

# SR

Comfort Air Curtain



**Biddle**



# A NEW WAVE IN CLIMATE SEPARATION

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SR air curtains are the ideal solution for retailers and other end-users to combat the issue of climate separation across their outlet or office building doorway. The importance of accessibility to attract customers in the retail sector is well-known, but with this free form of access through 'open door' trading, cold draughts and high energy bills are often the consequence.

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The SR technology has been designed to deliver greater comfort for all, whether it is in a supermarket, high street store or office building. The SR air curtain does not act as a barrier in the place of a door, its prime role is to reduce the amount of warm air leaving the building and condition the incoming air to a comfortable temperature. BSRIA and Biddle research produced documented evidence proving that air curtains operate best with specific velocities and air volumes. The SR air curtain satisfies these needs by delivering the right air flow and temperature at the right time automatically, reducing energy loss.

Furthermore, it is the only commercially available air curtain of its kind that now offers a unique air damper system to improve efficiency by controlling the outlet velocity.

Biddle has a great deal of experience in designing optimal climate separation solutions. The first step is to determine the climate requirement of the room, then in consultation with you we seek a suitable climate separation solution. By remote monitoring and intelligent software Biddle is able to monitor and analyse the doorway and its energy consumption and comfort levels in detail.



# IMPRESSIVE RESULTS

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The impressive results achieved by the SR are made possible thanks to a combination of four technologies. The revolutionary patented i-sense infrared technology collects all temperature-related data in the doorway. CHIPS technology translates this information into the correct setting, whilst the adaptable discharge width (Controlled Air strength technology) and the patented rectifier technology create the perfect climate separation.

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## INTELLIGENT AUTO-ACTIVE CONTROL AND MONITORING

The auto-active control is the next generation of controls. Knowing that manual control of air curtains often leads to the incorrect setting, the inclusion of the automatic CHIPS (Corrective Heating & Impulse Prediction System) technology ensures the most appropriate setting at any moment in time. The i-sense in the discharge grille measures the indoor and outdoor temperatures active in the door opening collecting real-time and accurate data. This auto-active control has been demonstrated to produce savings of up to 75% when compared with a manually controlled air curtain. Biddle has an extensive range of control options: the b-touch control panel, remote monitoring of comfort and energy performance and connecting to a BMS, which is easy through the standard integrated Modbus connection.

## FEATURES AND BENEFITS:

- Intelligent control and monitoring remotely
- Modbus integrated as standard
- Ability to capture and collect temperature data
- Stylish and low noise
- Complete customised solution
- Energy efficient and creating a comfortable environment
- Suitable for various heat sources
- Possible to combine with Daikin heat pumps and Biddle **air2air** heat recovery systems

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## VARIOUS HEAT SOURCES

The SR can be supplied to suit many heating mediums, with water, electric, Direct Expansion (DX), a combination of low grade water and electric (Hybrid) and ambient models all being available. The DX model is only suitable for use with Daikin VRV and ERQ Heat Pump systems.

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## APPLICATIONS

The SR is designed for door heights from 2.0 to 4.0 m. Within the retail, commercial and public sector the applications are endless. The SR can be applied above door openings of shopping malls, stores, supermarkets, banks, stations, museums, hotels and hospitals.

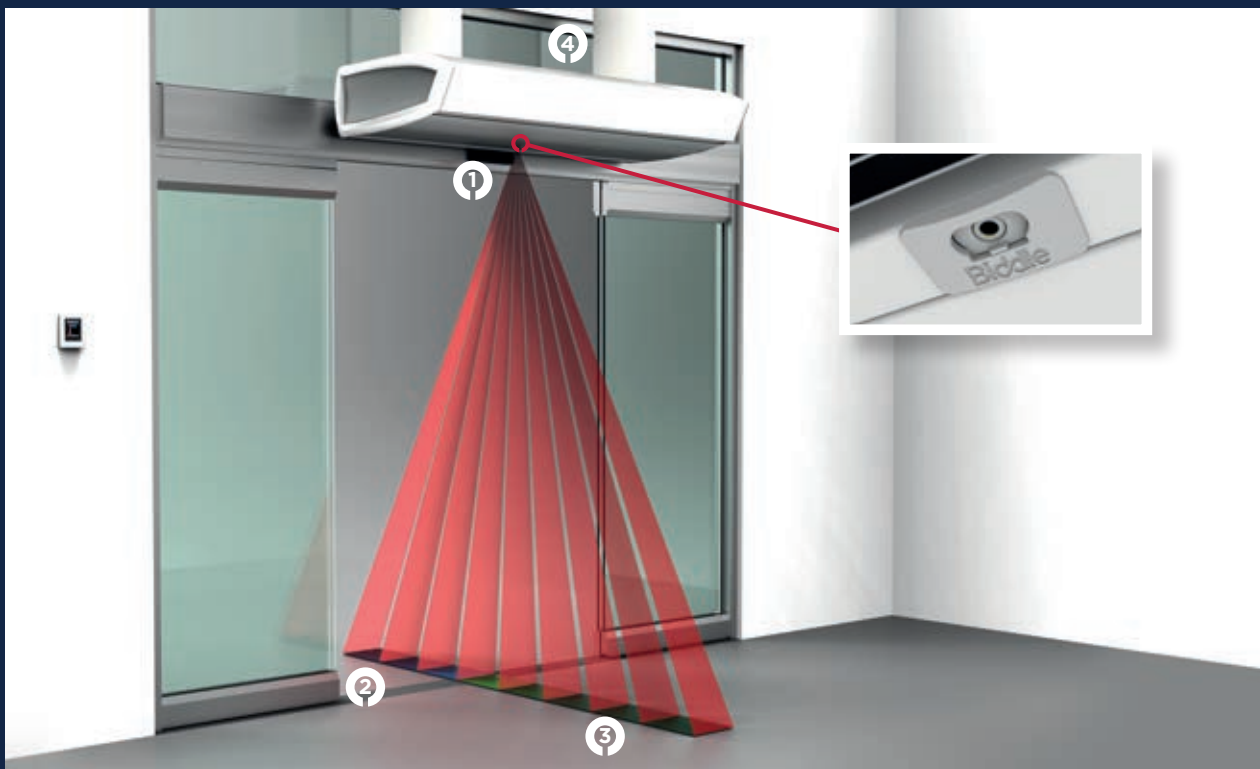
# i-SENSE INFRARED TECHNOLOGY

The patented i-sense infrared technology carefully scans the environment around the doorway collecting information on indoor and outdoor temperatures by measuring the exact temperature at floor level. In addition, the i-sense detects when the door is closed.

Outdoor and room temperatures are frequently used as a basis upon which automatic control settings are established. The temperature data is provided by a sensor located close to the device or attached to the building facade. This mechanism is not always reliable when it comes to measuring the exact climate prevailing in the doorway, resulting in the curtain operating on the basis of incorrect information. The SR however is different, as it is equipped with i-sense technology and the climate in the doorway is measured on an ongoing basis, thereby guaranteeing a comfortable environment as well as maximal energy savings.

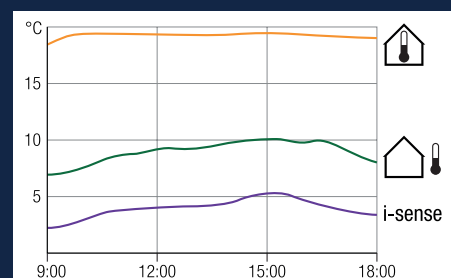
The i-sense **(1)** collects temperatures from several points both from inside and outside the doorway **(2&3)**, whilst a sensor in the return air measures room temperature **(4)**.

The automated CHIPS technology uses these temperature readings to determine the temperature and strength of the airflow that needs to be delivered, thereby guaranteeing the air curtain's performance. Air curtains that are equipped with auto-active technology are not only more efficient, but they also prevent energy being wasted due to incorrect settings. I-sense also recognises when a door is closed and adapts automatically to the situation, preventing heat from being produced unnecessarily.



## EXAMPLE OF i-SENSE IMPACT

The graph illustrates how the outdoor and indoor temperatures are measured using i-sense. As demonstrated, the sensor located on the outside of the doorway estimates an outdoor temperature of 9 °C (green line) whilst, i-sense sensor in the doorway provides a reading of 4 to 5 °C (purple line). This provides the evidence of accuracy readings of climate conditions in the doorway measured by Biddle technology.

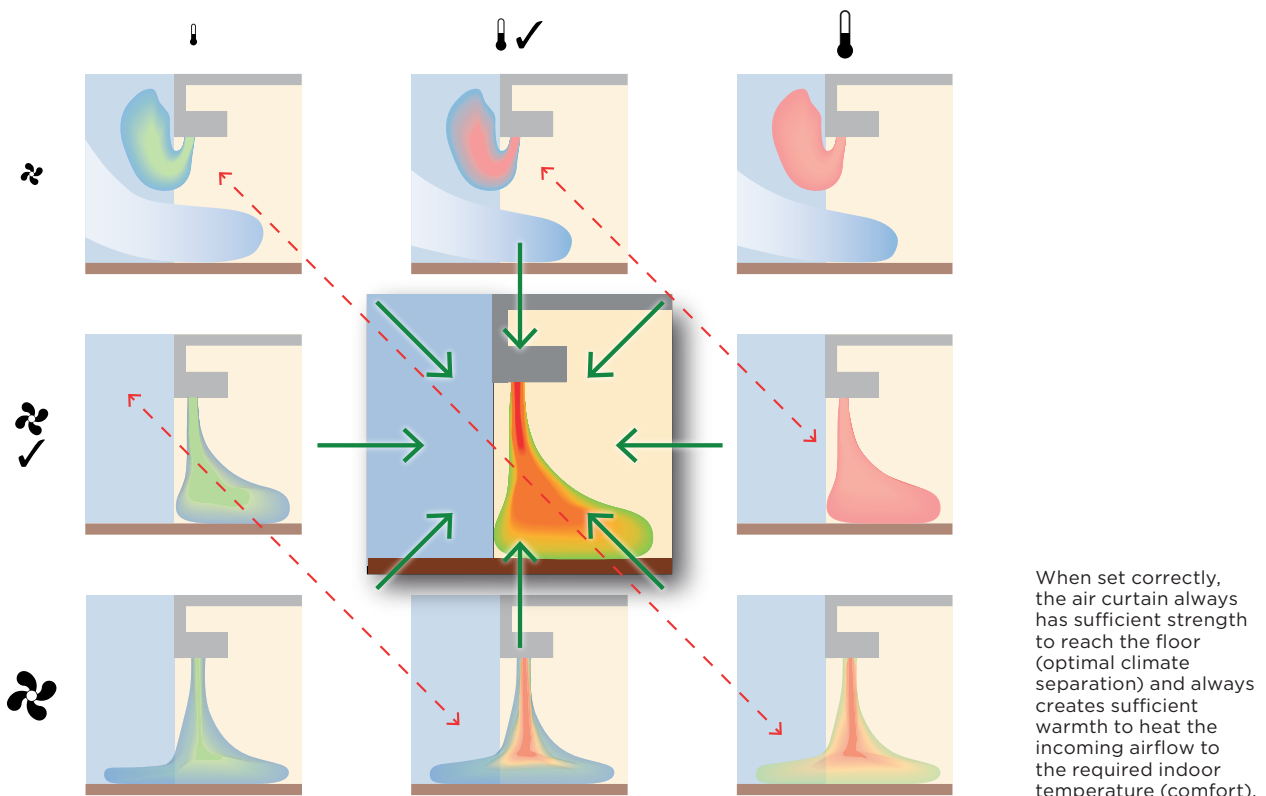


# AUTOMATIC CHIPS TECHNOLOGY

The Automatic CHIPS control strategy continually monitors and adjusts to provide the most effective and efficient operation by varying the strength and heating independently, to the point on the image below where 'sufficient heating' and 'sufficient strength' intersect.

The SR air curtain utilises CHIPS technology to automatically adjust discharge velocity, air volume, discharge temperature and heat output. Outside, return air and discharge temperature sensors are used to determine how much heat is required and the bespoke control algorithm 'translates' the data into the strength (a combination of air volume and velocity) required for complete climate separation and comfort. Negating the need for the user to continually adjust the air curtain's setting when the inside/outside temperatures and/or weather change.

An air curtain with traditional control has heat and fan speed linked to one another. When the fan speed increases heat output will also increase, whether or not it's necessary, leading to a less effective and less efficient air curtain. The CHIPS control strategy continually monitors and adjusts air volume, air velocity, discharge temperature and heat output independently of each other so that the point on the image where 'Sufficient Heating' and 'Sufficient Strength' intersect.



## CONVENTIONAL AIR CURTAINS

With a convectional air curtain both the heat and speed are usually linked to one another and when the fan speed increases, then it is probable that the heating also increases, resulting in a less effective or efficient air curtain. In contrast, Biddle's auto-active control treats both of these separately, ensuring conditions are always ideal and a maximum amount of energy is saved.



# RECTIFIER AND CONTROLLED AIR STRENGTH TECHNOLOGY

In order to achieve efficient climate separation, Biddle has created two separate technologies.

The patented rectifier ensures that the turbulent air from the fans is transformed into a virtually laminar air stream. The air stream reaches the floor with much less air speed than it would in a rectifier-free air curtain, whilst ensuring the discharge air stream stays within the building.

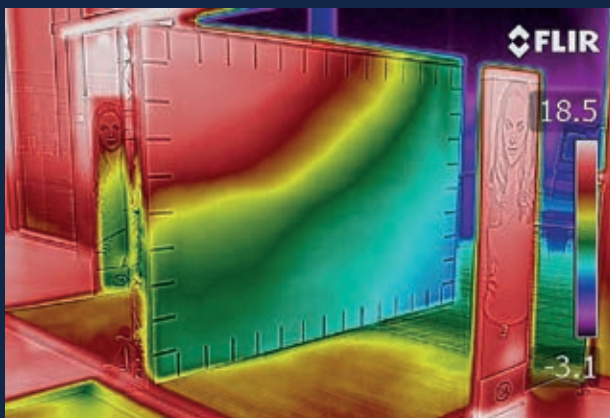
Controlled Air strength technology, on the other hand, ensures that the air stream reaches the floor containing the right volume of air, by calibrating air speed and outlet width.

At lower speeds (and hence lower air volumes) the damper partially opens to create a greater 'impulse' to the air stream, providing a more

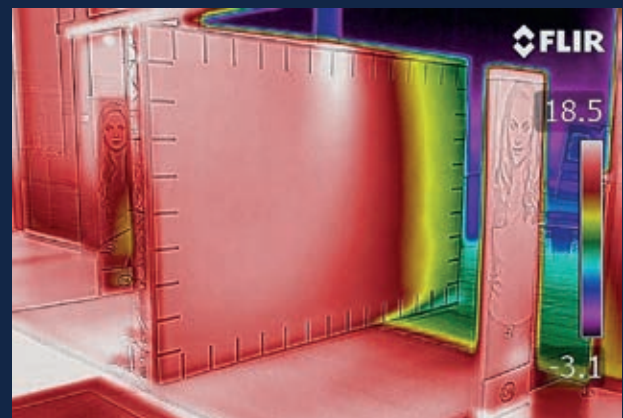
energy efficient air curtain. At higher speeds the damper opens to adjust the outlet velocity to deal with more demanding situations.

In partnership with the TNO wind facility at Apeldoorn in the Netherlands, it is proved that combining these two technologies yields an 80% climate separation efficiency rate.

The thermographic images illustrated below show the temperature differences between the conditions prevailing outside and inside a doorway create air exchanges: warm air flows outwards, cold air flows inwards. This leads to both energy losses and a draughty indoor climate. The auto-active SR technology ensures energy-efficient climate separation.



Air curtain off: significant air exchange



Air curtain on: optimal climate separation



# SELECTION AND OPTIONS

The SR has endless possibilities. The SR creates optimum climate separation in all doorways and is also suitable for a range of heating sources. There is a solution available for many monitoring and control options.

## EXAMPLE TYPE CODE: SR S-100-H3-F

SR	SR
<b>Capacity</b>	
S	Small (200-240cm)
M	Medium (220-280cm)
L	Large (250-330cm)
XL	Extra Large (300-400cm)
<b>Length (cm)</b>	
100 - 150 - 200 - 250	
<b>Coil type</b>	
H3	Hot water heating
E	Electrical heating
H3E	Hybrid heating (water & electric)
A	Ambient (no heating)
<b>Model</b>	
F	Free hanging model
R	Recessed model
C	Cassette model

For the DX version a separate brochure is available.

## FOR EVERY DOOR WIDTH

Doors wider than 250cm are covered by placing multiple units next to each other

## STANDARD COLOURS

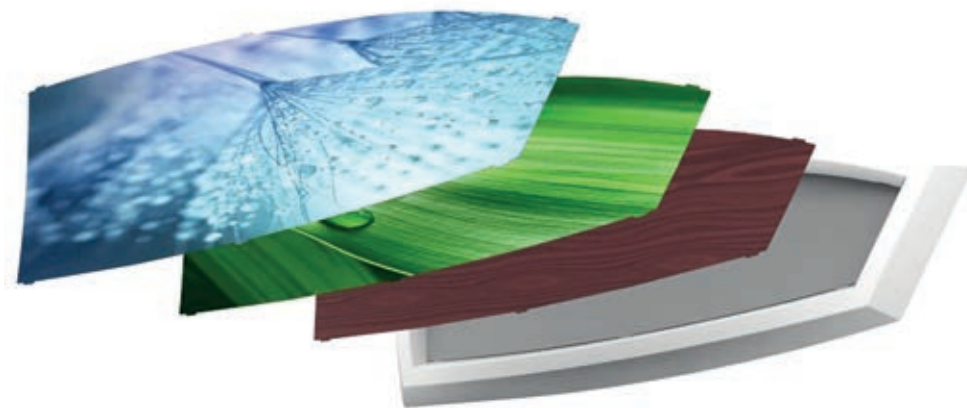
Traffic white (RAL 9016) with accent end panels in Silver Grey (RAL 9006)

Silver Grey (RAL 9006)

Other RAL classic colours available on request

## CUSTOMER-SPECIFIC STYLING

The inlays in the end panels are supplied in grey and white as standard. The removable inlays in the end panels can also be styled specifically if required (e.g. colour and logo)



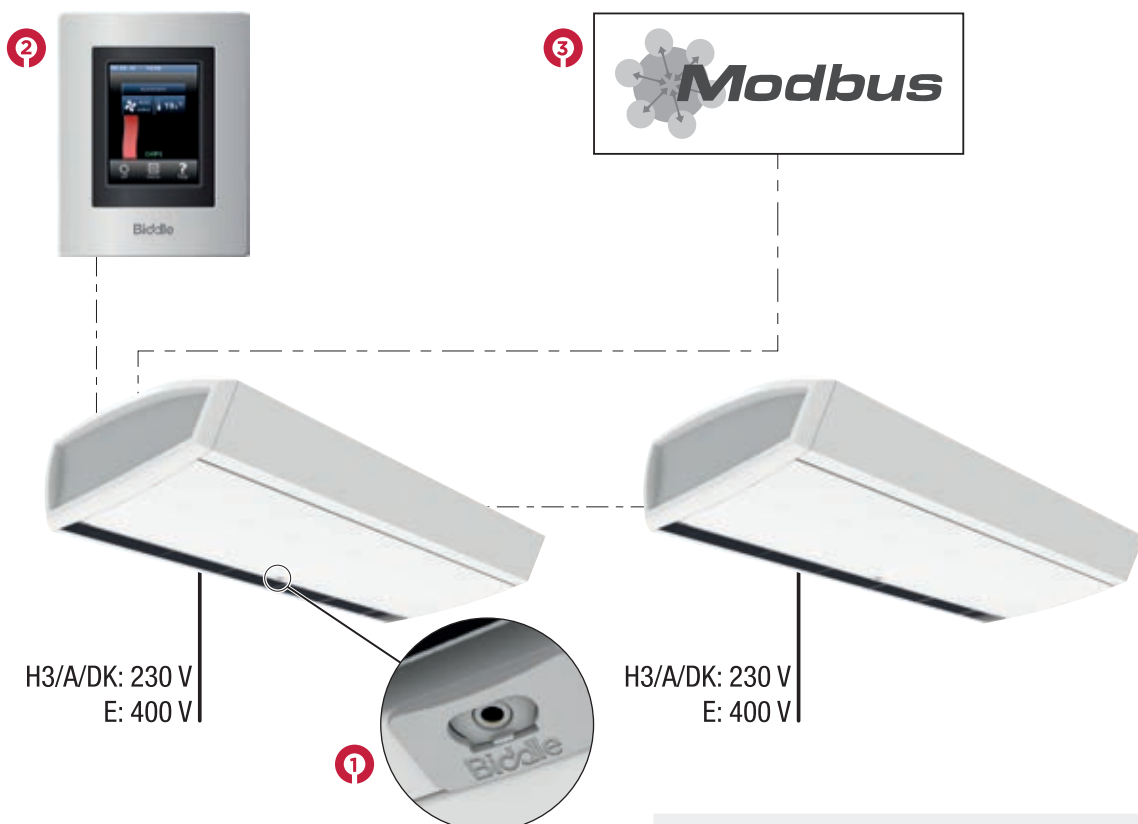
Customised end panels with styled inlays.

# INTELLIGENT CONTROLS

During installation, an air curtain is typically set to operate at a mid-speed setting and rarely adjusted. This results in the air curtain continually operating at a single air volume, velocity and temperature. However, as internal and external conditions constantly vary throughout the day this means the air curtain will only be operating at the optimum setting some of the time and for the rest of the time will be either set too high or too low.

The automatic CHIPS (Corrective Heating & Impulse Prediction System) technology ensures the most appropriate setting at any moment in time. The i-sense in the discharge grille measures the indoor and outdoor temperatures active in the door opening collecting real-time data. This process ensures that the SR is always functioning correctly and yields an ideal, energy-efficient indoor climate without the need for user input.

The auto-active SR device is equipped as standard with the b-touch control panel and i-sense infrared technology. It is also possible to communicate via Modbus.



# B-TOUCH

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The b-touch control panel has a simple menu structure making it very easy to select preferred settings, such as room temperature and switching the device on/off. Due to the fact the SR's intelligent software is integrated, once the device is installed, it may also function without the b-touch being connected. The b-touch may then be used as a service panel only.

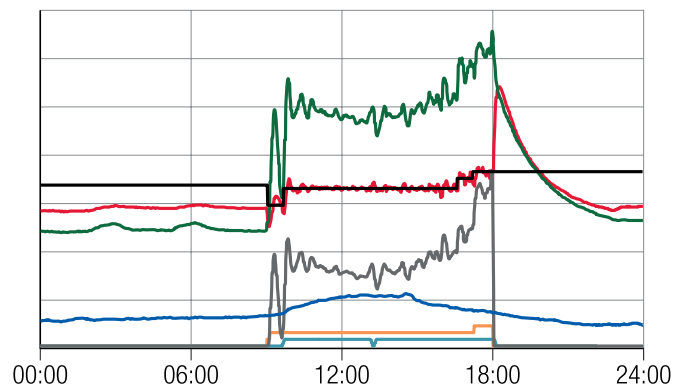
The b-touch can also be used as a component of a complete climate system. For instance, the Modbus BMS local operations via the b-touch and central management actively functions simultaneously. A single b-touch can be used to control a maximum of 10 units.

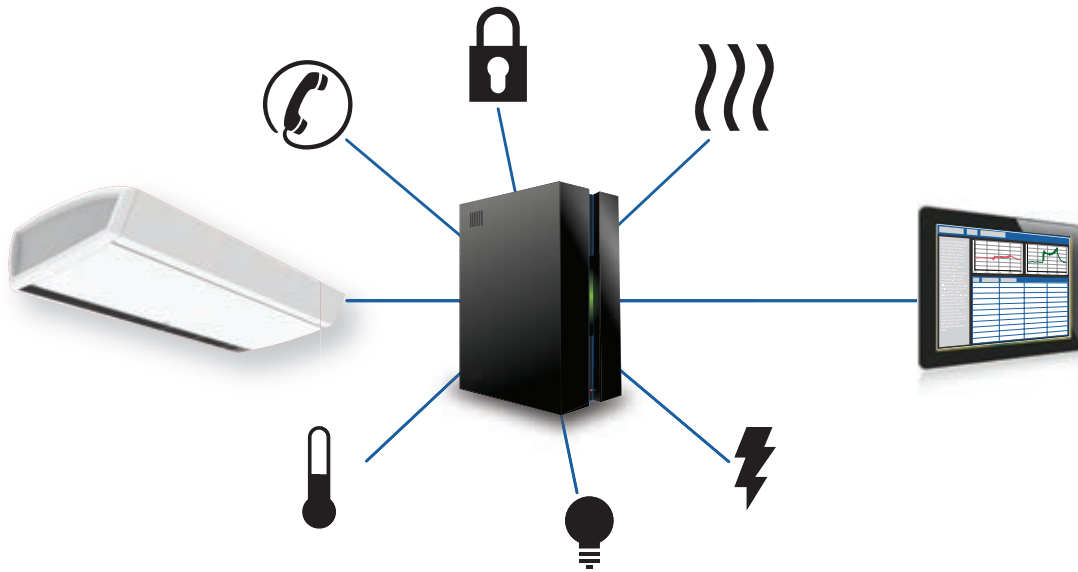
## CONTROL FEATURES:

- Touchscreen control panel
- Analytical tool
- Status screen displaying all settings and current values
- Multilingual navigation menu
- Practical installation wizard to achieve preferred settings on site
- Personalisation features
- Manual operation also possible

## ANALYTICS

A USB connector is located on the underside of the b-touch for exporting data usage, importing or exporting adjustments as well as updating new software. The graph, produced from exported data, shows the degree of comfort by comparing the actual (red line) and programmed indoor temperature (black line) from a particular project installation.





## MODBUS COMMUNICATION

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The SR comfort air curtain is easy to connect to a building management system using the standard integrated connection for Modbus communication protocol. Modbus can create communication between several products within the same network.

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A building management system (BMS) is used for the central monitoring, control and communication between the products and controls present within the building. With the Modbus communication protocol all functions of the SR can be monitored and controlled remotely. After installation, interaction with the SR is remotely or locally adjusted in line with the needs of the customer. In this way the SR is continuously monitored and adjusted where necessary to optimise operation.

In the Modbus communication protocol responsibilities with regard to local and central operation can be set. If required both the b-touch and Modbus can be used in parallel allowing local and remote control of the air curtain.

The SR air curtain can also be made suitable for Bacnet communication.

# SPECIFICATIONS

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## CASING

The casing is made of zinc plated sheet steel, and has an inspection panel in the bottom. The inlet grilles are made of anodised aluminium with fixed fins. The inlet module and the end panels as well as the casing are, as a standard, supplied in silver grey (RAL 9006) or traffic white (RAL 9016). The end panels of the white SR have a grey inlay. Other RAL casing colour finishes are available for an additional charge.

## FAN / MOTOR ASSEMBLY

The air curtain is equipped with two or more (depending on type) dual-inlet, vibration free suspended centrifugal fans. Each fan is driven by a rotor motor on bearings, which are seal for life and no maintenance is required. The fan casing and the impeller are made of zinc coated plate steel. The motors, as standard, are fitted with thermal contacts. These thermal contacts break the circuit of the motor when the maximum permissible motor temperature is exceeded.

## HEATING COIL

**Water:** made up of 3/8" (S/M) and 1/2" (L/XL) copper tubes and aluminium fins. The water connections are G1" female thread. The maximum operating pressure is 6 bar at 110°C. Higher pressure levels, up to 10 bar, are available upon request. The permissible pressure difference is with S / M  $p_{\Delta} \leq 0.5$  bar, and with L / XL  $p_{\Delta} \leq 1.0$  bar.

**Electric:** made up of electric heating elements with aluminium fins. The exchanger is controlled by the electronic control unit and is fitted with overload protection. When the unit is switched off, the fans will continue to run until the heating coils have cooled off sufficiently.

**Hybrid:** a combination of water heating coil with an electrical stitched wire heating element.

## CONNECTIONS

To connect hot water and ambient units to the mains supply, they come with a fixed cable (approx. 2m long) with a moulded, earthed plug. The pipework connections for water and hybrid units and the connector plate are fitted on the top of the unit.

The mains cable to electrically heated (and hybrid) units must be connected within the unit. The top of the unit has a cable gland for feeding through the mains cable. A 5-core cable (3 phases + earth + neutral) is required for connection.

## STANDARD DELIVERY

Water-side control: 3 way valve and control (water and hybrid unit)

Modbus communication

Air filters

Ceiling mounting brackets

Duct connections R-model (ducts not included)

## OPTIONAL ACCESSORIES

Filter sensor

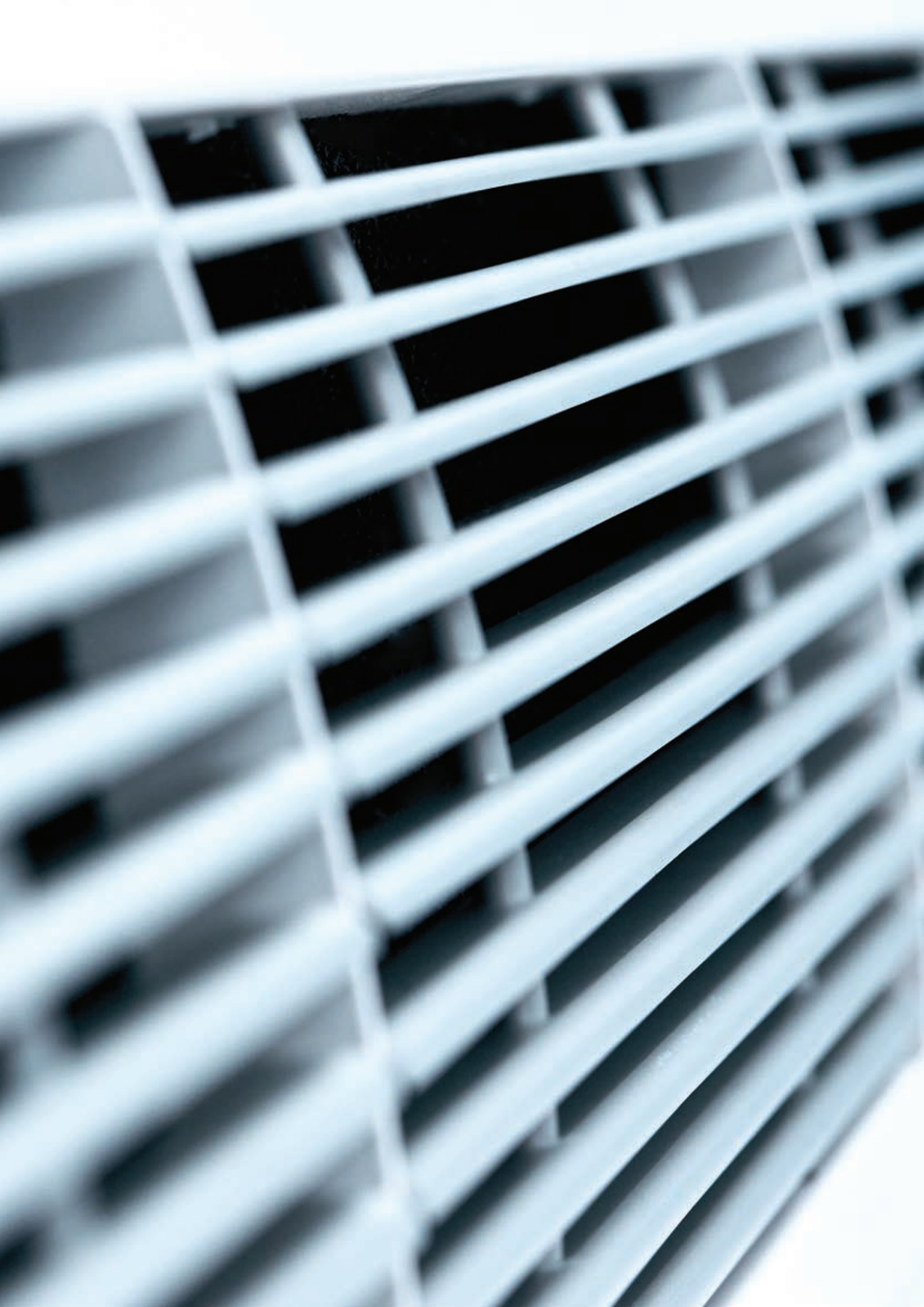
Wall mounting brackets: standard and design

Threaded rod covers

Door contact switch

External outdoor sensor

M8 threaded rods



# SR

Technical Details



# TECHNICAL EXPLANATION

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Because of the auto-active control of the SR comfort air curtain the outlet temperature varies at all speeds, depending on the situation. The SR is equipped with a low water temperature coil for every water temperature from 45/35°C to 90/70°C. The SR with hybrid heating is available for lower water temperatures than 45/35°C.

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## SELECTION BOILER CAPACITY

For the selection of the boiler one can take the heating capacity at speed 6 at a discharge air temperature of 40°C.

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## MAXIMUM HEATING CAPACITY

For the maximum heating capacity of water, electric and hybrid units, the heating capacity has been taken at speed 6 with a discharge air temperature of 50°C.

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## WATER VOLUME

The water volumes for water units are based on a water temperature of 80/60°C, a room temperature of 20°C and an discharge air temperature of 40°C. For hybrid units the water volumes are based on a water temperature of 40/30°C, a room temperature of 20°C and a discharge air temperature of 35°C. With different values it is necessary to calculate the water flow rate using the formula below. The formula is also useful to determine the required water volume to achieve the necessary heating capacity or to determine the maximum heating capacity at a certain water volume.

$m_w$  = water flow rate [l/h]

$Q$  = capacity [kW]

$C_{pw}$  = specific heat of water (=4.18) [kJ/kg°C]

$\Delta T_w$  = temperature difference water [°C]

$\rho_w$  = density of water at 90°C (=0.984) [kg/l]

$$m_w = \frac{Q}{C_{pw} \Delta T_w \rho_w} 3600 [l/h]$$

## WATER PRESSURE LOSS

If different water temperatures than 80/60°C or 40/30°C (hybrid) are concerned, the water pressure loss can be roughly calculated with the formula below. To do this the water volume flow rate should first be calculated (see left).

$\Delta P_{w1}$  = water pressure loss, table values [kPa]

$\Delta P_{w2}$  = water pressure loss [kPa]

$m_{w1}$  = water flow rate, table values [l/h]

$m_{w2}$  = water flow rate calculated using formula [l/h]

$$\Delta p_{w_2} = \Delta p_{w_1} \left( \frac{m_{w_2}}{m_{w_1}} \right)^2 [kPa]$$



# TECHNICAL EXPLANATION

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## SOUND

The sound data is based on the direct field, in a situation with an open door and a sound absorbing ceiling. The sound data for different situations can be determined by adding the adjacent values to the table values.

Closed door	+ 1 - 2 dB(A)
Acoustical "hard" ceiling	+ 2 - 3 dB(A)

Deviating distances and several units next to each other can be calculated with the table below. Data from the 1 m unit, measured at a distance of 3 m, is the basic assumption. The factors apply to all types of air curtains.

## CORRECTION FACTORS FOR SOUND PRESSURE IN dB(A)

Distance (m)	Total unit length (m)					
	1	1.5	2	2.5	3	3.5
1	+9.5	+11.3	+12.6	+13.5	+14.3	+15.0
2	+3.5	+5.3	+6.5	+7.5	+8.3	+9.0
3	0	+1.8	+3.0	+4.0	+4.8	+5.4
4	-2.5	-0.7	+0.5	+1.5	+2.3	+2.9
5	-4.4	-2.7	-1.4	-0.5	+0.3	+1

# WATER HEATING

## SR S-100-H3 / SR S-150-H3

SR S-100-H3							
Nominal unit length	m	1					
Door height	m	2 - 2.4					
Electrical supply	V/ph/Hz	230/1/50					
Max. Input current (1 phase)	A	0.88					
Max. Fan power	kW	0.2					
Max. Specific fan power	W/l/s	0.63					
Max. Heating capacity	kW	11.4					
Water flow rate	l/h	590					
Water pressure drop with 3-port valve	kPa	2.82					
Water range	°C	80/60					
Weight casing style F / R / C	kg	46/60/58					
Air inlet temperature	°C				20		
Discharge air temperature	°C			35			40
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	440	600	680	880	1010	1130
Heating capacity	kW	2.2	3	3.4	4.4	5.1	7.6
Sound pressure level at 3m	dB(A)	27	33	37	42	46	48

SR S-150-H3							
Nominal unit length	m	1.5					
Door height	m	2 - 2.4					
Electrical supply	V/ph/Hz	230/1/50					
Max. Input current (1 phase)	A	1.32					
Max. Fan power	kW	0.3					
Max. Specific fan power	W/l/s	0.63					
Max. Heating capacity	kW	17					
Water flow rate	l/h	935					
Water pressure drop with 3-port valve	kPa	8.1					
Water range	°C	80/60					
Weight casing style F / R / C	kg	65/87/82					
Air inlet temperature	°C				20		
Discharge air temperature	°C			35			40
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	660	910	1020	1320	1520	1700
Heating capacity	kW	3.3	4.5	5.1	6.6	7.6	11.4
Sound pressure level at 3m	dB(A)	28	35	39	43	47	50

# WATER HEATING

## SR S-200-H3 / SR S-250-H3

SR S-200-H3							
Nominal unit length	m	2					
Door height	m	2 - 2.4					
Electrical supply	V/ph/Hz	230/1/50					
Max. Input current (1 phase)	A	1.76					
Max. Fan power	kW	0.39					
Max. Specific fan power	W/l/s	0.63					
Max. Heating capacity	kW	22.7					
Water flow rate	l/h	1280					
Water pressure drop with 3-port valve	kPa	16.97					
Water range	°C	80/60					
Weight casing style F / R / C	kg	79/108/102					
Air inlet temperature	°C	20					
Discharge air temperature	°C	35					40
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	880	1210	1360	1770	2020	2260
Heating capacity	kW	4.4	6.1	6.8	8.9	10.1	15.1
Sound pressure level at 3m	dB(A)	30	36	40	45	49	51

SR S-250-H3							
Nominal unit length	m	2.5					
Door height	m	2 - 2.4					
Electrical supply	V/ph/Hz	230/1/50					
Max. Input current (1 phase)	A	2.2					
Max. Fan power	kW	0.49					
Max. Specific fan power	W/l/s	0.63					
Max. Heating capacity	kW	28.4					
Water flow rate	l/h	1625					
Water pressure drop with 3-port valve	kPa	30.15					
Water range	°C	80/60					
Weight casing style F / R / C	kg	102/138/130					
Air inlet temperature	°C	20					
Discharge air temperature	°C	35					40
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	1100	1510	1700	2210	2530	2830
Heating capacity	kW	5.5	7.6	8.5	11.1	12.7	18.9
Sound pressure level at 3m	dB(A)	31	37	41	46	50	52

# WATER HEATING

## SR M-100-H3 / SR M-150-H3

SR M-100-H3							
Nominal unit length	m	1					
Door height	m	2.2 - 2.8					
Electrical supply	V/ph/Hz	230/1/50					
Max. Input current (1 phase)	A	1.25					
Max. Fan power	kW	0.27					
Max. Specific fan power	W/l/s	0.63					
Max. Heating capacity	kW	15.4					
Water flow rate	l/h	726					
Water pressure drop with 3-port valve	kPa	4.18					
Water range	°C	80/60					
Weight casing style F / R / C	kg	52/66/64					
Air inlet temperature	°C				20		
Discharge air temperature	°C			35			40
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	490	740	880	1180	1310	1530
Heating capacity	kW	2.4	3.7	4.4	5.9	6.6	10.3
Sound pressure level at 3m	dB(A)	25	34	39	45	50	53

SR M-150-H3							
Nominal unit length	m	1.5					
Door height	m	2.2 - 2.8					
Electrical supply	V/ph/Hz	230/1/50					
Max. Input current (1 phase)	A	1.87					
Max. Fan power	kW	0.4					
Max. Specific fan power	W/l/s	0.63					
Max. Heating capacity	kW	23.1					
Water flow rate	l/h	1155					
Water pressure drop with 3-port valve	kPa	12.08					
Water range	°C	80/60					
Weight casing style F / R / C	kg	74/96/91					
Air inlet temperature	°C				20		
Discharge air temperature	°C			35			40
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	730	1100	1320	1780	1960	2300
Heating capacity	kW	3.7	5.5	6.6	8.9	9.8	15.4
Sound pressure level at 3m	dB(A)	26	35	40	47	51	54

# WATER HEATING

## SR M-200-H3 / SR M-250-H3

SR M-200-H3							
Nominal unit length	m	2					
Door height	m	2.2 - 2.8					
Electrical supply	V/ph/Hz	230/1/50					
Max. Input current (1 phase)	A	2.49					
Max. Fan power	kW	0.54					
Max. Specific fan power	W/l/s	0.63					
Max. Heating capacity	kW	30.8					
Water flow rate	l/h	1584					
Water pressure drop with 3-port valve	kPa	25.38					
Water range	°C	80/60					
Weight casing style F / R / C	kg	92/121/115					
Air inlet temperature	°C				20		
Discharge air temperature	°C			35			40
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	970	1470	1750	2370	2610	3070
Heating capacity	kW	4.9	7.4	8.8	11.9	13.1	20.5
Sound pressure level at 3m	dB(A)	28	37	42	48	53	56

SR M-250-H3							
Nominal unit length	m	2.5					
Door height	m	2.2 - 2.8					
Electrical supply	V/ph/Hz	230/1/50					
Max. Input current (1 phase)	A	3.12					
Max. Fan power	kW	0.67					
Max. Specific fan power	W/l/s	0.63					
Max. Heating capacity	kW	38.5					
Water flow rate	l/h	2013					
Water pressure drop with 3-port valve	kPa	45.11					
Water range	°C	80/60					
Weight casing style F / R / C	kg	114/150/142					
Air inlet temperature	°C				20		
Discharge air temperature	°C			35			40
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	1210	1840	2190	2960	3270	3840
Heating capacity	kW	6.1	9.2	11	14.9	16.4	25.7
Sound pressure level at 3m	dB(A)	29	38	43	49	54	57

# WATER HEATING

## SR L-100-H3 / SR L-150-H3

SR L-100-H3							
Nominal unit length	m	1					
Door height	m	2.5 - 3.3					
Electrical supply	V/ph/Hz	230/1/50					
Max. Input current (1 phase)	A	3.03					
Max. Fan power	kW	0.57					
Max. Specific fan power	W/l/s	0.66					
Max. Heating capacity	kW	31.5					
Water flow rate	l/h	1327					
Water pressure drop with 3-port valve	kPa	5.38					
Water range	°C	80/60					
Weight casing style F / R / C	kg	64/82/80					
Air inlet temperature	°C				20		
Discharge air temperature	°C			35			40
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	1010	1440	1710	2240	2680	3140
Heating capacity	kW	5	7.2	8.6	11.2	13.5	21
Sound pressure level at 3m	dB(A)	33	40	43	48	53	56

SR L-150-H3							
Nominal unit length	m	1.5					
Door height	m	2.5 - 3.3					
Electrical supply	V/ph/Hz	230/1/50					
Max. Input current (1 phase)	A	4.55					
Max. Fan power	kW	0.86					
Max. Specific fan power	W/l/s	0.66					
Max. Heating capacity	kW	47.3					
Water flow rate	l/h	2188					
Water pressure drop with 3-port valve	kPa	17.02					
Water range	°C	80/60					
Weight casing style F / R / C	kg	96/121/118					
Air inlet temperature	°C				20		
Discharge air temperature	°C			35			40
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	1510	2160	2560	3360	4020	4720
Heating capacity	kW	7.6	10.9	12.8	16.9	20.2	31.5
Sound pressure level at 3m	dB(A)	34	41	44	50	54	58

# WATER HEATING

## SR L-200-H3 / SR L-250-H3

SR L-200-H3							
Nominal unit length	m	2					
Door height	m	2.5 - 3.3					
Electrical supply	V/ph/Hz	230/1/50					
Max. Input current (1 phase)	A	6.07					
Max. Fan power	kW	1.15					
Max. Specific fan power	W/l/s	0.66					
Max. Heating capacity	kW	63.1					
Water flow rate	l/h	3051					
Water pressure drop with 3-port valve	kPa	37.51					
Water range	°C	80/60					
Weight casing style F / R / C	kg	121/155/151					
Air inlet temperature	°C				20		
Discharge air temperature	°C			35			40
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	2010	2880	3410	4480	5360	6290
Heating capacity	kW	10.1	14.5	17.1	22.5	26.9	42.1
Sound pressure level at 3m	dB(A)	36	43	46	51	56	59

SR L-250-H3							
Nominal unit length	m	2.5					
Door height	m	2.5 - 3.3					
Electrical supply	V/ph/Hz	230/1/50					
Max. Input current (1 phase)	A	7.58					
Max. Fan power	kW	1.44					
Max. Specific fan power	W/l/s	0.66					
Max. Heating capacity	kW	78.9					
Water flow rate	l/h	3642					
Water pressure drop with 3-port valve	kPa	25.37					
Water range	°C	80/60					
Weight casing style F / R / C	kg	154/197/191					
Air inlet temperature	°C				20		
Discharge air temperature	°C			35			40
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	2520	3610	4270	5600	6700	7860
Heating capacity	kW	12.6	18.1	21.4	28.1	33.6	52.6
Sound pressure level at 3m	dB(A)	37	44	47	52	57	60

# WATER HEATING

## SR XL-100-H3 / SR XL-150-H3

SR XL-100-H3							
Nominal unit length	m	1					
Door height	m	3 - 4					
Electrical supply	V/ph/Hz	230/1/50					
Max. Input current (1 phase)	A	5.02					
Max. Fan power	kW	1.03					
Max. Specific fan power	W/l/s	0.94					
Max. Heating capacity	kW	39.6					
Water flow rate	l/h	1513					
Water pressure drop with 3-port valve	kPa	6.9					
Water range	°C	80/60					
Weight casing style F / R / C	kg	68/86/84					
Air inlet temperature	°C	20					
Discharge air temperature	°C	35					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	1170	1580	2030	2720	3370	3950
Heating capacity	kW	5.9	7.9	10.2	13.7	16.9	26.4
Sound pressure level at 3m	dB(A)	38	42	47	52	57	62

SR XL-150-H3							
Nominal unit length	m	1.5					
Door height	m	3 - 4					
Electrical supply	V/ph/Hz	230/1/50					
Max. Input current (1 phase)	A	7.53					
Max. Fan power	kW	1.54					
Max. Specific fan power	W/l/s	0.94					
Max. Heating capacity	kW	59.4					
Water flow rate	l/h	2506					
Water pressure drop with 3-port valve	kPa	21.99					
Water range	°C	80/60					
Weight casing style F / R / C	kg	102/127/124					
Air inlet temperature	°C	20					
Discharge air temperature	°C	35					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	1750	2370	3050	4090	5060	5920
Heating capacity	kW	8.8	11.9	15.3	20.5	25.4	39.6
Sound pressure level at 3m	dB(A)	39	44	48	54	59	63



# WATER HEATING

## SR XL-200-H3 / SR XL-250-H3

SR XL-200-H3							
Nominal unit length	m	2					
Door height	m	3 - 4					
Electrical supply	V/ph/Hz	230/1/50					
Max. Input current (1 phase)	A	10.04					
Max. Fan power	kW	2.05					
Max. Specific fan power	W/l/s	0.94					
Max. Heating capacity	kW	79.2					
Water flow rate	l/h	3502					
Water pressure drop with 3-port valve	kPa	48.57					
Water range	°C	80/60					
Weight casing style F / R / C	kg	130/164/160					
Air inlet temperature	°C	20					
Discharge air temperature	°C	35					40
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	2330	3170	4060	5450	6740	7890
Heating capacity	kW	11.7	15.9	20.4	27.3	33.8	52.8
Sound pressure level at 3m	dB(A)	41	45	50	55	60	65

SR XL-250-H3							
Nominal unit length	m	2.5					
Door height	m	3 - 4					
Electrical supply	V/ph/Hz	230/1/50					
Max. Input current (1 phase)	A	12.55					
Max. Fan power	kW	2.57					
Max. Specific fan power	W/l/s	0.94					
Max. Heating capacity	kW	99					
Water flow rate	l/h	4172					
Water pressure drop with 3-port valve	kPa	33.05					
Water range	°C	80/60					
Weight casing style F / R / C	kg	163/206/200					
Air inlet temperature	°C	20					
Discharge air temperature	°C	35					40
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	2920	3960	5080	6810	8430	9870
Heating capacity	kW	14.6	19.9	25.5	34.2	42.3	66
Sound pressure level at 3m	dB(A)	42	46	51	56	61	66

# ELECTRICAL HEATING

## SR S-100-E / SR S-150-E

SR S-100-E							
Nominal unit length	m	1					
Door height	m	2 - 2.4					
Electrical supply	V/ph/Hz	400/3N/50					
Max. Cable size allowed (solid/stranded)	mm <sup>2</sup>	16/10					
Max. Current consumption (unit)	A	16					
Max. Fan power	kW	0.2					
Max. Power consumption, heating	kW	10.5					
Max. Specific fan power	W/l/s	0.63					
Max. Heating capacity	kW	10					
Weight casing style F / R / C	kg	55/65/63					
Air inlet temperature	°C	20					
Discharge air temperature	°C	35					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	440	600	680	880	1010	1130
Heating capacity	kW	2.2	3	3.4	4.4	5.1	5.7
Sound pressure level at 3m	dB(A)	27	33	37	42	46	48

SR S-150-E							
Nominal unit length	m	1,5					
Door height	m	2 - 2.4					
Electrical supply	V/ph/Hz	400/3N/50					
Max. Cable size allowed (solid/stranded)	mm <sup>2</sup>	16/10					
Max. Current consumption (unit)	A	23,8					
Max. Fan power	kW	0,3					
Max. Power consumption, heating	kW	15,6					
Max. Specific fan power	W/l/s	0,63					
Max. Heating capacity	kW	14,8					
Weight casing style F / R / C	kg	76/92/87					
Air inlet temperature	°C	20					
Discharge air temperature	°C	35					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	660	910	1020	1320	1520	1700
Heating capacity	kW	3.3	4.5	5.1	6.6	7.6	8.5
Sound pressure level at 3m	dB(A)	28	35	39	43	47	50

# ELECTRICAL HEATING

## SR S-200-E / SR S-250-E

SR S-200-E							
Nominal unit length	m	2					
Door height	m	2 - 2.4					
Electrical supply	V/ph/Hz	400/3N/50					
Max. Cable size allowed (solid/stranded)	mm <sup>2</sup>	16/10					
Max. Current consumption (unit)	A	32.1					
Max. Fan power	kW	0.39					
Max. Power consumption, heating	kW	21					
Max. Specific fan power	W/l/s	0.63					
Max. Heating capacity	kW	20					
Weight casing style F / R / C	kg	97/118/112					
Air inlet temperature	°C	20					
Discharge air temperature	°C	35					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	880	1210	1360	1770	2020	2260
Heating capacity	kW	4.4	6.1	6.8	8.9	10.1	11.4
Sound pressure level at 3m	dB(A)	30	36	40	45	49	51

SR S-250-E							
Nominal unit length	m	2.5					
Door height	m	2 - 2.4					
Electrical supply	V/ph/Hz	400/3N/50					
Max. Cable size allowed (solid/stranded)	mm <sup>2</sup>	16/10					
Max. Current consumption (unit)	A	39.9					
Max. Fan power	kW	0.49					
Max. Power consumption, heating	kW	26.1					
Max. Specific fan power	W/l/s	0.63					
Max. Heating capacity	kW	24.8					
Weight casing style F / R / C	kg	118/144/136					
Air inlet temperature	°C	20					
Discharge air temperature	°C	35					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	1100	1510	1700	2210	2530	2830
Heating capacity	kW	5.5	7.6	8.5	11.1	12.7	14.2
Sound pressure level at 3m	dB(A)	31	37	41	46	50	52

# ELECTRICAL HEATING

## SR M-100-E / SR M-150-E

SR M-100-E							
Nominal unit length	m	1					
Door height	m	2.2 - 2.8					
Electrical supply	V/ph/Hz	400/3N/50					
Max. Cable size allowed (solid/stranded)	mm <sup>2</sup>	16/10					
Max. Current consumption (unit)	A	22.7					
Max. Fan power	kW	0.27					
Max. Power consumption, heating	kW	14					
Max. Specific fan power	W/l/s	0.63					
Max. Heating capacity	kW	13.3					
Weight casing style F / R / C	kg	59/69/67					
Air inlet temperature	°C				20		
Discharge air temperature	°C				35		
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	490	740	880	1180	1310	1530
Heating capacity	kW	2.4	3.7	4.4	5.9	6.6	7.7
Sound pressure level at 3m	dB(A)	25	34	39	45	50	53

SR M-150-E							
Nominal unit length	m	1.5					
Door height	m	2.2 - 2.8					
Electrical supply	V/ph/Hz	400/3N/50					
Max. Cable size allowed (solid/stranded)	mm <sup>2</sup>	16/10					
Max. Current consumption (unit) a 33,8	A	23.8					
Max. Fan power	kW	0.4					
Max. Power consumption, heating	kW	20.8					
Max. Specific fan power	W/l/s	0.63					
Max. Heating capacity	kW	19.8					
Weight casing style F / R / C	kg	85/101/96					
Air inlet temperature	°C				20		
Discharge air temperature	°C				35		
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	730	1100	1320	1780	1960	2300
Heating capacity	kW	3.7	5.5	6.6	8.9	9.8	11.6
Sound pressure level at 3m	dB(A)	26	35	40	47	51	54

# ELECTRICAL HEATING

## SR M-200-E / SR M-250-E

SR M-200-E							
Nominal unit length	m	2					
Door height	m	2.2 - 2.8					
Electrical supply	V/ph/Hz	400/3N/50					
Max. Cable size allowed (solid/stranded)	mm <sup>2</sup>	35/35					
Max. Current consumption (unit)	A	45.5					
Max. Fan power	kW	0.54					
Max. Power consumption, heating	kW	28					
Max. Specific fan power	W/l/s	0.63					
Max. Heating capacity	kW	26.6					
Weight casing style F / R / C	kg	108/129/123					
Air inlet temperature	°C	20					
Discharge air temperature	°C	35					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	970	1470	1750	2370	2610	3070
Heating capacity	kW	4.9	7.4	8.8	11.9	13.1	15.4
Sound pressure level at 3m	dB(A)	28	37	42	48	53	56

SR M-250-E							
Nominal unit length	m	2.5					
Door height	m	2.2 - 2.8					
Electrical supply	V/ph/Hz	400/3N/50					
Max. Cable size allowed (solid/stranded)	mm <sup>2</sup>	35/35					
Max. Current consumption (unit)	A	56.5					
Max. Fan power	kW	0.67					
Max. Power consumption, heating	kW	34.8					
Max. Specific fan power	W/l/s	0.63					
Max. Heating capacity	kW	33.1					
Weight casing style F / R / C	kg	130/156/148					
Air inlet temperature	°C	20					
Discharge air temperature	°C	35					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	1210	1840	2190	2960	3270	3840
Heating capacity	kW	6.1	9.2	11	14.9	16.4	19.3
Sound pressure level at 3m	dB(A)	29	38	43	49	54	57

# ELECTRICAL HEATING

## SR L-100-E / SR L-150-E

SR L-100-E							
Nominal unit length	m	1					
Door height	m	2.5 - 3.3					
Electrical supply	V/ph/Hz	400/3N/50					
Max. Cable size allowed (solid/stranded)	mm <sup>2</sup>	35/35					
Max. Current consumption (unit)	A	37.9					
Max. Fan power	kW	0.57					
Max. Power consumption, heating	kW	24.5					
Max. Specific fan power	W/l/s	0.66					
Max. Heating capacity	kW	23.3					
Weight casing style F / R / C	kg	74/87/85					
Air inlet temperature	°C				20		
Discharge air temperature	°C				35		
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	1010	1440	1710	2240	2680	3140
Heating capacity	kW	5	7.2	8.6	11.2	13.5	15.8
Sound pressure level at 3m	dB(A)	33	40	43	48	53	56

SR L-150-E							
Nominal unit length	m	1.5					
Door height	m	2.5 - 3.3					
Electrical supply	V/ph/Hz	400/3N/50					
Max. Cable size allowed (solid/stranded)	mm <sup>2</sup>	35/35					
Max. Current consumption (unit)	A	56.3					
Max. Fan power	kW	0.86					
Max. Power consumption, heating	kW	36.4					
Max. Specific fan power	W/l/s	0.66					
Max. Heating capacity	kW	34.6					
Weight casing style F / R / C	kg	111/129/126					
Air inlet temperature	°C				20		
Discharge air temperature	°C				35		
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	1510	2160	2560	3360	4020	4720
Heating capacity	kW	7.6	10.9	12.8	16.9	20.2	23.7
Sound pressure level at 3m	dB(A)	34	41	44	50	54	58

# ELECTRICAL HEATING

## SR L-200-E / SR L-250-E

SR L-200-E							
Nominal unit length	m	2					
Door height	m	2.5 - 3.3					
Electrical supply	V/ph/Hz	400/3N/50					
Max. Cable size allowed (solid/stranded)	mm <sup>2</sup>	35/35					
Max. Current consumption (unit)	A	75.8					
Max. Fan power	kW	1.15					
Max. Power consumption, heating	kW	49					
Max. Specific fan power	W/l/s	0.66					
Max. Heating capacity	kW	46.6					
Weight casing style F / R / C	kg	146/171/167					
Air inlet temperature	°C				20		
Discharge air temperature	°C				35		
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	2010	2880	3410	4480	5360	6290
Heating capacity	kW	10.1	14.5	17.1	22.5	26.9	31.5
Sound pressure level at 3m	dB(A)	36	43	46	51	56	59

SR L-250-E							
Nominal unit length	m	2.5					
Door height	m	2.5 - 3.3					
Electrical supply	V/ph/Hz	400/3N/50					
Max. Cable size allowed (solid/stranded)	mm <sup>2</sup>	35/35					
Max. Current consumption (unit)	A	94.2					
Max. Fan power	kW	1.44					
Max. Power consumption, heating	kW	60.9					
Max. Specific fan power	W/l/s	0.66					
Max. Heating capacity	kW	57.9					
Weight casing style F / R / C	kg	181/213/207					
Air inlet temperature	°C				20		
Discharge air temperature	°C				35		
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	2520	3610	4270	5600	6700	7860
Heating capacity	kW	12.6	18.1	21.4	28.1	33.6	39.4
Sound pressure level at 3m	dB(A)	37	44	47	52	57	60

# ELECTRICAL HEATING

## SR XL-100-E / SR XL-150-E

SR XL-100-E							
Nominal unit length	m	1					
Door height	m	3 - 4					
Electrical supply	V/ph/Hz	400/3N/50					
Max. Cable size allowed (solid/stranded)	mm <sup>2</sup>	35/35					
Max. Current consumption (unit)	A	39.7					
Max. Fan power	kW	1.03					
Max. Power consumption, heating	kW	24.5					
Max. Specific fan power	W/l/s	0.94					
Max. Heating capacity	kW	23.3					
Weight casing style F / R / C	kg	78/91/89					
Air inlet temperature	°C	20					
Discharge air temperature	°C	35					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	1170	1580	2030	2720	3370	3950
Heating capacity	kW	5.9	7.9	10.2	13.7	16.9	19.8
Sound pressure level at 3m	dB(A)	38	42	47	52	57	62

SR XL-150-E							
Nominal unit length	m	1.5					
Door height	m	3 - 4					
Electrical supply	V/ph/Hz	400/3N/50					
Max. Cable size allowed (solid/stranded)	mm <sup>2</sup>	35/35					
Max. Current consumption (unit)	A	59.1					
Max. Fan power	kW	1.54					
Max. Power consumption, heating	kW	36.4					
Max. Specific fan power	W/l/s	0.94					
Max. Heating capacity	kW	34.6					
Weight casing style F / R / C	kg	117/135/132					
Air inlet temperature	°C	20					
Discharge air temperature	°C	35					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	1750	2370	3050	4090	5060	5920
Heating capacity	kW	8.8	11.9	15.3	20.5	25.4	29.7
Sound pressure level at 3m	dB(A)	39	44	48	54	59	63



# ELECTRICAL HEATING

## SR XL-200-E / SR XL-250-E

SR XL-200-E							
Nominal unit length	m	2					
Door height	m	3 - 4					
Electrical supply	V/ph/Hz	400/3N/50					
Max. Cable size allowed (solid/stranded)	mm <sup>2</sup>	35/35					
Max. Current consumption (unit)	A	79.4					
Max. Fan power	kW	2.05					
Max. Power consumption, heating	kW	49					
Max. Specific fan power	W/l/s	0.94					
Max heating capacity	kW	46.6					
Weight casing style F / R / C	kg	155/180/176					
Air inlet temperature	°C	20					
Discharge air temperature	°C	35					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	2330	3170	4060	5450	6740	7890
Heating capacity	kW	11.7	15.9	20.4	27.3	33.8	39.6
Sound pressure level at 3m	dB(A)	41	45	50	55	60	65

SR XL-250-E							
Nominal unit length	m	2.5					
Door height	m	3 - 4					
Electrical supply	V/ph/Hz	400/3N/50					
Max. Cable size allowed (solid/stranded)	mm <sup>2</sup>	35/35					
Max. Current consumption (unit)	A	98.8					
Max. Fan power	kW	2.57					
Max. Power consumption, heating	kW	60.9					
Max. Specific fan power	W/l/s	0.94					
Max. Heating capacity	kW	57.9					
Weight casing style F / R / C	kg	190/222/216					
Air inlet temperature	°C	20					
Discharge air temperature	°C	35					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	2920	3960	5080	6810	8430	9870
Heating capacity	kW	14.6	19.9	25.5	34.2	42.3	49.5
Sound pressure level at 3m	dB(A)	42	46	51	56	61	66

# HYBRID HEATING

## SR S-100-H3E / SR S-150-H3E

SR S-100-H3E							
Nominal unit length	m	1					
Door height	m	2 - 2.4					
Electrical supply	V/ph/Hz	400/3N/50					
Max. Cable size allowed (solid/stranded)	mm <sup>2</sup>	6/4					
Max. Current consumption (unit)	A	8.1					
Max. Fan power	kW	0.2					
Max. Power consumption, heating	kW	5					
Max. Specific fan power	W/l/s	0.63					
Max. Heating capacity - water	kW	11.4					
Max. Heating capacity - electric	kW	4.8					
Water flow rate	l/h	302					
Water pressure drop with 3-port valve	kPa	0.84					
Water range	°C	40/30					
Weight casing style F / R / C	kg	50/60/58					
Air inlet temperature	°C	20					
Discharge air temperature	°C	35					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	440	600	680	880	1010	1130
Heating capacity - water	kW	1.8	2.3	2.5	3	3.2	3.5
Heating capacity - electric	kW	0.4	0.7	0.9	1.5	1.8	2.2
Sound pressure level at 3m	dB(A)	27	33	37	42	46	48

SR S-150-H3E							
Nominal unit length	m	1.5					
Door height	m	2 - 2.4					
Electrical supply	V/ph/Hz	400/3N/50					
Max. Cable size allowed (solid/stranded)	mm <sup>2</sup>	6/4					
Max. Current consumption (unit)	A	12.2					
Max. Fan power	kW	0.3					
Max. Power consumption, heating	kW	7.5					
Max. Specific fan power	W/l/s	0.63					
Max. Heating capacity - water	kW	17					
Max. Heating capacity - electric	kW	7.1					
Water flow rate	l/h	505					
Water pressure drop with 3-port valve	kPa	2.71					
Water range	°C	40/30					
Weight casing style F / R / C	kg	71/87/82					
Air inlet temperature	°C	20					
Discharge air temperature	°C	35					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	660	910	1020	1320	1520	1700
Heating capacity - water	kW	3	3.8	4.1	4.9	5.4	5.9
Heating capacity - electric	kW	0.4	0.8	1	1.7	2.2	2.7
Sound pressure level at 3m	dB(A)	28	35	39	43	47	50

# HYBRID HEATING

## SR S-200-H3E / SR S-250-H3E

SR S-200-H3E							
Nominal unit length	m	2					
Door height	m	2 - 2.4					
Electrical supply	V/ph/Hz	400/3N/50					
Max. Cable size allowed (solid/stranded)	mm <sup>2</sup>	6/4					
Max. Current consumption (unit)	A	16.3					
Max. Fan power	kW	0.39					
Max. Power consumption, heating	kW	10					
Max. Specific fan power	W/l/s	0.63					
Max. Heating capacity - water	kW	22.7					
Max. Heating capacity - electric	kW	9.5					
Water flow rate	l/h	709					
Water pressure drop with 3-port valve	kPa	6.03					
Water range	°C	40/30					
Weight casing style F / R / C	kg	87/108/102					
Air inlet temperature	°C	20					
Discharge air temperature	°C	35					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	880	1210	1360	1770	2020	2260
Heating capacity - water	kW	4.1	5.2	5.7	6.9	7.6	8.2
Heating capacity - electric	kW	0.3	0.8	1.1	1.9	2.5	3.1
Sound pressure level at 3m	dB(A)	30	36	40	45	49	51

SR S-250-H3E							
Nominal unit length	m	2.5					
Door height	m	2 - 2.4					
Electrical supply	V/ph/Hz	400/3N/50					
Max. Cable size allowed (solid/stranded)	mm <sup>2</sup>	6/4					
Max. Current consumption (unit)	A	20.3					
Max. Fan power	kW	0.49					
Max. Power consumption, heating	kW	12.5					
Max. Specific fan power	W/l/s	0.63					
Max. Heating capacity - water	kW	28.4					
Max. Heating capacity - electric	kW	11.9					
Water flow rate	l/h	913					
Water pressure drop with 3-port valve	kPa	11.11					
Water range	°C	40/30					
Weight casing style F / R / C	kg	112/138/130					
Air inlet temperature	°C	20					
Discharge air temperature	°C	35					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	1100	1510	1700	2210	2530	2830
Heating capacity - water	kW	5.3	6.7	7.3	8.9	9.8	10.6
Heating capacity - electric	kW	0.3	0.9	1.2	2.2	2.9	3.6
Sound pressure level at 3m	dB(A)	31	37	41	46	50	52

# HYBRID HEATING

## SR M-100-H3E / SR M-150-H3E

SR M-100-H3E							
Nominal unit length	m	1					
Door height	m	2.2 - 2.8					
Electrical supply	V/ph/Hz	400/3N/50					
Max. Cable size allowed (solid/stranded)	mm <sup>2</sup>	6/4					
Max. Current consumption (unit)	A	8.5					
Max. Fan power	kW	0.27					
Max. Power consumption, heating	kW	5					
Max. Specific fan power	W/l/s	0.63					
Max. Heating capacity - water	kW	15.4					
Max. Heating capacity - electric	kW	4.8					
Water flow rate	l/h	366					
Water pressure drop with 3-port valve	kPa	1.21					
Water range	°C	40/30					
Weight casing style F / R / C	kg	56/66/64					
Air inlet temperature	°C	20					
Discharge air temperature	°C	35					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	490	740	880	1180	1310	1530
Heating capacity - water	kW	1.9	2.6	3	3.6	3.8	4.2
Heating capacity - electric	kW	0.5	1.1	1.4	2.3	2.7	3.5
Sound pressure level at 3m	dB(A)	25	34	39	45	50	53

SR M-150-H3E							
Nominal unit length	m	1.5					
Door height	m	2.2 - 2.8					
Electrical supply	V/ph/Hz	400/3N/50					
Max. Cable size allowed (solid/stranded)	mm <sup>2</sup>	6/4					
Max. Current consumption (unit)	A	12.7					
Max. Fan power	kW	0.4					
Max. Power consumption, heating	kW	7.5					
Max. Specific fan power	W/l/s	0.63					
Max. Heating capacity - water	kW	23.1					
Max. Heating capacity - electric	kW	7.1					
Water flow rate	l/h	616					
Water pressure drop with 3-port valve	kPa	3.95					
Water range	°C	40/30					
Weight casing style F / R / C	kg	80/96/91					
Air inlet temperature	°C	20					
Discharge air temperature	°C	35					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	730	1100	1320	1780	1960	2300
Heating capacity - water	kW	3.2	4.3	4.9	6	6.4	7.1
Heating capacity - electric	kW	0.5	1.2	1.7	2.9	3.4	4.4
Sound pressure level at 3m	dB(A)	26	35	40	47	51	54

# HYBRID HEATING

## SR M-200-H3E / SR M-250-H3E

SR M-200-H3E							
Nominal unit length	m	2					
Door height	m	2.2 - 2.8					
Electrical supply	V/ph/Hz	400/3N/50					
Max. Cable size allowed (solid/stranded)	mm <sup>2</sup>	6/4					
Max. Current consumption (unit)	A	17					
Max. Fan power	kW	0.54					
Max. Power consumption, heating	kW	10					
Max. Specific fan power	W/l/s	0.63					
Max. Heating capacity - water	kW	30.8					
Max. Heating capacity - electric	kW	9.5					
Water flow rate	l/h	868					
Water pressure drop with 3-port valve	kPa	8.82					
Water range °c 40/30	°C	40/30					
Weight casing style F / R / C	kg	100/121/115					
Air inlet temperature	°C	20					
Discharge air temperature	°C	35					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	970	1470	1750	2370	2610	3070
Heating capacity - water	kW	4.4	6.1	6.9	8.5	9.1	10.1
Heating capacity - electric	kW	0.4	1.3	1.9	3.4	4.1	5.3
Sound pressure level at 3m	dB(A)	28	37	42	48	53	56

SR M-250-H3E							
Nominal unit length	m	2.5					
Door height	m	2.2 - 2.8					
Electrical supply	V/ph/Hz	400/3N/50					
Max. Cable size allowed (solid/stranded)	mm <sup>2</sup>	6/4					
Max. Current consumption (unit)	A	21.2					
Max. Fan power	kW	0.67					
Max. Power consumption, heating	kW	12.5					
Max. Specific fan power	W/l/s	0.63					
Max. Heating capacity - water	kW	38.5					
Max. Heating capacity - electric	kW	11.9					
Water flow rate	l/h	1121					
Water pressure drop with 3-port valve	kPa	16.29					
Water range	°C	40/30					
Weight casing style F / R / C	kg	124/150/142					
Air inlet temperature	°C	20					
Discharge air temperature	°C	35					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	1210	1840	2190	2960	3270	3840
Heating capacity - water	kW	5.7	7.8	8.8	10.9	11.7	13
Heating capacity - electric	kW	0.4	1.4	2.2	3.9	4.7	6.3
Sound pressure level at 3m	dB(A)	29	38	43	49	54	57

# HYBRID HEATING

## SR L-100-H3E / SR L-150-H3E

SR L-100-H3E							
Nominal unit length	m	1					
Door height	m	2.5 - 3.3					
Electrical supply	V/ph/Hz	400/3N/50					
Max. Cable size allowed (solid/stranded)	mm <sup>2</sup>	35/35					
Max. Current consumption (unit)	A	15.8					
Max. Fan power	kW	0.57					
Max. Power consumption, heating	kW	8.8					
Max. Specific fan power	W/l/s	0.66					
Max. Heating capacity - water	kW	31.5					
Max. Heating capacity - electric	kW	8.4					
Water flow rate	l/h	593					
Water pressure drop with 3-port valve	kPa	1.26					
Water range	°C	40/30					
Weight casing style F / R / C	kg	69/82/80					
Air inlet temperature	°C	20					
Discharge air temperature	°C	35					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	1010	1440	1710	2240	2680	3140
Heating capacity - water	kW	3.5	4.4	4.9	5.7	6.3	6.9
Heating capacity - electric	kW	1.5	2.8	3.7	5.5	7.1	8.4
Sound pressure level at 3m	dB(A)	33	40	43	48	53	56

SR L-150-H3E							
Nominal unit length	m	1.5					
Door height	m	2.5 - 3.3					
Electrical supply	V/ph/Hz	400/3N/50					
Max. Cable size allowed (solid/stranded)	mm <sup>2</sup>	35/35					
Max. Current consumption (unit)	A	23.7					
Max. Fan power	kW	0.86					
Max. Power consumption, heating	kW	13.2					
Max. Specific fan power	W/l/s	0.66					
Max. Heating capacity - water	kW	47.3					
Max. Heating capacity - electric	kW	12.5					
Water flow rate	l/h	1087					
Water pressure drop with 3-port valve	kPa	4.94					
Water range	°C	40/30					
Weight casing style F / R / C	kg	103/121/118					
Air inlet temperature	°C	20					
Discharge air temperature	°C	35					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	1510	2160	2560	3360	4020	4720
Heating capacity - water	kW	6.2	7.9	8.8	10.4	11.5	12.6
Heating capacity - electric	kW	1.4	3	4.1	6.5	8.7	11.1
Sound pressure level at 3m	dB(A)	34	41	44	50	54	58

# HYBRID HEATING

## SR L-200-H3E / SR L-250-H3E

SR L-200-H3E							
Nominal unit length	m	2					
Door height	m	2.5 - 3.3					
Electrical supply	V/ph/Hz	400/3N/50					
Max. Cable size allowed (solid/stranded)	mm <sup>2</sup>	35/35					
Max. Current consumption (unit)	A	31.6					
Max. Fan power	kW	1.15					
Max. Power consumption, heating	kW	17.6					
Max. Specific fan power	W/l/s	0.66					
Max. Heating capacity - water	kW	63.1					
Max. Heating capacity - electric	kW	16.7					
Water flow rate	l/h	1588					
Water pressure drop with 3-port valve	kPa	12.04					
Water range °c 40/30	°C	40/30					
Weight casing style F / R / C	kg	130/155/151					
Air inlet temperature	°C	20					
Discharge air temperature	°C	35					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	2010	2880	3410	4480	5360	6290
Heating capacity - water	kW	8.8	11.3	12.7	15.1	16.8	18.4
Heating capacity - electric	kW	1.3	3.1	4.4	7.4	10.1	13.1
Sound pressure level at 3m	dB(A)	36	43	46	51	56	59

SR L-250-H3E							
Nominal unit length	m	2.5					
Door height	m	2.5 - 3.3					
Electrical supply	V/ph/Hz	400/3N/50					
Max. Cable size allowed (solid/stranded)	mm <sup>2</sup>	35/35					
Max. Current consumption (unit)	A	39.5					
Max. Fan power	kW	1.44					
Max. Power consumption, heating	kW	22					
Max. Specific fan power	W/l/s	0.66					
Max. Heating capacity - water	kW	78.9					
Max. Heating capacity - electric	kW	20.9					
Water flow rate	l/h	1768					
Water pressure drop with 3-port valve	kPa	6.51					
Water range °c 40/30	°C	40/30					
Weight casing style F / R / C	kg	165/197/191					
Air inlet temperature	°C	20					
Discharge air temperature	°C	35					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	2520	3610	4270	5600	6700	7860
Heating capacity - water	kW	10.1	12.8	14.3	16.9	18.7	20.5
Heating capacity - electric	kW	2.5	5.3	7.1	11.2	14.9	18.9
Sound pressure level at 3m	dB(A)	37	44	47	52	57	60

# HYBRID HEATING

## SR XL-100-H3E / SR XL-150-H3E

SR XL-100-H3E							
Nominal unit length	m	1					
Door height	m	3 - 4					
Electrical supply	V/ph/Hz	400/3N/50					
Max. Cable size allowed (solid/stranded)	mm <sup>2</sup>	35/35					
Max. Current consumption (unit)	A	17.8					
Max. Fan power	kW	1.03					
Max. Power consumption, heating	kW	8.8					
Max. Specific fan power	W/l/s	0.94					
Max. Heating capacity - water	kW	39.6					
Max. Heating capacity - electric	kW	8.4					
Water flow rate	l/h	667					
Water pressure drop with 3-port valve	kPa	1.57					
Water range °c 40/30	°C	40/30					
Weight casing style F / R / C	kg	73/86/84					
Air inlet temperature	°C	20					
Discharge air temperature	°C	35					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	1170	1580	2030	2720	3370	3950
Heating capacity - water	kW	3.9	4.7	5.4	6.4	7.1	7.7
Heating capacity - electric	kW	2	3.3	4.8	7.3	8.4	8.4
Sound pressure level at 3m	dB(A)	38	42	47	52	57	62

SR XL-150-H3E							
Nominal unit length	m	1.5					
Door height	m	3 - 4					
Electrical supply	V/ph/Hz	400/3N/50					
Max. Cable size allowed (solid/stranded)	mm <sup>2</sup>	35/35					
Max. Current consumption (unit)	A	26.7					
Max. Fan power	kW	1.54					
Max. Power consumption, heating	kW	13.2					
Max. Specific fan power	W/l/s	0.94					
Max. Heating capacity - water	kW	59.4					
Max. Heating capacity - electric	kW	12.5					
Water flow rate	l/h	1232					
Water pressure drop with 3-port valve	kPa	6.25					
Water range	°C	40/30					
Weight casing style F / R / C	kg	109/127/124					
Air inlet temperature	°C	20					
Discharge air temperature	°C	35					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	1750	2370	3050	4090	5060	5920
Heating capacity - water	kW	6.8	8.4	9.8	11.6	13.1	14.3
Heating capacity - electric	kW	1.9	3.5	5.5	8.9	12.3	12.5
Sound pressure level at 3m	dB(A)	39	44	48	54	59	63



# HYBRID HEATING

## SR XL-200-H3E / SR XL-250-H3E

SR XL-200-H3E							
Nominal unit length	m	2					
Door height	m	3 - 4					
Electrical supply	V/ph/Hz	400/3N/50					
Max. Cable size allowed (solid/stranded)	mm <sup>2</sup>	35/35					
Max. Current consumption (unit)	A	35.5					
Max. Fan power	kW	2.05					
Max. Power consumption, heating	kW	17.6					
Max. Specific fan power	W/l/s	0.94					
Max. Heating capacity - water	kW	79.2					
Max. Heating capacity - electric	kW	16.7					
Water flow rate	l/h	1806					
Water pressure drop with 3-port valve	kPa	15.3					
Water range °c 40/30	°C	40/30					
Weight casing style F / R / C	kg	139/164/160					
Air inlet temperature	°C	20					
Discharge air temperature	°C	35					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	2330	3170	4060	5450	6740	7890
Heating capacity - water	kW	9.8	12.1	14.2	16.9	19.2	20.9
Heating capacity - electric	kW	1.9	3.8	6.2	10.4	14.7	16.7
Sound pressure level at 3m	dB(A)	41	45	50	55	60	65

SR XL-250-H3E							
Nominal unit length	m	2.5					
Door height	m	3 - 4					
Electrical supply	V/ph/Hz	400/3N/50					
Max. Cable size allowed (solid/stranded)	mm <sup>2</sup>	35/35					
Max. Current consumption (unit)	A	44.4					
Max. Fan power	kW	2.57					
Max. Power consumption, heating	kW	22					
Max. Specific fan power	W/l/s	0.94					
Max. Heating capacity - water	kW	99					
Max. Heating capacity - electric	kW	20.9					
Water flow rate	l/h	2002					
Water pressure drop with 3-port valve	kPa	8.27					
Water range	°C	40/30					
Weight casing style F / R / C	kg	174/206/200					
Air inlet temperature	°C	20					
Discharge air temperature	°C	35					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	2920	3960	5080	6810	8430	9870
Heating capacity - water	kW	11.2	13.6	15.9	18.9	21.3	23.2
Heating capacity - electric	kW	3.5	6.2	9.6	15.3	20.9	20.9
Sound pressure level at 3m	dB(A)	42	46	51	56	61	66

# AMBIENT

## SR S-100-A / SR S-150-A / SR S-200-A / SR S-250-A

SR S-100-A							
Nominal unit length	m	1					
Door height	m	2 - 2.4					
Electrical supply	V/ph/Hz	230/1/50					
Max. Input current (1 phase)	A	0.88					
Max. Fan power	kW	0.2					
Max. Specific fan power	W/l/s	0.63					
Weight casing style F / R / C	kg	40/54/52					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	440	600	680	880	1010	1130
Sound pressure level at 3m	dB(A)	27	33	37	42	46	48

SR S-150-A							
Nominal unit length	m	1.5					
Door height	m	2 - 2.4					
Electrical supply	V/ph/Hz	230/1/50					
Max. Input current (1 phase)	A	1.32					
Max. Fan power	kW	0.3					
Max. Specific fan power	W/l/s	0.63					
Weight casing style F / R / C	kg	58/80/75					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	660	910	1020	1320	1520	1700
Sound pressure level at 3m	dB(A)	28	35	39	43	47	50

SR S-200-A							
Nominal unit length	m	2					
Door height	m	2 - 2.4					
Electrical supply	V/ph/Hz	230/1/50					
Max. Input current (1 phase)	A	1.76					
Max. Fan power	kW	0.39					
Max. Specific fan power	W/l/s	0.63					
Weight casing style F / R / C	kg	70/99/93					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	880	1210	1360	1770	2020	2260
Sound pressure level at 3m	dB(A)	30	36	40	45	49	51

SR S-250-A							
Nominal unit length	m	2.5					
Door height	m	2 - 2.4					
Electrical supply	V/ph/Hz	230/1/50					
Max. Input current (1 phase)	A	2.2					
Max. Fan power	kW	0.49					
Max. Specific fan power	W/l/s	0.63					
Weight casing style F / R / C	kg	91/127/119					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	1100	1510	1700	2210	2530	2830
Sound pressure level at 3m	dB(A)	31	37	41	46	50	52

# AMBIENT

## SR M-100-A / SR M-150-A / SR M-200-A / SR M-250-A

SR M-100-A							
Nominal unit length	m	1					
Door height	m	2.2 - 2.8					
Electrical supply	V/ph/Hz	230/1/50					
Max. Input current (1 phase)	A	1.25					
Max. Fan power	kW	0.27					
Max. Specific fan power	W/l/s	0.63					
Weight casing style F / R / C	kg	46/60/58					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	490	740	880	1180	1310	1530
Sound pressure level at 3m	dB(A)	25	34	39	45	50	53

SR M-150-A							
Nominal unit length	m	1.5					
Door height	m	2.2 - 2.8					
Electrical supply	V/ph/Hz	230/1/50					
Max. Input current (1 phase)	A	1.87					
Max. Fan power	kW	0.4					
Max. Specific fan power	W/l/s	0.63					
Weight casing style F / R / C	kg	66/88/83					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	730	1100	1320	1780	1960	2300
Sound pressure level at 3m	dB(A)	26	35	40	47	51	54

SR M-200-A							
Nominal unit length	m	2					
Door height	m	2.2 - 2.8					
Electrical supply	V/ph/Hz	230/1/50					
Max. Input current (1 phase)	A	2.49					
Max. Fan power	kW	0.54					
Max. Specific fan power	W/l/s	0.63					
Weight casing style F / R / C	kg	83/112/106					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	970	1470	1750	2370	2610	3070
Sound pressure level at 3m	dB(A)	28	37	42	48	53	56

SR M-250-A							
Nominal unit length	m	2.5					
Door height	m	2.2 - 2.8					
Electrical supply	V/ph/Hz	230/1/50					
Max. Input current (1 phase)	A	3.12					
Max. Fan power	kW	0.67					
Max. Specific fan power	W/l/s	0.63					
Weight casing style F / R / C	kg	103/139/131					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	1210	1840	2190	2960	3270	3840
Sound pressure level at 3m	dB(A)	29	38	43	49	54	57

# AMBIENT

## SR L-100-A / SR L-150-A / SR L-200-A / SR L-250-A

SR L-100-A							
Nominal unit length	m	1					
Door height	m	2.5 - 3.3					
Electrical supply	V/ph/Hz	230/1/50					
Max. Input current (1 phase)	A	3.03					
Max. Fan power	kW	0.57					
Max. Specific fan power	W/l/s	0.66					
Weight casing style F / R / C	kg	56/74/72					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	1010	1440	1710	2240	2680	3140
Sound pressure level at 3m	dB(A)	33	40	43	48	53	56

SR L-150-A							
Nominal unit length	m	1.5					
Door height	m	2.5 - 3.3					
Electrical supply	V/ph/Hz	230/1/50					
Max. Input current (1 phase)	A	4.55					
Max. Fan power	kW	0.86					
Max. Specific fan power	W/l/s	0.66					
Weight casing style F / R / C	kg	85/110/107					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	1510	2160	2560	3360	4020	4720
Sound pressure level at 3m	dB(A)	34	41	44	50	54	58

SR L-200-A							
Nominal unit length	m	2					
Door height	m	2.5 - 3.3					
Electrical supply	V/ph/Hz	230/1/50					
Max. Input current (1 phase)	A	6.07					
Max. Fan power	kW	1.15					
Max. Specific fan power	W/l/s	0.66					
Weight casing style F / R / C	kg	109/143/139					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	2010	2880	3410	4480	5360	6290
Sound pressure level at 3m	dB(A)	36	43	46	51	56	59

SR L-250-A							
Nominal unit length	m	2.5					
Door height	m	2.5 - 3.3					
Electrical supply	V/ph/Hz	230/1/50					
Max. Input current (1 phase)	A	7.58					
Max. Fan power	kW	1.44					
Max. Specific fan power	W/l/s	0.66					
Weight casing style F / R / C	kg	139/182/176					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	2520	3610	4270	5600	6700	7860
Sound pressure level at 3m	dB(A)	37	44	47	52	57	60

# AMBIENT

## SR XL-100-A / SR XL-150-A / SR XL-200-A / SR XL-250-A

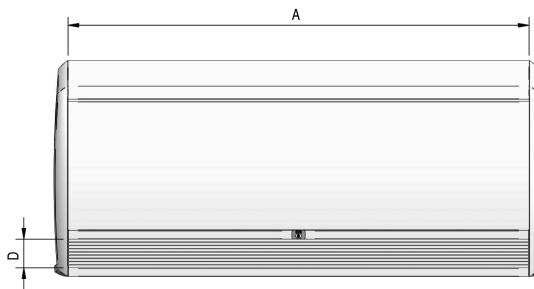
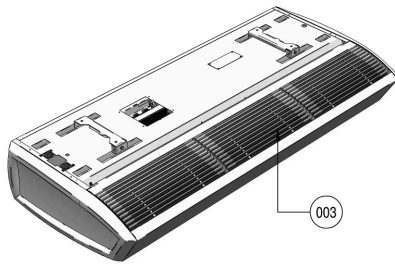
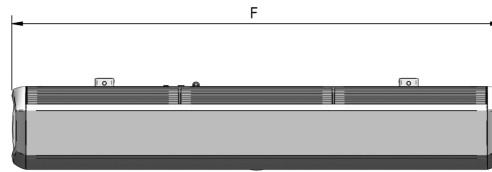
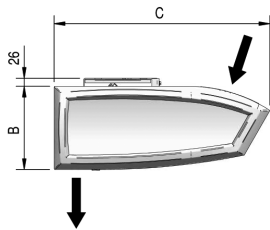
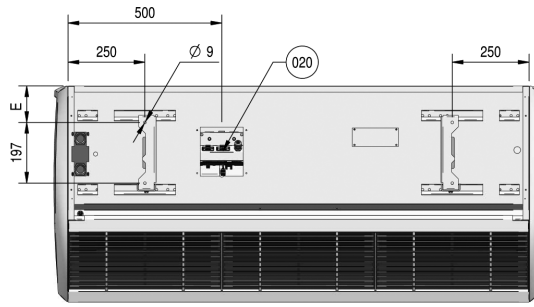
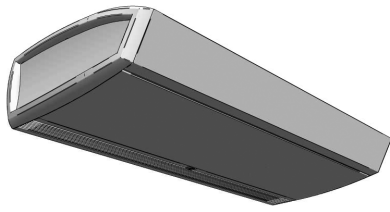
SR XL-100-A							
Nominal unit length	m	1					
Door height	m	3 - 4					
Electrical supply	V/ph/Hz	230/1/50					
Max. Input current (1 phase)	A	5.02					
Max. Fan power	kW	1.03					
Max. Specific fan power	W/l/s	0.94					
Weight casing style F / R / C	kg	60/78/76					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	1170	1580	2030	2720	3370	3950
Sound pressure level at 3m	dB(A)	38	42	47	52	57	62

SR XL-150-A							
Nominal unit length	m	1.5					
Door height	m	3 - 4					
Electrical supply	V/ph/Hz	230/1/50					
Max. Input current (1 phase)	A	7.53					
Max. Fan power	kW	1.54					
Max. Specific fan power	W/l/s	0.94					
Weight casing style F / R / C	kg	91/116/113					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	1750	2370	3050	4090	5060	5920
Sound pressure level at 3m	dB(A)	39	44	48	54	59	63

SR XL-200-A							
Nominal unit length	m	2					
Door height	m	3 - 4					
Electrical supply	V/ph/Hz	230/1/50					
Max. Input current (1 phase)	A	10.04					
Max. Fan power	kW	2.05					
Max. Specific fan power	W/l/s	0.94					
Weight casing style F / R / C	kg	118/152/148					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	2330	3170	4060	5450	6740	7890
Sound pressure level at 3m	dB(A)	41	45	50	55	60	65

SR XL-250-A							
Nominal unit length	m	2.5					
Door height	m	3 - 4					
Electrical supply	V/ph/Hz	230/1/50					
Max. Input current (1 phase)	A	12.55					
Max. Fan power	kw	2.57					
Max. Specific fan power	W/l/s	0.94					
Weight casing style F / R / C	kg	148/191/185					
Speed		1	2	3	4	5	6
Air volume	m <sup>3</sup> /h	2920	3960	5080	6810	8430	9870
Sound pressure level at 3m	dB(A)	42	46	51	56	61	66

# FREE HANGING MODEL DRAWING



	A	B	C	D	E	F
<b>SR S / M 100</b>	1000	270	702	93	119	1093
<b>SR S / M 150</b>	1500	270	702	93	119	1593
<b>SR S / M 200</b>	2000	270	702	93	119	2093
<b>SR S / M 250</b>	2500	270	702	93	119	2593
<b>SR L / XL 100</b>	1000	370	940	125	200	1138
<b>SR L / XL 150</b>	1500	370	940	125	200	1638
<b>SR L / XL 200</b>	2000	370	940	125	200	2138
<b>SR L / XL 250</b>	2500	370	940	125	200	2638

## EXPLANATION OF DIMENSIONAL SKETCHES

○ Models

**Free hanging:** by removing the end panels, the units are easy to interlink.

**Cassette:** aperture sizes = (A+8) x (C+8) mm.

**Recessed:** aperture sizes:

- for air discharge (A+8) x (D+8) mm
- for air inlet: (A+8) x (I+8) mm. If the recessed model is to be built into a bulkhead, it is also available in a design that has no inlet air plenum or flexible ducts.

○ Wall suspension brackets and threaded rod covers

- Material of threaded rod covers: zinc coated steel, painted, to a standard colour of RAL 9016 or RAL 9006.

○ Note

- All dimensions are in mm.
- SR 2500 mm units have 3 suspension brackets. All other sizes have 2 suspension brackets.

## INDEX

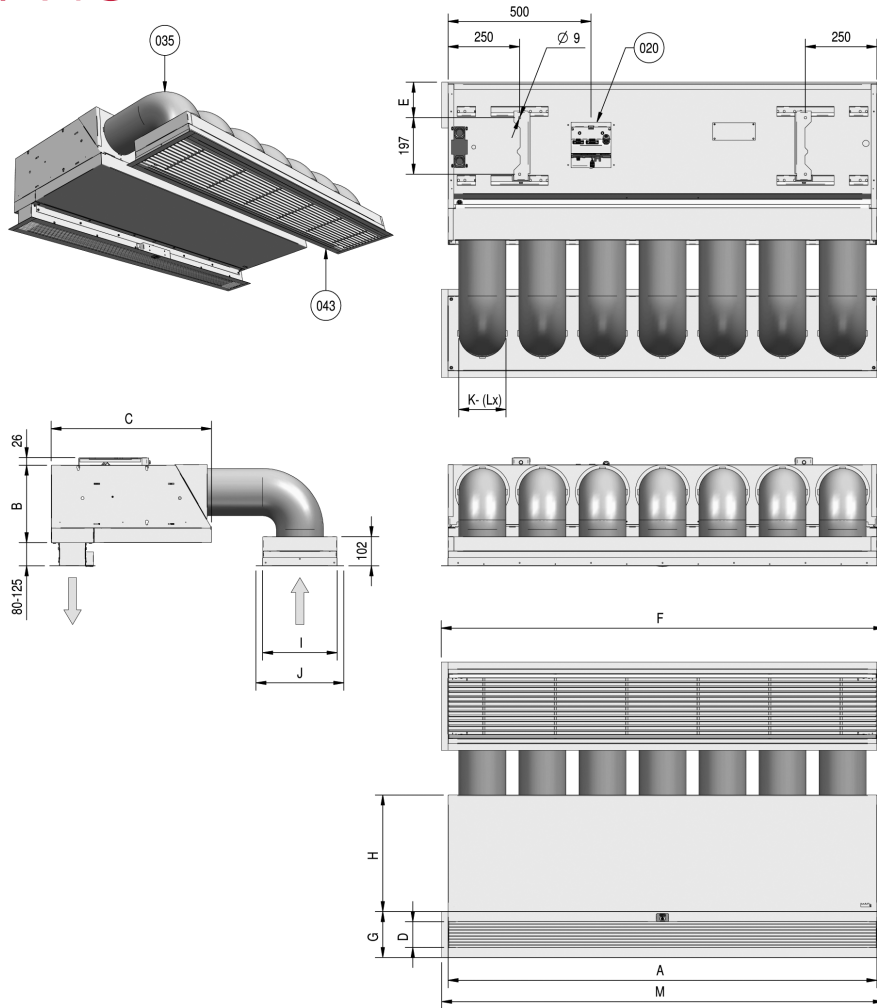
The corresponding numbers in the dimensional sketches are explained here:

**3**-Air inlet grille with filter. **20**-Connection plate. **35**-Ducts are not supplied. **43**-Finishing sections supplied separately.

**36**-Eye bolt M6. **7**-Air vent. **50**-Gland. **97**-Return (S/M). **98**-Return (L/XL). **99**-Supply (S/M). **100**-Supply (L/XL).

**12**-Pipework. **87**-Threaded rod covers (position is flexible).

# RECESSED MODEL DRAWING



	A	B	C	D	E	F	G	H	I	J	K	L	M
<b>SR S / M 100</b>	1000	270	561	90	125	1048	160	406	261	307	Ø160	5	1045
<b>SR S / M 150</b>	1500	270	561	90	125	1548	160	406	261	307	Ø160	7	1545
<b>SR S / M 200</b>	2000	270	561	90	125	2048	160	406	261	307	Ø160	10	2045
<b>SR S / M 250</b>	2500	270	561	90	125	2548	160	406	261	307	Ø160	12	2545
<b>SR L / XL 100</b>	1000	370	745	122	206	1048	191	559	361	407	Ø250	3	1045
<b>SR L / XL 150</b>	1500	370	745	122	206	1548	191	559	361	407	Ø250	5	1545
<b>SR L / XL 200</b>	2000	370	745	122	206	2048	191	559	361	407	Ø250	6	2045
<b>SR L / XL 250</b>	2500	370	745	122	206	2548	191	559	361	407	Ø250	8	2545

## EXPLANATION OF DIMENSIONAL SKETCHES

○ Models

**Free hanging:** by removing the end panels, the units are easy to interlink.

**Cassette:** aperture sizes =  $(A+8) \times (C+8)$  mm.

**Recessed:** aperture sizes:

- for air discharge  $(A+8) \times (D+8)$  mm
- for air inlet:  $(A+8) \times (I+8)$  mm. If the recessed model is to be built into a bulkhead, it is also available in a design that has no inlet air plenum or flexible ducts.

○ Wall suspension brackets and threaded rod covers

- Material of threaded rod covers: zinc coated steel, painted, to a standard colour of RAL 9016 or RAL 9006.

○ Note

- All dimensions are in mm.
- SR 2500 mm units have 3 suspension brackets. All other sizes have 2 suspension brackets.

## INDEX

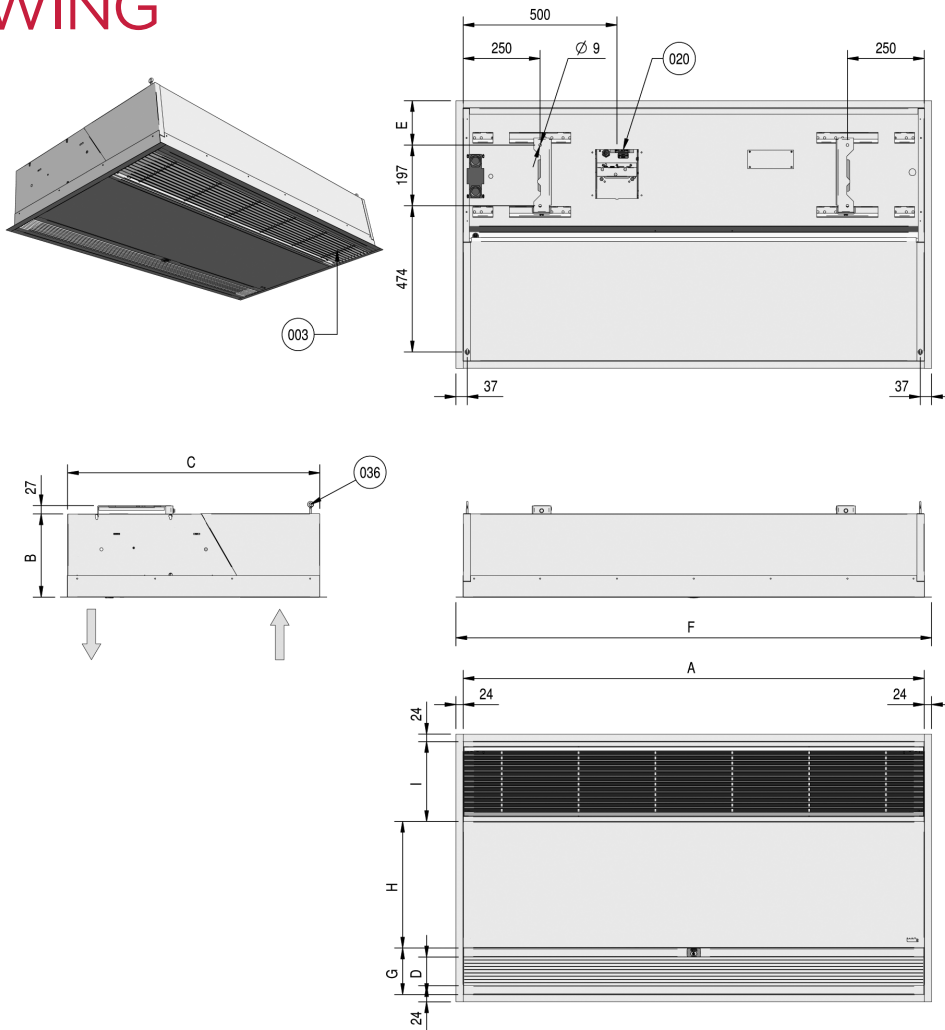
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**12**-Pipework. **87**-Threaded rod covers (position is flexible).

# CASSETTE MODEL DRAWING



	A	B	C	D	E	F	G	H	I
<b>SR S / M 100</b>	1000	270	821	93	144	1048	150	411	260
<b>SR S / M 150</b>	1500	270	821	93	144	1548	150	411	260
<b>SR S / M 200</b>	2000	270	821	93	144	2048	150	411	260
<b>SR S / M 250</b>	2500	270	821	93	144	2548	150	411	260
<b>SR L / XL 100</b>	1000	370	1105	125	175	1048	182	564	360
<b>SR L / XL 150</b>	1500	370	1105	125	175	1548	182	564	360
<b>SR L / XL 200</b>	2000	370	1105	125	175	2048	182	564	360
<b>SR L / XL 250</b>	2500	370	1105	125	175	2548	182	564	360

## EXPLANATION OF DIMENSIONAL SKETCHES

### ○ Models

**Free hanging:** by removing the end panels, the units are easy to interlink.

**Cassette:** aperture sizes =  $(A+8) \times (C+8)$  mm.

**Recessed:** aperture sizes:

- for air discharge  $(A+8) \times (D+8)$  mm
- for air inlet:  $(A+8) \times (I+8)$  mm. If the recessed model is to be built into a bulkhead, it is also available in a design that has no inlet air plenum or flexible ducts.

### ○ Wall suspension brackets and threaded rod covers

- Material of threaded rod covers: zinc coated steel, painted, to a standard colour of RAL 9016 or RAL 9006.

### ○ Note

- All dimensions are in mm.
- SR 2500 mm units have 3 suspension brackets. All other sizes have 2 suspension brackets.

## INDEX

The corresponding numbers in the dimensional sketches are explained here:

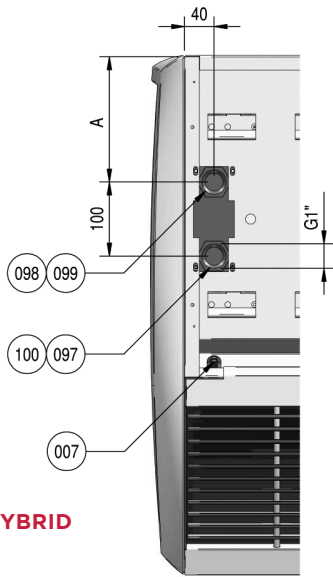
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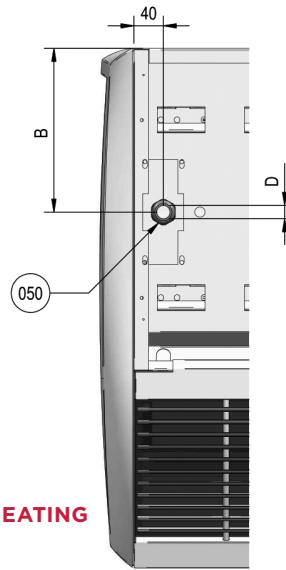
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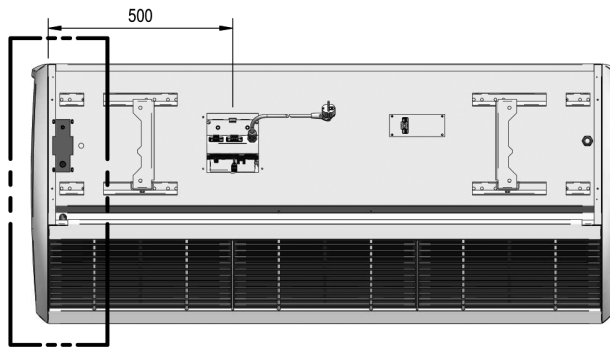
# CONNECTIONS DRAWING



**WATER & HYBRID**



**ELECTRIC HEATING**



	A	B	D
<b>SR S 100 / SR S 150</b>	170	220	PG21
<b>SR S 200 / SR S 250</b>	170	220	PG21
<b>SR M 100 / SR M 150</b>	170	220	PG21
<b>SR M 200 / SR M 250</b>	170	220	PG29
<b>SR L / XL 100</b>	245	295	PG21
<b>SR L / XL 150</b>	245	295	PG29
<b>SR L / XL 200</b>	245	295	PG36
<b>SR L / XL 250</b>	245	295	PG36

## EXPLANATION OF DIMENSIONAL SKETCHES

○ Models

**Free hanging:** by removing the end panels, the units are easy to interlink.

**Cassette:** aperture sizes = (A+8) x (C+8) mm.

**Recessed:** aperture sizes:

- for air discharge (A+8) x (D+8) mm
- for air inlet: (A+8) x (I+8) mm. If the recessed model is to be built into a bulkhead, it is also available in a design that has no inlet air plenum or flexible ducts.

- Wall suspension brackets and threaded rod covers
  - Material of threaded rod covers: zinc coated steel, painted, to a standard colour of RAL 9016 or RAL 9006.

○ Note

- All dimensions are in mm.
- SR 2500 mm units have 3 suspension brackets. All other sizes have 2 suspension brackets.

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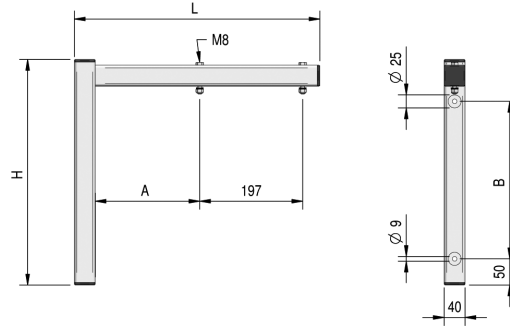
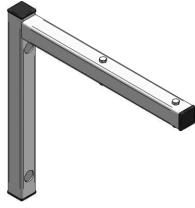
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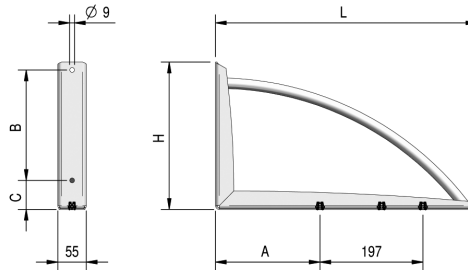
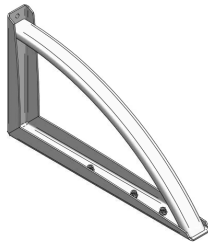
# WALL SUSPENSION BRACKETS DRAWING

## STANDARD



	L	H	A	B
SR S / M	389	330	119	200
SR L / XL	470	430	200	300

## DESIGN



	L	H	A	B	C
SR S / M	425	240	119	190	35
SR L / XL	500	280	200	210	55

## EXPLANATION OF DIMENSIONAL SKETCHES

### ○ Models

**Free hanging:** by removing the end panels, the units are easy to interlink.

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**Recessed:** aperture sizes:

- for air discharge (A+8) x (D+8) mm
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- Wall suspension brackets and threaded rod covers
  - Material of threaded rod covers: zinc coated steel, painted, to a standard colour of RAL 9016 or RAL 9006.

### ○ Note

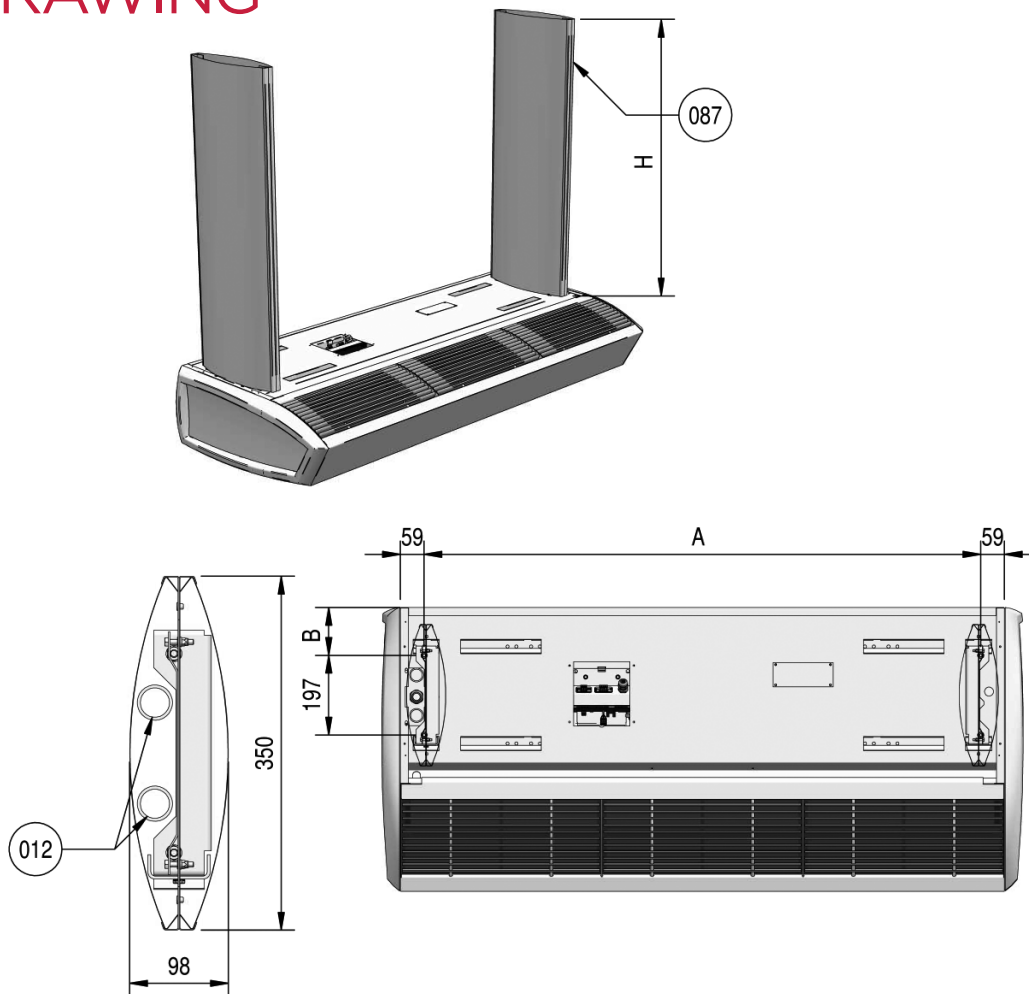
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**12**-Pipework. **87**-Threaded rod covers (position is flexible).

# THREADED ROD COVERS DRAWING



	A	B
SR 100	882	
SR 150	1382	119 (S/M)
SR 200	1882	200 (L/XL)
SR 250	1191 (x2)	

Size H is the distance between unit and ceiling. This size needs to be communicated on the order.

## EXPLANATION OF DIMENSIONAL SKETCHES

○ Models

**Free hanging:** by removing the end panels, the units are easy to interlink.

**Cassette:** aperture sizes =  $(A+8) \times (C+8)$  mm.

**Recessed:** aperture sizes:

- for air discharge  $(A+8) \times (D+8)$  mm
- for air inlet:  $(A+8) \times (I+8)$  mm. If the recessed model is to be built into a bulkhead, it is also available in a design that has no inlet air plenum or flexible ducts.

○ Wall suspension brackets and threaded rod covers

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**12**-Pipework. **87**-Threaded rod covers (position is flexible).

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**Biddle**

Every effort has been made to ensure descriptions are correct at the time of print.  
Errors and omissions excepted. SR|V1|01|2020