



# Hydronic Fan coil **42SI**

**IDROFAN**.SLIM



# NEW FAN COIL

Elegant & compact design

High efficiency with low energy consumption

Low noise level

Easy installation

**IDROFAN**.SLIM

## WATER TERMINAL UNIT FOR COOLING, HEATING, DEHUMIDIFICATION

### THE POWER OF ELEGANCE

With a discreet and elegant design, the new **IDROFAN**.SLIM terminal unit of Carrier fits perfectly in every room and covers every need.

Available in 5 sizes, cased or concealed for ceiling or floor mounting installations. Provides optimal comfort in both new and renovated buildings.

### HIGH ENERGY EFFICIENCY

**IDROFAN**.SLIM incorporates the latest technologies to meet the new building energy performance objectives. The new high energy efficient unit is designed for excellent performance & improved comfort with low energy consumption.

**IDROFAN**.SLIM is the ideal solution for residential and commercial applications as it can be combined with new or existing cooling and heating systems of all types.

### DC INVERTER FAN MOTORS

The **IDROFAN**.SLIM high efficiency tangential fan has the latest technology of variable speed EC motor that gradually changes the fan speed until the desired temperature is reached. It then keeps the speed constant, thus avoiding frequent fan restarts, offering more economical operation and reduced noise. Moreover, the fan has with staggered fins mounted on EPDM anti-vibration supports for even more silent operation. EC motors include auto adaptive control of the air flow from 0 to 100% to match individual comfort levels in both cooling and heating mode.

The high-performance fan of the IDROFAN incorporates the latest variable-speed EC motor technology and enhances user comfort by reducing the sound level.

The variable-speed EC motor, coupled with the latest-generation electronic Touch controller, ultra-discreet air flow and customized on-site fan speed setting, ensures optimized comfort and ultra-quiet operation.

## INDOOR AIR QUALITY

Indoor air quality is a factor of particular importance for all buildings and the well-being of tenants. The **IDROFAN.SLIM** unit has filters that retain air particles to create better comfort conditions.

It is not rare that room constraints do not allow the installation of a Fan Coil unit. Now the new **IDROFAN.SLIM** unit, with its reduced thickness and flexible installation can be easily built-in ensuring better aesthetic result, economy, and easy cleaning.



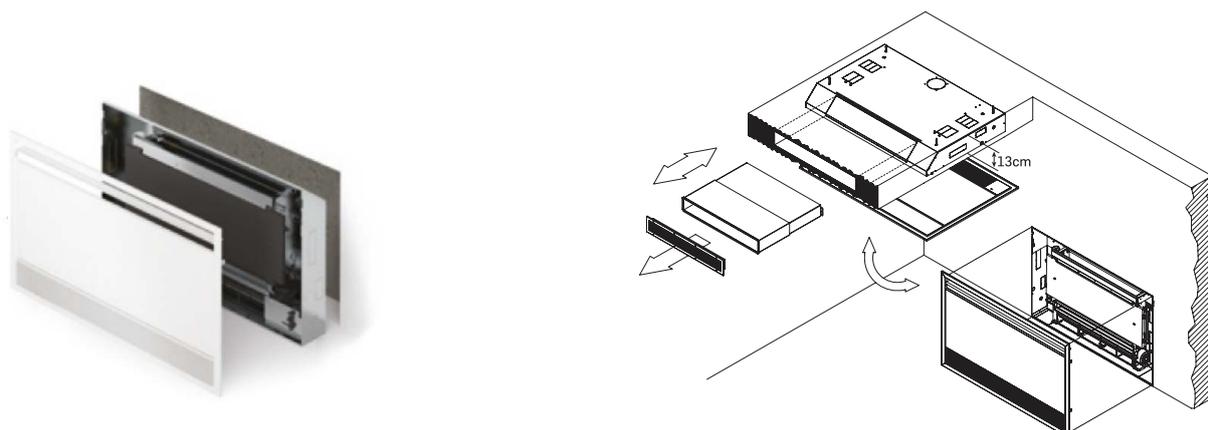
The 42SI is a hydronic slim fan coil available in 4 models (with cabinet and without cabinet) and 5 sizes. The slim cabinet version can be installed in any ambient thanks to its elegant design and reduced dimensions (depth is only 150 mm). All the models perform very low electric consumption and extremely quite sound levels following to the request of today's new projects.

42SIC	42SIR	42SIN	42SIL
<ul style="list-style-type: none"> <li>• Cabinet</li> <li>• 2pipes or 4pipes</li> <li>• Standard height (578mm)</li> </ul>	<ul style="list-style-type: none"> <li>• Cabinet</li> <li>• 2pipes</li> <li>• Low height (378mm)</li> </ul>	<ul style="list-style-type: none"> <li>• Concealed</li> <li>• 2pipes or 4pipes</li> <li>• Standard height (578mm)</li> </ul>	<ul style="list-style-type: none"> <li>• Concealed</li> <li>• 2pipes</li> <li>• Low height (378mm)</li> </ul>



## WALL BUILD IN UNIQUE INSTALLATION

The Bult In model is also particularly suited for built-in installations. Thanks to its reduced depth, I can be inserted in all types of walls and false ceilings, even shallow ones. It's extremely low noise levels make it the best choice for summer and winter climate control of all rooms.



## CONTROL WITH SMART TOUCH PANEL

available in two colours, black and white

1. Built in or wall version.
2. Management of different FCUs in a small wi-fi domestic network, max 10 units.
3. Management of the FCUs connected in a webserver network using Rs485 card, max 64 units.
4. Wi Fi control by smartphone, tablet using a dedicated app. or by a pc (optional).



## NET WORK CONTROLS

The Web server board allows to connect terminals fitted with electronic controls with PID logic to a normal cabled or wireless LAN network.

## MAIN FUNCTIONS

- Local or remote network supervision and control.
- Weekly, summer and winter programming with 3 temperature intervals.
- The programming allows to leave a margin for correction without the need to turn on the PC.
- Manual operation that allows to freely use the terminal.
- It is possible to completely block the control on board the machine to prevent incorrect use in areas accessible to the public.



**42SIC**

2 pipes / Standard height with cabinet

		<b>42SIC29F/G</b>	<b>42SIC49F/G</b>	<b>42SIC69F/G</b>	<b>42SIC89F/G</b>	<b>42SIC99F/G</b>
Total cooling capacity (*)	kW	0,83	1,76	2,65	3,34	3,80
Sensible cooling capacity	kW	0,62	1,27	1,96	2,65	3,01
Heating capacity with water inlet at 50°C (**)	kW	1,09	2,35	3,19	4,10	4,86
Heating capacity with water inlet at 70°C (***)	kW	1,89	3,99	5,47	6,98	8,30
Coil water content	lt	0,47	0,80	1,13	1,46	1,80
Maximum operating pressure	bar	10	10	10	10	10
Hydraulic connections	inch	eurokonus 3/4				
Maximum airflow (****)	m³/h	162	320	461	576	648
Maximum static pressure available	Pa	10	10	13	13	13
Maximum power consumption	W	11,9	17,6	19,8	26,5	29,7
Power consumption at minimum speed	W	6	12	14	18	19
Sound pressure at min/max airflow (*****)	dB(A)	24,2/39,4	25,3/40,2	25,6/42,2	26,3/42,5	27,6/43,9
Sound pressure at temperature set point	dB(A)	18,8	19,6	22,3	22,7	23,8
Dimensions						
Length	mm	723	923	1123	1323	1523
Height (without/with feet)	mm	578/658	578/658	578/658	578/658	578/658
Depth	mm	150	150	150	150	150
Weight	kgr	17	20	23	26	29
Power supply voltage	V/ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50

**42SIC 4-pipe**

4 pipes / Standard height with cabinet

		<b>42SIC29C/D</b>	<b>42SIC49C/D</b>	<b>42SIC69C/D</b>	<b>42SIC89C/D</b>	<b>42SIC99C/D</b>
Total cooling capacity (*)	kW	0,76	1,62	2,42	3,04	3,64
Sensible cooling capacity	kW	0,566	1,205	1,8	2,3	2,72
Heating capacity with water inlet at 50°C (**)	kW	0,61	1,29	1,71	2,13	2,9
Heating capacity with water inlet at 70°C (***)	kW	0,98	2,11	2,79	3,48	4,74
Cooling coil water content	lt	0,47	0,80	1,13	1,46	1,80
Heating coil water content	lt	0,16	0,27	0,38	0,49	0,60
Maximum operating pressure	bar	10	10	10	10	10
Hydraulic connections	inch	eurokonus 3/4				
Maximum airflow (****)	m³/h	147	289	411	529	602
Maximum static pressure available	Pa	8	8	11	11	11
Maximum power consumption	W	11,9	17,6	19,8	26,5	29,7
Power consumption at minimum speed	W	6	12	14	18	19
Sound pressure at min/max airflow (*****)	dB(A)	24,2/39,2	25,1/39,8	25,4/41,8	26,1/42,2	27,4/43,6
Sound pressure at temperature set point	dB(A)	18,8	19,6	22,3	22,7	23,8
Dimensions						
Length	mm	723	923	1123	1323	1523
Height (without/with feet)	mm	638/718	638/718	638/718	638/718	638/718
Depth	mm	150	150	150	150	150
Weight	kgr	18	21	25	28	32
Power supply voltage	V/ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50

**42SIR**

2 pipes / - Low height (370 mm) with cabinet

		<b>42SIR29F/G</b>	<b>42SIR49F/G</b>	<b>42SIR69F/G</b>	<b>42SIR89F/G</b>	<b>42SIR99F/G</b>
Total cooling capacity (*)	kW	0,56	1,04	1,64	2,31	3,14
Sensible cooling capacity	kW	0,52	0,84	1,40	2,10	2,50
Heating capacity with water inlet at 50°C (**)	kW	0,78	1,57	2,38	3,25	3,91
Heating capacity with water inlet at 70°C (***)	kW	1,39	2,73	4,14	5,65	6,62
Coil water content	lt	0,28	0,45	0,61	0,77	0,94
Maximum operating pressure	bar	10	10	10	10	10
Hydraulic connections	inch	eurokonus 3/4				
Maximum airflow (****)	m³/h	140	250	390	540	600
Maximum static pressure available	Pa	10	10	10	10	10
Maximum power consumption	W	11,9	17,6	19,8	26,5	43,0
Power consumption at minimum speed	W	6	12	14	18	19
Sound pressure at min/max airflow (*****)	dB(A)	23,8/38,8	24,9/39,5	25,1/41,4	25,7/41,6	26,8/42,6
Sound pressure at temperature set point	dB(A)	18,8	19,6	22,3	22,7	23,8
Dimensions						
Length	mm	723	923	1123	1323	1523
Height (without/with feet)	mm	378/458	378/458	378/458	378/458	378/458
Depth	mm	150	150	150	150	150
Weight	kgr	12	14	16	19	23
Power supply voltage	V/ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50

\* Cooling mode (2-pipe and 4-pipe coil): Entering air temperature 27°C db/19°C wb, entering/leaving water temperature 7°C/12°C, high fan speed.

\*\* Heating mode (2-pipe coil): Entering air temperature 20°C, entering water temperature 50°C, high fan speed, same water flow rate as in cooling mode.

\*\*\* Heating mode (4-pipe coil): Entering air temperature 20°C, entering water temperature 70°C, high fan speed, water temperature difference = 10 K.

\*\*\*\* Airflow measured with clean filters.

\*\*\*\*\* Sound pressure measured in semianechoic chamber in compliance with ISO 7779

**42SIN**

2 pipes / - Standard height without cabinet

		42SIN29F/G	42SIN49F/G	42SIN69F/G	42SIN89F/G	42SIN99F/G
Total cooling capacity (*)	kW	0,83	1,76	2,65	3,34	3,80
Sensible cooling capacity	kW	0,62	1,27	1,96	2,65	3,01
Heating capacity with water inlet at 50°C (**)	kW	1,09	2,35	3,19	4,10	4,86
Heating capacity with water inlet at 70°C (***)	kW	1,89	3,99	5,47	6,98	8,30
Coil water content	lt	0,47	0,80	1,13	1,46	1,80
Maximum operating pressure	bar	10	10	13	10	10
Hydraulic connections	inch	eurokonus 3/4				
Maximum airflow (****)	m³/h	162	320	461	576	648
Maximum static pressure available	Pa	10	10	13	13	13
Maximum power consumption	W	11,9	17,6	19,8	26,5	29,7
Power consumption at minimum speed	W	6	12	14	18	19
Sound pressure at min/max airflow (*****)	dB(A)	24,2/39,4	25,3/40,2	25,6/42,2	26,3/42,5	27,6/43,9
Sound pressure at temperature set point	dB(A)	18,8	19,6	22,3	22,7	23,8
Dimensions						
Length	mm	480	680	880	1080	1280
Height (without/with feet)	mm	576	576	576	576	576
Depth	mm	126	126	126	126	126
Weight	kgr	9	12	15	18	21
Power supply voltage	V/ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50

**42SIN 4-pipe**

4 pipes / Standard height without cabinet

		42SIN29C/D	42SIN49C/D	42SIN69C/D	42SIN89C/D	42SIN99C/D
Total cooling capacity (*)	kW	0,76	1,62	2,42	3,04	3,64
Sensible cooling capacity	kW	0,57	1,21	1,80	2,30	2,72
Heating capacity with water inlet at 50°C (**)	kW	0,61	1,29	1,71	2,13	2,9
Heating capacity with water inlet at 70°C (***)	kW	0,98	2,11	2,79	3,48	4,74
Cooling coil water content	lt	0,47	0,80	1,13	1,46	1,80
Heating coil water content	lt	0,16	0,27	0,38	0,49	0,60
Maximum operating pressure	bar	10	10	10	10	10
Hydraulic connections	inch	eurokonus 3/4				
Maximum airflow (****)	m³/h	147	289	411	529	602
Maximum static pressure available	Pa	10	10	13	13	13
Maximum power consumption	W	11,9	17,6	19,8	26,5	29,7
Power consumption at minimum speed	W	6	12	14	18	19
Sound pressure at min/max airflow (*****)	dB(A)	24,2/39,2	25,1/39,8	25,4/41,8	26,1/42,2	27,4/43,6
Sound pressure at temperature set point	dB(A)	18,8	19,6	22,3	22,7	23,8
Dimensions						
Length	mm	480	680	880	1080	1280
Height (without/with feet)	mm	636	636	636	636	636
Depth	mm	126	126	126	126	126
Weight	kgr	10	13	17	20	24
Power supply voltage	V/ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50

**42SIL**

2 pipes / - Low height (370 mm) without cabinet

		42SIL29F/G	42SIL49F/G	42SIL69F/G	42SIL89F/G	42SIL99F/G
Total cooling capacity (*)	kW	0,56	1,04	1,64	2,31	3,14
Sensible cooling capacity	kW	0,52	0,84	1,40	2,10	2,50
Heating capacity with water inlet at 50°C (**)	kW	0,78	1,57	2,38	3,25	3,91
Heating capacity with water inlet at 70°C (***)	kW	1,39	2,73	4,14	5,65	6,62
Coil water content	lt	0,28	0,45	0,61	0,77	0,94
Maximum operating pressure	bar	10	10	10	10	10
Hydraulic connections	inch	eurokonus 3/4				
Maximum airflow (****)	m³/h	140	250	390	540	600
Maximum static pressure available	Pa	10	10	10	10	10
Maximum power consumption	W	11,9	17,6	19,8	26,5	43,0
Power consumption at minimum speed	W	6	12	14	18	19
Sound pressure at min/max airflow (*****)	dB(A)	23,8/38,8	24,9/39,5	25,1/41,4	25,7/41,6	26,3/42,6
Sound pressure at temperature set point	dB(A)	18,8	19,6	22,3	22,7	23,8
Dimensions						
Length	mm	723	923	1123	1323	1523
Height (without/with feet)	mm	376/480	376/680	376/880	376/1080	378/1280
Depth	mm	126	126	126	126	126
Weight	kgr	7	9	11	13	15
Power supply voltage	V/ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50

\* Cooling mode (2-pipe and 4-pipe coil): Entering air temperature 27°C db/19°C wb, entering/leaving water temperature 7°C/12°C, high fan speed.

\*\* Heating mode (2-pipe coil): Entering air temperature 20°C, entering water temperature 50°C, high fan speed, same water flow rate as in cooling mode.

\*\*\* Heating mode (4-pipe coil): Entering air temperature 20°C, entering water temperature 70°C, high fan speed, water temperature difference = 10 K.

\*\*\*\* Airflow measured with clean filters.

\*\*\*\*\* Sound pressure measured in semianechoic chamber in compliance with ISO 7779



## **AHI CARRIER SOUTH EASTERN EUROPE AIR-CONDITIONING SINGLE MEMBER SOCIETE ANONYME**

### **Headquarters**

18, Kifissou Ave.  
104 42 - Athens  
GREECE  
Tel.: +30 210 6796300  
Fax: +30 210 6796390  
[www.ahi-carrier.gr](http://www.ahi-carrier.gr)

### **Thessaloniki Branch**

5, Ag. Georgioy str., Cosmos Offices  
570 01 - Patriarhiko Pileas Thessaloniki  
GREECE  
Tel.: +30 231 3080430  
Fax: +30 231 3080435

### **AHI Carrier HVAC BULGARIA EOOD**

Trade Center Europe Building 6, floor 3, office 6  
7 Iskarsko Shose Blvd., Sofia 1528  
BULGARIA  
Tel.: +35 929483960  
Fax: +35 929483990  
Email: [bginfo@ahi-carrier.com](mailto:bginfo@ahi-carrier.com)  
[www.ahi-carrier.bg](http://www.ahi-carrier.bg)

### **AHI Carrier ROMANIA SRL**

Intrarea Nestorei 1  
Corp B, Et.5, Sector 4  
RO-040295 Bucuresti,  
ROMANIA  
Tel. : +40 214 050751  
[www.ahi-carrier.ro](http://www.ahi-carrier.ro)

### **AHI Carrier GmbH**

Andromeda Tower, Donau-City Str. 6/9  
1220 Wien, Österreich  
AUSTRIA  
Tel.: +43 1 269 969 710  
Fax: +43 1 269 969 740

### **AHI Carrier CZ s.r.o.**

Styblova 253/13,  
14900 Praha 5, Chodov  
CZECH REPUBLIC  
Tel.: +420 212 812 030  
[www.ahi-carrier.cz](http://www.ahi-carrier.cz)