

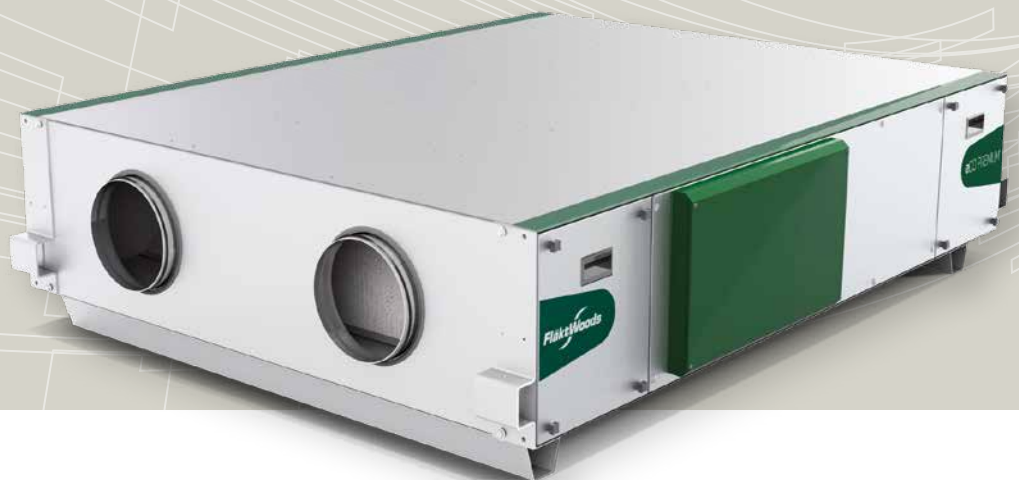
 AIR COMFORT

AIR TREATMENT

ENERGY RECOVERY

eCO PREMIUM™ ENERGY RECOVERY UNIT

» TECHNICAL INSTRUCTION





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DESCRIPTION

APPLICATIONS

eCO PREMIUM™ is a compact unit in six sizes that require minimal space and cover a flow range up to 0,9 m³ /s. Compact dimensions and low noise data provides great flexibility in the placement of the unit. The unit is supplied with direct drive on both supply and exhaust fans, compact supply and extract air filters and a counterflow heat exchanger.

- All duct connections are on side of the unit.
- High efficiency counterflow heat exchanger with Thermo Ice® defrosting and 100% bypass.
- Built in post-heater (water or electrical) and or preheater as option in colder climate
- Casing leakage L2 as standard
- The CURIO® control Plug & play system is integrated with the unit and is ready for use with a large number of functions.
- Communication Modbus RS 485 is standard (TCP/IP as option)
- As an option On Demand ventilation is available via PIR (occupancy) or CO₂ sensors
- Acoustic version is available when there is a high demand on low sound emission
- Optional accessories available for installation outside.

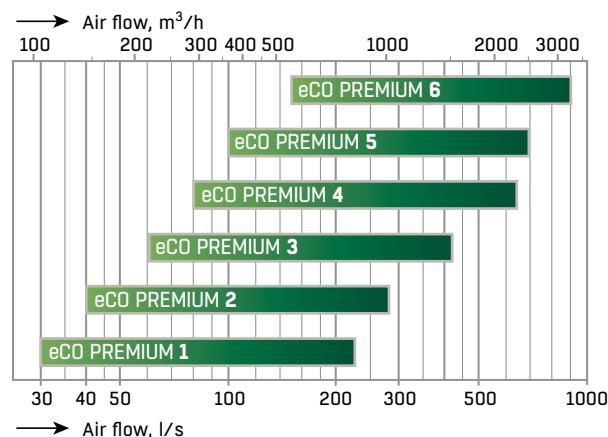
QUALITY & ENVIRONMENT

All units and components from Fläkt Woods are designed, tested and manufactured in accordance with applicable standards including the quality assurance system ISO 9001, the environmental management system ISO 14001 and the Energy Directive 2009/125/EC (LOT 6) for RVU and NRVU.

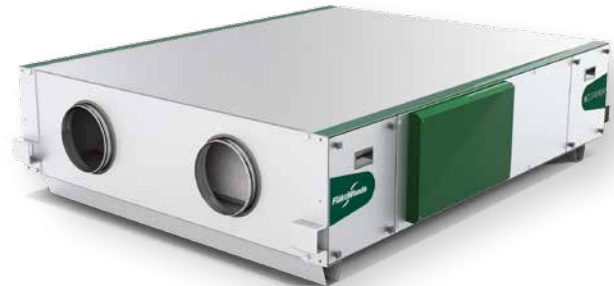
PRODUCT DATA - MAIN CODE

SIZE *REDA-a-b-cc-d-e-ff*

The eCO PREMIUM™ unit is available in 6 optimized sizes.



* Essential version with G4 filters at 100 Pa external pressure.



INSPECTION SIDE AND ACOUSTIC CASING

REDA-a-b-cc-d-e-ff

All casing sizes are available with left and right side inspection side. Size 1-4 are available in acoustic version with left or right inspection side. The Acoustic version is built to minimize the sound emission from the unit (lower break out noise level).

UNIT VERSIONS

REDA-a-b-cc-d-e-ff

eCO PREMIUM™ range is available in 3 versions:

- Essential:** Standard unit with plate heat exchanger and filters fitted
- Enhanced:** Essential version with Post heater fitted (water or electric)
- Elite:** Enhanced version with Pre heater (electric), duct to install in ductwork

FILTERS

REDA-a-b-cc-d-e-ff

Filters are included to provide protection to other components (i.e., exchanger/fans) and are mounted within runners for easy fitting/removal. ECO PREMIUM™ unit can be equipped with the following filter options.

- G4 class to the fresh air intake and return air
- F7 class to the fresh air intake and M5 on the return air

FAN SPEED CONTROL

REDA-a-b-cc-d-e-ff

Different fan speed control is available to individually adjust the airflow for supply and exhaust side. The following variants can be selected and will automatic be handled by the CURIO® Control.

- **VAV: Variable Air Volume.** Fan speeds are set individually between 30-100%
- **COP.** Constant Pressure
- **CAV.** Constant Air Volume
- **VAV+CO₂.** Fan speeds are set individually, overrides by the demand ventilation (CO₂) when the set PPM value is exceeded.



DESCRIPTION

ESSENTIAL VERSION – UNIT DESIGN

CASING

The unit is made of self-supporting double skin galvanized sheet steel, insulated with 25 mm mineral wool (35 kg/m³). All panels have plastic handles integrated in the outer panel. The filter panel (service side) has screws with plastic head for easy access (by hand) where other panels has fasteners that requires screwdriver. The unit is supplied on a stable base which can be fitted with feet.

- Corrosivity class C3 (BSK 94/99 and ISO 12944-2)
- Leakage class L2 (EN 1886))

CASING COMPONENTS

FILTER

Filter for supply and extract air are made of compact fiberglass optimized for low pressure drop. G4 or F7 class is available on the supply air and G4 or M5 on the extract air. The filters are pressed against the runners inside the casing for tightness and easy fitting/removal.

PLATE HEAT EXCHANGER AND SYSTEM THERMO ICE®

In apartment buildings and hotels, it is important with energy recovery systems which is easy care and keeps the energy costs low, and in some cases avoids cross-contamination. eCO PREMIUM™ uses a Eurovent certified counterflow heat exchanger and provides over 85% thermal efficiency according EN 308. During normal ventilation there is no need for defrosting but when the relative humidity of the extract air is high and the outdoor temperature lower than -5° C there may be a risk of frosting. eCO PREMIUM™ uses a defrost system Thermo Ice* that has undergone complete laboratory tests and is activated only when the efficiency of the core has been reduced to a certain level due to the frost. The heat exchanger is divided in sections for easy removing and cleaning.

**Thermo Ice is a demand controlled defrosting function that ensures minimal energy loss and is only activated when there is frost built up inside the core.*

FAN

eCO PREMIUM™ gives you top performance and overall eco-nomy combined with low noise levels. The high efficiency fans are powered by energy saving EC motors. The fan speed can be adjusted independently by the unit's CURO® control system and have a built in alarm.

UNIT VERSION: ENHANCED AND ELITE

WATER POST HEATER (ENHANCED & ELITE)

The air heater for water heating consists of copper pipe and aluminum fins. Pipe connection Ø15 mm. Contact sensors for frost protection are included in the control equipment. Recommended for outdoor temperatures down to -5° C. Max. operating pressure 1.6 MPa

ELECTRIC POST HEATER (ENHANCED & ELITE)

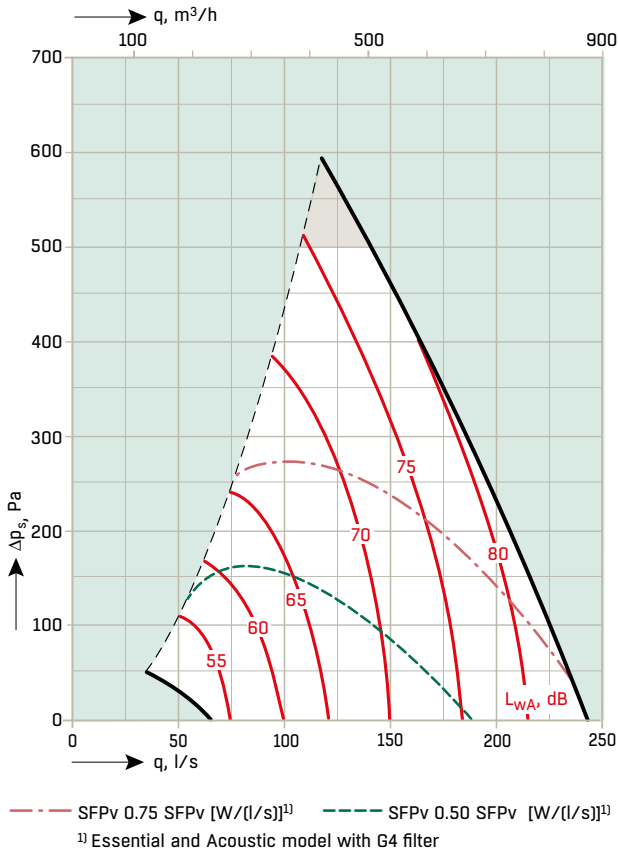
The electric heater has built-in control equipment for power control. The element is made of stainless steel. The heater has two thermal overload protection devices, one with an automatic reset and one with a manual reset accessible from the outside of the unit. Recommended for outdoor temperatures down to -5° C.

ELECTRIC PRE HEATER (ELITE)

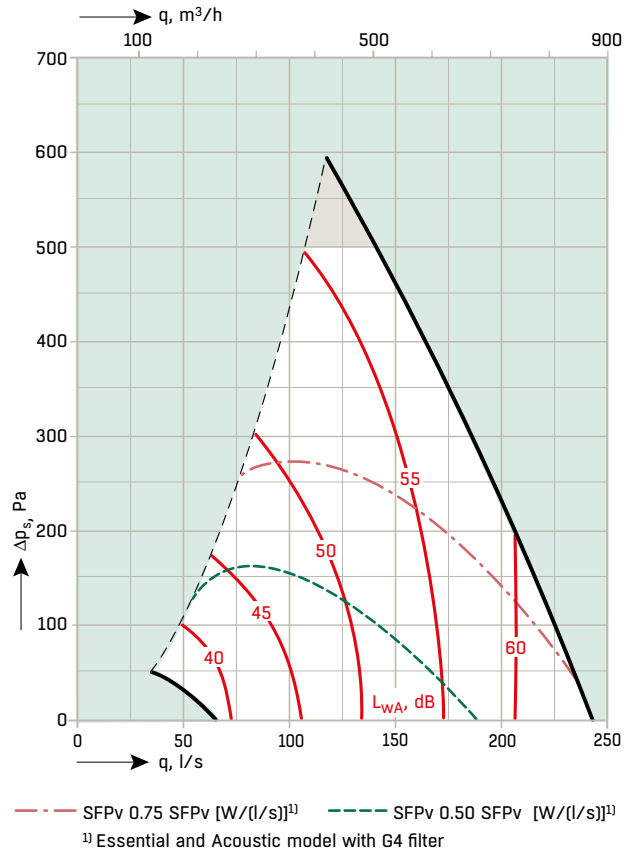
The electric pre heater is recommended when outdoor temperatures is between -5° C to -15° C, when you don't want to have supply fans stopped due to defrosting. The pre heater is a stand alone device without connection to the Curro® control system. The heater has built-in control equipment. The element is made of stainless steel. The heater has two thermal overload protection devices, one with an automatic reset and one with a manual reset accessible from the outside of the cabinet.

TECHNICAL DATA - SIZE 1

SUPPLY AIR FAN



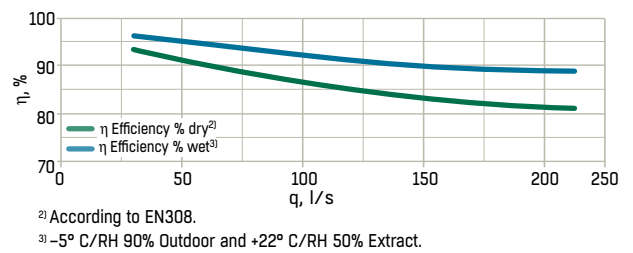
EXTRACT AIR FAN



SYSTEM OVERVIEW

The diagrams show the available external pressure for the duct system. The weighted sound power noise levels given in dB(A) apply to ducts on the supply fan's outlet side (diagram 1) and extract fans' inlet side (diagram 2). The SFP_v values for each fan are calculated according to clean filters. SFP_v is calculated for the complete unit and includes power to both supply and extract fan divided by either the supply or extract volume whichever is the greater.

TEMPERATURE EFFICIENCY



ELECTRICAL DATA

External fuse: Recommended 10 A.
 The mains supply cable must be fitted with an external safety switch, which can cut the current to the entire unit.
 Ambient temperature during operation -20° - +40°C

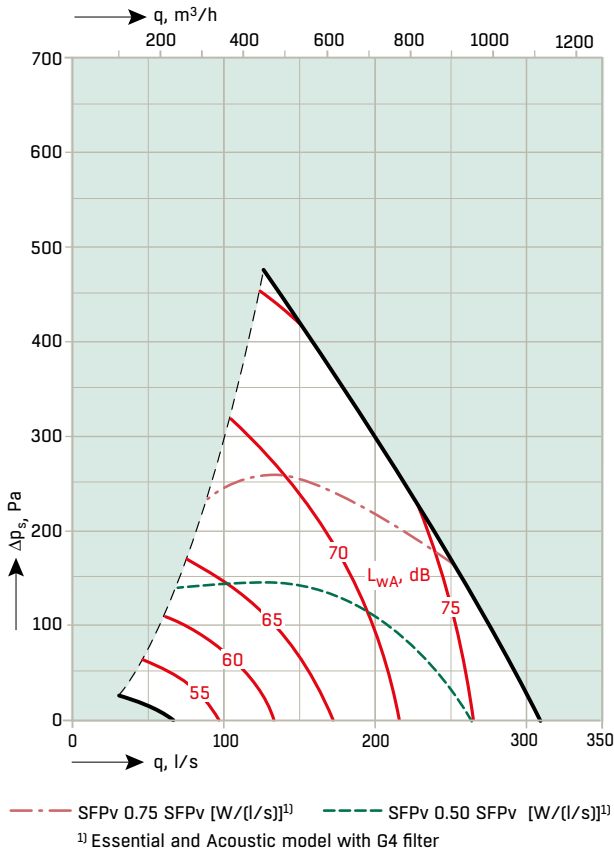
FILTER

Supply air: 550 x 307 x 48 mm, G4 alt F7
 Extract air: 550 x 307 x 48 mm, G4 alt M5

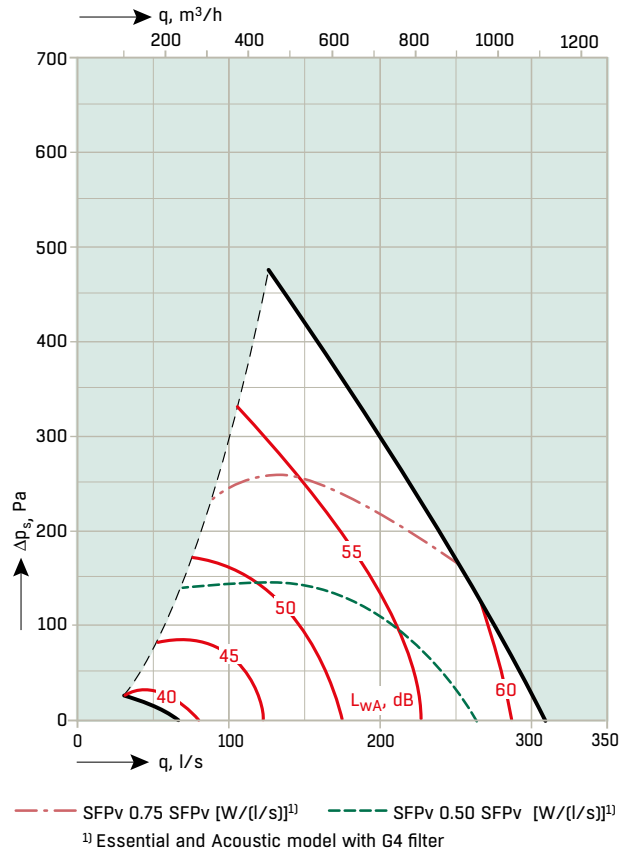
Unit Version	Fan Motors Power, 2 fans kW	Post Heater kW	Rated Power kW	Rated Current A	Electrical Supply V/Ph/Hz
Essential Enhanced HW Elite HW	0.338	-	0.358	2.8	230/1/50
Enhanced HE Elite HE	0.338	1.0	1.358	7.1	230/1/50

TECHNICAL DATA - SIZE 2

SUPPLY AIR FAN



EXTRACT AIR FAN



SYSTEM OVERVIEW

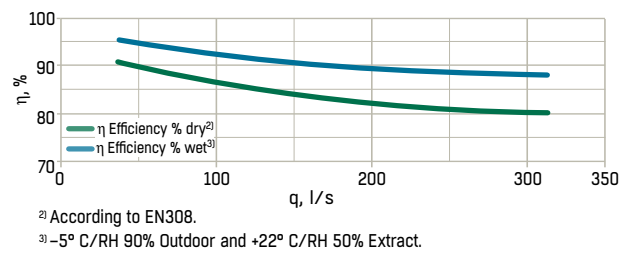
The diagrams show the available external pressure for the duct system. The weighted sound power noise levels given in dB(A) apply to ducts on the supply fan's outlet side (diagram 1) and extract fans' inlet side (diagram 2). The SFP_v values for each fan are calculated according to clean filters. SFP_v is calculated for the complete unit and includes power to both supply and extract fan divided by either the supply or extract volume whichever is the greater.

ELECTRICAL DATA

External fuse: Recommended 10 A.
 The mains supply cable must be fitted with an external safety switch, which can cut the current to the entire unit.
 Ambient temperature during operation $-20^\circ - +40^\circ C$

Unit Version	Fan Motors Power, 2 fans kW	Post Heater kW	Rated Power kW	Rated Current A	Electrical Supply V/Ph/Hz
Essential Enhanced HW Elite HW	0.34	-	0.36	2.9	230/1/50
Enhanced HE Elite HE	0.34	1.0	1.36	7.2	230/1/50

TEMPERATURE EFFICIENCY

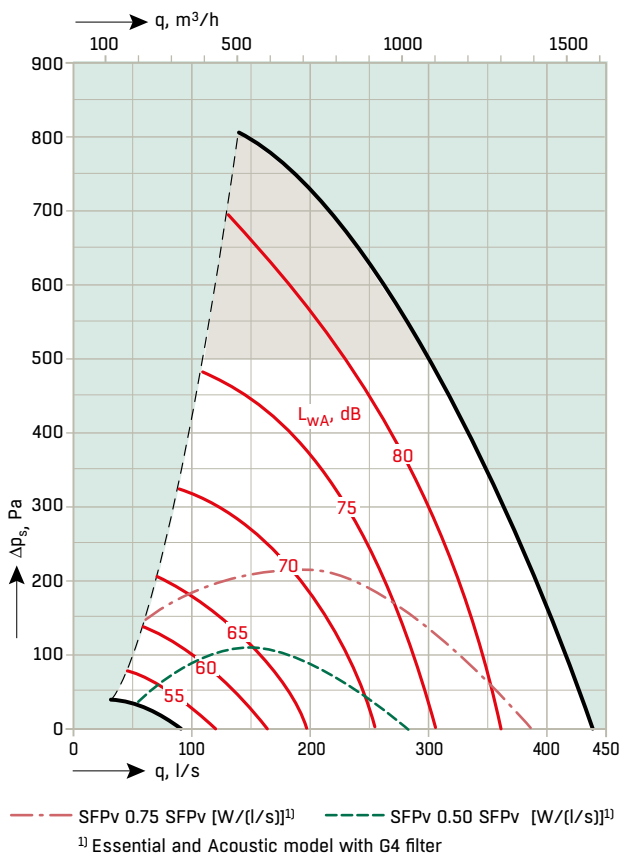


FILTER

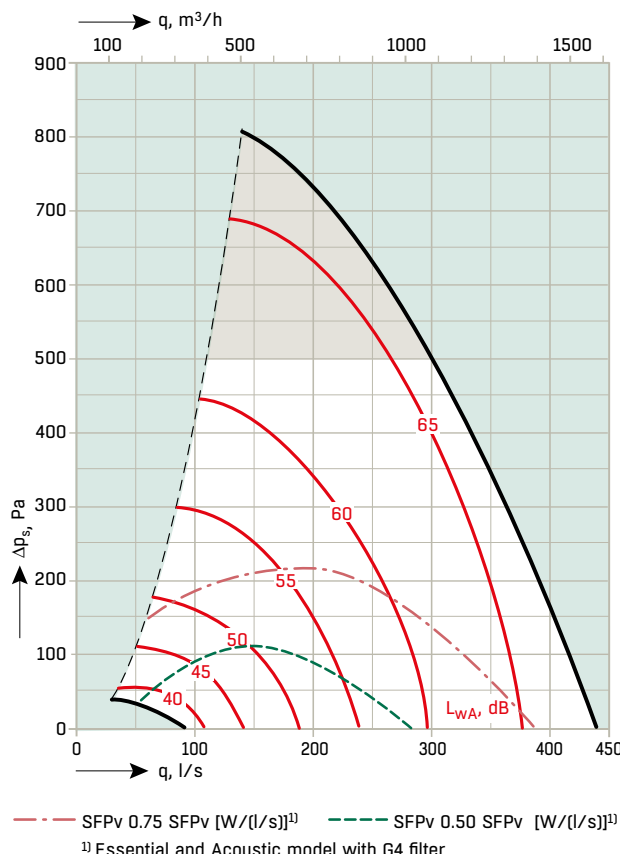
Supply air: 550 x 307 x 48 mm, G4 alt F7
 Extract air: 550 x 307 x 48 mm, G4 alt M5

TECHNICAL DATA - SIZE 3

SUPPLY AIR FAN



EXTRACT AIR FAN



SYSTEM OVERVIEW

The diagrams show the available external pressure for the duct system. The weighted sound power noise levels given in dB(A) apply to ducts on the supply fan's outlet side (diagram 1) and extract fans' inlet side (diagram 2). The SFP_v values for each fan are calculated according to clean filters. SFP_v is calculated for the complete unit and includes power to both supply and extract fan divided by either the supply or extract volume whichever is the greater.

ELECTRICAL DATA

External fuse: Recommended 10 A without electrical heater.

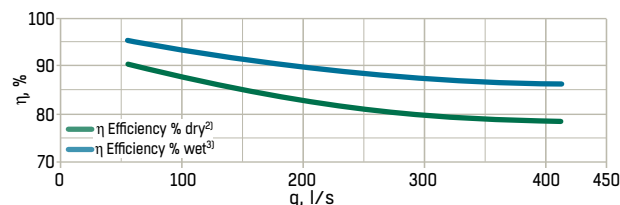
Recommended 16 A with electrical heater.

The mains supply cable must be fitted with an external safety switch, which can cut the current to the entire unit.

Ambient temperature during operation -20° - +40°C

Unit Version	Fan Motors Power, 2 fans kW	Post Heater kW	Rated Power kW	Rated Current A	Electrical Supply V/Ph/Hz
Essential Enhanced HW	0.77	-	0.79	5.1	230/1/50
Elite HW	0.77	1.5	2.29	11.6	230/1/50

TEMPERATURE EFFICIENCY



²⁾ According to EN308.

³⁾ -5° C/RH 90% Outdoor and +22° C/RH 50% Extract.

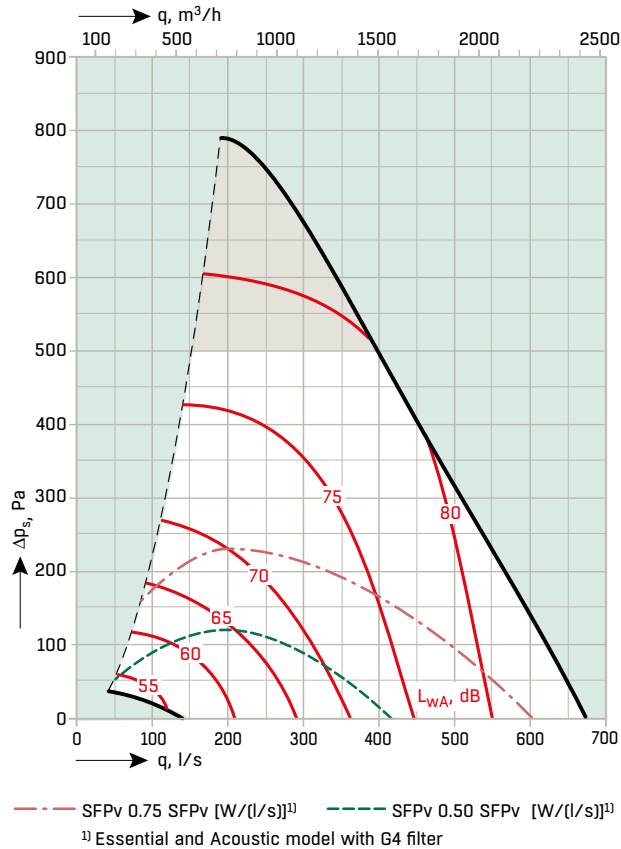
FILTER

Supply air: 2 x 348 x 352 x 48 mm, G4 alt F7

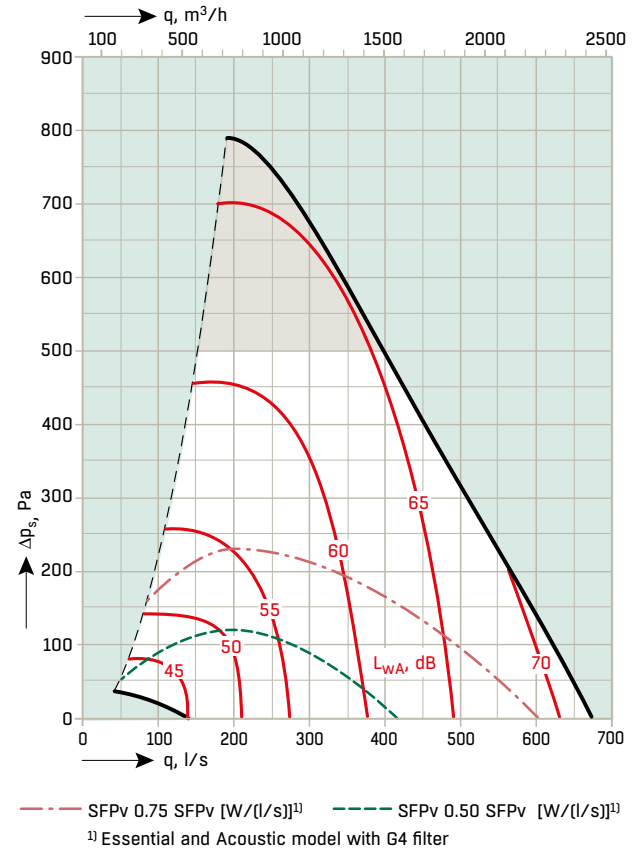
Extract air: 2 x 348 x 352 x 48 mm, G4 alt M5

TECHNICAL DATA - SIZE 4

SUPPLY AIR FAN



EXTRACT AIR FAN



SYSTEM OVERVIEW

The diagrams show the available external pressure for the duct system. The weighted sound power noise levels given in dB(A) apply to ducts on the supply fan's outlet side (diagram 1) and extract fans' inlet side (diagram 2). The SFP_v values for each fan are calculated according to clean filters. SFP_v is calculated for the complete unit and includes power to both supply and extract fan divided by either the supply or extract volume whichever is the greater.

ELECTRICAL DATA

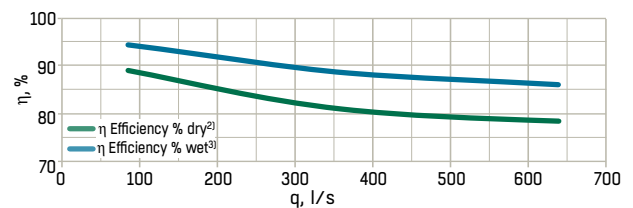
External fuse: Recommended 10 A without electrical heater.
 Recommended 16 A with electrical heater.

The mains supply cable must be fitted with an external safety switch, which can cut the current to the entire unit.

Ambient temperature during operation $-20^\circ - +40^\circ C$

Unit Version	Fan Motors Power, 2 fans kW	Post Heater kW	Rated Power kW	Rated Current A	Electrical Supply V/Ph/Hz
Essential Enhanced HW	1.0	-	1.02	4.5	230/1/50
Elite HW	1.0	-	1.02	4.5	230/1/50
Enhanced HE	1.0	2.0	3.02	13.2	230/1/50
Elite HE	1.0	2.0	3.02	13.2	230/1/50

TEMPERATURE EFFICIENCY



²⁾ According to EN308.

³⁾ $-5^\circ C/RH 90\%$ Outdoor and $+22^\circ C/RH 50\%$ Extract.

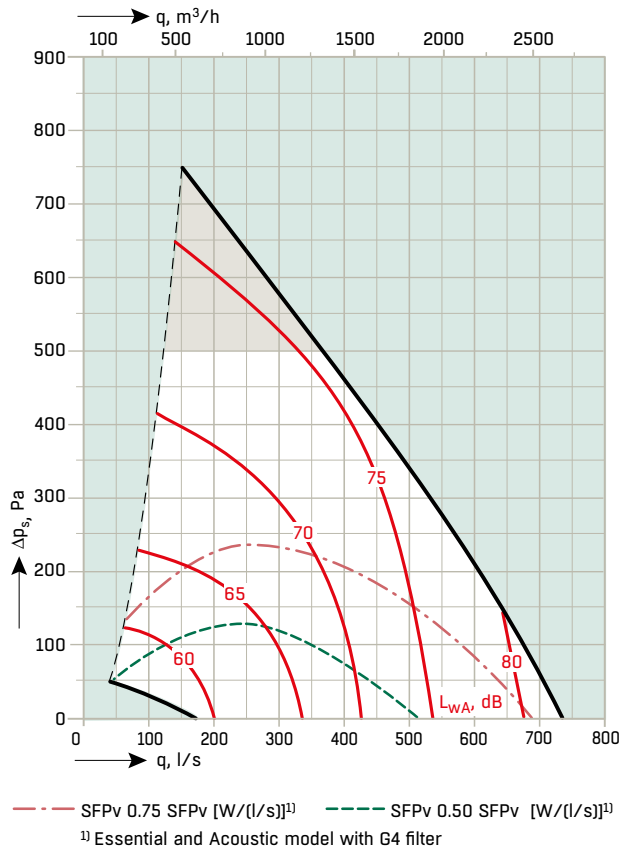
FILTER

Supply air: 2 x 348 x 352 x 48 mm, G4 alt F7

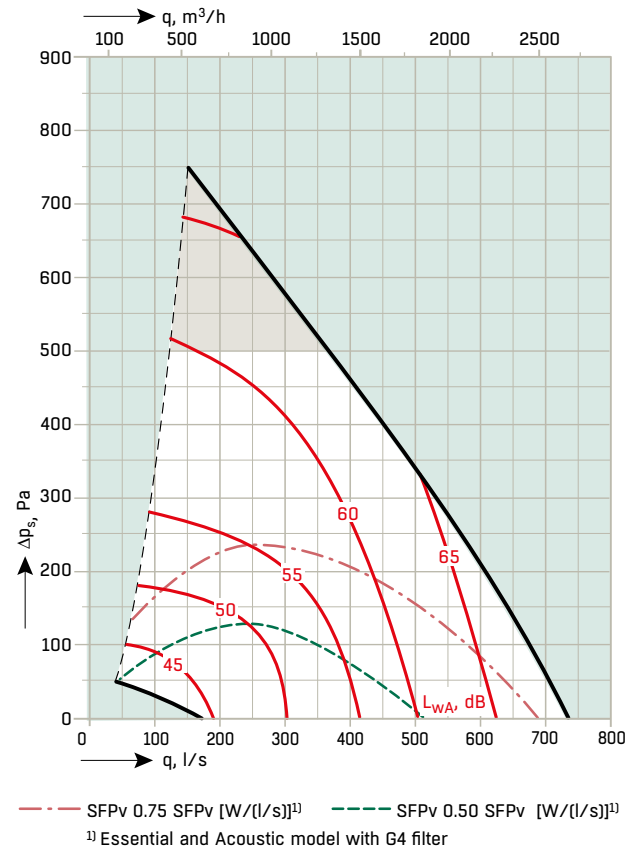
Extract air: 2 x 348 x 352 x 48 mm, G4 alt M5

TECHNICAL DATA - SIZE 5

SUPPLY AIR FAN



EXTRACT AIR FAN



SYSTEM OVERVIEW

The diagrams show the available external pressure for the duct system. The weighted sound power noise levels given in dB(A) apply to ducts on the supply fan's outlet side (diagram 1) and extract fans' inlet side (diagram 2). The SFP_v values for each fan are calculated according to clean filters. SFP_v is calculated for the complete unit and includes power to both supply and extract fan divided by either the supply or extract volume whichever is the greater.

ELECTRICAL DATA

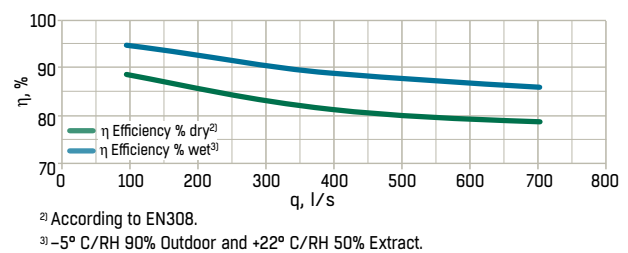
External fuse: Recommended 10 A without electrical heater.
 Recommended 16 A with electrical heater.

The mains supply cable must be fitted with an external safety switch, which can cut the current to the entire unit.

Ambient temperature during operation $-20^\circ - +40^\circ C$

Unit Version	Fan Motors Power, 2 fans kW	Post Heater kW	Rated Power kW	Rated Current A	Electrical Supply V/Ph/Hz
Essential Enhanced HW	1.0	-	1.02	4.5	230/1/50
Elite HW	1.0	-	1.02	4.5	230/1/50
Enhanced HE	1.0	2.5	3.52	15.4	230/1/50
Elite HE	1.0	2.5	3.52	15.4	230/1/50

TEMPERATURE EFFICIENCY

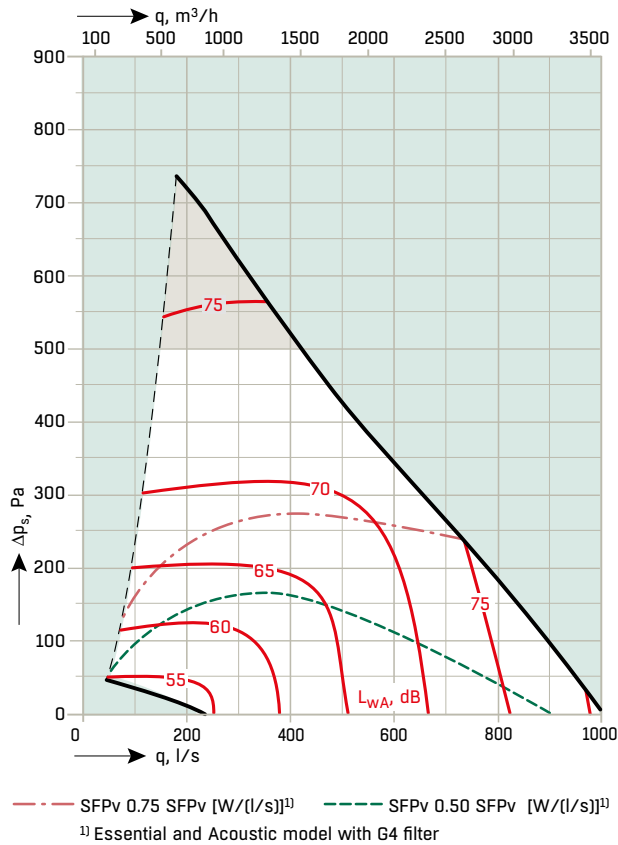


FILTER

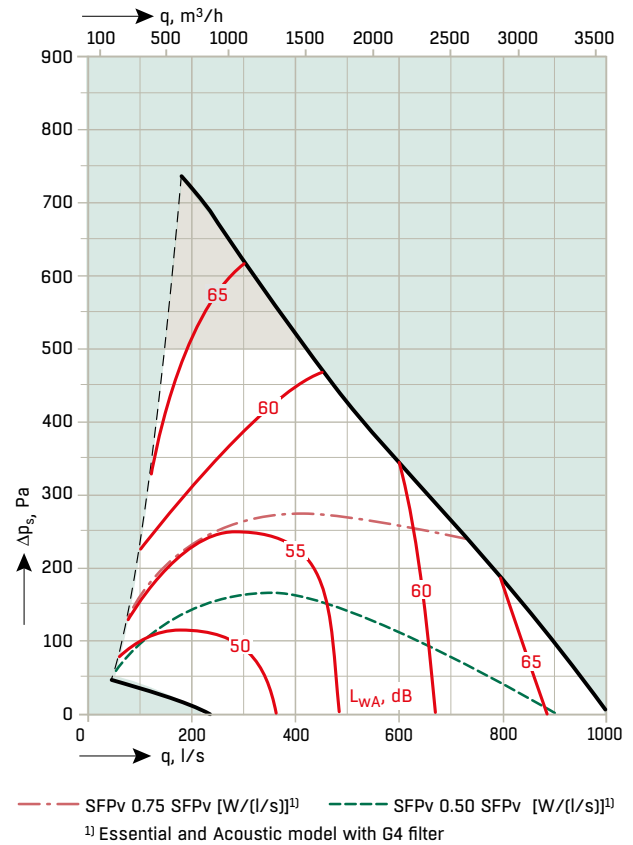
Supply air: 2 x 398 x 407 x 48 mm, G4 alt F7
 Extract air: 2 x 398 x 407 x 48 mm, G4 alt M5

TECHNICAL DATA - SIZE 6

SUPPLY AIR FAN



EXTRACT AIR FAN



SYSTEM OVERVIEW

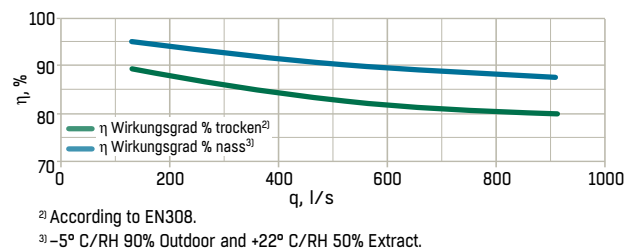
The diagrams show the available external pressure for the duct system. The weighted sound power noise levels given in dB(A) apply to ducts on the supply fan's outlet side (diagram 1) and extract fans' inlet side (diagram 2). The SFP_v values for each fan are calculated according to clean filters. SFP_v is calculated for the complete unit and includes power to both supply and extract fan divided by either the supply or extract volume whichever is the greater.

ELECTRICAL DATA

External fuse: Recommended 10 A.
 The mains supply cable must be fitted with an external safety switch, which can cut the current to the entire unit.
 Ambient temperature during operation -20° - +40°C

Unit Version	Fan Motors Power, 2 fans kW	Post Heater kW	Rated Power kW	Rated Current A	Electrical Supply V/Ph/Hz
Essential Enhanced HW Elite HW	1.0	-	1.02	4.4	230/1/50
Enhanced HE Elite HE	1.0	3.0	4.02	8.0	400/3/50

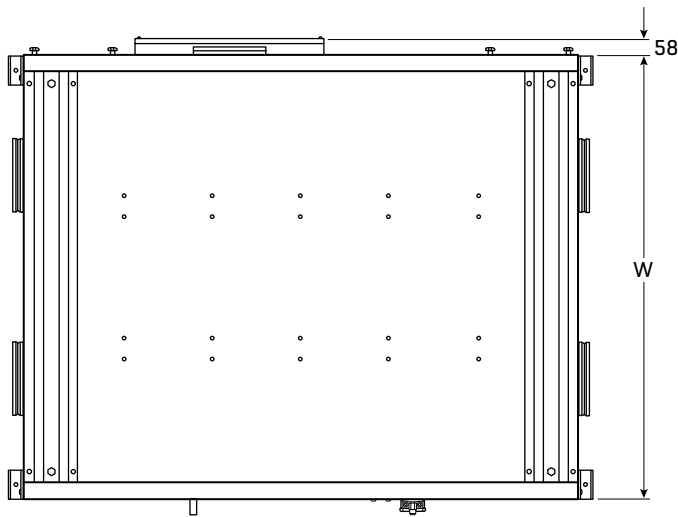
TEMPERATURE EFFICIENCY



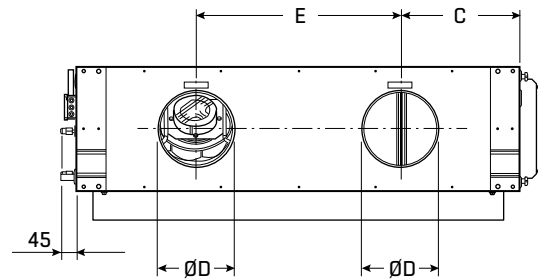
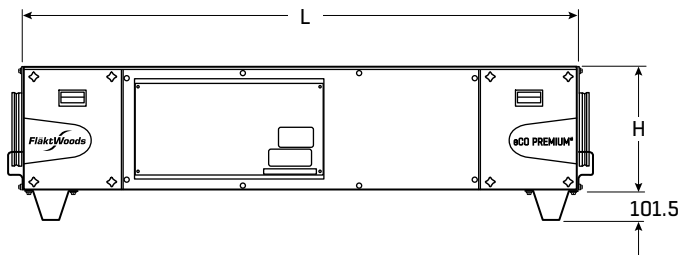
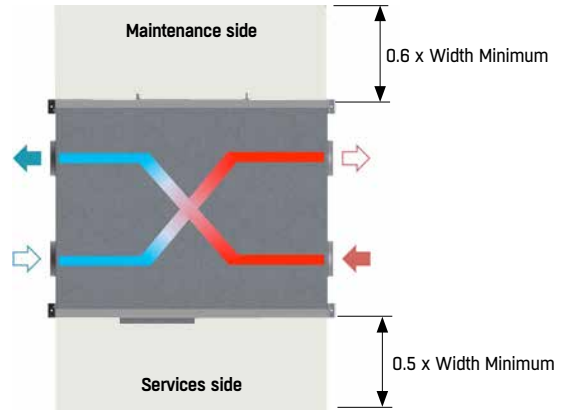
FILTER

Supply air: 2 x 398 x 602 x 48 mm, G4 alt F7
 Extract air: 2 x 398 x 602 x 48 mm, G4 alt M5

DIMENSIONS AND WEIGHT



MINIMUM MAINTENANCE SPACE



Unit Size	L	W	H	C	ØD	E	W1	W2
1	1600	1220	380	335	250	550	198	217
2	1600	1220	380	335	250	550	200	219
3	1900	1520	425	410	250	700	263	294
4	1900	1520	425	410	250	700	269	300
5	2000	1720	470	460	315	800	280	-
6	2480	1720	685	460	500	800	495	-

All dimensions in mm. All weights in kg.
 W1 = Weight for Essential model, Standard
 W2 = Weight for Essential model, Acoustic

ACCESSORIES

DUCT MOUNTED COOLING COIL - REDZ-14



Air cooler for cold water with copper tubes and aluminum fins. The air cooler is built into a galvanized sheet steel casing, AZ 185 with 9 mm insulation. The casing has a removable hatch for cleaning and duct connections with rubber ring seals. The air cooler has to be installed so that the distance to the fan or bend upstream of the cooler is at least 600 mm. The cooler is only available in a left-hand configuration.

Venting and draining is carried out via the pipe system. The pipe connection, Ø 22 mm, is located on the outlet end, is smooth and is intended for a compression fitting. The drainage tray is in stainless steel and has an R 1/2" connection.

Max. Operating pressure 1.0 Mpa.

Max. Operating temperature 100°C.

WEATHER COVER ROOF - REDZ-80



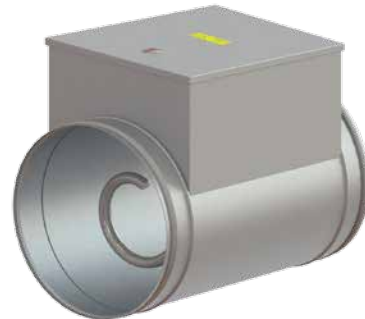
eCO PREMIUM™ unit can be installed outside when a weather cover roof is fitted. The separate roof made in Aluzink is done to resist outdoor environment and fulfills the C4 class (BSK 94/99 and ISO 12944-2).

SPARE FILTERS - REDZ-81



Filter for supply and extract air have the same design and are made of compact fiberglass optimized for low pressure drop and is available in filter class G4, M5 and F7.

DUCT MOUNTED PRE HEATER - REDZ-82



An optional electric pre-heater (frost heater) is available as part of frost protection strategy and is delivered in the unit version ELITE. The heater is a stand alone device and has no electrical connection with the unit. The heater is made in Aluzink steel plate and its element in stainless steel according EN 1.4301. The heater complies with protection class C to EN 15727. Built-in electronic flow switch and regulator via built-in temperature sensor in duct. Set point adjustment is set on the heater cover.

Unit size	Diameter [mm]	Rated Power [kW]	Supply voltage [V]	Supply phase [nr]
1-2	250	3	230	1
3-4	250	6	400	2
5	315	9	400	3
6	400 ¹⁾	12	400	3

¹⁾ Needs a dimension change from 500 to 400.



ACCESSORIES

DRAIN TRAP - REDZ-84



Drain trap to provide air coming in and out from the drainage. Including two adapters. Fits both drop tray and the duct mounted cooling coils.

ACOUSTIC SILENCER - REDZ-85



Rectangular version for eCO PREMIUM™ 1-4 and is recommended for areas where no breakout between unit and duct is allowed. The silencer consists of a galvanized sheet metal casing, absorbent material in coated glass wool and end pieces with rubber gaskets. One side consists of female spigot in order to get close to unit without any breakout noise. The available nominal length is 1000 mm.

Size	Way	Ø [mm]	L [mm]	W [mm]	H [mm]	Attenuation [dB] at Octave band mid-frequency [Hz]							
						63	125	250	500	1K	2K	4K	8K
1, 2	F/E	250	950	1000	380	-6	-6	-10	-19	-30	-27	-16	-14
1, 2	S/E	250	950	1000	380	-8	-8	-13	-23	-34	-30	-17	-14
3, 4	F/E	250	950	1310	425	-7	-7	-11	-20	-31	-28	-17	-15
3, 4	S/E	250	950	1310	425	-9	-9	-14	-24	-35	-31	-18	-15

F/E = Fresh/Extract air
 S/E = Supply/Exhaust air
 Ø = Diameter spigot
 L = Length
 W = Width
 H = Height

STANDARD SILENCER - REDZ-86



The standard silencer is a straight circular duct silencer with 100 mm mineral wool filling. Duct connections have rubber seals. The silencer consists of a perforated sheet metal pipe surrounded by a galvanized sheet steel mantle and end pieces sandwiching mineral wool covered with nonwoven fabric to prevent fibre migration. Fire resistance rating EI30. The available nominal lengths are 600, 900 & 1200 mm.

Dia A [mm]	Lenght [mm]	Dia B [mm]	Attenuation [dB] at Octave band mid-frequency [Hz]							
			63	125	250	500	1K	2K	4K	8K
250	600	355	0	-2	-7	-12	-18	-23	-10	-5
250	900	355	-2	-2	-8	-19	-25	-32	-12	-6
250	1200	355	-2	-4	-11	-25	-30	-39	-14	-10
315	600	415	0	-2	-7	-10	-15	-20	-7	-4
315	900	415	-1	-2	-7	-16	-22	-24	-10	-6
315	1200	415	-2	-4	-10	-22	-28	-30	-12	-9
500	900	630	-1	-1	-5	-11	-14	-12	-9	-6
500	1200	630	-1	-3	-7	-16	-20	-15	-10	-7

ACCESSORIES

SHUT OFF DAMPER WITH ACTUATOR - REDZ-87



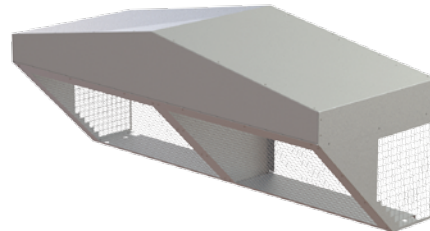
Duct mounted damper in leakage class 3 (CEN 3). The damper is made of galvanized sheet steel and has a spring return on/off actuator mounted on it. The actuator is connected to a terminal block in the electrical cabinet. The damper has a duct connection with a rubber ring seal and it can be mounted directly onto the unit or into the duct. It is designed for duct insulation of up to 50 mm. At air speeds below 10 m/s and the damper fully open the sound power level is below 20 dB. A spring return shut-off damper should be used for units with a water coil. IP 54.

MOUNTING FEET - REDZ-88



The unit can be mounted directly onto the surface if this is flat and horizontal. The height of the mounting feet can be adjusted between 15 - 85 mm. Rubber feet are included in the kit.

WEATHER COWL KIT - REDZ-89



Outside wall cowl for outdoor air and exhaust air. The cowl comes with bird guard net and is made of Aluzink to resist outdoor environment. It fulfills the C4 class (BSK 94/99 and ISO 12944-2). The size allows to have a shut off damper (REDZ-87) mounted on the unit.



CONTROLS

GENERAL

eCO PREMIUM™ is delivered with the integrated control platform Curo® and the belonging control panel, Curo® Touch. All internal components are prewired and the eCO PREMIUM™ is factory tested. The controls are easy to use. The control equipment can communicate via Modbus RS485 or Modbus TCP/IP. For adjustments and settings use the control panel Curo® Touch.



STANDARD CONTROL FUNCTIONS

- Fan speed control
 - VAV, Variable air volume (supply and extract)
- Temperature control
 - Supply air control
- Communication Modbus RS 485
- Fan monitoring
- Fire Protection system
- Night cooling
- Cooling recovery
- Frost protection, standard with a unit equipped with water heater coil
- Schedule
- Demand controlled defrosting (Thermo Ice)

ACCESSORIES /OPEN OPTIONS

- Fan speed control
 - CAV, Constant Air Volume
 - COP, Constant Pressure (supply and exhaust)
 - VAV, Variable Air Volume with CO₂ function
- Temperature control
 - Extract air control
 - Room control
 - Outdoor air compensation
- Communication Modbus TCP/IP
- Filter monitoring
- Extended and / or forced operation
 - External timer
 - PIR

STANDARD CONTROL FUNCTIONS

FAN SPEED CONTROL - VAV

Fan speeds are set individually between 30-100%

TEMPERATURE CONTROL

Supply air control

Constant supply air temperature is maintained.

COMMUNICATION

eCO PREMIUM™ is delivered with BMS communication (MODBUS RS-485)

FAN MONITORING

The controls will stop the unit and generate an alarm if the flow of the fans is too low.

FIRE PROTECTION

A separate fire protection system may be connected to the unit.
Function: stop the unit.

NIGHT COOLING (FREE COOLING)

Night cooling is used during warm summer nights in order to reduce the indoor temperature. This is done by cooling down the warm indoor temperature with cold outdoor air.

COOLING RECOVERY

When there is a cooling demand the unit will automatically close the bypass to cool the supply air. It happens when the extract air temperature is lower than the outdoor air temperature and there is a cooling demand.

SCHEDULE

The controller has three types of internal time schedules, Weekly, Single date and Date period.

DEFROSTING (THERMO ICE)

eCO PREMIUM™ uses an advanced defrosting function that ensures that the annual heat recovery efficiency is as high as possible.

During cold periods if icing has occurred on the counter flow heat exchanger then the defrosting function will stop the supply fan and start the defrosting process.

The defrosting function will only be active when necessary, a large part of the counter flow needs to be iced before the defrosting function starts.



CONTROLS CONT.

ACCESSORIES /OPEN OPTIONS

FAN SPEED CONTROL

REDA-a-b-cc-d-e-ff

Different fan speed control is available to individually adjust the airflow for supply and exhaust side. The following options can be selected and will automatic be handled by the CURO® Control.

- **COP.** Constant Pressure
- **CAV.** Constant Air Volume
- **VAV+CO₂.** Fan speeds are set individually, overrides by the demand ventilation (CO₂) when the set PPM value is exceeded.

TEMPERATURE CONTROL REDZ-01

Extract air control

Constant extract air temperature is maintained via cascade regulation of the supply air temperature with min- and max temperature limits.

Room air control

Constant room air temperature is maintained via cascade regulation of the supply air temperature with min- and max temperature limits.

Outdoor air compensation

The function offsets the set point of the supply air temperature. Not available with extract- or room air control.

COMMUNICATION - REDZ-05

eCO PREMIUM™ can be delivered with Modbus TCP/IP via separate Ethernet card.

FILTER MONITORS - REDZ-28



The controls will generate an alarm if the pressure drop over each filter exceeds set value.

SAFETY SWITCH - REDZ-39



The mains supply cable must be fitted with an external safety switch, which can cut the current to the entire unit. Is available in 16A & 25 A.

EXTENDED FORCED OPERATION - REDZ-40



External timer



PIR

External timer (setting 0-5 hours) or occupancy detector (PIR). Both for external and recessed mounting.

COIL CONTROL - REDZ-70

Air heater

Control signal (0-10V) for a valve actuator.

Freeze protection: When the unit is not in operation mode the water temperature will be held constant at 25°C. During operation mode the valve will be controlled so that the returned water temperature will not be below 15° C. The unit will be stopped and an alarm will be activated If the returned water temperature is below 7° C.

Air cooler

Control signal 0-10 V for air cooler, water.

Valve actuator for air heater/ cooler

Valve actuator customized to fit a valve with a 5.5mm and G3/4" thread.

PRODUCT CODE

ENERGY RECOVERY UNIT

eCO PREMIUM™

REDA-a-b-cc-d-e-ff

Size (a) _____

- 1 = Size 1
- 2 = Size 2
- 3 = Size 3
- 4 = Size 4
- 5 = Size 5
- 6 = Size 6

Inspection side (b) _____

- 1 = Right standard
- 2 = Left standard
- 3 = Right "acoustic" casing (Only a = 1 - 4)
- 4 = Left "acoustic" casing (Only a = 1 - 4)

Unit variants (cc) _____

- 00 = Essential
- 01 = Enhanced electrical
- 02 = Enhanced hot water
- 03 = Elite electrical
- 04 = Elite hot water

Filter (supply / exhaust) (d) _____

- 1 = G4 compact / G4 compact
- 4 = F7 compact / M5 compact

Fan speed control (e) _____

- 1 = VAV, Variably Air Volume, (Supply exhaust)
- 2 = COP, Constant Pressure, (Supply exhaust)
- 3 = CAV, Constant Air Volume, (Supply exhaust)
- 4 = VAV+CO2 function (int. as standard)

Language (ff) _____

- 03 = English

ACCESSORIES

Temperature control

REDZ-01-b

Control situation (b) _____

- 2 = Extract air control
- 3 = Room control
- 4 = Supply air control with outdoor air compensation

Communication

REDZ-05-b

Type (b) _____

- 1 = Ethernet Card

Duct mounted cooling coil

REDZ-14-b-c-d

Size (b) _____

- 1 = Size 1
- 2 = Size 2
- 3 = Size 3
- 4 = Size 4
- 5 = Size 5
- 6 = Size 6

Type (c) _____

- 1 = Water

Connection side (d) _____

- 1 = Right
- 2 = Left

Filter monitor

REDZ-28-b

Function (b) _____

- 1 = Filter monitor

Safety switch

REDZ-39-bbb

Current (bbb) _____

- 016 = 16 A
- 025 = 25 A

Extended/forced operation

REDZ-40-b-c

Variant (b) _____

- 1 = External timer, electronic (1 - 5 h)
- 3 = PIR

Type (c) _____

- 1 = Standard

ACCESSORIES

Coil control

REDZ-70-b-c-d-eee

Scope of supply (b) _____

- 1 = Actuator only
- 2 = Valve with actuator
- 3 = Valve only

Type of valve (c) _____

- 0 = Without (only if b = 1)
- 2 = 2-way
- 3 = 3-way

Location (d) _____

- 1 = Heating
- 2 = Cooling

Kvs-value (eee) _____

- 000 = Actuator only (only if b = 0)
- 002 = 0.25
- 004 = 0.4
- 006 = 0.63
- 010 = 1.0
- 016 = 1.6
- 025 = 2.5
- 040 = 4.0
- 100 = 10.0

CURO® Touch Extra cable

REDZ-76-bb

Length (bb) _____

- 10 = 10 meters
- 25 = 25 meters

Weather cover, roof

REDZ-80-b-c

Size (b) _____

- 1 = Size 1
- 2 = Size 2
- 3 = Size 3
- 4 = Size 4
- 5 = Size 5
- 6 = Size 6

Type (c) _____

- 1 = Standard

Spare filter

REDZ-81-b-c

Size (b) _____

- 1 = Size 1
- 2 = Size 2
- 3 = Size 3
- 4 = Size 4
- 5 = Size 5
- 6 = Size 6

Type (c) _____

- 1 = G4 (2 pcs)
- 2 = M5 (2 pcs)
- 3 = F7 (2 pcs)

Pre Heater, duct mounted

REDZ-82-b

Size (b) _____

- 1 = Size 1
- 2 = Size 2
- 3 = Size 3
- 4 = Size 4
- 5 = Size 5
- 6 = Size 6

Drain trap

REDZ-84-b

Type (b) _____

- 1 = Standard

Acoustic Silencer

REDZ-85-b

Size (b) _____

- 1 = Size 1 and 2
- 2 = Size 3 and 4

Standard Silencer

REDZ-86-bbb-ccc

Diameter (bbb) _____

- 025 = 250 mm
- 031 = 315 mm
- 050 = 500 mm

Length (ccc) _____

- 060 = 600 mm
- 090 = 900 mm
- 120 = 1200 mm



Shut off damper with actuator **REDZ-87-bbb-c**

Size (bbb) _____

025 = 250 mm

031 = 315 mm

050 = 500 mm

Type (c) _____

2 = On-Off, Spring-return

Mounting feet **REDZ-88-b**

Size (b) _____

1 = Size 1 - 4

2 = Size 5 - 6

Weather Cowl Kit **REDZ-89-b-c**

Size (b) _____

1 = Size 1

2 = Size 2

3 = Size 3

4 = Size 4

5 = Size 5

6 = Size 6

Type (c) _____

1 = Standard

WE BRING BETTER AIR™ TO LIFE

With over a century of innovation and expertise to share with our customers, Fläkt Woods is a global leader in Air Technology products and solutions. We specialize in the design and manufacturing of a wide range of products and solutions for Air Movement, Air Treatment, Air Distribution, Air Management and Air Diffusion with focus on two major benefits – **Air Comfort** and **Fire Safety**. With market presence in 65 countries we are in a unique position to be a local supplier and an international partner in our customer's projects.

Our product brands such as SEMCO®, eQ®, eQ Prime®, JM Aerofoil®, Econet®, Veloduct®, Optivent®, Optimix®, Econovent® and Clean-vent® are well-known and trusted by customers all over the world to deliver high quality and energy efficient solutions.

» To learn more about our offering and get in contact with your nearest sales representative please visit www.flaktwoods.com

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