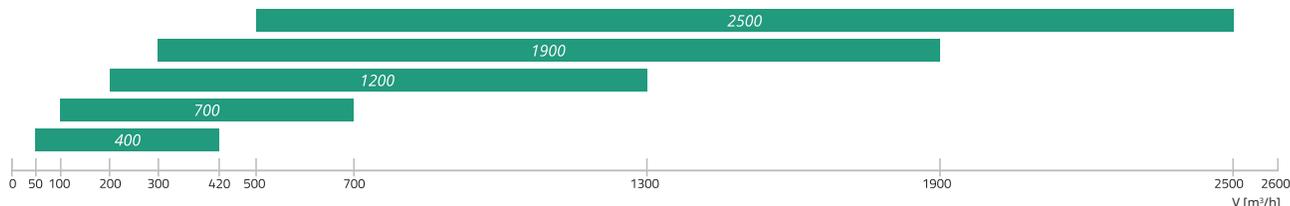
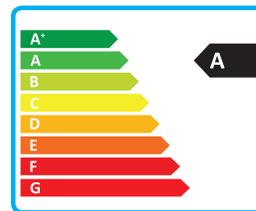


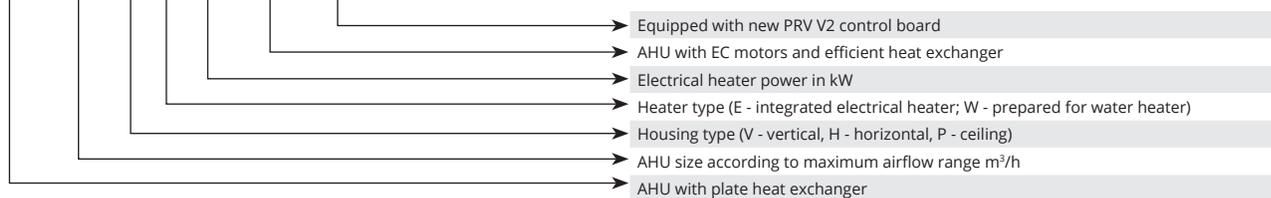
RIS P EKO



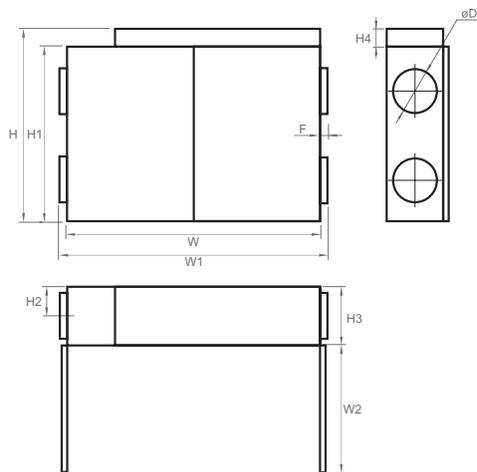
AIR HANDLING UNITS

| | |
|-----------------------|---|
| Application | Ventilation of houses, offices or other heated premises (classrooms, apartments, conference rooms, etc.) |
| Description | <p>RIS P EKO 3.0 is a range of heat recovery units with high-efficiency counter-flow heat exchangers and low height. The units are designed for mounting under ceilings in order to save space. There are 5 sizes (airflow interval 420-2500 m³/h) with separate heaters available for different climate zones.</p> <p>RIS P EKO 3.0 units have high overall energy savings due to the highly efficient heat recovery (up to 90%), quiet and economical EC fans, effective low-pressure-drop filters, 100% motorized bypass dampers (for the 1900 and 2500 versions) and top-level of air tightness.</p> <p>Energy efficiency ensures full thermal comfort for passive houses, without an additional pre-heater at temperatures above -5°C.</p> <p>All the RIS P EKO 3.0 units are fully equipped with automatic controls. Optional external sensors for CO₂ and humidity and the event planning feature will help to control automatically your climate (demand-level control). RIS P EKO 3.0 units are service-friendly and are easy to mount. Filter pollution may be identified by timers or contamination controls (RIS 1200-2500 P EKO 3.0). All units are supplied tested and ready to install.</p> |
| Remote control | <p>Three remote control options are available:</p> <ol style="list-style-type: none"> 1. Flex, Stouch or Ptouch remote controllers. 2. Building management system connections. 3. Remote control via PC MB-Gateway. |
| Features | <ul style="list-style-type: none"> › Ideal for ceiling installations. › Ready for Passive House technology: high efficiency. › Easy and quick mounting. › Water/electrical heating options. › Fully integrated plug-and-play control system. |
| Construction | <ul style="list-style-type: none"> › Frameless construction from double-skinned panels. › Acoustic and thermal wall insulation: RIS 400-2500 P EKO 3.0 - 30/50 mm. › RIS 400-700 P EKO 3.0 powder-coated white housing RAL 9016; RIS 1200-2500 P EKO 3.0 powder-coated grey housing RAL 7040. › Integrated electrical heater or optional duct-based water heater/cooler. › Low-pressure-drop filters: F7/M5. › Hinged door with locks grants easy access to internal components. › Separate compartment on the side of the unit grants quick access to the control board (plug-and-play). › Stainless steel condensate tray. › Fitted with mounting brackets. › Integrated anti-frost pressure switch (RIS 1200-2500 P EKO 3.0). |

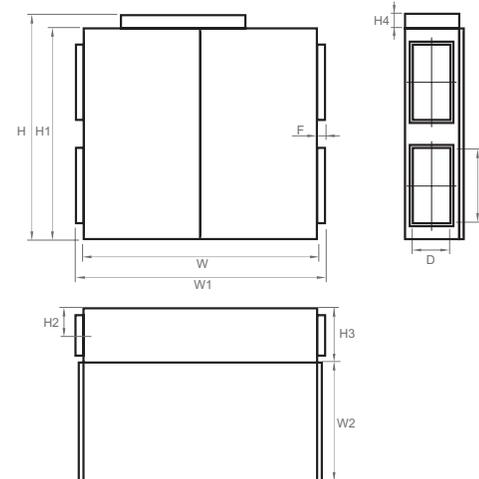
RIS 400 P E 0.9 EKO 3.0



RIS 400P EKO - RIS 700P EKO 3.0



RIS 1200P EKO - RIS 2500P EKO 3.0

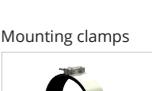
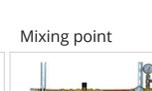


| Unit | Dimensions [mm] | | | | | | | | | | | |
|-----------------------|-----------------|------|-----|------|------|-----|-----|-----|----|-----|-----|-----|
| | W | W1 | W2 | H | H1 | H2 | H3 | H4 | F | ØD | G | D |
| RIS 400PE/PW EKO 3.0 | 1300 | 1361 | 650 | 768 | 670 | 158 | 330 | 98 | 31 | 200 | - | - |
| RIS 700PE/PW EKO 3.0 | 1380 | 1461 | 695 | 1069 | 970 | 160 | 350 | 99 | 40 | 250 | - | - |
| RIS 1200PE/PW EKO 3.0 | 1550 | 1655 | 780 | 1497 | 1397 | 172 | 390 | 100 | 52 | - | 500 | 250 |
| RIS 1900PE/PW EKO 3.0 | 1750 | 1870 | 710 | 1955 | 1850 | 194 | 399 | 105 | 60 | - | 700 | 300 |
| RIS 2500PE/PW EKO 3.0 | 1850 | 1970 | 720 | 2055 | 1950 | 244 | 499 | 105 | 60 | - | 700 | 400 |

| Unit | Optional accessories | | | | | | | | | | | | |
|--------------------|-------------------------------|--------------------------|-------------|-------------|-------------|-------------|----------|----------|-----|---------|------------|-------------------|-----------|
| | Flex Stouch Ptouch MB-Gateway | S-1141 S-RC02-F2 S-KFF-U | SSB Heating | SSB Cooling | SP Supply | SP Exhaust | SVS | SSK SKS | RMG | VVP/VXP | SKG AKS AP | AVS AVA EKA NV PH | EKS NV PH |
| RIS 400PE EKO 3.0 | + | + | - | 81 | CM230-1-F-L | CM230-1-F-L | - | - | - | - | 200 | 200 | - |
| RIS 400PW EKO 3.0 | + | + | 61 | 81 | TF230 | CM230-1-F-L | - | - | + | + | 200 | 200 | - |
| RIS 700PE EKO 3.0 | + | + | - | 81 | CM230-1-F-L | CM230-1-F-L | - | - | - | - | 250 | 250 | - |
| RIS 700PW EKO 3.0 | + | + | 61 | 81 | TF230 | CM230-1-F-L | - | - | + | + | 250 | 250 | - |
| RIS 1200PE EKO 3.0 | + | + | - | - | LM230A-TP | LM230A-TP | - | 500x250 | - | - | - | - | 500x250 |
| RIS 1200PW EKO 3.0 | + | + | 61 | - | NFA | LM230A-TP | 500x250 | 500x250 | + | + | - | - | 500x250 |
| RIS 1900PE EKO 3.0 | + | + | - | - | LM230A-TP | LM230A-TP | - | 700x400* | - | - | - | - | 700x400* |
| RIS 1900PW EKO 3.0 | + | + | 61 | - | NFA | LM230A-TP | 700x400* | 700x400* | + | + | - | - | 700x400* |
| RIS 2500PE EKO 3.0 | + | + | - | - | LM230A-TP | LM230A-TP | - | 700x400 | - | - | - | - | 700x400 |
| RIS 2500PW EKO 3.0 | + | + | 61 | - | NFA | LM230A-TP | 700x400 | 700x400 | + | + | - | - | 700x400 |

*necessary to order flange adapter STP 700x400-700x300

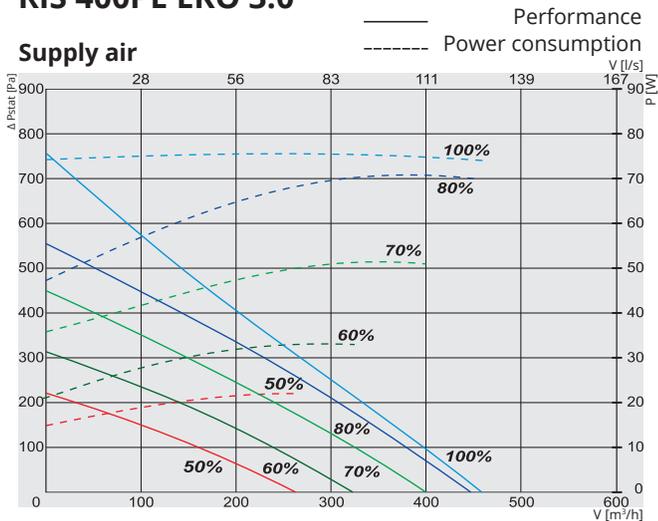
Accessories

| | | | | | | | |
|---|--|--|--|---|--|--|--|
| Network Module  MB-Gateway p. 178 | Remote controller  Ptouch p. 175 | Control panel  FLEX p. 177 | Remote controller  Stouch p. 176 | Pressure transmitter  S-1141 p. 179 | CO2 sensor  S-RC02-F2 p. 180 | | |
| Humidity sensor  S-KFF-U p. 181 | Thermic water valve actuator  SSB p. 195 | Actuator for dampers  SP p. 210 | Water heater coil  SVS p. 190 | Damper for rectangular duct  SSK p. 213 | Rectangular duct silencer  SKS p. 215 | Shut-off damper  SKG p. 212 | Circular duct silencer  AKS p. 216 |
| Mounting clamps  AP p. 219 | Heating coil  AVS p. 185 | Circular duct water cooler  AVA p. 193 | Electrical duct pre-heater  EKS NV PH p. 203 | Electrical duct pre-heater  EKA NV PH p.201 | Mixing point  RMG p. 196 | 2 and 3 way valves  VVP/VXP p. 197 | Flange adapter  STP p. 220 |

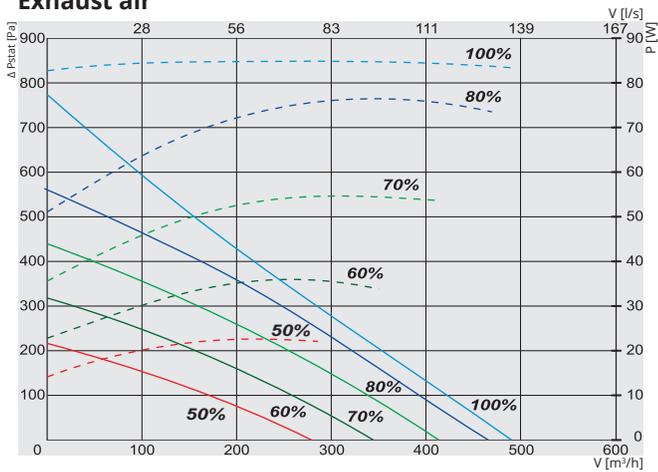
RIS P EKO

RIS 400PE EKO 3.0

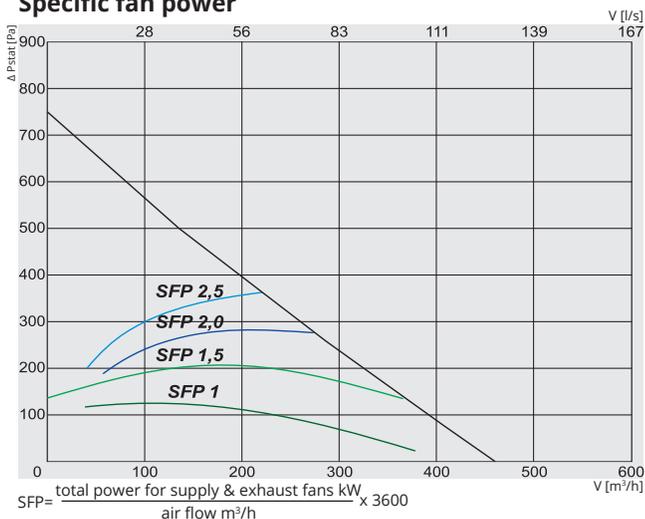
Supply air



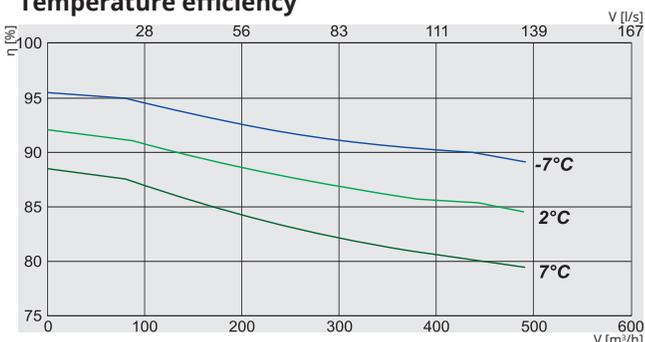
Exhaust air



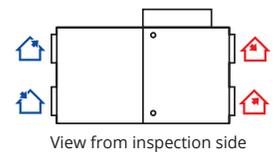
Specific fan power



Temperature efficiency



RIS 400PE EKO 3.0



➡ Exhaust air
 ➡ Extract air
 ➡ Outdoor air
 ➡ Supply air

| Article No. | Version |
|------------------|--|
| GAGRIS1747_0017A | 400PE 0.9 EKO 3.0 Integrated electrical heater |
| GAGRIS1746_0017A | 400PE 1.6 EKO 3.0 Integrated electrical heater |
| GAGRIS1692_0016A | 400PE 3.0 EKO 3.0 Integrated electrical heater |

| | | 0.9 EKO 3.0 | 1.6 EKO 3.0 | 3.0 EKO 3.0 |
|----------------------------------|--------------------------------|-------------|-------------|-------------|
| Electrical heater | phase/voltage [50Hz/VAC] | ~1, 230 | ~1, 230 | ~1, 230 |
| | [kW] | 0,9 | 1,6 | 3,0 |
| EC fans | phase/voltage [50Hz/VAC] | ~1, 230 | | |
| exhaust | power/current [kW/A] | 0,085/0,73 | | |
| | fan speed [min ⁻¹] | 3200 | | |
| supply | power/current [kW/A] | 0,085/0,73 | | |
| | fan speed [min ⁻¹] | 3200 | | |
| Thermal efficiency up to* | | 90% | | |
| Motorized by-pass | | + | | |
| Max power consumption | [kW/A] | 1,07/5,50 | 1,77/8,50 | 3,17/14,50 |
| Control board | | PRV V2 | | |
| Filter class | exhaust/supply | M5/F7 | | |
| Housing insulation, mineral wool | [mm] | 30 | | |
| Colour | RAL | white 9016 | | |
| Weight (net, without packing) | [kg] | 74 | | |
| Comply with ERP | | 2016; 2018 | | |
| Operation | | indoors | | |
| Fresh air temperature limits** | °C | -5 - +40 | | |
| Housing protection class | IP | 34 | | |

* Calculated according EN 13141-7.

**For temperatures lower than recommended, use electrical pre-heater to ensure balanced operation.

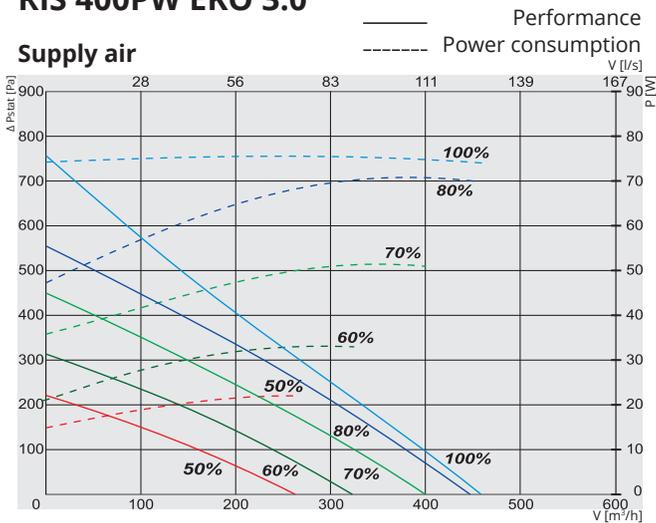
Temperature efficiency (balanced mass flow) EN 13141-7:
 Extract air = 20°C/60%RH
 Outdoor air = -7°C / 2°C / 7°C

| RIS 400PE EKO 3.0 | Lwa total, dB(A) | LWA, dB(A) | | | | | | |
|-------------------|------------------|------------|--------|--------|-------|-------|-------|-------|
| | | 125 Hz | 250 Hz | 500 Hz | 1 kHz | 2 kHz | 4 kHz | 8 kHz |
| Supply | 67 | 54 | 59 | 64 | 58 | 57 | 54 | 47 |
| Extract | 58 | 48 | 50 | 53 | 51 | 48 | 46 | 41 |
| Surrounding | 51 | 40 | 43 | 46 | 45 | 40 | 39 | 36 |

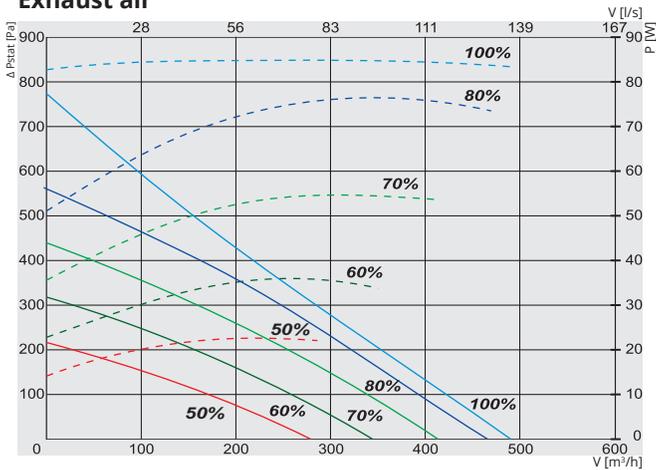
Measured at 395 m³/h, 100 Pa

RIS 400PW EKO 3.0

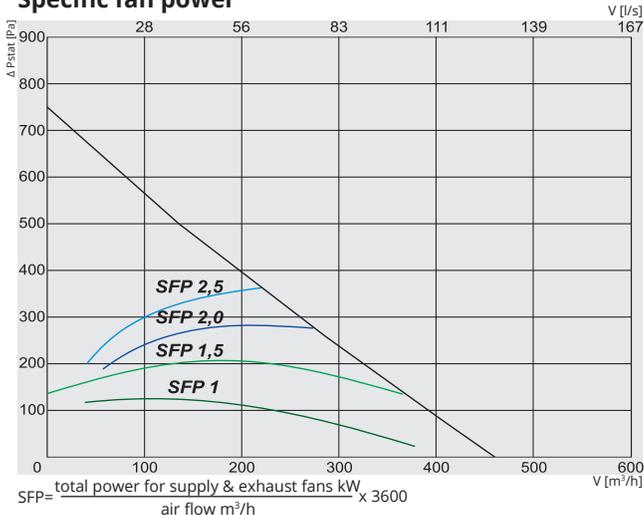
Supply air



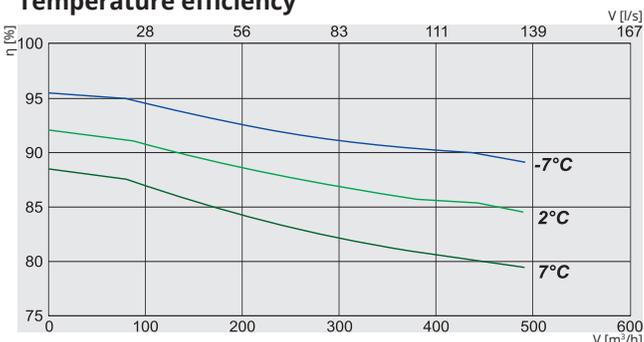
Exhaust air



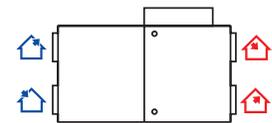
Specific fan power



Temperature efficiency



RIS 400PW EKO 3.0



View from inspection side

🏠 Exhaust air
 🏠 Extract air
 🏠 Outdoor air
 🏠 Supply air

Article No. GAGRIS1748_0019A Version 400PW EKO 3.0 Optional water heater

400PW EKO 3.0

| | | |
|----------------------------------|----------------|---------------------------|
| Water heater (optional) | AVS 200 | |
| Fans | phase/voltage | [50Hz/VAC] ~1, 230 |
| exhaust | power/current | [kW/A] 0,085/0,73 |
| | fan speed | [min ⁻¹] 3200 |
| supply | power/current | [kW/A] 0,085/0,73 |
| | fan speed | [min ⁻¹] 3200 |
| Thermal efficiency up to* | 90% | |
| Motorized by-pass | + | |
| Max power consumption | [kW/A] | 0,17/1,50 |
| Control board | PRV V2 | |
| Filter class | exhaust/supply | M5/F7 |
| Housing insulation, mineral wool | [mm] | 30 |
| Colour | RAL | white 9016 |
| Weight (net, without packing) | [kg] | 73 |
| Comply with ERP | 2016; 2018 | |
| Operation | indoors | |
| Fresh air temperature limits** | °C | -5 - +40 |
| Housing protection class | IP | 34 |

* Calculated according EN 13141-7.

**For temperatures lower than recommended, use electrical pre-heater to ensure balanced operation.

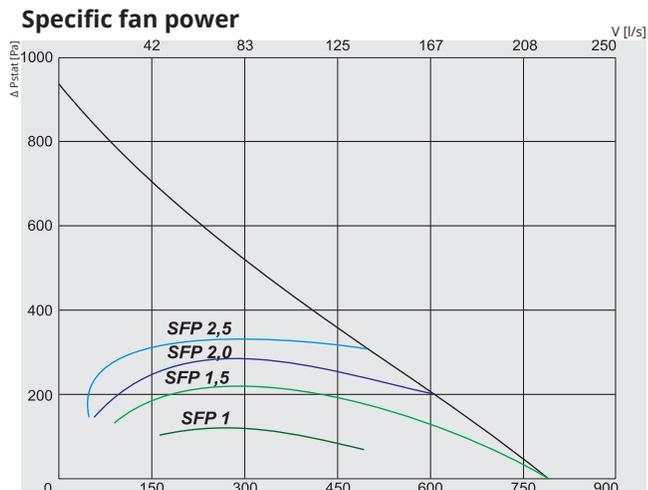
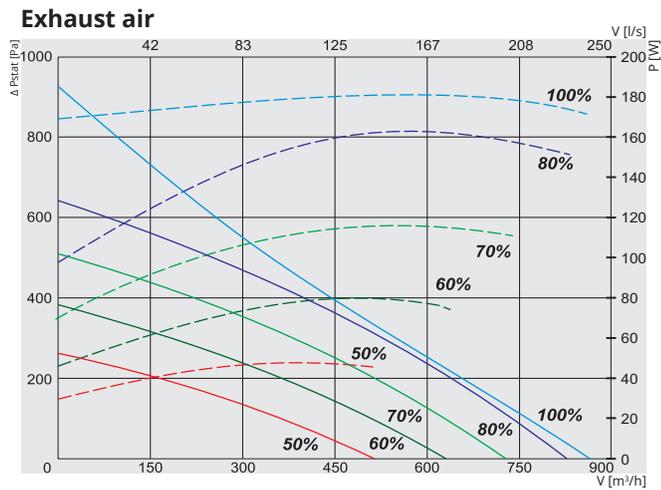
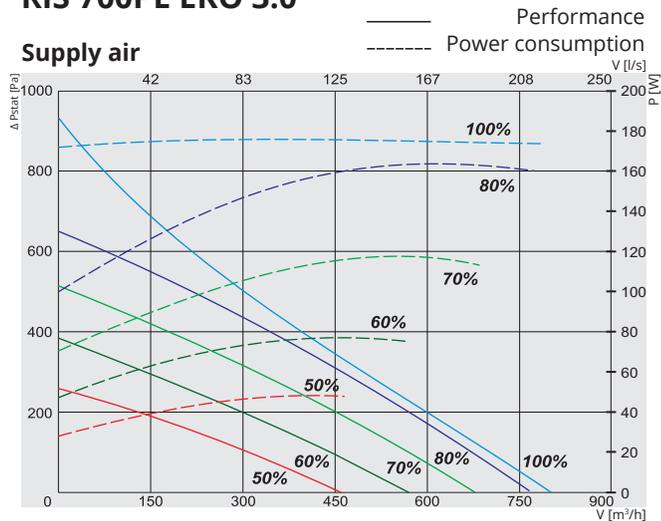
Temperature efficiency (balanced mass flow) EN 13141-7:
 Extract air = 20°C/60%RH
 Outdoor air = -7°C / 2°C / 7°C

| RIS 400PW EKO 3.0 | Lwa total, dB(A) | LWA, dB(A) | | | | | | |
|-------------------|------------------|------------|--------|--------|-------|-------|-------|-------|
| | | 125 Hz | 250 Hz | 500 Hz | 1 kHz | 2 kHz | 4 kHz | 8 kHz |
| Supply | 67 | 54 | 59 | 64 | 58 | 57 | 54 | 47 |
| Extract | 58 | 48 | 50 | 53 | 51 | 48 | 46 | 41 |
| Surrounding | 51 | 40 | 43 | 46 | 45 | 40 | 39 | 36 |

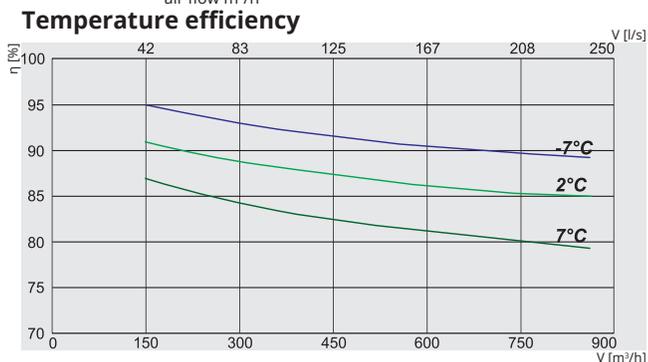
Measured at 395 m³/h, 100 Pa

RIS P EKO

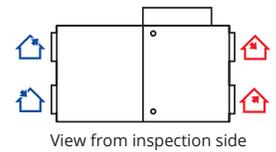
RIS 700PE EKO 3.0



$$SFP = \frac{\text{total power for supply \& exhaust fans kW}}{\text{air flow m}^3/\text{h}} \times 3600$$



RIS 700PE EKO 3.0



🏠 Exhaust air
 🏠 Extract air
 🏠 Outdoor air
 🏠 Supply air

| Article No. | Version | Version |
|------------------|-------------------|------------------------------|
| GAGRIS1737_0008A | 700PE 1.2 EKO 3.0 | Integrated electrical heater |
| GAGRIS1736_0007A | 700PE 3.0 EKO 3.0 | Integrated electrical heater |
| GAGRIS1693_0005B | 700PE 4.5 EKO 3.0 | Integrated electrical heater |

| | | 1.2 EKO 3.0 | 3.0 EKO 3.0 | 4.5 EKO 3.0 |
|----------------------------------|--------------------------------|-------------|-------------|-------------|
| Electrical heater | phase/voltage [50Hz/VAC] | ~1, 230 | ~1, 230 | ~3, 400 |
| | [kW] | 1,2 | 3,0 | 4,5 |
| EC fans | phase/voltage [50Hz/VAC] | ~1, 230 | | |
| exhaust | power/current [kW/A] | 0,168/1,4 | | |
| | fan speed [min ⁻¹] | 3230 | | |
| supply | power/current [kW/A] | 0,168/1,4 | | |
| | fan speed [min ⁻¹] | 3230 | | |
| Thermal efficiency up to* | | 90% | | |
| Motorized by-pass | | + | | |
| Max power consumption | [kW/A] | 1,54/8,34 | 3,34/15,84 | 4,84/9,3 |
| Control board | | PRV V2 | | |
| Filter class | exhaust/supply | M5/F7 | | |
| Housing insulation, mineral wool | [mm] | 30 | | |
| Colour | RAL | white | 9016 | |
| Weight (net, without packing) | [kg] | 103,5 | 104 | 104,5 |
| Comply with ERP | | 2016;2018 | | |
| Operation | | indoors | | |
| Fresh air temperature limits** | °C | -5 - +40 | | |
| Housing protection class | IP | 34 | | |

* Calculated according EN 13141-7.

**For temperatures lower than recommended, use electrical pre-heater to ensure balanced operation.

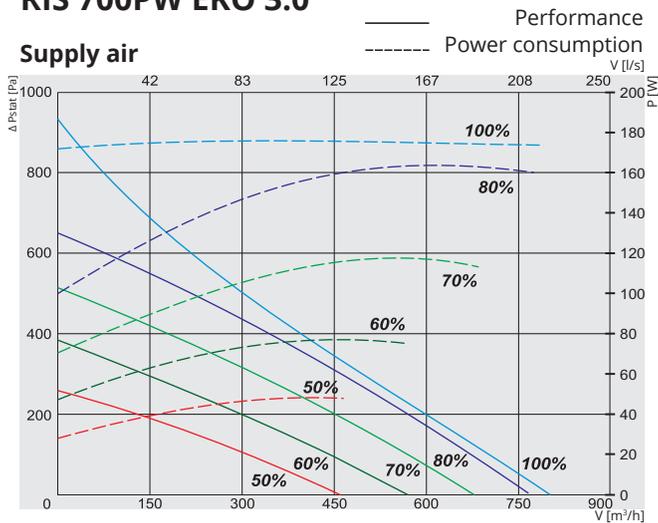
Temperature efficiency (balanced mass flow) EN 13141-7:
Extract air = 20°C/60%RH
Outdoor air = -7°C / 2°C / 7°C

| RIS 700PE EKO 3.0 | Lwa total, dB(A) | LWA, dB(A) | | | | | | |
|-------------------|------------------|------------|--------|--------|-------|-------|-------|-------|
| | | 125 Hz | 250 Hz | 500 Hz | 1 kHz | 2 kHz | 4 kHz | 8 kHz |
| Supply | 75 | 64 | 66 | 68 | 70 | 66 | 60 | 59 |
| Extract | 62 | 53 | 55 | 57 | 56 | 52 | 49 | 45 |
| Surrounding | 56 | 45 | 47 | 50 | 50 | 47 | 43 | 42 |

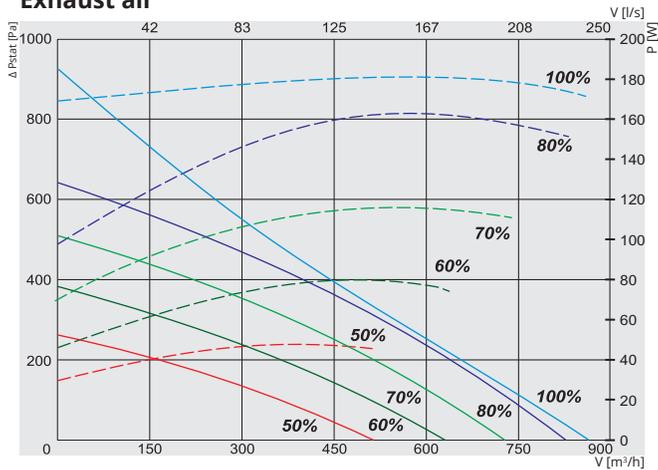
Measured at 700 m³/h, 100 Pa

RIS 700PW EKO 3.0

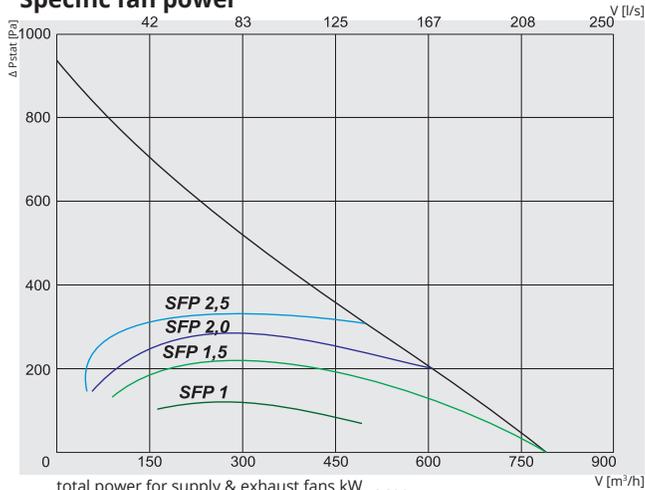
Supply air



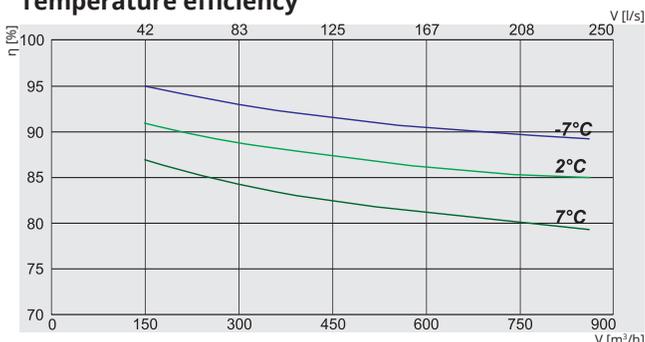
Exhaust air



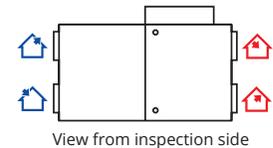
Specific fan power



Temperature efficiency



RIS 700PW EKO 3.0



🏠 Exhaust air
 🏠 Extract air
 🏠 Outdoor air
 🏠 Supply air

Article No. GAGRIS1738_0009A Version 700PW EKO 3.0 Optional water heater

700PW EKO 3.0

| | | |
|----------------------------------|----------------|---------------------------|
| Water heater (optional) | AVS 250 | |
| Fans | phase/voltage | [50Hz/VAC] ~1,230 |
| exhaust | power/current | [kW/A] 0,168/1,4 |
| | fan speed | [min ⁻¹] 3230 |
| supply | power/current | [kW/A] 0,168/1,4 |
| | fan speed | [min ⁻¹] 3230 |
| Thermal efficiency up to* | 90% | |
| Motorized by-pass | + | |
| Max power consumption | [kW/A] | 0,34/2,84 |
| Control board | PRV V2 | |
| Filter class | exhaust/supply | M5/F7 |
| Housing insulation, mineral wool | 30 | |
| Colour | RAL | white 9016 |
| Weight (net, without packing) | [kg] | 103 |
| Comply with ERP | 2016;2018 | |
| Operation | indoors | |
| Fresh air temperature limits** | °C | -5 - +40 |
| Housing protection class | IP | 34 |

* Calculated according EN 13141-7.

**For temperatures lower than recommended, use electrical pre-heater to ensure balanced operation.

Temperature efficiency (balanced mass flow) EN 13141-7:
 Extract air = 20°C/60%RH
 Outdoor air = -7°C / 2°C / 7°C

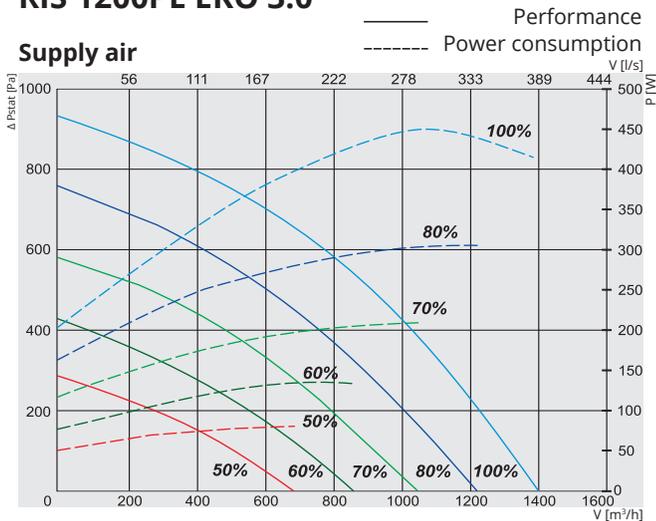
| RIS 700PW EKO 3.0 | Lwa total, dB(A) | LWA, dB(A) | | | | | | |
|-------------------|------------------|------------|--------|--------|-------|-------|-------|-------|
| | | 125 Hz | 250 Hz | 500 Hz | 1 kHz | 2 kHz | 4 kHz | 8 kHz |
| Supply | 75 | 64 | 66 | 68 | 70 | 66 | 60 | 59 |
| Extract | 62 | 53 | 55 | 57 | 56 | 52 | 49 | 45 |
| Surrounding | 56 | 45 | 47 | 50 | 50 | 47 | 43 | 42 |

Measured at 700 m³/h, 100 Pa

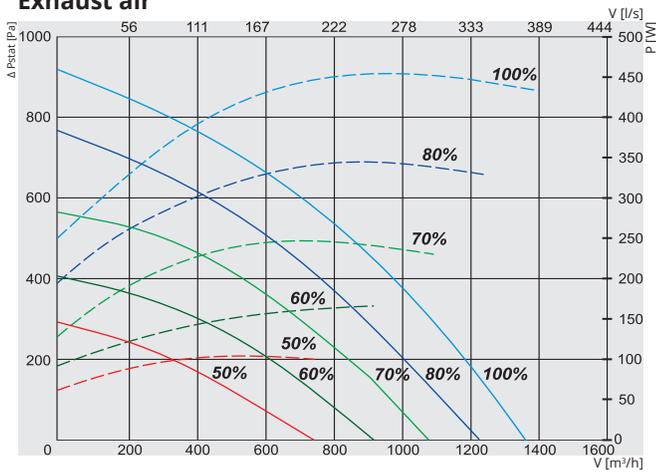
RIS P EKO

RIS 1200PE EKO 3.0

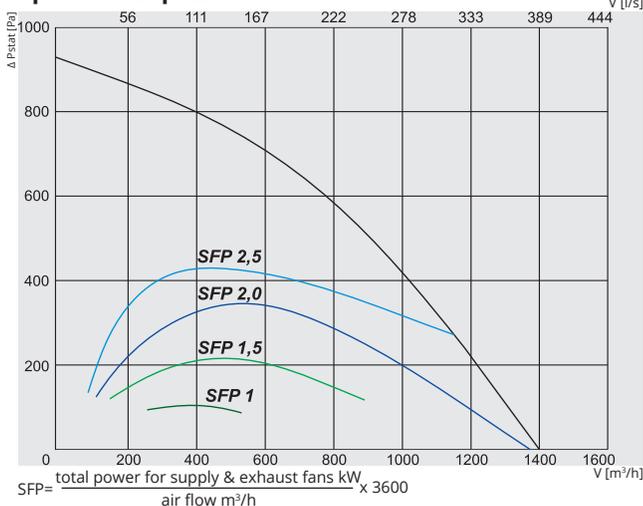
Supply air



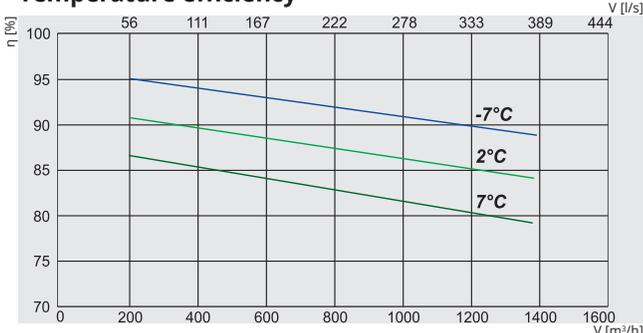
Exhaust air



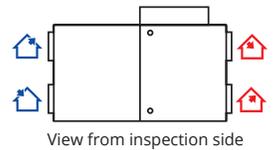
Specific fan power



Temperature efficiency



RIS 1200PE EKO 3.0



- Exhaust air
- Extract air
- Outdoor air
- Supply air

| Article No. | Version |
|------------------|---|
| GAGRIS1744_0022A | 1200PE 3.0 EKO 3.0 Integrated electrical heater |
| GAGRIS1745_0021B | 1200PE 6.0 EKO 3.0 Integrated electrical heater |
| GAGRIS1701_0020B | 1200PE 9.0 EKO 3.0 Integrated electrical heater |

| | 3.0 EKO 3.0 | 6.0 EKO 3.0 | 9.0 EKO 3.0 |
|----------------------------------|----------------------------------|-------------|-----------------------|
| Electrical heater | phase/voltage [50Hz/VAC] ~1, 230 | ~3, 400 | ~3, 400 |
| | [kW] | 3,0 | 6,0 9,0 |
| EC fans | phase/voltage [50Hz/VAC] ~1,230 | | |
| exhaust | power/current [kW/A] | 0,450/2,95 | |
| | fan speed [min ⁻¹] | 3400 | |
| supply | power/current [kW/A] | 0,370/2,5 | |
| | fan speed [min ⁻¹] | 3400 | |
| Thermal efficiency up to* | | 90% | |
| Motorized by-pass | | + | |
| Max power consumption | [kW/A] | 3,82/18,49 | 6,82/14,19 9,82/18,49 |
| Control board | | PRV V2 | |
| Filter class | exhaust/supply | M5/F7 | |
| Housing insulation, mineral wool | [mm] | 50 | |
| Colour | RAL | grey 7040 | |
| Weight (net, without packing) | [kg] | 170 | |
| Comply with ERP | | 2016;2018 | |
| Operation | | indoors | |
| Fresh air temperature limits** | °C | -5 - +40 | |
| Housing protection class | IP | 34 | |

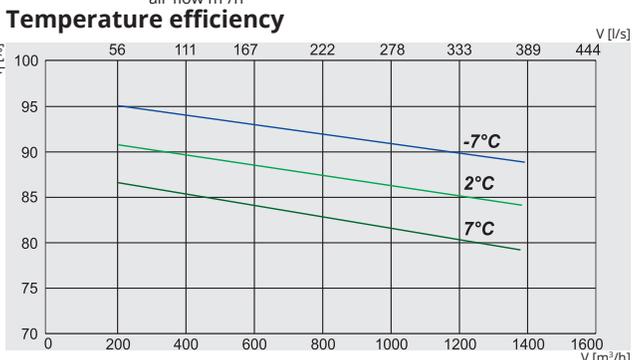
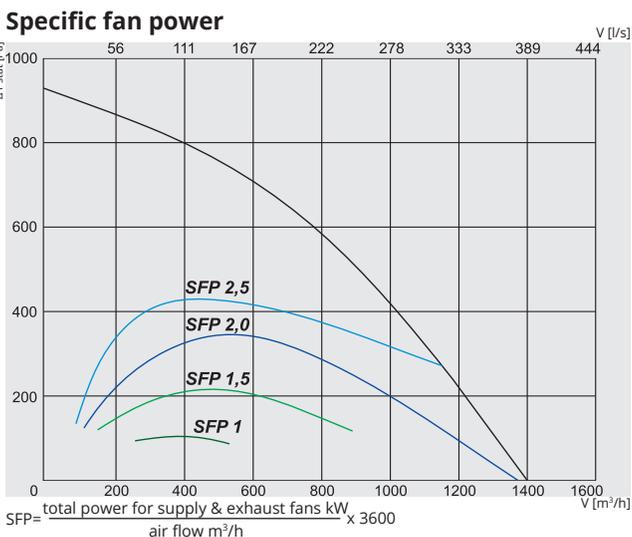
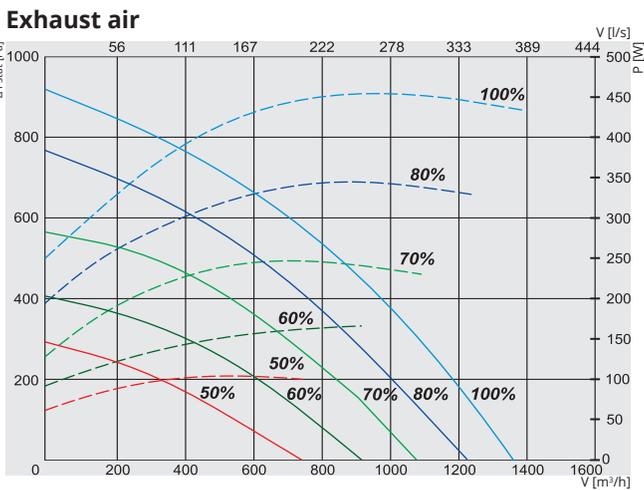
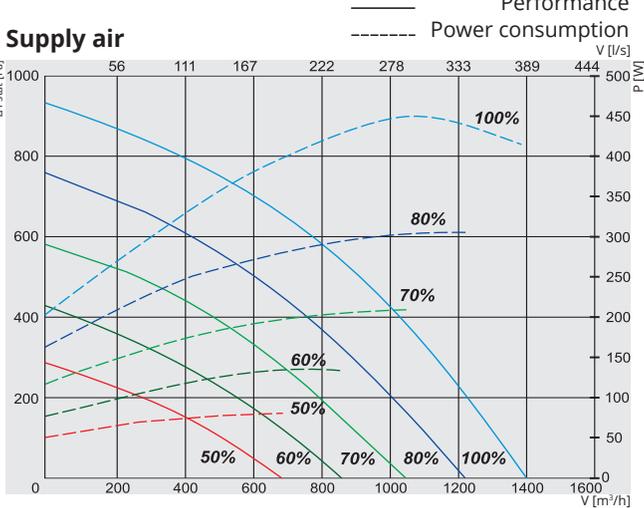
* Calculated wet efficiency.
 **For temperatures lower than recommended, use electrical pre-heater to ensure balanced operation.

Temperature efficiency (balanced mass flow):
 Extract air = 20°C/60%RH
 Outdoor air = -7°C / 2°C / 7°C

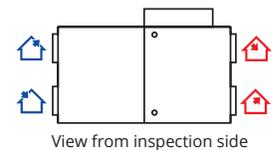
| RIS 1200PE EKO 3.0 | Lwa total, dB(A) | 125 Hz | 250 Hz | 500 Hz | 1 kHz | 2 kHz | 4 kHz | 8 kHz |
|--------------------|------------------|--------|--------|--------|-------|-------|-------|-------|
| Supply | 76 | 58 | 69 | 71 | 69 | 67 | 64 | 56 |
| Extract | 64 | 52 | 56 | 61 | 56 | 50 | 45 | 42 |
| Surrounding | 56 | 42 | 48 | 50 | 49 | 48 | 46 | 40 |

Measured at 1298 m³/h, 100 Pa

RIS 1200PW EKO 3.0



RIS 1200PW EKO 3.0



🏠 Exhaust air
 🏠 Extract air
 🏠 Outdoor air
 🏠 Supply air

Article No. GAGRIS1721_0023A Version 1200PW EKO 3.0 Optional water heater

1200PW EKO 3.0

| | | | |
|----------------------------------|----------------|----------------------|------------|
| Water heater (optional) | SVS 500x250 | | |
| Fans | phase/voltage | [50Hz/VAC] | ~1,230 |
| exhaust | power/current | [kW/A] | 0,450/2,95 |
| | fan speed | [min ⁻¹] | 3400 |
| supply | power/current | [kW/A] | 0,370/2,5 |
| | fan speed | [min ⁻¹] | 3400 |
| Thermal efficiency up to* | 90% | | |
| Motorized by-pass | + | | |
| Max power consumption | [kW/A] | 0,82/5,49 | |
| Control board | PRV V2 | | |
| Filter class | exhaust/supply | M5/F7 | |
| Housing insulation, mineral wool | [mm] | 50 | |
| Colour | RAL | grey | 7040 |
| Weight (net, without packing) | [kg] | 170 | |
| Comply with ERP | 2016;2018 | | |
| Operation | indoors | | |
| Fresh air temperature limits** | °C | -5 - +40 | |
| Housing protection class | IP | 34 | |

** Calculated wet efficiency.

**For temperatures lower than recommended, use electrical pre-heater to ensure balanced operation.

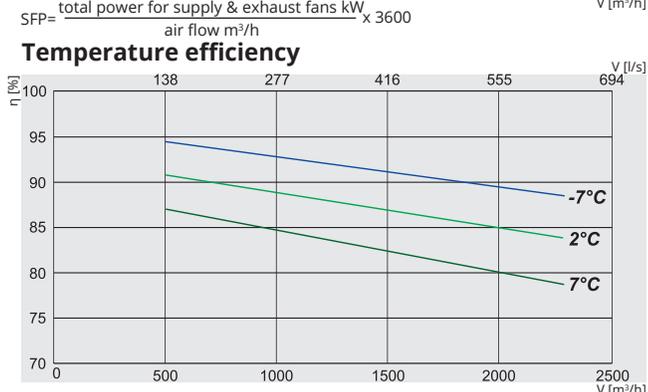
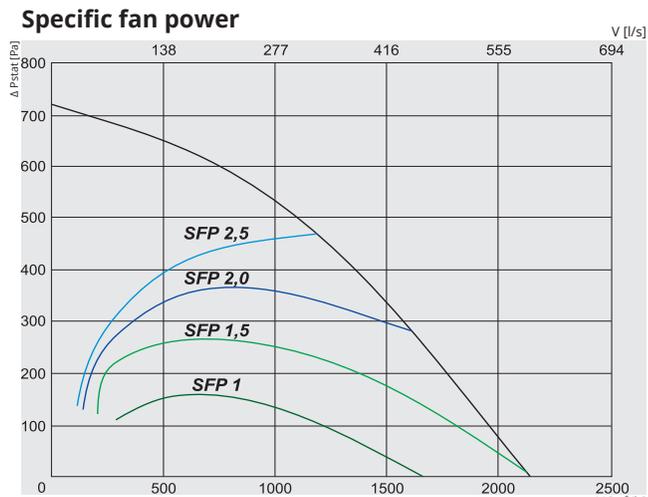
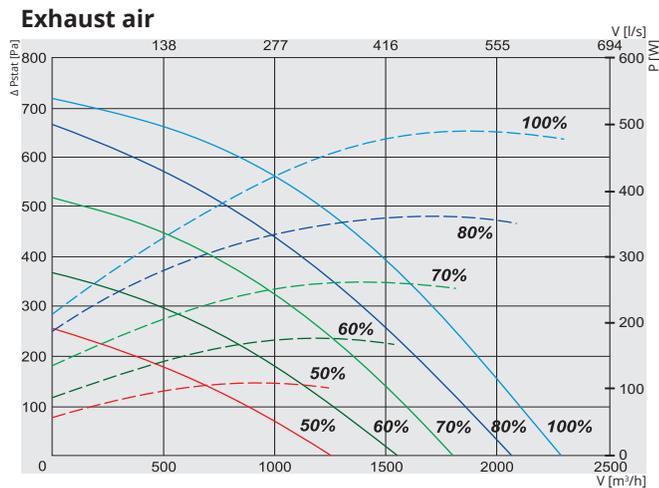
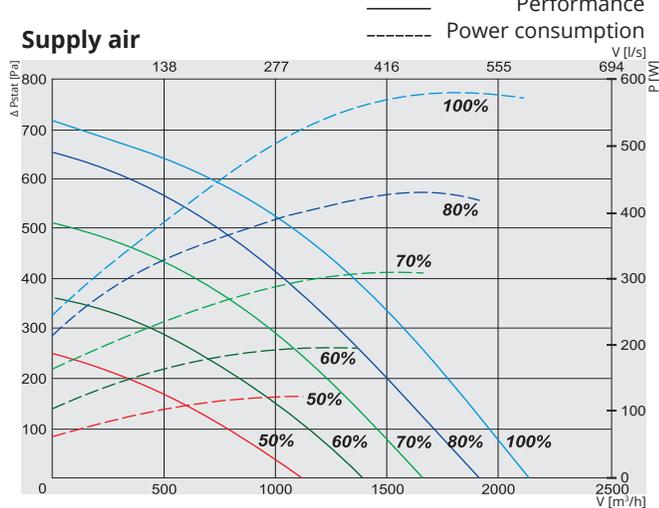
Temperature efficiency (balanced mass flow) EN :
 Extract air = 20°C/60%RH
 Outdoor air = -7°C / 2°C / 7°C

| RIS 1200PE EKO 3.0 | Lwa total, dB(A) | LWA, dB(A) | | | | | | |
|--------------------|------------------|------------|--------|--------|-------|-------|-------|-------|
| | | 125 Hz | 250 Hz | 500 Hz | 1 kHz | 2 kHz | 4 kHz | 8 kHz |
| Supply | 76 | 58 | 69 | 71 | 69 | 67 | 64 | 56 |
| Extract | 64 | 52 | 56 | 61 | 56 | 50 | 45 | 42 |
| Surrounding | 56 | 42 | 48 | 50 | 49 | 48 | 46 | 40 |

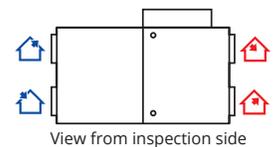
Measured at 1298 m³/h, 100 Pa

RIS P EKO

RIS 1900PE EKO 3.0



RIS 1900PE EKO 3.0



| Article No. | Version |
|------------------|--|
| GAGRIS1751_0025A | 1900PE 3.0 EKO 3.0 Integrated electrical heater |
| GAGRIS1752_0024B | 1900PE 6.0 EKO 3.0 Integrated electrical heater |
| GAGRIS1706_0001B | 1900PE 12.0 EKO 3.0 Integrated electrical heater |

| | | 3.0 EKO 3.0 | 6.0 EKO 3.0 | 12.0 EKO 3.0 |
|----------------------------------|--------------------------------|-------------|-------------|--------------|
| Electrical heater | phase/voltage [50Hz/VAC] | ~1, 230 | ~3, 400 | ~3, 400 |
| | [kW] | 3,0 | 6,0 | 12,0 |
| EC fans | phase/voltage [50Hz/VAC] | ~1, 230 | | |
| | power/current [kW/A] | 0,485/3,12 | | |
| exhaust | fan speed [min ⁻¹] | 2540 | | |
| | fan speed [min ⁻¹] | 2540 | | |
| supply | power/current [kW/A] | 0,488/3,16 | | |
| | fan speed [min ⁻¹] | 2540 | | |
| Thermal efficiency up to* | | 90% | | |
| Motorized by-pass | | + | | |
| Max power consumption | [kW/A] | 3,97 /20,32 | 6,97 /14,92 | 12,97 /24,32 |
| Control board | | PRV V2 | | |
| Filter class | exhaust/supply | M5/F7 | | |
| Housing insulation, mineral wool | [mm] | 50 | | |
| Colour | RAL | grey | 7040 | |
| Weight (net, without packing) | [kg] | 269 | 270 | 272 |
| Comply with ERP | | 2016;2018 | | |
| Operation | | indoors | | |
| Fresh air temperature limits** | °C | -5 - +40 | | |
| Housing protection class | IP | 34 | | |

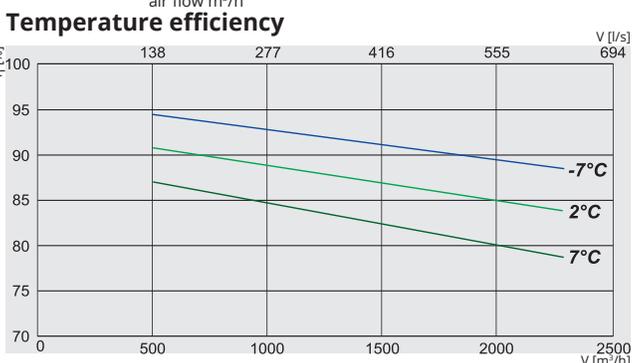
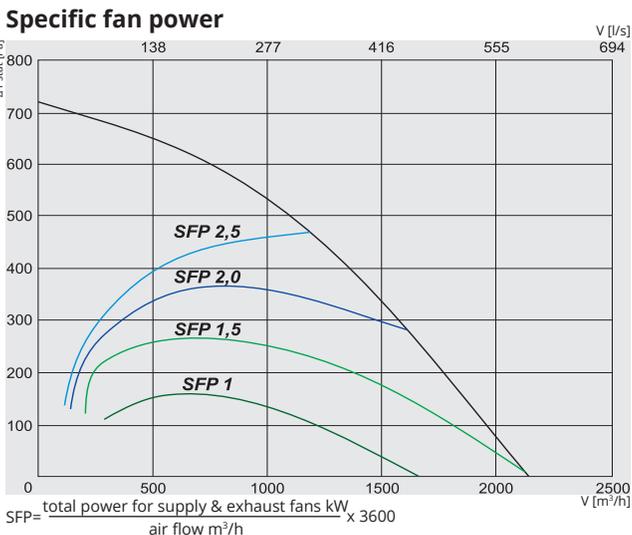
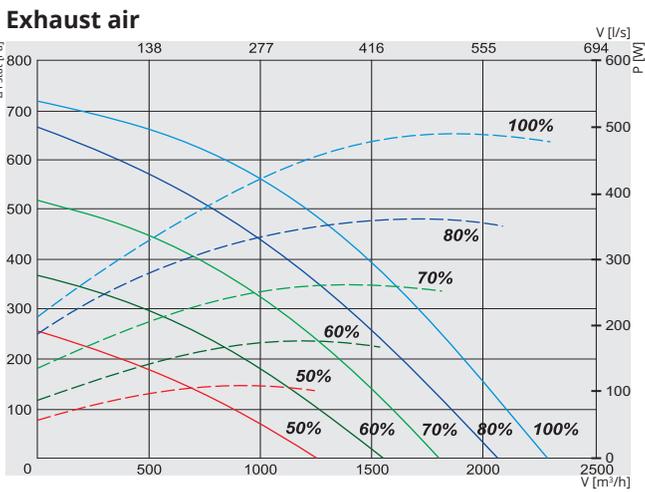
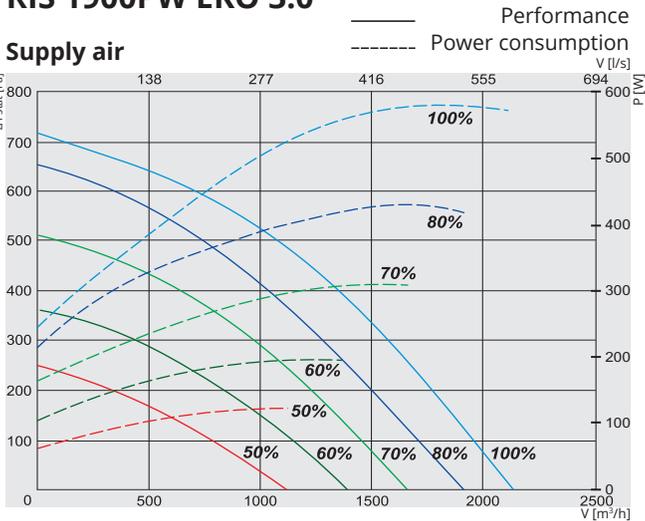
* Calculated wet efficiency.
**For temperatures lower than recommended, use electrical pre-heater to ensure balanced operation.

Temperature efficiency (balanced mass flow):
Extract air = 20°C/60%RH
Outdoor air = -7°C / 2°C / 7°C

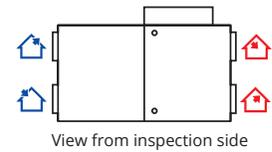
| RIS 1900PE EKO 3.0 | Lwa total, dB(A) | 125 Hz | 250 Hz | 500 Hz | 1 kHz | 2 kHz | 4 kHz | 8 kHz |
|--------------------|------------------|--------|--------|--------|-------|-------|-------|-------|
| Supply | 77 | 53 | 64 | 69 | 73 | 70 | 65 | 61 |
| Extract | 68 | 42 | 58 | 64 | 62 | 61 | 58 | 55 |
| Surrounding | 60 | 50 | 52 | 54 | 54 | 50 | 48 | 41 |

Measured at 1938 m³/h, 100 Pa

RIS 1900PW EKO 3.0



RIS 1900PW EKO 3.0



🏠 Exhaust air
 🏠 Extract air
 🏠 Outdoor air
 🏠 Supply air

Article No. GAGRIS1753_0026A
 Version 1900PW EKO 3.0
 Optional water heater

1900PW EKO 3.0

| | | | |
|----------------------------------|----------------|----------------------|------------|
| Water heater (optional) | SVS 700x400 | | |
| Fans | phase/voltage | [50Hz/VAC] | ~1, 230 |
| exhaust | power/current | [kW/A] | 0,485/3,12 |
| | fan speed | [min ⁻¹] | 2540 |
| supply | power/current | [kW/A] | 0,488/3,16 |
| | fan speed | [min ⁻¹] | 2540 |
| Thermal efficiency up to* | 90% | | |
| Motorized by-pass | + | | |
| Max power consumption | [kW/A] | 0,97 /6,32 | |
| Control board | PRV V2 | | |
| Filter class | exhaust/supply | M5/F7 | |
| Housing insulation, mineral wool | [mm] | 50 | |
| Colour | RAL | grey | 7040 |
| Weight (net, without packing) | [kg] | 269 | |
| Comply with ERP | 2016;2018 | | |
| Operation | indoors | | |
| Fresh air temperature limits** | °C | -5 - +40 | |
| Housing protection class | IP | 34 | |

* Calculated wet efficiency.

**For temperatures lower than recommended, use electrical pre-heater to ensure balanced operation.

Temperature efficiency (balanced mass flow):
 Extract air = 20°C/60%RH
 Outdoor air = -7°C / 2°C / 7°C

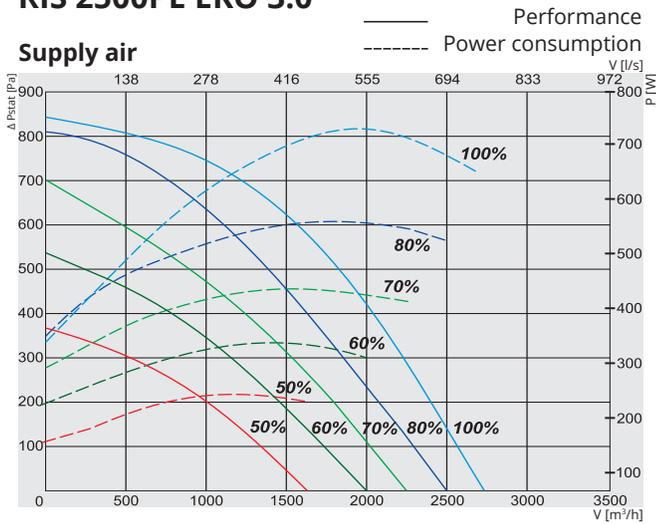
| RIS 1900PW EKO 3.0 | Lwa total, dB(A) | LWA, dB(A) | | | | | | |
|--------------------|------------------|------------|--------|--------|-------|-------|-------|-------|
| | | 125 Hz | 250 Hz | 500 Hz | 1 kHz | 2 kHz | 4 kHz | 8 kHz |
| Supply | 77 | 53 | 64 | 69 | 73 | 70 | 65 | 61 |
| Extract | 68 | 42 | 58 | 64 | 62 | 61 | 58 | 55 |
| Surrounding | 60 | 50 | 52 | 54 | 54 | 50 | 48 | 41 |

Measured at 1938 m³/h, 100 Pa

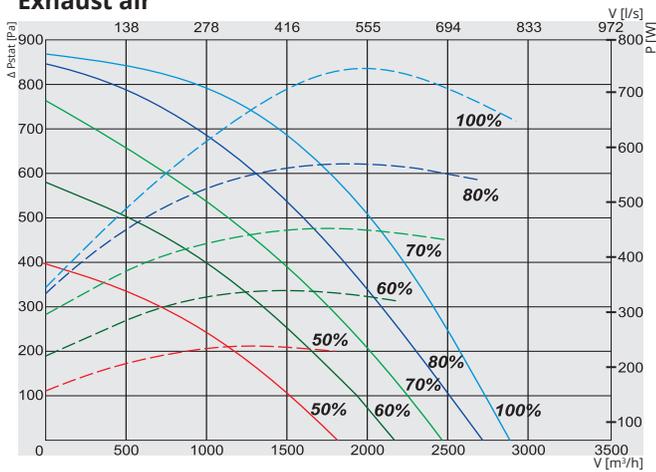
RIS P EKO

RIS 2500PE EKO 3.0

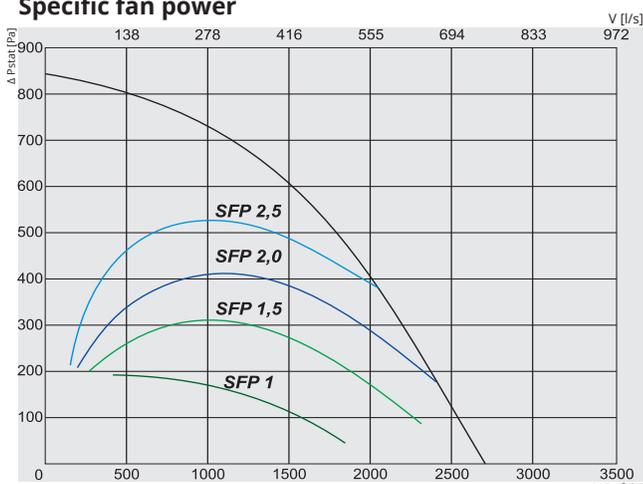
Supply air



Exhaust air

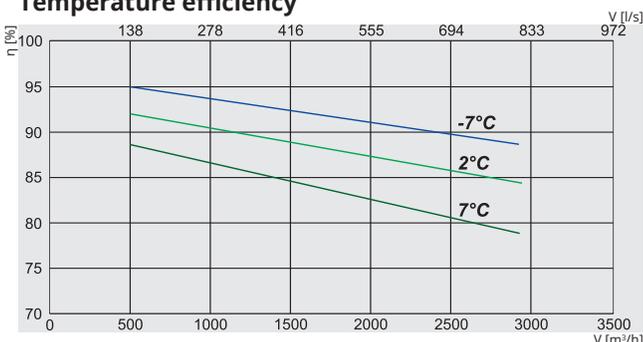


Specific fan power

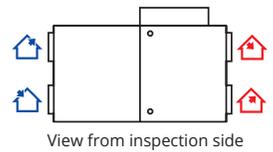


$$SFP = \frac{\text{total power for supply \& exhaust fans kW}}{\text{air flow m}^3/\text{h}} \times 3600$$

Temperature efficiency



RIS 2500PE EKO 3.0



🏠 Exhaust air
 🏠 Extract air
 🏠 Outdoor air
 🏠 Supply air

| Article No. | Version |
|------------------|--|
| GAGRIS1754_0027B | 2500PE 4.5 EKO 3.0 Integrated electrical heater |
| GAGRIS1755_0028B | 2500PE 9.0 EKO 3.0 Integrated electrical heater |
| GAGRIS1707_0015B | 2500PE 18.0 EKO 3.0 Integrated electrical heater |

| | | 4.5 EKO 3.0 | 9.0 EKO 3.0 | 18.0 EKO 3.0 |
|----------------------------------|--------------------------------|--------------|---------------|---------------|
| Electrical heater | phase/voltage [50Hz/VAC] | ~3, 400 | ~3, 400 | ~3, 400 |
| | [kW] | 4,5 | 9,0 | 18,0 |
| EC fans | phase/voltage [50Hz/VAC] | ~1, 230 | | |
| exhaust | power/current [kW/A] | 0,725/3,24 | | |
| | fan speed [min ⁻¹] | 2800 | | |
| supply | power/current [kW/A] | 0,675/3 | | |
| | fan speed [min ⁻¹] | 2800 | | |
| Thermal efficiency up to* | | 90% | | |
| Motorized by-pass | | + | | |
| Max power consumption | [kW/A] | 5,90 / 12,78 | 10,40 / 19,28 | 19,40 / 32,28 |
| Control board | | PRV V2 | | |
| Filter class | exhaust/supply | M5/F7 | | |
| Housing insulation, mineral wool | [mm] | 50 | | |
| Colour | RAL | grey 7040 | | |
| Weight (net, without packing) | [kg] | 322 | | |
| Comply with ERP | | 2016;2018 | | |
| Operation | | indoors | | |
| Fresh air temperature limits** | °C | -5 - +40 | | |
| Housing protection class | IP | 34 | | |

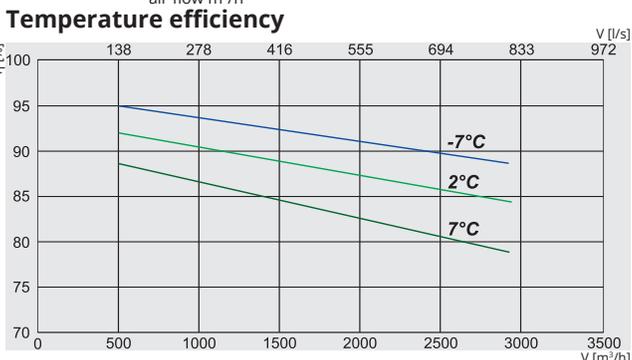
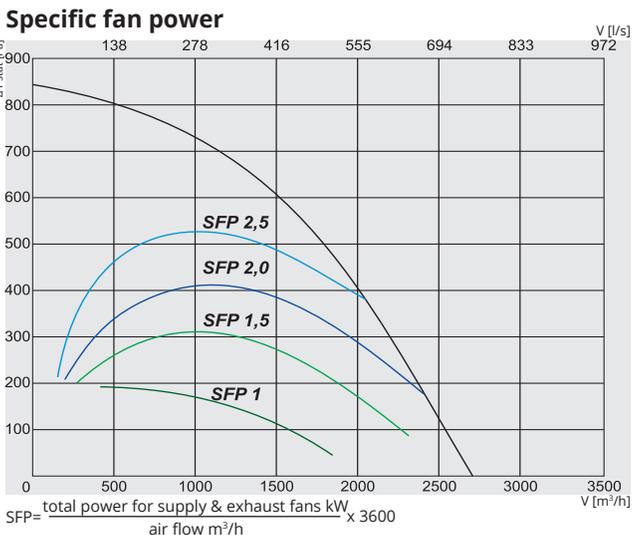
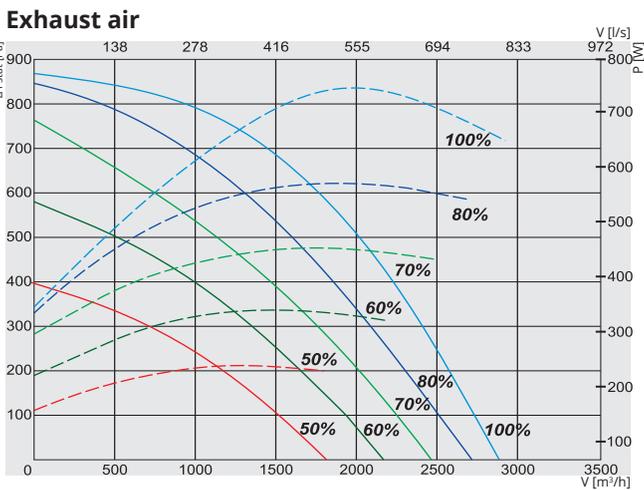
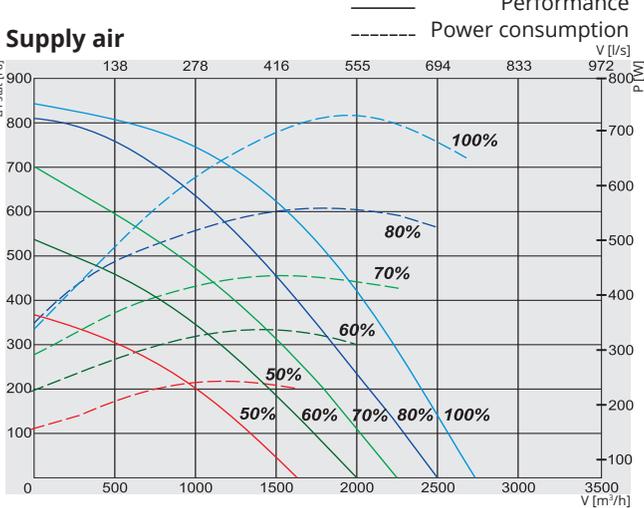
* Calculated wet efficiency.
 **For temperatures lower than recommended, use electrical pre-heater to ensure balanced operation.

Temperature efficiency (balanced mass flow):
 Extract air = 20°C/60%RH
 Outdoor air = -7°C / 2°C / 7°C

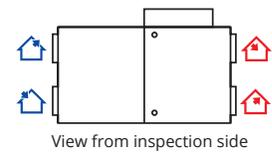
| RIS 2500PE EKO 3.0 | Lwa total, dB(A) | LWA, dB(A) | | | | | | |
|--------------------|------------------|------------|--------|--------|-------|-------|-------|-------|
| | | 125 Hz | 250 Hz | 500 Hz | 1 kHz | 2 kHz | 4 kHz | 8 kHz |
| Supply | 80 | 60 | 68 | 72 | 75 | 74 | 71 | 65 |
| Extract | 69 | 56 | 60 | 64 | 63 | 60 | 58 | 41 |
| Surrounding | 62 | 46 | 54 | 56 | 57 | 54 | 50 | 45 |

Measured at 2548 m³/h, 102 Pa

RIS 2500PW EKO 3.0



RIS 2500PW EKO 3.0



➡ Exhaust air
 ➡ Extract air
 ➡ Outdoor air
 ➡ Supply air

Article No. GAGRIS1756_0029A Version 2500PW EKO 3.0 Optional water heater

2500PW EKO 3.0

| | | | |
|----------------------------------|----------------|----------------------|-------------|
| Water heater (optional) | phase/voltage | [50Hz/VAC] | SVS 700x400 |
| Fans | phase/voltage | [50Hz/VAC] | ~1, 230 |
| exhaust | power/current | [kW/A] | 0,725/3,24 |
| | fan speed | [min ⁻¹] | 2800 |
| supply | power/current | [kW/A] | 0,675/3 |
| | fan speed | [min ⁻¹] | 2800 |
| Thermal efficiency up to* | | | 90% |
| Motorized by-pass | | | + |
| Max power consumption | [kW/A] | | 1,40 /6,28 |
| Control board | | | PRV V2 |
| Filter class | exhaust/supply | | M5/F7 |
| Housing insulation, mineral wool | | [mm] | 50 |
| Colour | RAL | grey | 7040 |
| Weight (net, without packing) | | [kg] | 322 |
| Comply with ERP | | | 2016;2018 |
| Operation | | | indoors |
| Fresh air temperature limits** | | °C | -5 - +40 |
| Housing protection class | IP | | 34 |

* Calculated wet efficiency.

**For temperatures lower than recommended, use electrical pre-heater to ensure balanced operation.

Temperature efficiency (balanced mass flow):
Extract air = 20°C/60%RH
Outdoor air = -7°C / 2°C / 7°C

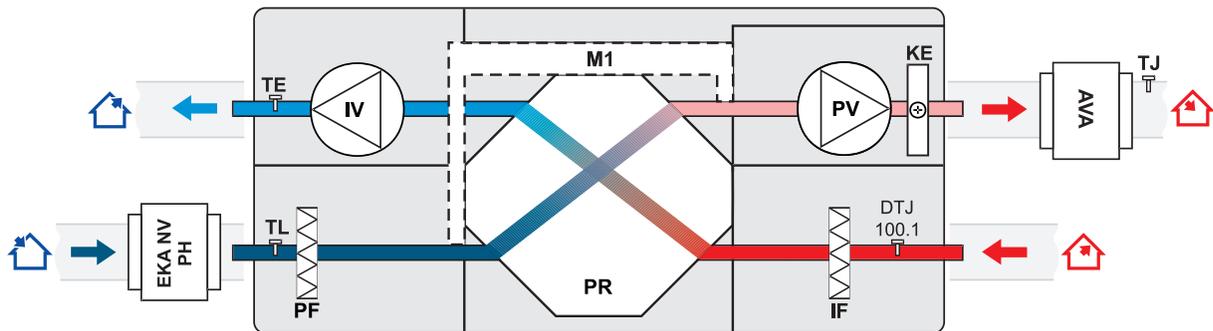
| RIS 2500PW EKO 3.0 | Lwa total, dB(A) | LWA, dB(A) | | | | | | |
|--------------------|------------------|------------|--------|--------|-------|-------|-------|-------|
| | | 125 Hz | 250 Hz | 500 Hz | 1 kHz | 2 kHz | 4 kHz | 8 kHz |
| Supply | 80 | 60 | 68 | 72 | 75 | 74 | 71 | 65 |
| Extract | 69 | 56 | 60 | 64 | 63 | 60 | 58 | 41 |
| Surrounding | 62 | 46 | 54 | 56 | 57 | 54 | 50 | 45 |

Measured at 2548 m³/h, 102 Pa

RIS P EKO

RIS 400PE EKO 3.0 / RIS 700PE EKO 3.0

(ceiling mounted) **versions with electrical heater**

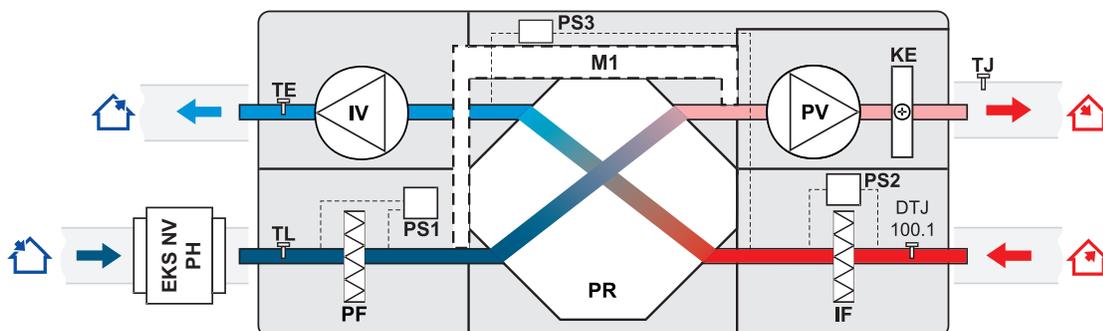


IV - exhaust air fan
 PV - supply air fan
 PR - plate heat exchanger
 PF - filter for supply air (class F7)
 IF - filter for extract air (class M5)
 KE - electrical heater
 M1 - actuator of by-pass damper

TL - fresh air temperature sensor
 TJ - supply air temperature sensor
 TE - exhaust air temperature sensor
 DTJ 100.1 - humidity + temperature sensor
 AVA - optionally supplied water cooler
 EKA NV PH - optional fresh air pre-heater

RIS 1200PE EKO 3.0 / 1900PE EKO 3.0 / 2500PE EKO 3.0

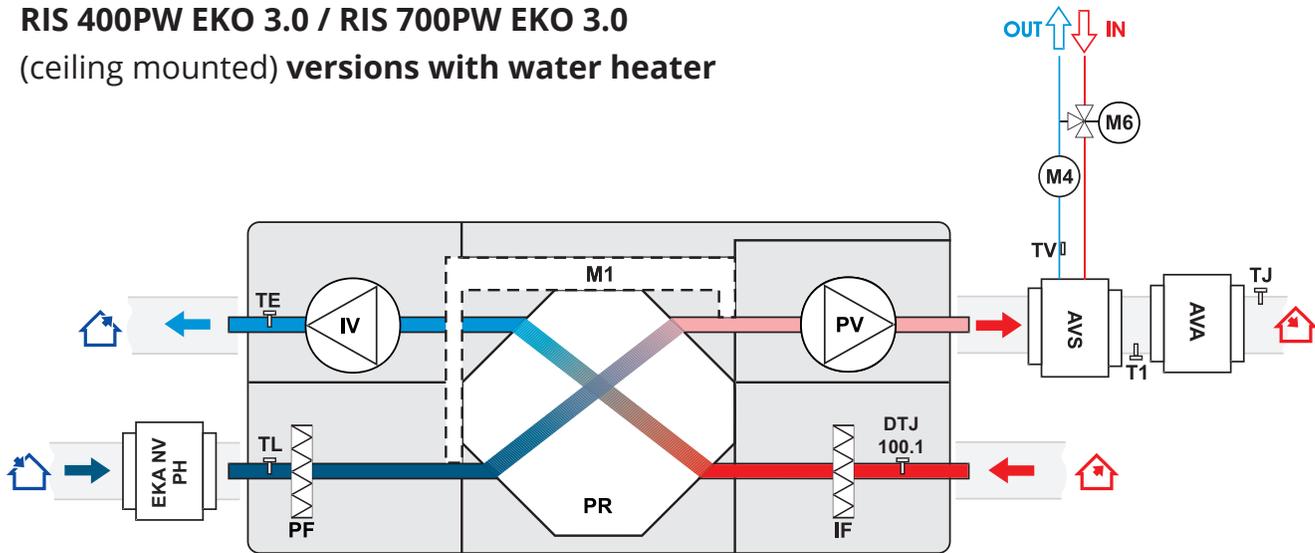
(ceiling mounted) **versions with electrical heater**



IV - exhaust air fan
 PV - supply air fan
 PR - plate heat exchanger
 KE - electrical heater
 PF - filter for supply air (class F7)
 IF - filter for extract air (class M5)
 TE - temperature sensor for exhaust air
 TL - temperature sensor for fresh air

EKS NV PH - optional fresh air pre-heater
 DTJ 100.1 - humidity + temperature sensor
 TJ - temperature sensor for supply air
 M1 - actuator of by-pass damper
 PS1 - supply air differential pressure switch
 PS2 - extract air differential pressure switch
 PS3 - heat exchanger antifrost pressure switch

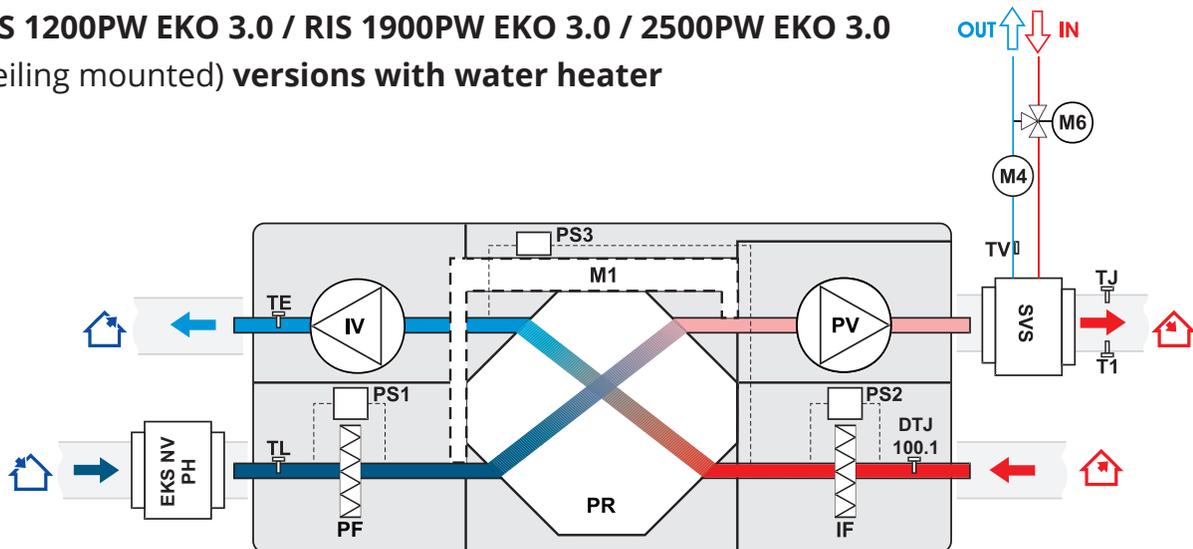
RIS 400PW EKO 3.0 / RIS 700PW EKO 3.0 (ceiling mounted) versions with water heater



IV - exhaust air fan
PV - supply air fan
PR - plate heat exchanger
PF - filter for supply air (class F7)
IF - filter for extract air (class M5)
TV - antifrost sensor
M1 - actuator of by-pass damper
AVA - optionally supplied water cooler

M4 - water heater circulation pump
M6 - optionally supplied mixing valve and motor
TL - fresh air temperature sensor
TJ - supply air temperature sensor
TE - exhaust air temperature sensor
T1 - antifrost thermostat
DTJ 100.1 - humidity + temperature sensor
AVS - optionally supplied water heater
EKA NV PH - optional fresh air pre-heater

RIS 1200PW EKO 3.0 / RIS 1900PW EKO 3.0 / 2500PW EKO 3.0 (ceiling mounted) versions with water heater



IV - exhaust air fan
PV - supply air fan
PR - plate heat exchanger
PF - filter for supply air (class F7)
IF - filter for extract air (class M5)
TE - temperature sensor for exhaust air
TL - temperature sensor for fresh air
TJ - temperature sensor for supply air
T1 - antifrost thermostat

TV - antifrost sensor
DTJ 100.1 - humidity + temperature sensor
M1 - actuator of by-pass damper
M4 - water heater circulation pump
M6 - optionally supplied mixing valve and motor
PS1 - supply air differential pressure switch
PS2 - extract air differential pressure switch
PS3 - heat exchanger antifrost pressure switch
SVS - optionally supplied water heater
EKS NV PH - optional fresh air heater

| FUNCTIONS | | PRV V2 | |
|---|--|----------------|----------------|
| | | RIS EKO 3.0 | |
| Description of the functions | | E | W |
| Functions | | | |
| | Date and time settings | ✓ | ✓ |
| | 4 speeds for easy and user-friendly control ("Stop" - the unit is stopped; "Low", medium", and "High". Service menu allows adjusting each speed individually) | ✓ | ✓ |
| | BOOST function (Fans operate at highest speed) | ✓ | ✓ |
| | Comfortable air temperature function | ✓ | ✓ |
| | Cold/heat recovery | ✓ | ✓ |
| | Fire place function | ✓ | ✓ |
| | Dryness protection | ✓ | ✓ |
| | Weekly schedule | ✓ | ✓ |
| | Holiday schedule | ✓ | ✓ |
| | User and service control levels | ✓ | ✓ |
| | Manual air flow balancing | ✓ | ✓ |
| | CO₂ level indication and reduction function | ✓ | ✓ |
| | Night cooling function | ✓ | ✓ |
| | Relative humidity (RH) level indication and reduction function | ✓ | ✓ |
| | Software and configuration update possibility | ✓ | ✓ |
| | Supply air temperature control according to the extract air sensor | ✓ | ✓ |
| | Monitoring function (all sensors and I/O) | ✓ ² | ✓ ² |
| | Mode switch (start/stop) | ✓ | ✓ |
| | Extracted air relative humidity converter | ✓ | ✓ |
| | Manual components control | ✓ ¹ | ✓ ¹ |
| Functional units | | | |
| Fans | | | |
| | Soft start and stop | ✓ | ✓ |
| | Fan failure protection | ✓ | ✓ |
| | Speed synchronous/asynchronous 0-10V control | ✓ | ✓ |
| Electric heater | | | |
| | On/Off / PWM control | ✓ | |
| | Manual protection | ✓ | |
| | Overheat protection (additional protection software) | ✓ | ✓ |
| Water heater | | | |
| | Pulse-width modulation (PWM) valve actuator control | | ✓ |
| | Protection using temperature sensor | | ✓ |
| | Protection using thermostat (NC) | | ✓ |
| | Circulation pump control | | ✓ |
| | Return water temperature sensor | ✓ | ✓ |
| DX cooler | | | |
| | Control On/Off | ✓ | ✓ |
| Water cooler | | | |
| | Pulse-width modulation (PWM) valve actuator control | | ✓ |
| | Control with three-positional valve actuator | ✓ | ✓ |
| Bypass damper | | | |
| | 3-position actuator control | ✓ | ✓ |
| Filter pollution monitoring | | | |
| | By pressure switch (NC) | ✓ | ✓ |
| | By filter timer | ✓ | ✓ |
| Sensors | | | |
| | Supply air temperature sensor | ✓ | ✓ |
| | Fresh air temperature sensor | ✓ | ✓ |
| | Exhaust air temperature sensor | ✓ | ✓ |
| | Extract air temperature sensor | ✓ | ✓ |
| Emergency signals and inputs/outputs | | | |
| | Fire protection input | ✓ | ✓ |
| | Working indication output | ✓ | ✓ |
| | Alarm indication output | ✓ | ✓ |
| Remote controllers | | | |
| | Stouch | ✓ | ✓ |
| | Flex | ✓ | ✓ |
| | Ptouch | ✓ | ✓ |
| | MB-Gateway | ✓ | ✓ |

1 With FLEX TEST remote controller

2 Only sensors