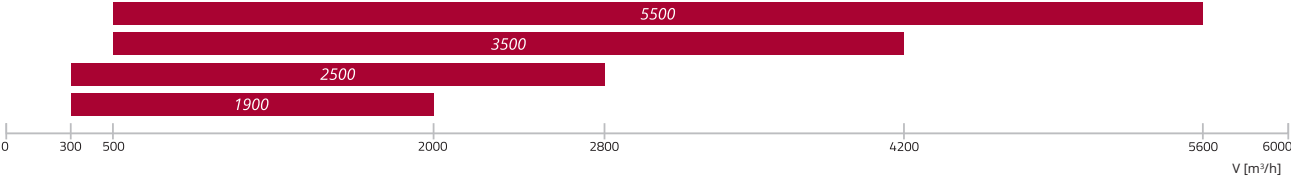
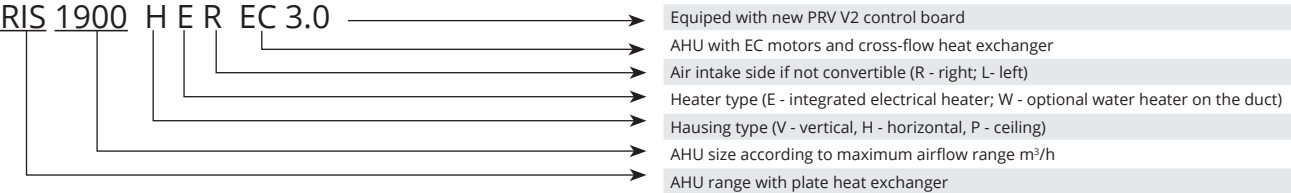


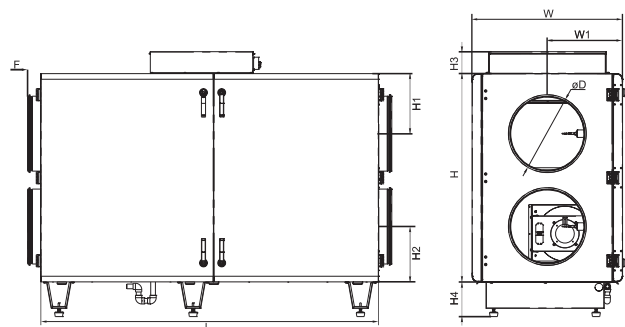
RIS H EC



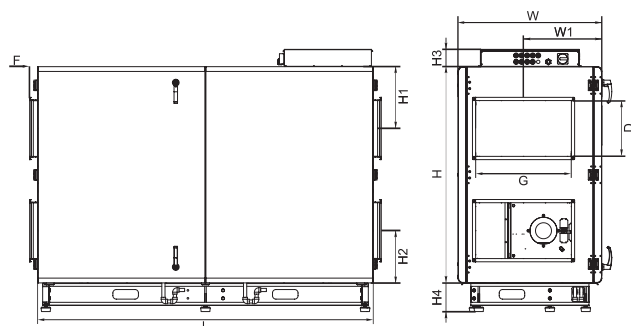
Application	Ventilation of small public buildings, offices, other larger heated premises (sport facilities, conference rooms, shops, etc.)
Description	RIS H EC 3.0 and RIS H EC 3.0 SSK are designed for the ventilation of heated premises with an efficient cross-flow heat exchanger. There are 4 sizes (airflow interval 2000-5600 m³/h) with integrated electrical heaters or optional water heaters on the duct. Energy savings are contributed to by the cross-flow heat exchangers (with efficiency up to 60%), economical and silent EC fans, and high level of air tightness. Demand-level control options with CO₂ and humidity sensors. All units are supplied tested and ready to install.
Controls	Three remote control options are available: 1. Flex, Stouch or Ptouch remote controllers. 2. Building management system connections. 3. Remote control via PC MB-Gateway.
Features	› Energy-efficient and low-noise EC fans. › Efficient plate heat exchangers with up to 65% heat recovery. › Controlled airflow. › Supply air temperature control. › Water/electrical heating options. › Easy and quick mounting.
Construction	› Acoustic and thermal wall insulation – 50 mm. › Powder coated housing – RAL 7040. › Integrated pressure switch for filter pollution. › Heat exchanger anti-frost protection. › Motorized bypass damper. › Integrated electrical heater and optional (duct-based) water/DX heater/cooler. › Optional roof and outlet cover for outdoor versions. › Optional motorized supply and exhaust air dampers. › Panel filters M5/F7. › Stainless steel condensate tray. › Optional CO₂, pressure or airflow transmitters. › RIS 5500 H EC 3.0/EC 3.0 SSK delivered in two sections.



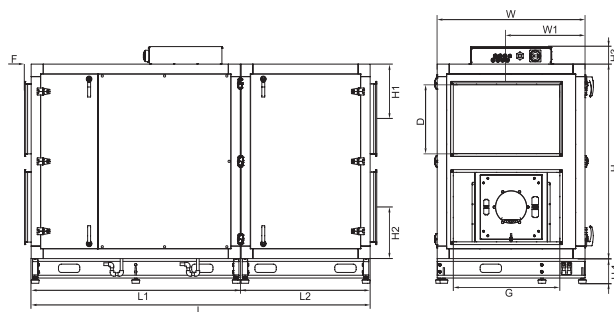
RIS 1900H EC 3.0



RIS 2500H EC 3.0, RIS 3500H EC 3.0



RIS 5500H EC 3.0



Unit	Dimensions [mm]													
	L	L ₁	L ₂	W	W ₁	D	G	ØD	H	H ₁	H ₂	H ₃	H ₄	F
RIS 1900 HE/HW EC 3.0	1800	-	-	802	401	-	-	400	1110	320	295	117	184	70
RIS 2500 HE/HW EC 3.0	2100	-	-	900	490	350	600	-	1355	387	327	108	180	51
RIS 3500 HE/HW EC 3.0	2100	-	-	900	490	350	600	-	1355	387	327	108	180	51
RIS 5500 HE/HW EC 3.0	2545	1570	975	1110	590	500	800	-	1400	395	370	127	180	51

Unit	Optional accessories											
	Ptouch Stouch MB-Gateway Flex	S-1141 S-RC02-F2 S-KFF-U	AKS SKG AP	AVA AVS EKA NV PH	SP Supply	SP Exhaust	SKS	SVS	Comfort Box	SSB Heating	SSB Cooling	EKS NV PH
RIS 1900HE EC 3.0	+	+	400	400	SM230A-TP	-	-	400	-	81	-	-
RIS 1900HW EC 3.0	+	+	400	400	NF230A	SM230A-TP	-	-	400	61	81	-
RIS 2500HE EC 3.0	+	-	-	-	-	-	600x350	-	+	-	-	600x350
RIS 2500HW EC 3.0	+	-	-	-	-	-	600x350	600x350	+	61	-	600x350
RIS 3500HE EC 3.0	+	-	-	-	-	-	600x350	-	+	-	-	600x350
RIS 3500HW EC 3.0	+	-	-	-	-	-	600x350	600x350	+	61	-	600x350
RIS 5500HE EC 3.0	+	-	-	-	-	-	800x500	-	+	-	-	800x500
RIS 5500HW EC 3.0	+	-	-	-	-	-	800x500	800x500	+	61	-	800x500

If ordering RIS 2500-5500HW EC 3.0 and SVS/AVS must be ordered water sensor (TJP 10K) and duct thermostat (C04C).

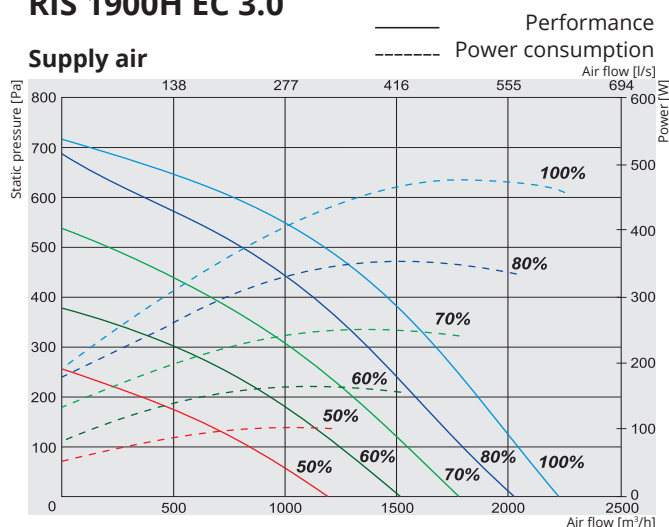
Heaters, coolers and RMG/VVP/VXP
data online selection program: www.solda.it

Accessories

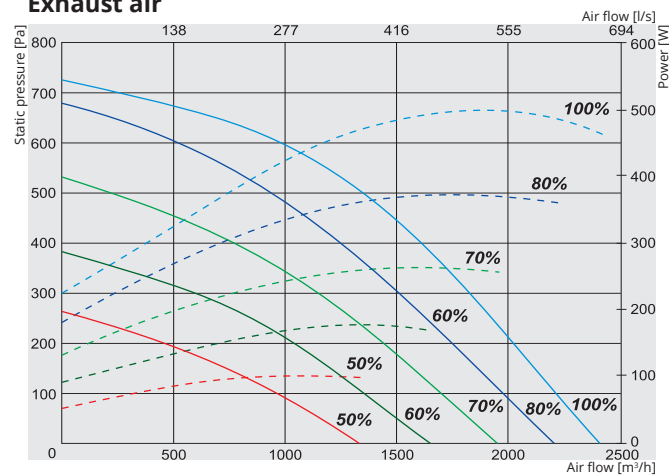
Remote controller  Ptouch p. 175	Control panel  FLEX p. 177	Remote controller  Stouch p. 176	Net module  MB-Gateway p. 178	Actuator for dampers  SP p. 210	Electrical duct pre-heater  EKA NV PH p. 201	Electrical duct pre-heater  EKS NV PH p. 203	
Thermic water valve actuator  SSB p. 195	Rectangular duct silencer  SKS p. 215	Comfort Box  CB p. 183	Water heater coil  SVS p. 190	Mixing point  RMG p. 196	2 and 3 way valves  VVP/VXP p. 197	Outlet cover 	Roof 

RIS 1900H EC 3.0

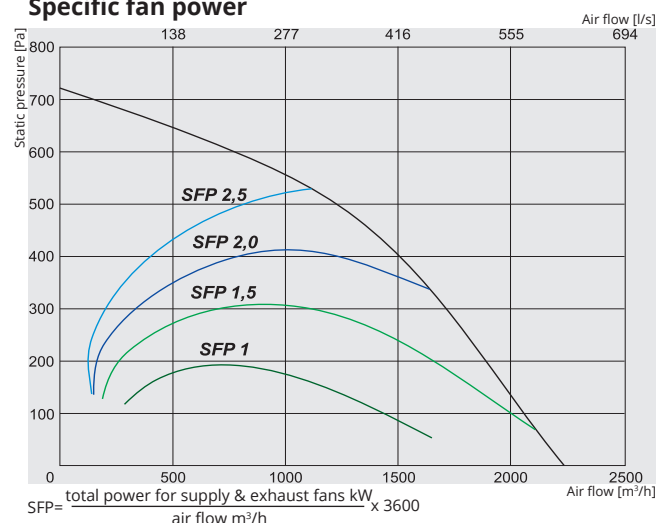
Supply air



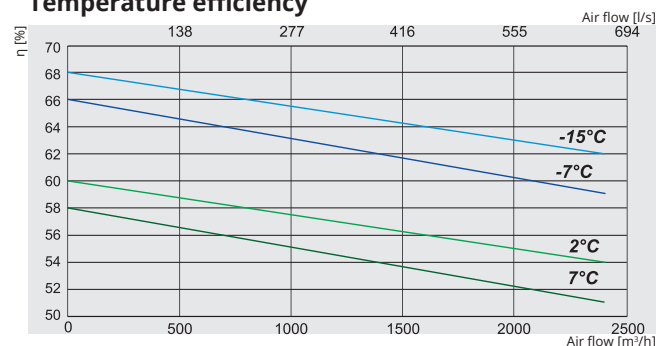
Exhaust air



Specific fan power



Temperature efficiency



RIS 1900H EC 3.0 (convertible) ver.



Exhaust air Extract air Outdoor air Supply air

Article No.	Version
GAGRIS1700_0106B	1900HE EC 3.0 Integrated electrical heater
GAGRIS1867_0107B	1900HW EC 3.0 Optional water heater

1900HE/HW EC 3.0

Water heater (optional) HW ver.	AVS / Comfort box 400
Heater	-phase/voltage [50Hz/VAC] ~3,400
	-power consumption [kW] 12
EC Fans	-phase/voltage [50Hz/VAC] ~1,230
exhaust	-power/current [kW/A] 0,48/3,11
	-fan speed [min ⁻¹] 2540
supply	-power/current [kW/A] 0,484/3,15
	-fan speed [min ⁻¹] 2540
Motor protection class	IP-54
Thermal efficiency	60%
Max power consumption	[kW/A] 13,93/29,82 0,97/6,26
Control board	PRV V2
Filter class	-exhaust M5
	supply F7
Thermal insulation	[mm] 50
Weight	[kg] 224
Operation	indoors/outdoors***

* Calculated wet efficiency.

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

***With proper roof mounted.

Temperature efficiency (balanced mass flow):
Extract air = 20°C/60%RH
Outdoor air = -15°C / -7°C / 2°C / 7°C

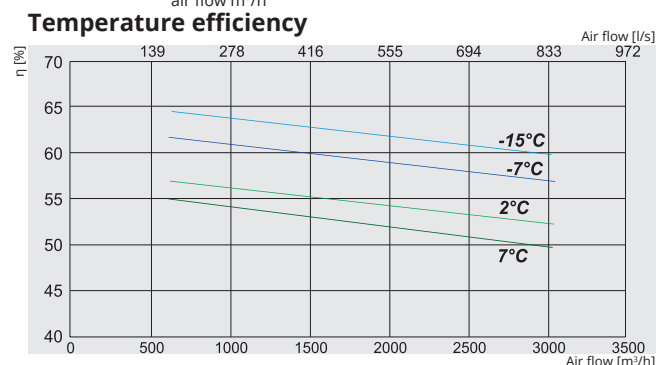
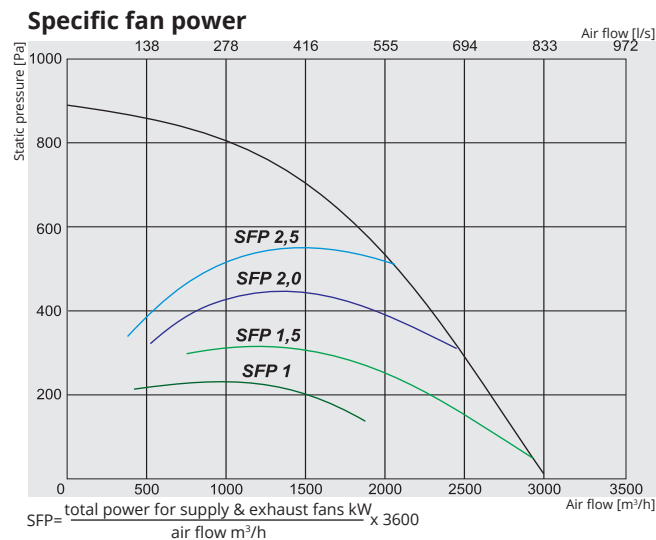
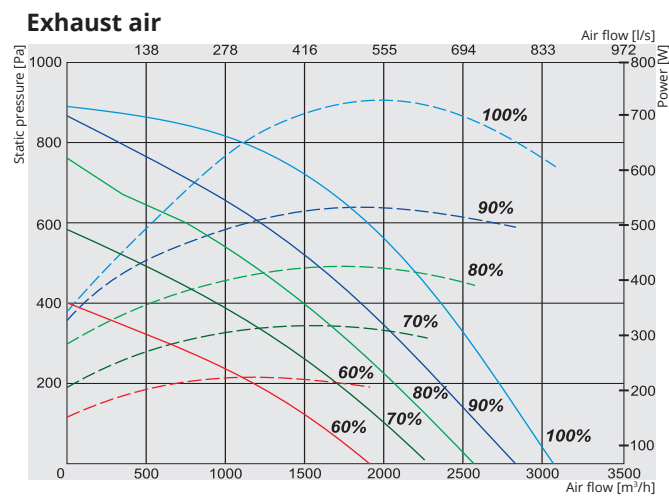
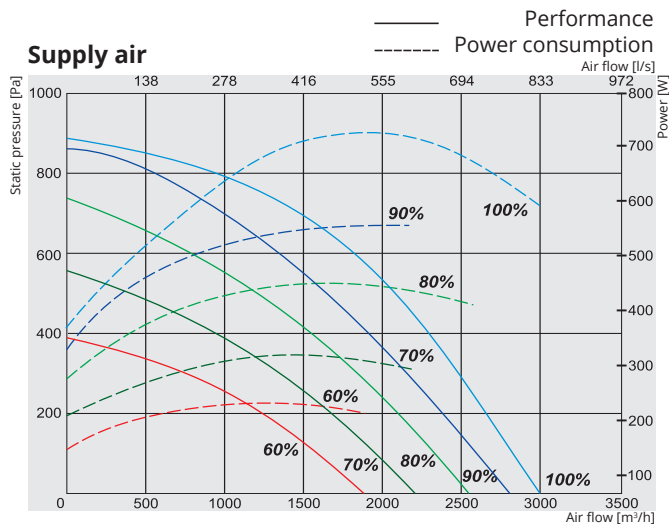
1900H EC 3.0	Lwa total, dB(A)	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	83	65	70	76	78	77	72	64
Extract	69	53	61	66	63	54	49	45
Surrounding	61	47	53	55	56	54	48	44

Measured at 1866 m³/h, 201 Pa

Certifications

EUROVENT certified
heat exchanger performance





RIS 2500H EC 3.0

Performance
Power consumption

RIS 2500H EC 3.0 (convertible) ver.



Exhaust air Extract air outdoor air Supply air

Article No.	Version
GAGRIS1804_0056B	2500HE EC 3.0 Integrated electrical heater
GAGRIS1857_0056B	2500HE EC 3.0 SSK Integrated electrical heater and motorized supply and exhaust dampers
GAGRIS1805_0057A	2500HW EC 3.0 Optional water heater
GAGRIS1858_0057A	2500HW EC 3.0 SSK Optional water heater and motorized supply and exhaust dampers

2500HE/HW EC 3.0

Water heater (optional) HW ver. SVS 600x350 or Comfort Box 600x350

Heater	-phase/voltage [50Hz/VAC]	~3,400
	-power consumption [kW]	18
EC Fans	-phase/voltage [50Hz/VAC]	~1,230
exhaust	-power/current [kW/A]	0,722/3,19
	-fan speed [min ⁻¹]	2800
supply	-power/current [kW/A]	0,722/3,19
	-fan speed [min ⁻¹]	2800
Motor protection class		IP-54
Thermal efficiency		60%
Max power consumption	[kW/A]	19,45/32,48 1,45/6,48
Automatic control		PRV V2
Filter class	-exhaust	M5
	supply	F7
Thermal insulation	[mm]	50
Weight	[kg]	340
Operation		indoors/outdoors***

* Calculated wet efficiency.

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

***With proper roof mounted.

Temperature efficiency (balanced mass flow) :
Extract air = 20°C/60%RH
Outdoor air = -15°C / -7°C / 2°C / 7°C

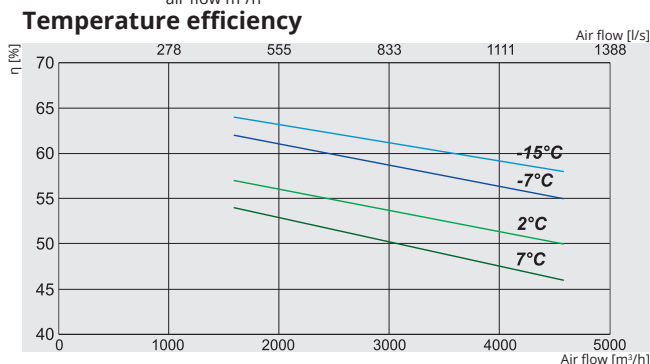
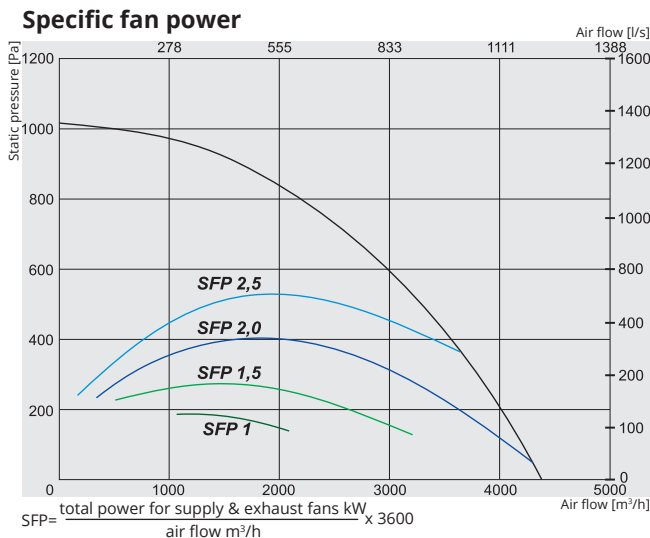
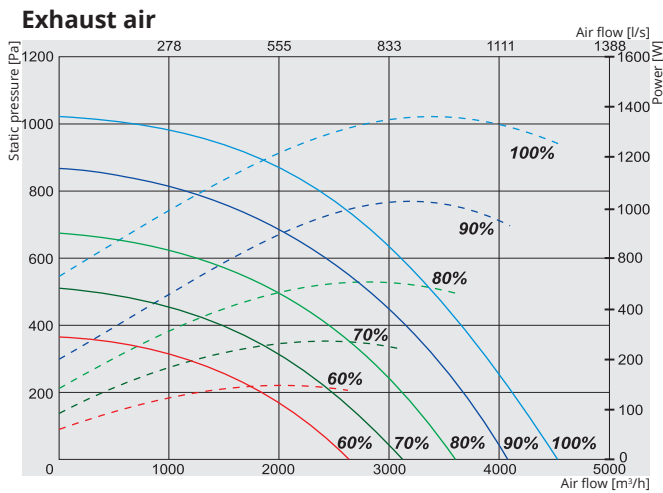
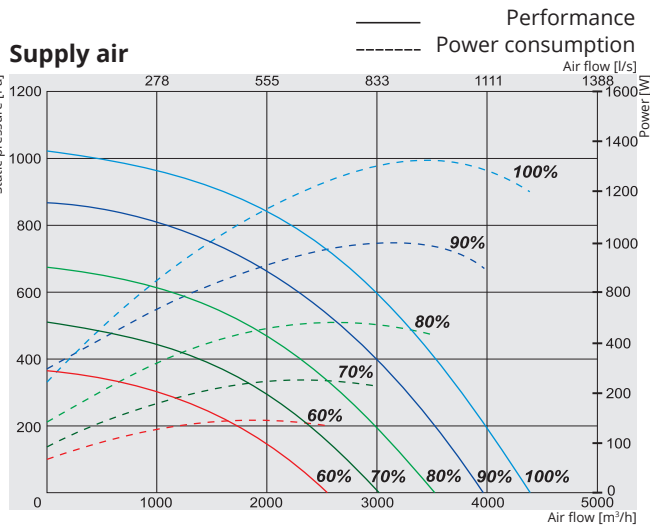
2500H EC 3.0	Lwa total, dB(A)	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	84	65	77	78	79	74	68	67
Extract	66	44	63	61	54	52	46	40
Surrounding	62	45	57	59	55	51	45	43

Measured at 2757 m³/h, 121 Pa

Certifications

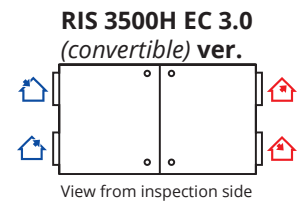
EUROVENT certified
heat exchanger performance





RIS 3500H EC 3.0

Performance
Power consumption



Exhaust air Extract air Outdoor air Supply air

Article No.	Version
GAGRIS1806_0058B	3500HE EC 3.0 Integrated electrical heater
GAGRIS1859_0058B	3500HE EC 3.0 SSK Integrated electrical heater and motorized supply and exhaust dampers
GAGRIS1807_0059A	3500HW EC 3.0 Optional water heater
GAGRIS1860_0059A	3500HW EC 3.0 SSK Optional water heater and motorized supply and exhaust dampers

3500HE/HW EC 3.0

Water heater (optional) HW ver.	SVS 600x350 or Comfort Box 600x350
Heater	-phase/voltage [50Hz/VAC] ~3,400
	-power consumption [kW] 24
EC Fans	-phase/voltage [50Hz/VAC] ~1,230
exhaust	-power/current [kW/A] 1,37/6,12
	-fan speed [min ⁻¹] 2390
supply	-power/current [kW/A] 1,41/6,35
	-fan speed [min ⁻¹] 2390
Motor protection class	IP-54
Thermal efficiency	60%
Max power consumption	[kW/A] 26,79/47,55 2,79/12,57
Automatic control	PRV V2
Filter class	-exhaust M5
	supply F7
Thermal insulation	[mm] 50
Weight	[kg] 340 337
Operation	indoors/outdoors***

* Calculated wet efficiency.

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

***With proper roof mounted.

Temperature efficiency (balanced mass flow):
Extract air = 20°C/60%RH
Outdoor air = -15°C / -7°C / 2°C / 7°C

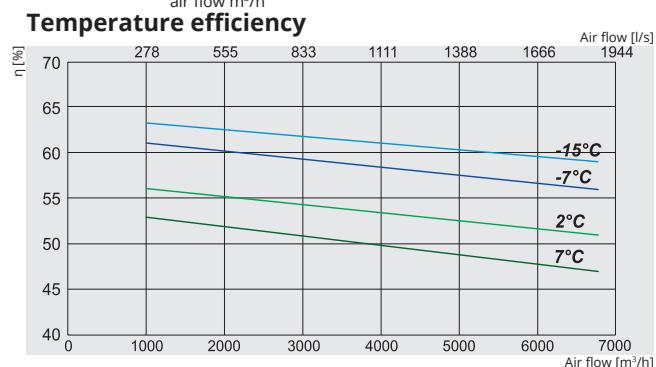
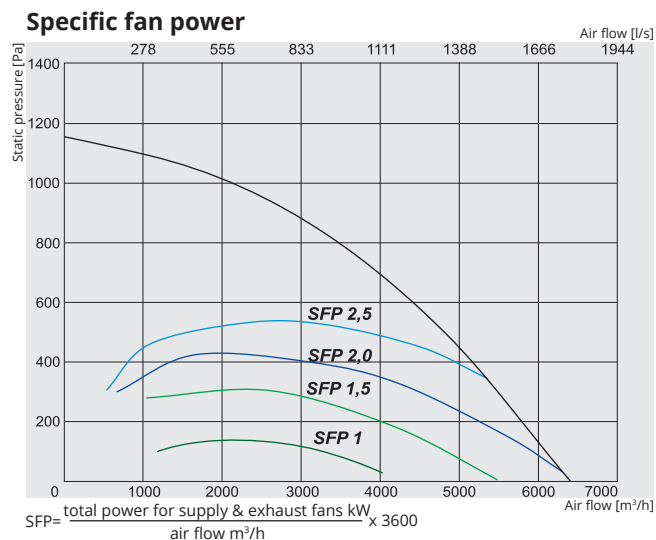
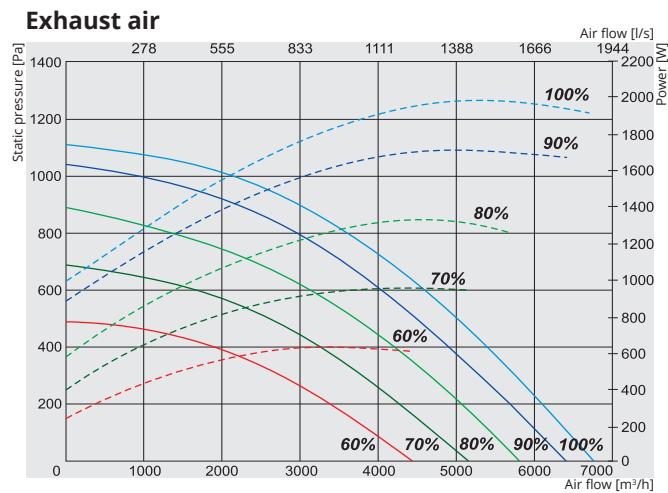
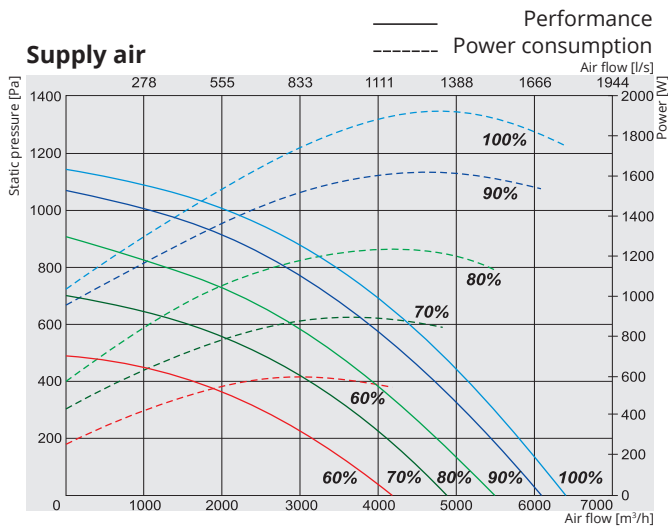
3500H EC 3.0	Lwa total, dB(A)	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	86	63	79	80	81	77	76	64
Extract	72	60	69	66	62	62	54	43
Surrounding	68	57	65	62	58	55	52	46

Measured at 4006 m³/h, 198 Pa

Certifications

EUROVENT certified
heat exchanger performance





RIS 5500H EC 3.0

Performance
Power consumption

RIS 5500HR EC 3.0

Air intake side (R- right)



View from inspection side

Exhaust air Extract air Outdoor air Supply air

Article No.	Version
GAGRIS1808_0060B	5500HER EC 3.0 Right-hand maintenance version with integrated electrical heater
GAGRIS1861_0060B	5500HER EC 3.0 SSK Integrated electrical heater and motorized supply and exhaust dampers
GAGRIS1809_0061B	5500HWR EC 3.0 Right-hand maintenance version prepared for optional water heater
GAGRIS1862_0061B	5500HWR EC 3.0 SSK Optional water heater and motorized supply and exhaust dampers

5500HE / HW EC 3.0

Water heater (optional) HW ver.	SVS 800x500 or Comfort Box 800x500
Heater	-phase/voltage [50Hz/VAC] ~3,400
	-power consumption [kW] 30
EC Fans	-phase/voltage [50Hz/VAC] ~3,400
exhaust	-power/current [kW/A] 2,031/3,24
	-fan speed [min ⁻¹] 2180
supply	-power/current [kW/A] 2,05/3,3
	-fan speed [min ⁻¹] 2180
Motor protection class	IP-54
Thermal efficiency	60%
Max power consumption	[kW/A] 34,09/50,04 4,09 /6,64
Automatic control	PRV V2
Filter class	-exhaust M5
	supply M5
Thermal insulation	[mm] 50
Weight	[kg] 480 477
Operation	indoors/outdoors***

* Calculated wet efficiency.

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

***With proper roof mounted.

Temperature efficiency (balanced mass flow) :
Extract air = 20°C/60%RH
Outdoor air = -15°C / -7°C / 2°C / 7°C

5500H EC 3.0	Lwa total, dB(A)	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	89	70	81	83	85	81	77	73
Extract	75	65	72	69	68	62	53	52
Surrounding	79	60	72	74	73	69	64	61

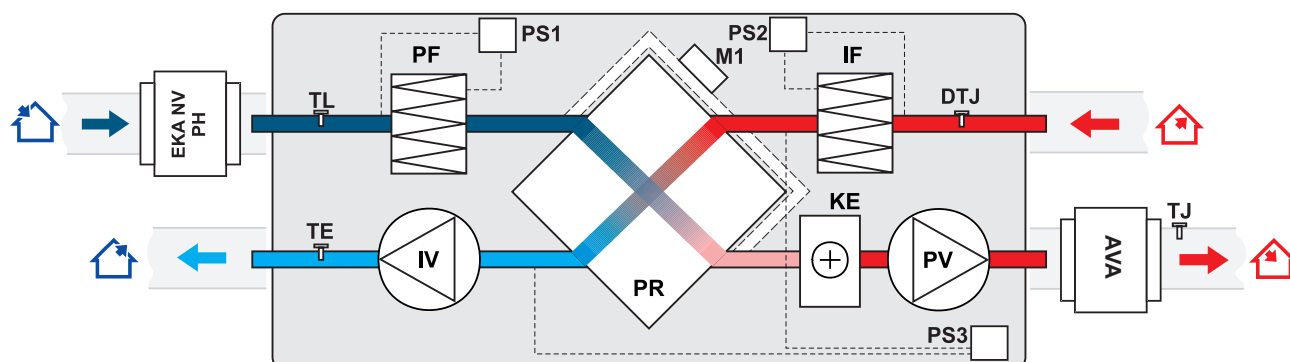
Measured at 5788 m³/h, 211 Pa

Certifications

EUROVENT certified
heat exchanger performance



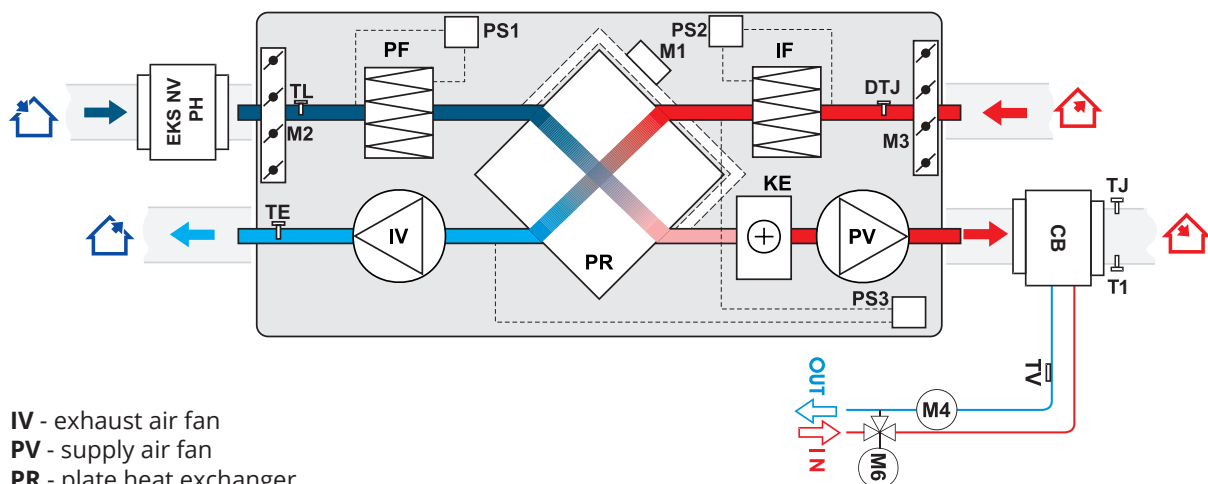
RIS 1900HE EC 3.0 (horizontal) version with electrical heater



IV - exhaust air fan
PV - supply air fan
PR - plate heat exchanger
KE - electrical heater
PF - filter for supply air
IF - filter for extract air
DTJ - humidity + temperature sensor
AVA - optionally supplied water cooler

TE - temperature sensor for exhaust air
TL - temperature sensor for fresh air
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
EKA NV PH - optional fresh air pre-heater

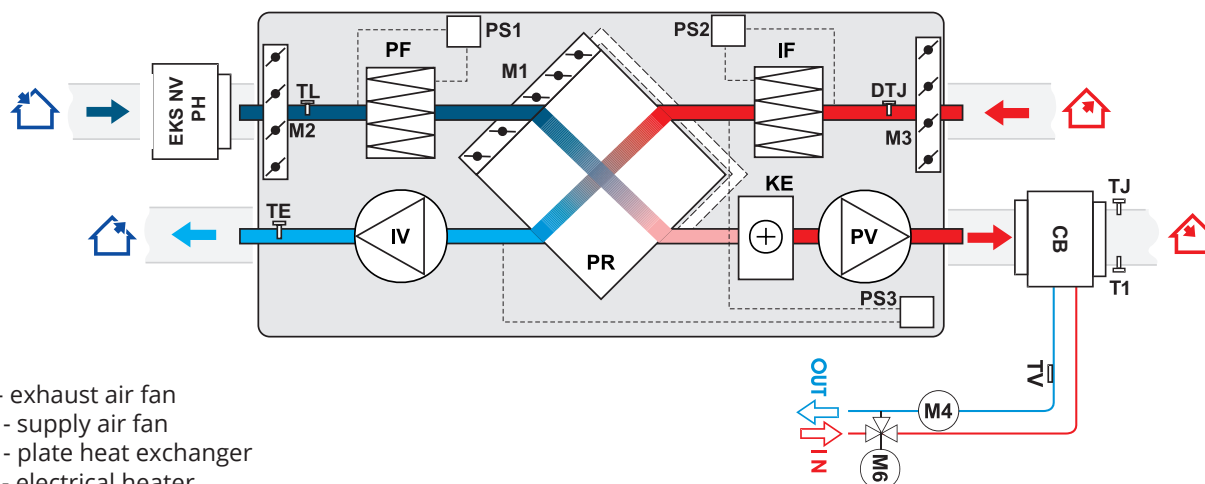
RIS 2500HE EC 3.0 / 3500HE EC 3.0 (horizontal) versions with electrical heater



IV - exhaust air fan
PV - supply air fan
PR - plate heat exchanger
KE - electrical heater
PF - filter for supply air
IF - filter for extract air
M2 - supply air damper (GAGRIS1857_0056B)
M3 - extract air damper (GAGRIS1857_0056B)
TV - antifrost sensor
T1 - antifrost thermostat
M6 - optionally supplied mixing valve and motor
M4 - water heater circulation pump

DTJ - humidity + temperature sensor
TE - temperature sensor for exhaust air
TL - temperature sensor for fresh air
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
EKS NV PH - optional fresh air pre-heater

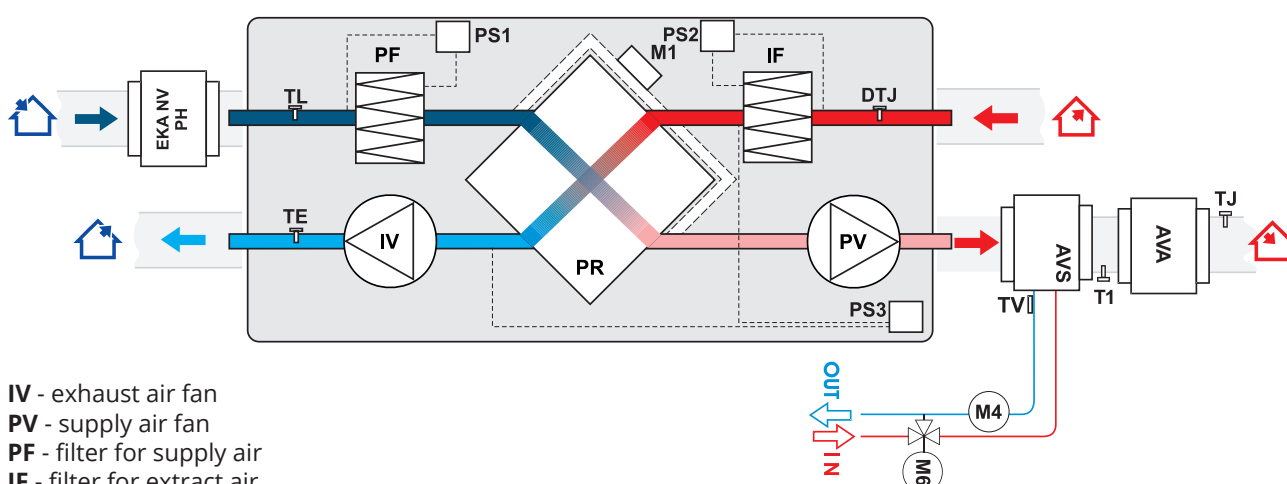
RIS 5500HE EC 3.0 (horizontal) version with electrical heater



- IV - exhaust air fan
- PV - supply air fan
- PR - plate heat exchanger
- KE - electrical heater
- PF - filter for supply air
- IF - filter for extract air
- M2 - supply air damper (GAGRIS1861_0060B)
- M3 - extract air damper (GAGRIS1861_0060B)
- M6 - optionally supplied mixing valve and motor
- M4 - water heater circulation pump
- PS1 - supply air differential pressure switch
- PS2 - extract air differential pressure switch
- PS3 - heat exchanger antifrost pressure switch

- EKS NV PH - optional fresh air pre-heater
- DTJ - humidity + temperature sensor
- TE - temperature sensor for exhaust air
- TL - temperature sensor for fresh air
- TJ - temperature sensor for supply air
- TV - antifrost sensor
- T1 - antifrost thermostat
- M1 - actuator of by-pass damper

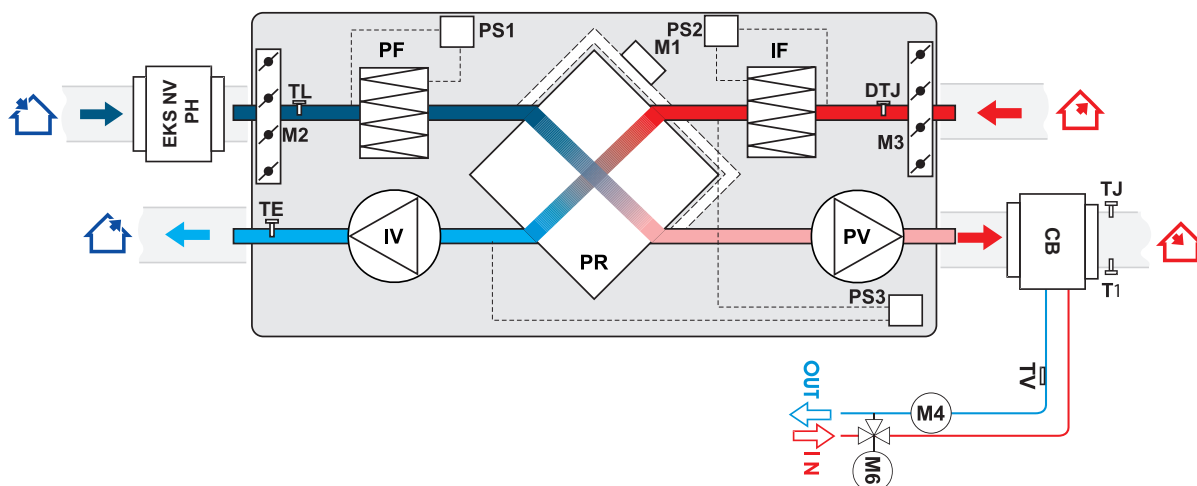
RIS 1900HW EC 3.0 (horizontal) version with optional water heater



- IV - exhaust air fan
- PV - supply air fan
- PF - filter for supply air
- IF - filter for extract air
- PR - plate heat exchanger
- DTJ - humidity + temperature sensor
- AVS - optionally supplied water heater
- AVA - optionally supplied water cooler
- TV - antifrost sensor
- T1 - antifrost thermostat
- M4 - water heater circulation pump
- M6 - optionally supplied mixing valve and motor

- TE - temperature sensor for exhaust air
- TJ - temperature sensor for supply air
- TL - temperature sensor for fresh 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
- EKA NV PH - optional fresh air pre-heater

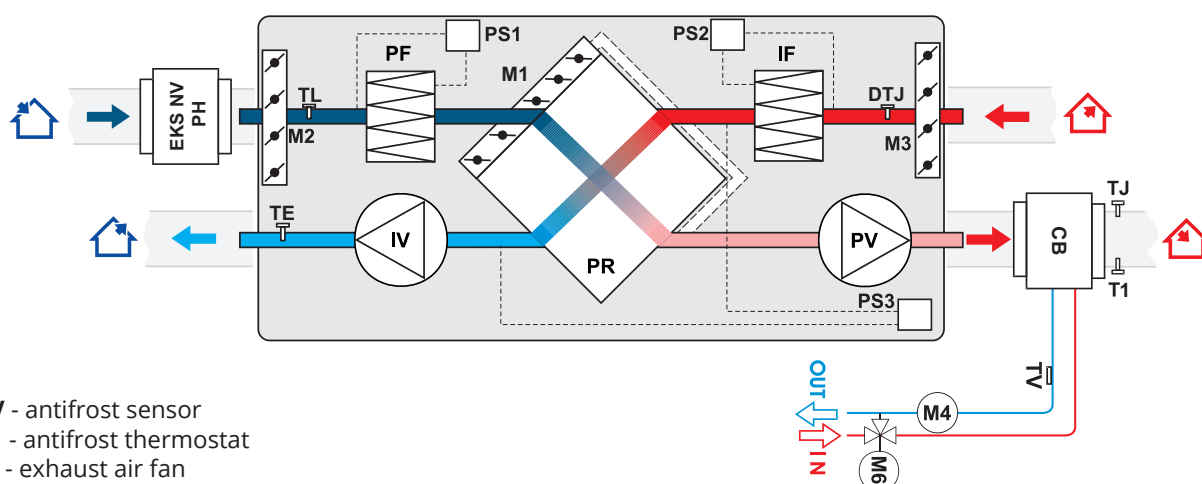
RIS 2500HW EC 3.0 / 3500HW EC 3.0 (horizontal) versions with optional water heater



IV - exhaust air fan
PV - supply air fan
PF - filter for supply air
IF - filter for extract air
PR - plate heat exchanger
DTJ - humidity + temperature sensor
M2 - supply air damper (GAGRIS1858_0057A)
M3 - extract air damper (GAGRIS1858_0057A)
M6 - optionally supplied mixing valve and motor
M4 - water heater circulation pump

TV - antifrost sensor
TE - temperature sensor for exhaust air
T1 - antifrost thermostat
TL - temperature sensor for fresh air
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
EKS NV PH - optional fresh air pre-heater

RIS 5500HW EC 3.0 (horizontal) version with optional water heater



TV - antifrost sensor
T1 - antifrost thermostat
IV - exhaust air fan
PV - supply air fan
PF - filter for supply air
IF - filter for extract air
PR - plate heat exchanger
DTJ - humidity + temperature sensor
M2 - supply air damper (GAGRIS1862_0061B)
M3 - extract air damper (GAGRIS1862_0061B)
M6 - optionally supplied mixing valve and motor
M4 - water heater circulation pump

TE - temperature sensor for exhaust air
TL - temperature sensor for fresh air
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
EKS NV PH - optional fresh air pre-heater

FUNCTIONS			
Description of the functions		PRV V2	
		RIS EC 3.0	
		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	✓	✓
	CO ₂ 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 controler

2 Only sensors