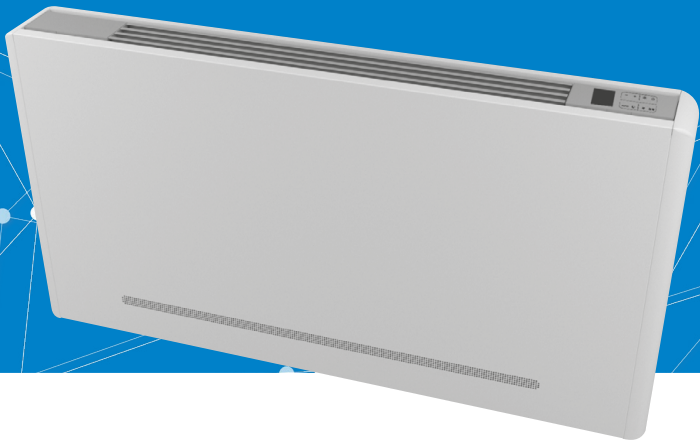


SLIM FAN COIL



Easy installation
Elegant design and reduced dimensions
Low energy consumption
Low noise level

42SI

The 42SI is an hydronic slim wall fan coil available in 4 models (with cabinet and without cabinet) and 5 sizes

The slim cabinet version can be installed in any ambient thanks to its elegant design and reduced dimensions (depth is only 150 mm).

All the models perform very low electric consumption and extremely quite sound levels according to the request of today's new projects.



CARRIER participates in the ECP programme for LCP/HP
Check ongoing validity of certificate:
www.eurovent-certification.com

RANGE

The 42SI range includes 4 models and 5 sizes .

It covers a range of cooling capacity from 0.43 kW to 3.7 kW at Eurovent conditions

The 42SI is available in :

- 2 pipe system heating or cooling
- 4 pipes system heating/cooling

CODIFICATION

Range				Casing- Size& motor type			Coil Type	Control	Body Valve	Electrical heater	Actuators	Modification index
4	2	S	I	C	2	9	F	-	-	-	A	
1	2	3	4	5	6	7	8	9	10	11	12	13

Digit 12
' - = without
A = ON/OFF 230V ACTUATOR

Digit 11
- = without

Digit 10
' - = without
G = 2 WAYS VALVE GROUP
H = 3 WAYS VALVE GROUP

Digit 9
- = without
A = With Electronic control & user interface built-in
B = With Electronic control & command built-in with Wifi
C= With Electronic control (witout wall user interface)

Digit 8
F = 2 pipes Left
G = 2 pipes Right
C = 4 pipes Left
D = 4 pipes Right

Digit 5 - 6 - 7			
C	2	9	Size 2 _ Standard Height with cabinet_ EC motor
C	4	9	Size 4 _ Standard Height with cabinet_ EC motor
C	6	9	Size 6 _ Standard Height with cabinet_ EC motor
C	8	9	Size 8 _ Standard Height with cabinet_ EC motor
C	9	9	Size 9_ Standard Height with cabinet_ EC motor
R	2	9	Size 2 _ Low Height (370 mm) with cabinet_ EC motor
R	4	9	Size 4 _ Low Height (370 mm) with cabinet_ EC motor
R	6	9	Size 6 _ Low Height (370 mm) with cabinet_ EC motor
R	8	9	Size 8 _ Low Height (370 mm) with cabinet_ EC motor
R	9	9	Size 9_ Low Height (370 mm) with cabinet_ EC motor
N	2	9	Size 2 _ Standard Height without cabinet_ EC motor
N	4	9	Size 4 _ Standard Height without cabinet_ EC motor
N	6	9	Size 6 _ Standard Height without cabinet_ EC motor
N	8	9	Size 8 _ Standard Height without cabinet_ EC motor
N	9	9	Size 9_ Standard Height without cabinet_ EC motor
L	2	9	Size 2 _ Low Height without cabinet_ EC motor
L	4	9	Size 4 _ Low Height without cabinet_ EC motor
L	6	9	Size 6 _ Low Height without cabinet_ EC motor
L	8	9	Size 8 _ Low Height without cabinet_ EC motor
L	9	9	Size 9_ Low Height without cabinet_ EC motor

TECHNICAL DESCRIPTION

Frame

Made with high-resistance electrolytically zinc-coated metal.

Casing (for 42SIC & 42SIR version)

Air intake grid made with electrolytically zinc-coated sheet metal painted with oven-dried epoxy powders, with quick-release device to clean the filters.

Reversible air outlet grid made with aluminium painted with oven-dried epoxy powders (metallic silver paint). Its generous size enhances its high mechanical strength

For 42SIC 2 pipes :

Lateral made in plastic (RAL9003)

Front panel made with electrolytically zinc-coated sheet metal painted with oven-dried epoxy powders

For 42SIC 4 pipes & 42SIR (low height) :

Sides and front panel made with electrolytically zinc-coated sheet metal painted with oven-dried epoxy powders (RAL 9003)

Air Filter

Polypropylene filter, washable or regenerable.

Fan Motor

Tangential fan made from synthetic material with staggered fins mounted on EPDM anti-vibration supports. Statically and dynamically balanced rotor, assembled directly on the motor's shaft.

Single phase electric motor fitted on anti-vibration EPDM supports.

Heat exchange coil

It is made with copper pipes and aluminium fins with high efficiency coils . 3/4 Eurokonus threaded fittings compliant with the requirements of the new EU Standards.

Condensate drip Tray

Made in ABS the outside diameter of the condensate discharge pipe is 14mm.

Options fitted in factory

- 2 ways valve
- 3 ways valve
- ON/OFF 230V actuator
- electronic control with user interface built-in

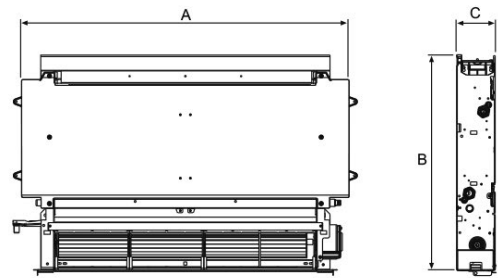
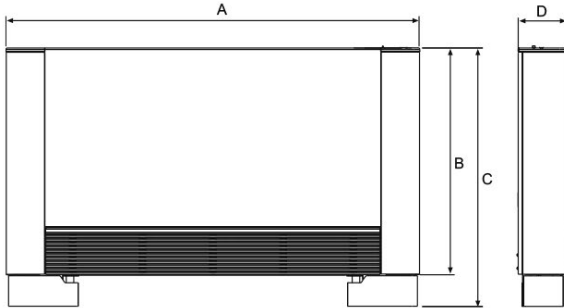
Accessories available in kit

- Kit 2 ways valve
- Kit 3 ways valve
- Back panel RAL9010 for cabinet version (42SIC or 42SIR)
- White color feet for covering floor pipes
- White color support feet
- In-wall box for vertical concealed version (42SIN or 42SIL)
- Front panel RAL90032 'equipped with return grill and supply adjustable blade for vertical concealed version (42SIN or 42SIL)
- LCD TOUCH electronic wall mounted control panel with or without WIFI module color black or white

DIMENSION, WEIGHT

VERSIONS: 42SIC 2 PIPES - 42SIC 4 PIPES - 42SIR 2 PIPES

42SIN 2-PIPE - 42SIN 4-PIPE - 42SIL BUILT-IN VERSIONS



VERSIONS: 42SIC 2 PIPES

DIMENSIONS		42SIC29F/G	42SIC49F/G	42SIC69F/G	42SIC89F/G	42SIC99F/G
A	mm	723	923	1123	1323	1523
B	mm	578	578	578	578	578
C	mm	658	658	658	658	658
D	mm	150	150	150	150	150
WEIGHT						
Net weight	kg	17	20	23	26	29

VERSIONS: 42SIC 4 PIPES

DIMENSIONS		42SIC29C/D	42SIC49C/D	42SIC69C/D	42SIC89C/D	42SIC99C/D
A	mm	723	723	1123	1323	1523
B	mm	638	638	638	638	638
C	mm	718	718	718	718	718
D	mm	150	150	150	150	150
WEIGHT						
Net weight	kg	18	21	25	28	32

42SIN 2-PIPES BUILT-IN VERSIONS

DIMENSIONS		42SIN29F/G	42SIN49F/G	42SIN69F/G	42SIN89F/G	42SIN99F/G
A	mm	480	680	880	1080	1280
B	mm	576	576	576	576	576
C	mm	126	126	126	126	126
WEIGHT						
Net weight	kg	9	12	15	18	21

42SIN 4-PIPE BUILT-IN VERSIONS

DIMENSIONS		42SIN29C/D	42SIN49C/D	42SIN69C/D	42SIN89C/D	42SIN99C/D
A	mm	480	680	880	1080	1280
B	mm	636	636	636	636	636
C	mm	126	126	126	126	126
WEIGHT						
Net weight	kg	10	13	17	20	24

VERSIONS: 42SIR 2 PIPES

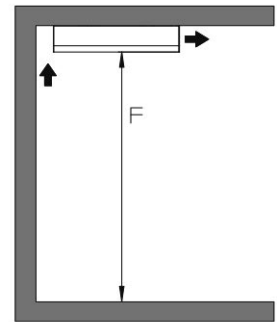
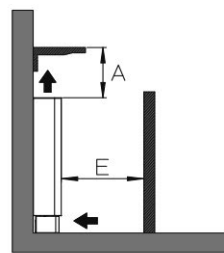
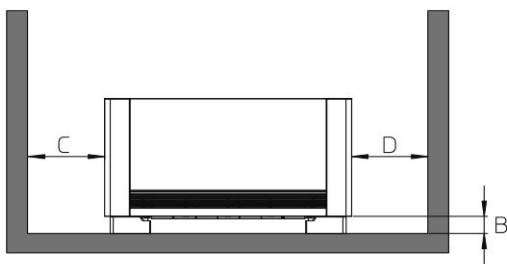
DIMENSIONS		42SIR29F/G	42SIR49F/G	42SIR69F/G	42SIR89F/G	42SIR99F/G
A	mm	723	923	1123	1323	1523
B	mm	378	378	378	378	378
C	mm	458	458	458	458	458
D	mm	150	150	150	150	150
WEIGHT						
Net weight	kg	12	14	16	19	23

42SIL 2 PIPES BUILT-IN VERSIONS

DIMENSIONS		42SIN29C/D	42SIN49C/D	42SIN69C/D	42SIN89C/D	42SIN99C/D
A	mm	480	680	880	1080	1280
B	mm	376	376	376	376	376
C	mm	126	126	126	126	126
Weight						
Net Weight	kg	7	9	11	13	15

POSITIONING

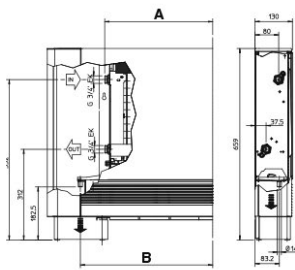
DISTANCES		29	49	69	89	99
A	mm	140	140	140	140	140
B	mm	80	80	80	80	80
C	mm	20	20	20	20	20
D	mm	20	20	20	20	20
E	mm	400	400	400	400	400
F	mm	2500	2500	2500	2500	2500



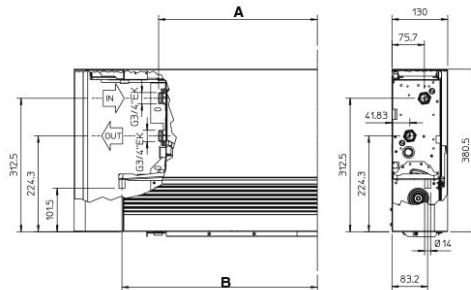
HYDRAULIC CONNECTIONS

		29	49	69	89	99
Without valves						
A	mm	170,5	270,5	370,5	470,5	570,5
B	mm	254	354	454	554	654
With two-way valve						
A	mm	210	310	410	510	610
B	mm	254	354	454	554	654
With three-way valve						
A	mm	282	382	482	582	682
B	mm	254	354	454	554	654

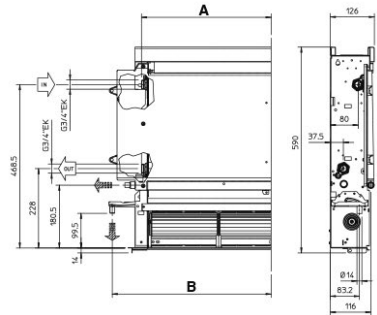
42SIC CABINET VERSION 2 PIPES



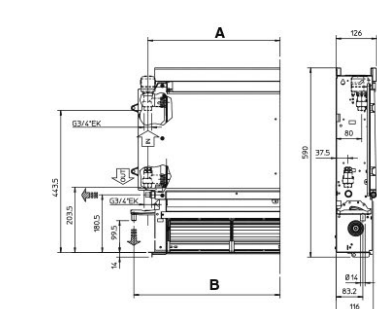
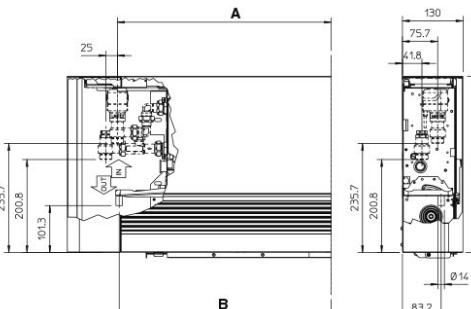
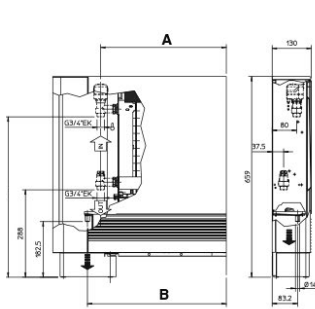
42SIR LOW HIGH CABINET VERSION



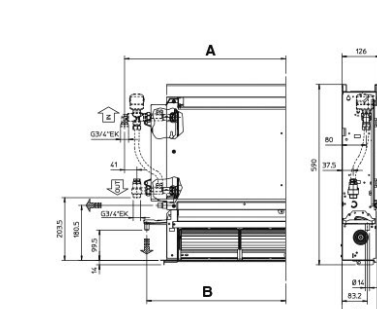
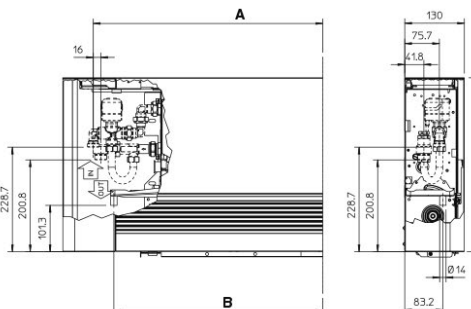
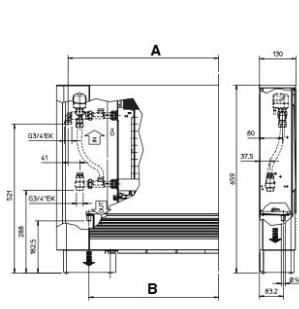
42SIN BUILT-IN VERSION 2 PIPES



WITHOUT VALVES



WITH TWO-WAY VALVE



WITH TRADITIONAL THREE-WAY VALVE

OPERATING LIMITS

Water Temperature min : 4°C

Water Tempertaure maxi : 80°C

Air ambient temperature min. : 5°C

Air ambient temperature maxi. : 32°C

HYDRAULIC CONNECTIONS

POSITION OF CONNECTION AND POSSIBLE INVERSION

The standard configuration of the machines has the hydraulic connections on the left and the control panels on the right.

If the positions must be inverted, the operation can be performed directly at the factory on demand.

CONNECTING PIPING

The position of the hydraulic connections can be inverted from left to right during installation.

The choice and the dimension of the hydraulic lines are the responsibility of the designer, who must operate in accordance with good practice regulations and laws in force.

		29	49	69	89	99
Distance						
Water flow rate	l/h	215	390	525	700	890
Ø Steel	"	1/2	1/2	1/2	3/4	3/4
Ø Copper	mm	14	16	18	18	22
Ø Multilayer	mm	16	18	20	20	26

CONDENSATION DRAIN

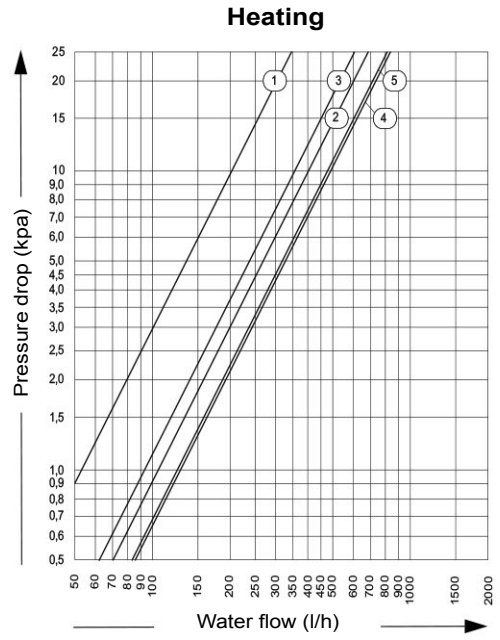
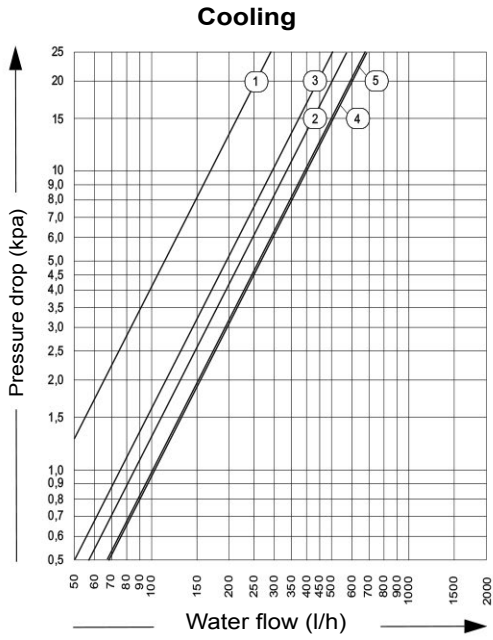
The condensation drainage system must be adequately sized (minimum internal diameter of the pipe 16 mm) and the piping positioned so that along the route it always maintains a specific gradient, which must be never lower than 1%. In vertical installations the drainage pipe is connected directly to the drainage tray, positioned below on the side shoulder, under the hydraulic connections.

FLOW RATE - PRESSURE DROP CHARTS

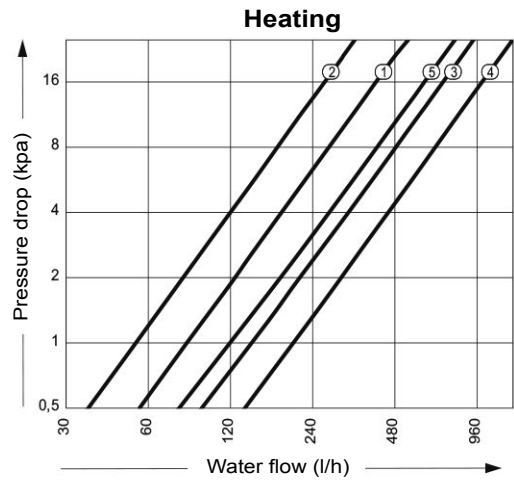
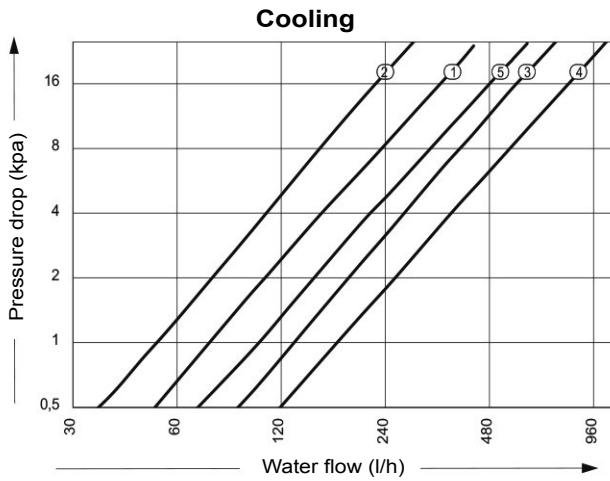
Key

- 1 29 model
- 2 49 model
- 3 69 model
- 4 89 model
- 5 99 model

42SIC - 42SIN



42SIR - 42SIL



THERMAL PERFORMANCES

2 PIPES

PERFORMANCE			42SIC29F/G 42SIN29F/G	42SIR29F/G 42SIL29F/G	42SIC49F/G 42SIN49F/G	42SIR49F/G 42SIL49F/G	42SIC69F/G 42SIN69F/G
Total cooling capacity	a	W	830	560	1760	1040	2650
Sensitive cooling capacity		W	620	520	1270	840	1960
Water flow rate		l/h	143	95	303	179	456
Water pressure drop		KPa	7,2	4,7	8,4	10,7	22,5
Heating capacity with water intel at 50°C	b	W	1090	780	2350	1570	3190
Water flow rate (water intel at 50°C)		l/h	143	95	303	179	456
Water pressure drop (water intel at 50°C)		KPa	5,7	1,4	6,6	8,8	16,3
Heating capacity without ventilation (50°C)		W	210	150	247	165	291
Heating capacity with water intel at 70°C	c	W	1890	1390	3990	2730	5470
Water flow rate (70°C at 10)		l/h	162	119	343	234	471
Water pressure drop (70°C at 10)		KPa	6,7	2	7,6	13	16,1
Heating capacity without ventilation 70		W	322	236	379	259	447
HYDRAULIC FEATURES							
Battery water content		litri	0,47	0,28	0,8	0,45	1,13
Maximum operating pressure		bar	10	10	10	10	10
Hydraulic connections		pollici	eurokonus 3/4	eurokonus 3/4	eurokonus 3/4	eurokonus 3/4	eurokonus 3/4
AERAILIC DATA							
Maximum airflow	d	m³/h	162	140	320	250	461
Airflow at medium speed (AUTO mode)		m³/h	113	96	252	199	367
Airflow at minimum ventilation speed		m³/h	55	49	155	119	248
Maximum static pressure available		Pa	10	10	10	10	13
ELECTRICAL DATA							
Power supply voltage		V/ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50
Maximum power consumption		W	11,9	11,9	17,6	17,6	19,8
Maximum current consumption		A	0,11	0,11	0,16	0,16	0,18
Power consumption at minimum speed		W	6	6	12	12	14
SOUND LEVEL							
Sound pressure at maximum airflow	g	dB(A)	39,4	38,8	40,2	39,5	42,2
Sound pressure at medium airflow	g	dB(A)	33,2	32,7	34,1	33,5	34,4
Sound pressure at minimum airflow	g	dB(A)	24,2	23,8	25,3	24,9	25,6
Sound pressure at temperature set point	g	dB(A)	18,8	18,8	19,6	19,6	22,3

- (a) Water temperature at battery intel 7°C, water temperature at battery outlet 12°C, ambient air temperature 27°C dry bulb and 19°C wet bulb (UNI EN 1397).
- (b) Water temperature at battery intel 50°C, water flow rate as in cooling ambient air temperature 20°C (UNI EN 1397 standard).
- (c) Water temperature at battery intel 70°C, water temperature at battery outlet 60°C, ambient air temperature 20°.
- (d) Airflow measured with clean filters.
- (g) Sound pressure measured in semianechoic chamber in compliance with ISO 7779.
- (*) Cooling capacity. There is a greater heating capacity at all speeds, with a 20 m³/h increase for the 200 model and a 40 m³/h increase for all other models.

THERMAL PERFORMANCES

2 PIPES

PERFORMANCE			42SIR69F/G 42SIL69F/G	42SIC89F/G 42SIN89F/G	42SIR89F/G 42SIL89F/G	42SIC99F/G 42SIN99F/G	42SIR99F/G 42SIL99F/G
Total cooling capacity	a	W	1640	3340	2310	3800	3140
Sensitive cooling capacity		W	1400	2650	2100	3010	2500
Water flow rate		l/h	281	574	397	654	539
Water pressure drop		KPa	4,5	18,6	2,1	24,9	14,5
Heating capacity with water intel at 50°C	b	W	2380	4100	3250	4860	3910
Water flow rate (water intel at 50°C)		l/h	281	574	397	654	539
Water pressure drop (water intel at 50°C)		KPa	3,4	14	3,5	18,3	13,4
Heating capacity without ventilation (50°C)		W	217	366	290	449	361
Heating capacity with water intel at 70°C	c	W	4140	6980	5650	8300	6620
Water flow rate (70°C at 10)		l/h	356	600	485	714	569
Water pressure drop (70°C at 10)		KPa	4,7	14	4,5	19,8	14
Heating capacity without ventilation 70		W	338	563	455	690	550
HYDRAULIC FEATURES							
Battery water content		litri	0,61	1,46	0,77	1,8	0,94
Maximum operating pressure		bar	10	10	10	10	10
Hydraulic connections		pollici	eurokonus 3/4	eurokonus 3/4	eurokonus 3/4	eurokonus 3/4	eurokonus 3/4
AERAILIC DATA							
Maximum airflow	d	m³/h	390	576	540	648	600
Airflow at medium speed (AUTO mode)		m³/h	306	453	416	494	460
Airflow at minimum ventilation speed		m³/h	204	370	343	426	403
Maximum static pressure available		Pa	10	13	10	13	10
ELECTRICAL DATA							
Power supply voltage		V/ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50
Maximum power consumption		W	19,8	26,5	26,5	29,7	43
Maximum current consumption		A	0,18	0,26	0,26	0,28	0,27
Power consumption at minimum speed		W	14	18	18	19	19
SOUND LEVEL							
Sound pressure at maximum airflow	g	dB(A)	41,4	42,5	41,6	43,9	42,6
Sound pressure at medium airflow	g	dB(A)	33,7	35	34,3	37,6	36,5
Sound pressure at minimum airflow	g	dB(A)	25,1	26,3	25,7	27,6	26,8
Sound pressure at temperature set point	g	dB(A)	22,3	22,7	22,7	23,8	23,8

- (a) Water temperature at battery intel 7°C, water temperature at battery outlet 12°C, ambient air temperature 27°C dry bulb and 19°C wet bulb (UNI EN 1397).
- (b) Water temperature at battery intel 50°C, water flow rate as in cooling ambient air temperature 20°C (UNI EN 1397 standard).
- (c) Water temperature at battery intel 70°C, water temperature at battery outlet 60°C, ambient air temperature 20°.
- (d) Airflow measured with clean filters.
- (g) Sound pressure measured in semianechoic chamber in compliance with ISO 7779.
- (*) Cooling capacity. There is a greater heating capacity at all speeds, with a 20 m³/h increase for the 200 model and a 40 m³/h increase for all other models.

THERMAL PERFORMANCES

4 PIPES

PERFORMANCE			42SIC29C/D	42SIN29C/D	42SIC49C/D	42SIN49C/D	42SIC69C/D	42SIN69C/D
Total cooling capacity	a	W	760	760	1620	1620	2420	2420
Sensitive cooling capacity		W	566	566	1205	1205	1800	1800
Water flow rate		l/h	130	130	277	277	416	416
Water pressure drop		KPa	6,1	6,1	7,1	7,1	18,6	18,6
Heating capacity with water intel at 50°C	b	W	610	610	1290	1290	1710	1710
Water flow rate (water intel at 50°C)		l/h	104	104	222	222	294	294
Water pressure drop (water intel at 50°C)		KPa	4,7	4,7	6,8	6,8	10,4	10,4
Heating capacity with water intel at 70°C	c	W	980	980	2110	2110	2790	2790
Water flow rate (70°C at 10)		l/h	85	85	181	181	240	240
Water pressure drop (70°C at 10)		KPa	3,4	3,4	4,8	4,8	7,2	7,2

HYDRAULIC FEATURES

Cooling battery water content		litri	0,47	0,47	0,8	0,8	1,13	1,13
Heating battery water content		litri	0,16	0,16	0,27	0,27	0,38	0,38
Maximum operating pressure		bar	10	10	10	10	10	10
Hydraulic connections		pollici	eurokonus 3/4	eurokonus 3/4	eurokonus 3/4	eurokonus 3/4	eurokonus 3/4	eurokonus 3/4

AERAILIC DATA

Maximum airflow	d	m³/h	147	147	289	289	411	411
Airflow at medium speed (AUTO mode)		m³/h	101	101	230	230	323	323
Airflow at minimum ventilation speed		m³/h	51	51	138	138	215	215
Maximum static pressure available		Pa	8	10	8	10	11	13

ELECTRICAL DATA

Power supply voltage		V/ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50
Maximum power consumption		W	11,9	11,9	17,6	17,6	19,8	19,8
Maximum current consumption		A	0,11	0,11	0,16	0,16	0,18	0,18
Power consumption at minimum speed		W	6	6	12	12	14	14

SOUND LEVEL

Sound pressure at maximum airflow	g	dB(A)	39,2	39,2	39,8	39,8	41,8	41,8
Sound pressure at medium airflow	g	dB(A)	33,1	33,1	33,9	33,9	34,2	34,2
Sound pressure at minimum airflow	g	dB(A)	24,2	24,2	25,1	25,1	25,4	25,4
Sound pressure at temperature set point	g	dB(A)	18,8	18,8	19,6	19,6	22,3	22,3

DIMENSIONS AND WEIGHT

Total length		mm	735	479	935	679	1135	879
Total height (without support feet)		mm	639	650	639	650	639	650
Total depth		mm	129	126	129	126	129	126
Net weight		Kg	18	10	21	13	25	17

- (a) Water temperature at battery intel 7°C, water temperature at battery outlet 12°C, ambient air temperature 27°C dry bulb and 19°C wet bulb (UNI EN 1397).
- (b) Water temperature at battery intel 50°C, water flow rate as in cooling ambient air temperature 20°C (UNI EN 1397 standard).
- (c) Water temperature at battery intel 70°C, water temperature at battery outlet 60°C, ambient air temperature 20°.
- (d) Airflow measured with clean filters.
- (g) Sound pressure measured in semianechoic chamber in compliance with ISO 7779.
- (*) Cooling capacity. There is a greater heating capacity at all speeds, with a 20 m³/h increase for the 200 model and a 40 m³/h increase for all other models.

THERMAL PERFORMANCES

4 PIPES

PERFORMANCE			42SIC89C/D	42SIN89C/D	42SIC99C/D	42SIN99C/D
Total cooling capacity	a	W	3040	3040	3640	3640
Sensitive cooling capacity		W	2300	2300	2720	2720
Water flow rate		l/h	523	523	627	627
Water pressure drop		KPa	14,9	14,9	21,7	21,7
Heating capacity with water intel at 50°C	b	W	2130	2130	2900	2900
Water flow rate (water intel at 50°C)		l/h	366	366	499	499
Water pressure drop (water intel at 50°C)		KPa	10,1	10,1	15	15
Heating capacity with water intel at 70°C	c	W	3480	3480	4740	4740
Water flow rate (70°C at 10)		l/h	299	299	408	408
Water pressure drop (70°C at 10)		KPa	5,4	5,4	8,8	8,8
HYDRAULIC FEATURES						
Cooling battery water content		litri	1,46	1,46	1,8	1,8
Heating battery water content		litri	0,49	0,49	0,6	0,6
Maximum operating pressure		bar	10	10	10	10
Hydraulic connections		pollici	eurokonus 3/4	eurokonus 3/4	eurokonus 3/4	eurokonus 3/4
AERAULIC DATA						
Maximum airflow	d	m³/h	529	529	602	602
Airflow at medium speed (AUTO mode)		m³/h	408	408	462	462
Airflow at minimum ventilation speed		m³/h	336	336	404	404
Maximum static pressure available		Pa	11	13	11	13
ELECTRICAL DATA						
Power supply voltage		V/ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50
Maximum power consumption		W	26,5	26,5	29,7	29,7
Maximum current consumption		A	0,26	0,26	0,28	0,28
Power consumption at minimum speed		W	18	18	19	19
SOUND LEVEL						
Sound pressure at maximum airflow	g	dB(A)	42,2	42,2	43,6	43,6
Sound pressure at medium airflow	g	dB(A)	34,8	34,8	37,2	37,2
Sound pressure at minimum airflow	g	dB(A)	26,1	26,1	27,4	27,4
Sound pressure at temperature set point	g	dB(A)	22,7	22,7	23,8	23,8

- (a) Water temperature at battery intel 7°C, water temperature at battery outlet 12°C, ambient air temperature 27°C dry bulb and 19°C wet bulb (UNI EN 1397).
- (b) Water temperature at battery intel 50°C, water flow rate as in cooling ambient air temperature 20°C (UNI EN 1397 standard).
- (c) Water temperature at battery intel 70°C, water temperature at battery outlet 60°C, ambient air temperature 20°.
- (d) Airflow measured with clean filters.
- (g) Sound pressure measured in semianechoic chamber in compliance with ISO 7779.
- (*) Cooling capacity. There is a greater heating capacity at all speeds, with a 20 m³/h increase for the 200 model and a 40 m³/h increase for all other models.



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Manufacturer reserves the right to change any product specifications without notice.



Quality and Environment
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Approval

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