

FCZ US

Fan coil for universal and floor installation

Cooling capacity 4.9 ÷ 58.0 MBTU/h
Heating capacity 2.2 ÷ 26 MBTU/h



- Very quiet
- Vertical and horizontal installation



DESCRIPTION

fan coil can be installed in any 2/4 pipe system and operates with any heat generator even at low temperatures, and thanks to varied versions and settings, it is easy to pick the ideal solution for any need.

FEATURES

Case

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

Air distribution grille with fixed fins.

Ventilation group

Consisting of double suction centrifugal fans that are particularly silent, statically and dynamically balanced, and directly coupled with the motor shaft.

The motor is wired for single phase and has three speeds, with capacitor. The motor is fitted on sealed for life bearings and is secured on anti-vibration and self-lubricating mountings.

Extractable shrouds for easy, effective cleaning

Main finned pack heat exchanger

With copper pipes and aluminium louvers, the standard or oversized heat exchanger and the possible secondary heat exchanger have female gas water connections on the left side and the manifolds have air vents.

The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

■ *Reversibility of hydraulic connections when ordering.*

Finned pack heat exchanger (secondary)

With copper tubes and aluminum louvers, the secondary exchanger has female gas hydraulic connections and is equipped with air vents.

■ *To be provided when ordering, factory-installable only.*

Condensate drip

Provided standard in plastic and fixed to the interior structure; with external condensate discharge.

Air filter

Air filter easily removed and cleaned.

VERSIONS

US With casing

OPTIONS

Without options

M With transformer for 208/220/277 V

T With electronic control board

MT With transformer and control board

CONFIGURATOR

Field	Description
1,2,3	FCZ
4	Size 1, 2, 3, 4, 5, 6, 7, 8, 9, 10
5	main heat exchanger
0	Standard 3-row
5	Oversized 4-row
6	Secondary heat exchanger
0	Absent
1	Standard 1-row (only heating) (1)
7	Installation
.	Standard ceiling installation

ACCESSORIES

Control panels

TX24: Wall-mounting thermostat for controlling 2/4 tube fan coils with brushless motors.

Water valves

VCF44 - 45 - for secondary heat exchanger: The 3-way motorised valve kit for the secondary coil heat only. The kit consists of a valve with its insulating shell, actuator and relevant water fittings; it is suitable to be installed on the fan coils with right and left water connections.

VCZD: 2-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings. It can be installed on fan coils with both right and left connections.

ACCESSORIES COMPATIBILITY

Control panels

Accessory	FCZ100UA/US	FCZ150UA/US	FCZ200UA/US	FCZ250UA/US	FCZ300UA/US	FCZ350UA/US	FCZ400UA/US	FCZ450UA/US	FCZ500UA/US	FCZ550UA/US
TX24	.	.	.	.	.	.	.	.	.	.
Accessory	FCZ600UA/US	FCZ650UA/US	FCZ700UA/US	FCZ750UA/US	FCZ800UA/US	FCZ850UA/US	FCZ900UA/US	FCZ950UA/US	FCZ1000UA/US	FCZ1000UA/US
TX24	.	.	.	.	.	.	.	.	.	.
Accessory	FCZ101UA/US	FCZ201UA/US	FCZ301UA/US	FCZ401UA/US	FCZ501UA/US	FCZ601UA/US	FCZ701UA/US	FCZ801UA/US	FCZ901UA/US	FCZ1001UA/US
TX24	.	.	.	.	.	.	.	.	.	.

Water valves

3 way valve kit

	100	101	150	200	201	250	300	301	350	400	401	450
Main coil	VCZ4124	VCZ4124	VCZ4124	VCZ4124	VCZ4124	VCZ4124	VCZ4224	VCZ4224	VCZ4224	VCZ4224	VCZ4224	VCZ4224
Secondary coil	-	VCF4424	-	-	VCF4424	-	-	VCF4424	-	-	VCF4424	-
Additional coil "BV"	VCF4424	-	-	VCF4424	-	-	VCF4424	-	-	VCF4424	-	-
	500	501	550	600	601	650	700	701	750	800	801	850
Main coil	VCZ4224	VCZ4224	VCZ4224	VCZ4224	VCZ4224	VCZ4224	VCZ4224	VCZ4224	VCZ4224	VCZ4224	VCZ4224	VCZ4224
Secondary coil	-	VCF4424	-	-	VCF4424	-	-	VCF4424	-	-	VCF4424	-
Additional coil "BV"	VCF4424	-	-	VCF4424	-	-	VCF4424	-	-	VCF4424	-	-
	900	901	950	1000	1001							
Main coil	VCZ4324	VCZ4324	VCZ4324	VCZ4324	VCZ4324							
Secondary coil	-	VCF4524	-	-	VCF4524							
Additional coil "BV"	VCF4524	-	-	VCF4524	-							

2 way valve kit

	100	101	150	200	201	250	300	301	350	400	401	450	500	501	550	
Main coil	VCZD124	VCZD124	VCZD124	VCZD124	VCZD124	VCZD124	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	
Secondary coil	-	VCFD424	-	-	VCFD424	-	-	VCFD424	-	-	VCFD424	-	-	VCFD424	-	
Additional coil "BV"	VCFD424	-	-	VCFD424	-	-	VCFD424	-	-	VCFD424	-	-	VCFD424	-	-	
	600	601	650	700	701	750	800	801	850	900	901	950	1000	1001		
Main coil	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD324	VCZD324	VCZD324	VCZD324	VCZD324	VCZD324	
Secondary coil	-	VCFD424	-	-	VCFD424	-	-	VCFD424	-	-	VCFD424	-	-	VCFD424	-	
Additional coil "BV"	VCFD424	-	-	VCFD424	-	-	VCFD424	-	-	VCFD424	-	-	VCFD424	-	-	

(Heating only) additional coil

Heating only additional coil

Accessory	FCZ100UA/US	FCZ200UA/US	FCZ300UA/US	FCZ400UA/US	FCZ500UA/US	FCZ600UA/US	FCZ800UA/US	FCZ900UA/US	FCZ1000UA/US
BV117	.								
BV122		.							
BV132			.						

Field	Description
UA	Floor installation (with bottom grille)
8,9,10,11	Power supply
/120	120 V
12,13	Version
US	With casing
14	Options
.	Without options
M	With transformer for 208/220/277 V
MT	With transformer and control board
T	With electronic control board

(1) 1-row secondary coil is available with the standard 3-row main coil only

(Heating only) additional coil

BV: Hot water heat exchanger with 1 row.

Installation accessories

FIKIT: Structural bracket in floor installation.

GA: Lower intake grille for encapsulated fan coils. Can also be used in wall-mounted or floor installations, the FIKIT accessory is needed only in the case of floor installation.

	FCZ100	FCZ150	FCZ200	FCZ250	FCZ300	FCZ350	FCZ400	FCZ450	FCZ500	FCZ550	
Sound power level	31.0 38.0 45.0	31.0 38.0 45.0	35.0 46.0 51.0	35.0 46.0 51.0	34.0 41.0 48.0	34.0 41.0 48.0	37.0 44.0 51.0	37.0 44.0 51.0	42.0 51.0 56.0	42.0 51.0 56.0	
Sound pressure level	23.0 30.0 37.0	23.0 30.0 37.0	27.0 38.0 43.0	27.0 38.0 43.0	26.0 33.0 40.0	26.0 33.0 40.0	29.0 36.0 43.0	29.0 36.0 43.0	34.0 43.0 48.0	34.0 43.0 48.0	
Diameter hydraulic fittings											
Main heat exchanger	Ø	1/2"	1/2"	1/2"	1/2"	3/4"	3/4"	3/4"	3/4"	3/4"	
Power supply											
Power supply	120V~60Hz	120V~60Hz	120V~60Hz	120V~60Hz	120V~60Hz	120V~60Hz	120V~60Hz	120V~60Hz	120V~60Hz	120V~60Hz	
	FCZ600	FCZ650	FCZ700	FCZ750	FCZ800	FCZ850	FCZ900	FCZ950	FCZ1000		
	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	
Heating performance 158 °F / 140 °F (1)											
Heating capacity	22.2 27.6 34.1	24.5 31.2 39.2	27.6 33.4 37.5	31.0 38.5 42.6	33.4 36.8 40.9	38.5 42.1 47.7	36.7 45.5 51.6	38.2 49.2 58.3	42.8 52.0 58.0		
Water flow rate system side	2.5 3.1 3.9	2.8 3.5 4.4	3.1 3.8 4.2	3.5 4.4 4.8	3.8 4.2 4.6	4.4 4.8 5.4	4.2 5.2 5.8	4.3 5.6 6.6	4.8 5.9 6.6		
Pressure drop system side	4.01 5.95 8.69	4.48 6.91 10.43	5.69 8.03 9.70	3.35 5.02 6.02	7.48 8.91 10.78	5.67 6.66 8.34	3.97 5.84 7.32	5.19 8.18 11.12	7.44 10.54 12.86		
Heating performance 113 °F / 104 °F (2)											
Heating capacity	11.0 13.7 16.9	12.2 15.5 19.5	13.7 16.6 18.6	15.4 19.1 21.1	16.6 18.3 20.3	19.1 20.9 23.7	18.2 22.6 25.7	19.0 24.4 29.0	21.3 25.8 28.8		
Water flow rate system side	2.5 3.1 3.8	2.7 3.5 4.4	3.1 3.7 4.2	3.5 4.3 4.8	3.7 4.1 4.6	4.3 4.7 5.3	4.1 5.1 5.8	4.3 5.5 6.5	4.8 5.8 6.5		
Pressure drop system side	3.94 5.84 8.54	4.40 6.79 10.20	5.35 8.03 9.70	3.35 4.68 6.02	7.35 8.76 10.59	5.57 6.54 8.20	3.90 5.73 7.19	5.10 8.04 10.92	7.31 10.36 12.63		
Cooling performances 44.6 °F / 53.6 °F (3)											
Cooling capacity	11 13.3 15.9	13.5 16.4 19.3	13.3 16.6 18.7	16.0 18.2 20.9	16.5 19.3 20.8	17.9 21.5 23.6	14.6 17.1 23.6	19.7 25 29.3	19.4 23.5 26		
Sensible cooling capacity	8.7 10.8 13.4	9.5 11.7 14.1	10.2 12.8 14.6	10.9 13.8 16.1	12.7 15.1 16.5	13.6 16.5 18.3	10.1 12.9 19.4	13 16.6 19.7	15.1 18.2 18.9		
Water flow rate system side	2.4 3.0 3.5	2.6 3.6 4.3	3.0 3.7 4.2	3.2 4.0 4.6	3.7 4.3 4.6	4.0 4.8 5.2	3.2 3.8 5.2	4.4 5.5 6.5	4.3 5.2 5.8		
Pressure drop system side	4.49 6.34 8.70	4.90 6.95 9.37	5.35 8.03 10.04	3.35 4.68 6.02	6.62 8.79 10.04	4.71 6.49 7.69	3.12 4.11 7.36	4.90 7.51 10.04	7.32 10.30 12.38		
Fan											
Type	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	
Fan motor	Asynchronous	Asynchronous	Asynchronous	Asynchronous	Asynchronous	Asynchronous	Asynchronous	Asynchronous	Asynchronous	Asynchronous	
Number	3	3	3	3	3	3	3	3	3	3	
Air flow rate	306 424 541	306 424 541	412 547 671	412 547 671	530 659 765	530 659 765	412 547 671	412 547 671	530 659 765	530 659 765	
Fan coil sound data (4)											
Sound power level	42.0 51.0 57.0	42.0 51.0 57.0	50.0 57.0 62.0	50.0 57.0 62.0	56.0 61.0 66.0	56.0 61.0 66.0	51.0 57.0 62.0	51.0 57.0 62.0	56.0 61.0 66.0		
Sound pressure level	34.0 43.0 49.0	34.0 43.0 49.0	42.0 49.0 54.0	42.0 49.0 54.0	48.0 53.0 58.0	48.0 53.0 58.0	43.0 49.0 54.0	43.0 49.0 54.0	48.0 53.0 58.0		
Diameter hydraulic fittings											
Main heat exchanger	Ø	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	
Power supply											
Power supply	120V~60Hz	120V~60Hz	120V~60Hz	120V~60Hz	120V~60Hz	120V~60Hz	120V~60Hz	120V~60Hz	120V~60Hz	120V~60Hz	

- (1) Room air temperature 68 °F d.b.; Water (in/out) 158 °F/140 °F
(2) Room air temperature 68 °F d.b.; Water (in/out) 113 °F/104 °F
(3) Room air temperature 80.6 °F d.b./66.2 °F w.b.; Water (in/out) 44.6 °F/53.6 °F
(4) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583.

The unit is supplied with nipples for hydraulic connections.

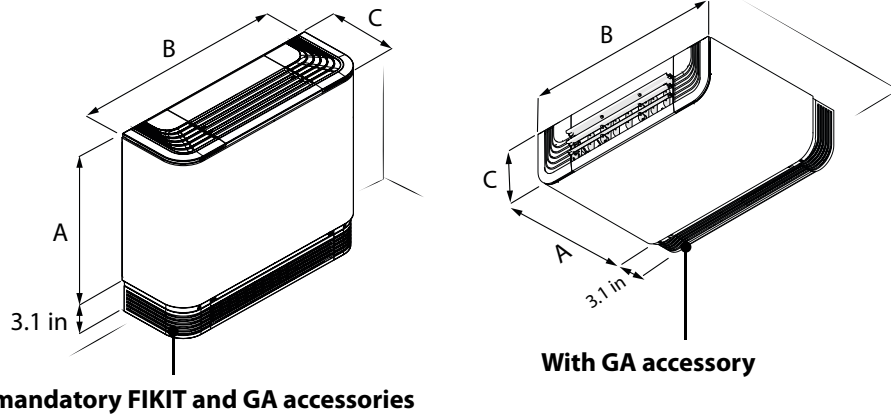
4-pipe

	FCZ101	FCZ201	FCZ301	FCZ401	FCZ501	FCZ601	FCZ701	FCZ801	FCZ901	FCZ1001
	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
Heating performance 149 °F / 131 °F (1)										
Heating capacity	1.4 1.9 2.2	1.9 2.5 3.0	3.4 4.1 4.8	4.0 5.0 5.9	4.9 6.3 7.0	5.6 6.9 8.2	6.9 8.1 9.3	7.9 9.0 10.1	8.9 10.6 10.8	9.2 10.5 11.5
Water flow rate system side	0.3 0.4 0.5	0.4 0.6 0.7	0.8 0.9 1.1	0.9 1.1 1.3	1.1 1.4 1.6	1.3 1.6 1.9	1.6 1.8 2.1	1.8 2.0 2.3	2.0 2.4 2.4	2.1 2.4 2.6
Pressure drop system side	0.76 1.32 1.70	1.81 3.00 4.09	5.73 8.11 10.74	1.71 2.53 3.42	2.12 3.35 4.09	3.24 4.78 6.51	4.38 5.82 7.51	6.25 7.89 9.58	3.44 4.70 4.85	4.18 5.36 6.29
Cooling performances 44.6 °F / 53.6 °F (2)										
Cooling capacity	2.2 2.8 3.4	3.0 4.3 5.4	5.7 7.4 9.0	7.5 9.9 12.2	9.1 12.5 14.5	10.9 13.3 15.8	13.3 16.6 18.7	16.5 19.3 20.8	14.6 17.0 23.5	19.4 23.4 26.0
Sensible cooling capacity	1.7 2.3 2.8	2.4 3.5 4.5	4.3 5.6 6.9	5.4 7.3 9.1	6.6 9.3 10.8	8.7 10.8 13.3	10.2 12.8 14.6	12.6 15.0 16.4	10.1 12.8 19.3	15.0 18.2 18.8
Water flow rate system side	0.5 0.6 0.8	0.7 1.0 1.2	1.3 1.6 2.0	1.7 2.2 2.7	2.0 2.8 3.2	2.4 3.0 3.5	3.0 3.7 4.2	3.7 4.3 4.6	3.2 3.8 5.2	4.3 5.2 5.8
Pressure drop system side	1.23 1.96 2.68	2.10 4.07 6.03	2.65 4.22 6.02	3.88 6.45 9.38	4.23 7.53 9.71	4.49 6.34 8.70	5.47 8.13 10.04	6.62 8.79 10.04	3.12 4.11 7.36	7.32 10.30 12.38
Fan										
Type	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal
Fan motor	Asynchronous	Asynchronous	Asynchronous	Asynchronous	Asynchronous	Asynchronous	Asynchronous	Asynchronous	Asynchronous	Asynchronous
Number	1	1	2	2	2	3	3	3	3	3
Air flow rate	65 94 118	82 129 171	153 206 265	194 271 353	235 353 424	306 424 541	412 547 671	530 659 765	412 547 671	530 659 765
Fan coil sound data (3)										
Sound pressure level	23.0 30.0 37.0	27.0 38.0 43.0	26.0 33.0 40.0	29.0 36.0 43.0	34.0 43.0 48.0	34.0 43.0 49.0	42.0 49.0 54.0	48.0 53.0 58.0	43.0 49.0 54.0	48.0 53.0 58.0
Sound power level	31.0 38.0 45.0	35.0 46.0 51.0	34.0 41.0 48.0	37.0 44.0 51.0	42.0 51.0 56.0	42.0 51.0 57.0	50.0 57.0 62.0	56.0 61.0 66.0	51.0 57.0 62.0	56.0 61.0 66.0
Diameter hydraulic fittings										
Main heat exchanger	Ø	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
Secondary heat exchanger	Ø	1/2"	1/2"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Power supply										
Power supply	120V~60Hz	120V~60Hz	120V~60Hz	120V~60Hz	120V~60Hz	120V~60Hz	120V~60Hz	120V~60Hz	120V~60Hz	120V~60Hz

- (1) Room air temperature 68 °F d.b.; Water (in/out) 149 °F/131 °F
(2) Room air temperature 80.6 °F d.b./66.2 °F w.b.; Water (in/out) 44.6 °F/53.6 °F
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583.

The unit is supplied with nipples for hydraulic connections.

DIMENSIONS



2-pipe

		FCZ100UA/US	FCZ150UA/US	FCZ200UA/US	FCZ250UA/US	FCZ300UA/US	FCZ350UA/US	FCZ400UA/US
Dimensions and weights								
A	in	19.1	19.1	19.1	19.1	19.1	19.1	19.1
B	in	25.2	25.2	29.5	29.5	38.6	38.6	47.2
C	in	8.7	8.7	8.7	8.7	8.7	8.7	8.7
Empty weight	lbs	33	35	35	37	40	42	53

		FCZ450UA/US	FCZ500UA/US	FCZ550UA/US	FCZ600UA/US	FCZ650UA/US	FCZ700UA/US	FCZ750UA/US
Dimensions and weights								
A	in	19.1	19.1	19.1	19.1	19.1	19.1	19.1
B	in	47.2	47.2	47.2	52.0	52.0	52.0	52.0
C	in	8.7	8.7	8.7	8.7	8.7	8.7	8.7
Empty weight	lbs	57	53	57	66	71	66	71

		FCZ800UA/US	FCZ850UA/US	FCZ900UA/US	FCZ950UA/US	FCZ1000UA/US
Dimensions and weights						
A	in	19.1	19.1	19.1	19.1	19.1
B	in	52.0	52.0	52.0	52.0	52.0
C	in	8.7	8.7	8.7	8.7	8.7
Empty weight	lbs	66	71	77	82	77

4-pipe

		FCZ101UA/US	FCZ201UA/US	FCZ301UA/US	FCZ401UA/US	FCZ501UA/US	FCZ601UA/US
Dimensions and weights							
A	in	25.2	29.5	38.6	47.2	47.2	52.0
B	in	19.1	19.1	19.1	19.1	19.1	19.1
C	in	8.7	8.7	8.7	8.7	8.7	8.7
Empty weight	lbs	35	37	42	57	57	71

		FCZ701UA/US	FCZ801UA/US	FCZ901UA/US	FCZ1001UA/US
Dimensions and weights					
A	in	52.0	52.0	52.0	52.0
B	in	19.1	19.1	19.1	19.1
C	in	8.7	8.7	8.7	8.7
Empty weight	lbs	71	71	82	82

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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