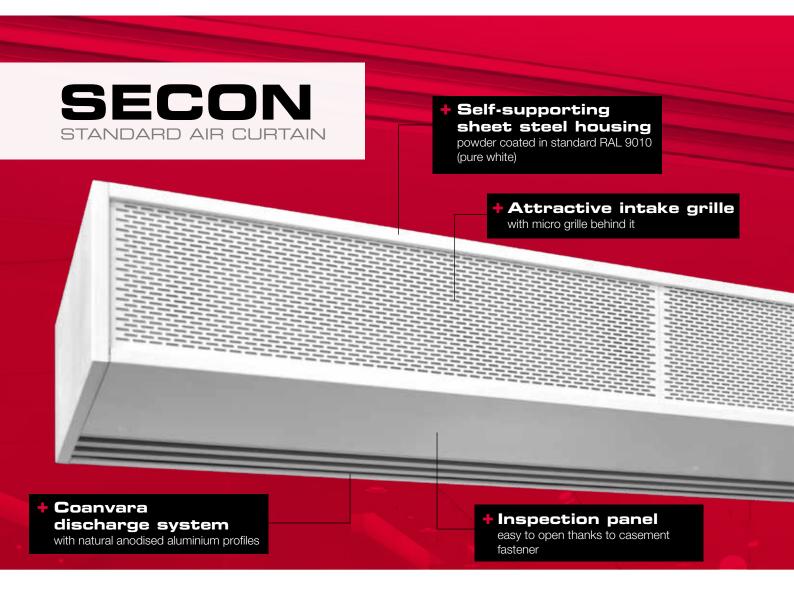




# SECON STANDARD AIR CURTAIN

INDIVIDUAL INNOVATIVE ENERGY-SAVING





### **Applications**

Secon is the visible, compact door air curtain for optimum shielding of larger doors and gates (shopping centres, shops, DIY stores, supermarkets), which require effective draught-reduction. Installation-ready unit for 3 different installation variants: Free-hanging, flush with the ceiling or for installation in suspended ceilings.

## Special design

Secon is available in 2 variants. SLW – for smaller to mid-sized entrances with a balanced pressure ratio and ULW – for larger doors and difficult entry situations. In the SLW standard air roll, the recirculating air intake is on the room side and the air discharge directly at the door. In contrast, in the ULW version (reversed air roll), the mixed air intake is by the door and the air discharge on the room side.

The air exits via the Coanvara discharge system, a multi-nozzle system with optimised, drop-shaped profiles. Using the Coanda effect to bring the individual streams together results in a very broad, homogenous air stream. The purposely long profiles, which are parallel and steplessly adjustable in both directions (up to 40°), act as a flow straightener. This ensures the stream mixing factor remains low, as desired.

The selected discharge temperature is carried far down to the floor, effectively preventing the room from cooling down. This means the discharged air is heated less than it would have been if a conventional air curtain had been used.

# The housing

Self-supporting, powder coated sheet steel housing. Screws are not visible. Available in RAL 9010 as standard (pure white). Other colours are available. Intake grille with micro grille behind it as an intake filter, for service-friendly use. Can be removed without tools for easy cleaning. Inspection panel hinged on one side, opened with casement fasteners. The Coanvara discharge system is flush with the underside of the unit.

Water and electrical connections can be made either from above (right-left) or from the side.

### Heating media

### Heat exchangers for different heating media

LPHW: For normal temperature LPHW 70/50 °C and low-temperature LPHW 60/40 °C, other temperatures available on request. High-quality heat exchanger made from copper tubes, with pressed-on, extra-strong aluminium fins.





- + Made in Germany
- + ErP 2015 ready
- + Certified by TÜV-Süd
- + Robust self-supporting steel/aluminium composite construction
- + Selection of individual RAL colours available
- + Unit lengths up to 3000 mm
- Service-friendly thanks to intake grille with micro grille
- Coanvara discharge system for stepless, parallel adjustment of the discharge angle
- Large throw distance, low noise, optimum shielding
- + Simple to install

# The fans

Equipped with individually-driven, efficient, ErP-compliant AC radial fans from ebm-papst as standard. These can intake air in both directions, are maintenance free, have vibration-free bearings and come with integrated thermal contacts for motor protection.

Can also be supplied with EC fans on request. The fans are located on a motor plate, which (after opening the inspection panel) can be pulled out downwards.

### Mounting

Easy installation thanks to grooved tracks with sliding blocks (M10) set into the top of the unit. This simplifies adjustment of the unit's position during installation. In the standard version, the unit does not need to be opened for electrical connection. Connection terminals for the voltage supply, as well as the connectors for the control unit and parallel operation can be accessed from the outside. (Plug&Play)

# Maintenance

Easy to clean (micro grille) without opening the unit by simply vacuuming the intake grille.

Inspection panel closed and secured with a casement fastener (hinges on one side) on the lower side of the unit – easy to open.

### Control

Electronic TEKADOOR GTC AC control unit, multifunctional with touch display, including an optional ModBus interface

A GTC 1 AC control unit is used as standard for models with LPHW heating. The units come with 20 m preassembled and shielded data cable. The GTC 1 AC 5-stage control unit includes the ability to switch from manual to automatic and from summer mode to winter mode as standard. A solenoid valve of up to 2.5 A can be connected as an option for the winter mode. The control unit includes a manual to automatic mode switch and a potential-free contact for enabling via any on-site BMS or BEMS. A choice of 5-stage fan operation is offered as standard. A maximum of 10 units can be connected in parallel.



# Connections

Heating connections – flow and return (dimensions depend on the model) – on top of the unit as standard for easy connection to the on-site heating system.

Optionally, the connections can also be located at the side.

# Connection box

Simple electrical connection via connection box (voltage supply 230V/50 Hz) on the top of the unit; side connections are available as an option.





# Data cable connection/interface

Simple, standard plug and play connection of the data cable and an optional solenoid valve on the top of the unit. The connection can be offset on request.

### Control:

Input for the data cable to the control unit.

### Auxiliary:

Output for parallel operation with other units.

### Coanvara discharge system

Multi-nozzle system with optimised, drop-shaped profiles, steplessly adjustable in both directions (parallel), up to 40°.





# Thermostatic control valve

Setting range + 20 °C to + 35 °C, limits the discharge temperature (constant supply air temperature limitation). Also available as a 3-way valve.

# Ceiling attachment set

For trouble-free, vibration-free ceiling attachment, consisting of M10 threaded rods up to 1000 mm in length, vibration dampers, turn-buckles and counter nuts.

# Door contact solenoid switch

In automatic mode switches on the door air curtain in the preselected stages.





# Frost protection thermostat

For monitoring LPHW heat exchangers exposed to the risk of frost. As soon as the intake temperature falls below +7 °C, the fans are switched off and an optional solenoid valve is opened.

# Solenoid valve

Opens or closes the warm water circuit in the summer/winter setting of the control unit, in order to close the heating water circuit and save energy during summer operation or when the air curtain is not working (normally closed).

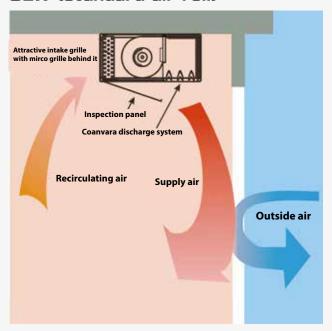
**Caution:** If solenoid valves are used, it is expressly recommended to install a frost protection thermostat (automatically actuated) and a strainer.

# Electronic control valve

Electronic valve with 0-10V impulse and blow-out temperature sensor completely installed and wired. In combination with the GTC 2 control, a preselected blow-out temperature is kept constant.

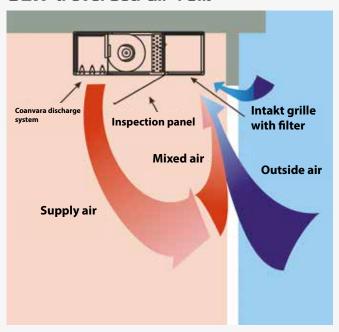


### SLW (standard air roll)



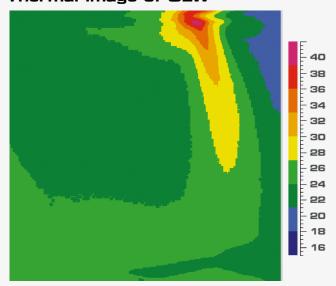
Recirculating air intake from the room, air discharge close to the door. The air roll shields the door region and mixes with any cold air coming in. It rotates towards the inside of the room and then back towards the intake grille, thus being (partially) drawn in to the unit again.

# **ULW** (reversed air roll)



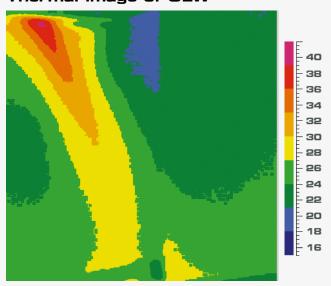
Mixed air intake in the door region. Air discharge in the room. The air roll protects the door region near the floor from cold air entering and rotates away from the room. An overpressure results from the external air component of the air mixture drawn in to the unit. A frost protection thermostat is required.

# Thermal image of SLW



Example: Thermography (SLW)

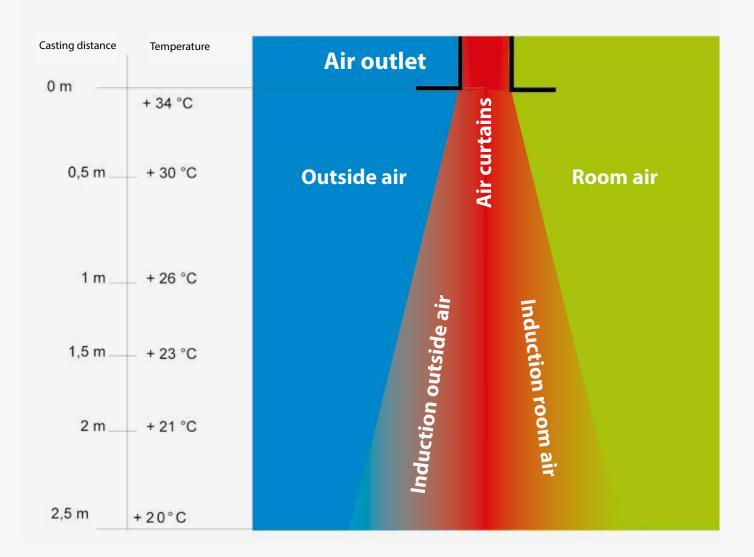
# Thermal image of ULW



Example: Thermography (ULW)



# Basic illustration of the air curtain on the stream axis

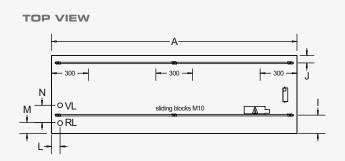


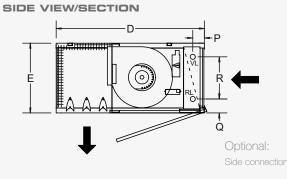
Depending on the mixing factor (m), from the outlet onwards, the discharged air quantity (V0) – with a discharge temperature of e.g. + 34 °C (tLA) – induces the ambient air on both sides of the stream. Here, in the region of the door, that comprises external and indoor air components. Due to this physical fact, the initial air quantity grows into an overall air mass moving within the stream. During this process, both the discharge speed of the air stream and the initial temperature drop. The technical parameters of our door air curtain units are calculated so that there is still a residual speed of approx. 1.5 m/s - 2 m/s or more after the desired stream length, as well as a room temperature of about + 20 °C.



# Free-hanging

# FRONT VIEW BOTTOM VIEW





# **Technical dimensions**

| (free-hanging) |      |                 |      |  |  |  |  |  |  |  |
|----------------|------|-----------------|------|--|--|--|--|--|--|--|
| Model          | 2000 | 3000            | 4000 |  |  |  |  |  |  |  |
| Α              |      | Variable length |      |  |  |  |  |  |  |  |
| D              | 635  | 765             | 815  |  |  |  |  |  |  |  |
| E              | 290  | 360             | 390  |  |  |  |  |  |  |  |
| F              | 230  | 300             | 330  |  |  |  |  |  |  |  |
| G              | 210  | 240             | 260  |  |  |  |  |  |  |  |
| I              | 150  | 150             | 160  |  |  |  |  |  |  |  |
| J              | 60   | 60              | 60   |  |  |  |  |  |  |  |
| L              | 70   | 70              | 70   |  |  |  |  |  |  |  |
| M              | 85   | 90              | 100  |  |  |  |  |  |  |  |
| N              | 140  | 180             | 180  |  |  |  |  |  |  |  |
| Р              | 150  | 150             | 150  |  |  |  |  |  |  |  |
| Q              | 60   | 70              | 95   |  |  |  |  |  |  |  |
| R              | 170  | 230             | 250  |  |  |  |  |  |  |  |

**Drawing key** 

# Technical dimensions

(AK - free hanging/ceiling-flush and Z - suspended ceiling)

| Model | 2000 | 3000            | 4000 |  |  |  |  |  |  |
|-------|------|-----------------|------|--|--|--|--|--|--|
| Α     | \    | Variable length |      |  |  |  |  |  |  |
| D     | 895  | 1095            | 1175 |  |  |  |  |  |  |
| Е     | 290  | 360             | 390  |  |  |  |  |  |  |
| F     | 230  | 300             | 330  |  |  |  |  |  |  |
| G     | 210  | 240             | 260  |  |  |  |  |  |  |
| J     | 60   | 60              | 60   |  |  |  |  |  |  |
| K     | 425  | 555             | 595  |  |  |  |  |  |  |
| L     | 70   | 70              | 70   |  |  |  |  |  |  |
| M     | 345  | 420             | 460  |  |  |  |  |  |  |
| N     | 140  | 180             | 180  |  |  |  |  |  |  |
| Р     | 480  | 630             | 650  |  |  |  |  |  |  |
| Q     | 60   | 70              | 95   |  |  |  |  |  |  |
| R     | 170  | 230             | 250  |  |  |  |  |  |  |

**Drawing key** 

Connection-ready door air curtain unit with recirculating air intake from the room side. Freely accessible inspection panel.

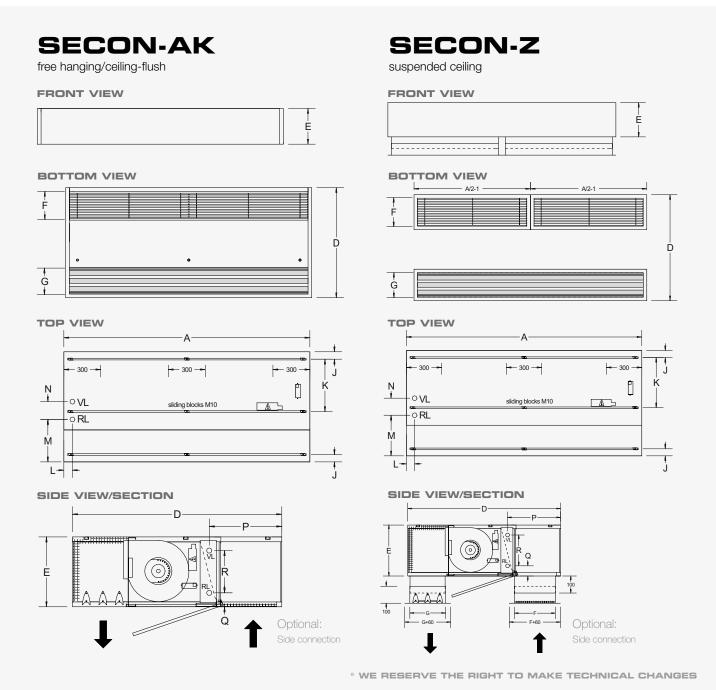


# Suspension

Simple mounting thanks to the grooved tracks incorporated on the upper side of the unit. Depending on the size of the unit, located within the grooved tracks are 4 to 6 sliding blocks with an M10 internal thread, for connection to 10 mm threaded rods. Thanks to the variable suspension points (within the grooved track), the unit is simple to install on site.

<sup>\*</sup> WE RESERVE THE RIGHT TO MAKE TECHNICAL CHANGES





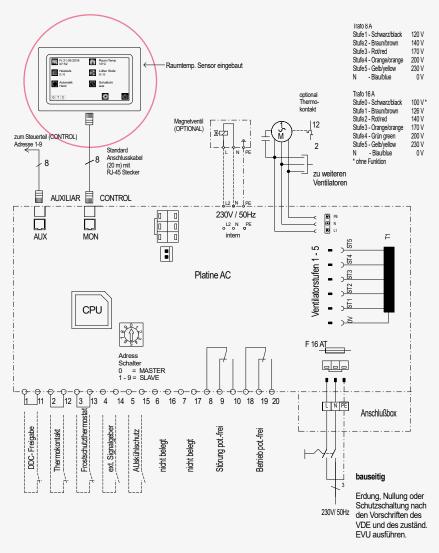
# AK - free hanging/ceiling-flush

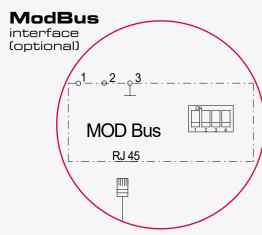
Connection-ready door air curtain unit with intake chamber on the underside for free-hanging (ULW) or ceiling-flush (SLW or ULW) installation. Recirculating air intake from the underside. Freely accessible inspection panel.

# Suspended ceiling

Connection-ready door air curtain unit with intake chamber on the underside and intake and discharge sliding supports for installation in the suspended ceiling. SLW and ULW versions possible.

# SECON STANDARD CIRCUIT DIAGRAM FOR LPHW





\* WE RESERVE THE RIGHT TO MAKE TECHNICAL CHANGES

# **CONTROL UNIT GTC 1 AC**

Multilingual, menu-driven electronic control unit for TEKADOOR air curtains with LPHW heating and energy-saving AC fans. A standard feature of the control unit with touch display is a choice between 5-stage fan control, which can be selected individually by the operator. The relevant operating modes and symbols are arranged clearly on the colour display. The date, time and room temperature are shown as standard. The room temperature is monitored via an internal temperature sensor in the control unit as standard.



Hand – manual operation

Auto AS – automatic operation via cool down protection

Auto RT – automatic operation via room temperature

Auto TK – automatic operation via door contact

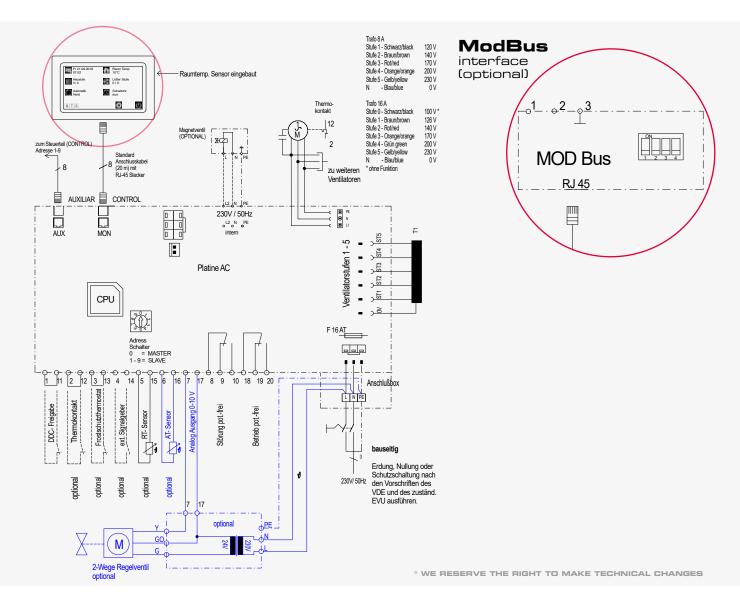
Auto Kombi – option to combine all individual automatic modes

An enabling contact and potential-free operation and malfunction signals are provided for control via an on-site BMS or BEMS. Errors and faults are displayed with a red "warning" sign. By coding the control boards differently, up to 10 door air curtains can also be operated in parallel with 1 control unit, using the Master/Slave principle. The control board is preinstalled in the door air curtain unit and 20 m of preassembled data cable (connection between the door air curtain and control unit) are included as standard.



# SECON CIRCUIT DIAGRAM FOR LPHW EASY-TO-USE CONTROL UNIT (OPTIONAL)





### **EASY-TO-USE CONTROL UNIT GTC 2 AC**

Multilingual, menu-driven electronic control unit for TEKADOOR air curtains with LPHW heating and AC fans. 5-stage fan operation – easy to adjust on the control unit using the touch display. The relevant operating modes and symbols are arranged clearly on the colour display. The date, time and room temperature are shown as standard. The room temperature is monitored via an internal temperature sensor in the control unit as standard.



An easy-to-navigate menu offers a selection of different operating modes: Hand – manual operation

Auto AS – automatic operation via cool down protection

Auto RT – automatic operation via room temperature

Auto TK – automatic operation via door contact

Auto AT – automatic operation via constant discharge temperature (opt. electronic control valve required)

Auto Kombi – option to combine all individual automatic modes

An enabling contact and potential-free operation and malfunction signals are provided for control via an on-site BMS or BEMS. A constant discharge temperature can be set via an optional electronic control valve. A week timer is incorporated as standard, enabling up to 12 different switching times to be programmed per week. This enables optimisation of the shielding performance. Errors and faults are displayed with a red "warning" sign. By coding the control boards differently, up to 10 door air curtains can also be operated in parallel with 1 control unit, using the Master/Slave principle. The control board is preinstalled in the door air curtain unit and 20 m of preassembled data cable (connection between the door air curtain and control unit)

# SECON 2000 SLW

TECHNICAL DATA
FREE-HANGING / CEILING-FLUSH / SUSPENDED CEILING

# Design based on:

recommended operating point intake temperature tLE = +20 °C discharge temperature tLA = +34 °C discharge height = up to 2.70 m

| SECON 2000 SLW                      |   |                    | 2001  | 2001.5                        | 2002               | 2002.5                           | 2003                            |
|-------------------------------------|---|--------------------|---|-------------------------------|--------------------|----------------------------------|---------------------------------|
| Total air quantity                  |   | m³/h               | 2200  | 2500                          | 3800               | 4800                             | 5900                            |
| Heating capacity rated <sup>1</sup> | LPHW 70 / 50 °C<br>LPHW 60 / 40 °C                                      | kW<br>kW           | 10.4<br>10.4  | 11.8<br>11.8                  | 18.0<br>18.0       | 22.7<br>22.7                     | 27.8<br>27.8                    |
| Flow rate                           | LPHW 70 / 50 °C<br>LPHW 60 / 40 °C                                      | m³/h<br>m³/h       | 0.45<br>0.45  | 0.52<br>0.51                  | 0.78<br>0.78       | 0.99<br>0.99                     | 1.22<br>1.21                    |
| Water resistance                    | LPHW 70 / 50 °C<br>LPHW 60 / 40 °C                                      | kPa<br>kPa         | 3.5<br>4.0  | 0.8<br>1.0                    | 1.9<br>2.6         | 3.1<br>3.6                       | 4.9<br>5.8                      |
| Nominal connection sizes            | Internal thread Flow/return   | Inches<br>DN       | 2 x 3/4"<br>20  | 2 x 3/4"<br>20                | 2 x 3/4"<br>20     | 2 x 3/4"<br>20                   | 2 x 3/4"<br>20                  |
| AC fans                             | Voltage Frequency Current consumption Motor power                       | V<br>Hz<br>A<br>kW | 230 / 1 / N / PE<br>50<br>3.8 3.8 5.7 7.6 9.<br>0.62 0.62 0.93 1.24 1.5 |                               |                    |                                  |                                 |
| Sound pressure level <sup>2</sup>   | Highest setting   | dB (A)             | 54  | 54                            | 55                 | 56                               | 57                              |
| Drawing dimension                   | Unit width (A) Unit height (E) <sup>3</sup> Unit depth (D) <sup>4</sup> | mm<br>mm<br>mm     | 1000<br>290<br>635  | 1500<br>290<br>635            | 2000<br>290<br>635 | 2500<br>290<br>635               | 3000<br>290<br>635              |
| Weight                              | Secon-AK<br>Secon-Z   | kg<br>kg<br>kg     | 52<br>56<br>59  | 77<br>82<br>90<br>BERVE THE B | 80<br>96<br>104    | 110<br>116<br>132<br>KE TECHNICA | 115<br>126<br>146<br>AL CHANGES |

<sup>1.</sup> Rated operation based on operating point (see above), discharge temperature control recommended.

<sup>2.</sup> Measured at a lateral distance of 3 m. Sound pressure level may very depending on surrounding conditions.

<sup>3.</sup> For the Secon-Z (suspended ceiling version), this dimension changes to 390-460 mm.

<sup>4.</sup> For the Secon-Z and Secon-AK (ceiling-flush version) this dimension changes to 895 mm.

# SECON 2000 ULW

TECHNICAL DATA
FREE-HANGING / CEILING-FLUSH / SUSPENDED CEILING



# Design based on:

recommended operating point intake temperature tLE = +10 °C discharge temperature tLA = +34 °C discharge height = up to 2.70 m

| SECON 2000 ULW                      |   |                    | 2001   | 2001.5                        | 2002               | 2002.5             | 2003               |
|-------------------------------------|---|--------------------|--|-------------------------------|--------------------|--------------------|--------------------|
| Total air quantity                  |   | m³/h               | 2200   | 2500                          | 3800               | 4800               | 5900               |
| Heating capacity rated <sup>1</sup> | LPHW 70 / 50 °C<br>LPHW 60 / 40 °C                | kW<br>kW           | 17.8<br>17.8   | 20.2<br>20.2                  | 30.7<br>30.7       | 38.8<br>38.8       | 47.7<br>47.7       |
| Flow rate                           | LPHW 70 / 50 °C<br>LPHW 60 / 40 °C                | m³/h<br>m³/h       | 0.78<br>0.77   | 0.88<br>0.88                  | 1.34<br>1.34       | 1.70<br>1.60       | 2.09<br>2.08       |
| Water resistance                    | LPHW 70 / 50 °C<br>LPHW 60 / 40 °C                | kPa<br>kPa         | 9.9<br>11.1  | 2.2<br>2.2                    | 5.3<br>7.0         | 8.8<br>10.1        | 13.8<br>16.1       |
| Nominal connection sizes            | Internal thread<br>Flow/return                    | Inches<br>DN       | 2 x 3/4"<br>20   | 2 x 3/4"<br>20                | 2 x 3/4"<br>20     | 2 x 3/4"<br>20     | 2 x 3/4"<br>20     |
| AC fans                             | Voltage Frequency Current consumption Motor power | V<br>Hz<br>A<br>kW | 230 / 1 / N / PE<br>50<br>3.8 3.8 5.7 7.6 9<br>0.62 0.62 0.93 1.24 1 |                               |                    |                    |                    |
| Sound pressure level <sup>2</sup>   | Highest setting                                   | dB (A)             | 54   | 54                            | 55                 | 56                 | 57                 |
| Drawing dimension                   | Unit width (A) Unit height (E) 3 Unit depth (D) 4 | mm<br>mm<br>mm     | 1000<br>290<br>895   | 1500<br>290<br>895            | 2000<br>290<br>895 | 2500<br>290<br>895 | 3000<br>290<br>895 |
| Weight                              | Secon-AK<br>Secon-Z                               | kg<br>kg<br>kg     | 52<br>56<br>59   | 77<br>82<br>90<br>SERVE THE R | 80<br>96<br>104    | 110<br>116<br>132  | 115<br>126<br>146  |

<sup>1.</sup> Rated operation based on operating point (see above), discharge temperature control recommended.

<sup>2.</sup> Measured at a lateral distance of 3 m. Sound pressure level may very depending on surrounding conditions.

<sup>3.</sup> For the Secon-Z (suspended ceiling version), this dimension changes to 390-460 mm.

<sup>4.</sup> For the Secon-Z and Secon-AK (ceiling-flush version) this dimension changes to 895 mm.

# SECON 3000 SLW

TECHNICAL DATA
FREE-HANGING / CEILING-FLUSH / SUSPENDED CEILING

# Design based on:

recommended operating point intake temperature tLE = +20 °C discharge temperature tLA = +34 °C discharge height = up to 3.00 m

| SECON 3000 SLW                      |   |                    | 3001               | 3001.5                          | 3002               | 3002.5             | 3003               |
|-------------------------------------|---|--------------------|--------------------|---------------------------------|--------------------|--------------------|--------------------|
| Total air quantity                  |   | m³/h               | 2500               | 3800                            | 4800               | 6000               | 7200               |
| Heating capacity rated <sup>1</sup> | LPHW 70 / 50 °C<br>LPHW 60 / 40 °C                                      | kW<br>kW           | 11.8<br>11.8       | 17.9<br>17.9                    | 22.6<br>22.6       | 28.3<br>28.3       | 34.0<br>34.0       |
| Flow rate                           | LPHW 70 / 50 °C<br>LPHW 60 / 40 °C                                      | m³/h<br>m³/h       | 0.52<br>0.51       | 0.78<br>0.78                    | 0.99<br>0.99       | 1.24<br>1.23       | 1.49<br>1.48       |
| Water resistance                    | LPHW 70 / 50 °C<br>LPHW 60 / 40 °C                                      | kPa<br>kPa         | 1.3<br>1.7         | 2.6<br>3.2                      | 1.3<br>1.5         | 2.1<br>2.6         | 3.2<br>4.1         |
| Nominal connection sizes            | Internal thread Flow/return   | Inches<br>DN       | 2 x 1"<br>25       | 2 x 1"<br>25                    | 2 x 1"<br>25       | 2 x 1"<br>25       | 2 x 1"<br>25       |
| AC fans                             | Voltage Frequency Current consumption Motor power                       | V<br>Hz<br>A<br>kW | 3.8 5.7 7.6 9.5    |                                 |                    |                    | 11.4<br>1.86       |
| Sound pressure level <sup>2</sup>   | Highest setting   | dB (A)             | 0.62<br>62         | 0.93                            | 64                 | 1.55<br>65         | 66                 |
| Drawing dimension                   | Unit width (A) Unit height (E) <sup>3</sup> Unit depth (D) <sup>4</sup> | mm<br>mm<br>mm     | 1000<br>360<br>765 | 1500<br>360<br>765              | 2000<br>360<br>765 | 2500<br>360<br>765 | 3000<br>360<br>765 |
| Weight                              | Secon-AK<br>Secon-Z   | kg<br>kg<br>kg     | 56<br>68<br>72     | 78<br>110<br>118<br>SERVE THE F | 103<br>120<br>130  | 145<br>161<br>129  | 147<br>200<br>220  |

<sup>1.</sup> Rated operation based on operating point (see above), discharge temperature control recommended.

<sup>2.</sup> Measured at a lateral distance of 3 m. Sound pressure level may very depending on surrounding conditions.

<sup>3.</sup> For the Secon-Z (suspended ceiling version), this dimension changes to 460-530 mm.

<sup>4.</sup> For the Secon-Z and Secon-AK (ceiling-flush version) this dimension changes to 1095 mm.

# SECON 3000 ULW

TECHNICAL DATA
FREE-HANGING / CEILING-FLUSH / SUSPENDED CEILING



# Design based on:

recommended operating point intake temperature tLE = +10 °C discharge temperature tLA = +34 °C discharge height = up to 3.00 m

| SECON 3000 ULW                      |   |                    | 3001                | 3001.5                      | 3002                         | 3002.5              | 3003                |
|-------------------------------------|---|--------------------|---------------------|-----------------------------|------------------------------|---------------------|---------------------|
| Total air quantity m³/h             |   | m³/h               | 2500                | 3800                        | 4800                         | 6000                | 7200                |
| Heating capacity rated <sup>1</sup> | LPHW 70 / 50 °C<br>LPHW 60 / 40 °C                | kW<br>kW           | 20.2                | 30.7<br>30.7                | 38.8<br>38.8                 | 48.5<br>48.5        | 58.2<br>58.2        |
| Flow rate                           | LPHW 70 / 50 °C<br>LPHW 60 / 40 °C                | m³/h<br>m³/h       | 0.88<br>0.88        | 1.34<br>1.34                | 1.70<br>1.69                 | 2.12<br>2.11        | 2.55<br>2.54        |
| Water resistance                    | LPHW 70 / 50 °C<br>LPHW 60 / 40 °C                | kPa<br>kPa         | 3.6<br>4.5          | 7.1<br>8.8                  | 3.5<br>4.2                   | 5.8<br>7.1          | 8.9<br>11.0         |
| Nominal connection sizes            | Internal thread<br>Flow/return                    | Inches<br>DN       | 2 x 1"<br>25        | 2 x 1"<br>25                | 2 x 1"<br>25                 | 2 x 1"<br>25        | 2 x 1"<br>25        |
| AC fans                             | Voltage Frequency Current consumption Motor power | V<br>Hz<br>A<br>kW | 3.8<br>0.62         | 230 / 1<br>5<br>5.7<br>0.93 | / N / PE<br>0<br>7.6<br>1.24 | 9.5<br>1.55         | 11.4<br>1.86        |
| Sound pressure level <sup>2</sup>   | Highest setting                                   | dB (A)             | 62                  | 63                          | 64                           | 65                  | 66                  |
| Drawing dimension                   | Unit width (A) Unit height (E) 3 Unit depth (D) 4 | mm<br>mm<br>mm     | 1000<br>360<br>1095 | 1500<br>360<br>1095         | 2000<br>360<br>1095          | 2500<br>360<br>1095 | 3000<br>360<br>1095 |
| Weight                              | Secon-AK<br>Secon-Z                               | kg<br>kg<br>kg     | 56<br>68<br>72      | 78<br>110<br>118            | 103<br>120<br>130            | 129<br>145<br>161   | 147<br>200<br>220   |

<sup>\*</sup> WE RESERVE THE RIGHT TO MAKE TECHNICAL CHANGES

<sup>1.</sup> Rated operation based on operating point (see above), discharge temperature control recommended.

<sup>2.</sup> Measured at a lateral distance of 3 m. Sound pressure level may very depending on surrounding conditions.

<sup>3.</sup> For the Secon-Z (suspended ceiling version), this dimension changes to 460-530 mm.

<sup>4.</sup> For the Secon-Z and Secon-AK (ceiling-flush version) this dimension changes to 1095 mm.

# SECON 4000 SLW

TECHNICAL DATA
FREE-HANGING / CEILING-FLUSH / SUSPENDED CEILING

# Design based on:

recommended operating point intake temperature tLE = +20 °C discharge temperature tLA = +34 °C discharge height = up to 3.50 m

| SECON 4000 SLW                      |                                    | 4001         | 4001.5       | 4002         | 4002.5       | 4003                                     |              |  |
|-------------------------------------|------------------------------------|--------------|--------------|--------------|--------------|--|--------------|--|
| Total air quantity                  |                                    | m³/h         | 4700         | 6000         | 8000         | 10500                                    | 13000        |  |
| Heating capacity rated <sup>1</sup> | LPHW 70 / 50 °C<br>LPHW 60 / 40 °C | kW<br>kW     | 22.2<br>22.2 | 26.4<br>26.4 | 37.7<br>37.7 | 49.5<br>49.5                             | 61.3<br>61.3 |  |
| Flow rate                           | LPHW 70 / 50 °C<br>LPHW 60 / 40 °C | m³/h<br>m³/h | 0.97<br>0.79 | 1.16<br>1.15 | 1.65<br>1.64 | 2.17<br>2.16                             | 2.68<br>2.67 |  |
| Water resistance                    | LPHW 70 / 50 °C<br>LPHW 60 / 40 °C | kPa<br>kPa   | 3.8<br>3.8   | 1.8<br>1.8   | 3.9<br>4.0   | 7.3<br>7.4                               | 11.9<br>12.1 |  |
| Nominal connection sizes            | Internal thread Flow/return        | Inches<br>DN | 2 x 1"<br>25 | 2 x 1"<br>25 | 2 x 1"<br>25 | 2 x 1"<br>25                             | 2 x 1"<br>25 |  |
| AC fans                             | Voltage                            | V            | 2            | 30/1/N/P     | E            | 400V / 50Hz / 3 PH + N / PE <sup>5</sup> |              |  |
|                                     | Frequency                          | Hz           | 50           |              |              | 5  | 0            |  |
|                                     | Current consumption                | Α            | 7            | 10,5         | 14           | 7  | 7            |  |
|                                     | Motor power                        | kW           | 1,3          | 1,5          | 2,6          | 3,25                                     | 3,9          |  |
| Sound pressure level <sup>2</sup>   | Highest setting                    | dB (A)       | 64           | 66           | 67           | 68                                       | 70           |  |
| Drawing dimension                   | Unit width (A)                     | mm           | 1000         | 1500         | 2000         | 2500                                     | 3000         |  |
|                                     | Unit height (E) 3                  | mm           | 390          | 390          | 390          | 390                                      | 390          |  |
|                                     | Unit depth (D) 4                   | mm           | 815          | 815          | 815          | 815                                      | 815          |  |
| Weight                              | Secon                              | kg           | 75           | 110          | 145          | 190                                      | 235          |  |
|                                     | Secon-AK                           | kg           | 85           | 128          | 180          | 205                                      | 230          |  |
|                                     | Secon-Z                            | kg           | 90           | 134          | 192          | 221                                      | 250          |  |

<sup>\*</sup> WE RESERVE THE RIGHT TO MAKE TECHNICAL CHANGES

- 1. Rated operation based on operating point (see above), discharge temperature control recommended.
- 2. Measured at a lateral distance of 3 m. Sound pressure level may very depending on surrounding conditions.
- 3. For the Secon-Z (suspended ceiling version), this dimension changes to 490-560 mm.
- 4. For the Secon-Z and Secon-AK (ceiling-flush version) this dimension changes to 1175 mm.
- 5. Multiple fans distributed across individual phases. Displayed here are the maximum value of the current consumption and the motor power.

# SECON 4000 ULW

TECHNICAL DATA
FREE-HANGING / CEILING-FLUSH / SUSPENDED CEILING



# Design based on:

recommended operating point intake temperature tLE = +10 °C discharge temperature tLA = +34 °C discharge height = up to 3.50 m

| SECON 4000 ULW                      |   |                    | 4001                | 4001.5                                | 4002                | 4002.5                            | 4003                |
|-------------------------------------|---|--------------------|---------------------|---------------------------------------|---------------------|-----------------------------------|---------------------|
| Total air quantity                  |   | m³/h               | 4700                | 6000                                  | 8000                | 10500                             | 13000               |
| Heating capacity rated <sup>1</sup> | LPHW 70 / 50 °C<br>LPHW 60 / 40 °C                | kW<br>kW           | 38.0<br>38.0        | 45.2<br>45.2                          | 64.6<br>64.6        | 84.8<br>84.8                      | 105.0<br>105.0      |
| Flow rate                           | LPHW 70 / 50 °C<br>LPHW 60 / 40 °C                | m³/h<br>m³/h       | 1.66<br>1.65        | 1.98<br>1.97                          | 2.83<br>2.82        | 3.71<br>3.70                      | 4.60<br>4.58        |
| Water resistance                    | LPHW 70 / 50 °C<br>LPHW 60 / 40 °C                | kPa<br>kPa         | 10.5<br>10.6        | 4.9<br>18.1                           | 10.8<br>10.9        | 20.0<br>20.3                      | 12.0<br>12.1        |
| Connections<br>Nominal diameters    | Internal thread Flow/return                       | Inches<br>DN       | 2 x 1"<br>25        | 2 x 1"<br>25                          | 2 x 1"<br>25        | 2 x 1"<br>25                      | 2 x 1"<br>25        |
| AC fans                             | Voltage Frequency Current consumption Motor power | V<br>Hz<br>A<br>kW | 7<br>1,3            | 230 / 1 / N / Pl<br>50<br>10,5<br>1,5 | 14<br>2,6           | 400V / 50Hz / 3<br>5<br>7<br>3,25 |                     |
| Sound pressure level <sup>2</sup>   | Highest setting                                   | dB (A)             | 64                  | 66                                    | 67                  | 68                                | 70                  |
| Drawing dimension                   | Unit width (A) Unit height (E) 3 Unit depth (D) 4 | mm<br>mm           | 1000<br>390<br>1175 | 1500<br>390<br>1175                   | 2000<br>390<br>1175 | 2500<br>390<br>1175               | 3000<br>390<br>1175 |
| Weight                              | Secon-AK<br>Secon-Z                               | kg<br>kg<br>kg     | 75<br>85<br>90      | 110<br>128<br>134                     | 145<br>180<br>192   | 190<br>205<br>221                 | 235<br>230<br>250   |

<sup>\*</sup> WE RESERVE THE RIGHT TO MAKE TECHNICAL CHANGES

- 1. Rated operation based on operating point (see above), discharge temperature control recommended.
- 2. Measured at a lateral distance of 3 m. Sound pressure level may very depending on surrounding conditions.
- 3. For the Secon-Z (suspended ceiling version), this dimension changes to 490-560 mm.
- 4. For the Secon-Z and Secon-AK (ceiling-flush version) this dimension changes to 1175 mm.
- 5. Multiple fans distributed across individual phases. Displayed here are the maximum value of the current consumption and the motor power.





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