

RIS H EKO



Heat recovery units with counterflow plate heat exchanger, automatic control and E.C. motors, designed for horizontal ducts and installation on roof or in technical room.



FLEX panel included in all models

Common characteristics:

- Efficient low-noise EC adjustable fans.
- Maintenance switch – disconnecter incorporated.
- Thermal efficiency of up to 90%.
- Sound insulation up to 50mm thick for low noise level.
- Large access doors for maintenance.
- Tray for collecting condensation with drainage.

PRV 3.0 control functions incorporated:

- Free cooling function with motorised BY-PASS.
- Fan speed control by manual selection or optional external sensors (CO2 or pressure).
- Frost protection built-in.
- Built-in control system with FLEX remote control panel (including 13 m cable).
- Control of external closing hatch (hatches included), for some models.
- ON/OFF and speed control available through panel or external switches.
- Control of external DX coolers.

- Built-in temperature and humidity sensors (for some models).
- Filter condition control through built-in pressure switches.
- Management of fire alarms and equipment failure alarms.
- Compatible with MODBUS RTU.

Finish:

- Silver/Ral 7040 paint.

Versions:

- Environmental: Renewal of air without supplying heat (S).
- Electric: With heating supplied by single-stage electrically heated coils (E).
- Water battery: With heating supplied by water coils external to the machine (W).



On request:

- Boxes with special filters.
- Adiabatic module.
- Cover for roof installation.

Order code

RIS — 2500 — H-EKO — E — D — F7

RIS: Heat recovery units with counterflow plate heat exchanger, automatic control and E.C. motors.

Size

Horizontal ducts

S: No battery or water coils
E: Electrical battery
W: External water coil

Side on which the air supply to the premises is located, seen from the maintenance access.

F7 filter (air supply filter)

D: Right-hand side (standard)
K: left-hand side

Accessories

See accessories section



FILTERS



CJFILTER/REC



ADIABATIC BOX



PRESSURE SWITCH



CO2 PROBE



TEJ

Characteristics, depending on size

| | RIS-700 | RIS-1200 | RIS-1900 | RIS-2500 | RIS-3500 |
|---|---------|----------|----------|----------|----------|
| Standard filters (supply/extraction) | F7/M5 | F7/M5 | F7/M5 | F7/M5 | F7/M5 |
| Free cooling function with motorised BY-PASS 100% of flow | YES | YES | YES | YES | YES |
| Control of external closing hatches | - | - | - | YES | YES |
| Side for maintenance access can be changed (D↔K) | YES | YES | YES | - | - |
| Version availability according to maintenance access side (versions D or K) | D/K | D/K | D/K | D | K |
| Built-in pressure switches for filter condition control | - | YES | YES | YES | YES |

Technical characteristics

| Model | Double-inlet | | | Maximum flow F7 (m3/h) | Thermal efficiency (%) | LpA radiated 3m dB(A) | Total voltage (V) | Total current (A) | Total power (kW) | Weight (Kg) | According ErP |
|------------------|---------------|-------------|------------|------------------------|------------------------|-----------------------|-------------------|-------------------|------------------|-------------|---------------|
| | Speed (r/min) | Current (A) | Power (kW) | | | | | | | | |
| RIS-700-H-EKO-S | 2930 | 2x1.7 | 2x0.23 | 850 | 90 | 56 | 1x230 | 3.3 | 0.4 | 105 | 2018 |
| RIS-700-H-EKO-E | 2930 | 2x1.7 | 2x0.23 | 850 | 90 | 56 | 1x230 | 8.5 | 1.6 | 105 | 2018 |
| RIS-700-H-EKO-W | 2930 | 2x1.7 | 2x0.23 | 850 | 90 | 56 | 1x230 | 3.3 | 0.4 | 117.5 | 2018 |
| RIS-1200-H-EKO-S | 3400 | 2x2.7 | 2x0.42 | 1350 | 90 | 53 | 1x230 | 5.3 | 0.8 | 184 | 2018 |
| RIS-1200-H-EKO-E | 3400 | 2x2.7 | 2x0.42 | 1350 | 90 | 53 | 1x230 | 14 | 2.8 | 184 | 2018 |
| RIS-1200-H-EKO-W | 3400 | 2x2.7 | 2x0.42 | 1350 | 90 | 53 | 1x230 | 5.3 | 0.8 | 200 | 2018 |
| RIS-1900-H-EKO-S | 2600 | 2x3.2 | 2x0.50 | 2000 | 90 | 60 | 1x230 | 6.3 | 0.9 | 260 | 2018 |
| RIS-1900-H-EKO-E | 2600 | 2x3.2 | 2x0.50 | 2000 | 90 | 60 | 1x230 | 19.3 | 3.9 | 260 | 2018 |
| RIS-1900-H-EKO-W | 2600 | 2x3.2 | 2x0.50 | 2000 | 90 | 60 | 1x230 | 6.3 | 0.9 | 276 | 2018 |
| RIS-2500-H-EKO-S | 2200 | 2x4.4 | 2x1.00 | 3300 | 90 | 62 | 3x400 | 8.4 | 1.8 | 390 | 2018 |
| RIS-2500-H-EKO-E | 2200 | 2x4.4 | 2x1.00 | 3300 | 90 | 62 | 3x400 | 13.6 | 5.5 | 390 | 2018 |
| RIS-2500-H-EKO-W | 2200 | 2x4.4 | 2x1.00 | 3300 | 90 | 62 | 3x400 | 8.4 | 1.8 | 408 | 2018 |
| RIS-3500-H-EKO-S | 2390 | 2x5.4 | 2x1.60 | 4100 | 90 | 69 | 3x400 | 10.9 | 2.3 | 627 | 2018 |
| RIS-3500-H-EKO-E | 2390 | 2x5.4 | 2x1.60 | 4100 | 90 | 69 | 3x400 | 19.5 | 8.3 | 627 | 2018 |
| RIS-3500-H-EKO-W | 2390 | 2x5.4 | 2x1.60 | 4100 | 90 | 69 | 3x400 | 10.9 | 2.3 | 649 | 2018 |



Erp. (Energy Related Products)

Information on Directive 2009/125/EC can be downloaded from the SODECA website or the QuickFan selector programme.

Technical characteristics of models with electrically heated coil



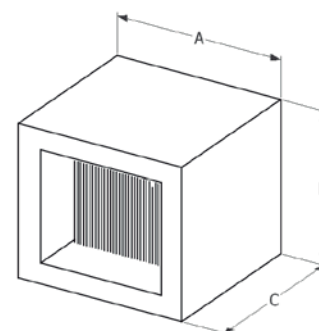
| Model | Voltage (V) | Power (kW) |
|------------------|-------------|------------|
| RIS-700-H-EKO-E | 1x230 | 1.2 |
| RIS-1200-H-EKO-E | 1x230 | 2 |
| RIS-1900-H-EKO-E | 1x230 | 3 |
| RIS-2500-H-EKO-E | 3x400 | 3.6 |
| RIS-3500-H-EKO-E | 3x400 | 6 |

Technical characteristics of models with water coil at 80/60 °C

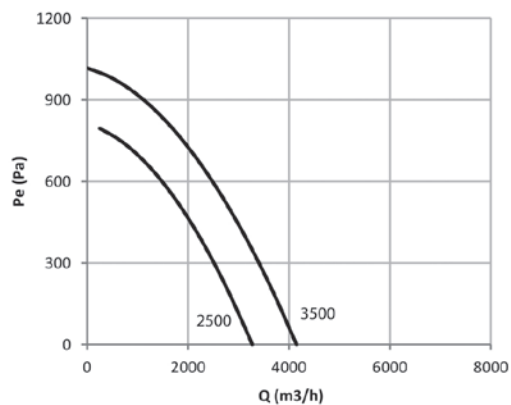
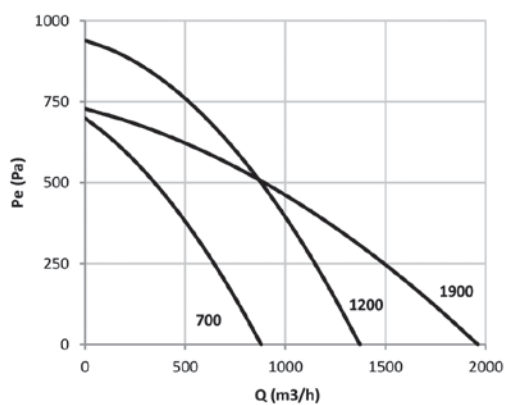
| Model | Heat power (kW) | Water flow (l/s) | Head loss (kPa) | Air speed (m/s) | Max. temperature difference (°C) | Coil thread diam |
|------------------|-----------------|------------------|-----------------|-----------------|----------------------------------|------------------|
| RIS-700-H-EKO-W | 10.6 | 0.13 | 9.32 | 3.37 | 31.3 | 1/2" |
| RIS-1200-H-EKO-W | 15.6 | 0.19 | 9.5 | 3 | 33 | 1/2" |
| RIS-1900-H-EKO-W | 10.6 | 0.13 | 9.5 | 2.06 | 21 | 1/2" |
| RIS-2500-H-EKO-W | 20 | 0.24 | 15.6 | 2.44 | 20 | 1/2" |
| RIS-3500-H-EKO-W | 33 | 0.4 | 23 | 2.57 | 20 | 3/4" |

* Data at 80/60°C, machine's maximum flow and outside temperature = 0°C

| Model | A | B | C |
|-------------------|------|-----|-----|
| RIS-700- H-EKO-W | 364 | 395 | 342 |
| RIS-1200- H-EKO-W | 439 | 460 | 342 |
| RIS-1900- H-EKO-W | 679 | 813 | 791 |
| RIS-2500- H-EKO-W | 880 | 838 | 756 |
| RIS-3500- H-EKO-W | 1150 | 944 | 795 |



External water coils

Characteristic Curves**Acoustic features**



The values specified are determined according to free field measurements of sound levels in dB(A) at a distance of no less than 3 m from the equipment.




Sound power Lw(A) spectrum in dB(A) via frequency band in Hz

| Model | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
|----------|----|-----|-----|-----|------|------|------|------|
| RIS-700 | 42 | 45 | 49 | 54 | 45 | 43 | 40 | 37 |
| RIS-1200 | 41 | 44 | 43 | 48 | 47 | 43 | 40 | 33 |
| RIS-1900 | 40 | 41 | 51 | 55 | 53 | 52 | 49 | 42 |
| RIS-2500 | 42 | 45 | 57 | 58 | 55 | 52 | 44 | 36 |
| RIS-3500 | 53 | 59 | 65 | 62 | 62 | 59 | 52 | 58 |

Configurations

View of machine from the maintenance access side

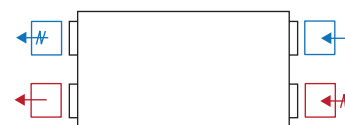
 Air extracted from the premises
 Air blown into the premises

 Stale air exiting
 Clean air entering
 External water coils

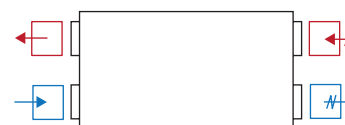
Configuration D

Configuration K

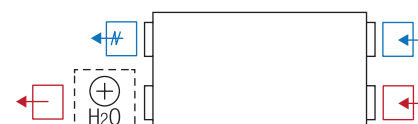
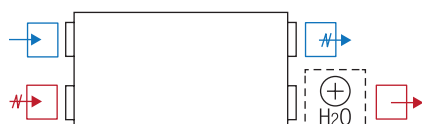
RIS 700/1200/1900
S / E Versions



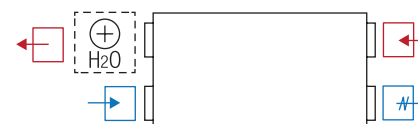
RIS 2500
S / E Versions



RIS 3500
S / E Versions



RIS 700/1200/1900
W Versions

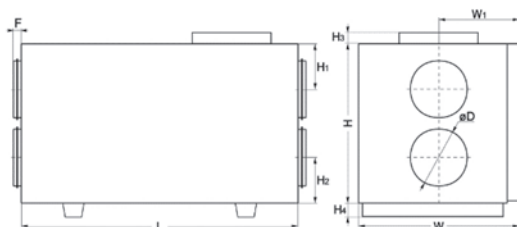


RIS 2500
W Versions

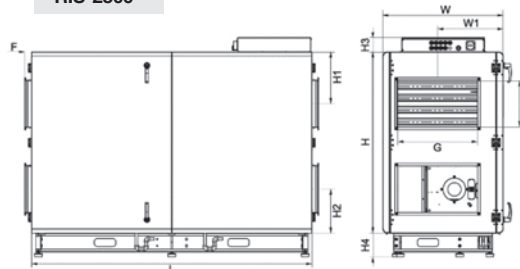
RIS 3500
W Versions

Dimensions in mm

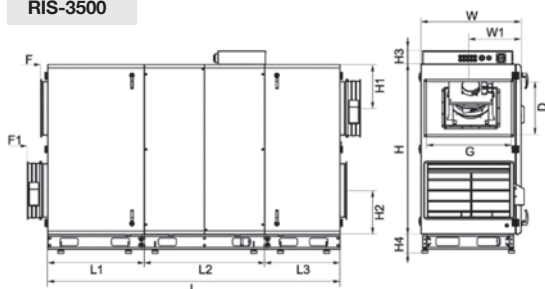
RIS-700/1200/1900



RIS-2500



RIS-3500



| Model | L | L1 | L2 | L3 | W | W1 | H | H1 | H2 | H3 | H4 | F | F1 | ØD | G | D |
|---------------------|------|-----|------|-----|-----|-----|------|-----|-----|-----|-----|----|-----|-----|-----|-----|
| RIS-700- H-EKO-S/E | 1200 | - | - | - | 670 | 335 | 780 | 210 | 210 | 65 | 126 | 40 | - | 250 | - | - |
| RIS-700- H-EKO-W | 1200 | - | - | - | 670 | 335 | 780 | 210 | 210 | 65 | 126 | 40 | - | 250 | - | - |
| RIS-1200- H-EKO-S/E | 1500 | - | - | - | 760 | 380 | 1000 | 269 | 269 | 70 | 141 | 40 | - | 315 | - | - |
| RIS-1200- H-EKO-W | 1500 | - | - | - | 760 | 380 | 1000 | 269 | 269 | 70 | 141 | 40 | - | 315 | - | - |
| RIS-1900- H-EKO-S/E | 1800 | - | - | - | 800 | 400 | 1245 | 331 | 331 | 106 | 141 | 70 | - | 400 | - | - |
| RIS-1900- H-EKO-W | 1800 | - | - | - | 800 | 400 | 1245 | 331 | 331 | 106 | 141 | 70 | - | 400 | - | - |
| RIS-2500- H-EKO-S/E | 2100 | - | - | - | 900 | 490 | 1355 | 387 | 327 | 108 | 180 | 50 | - | - | 600 | 350 |
| RIS-2500- H-EKO-W | 2100 | - | - | - | 900 | 490 | 1355 | 387 | 327 | 108 | 180 | 50 | - | - | 600 | 350 |
| RIS-3500- H-EKO-S/E | 2756 | 909 | 1132 | 709 | 946 | 494 | 1600 | 413 | 413 | 129 | 180 | 65 | 192 | - | 800 | 500 |
| RIS-3500- H-EKO-W | 2756 | 909 | 1132 | 709 | 946 | 494 | 1600 | 413 | 413 | 129 | 180 | 65 | 192 | - | 800 | 500 |

CJFILTER/REC filter box configurations

CJFILTER/REC — 300x600-250 — CA

Air filter boxes for circular ducts equipped with different types of filter, depending on model



Box size

Filters available
F7
F9
CA (Active Carbon)
H10
H13

Filter box part numbers according to machine size and inlet/outlet cross-section

| Model | Box size |
|----------------|-----------------|
| RIS-700-H-EKO | 300x600-250 |
| RIS-1200-H-EKO | 600x600-315 |
| RIS-1900-H-EKO | 600x600-400 |
| RIS-2500-H-EKO | 600x900-350x600 |
| RIS-3500-H-EKO | 600x900-500x800 |

For more information, see CJFILTER/REC section.