously dimensioned coil, with the option of a supplementary coil allowing 4-pipe operation. It is furthermore possible to add an additional row to either the main or supplementary coil.



Pressure independent valves

FCZ offers numerous valve configurations according to the individual needs. Pressure Independent valves ensure a constant water flow in all conditions, in a self setting and self adjusting configuration which notably simplifies start-up and operation. A unique 3-way valve configuration is also available allowing single coil units to operate in 4-pipe configurations. FCZ allows the valve section to be repositioned from one side to the other, also on-site.

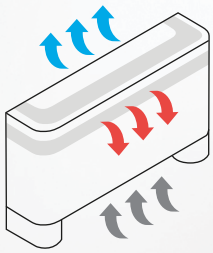


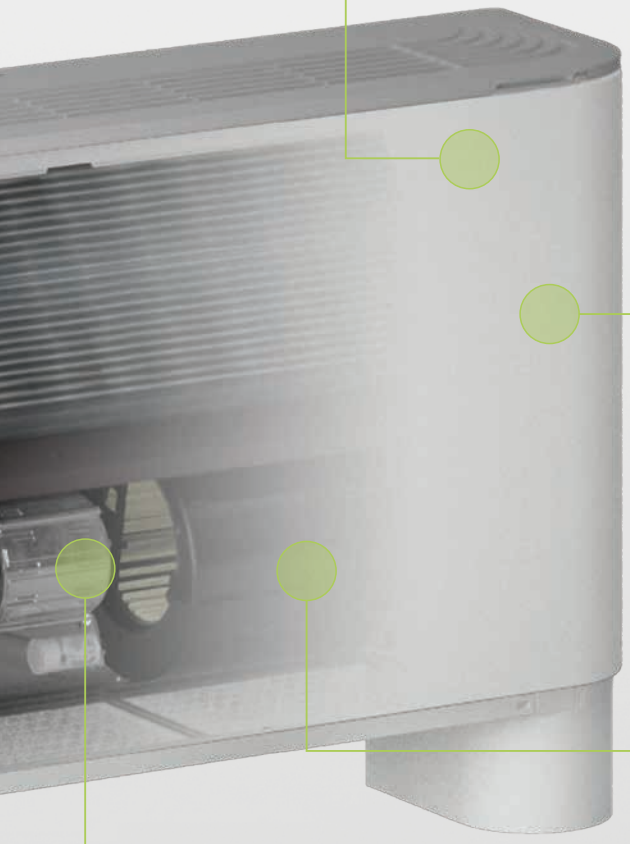
Air quality

80% of our time is spent inside, as such indoor air quality is paramount for human health. The standard G2 air filter ensures clean comfortable air and can be easily removed and cleaned, with a warning on the T-Touch controller informing when service is due. The optional patented Plasmacluster ionizer repels bacteria, dust mites, viruses, molds and pollens, ensuring absolutely healthy air.

Design

The epoxy powder painted galvanized steel housing combines style with quality. A total absence of unpainted surfaces reduces corrosion risks. The CFD designed air circuit offers optimised aeraulic performance, perfect air tightness and easy access to all components.





Dualjet seasonal comfort

Dualjet features 2 air outlets: cool air exits upwards from the top, hot air exits downwards from the front; simply opening or closing the air grille automatically switches between the two. Dualjet ensures highest comfort in all seasons, minimises the sensation of undesired air currents and reduces power consumptions.

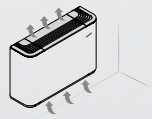
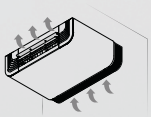
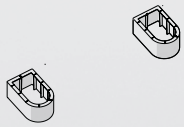
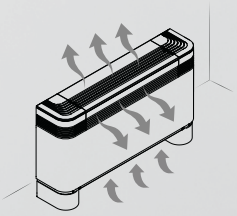
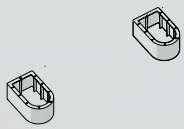
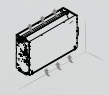
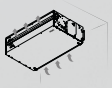
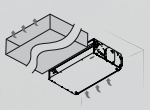
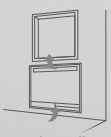
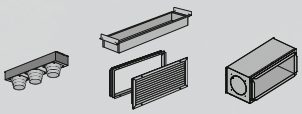
Patented fan section

The low weight ABS cochlea's patented fan profile optimises performance and reduces noise. The fan housing's sound adsorbing material features a smooth dust repelling antistatic surface and can be opened for easy cleaning and service. The fan, directly coupled to the motor and then balance tested, is mounted on a separate all-in-one assembly to reduce vibrations and noise.

Fan motor

Both EC brushless inverter and asynchronous motors are offered. Brushless motors allow 0-100% speed control in a zero friction low noise configuration offering notably higher reliability versus AC motors: power consumptions are reduced by over 50%, and start-up currents by 75%.

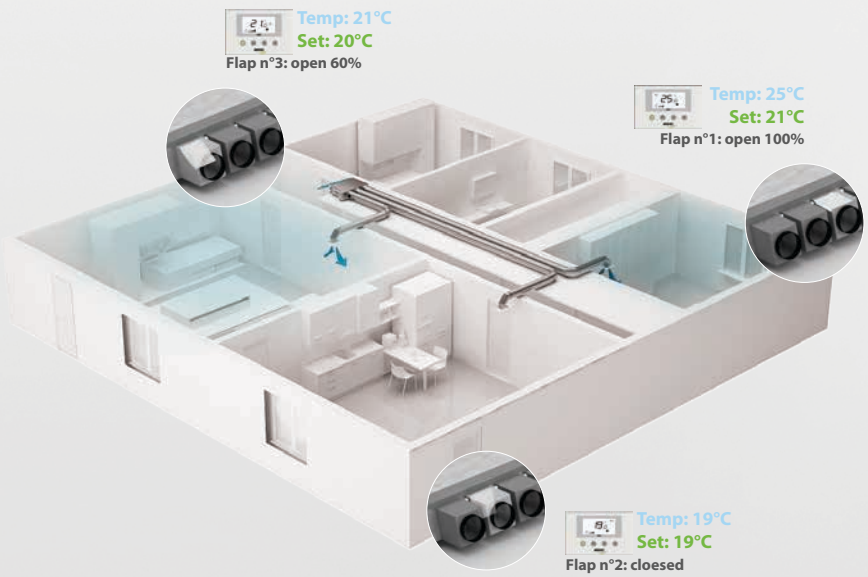
FCZ: always the perfect solution

	Configuration	Installation	Installation accessories
Standard with housing		 Vertical installation Models A, AS, ACT, APC, U, UA  Horizontal installation Models U, UA	 Feet for vertical floor mounting  Inlet grille for horizontal ceiling mounting
Dualjet with housing		 Vertical installation Models D, DS, DT	 Feet for vertical floor mounting
Concealed		 Vertical installation Models P, PPC  Horizontal installation Models P, PPC  Installation with ducting Model PO  Wall recessed vertical installationModels P, PPC	 Air grilles  Inlet & discharge plenums, grilles, ducting mounts  Housing for wall recessed mounting

Options & Accessories

Personalise your FCZ fan coil with an array of options and accessories which ensure each specific application need can be met:

- Numerous 2 and 3-way valve options for 2 and 4-pipe applications (including Pressure Independent Valves and 3-way valves allowing single coil units to operate in 4-pipe configurations).
- Single and twin coil configurations, with the option of an added row on either coil (NB: the secondary coil cannot be mounted on units with the added row on the main coil).
- Condensate drain pump (where a natural run-off is not available).
- Plasmacluster air ionizer.
- Electrical heater.
- Fixed or adjustable air outlet grilles (units with housing).
- Grilles for concealed units (intake and discharge, with or without filter, with fixed or adjustable louvres).
- Ducted unit accessories (intake and discharge plenums with circular or rectangular flanges and with straight or 90° fittings).
- Rear closing panel.
- Air and water sensors.
- Wall / floor / ceiling mounting accessories.



*For further information, please refer to the PMZ and MZC technical documentation.

Clima-Zone: the multi-zone solution

Clima-Zone* allows a single fan coil to provide air conditioning for multiple ambients. Individual ducts supply air to a maximum of 6 ambients, with individual temperature control of each ambient via dedicated remote controllers. Clima-Zone offers a highly cost effective solution which can be totally concealed and takes up minimum space within the ambients to be conditioned.

The full Aermec fan coil range

Beyond FCZ, Aermec offers fan coils in numerous configurations to cover all individual requests:

Cassette

Coanda Effect

High head pressure

Wall

With radiant heating*

Underfloor

*Radiant heating under licence

FCZ: advanced control solutions

Wide selection of controllers

Controllers for on-board installation, wall mounting or wireless remote control are available. According to the model they offer:

- Digital LCD display.
- Choice between touch keyboard, rotary and slider control.
- Automatic or manual seasonal switch-over.
- Automatic or manual fan speed control.
- 2-pipe and 4-pipe operation allowing automatic year round temperature control.
- Electrical heating control (with integrative or substitutive algorithm).
- Control of both air and water sensors for highest ambient comfort.
- Control of an additional air or water sensor offering further comfort gains.
- Temperature sensor positioning on the controller or fan coil (including commutation between the two), including the I-FEEL temperature sensor (allowing the sensor to be positioned anywhere within the ambient).
- Control of the adjustable air outlet grille.
- Plasmacluster ionizer management (including air circulation mode).
- Interface allowing a single controller to manage up to 10 fan coils.
- Serial connection (Modbus or LonWorks) via VMF.
- VMF connection.

Fan coil mounted controllers

Wall mounted controllers

Wireless remote controllers

T-Touch controller

T-Touch allows programming either on-board or using ThermApp, downloaded on smart devices and interfaced via NFC connection. T-Touch offers:

- A backlit display with touch control.
- Choice between pre-programmed and personalised operating profiles.
- Up to 5 weekly temperature profiles.
- Precise hourly temperature programming.
- Sleep function for improved comfort.
- Service warning (informs when maintenance is due).
- Alarms management.
- Links to useful information and user instructions.
- RS485 serial interfacing and VMF connection.

VMF: the system solution

VMF (Variable Multi Flow) transforms single hydronic components into an optimised system controlled by a centralized controller, Integrating heat pumps, fan coils, heat recovery equipment, water heaters, boilers and renewable energy sources. By contemporaneously controlling and varying refrigerant, water and air flows, VMF saves energy, maximizes comfort and optimizes integration between the system components.
A single VMF-E5 controller manages up to 384 fan coils, 4 heat pumps, 12 secondary hydronic circuits, heat recovery units, a DHW (domestic hot water) source and an integrative source (boiler, etc.). VMF also caters for integration with renewable energy sources.

VMF allows components to operate in master/slave configurations. Furthermore single fan coils, or groups of fan coils, can be managed using the average of 2 air sensor readings.
Boiler control can be either in integration or in substitution; this allows mixed heat pump – boiler management algorithms which identify the highest overall efficiency available according to the conditions. VMF allows serial connection via Modbus or LonWorks. The VMF Monitoring protocol expands VMF management to a centralized PC based supervisor, also allowing VMF to be interfaced with Aermec's Aerweb monitoring protocol.

Variable Multi Flow

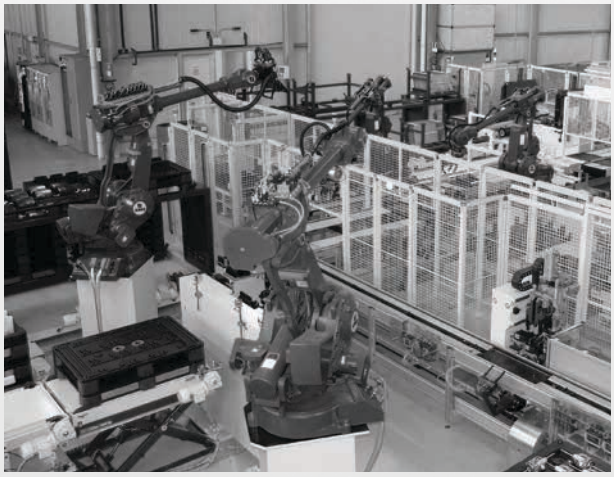
FCZ: unmatched quality

Advanced design process

Computer aided design, CFD air flow analyses, rigorous noise testing in Aermec's semi-anechoic chamber and precise temperature distribution analyses within the "real room" lab allow FCZ to achieve class leading comfort, energy consumption and performance.

High tech manufacturing

Robotised manufacturing ensures high quality and tightest tolerances. All major components are made in-house within an eco-sensitive process ensuring an elevated level of excellence and complete control of the quality process.

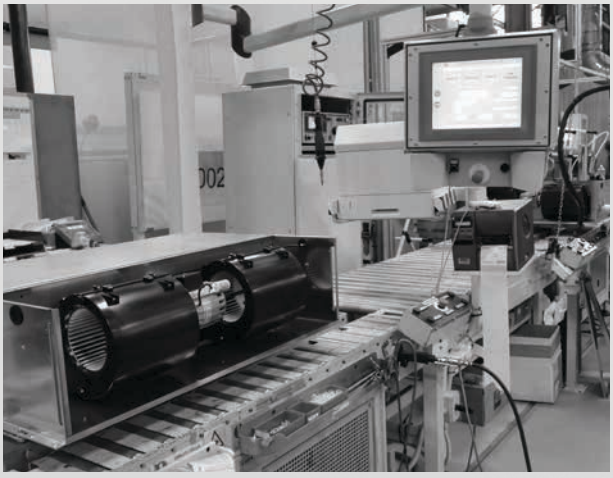


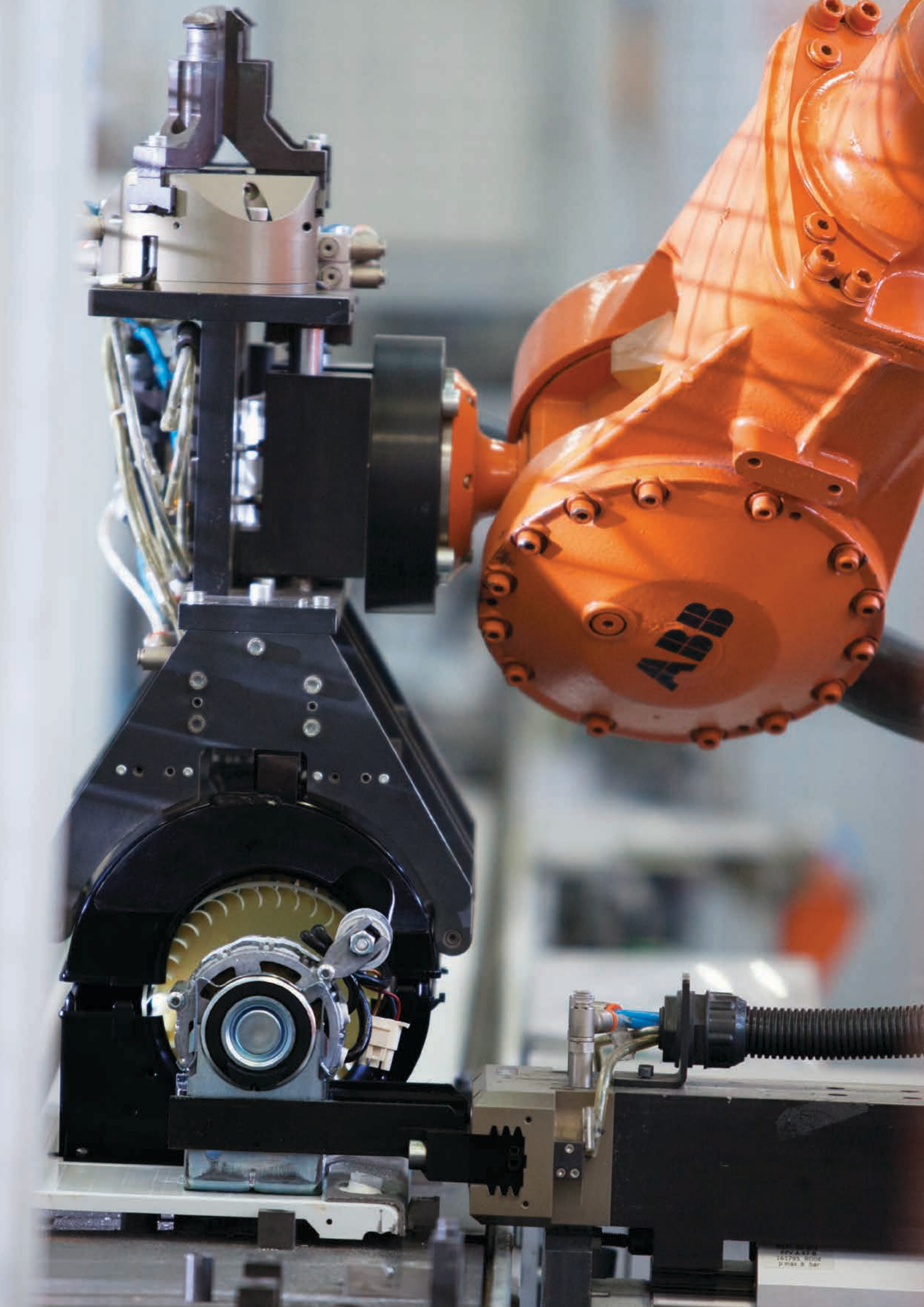
Quality components

Quality components are used throughout. All critical components are 100% tested, including individual leak tests for heat exchangers and operation tests for all valve groups. Control devices are subject to individual operation tests and batch longevity tests.

Individual product testing

Every finished fan coil is subject to a rigorous test sequence, including operating, electrical and safety checks. Each single unit is also vibration and noise tested. Furthermore a specific noise and vibration test chamber is used for precision batch testing.





ABB

FCZ: famous in every application

Aermec fan coils, installed all over the world, have been applied in the most prestigious and demanding applications, where silent operation, precise temperature control and highest operating reliability are of paramount importance. FCZ is the perfect partner within a wide range of applications, with configurations and accessories which ensure FCZ meets the most demanding specific project needs.

Whatever your specific application and individual need, FCZ represents the perfect solution offering highest comfort and performance levels.

FCZ is ideal for installation within:

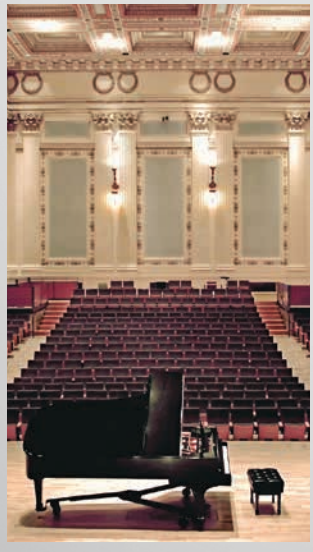
- Hotels
- Residential housing
- Offices
- Theatres
- Shops & retail outlets
- Sport & leisure facilities
- Museums
- Schools & universities
- Transportation infrastructures
- Hospitals
- Public buildings
- Restaurants & bars
- Banks
- Industrial applications

Selected fan coil installations worldwide

Skolkovo. Moscow. Russia.

Villa Barbara. Juršići. Croatia.

Porsche Centre. Lugano. Switzerland.



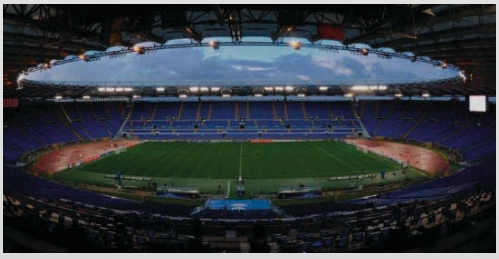
San Francisco Conservatory. USA

American Express. Burgess Hill. England.

Beverly Hilton. Beverly Hills. USA.

Guggenheim Collection. Venice. Italy.

Bolshoi Theatre. Moscow. Russia



Olympic Stadium. Rome. Italy.

Dimensions and weights

FCZ model		100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
A	mm	486				486				486				486				486			
B	mm	640				750				980				1200				1200			
C	mm	220				220				220				220				220			
Weight*	kg	13	14	14	14	15	15	16	16	17	18	19	19	23	23	24	24	22	23	24	24

FCZ model		600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001
A	mm	486				486				486				591			591	
B	mm	1320				1320				1320				1320			1320	
C	mm	220				220				220				220			220	
Weight*	kg	29	31	33	33	29	31	33	33	29	29	31	33	34			34	

FCZ_P model		100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
A	mm	216				216				216				216				216			
B	mm	412				522				753				973				973			
D**	mm	452				562				793				1013				1013			
C	mm	453				453				453				453				453			
Weight	kg	12	12	13	13	12	13	14	14	14	15	16	16	20	21	22	22	23	23	24	24

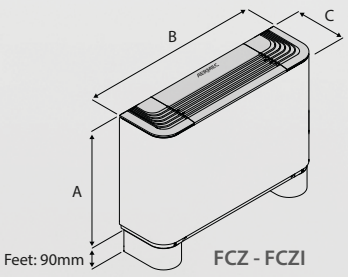
FCZ_P model		600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001
A	mm	216				216				216				216			216	
B	mm	1122				1122				1122				1122			1122	
D**	mm	1147				1147				1147				1147			1147	
C	mm	453				453				453				558			558	
Weight	kg	29	30	31	31	26	27	28	28	26	27	28	28	32			32	

FCZI model		200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
A	mm	486				486				486				486				486				591		
B	mm	750				980				1200				1200				1320				1320		
C	mm	220				220				220				220				220				220		
Weight*	kg	15	15	16	16	17	17	18	18	22	23	24	24	22	23	24	24	29	30	31	31	34		

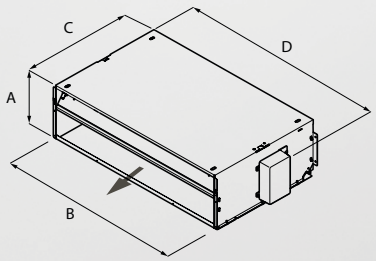
FCZI_P model		200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
A	mm	216				216				216				216				216				216		
B	mm	522				753				973				973				1122				1122		
D**	mm	562				793				1013				1013				1147				1147		
C	mm	453				453				453				453				453				558		
Weight	kg	12	13	14	14	14	15	16	16	20	21	22	22	23	23	24	24	26	27	28	28	32		

* Weights are without feet

** Maximum dimensions (incl. electrical box)



FCZ - FCZI



FCZ_P - FCZI_P

Hydraulic connections

2 pipe systems

FCZ and FCZ_P model		100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
Main coil																				
Standard	Ø	1/2"	/	1/2"	/	3/4"	/	3/4"	/	3/4"	/	3/4"	/	3/4"	/	3/4"	/	3/4"	/	3/4"
Oversized	Ø	/	1/2"	/	1/2"	/	3/4"	/	3/4"	/	3/4"	/	3/4"	/	3/4"	/	3/4"	/	3/4"	/

FCZI and FCZI_P model		200	250	300	350	400	450	500	550	700	750	900	950
Main coil													
Standard	Ø	1/2"	/	3/4"	/	3/4"	/	3/4"	/	3/4"	/	3/4"	/
Oversized	Ø	/	1/2"	/	3/4"	/	3/4"	/	3/4"	/	3/4"	/	3/4"

4 pipe systems

FCZ and FCZ_P model		101	102	201	202	301	302	401	402	501	502	601	602	701	702	801	802	901	1001
Main coil																			
Standard	Ø	1/2"		1/2"		3/4"		3/4"		3/4"		3/4"		3/4"		3/4"		3/4"	
Additional coil																			
Standard	Ø	1/2"	1/2"	1/2"	1/2"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Oversized	Ø	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"

FCZI and FCZI_P model		201	202	301	302	401	402	501	502	701	702	901
Main coil												
Standard	Ø	1/2"		3/4"		3/4"		3/4"		3/4"		3/4"
Additional coil												
Standard	Ø	1/2"	1/2"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Oversized	Ø	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"

Technical data FCZ - FCZ_P

2 pipe systems

Fan speed			H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L
Model			**100**			**150**			**200**			**250**			**300**			**350**			**400**			**450**			**500**			**550**		
Heating capacity (70°C)	(1)	kW	2,40	2,00	1,45	2,65	2,19	1,55	3,70	2,95	2,02	4,05	3,18	2,20	5,50	4,46	3,47	6,15	4,92	3,77	7,15	5,74	4,32	7,82	6,29	4,57	8,50	7,31	5,27	9,75	8,34	5,82
Water flow rate	(1)	l/h	206	172	125	232	192	136	324	258	177	355	278	193	482	391	304	539	431	330	627	503	379	685	551	400	745	641	462	855	731	510
Pressure drop	(1)	kPa	9	7	4	12	9	5	18	12	6	23	15	7	18	12	7	20	14	8	24	16	9	16	11	6	28	21	12	26	20	10
Heating capacity (45°C)	(3)	kW	1,19	0,99	0,72	1,31	1,09	0,77	1,84	1,46	1,00	2,01	1,58	1,09	2,73	2,21	1,72	3,06	2,44	1,87	3,55	2,85	2,14	3,88	3,12	2,27	4,22	3,63	2,62	4,85	4,14	2,89
Water flow rate	(3)	l/h	207	173	126	229	189	134	319	254	174	350	274	190	475	385	299	531	425	325	617	495	373	675	543	394	734	631	455	842	720	502
Pressure drop	(3)	kPa	9	7	4	12	9	5	17	12	6	23	15	8	17	12	8	20	14	8	23	16	9	16	11	6	28	21	12	25	19	10
Total cooling capacity	(4)	kW	1,00	0,84	0,65	1,27	1,06	0,80	1,60	1,28	0,89	1,94	1,55	1,06	2,65	2,17	1,68	3,02	2,46	1,89	3,60	2,92	2,21	4,03	3,21	2,41	4,25	3,69	2,68	4,79	4,13	2,91
Sensible cooling capacity	(4)	kW	0,83	0,69	0,51	0,97	0,80	0,57	1,33	1,05	0,71	1,52	1,20	0,79	2,04	1,65	1,26	2,18	1,76	1,33	2,67	2,14	1,59	2,90	2,30	1,69	3,18	2,73	1,94	3,49	2,98	2,07
Water flow rate	(4)	l/h	172	144	112	219	182	138	275	221	153	334	267	182	456	374	288	560	460	350	619	503	379	694	552	414	731	634	460	824	711	501
Pressure drop	(4)	kPa	8	6	4	13	12	6	18	12	6	25	17	8	18	12	8	25	17	11	24	16	10	22	15	9	29	22	13	28	21	11
Centrifugal Fans		n°	1						1						2						2						2					
Air flow rate		m³/h	200	160	110	200	160	110	290	220	140	290	220	140	450	350	260	450	350	260	600	460	330	600	460	330	720	600	400	720	600	400
Sound power level	(5)	dB(A)	45	38	31	45	38	31	50	43	31	50	43	31	48	41	34	48	41	34	51	44	37	51	44	37	56	51	42	56	51	42
Sound pressure level	(6)	dB(A)	37	30	23	37	30	23	42	35	23	42	35	23	40	33	26	40	33	26	43	36	29	43	36	29	48	43	34	48	43	34
Absorbed power		W	30	25	20	30	25	20	35	25	13	35	25	13	44	33	25	44	33	25	57	43	30	57	43	30	76	52	38	76	52	38
Connected for speeds			V3	V2	V1	V3	V2	V1	V3	V2	V1	V3	V2	V1	V3	V2	V1	V3	V2	V1	V3	V2	V1	V3	V2	V1	V3	V2	V1	V3	V2	V1

Model			**600**			**650**			**700**			**750**			**800**			**850**			**900**			**950**			**1000**		
Heating capacity (70°C)	(1)	kW	10,00	8,10	5,70	11,50	9,15	6,21	11,00	9,80	8,10	12,50	11,30	9,10	12,00	10,80	9,80	14,00	12,35	11,30	15,14	13,35	10,77	17,10	14,42	11,20	17,02	15,24	12,56
Water flow rate	(1)	l/h	860	696	490	989	785	534	946	843	696	1075	972	782	1032	929	843	1204	1062	972	1328	1171	945	1500	1295	982	1493	1337	1101
Pressure drop	(1)	kPa	25	17	9	54	36	12	37	30	21	20	16	11	42	35	29	24	19	16	21	16	11	32	23	15	43	34	24
Heating capacity (45°C)	(3)	kW	4,98	4,03	2,84	5,72	4,55	3,09	5,47	4,88	4,03	6,22	5,62	4,53	5,97	5,37	4,88	6,97	6,14	5,62	7,53	6,64	5,36	8,51	7,17	5,57	8,47	7,58	6,25
Water flow rate	(3)	l/h	863	699	492	993	790	536	950	846	699	1079	975	786	1036	932	846	1209	1066	975	1307	1152	930	1476	1245	967	1469	1316	1084
Pressure drop	(3)	kPa	25	18	9	54	36	12	37	30	21	20	17	11	43	35	30	24	19	17	20	15	11	31	21	15	42	33	23
Total cooling capacity	(4)	kW	4,65	3,90	3,22	5,67	4,80	3,95	5,50	4,89	3,92	6,14	5,34	4,27	6,10	5,66	4,84	6,91	6,29	5,26	6,91	5,00	4,29	8,60	7,32	5,77	7,62	6,88	5,69
Sensible cooling capacity	(4)	kW	3,92	3,17	2,56	4,12	3,43	2,78	4,30	3,76	2,99	4,72	4,05	3,20	4,83	4,42	3,72	5,36	4,83	4,00	5,68	3,78	2,97	5,78	4,87	3,80	5,53	5,34	4,42
Water flow rate	(4)	l/h	800	671	554	975	825	595	946	841	675	1056	918	734	1049	974	833	1189	1082	904	1189	860	738	1479	1259	992	1311	1183	979
Pressure drop	(4)	kPa	26	19	13	28	21	15	30	24	16	18	14	10	30	26	20	23	19	14	23	12	9	30	22	15	37	31	22
Centrifugal Fans		n°	3						3						3						3						3		
Air flow rate		m³/h	920	720	520	920	720	520	1140	930	700	1140	930	700	1300	1120	900	1300	1120	900	1140	930	700	1140	930	700	1300	1120	900
Sound power level	(5)	dB(A)	57	51	42	57	51	42	62	57	50	62	57	50	66	61	56	66	61	56	62	57	51	61	57	51	66	61	56
Sound pressure level	(6)	dB(A)	49	43	34	49	43	34	54	49	42	54	49	42	58	53	48	58	53	48	54	49	43	53	49	43	58	53	48
Absorbed power		W	91	60	38	91	60	38	106	80	59	106	80	59	131	100	80	131	100	80	106	80	59	106	80	59	131	100	80
Connected for speeds			V3	V2	V1	V3	V2	V1	V3	V2	V1	V3	V2	V1	V3	V2	V1	V3	V2	V1	V3	V2	V1	V3	V2	V1	V3	V2	V1

4 pipe systems

Fan speed			H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L
Model			**101**			**102**			**201**			**202**			**301**			**302**			**401**			**402**			**501**		
Heating capacity (65°C)	(2)	kW	1,17	1,02	0,75	1,97	1,66	1,23	1,61	1,36	1,02	2,73	2,23	1,57	2,56	2,19	1,81	4,33	3,58	2,84	3,13	2,65	2,13	5,29	4,34	3,35	3,74	3,34	2,59
Water flow rate	(2)	l/h	101	88	65	169	143	106	138	117	88	234	191	135	221	188	155	372	308	244	269	228	183	455	373	288	321	287	223
Pressure drop	(2)	kPa	4	3	2	3	2	2	10	7	5	7	5	3	29	22	15	22	16	11	8	7	4	7	4	3	10	8	5
Total cooling capacity	(4)	kW	1,00	0,84	0,65	1,00	0,84	0,65	1,60	1,28	0,89	1,60	1,28	0,89	2,65	2,17	1,68	2,65	2,17	1,68	3,60	2,92	2,21	3,60	2,92	2,21	4,25	3,69	2,68
Sensible cooling capacity	(4)	kW	0,83	0,69	0,51	0,83	0,69	0,51	1,33	1,05	0,71	1,33	1,05	0,71	2,04	1,65	1,26	2,04	1,65	1,26	2,67	2,14	1,59	2,67	2,14	1,59	3,18	2,73	1,94
Water flow rate	(4)	l/h	172	144	112	172	144	112	275	221	153	275	221	153	456	374	288	456	374	288	619	503	379	619	503	379	731	634	460
Pressure drop	(4)	kPa	8	6	4	8	6	4	18	12	6	18	12	6	18	12	8	18	12	8	24	16	10	24	16	10	29	22	13
Centrifugal fans		n°	1						1						2						2						2		
Air flow rate		m³/h	200	160	110	200	160	110	290	220	140	290	220	140	450	350	260	450	350	260	600	460	330	600	460	330	720	600	400
Sound power level	(5)	dB(A)	45	38	31	45	38	31	50	43	31	50	43	31	48	41	34	48	41	34	51	44	39	51	44	39	56	51	42
Sound pressure level	(6)	dB(A)	37	30	23	37	30	23	42	35	23	42	35	23	40	33	26	40	33	26	43	36	31	43	36	31	48	43	34
Absorbed power		W	35	29	19	30	25	20	35	29	25	35	25	13	44	33	25	44	33	25	57	43	30	57	43	30	76	52	38
Connected for speeds			V3	V2	V1	V3	V2	V1	V3	V2	V1	V3	V2	V1	V3	V2	V1	V3	V2	V1	V3	V2	V1	V3	V2	V1	V3	V2	V1

Model			**502**			**601**			**602**			**701**			**702**			**801**			**802**			**901**			**1001**		
Heating capacity (65°C)	(2)	kW	6,44	5,66	4,16	4,36	3,67	2,53	7,60	6,24	4,59	4,95	4,29	3,66	8,80	7,48	6,24	5,34	4,79	4,21	9,61	8,50	7,31	5,73	5,63	4,74	6,09	5,57	4,85
Water flow rate	(2)	l/h	554	486	358	375	316	217	653	536	395	426	369	315	757	643	536	459	412	362	826	731	629	493	484	407	523	479	417
Pressure drop	(2)	kPa	7	7	3	16	11	7	12	9	5	20	16	15	16	12	11	23	19	12	19	15	11	12	11	9	15	13	10
Total cooling capacity	(4)	kW	4,25	3,69	2,68	4,65	3,90	3,22	4,65	3,90	3,22	5,50	4,89	3,92	5,50	4,89	3,92	6,10	5,66	4,84	6,10	5,66	4,84	6,91	5,00	4,29	7,62	6,88	5,69
Sensible cooling capacity	(4)	kW	3,18	2,73	1,94	3,92	3,17	2,56	3,92	3,17	2,56	4,30	3,76	2,99	4,30	3,76	2,99	4,83	4,42	3,72	4,83	4,42	3,72	5,68	3,78	2,97	5,53	5,34	4,42
Water flow rate	(4)	l/h	731	634	460	800	671	554	800	671	554	946	841	675	946	841	675	1049	974	833	1049	974	833	1189	860	738	1311	1183	979
Pressure drop	(4)	kPa	29	22	13	26	19	13	26	19	13	30	24	16	30	24	16	30	26	20	30	26	20	22	12	9	37	31	22
Centrifugal fans		n°	2			3						3						3						3			3		
Air flow rate		m³/h	720	600	400	920	720	520	920	720	520	1140	930	700	1140	930	700	1300	1120	900	1300	1120	900	1140	930	700	1300	1120	900
Sound power level	(5)	dB(A)	56	51	42	57	51	42	57	51	42	61	57	51	61	57	51	66	61	56	66	61	56	61	57	51	66	61	56
Sound pressure level	(6)	dB(A)	48	43	34	49	43	34	49	43	34	53	49	43	53	49	43	58	53	48	58	53	48	53	49	43	58	53	48
Absorbed power		W	76	52	38	91	60	38	82	61	40	106	80	59	106	80	59	131	100	80	131	100	80	106	80	59	131	100	80
Connected for speeds			V3	V2	V1	V3	V2	V1	V3	V2	V1	V3	V2	V1	V3	V2	V1	V3	V2	V1	V3	V2	V1	V3	V2	V1	V3	V2	V1

Power supply: 230V~50Hz

(1) Room air temperature 20°C d.b.; Water (in/out) 70°C/60°C;
(2) Room air temperature 20°C b.s.; Acqua (in/out) 65°C/55°C (EUROVENT);
(3) Room air temperature 20°C d.b.; Water (in/out) 45°C/40°C (EUROVENT);
(4) Room air temperature 27°C d.b./19°C w.b.; Water (in/out) 7°C/12°C (EUROVENT);
(5) Sound power level: based on mesurement in compliance with Eurovent 8/2;
(6) Sound pressure level (A-weighted) measured indoors with volume V=85m³,
Reverberation time t = 0.5 s; Direction factor Q = 2; Distance r = 2.5m;

Technical data FCZI - FCZI_P

2 pipe systems

Fan speed			H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L
Model			**200**			**250**			**300**			**350**			**400**			**450**		
Heating capacity (70°C)	(1)	kW	3,70	2,95	2,02	4,05	3,18	2,20	5,50	4,46	3,47	6,15	4,92	3,77	7,15	5,74	4,32	7,82	6,29	4,57
Water flow rate	(1)	l/h	324	258	177	355	278	193	482	391	304	539	431	330	627	503	379	685	551	400
Pressure drop	(1)	kPa	18	12	6	23	15	7	18	12	7	20	14	8	24	16	9	16	11	6
Heating capacity (45°C)	(3)	kW	1,84	1,46	1,00	2,01	1,58	1,09	2,73	2,21	1,72	3,06	2,44	1,87	3,55	2,85	2,14	3,88	3,12	2,27
Water flow rate	(3)	l/h	319	254	174	350	274	190	475	385	299	531	425	325	617	495	373	675	543	394
Pressure drop	(3)	kPa	17	12	6	23	15	8	17	12	8	20	14	8	23	16	9	16	11	6
Total cooling capacity	(4)	kW	1,60	1,28	0,89	1,94	1,55	1,06	2,65	2,17	1,68	3,02	2,46	1,89	3,60	2,92	2,21	4,03	3,21	2,41
Sensible cooling capacity	(4)	kW	1,33	1,05	0,71	1,52	1,20	0,79	2,04	1,65	1,26	2,18	1,76	1,33	2,67	2,14	1,59	2,90	2,30	1,69
Water flow rate	(4)	l/h	275	221	153	334	267	182	456	374	288	560	460	350	619	503	379	694	552	414
Pressure drop	(4)	kPa	18	12	6	25	17	8	18	12	8	25	17	11	24	16	10	22	15	9
Centrifugal Fans		n°	1						2						2					
Air flow rate		m³/h	290	220	140	290	220	140	450	350	260	450	350	260	600	460	330	600	460	330
Sound power level	(5)	dB(A)	50	43	31	50	43	31	48	41	34	48	41	34	51	44	37	51	44	37
Sound pressure level	(6)	dB(A)	42	35	23	42	35	23	40	33	26	40	33	26	43	36	29	43	36	29
Absorbed power		W	12	8	5	12	8	5	13	7	4	13	7	4	17	9	6	17	9	6

Model			**500**			**550**			**700**			**750**			**900**			**950**		
Heating capacity (70°C)	(1)	kW	8,50	7,31	5,27	9,75	8,34	5,82	11,00	9,80	8,10	12,50	11,30	9,10	15,14	13,35	10,77	17,10	14,42	11,20
Water flow rate	(1)	l/h	745	641	462	855	731	510	964	859	710	1096	991	798	1328	1171	945	1500	1264	982
Pressure drop	(1)	kPa	28	21	12	26	20	10	29	23	17	18	15	10	22	17	12	33	24	15
Heating capacity (45°C)	(3)	kW	4,22	3,63	2,62	4,85	4,14	2,89	5,47	4,87	4,03	6,21	5,62	4,52	7,53	6,64	5,35	8,50	7,17	5,57
Water flow rate	(3)	l/h	734	631	455	842	720	502	950	846	699	1079	975	786	1307	1152	930	1476	1245	967
Pressure drop	(3)	kPa	28	21	12	25	19	10	29	23	16	17	14	10	21	17	12	33	24	15
Total cooling capacity	(4)	kW	4,25	3,69	2,68	4,79	4,13	2,91	5,50	4,89	3,92	6,14	5,34	4,27	6,91	5,00	4,29	8,60	7,32	5,77
Sensible cooling capacity	(4)	kW	3,18	2,73	1,94	3,49	2,98	2,07	4,30	3,76	2,99	4,72	4,05	3,20	5,68	3,78	2,97	5,78	4,87	3,80
Water flow rate	(4)	l/h	731	634	460	824	711	501	946	841	675	1056	918	734	1189	860	738	1479	1259	992
Pressure drop	(4)	kPa	29	22	13	28	21	11	30	24	16	18	14	10	23	12	9	30	22	15
Centrifugal Fans		n°	2						3						3					
Air flow rate		m³/h	720	600	400	720	600	400	1140	930	700	1140	930	700	1140	930	700	1140	930	700
Sound power level	(5)	dB(A)	56	51	42	56	51	42	62	57	50	62	57	50	62	57	51	61	57	51
Sound pressure level	(6)	dB(A)	48	43	34	48	43	34	54	49	42	54	49	42	54	49	43	53	49	43
Absorbed power		W	37	20	8	37	20	8	80	40	30	80	40	30	80	40	30	80	40	30

4 pipe systems

Fan speed			H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L
Model			**201**			**202**			**301**			**302**			**401**			**402**		
Heating capacity (65°C)	(2)	kW	1,61	1,36	1,02	2,73	2,23	1,57	2,56	2,19	1,81	4,33	3,58	2,84	3,13	2,65	2,13	5,29	4,34	3,35
Water flow rate	(2)	l/h	138	117	88	234	191	135	221	188	155	372	308	244	269	228	183	455	373	288
Pressure drop	(2)	kPa	10	7	5	7	5	3	29	22	15	22	16	11	8	7	4	7	4	3
Total cooling capacity	(4)	kW	1,60	1,28	0,89	1,60	1,28	0,89	2,65	2,17	1,68	2,65	2,17	1,68	3,60	2,92	2,21	3,60	2,92	2,21
Sensible cooling capacity	(4)	kW	1,33	1,05	0,71	1,33	1,05	0,71	2,04	1,65	1,26	2,04	1,65	1,26	2,67	2,14	1,59	2,67	2,14	1,59
Water flow rate	(4)	l/h	275	221	153	275	221	153	456	374	288	456	374	288	619	503	379	619	503	379
Pressure drop	(4)	kPa	18	12	6	18	12	6	18	12	8	18	12	8	24	16	10	24	16	10
Centrifugal Fans		n°	1						2						2					
Air flow rate		m³/h	290	220	140	290	220	140	450	350	260	450	350	260	600	460	330	600	460	330
Sound power level	(5)	dB(A)	50	43	31	50	43	31	48	41	34	48	41	34	51	44	39	51	44	39
Sound pressure level	(6)	dB(A)	42	35	23	42	35	23	40	33	26	40	33	26	43	36	31	43	36	31
Absorbed power		W	12	8	5	12	8	5	13	7	4	13	7	4	17	9	6	17	9	6

Model			**501**			**502**			**701**			**702**			**901**		
Heating capacity (65°C)	(2)	kW	3,74	3,34	2,59	6,44	5,66	4,16	4,95	4,29	3,66	8,80	7,48	6,24	5,73	5,63	4,74
Water flow rate	(2)	l/h	321	287	223	554	486	358	426	369	315	757	643	536	493	484	407
Pressure drop	(2)	kPa	10	8	5	7	7	3	20	16	15	16	12	11	12	11	9
Total cooling capacity	(4)	kW	4,25	3,69	2,68	4,25	3,69	2,68	5,50	4,89	3,92	5,50	4,89	3,92	6,91	5,00	4,29
Sensible cooling capacity	(4)	kW	3,18	2,73	1,94	3,18	2,73	1,94	4,30	3,76	2,99	4,30	3,76	2,99	5,68	3,78	2,97
Water flow rate	(4)	l/h	731	634	460	731	634	460	946	841	675	946	841	675	1189	860	738
Pressure drop	(4)	kPa	29	22	13	29	22	13	30	24	16	30	24	16	22	12	9
Centrifugal Fans		n°	2						3						3		
Air flow rate		m³/h	720	600	400	720	600	400	1140	930	700	1140	930	700	1140	930	700
Sound power level	(5)	dB(A)	56	51	42	56	51	42	61	57	51	61	57	51	61	57	51
Sound pressure level	(6)	dB(A)	48	43	34	48	43	34	53	49	43	53	49	43	53	49	43
Absorbed power		W	37	20	8	37	20	8	80	40	30	80	40	30	80	40	30

Power supply: 230V~50Hz

- (1) Room air temperature 20°C d.b.; Water (in/out) 70°C/60°C;
- (2) Room air temperature 20°C b.s.; Acqua (in/out) 65°C/55°C (EUROVENT);
- (3) Room air temperature 20°C d.b.; Water (in/out) 45°C/40°C (EUROVENT);
- (4) Room air temperature 27°C d.b./19°C w.b.; Water (in/out) 7°C/12°C (EUROVENT);
- (5) Sound power level: based on mesurement in compliance with Eurovent 8/2;
- (6) Sound pressure level (A-weighted) measured indoors with volume V=85m³, Reverberation time t = 0.5 s; Direction factor Q = 2; Distance r = 2.5m

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

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