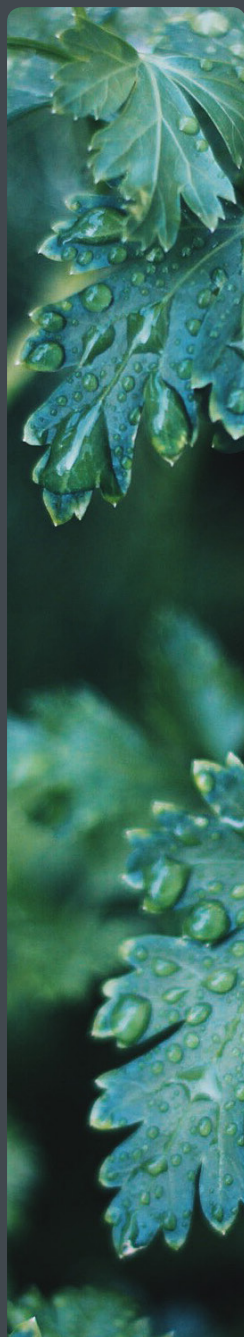


# SRC - H

VENTILATOR UNIT



## SRC-H

Non-residential ventilator unit with dual flow and high yield heat recovery.

## PERFORMANCE

Equipped with counter current heat exchanger in aluminum (Eurovent certified) and electronic backward blade ventilators. The total bypass as standard allows favorable climatic conditions to be taken advantage of outside the building for free cooling (or free heating) in automatic mode.

## STRUCTURE

SRC-H is manufactured using a profiled extruded aluminum frame and 25 mm thick sandwich panels, insulated in polyurethane foam. The panels and inner parts are manufactured in Aluzinc®, material that ensures high strength against corrosion and oxidation. A panel with shutter opening eases access to the filters (F7 for the renewed air flow and G4 for the extraction air flow). SRC-H is prepared for installation outdoors (with an optional, specific protective roof) and indoors. Available in 4 sizes, it can be equipped with air post-treatment systems (inside the unit) such as: hot/cold water battery, electrical heater or direct expansion battery. SRC-H was designed to enable easy configuration of the connection to the air distribution/captation ducts. It is also possible and easy to install post-air treatment devices after sale.

## CONTROLS

SRC-H was supplied with an electric box and control system; it is available in a version equipped with CM-EVO control and a version equipped with CM-EVO-IP control prepared for complete integration in home automation systems (Modbus protocol with Ethernet connection or, on request, with the addition of connection RS485). The new version of our control systems enables extremely easy and rapid passage from a control system to another, even after installation with the single replacement of the remote panel.

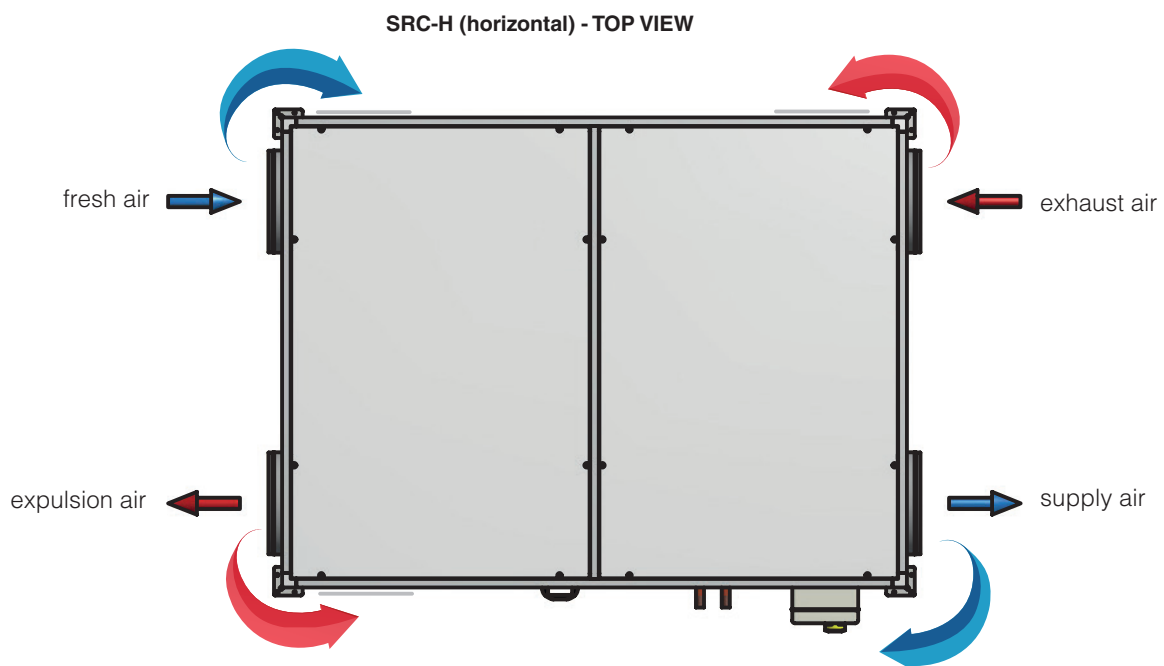
The CM-EVO control has a colored, backlit touch screen interface with intuitive viewing of the working status of the machine. It enables precise adjustment of ventilator speed and has a weekly, time schedule for automatic management of the ventilators. It can be controlled by an external switch to activate the booster function, it can automatically adjust the air flow rate if connected to an air quality probe, it can manage any air post treatment accessories, it automatically manages the bypass and prevents heat exchanger freezing by managing the speed of the ventilators or, if installed, an electrical pre-heating resistor (optional accessory outside the machine); it signals to the user the need to replace the filters (the clogging status of the filters is monitored by a pair of different pressure switches, supplied as standard) or an anomaly, indicating the origin. With the addition of optional accessories (COP kit and CAV kit installed on the channel) you can manage the ventilation machine in constant pressure or constant flow rate mode.

The CM-EVO-IP control has the same characteristics as the CM-EVO version with the addition of Modbus communication protocol which allows full control of the machine by the supervision software of the home automation system. The implemented webserver allows interaction with the machine, even with an internet browser of a device connected (even from remote) to the home automation system in which the machine is inserted.

## ACCESSORIES

- SRC-H can be equipped with other accessories such as:
  - . R.H. of probe, CO2 or CO2 / VOC
  - . Operating kit pressure or constant flow
  - . protection roof for outside installation
  - . grilles and damper

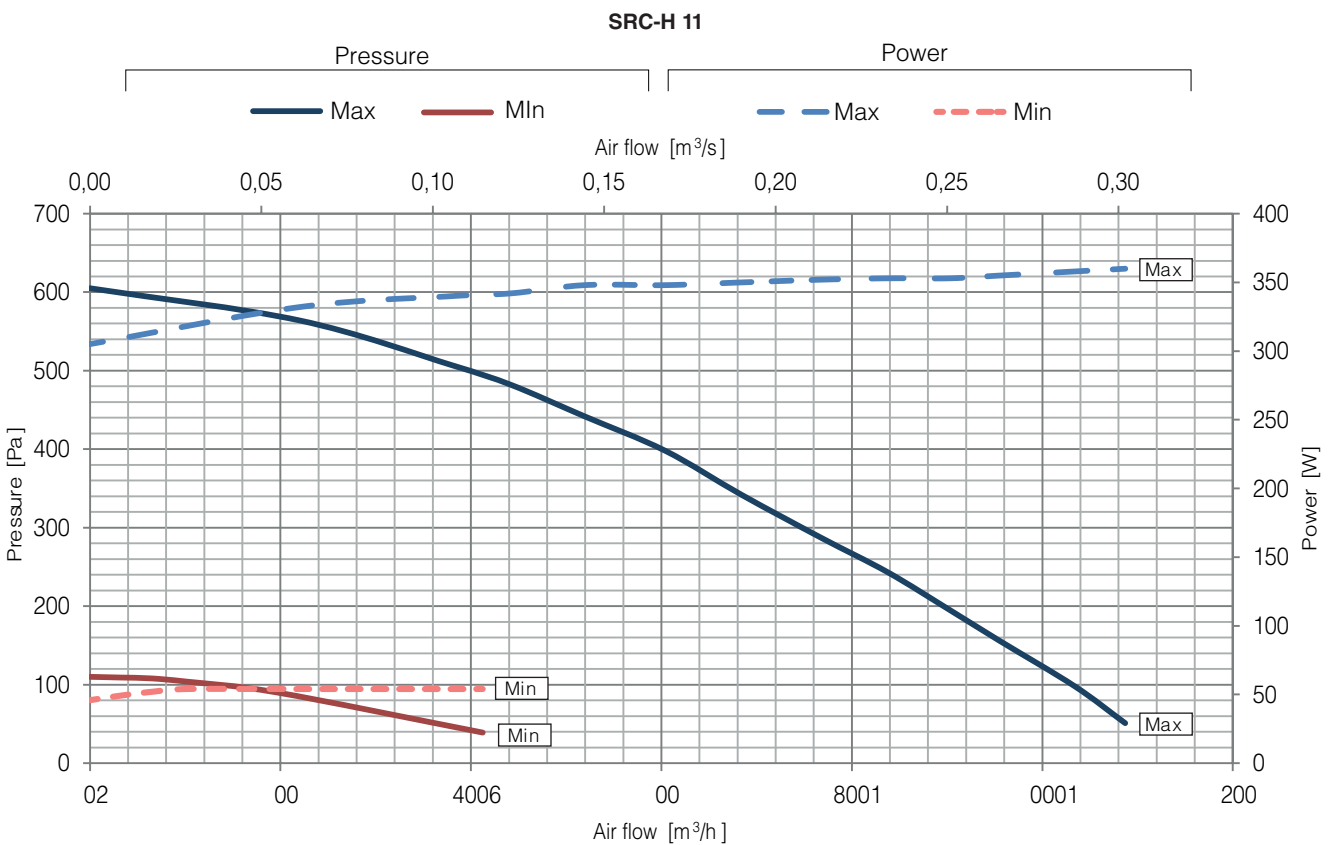
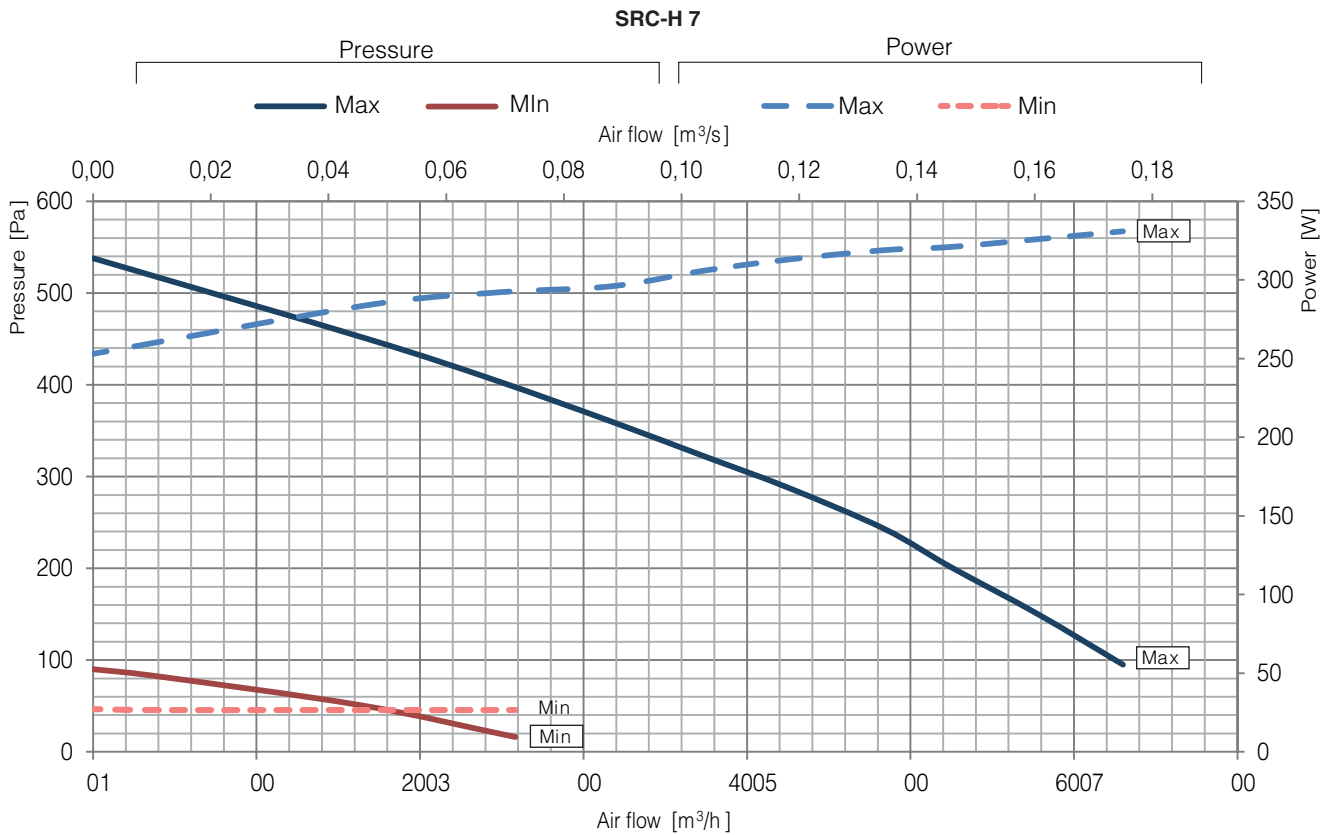
*For a more complete view of the characteristics of the control panels, please read the specific manuals.*



Counterflow heat exchanger made of aluminum manufactured by RECUTECH  
RECUTECH participates in the Eurovent Certification Program

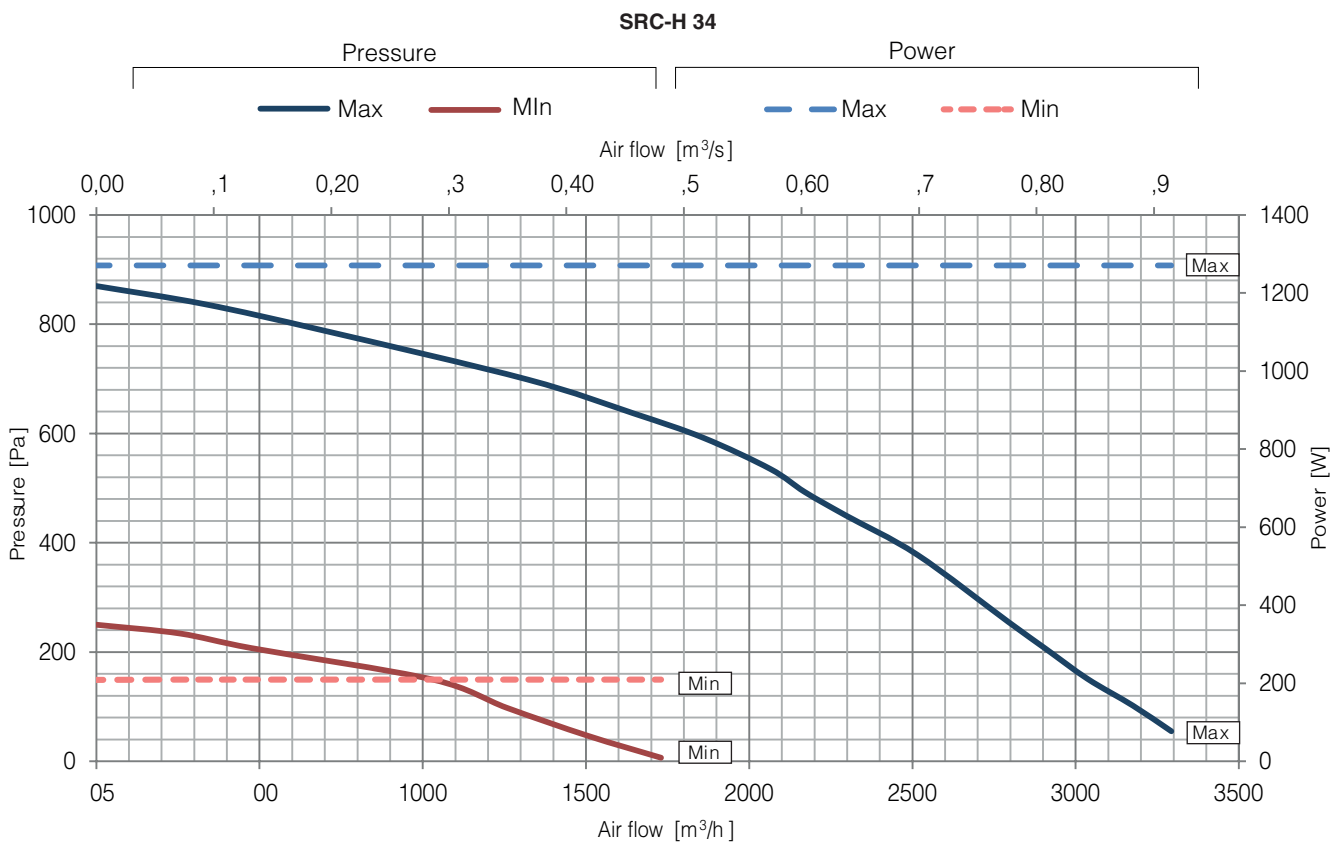
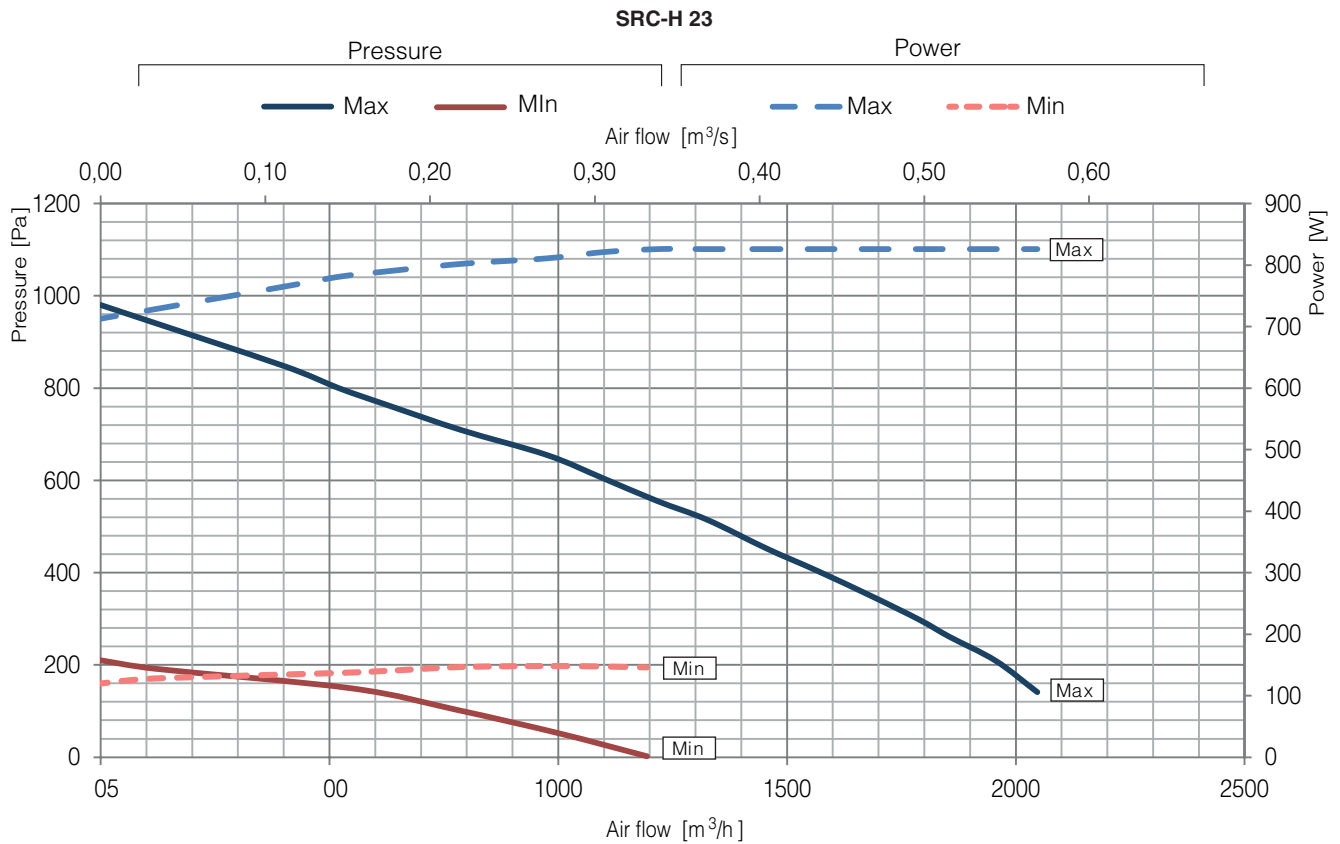
### PERFORMANCES (UNI EN 13141-7)

The unit must be ducted properly: SAMP authorizes the use only according to its performance diagram shown into this catalogue.  
The declared performances are with CLEAN filters, and guaranteed ONLY with the original filters SAMP low pressure drop.



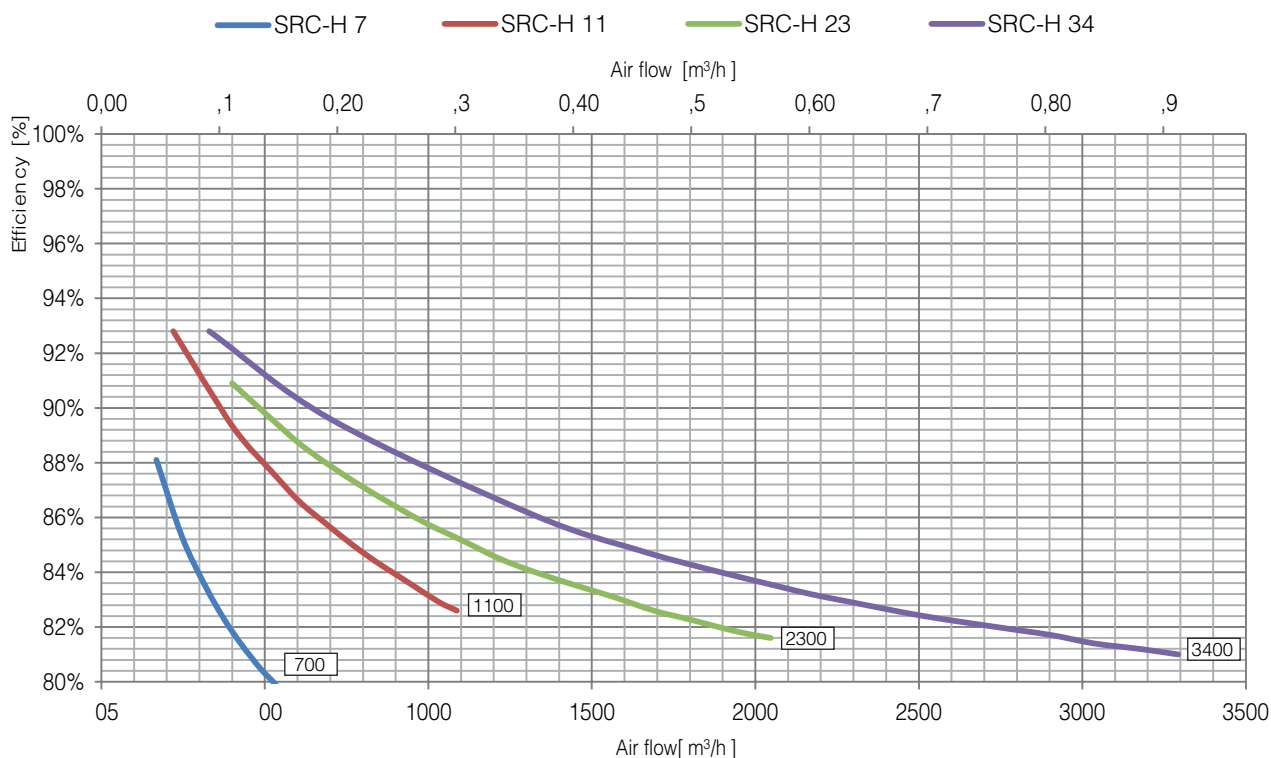
### PERFORMANCES (UNI EN 13141-7)

The unit must be ducted properly: SAMP authorizes the use only according to its performance diagram shown into this catalogue.  
The declared performances are with CLEAN filters, and guaranteed ONLY with the original filters SAMP low pressure drop.



### HEAT RECOVERY PERFORMANCE (sensible efficiency)

Values referred to the following conditions (UNI EN 13141-7): Tbs external air 5°C; U.R. esternal 72%; Tbs enviorment 25°C; U.R. environment 28%



### ECODESIGN

MOD.	$\eta_{L,nvru}$ [%]	$Q_{nom}$ [m³/s]	$\Delta p_{s,ext}$ [Pa]	P [kW]	SFPint [W/(m³/s)]	SFPint_lim 2016 [W/(m³/s)]	SFPint_lim 2018 [W/(m³/s)]	FACE VELOCITY [m/s]	$\Delta p_{s,int}$ [Pa]	$\eta_{Fan}$ [%]	* Internal LEAKAGE [%]	* External LEAKAGE [%]
SRC-H 7	80,0	0,15	200	0,32	1079	1407	1137	1,87	511	54,4	11,2	5,7
SRC-H 11	84,0	0,25	200	0,35	529	1511	1241	1,62	296	58,7	4,4	4,2
SRC-H 23	81,8	0,55	200	0,83	753	1401	1131	2,04	498	60,8	4,7	3,2
SRC-H 34	81,7	0,81	200	1,27	664	1358	1088	1,97	349	49,7	3,1	2,6

\* Compared to  $Q_{nom}$

VALUES ACCORDING UNI EN 1886: 2008

UNIT	CASING STRENGTH	CASING LEAKAGE	FILTER CLASS	THERMAL TRANSMITTANCE	THERMAL BRIDGE
SRC-H 7	D1 (M)	L3 (M)	F7 (M)	T4 (M)	TB3 (M)
SRC-H 11	D1 (M)	L3 (M)	F7 (M)	T4 (M)	TB3 (M)
SRC-H 23	D1 (M)	L3 (M)	F7 (M)	T4 (M)	TB3 (M)
SRC-H 34	D1 (M)	L3 (M)	F7 (M)	T4 (M)T	B3 (M)

### TEST LEAKAGE (UNI EN 13141-7)

LEAKAGE	CONDIZIONI DI PROVA	LEAKAGE CLASSIFICATION			
		SRC-H 7	SRC-H 11	SRC-H 23	SRC-H 34
OUTDOOR	Positive pressure 400 Pa	A2	A2	A2	A2
OUTDOOR	Negative pressure 400 Pa	A2	A2	A2	A1
INDOOR	Pressure difference 250 Pa	A3	A2	A2	A2

### NOISE LEVEL

L<sub>w</sub> Sound power level taken in accordance to UNI EN ISO 3747 - CLASS 3

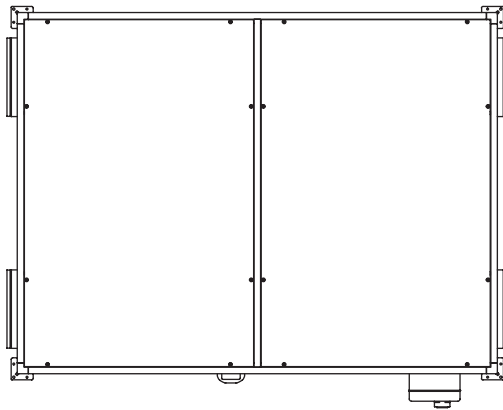
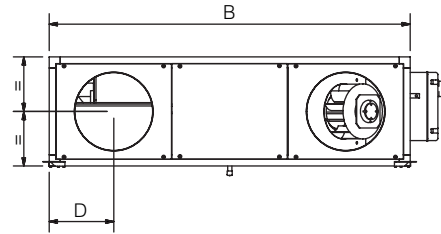
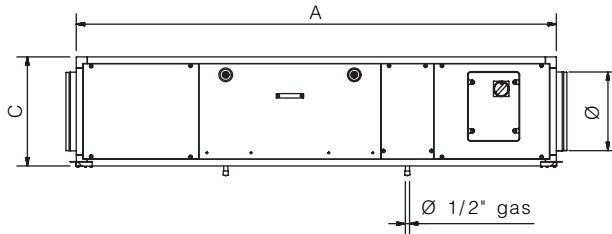
SRC-H 7	NOISE FROM THE CASE (dB)							
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	L <sub>w</sub> dB(A)
	58	59	46	41	35	30	22	51,8
SRC-H 7	NOISE IN THE DUCTS (dB)							
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	L <sub>w</sub> dB(A)
	67	68	54	53	51	47	45	61,9
SRC-H 11	NOISE FROM THE CASE (dB)							
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	L <sub>w</sub> dB(A)
	66	66	55	46	41	33	31	59,6
SRC-H 11	NOISE IN THE DUCTS (dB)							
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	L <sub>w</sub> dB(A)
	72	67	58	47	45	37	32	61,6
SRC-H 23	NOISE FROM THE CASE (dB)							
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	L <sub>w</sub> dB(A)
	67	74	60	57	52	44	34	66,8
SRC-H 23	NOISE IN THE DUCTS (dB)							
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	L <sub>w</sub> dB(A)
	69	77	61	60	55	48	39	69,3
SRC-H 34	NOISE FROM THE CASE (dB)							
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	L <sub>w</sub> dB(A)
	69	76	57	59	50	43	35	68,6
SRC-H 34	NOISE IN THE DUCTS (dB)							
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	L <sub>w</sub> dB(A)
	76	78	60	61	56	51	43	70,9

### ELECTRICAL DATA

MATCHING	FANS				UNIT SRC-H		
	Power [W]	Supply	Current max.[A]	Insulation class	Supply	Current max.[A]	Insulation class
SRC-H 7	2 x 14,5	230V 50/60 Hz 1F	2 x 1,20	IP54 CLASS B	230V 50 Hz 1F	2,50	IP 20
SRC-H 11	2 x 17,0	230V 50/60 Hz 1F	2 x 1,40	IP54 CLASS B	230V 50 Hz 1F	2,90	IP 20
SRC-H 23	2 x 44,8	230V 50/60 Hz 1F	2 x 2,80	IP54 CLASS B	230V 50 Hz 1F	5,70	IP 20
SRC-H 34	2 x 71,5	230V 50/60 Hz 1F	2 x 3,10	IP54 CLASS B	230V 50 Hz 1F	6,30	IP 20

**DIMENSIONS (mm) and WEIGHT (kg)**

UNIT	Dimensions [mm]					
	A	B	C	D	Ø	Weight
SRC-H 7	1590	740	360	200	200	103
SRC-H 11	1815	1240	420	225	250	149
SRC-H 23	2180	1640	495	95	355	280
SRC-H 34	2400	1740	635	450	450	352



**INSTALLATION**

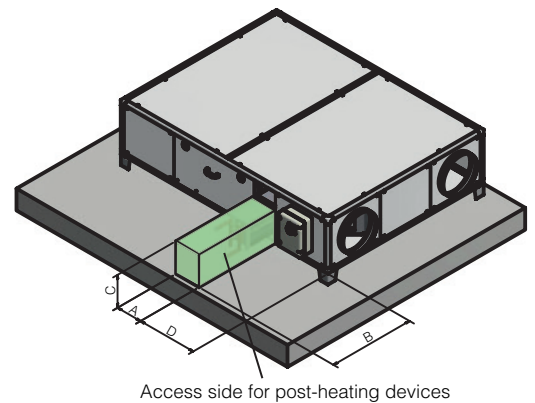
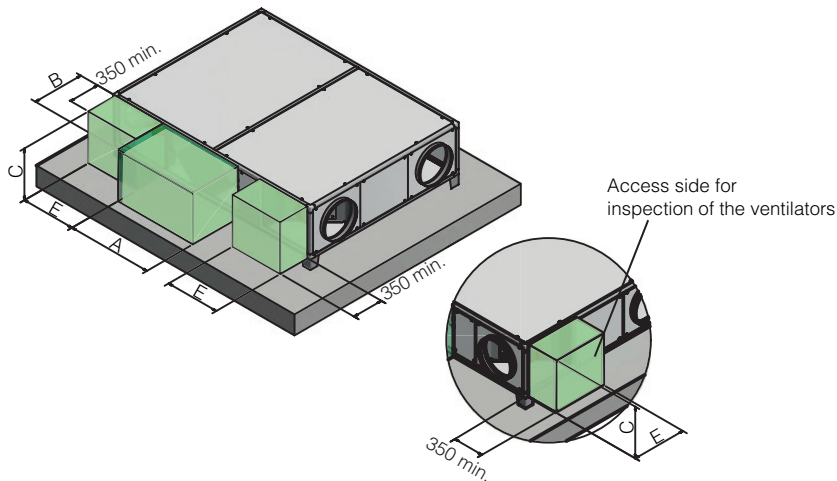
FLOOR INSTALLATION

Minimum required space for maintenance (mm)


UNIT	Dimensions [mm]			
	A	B	C	E
SRC-H 7	660	600	360	340
SRC-H 11	720	600	420	400
SRC-H 23	820	800	495	530
SRC-H 34	980	850	635	560

UNIT	Dimensions [mm]			
	A	B	C	D
SRC-H 7	250	700	250	370
SRC-H 11	250	1200	250	430
SRC-H 23	250	1600	320	560
SRC-H 34	250	1700	320	590

Extraordinary maintenance and  
Replacing of water coil and  
Electric heater



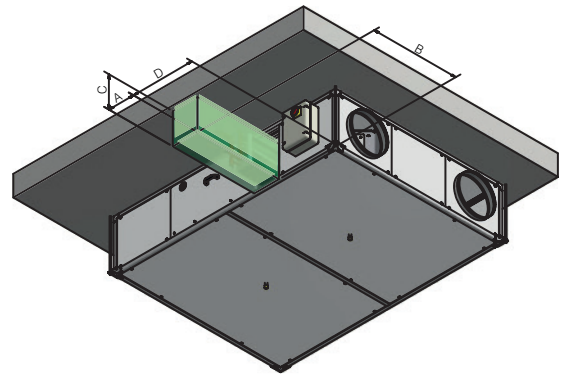
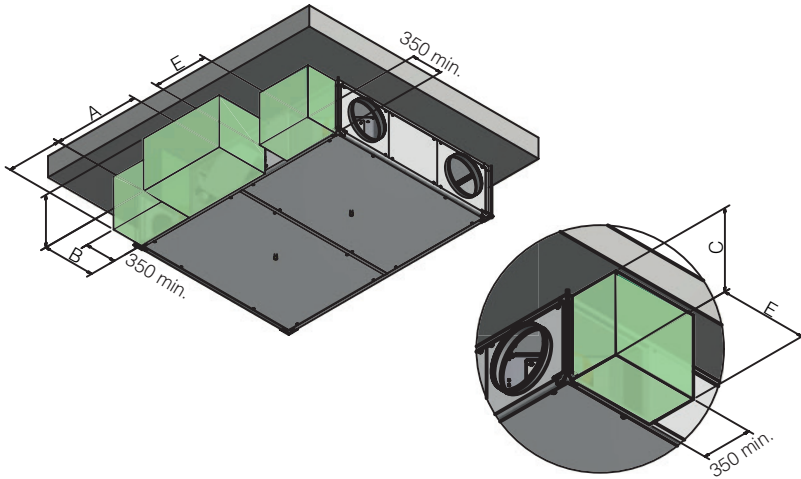
## CEILING INSTALLATION

 Minimum required space for maintenance (mm)

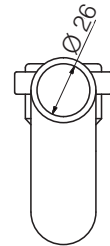
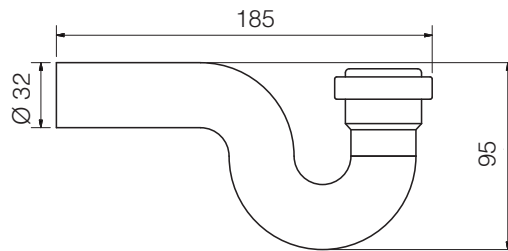
UNIT	Dimensions [mm]			
	A	B	C	E
SRC-H 7	660	600	360	340
SRC-H 11	720	600	420	400
SRC-H 23	820	800	495	530
SRC-H 34	980	850	635	560

UNIT	Dimensions [mm]			
	A	B	C	D
SRC-H 7	250	700	250	370
SRC-H 11	250	1200	250	430
SRC-H 23	250	1600	320	560
SRC-H 34	250	1700	320	590

Extraordinary maintenance and  
Replacing of water coil and  
Electric heater



## STANDARD SIPHON (MM)



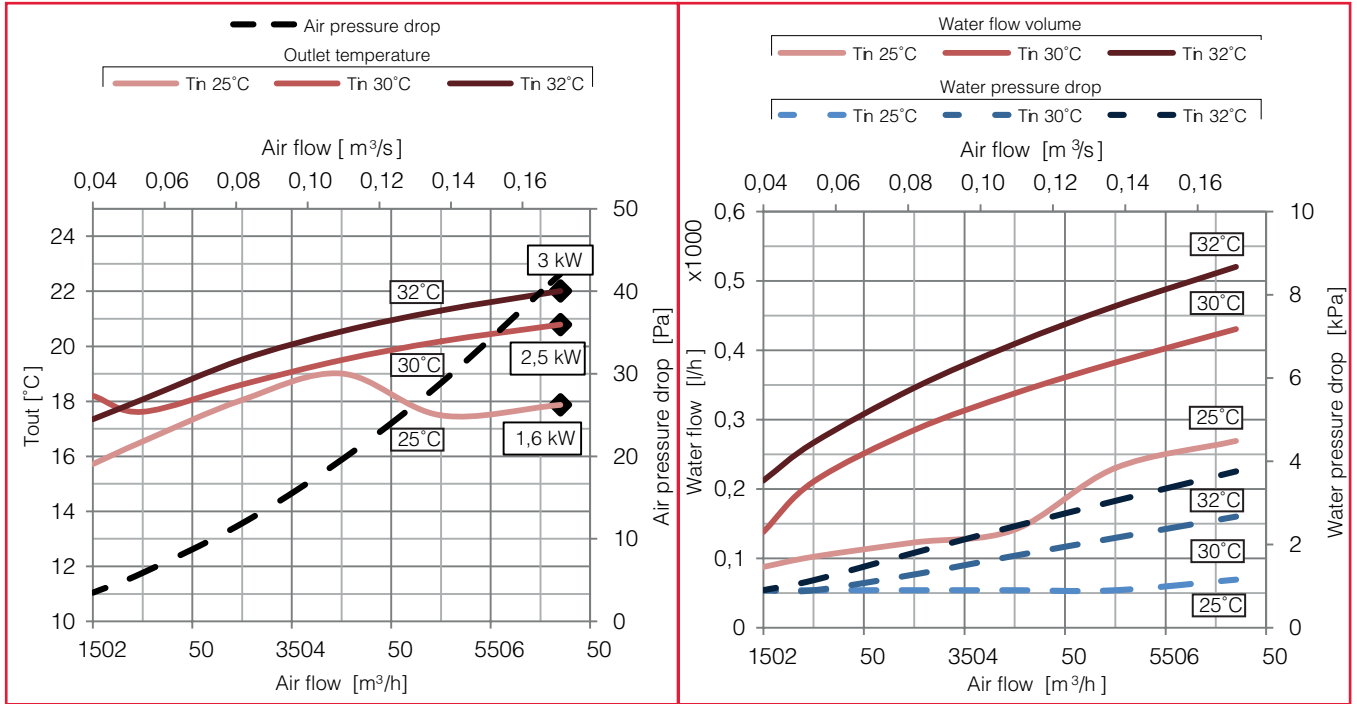


### COILS SRC-H 7

Cooling water coil (7°C/12°C)

#### MATERIALS

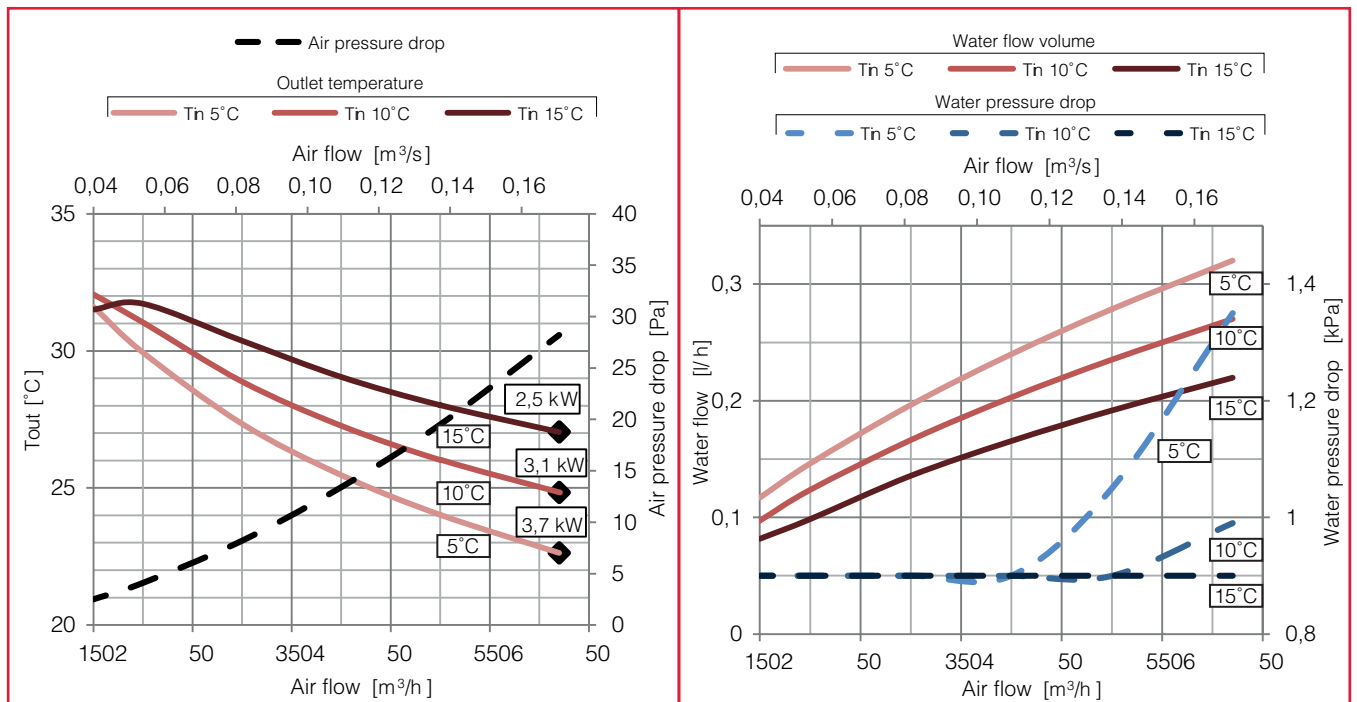
Ø WATER [“gas]	N. ROWS	FIN PITCH [mm]	INT.VOL. [dm <sup>3</sup> ]	TUBES	FINSF	FRAME
1/2"	2	2,5	1	Cu	Al	Fe Zn



Heating water coil (45°C/35°C)

#### MATERIALS

Ø WATER [“gas]	N. ROWS	FIN PITCH [mm]	INT.VOL. [dm <sup>3</sup> ]	TUBES	FINS	FRAME
1/2"	2	2,5	1	Cu	Al	Fe Zn

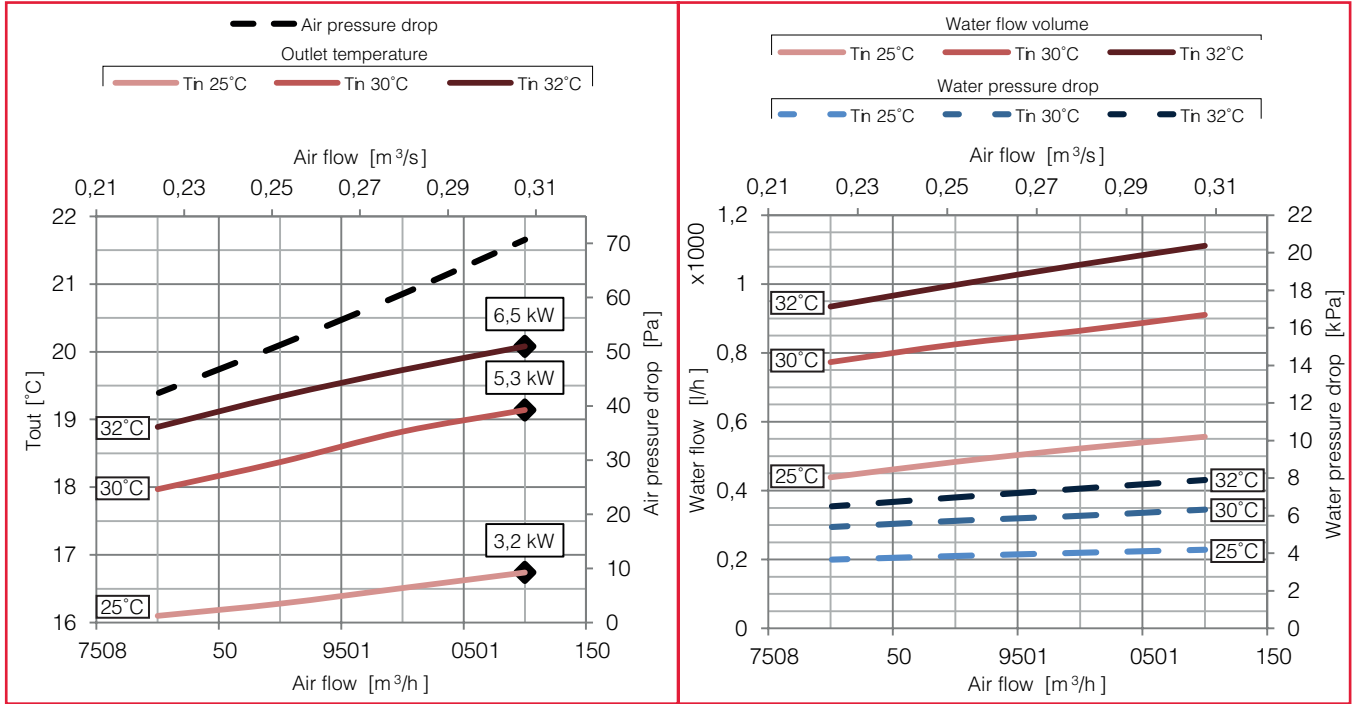


### COILS SRC-H 11

Cooling water coil (7°C/12°C)

#### MATERIALS

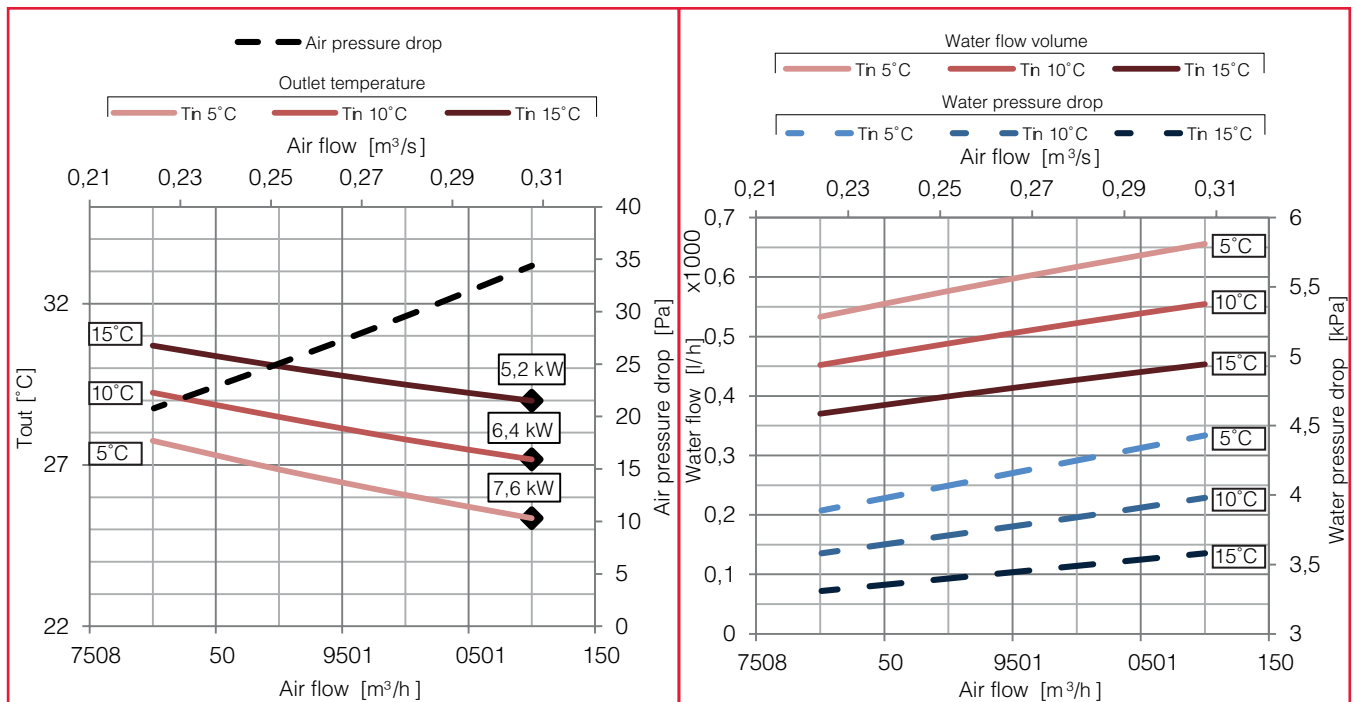
Ø WATER [“gas]	N. ROWS	FIN PITCH [mm]	INT.VOL. [dm <sup>3</sup> ]	TUBES	FINS	FRAME
3/4"	4	2,5	3	Cu	Al	Fe Zn



Heating water coil (45°C/35°C)

#### MATERIALS

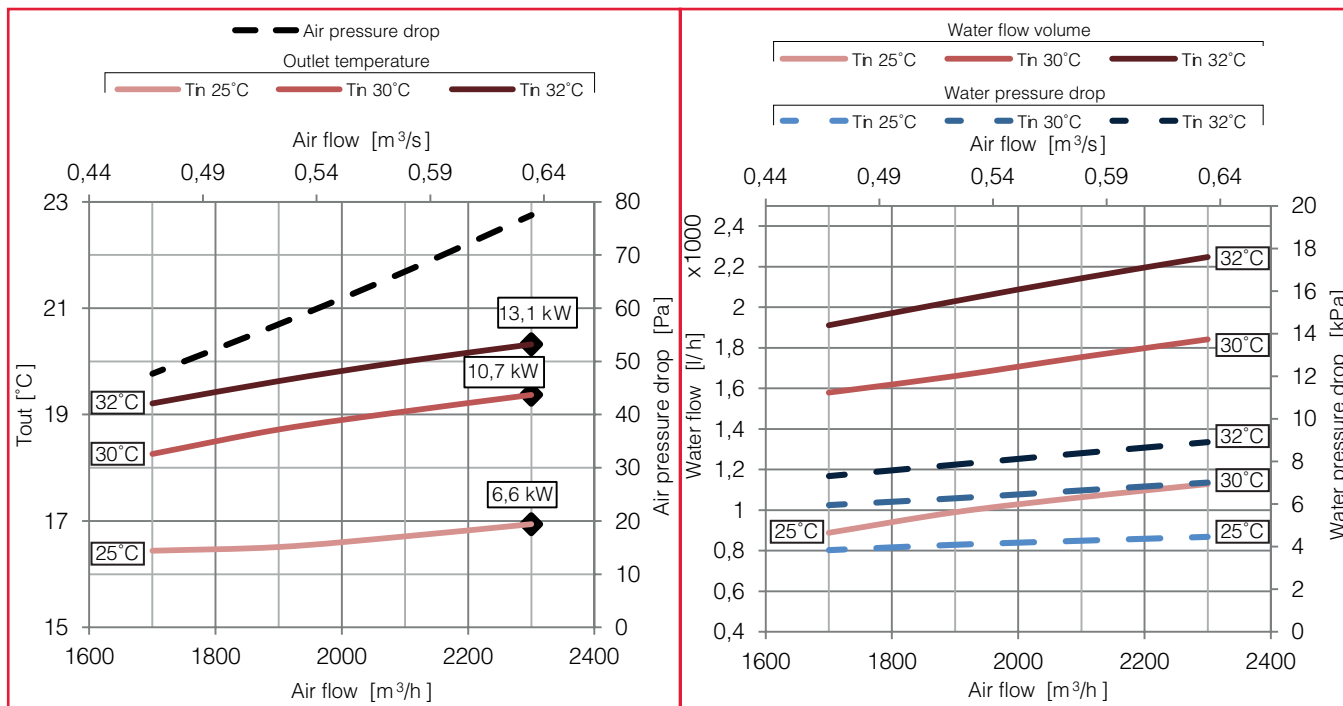
Ø WATER [“gas]	N. ROWS	FIN PITCH [mm]	INT.VOL. [dm <sup>3</sup> ]	TUBES	FINS	FRAME
3/4"	4	2,5	3	Cu	Al	Fe Zn



### COILS SRC-H 23

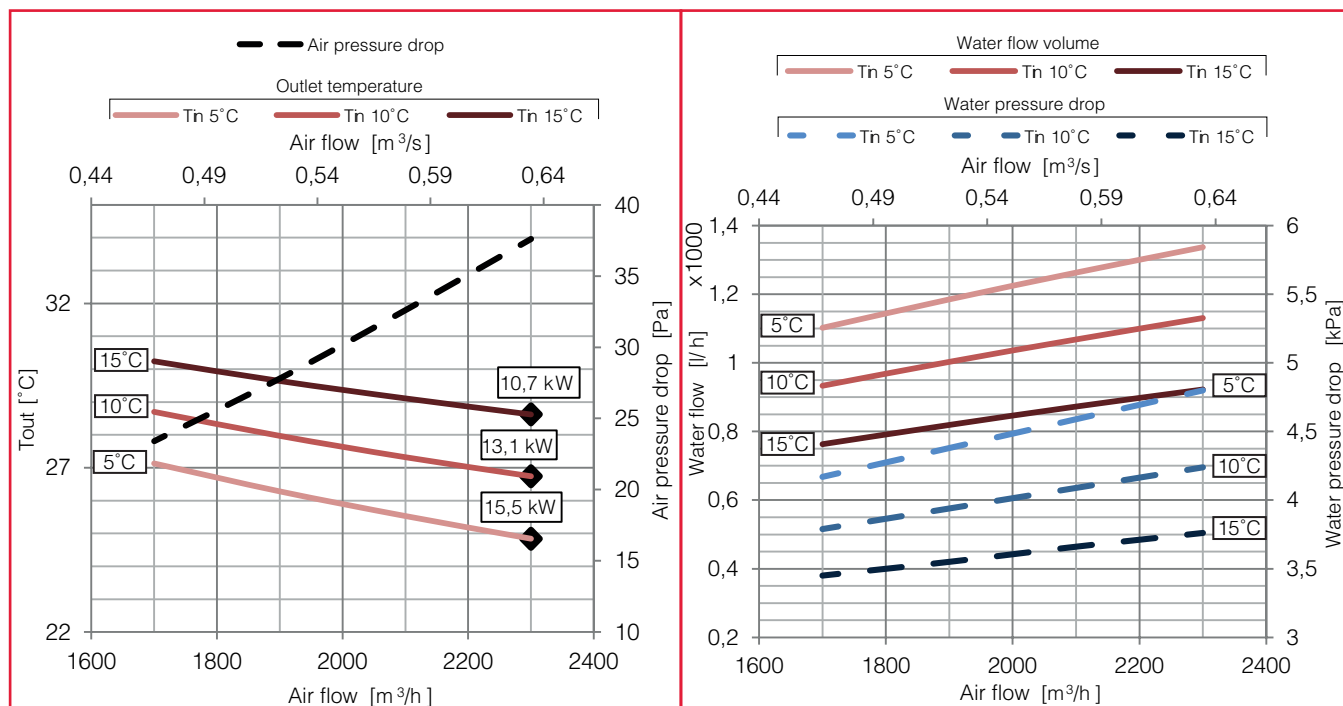
Cooling water coil (7°C/12°C)

Ø WATER [“gas]	N. ROWS	FIN PITCH [mm]	INT.VOL. [dm <sup>3</sup> ]	MATERIALS		
				TUBES	FINSF	RAME
3/4”	4	2,5	5	Cu	Al	Fe Zn



Heating water coil (45°C/35°C)

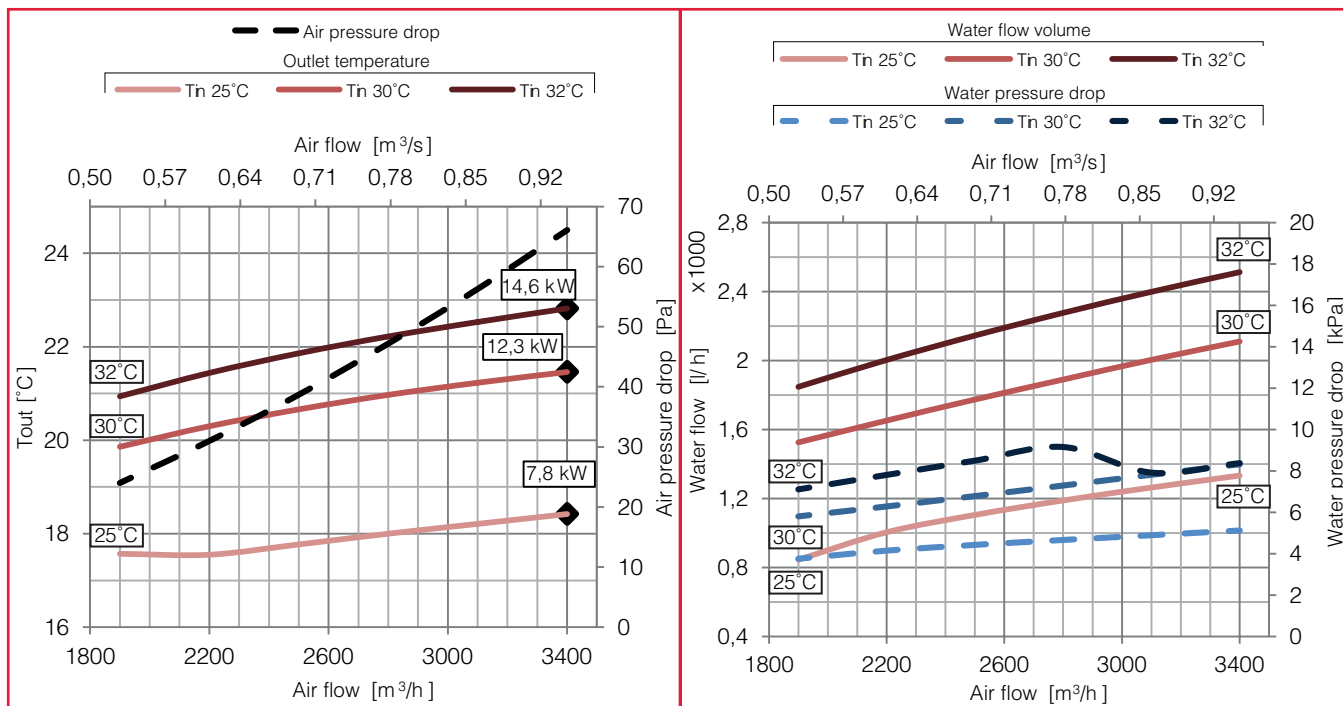
Ø WATER [“gas]	N. ROWS	FIN PITCH [mm]	INT.VOL. [dm <sup>3</sup> ]	MATERIALS		
				TUBES	FINSF	RAME
3/4”	4	2,5	5	Cu	Al	Fe Zn



### COILS SRC-H 34

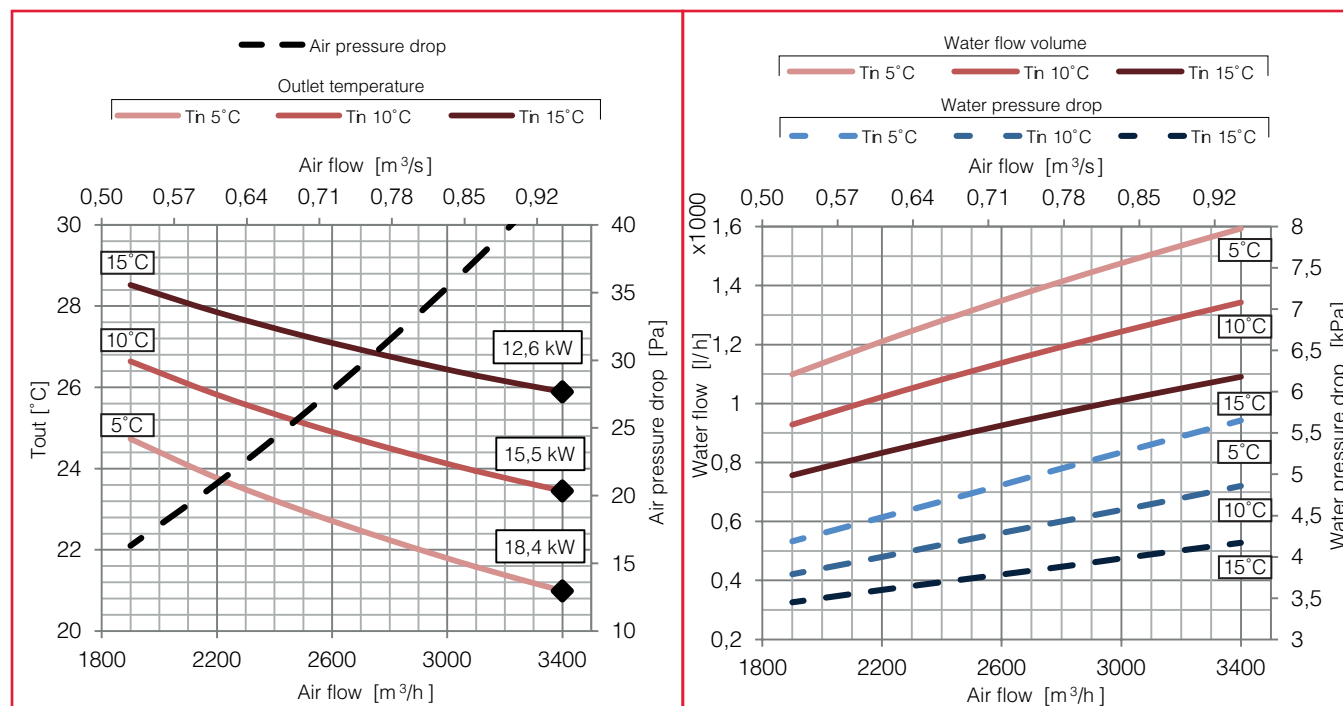
Cooling water coil (7°C/12°C)

Ø WATER [“gas]	N. ROWS	FIN PITCH [mm]	INT.VOL. [dm <sup>3</sup> ]	MATERIALS		
				TUBES	FINSF	RAME
3/4"	2	2,5	5	Cu	Al	Fe Zn



Heating water coil (45°C/35°C)

Ø WATER [“gas]	N. ROWS	FIN PITCH [mm]	INT.VOL. [dm <sup>3</sup> ]	MATERIALS		
				TUBES	FINSF	RAME
3/4"	2	2,5	5	Cu	Al	Fe Zn



## DX coil SRC-H 7

DIRECT EXPANSION COIL (R410A) TECHNICAL DATA						
Air flow [m <sup>3</sup> /h]	Tin [C°]	R.H in [%]	Power [kW]	Tout [°C]	R.H: out [%]	Air pressure drop [Pa]
500	28	80	5,5	17	100	90
Ø Connection [mm]	Fin pitch [mm]	N. Rows	Int.Vol. [dm <sup>3</sup> ]	T evap [°C]	T cond [°C]	
22-12	2,5	4	1	5	50	

## DX coil SRC-H 11

DIRECT EXPANSION COIL (R410A) TECHNICAL DATA						
Air flow [m <sup>3</sup> /h]	Tin [C°]	R.H in [%]	Power [kW]	Tout [°C]	R.H: out [%]	Air pressure drop [Pa]
1100	28	68	11	15	98	73
Ø Connection [mm]	Fin pitch [mm]	N. Rows	Int.Vol. [dm <sup>3</sup> ]	T evap [°C]	T cond [°C]	
28-16	2,5	4	3	5	50	

## DX coil SRC-H 23

DIRECT EXPANSION COIL (R410A) TECHNICAL DATA						
Air flow [m <sup>3</sup> /h]	Tin [C°]	R.H in [%]	Power [kW]	Tout [°C]	R.H: out [%]	Air pressure drop [Pa]
2300	28	68	17	18,5	92	49
Ø Connection [mm]	Fin pitch [mm]	N. Rows	Int.Vol. [dm <sup>3</sup> ]	T evap [°C]	T cond [°C]	
28-22	4,0	4	5	5	50	

## DX coil SRC-H 34

DIRECT EXPANSION COIL (R410A) TECHNICAL DATA						
Air flow [m <sup>3</sup> /h]	Tin [C°]	R.H in [%]	Power [kW]	Tout [°C]	R.H: out [%]	Air pressure drop [Pa]
3400	28	68	22	19	90	71
Ø Connection [mm]	Fin pitch [mm]	N. Rows	Int.Vol. [dm <sup>3</sup> ]	T evap [°C]	T cond [°C]	
28-22	4,0	4	6	5	50	

## Electrical heater

POST ELECTRICAL HEATER TECHNICAL DATA				
Unit	Power supply	Power [kW]	Current [A]	N. stages
SRC-H 7	230V, 50Hz,1F	2	8,7	1
SRC-H 11	230V, 50Hz,1F	3	13,0	1
SRC-H 23	230V, 50Hz,1F	6	26,0	1
SRC-H 34	230V, 50Hz,1F	8	34,7	1
SRC-H 34	400V, 50Hz,3F	8	11,5	1

N.B. – for other batteries PRE or POST treatment see the Techno-list of ACCESSORIES



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