

News and information from Kvänum 2010



New GOLD version D

GOLD Wing+

New motor technology

Modified sizes

Full face

~~GOLD Version D~~



GOLD Wing+ - *more airflow less energy!*



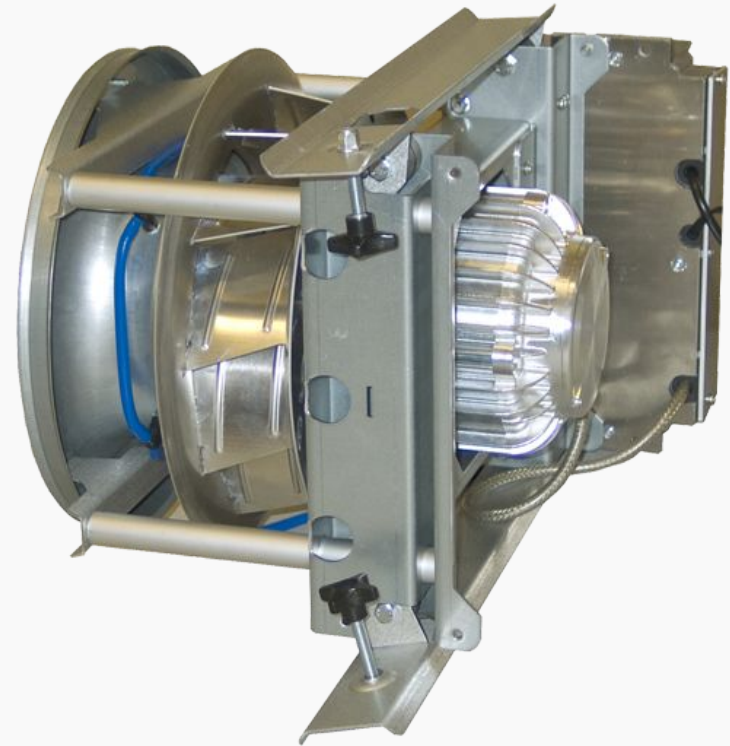
GOLD Wing+ - *New production!*



Next generation EC-technique

Motor controller developed by Swegon

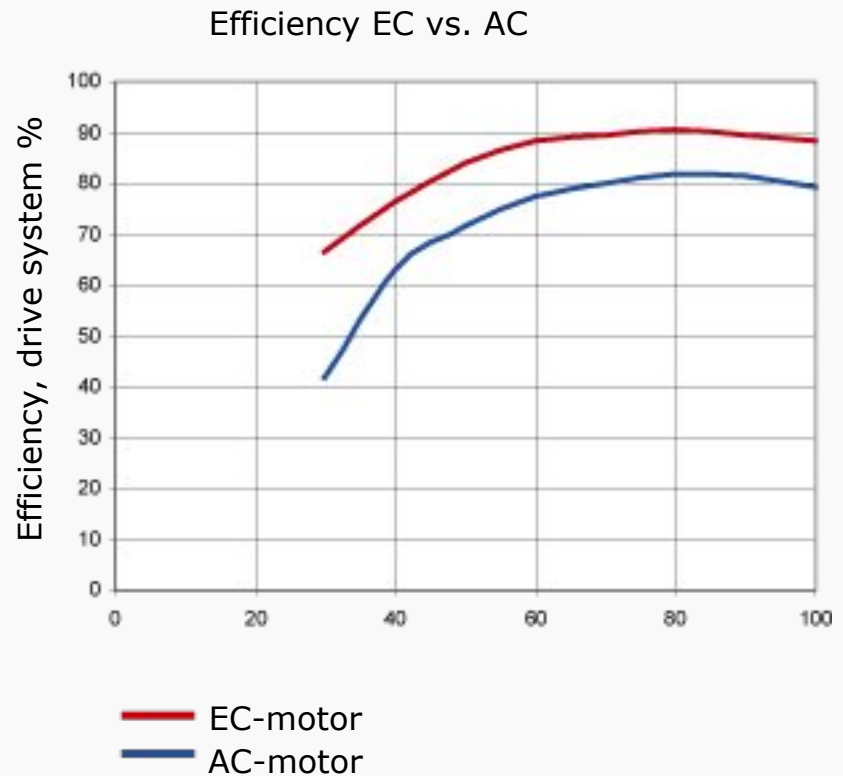
6 sizes - 0,8-6,5kW



Next generation EC-technique

10-15% higher efficiency compared to traditional AC-technique

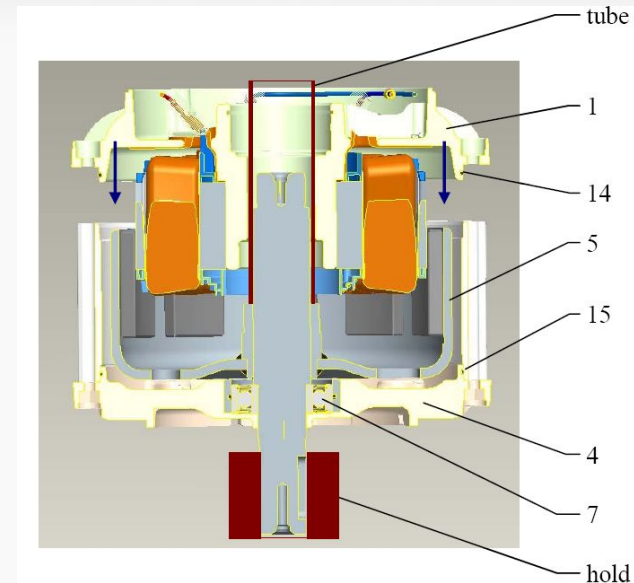
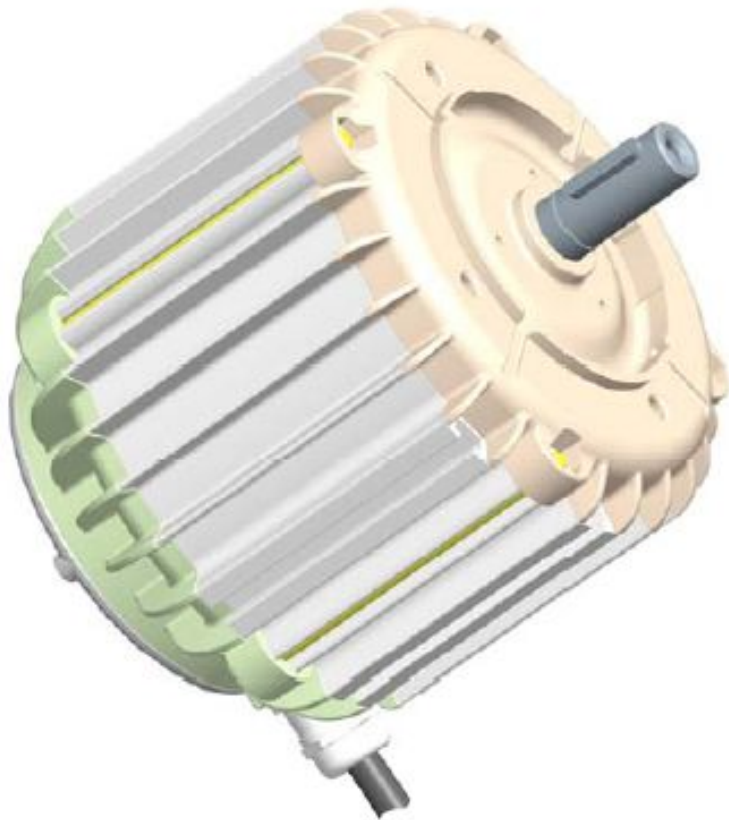
High efficiency in all working area



GOLD Generation D, Sizes

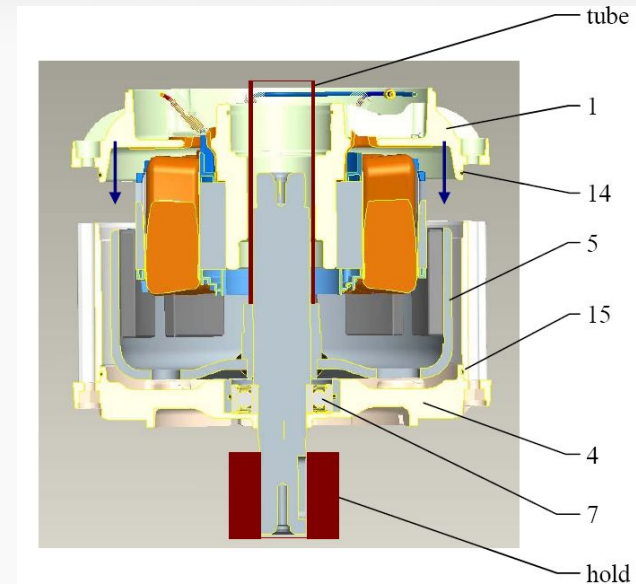
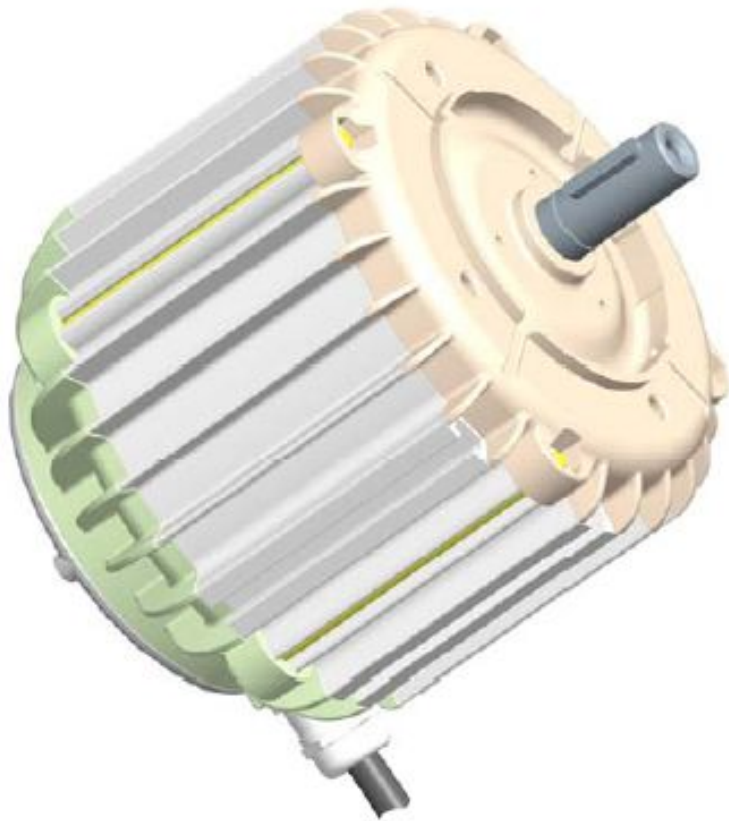


GOLD Wing+



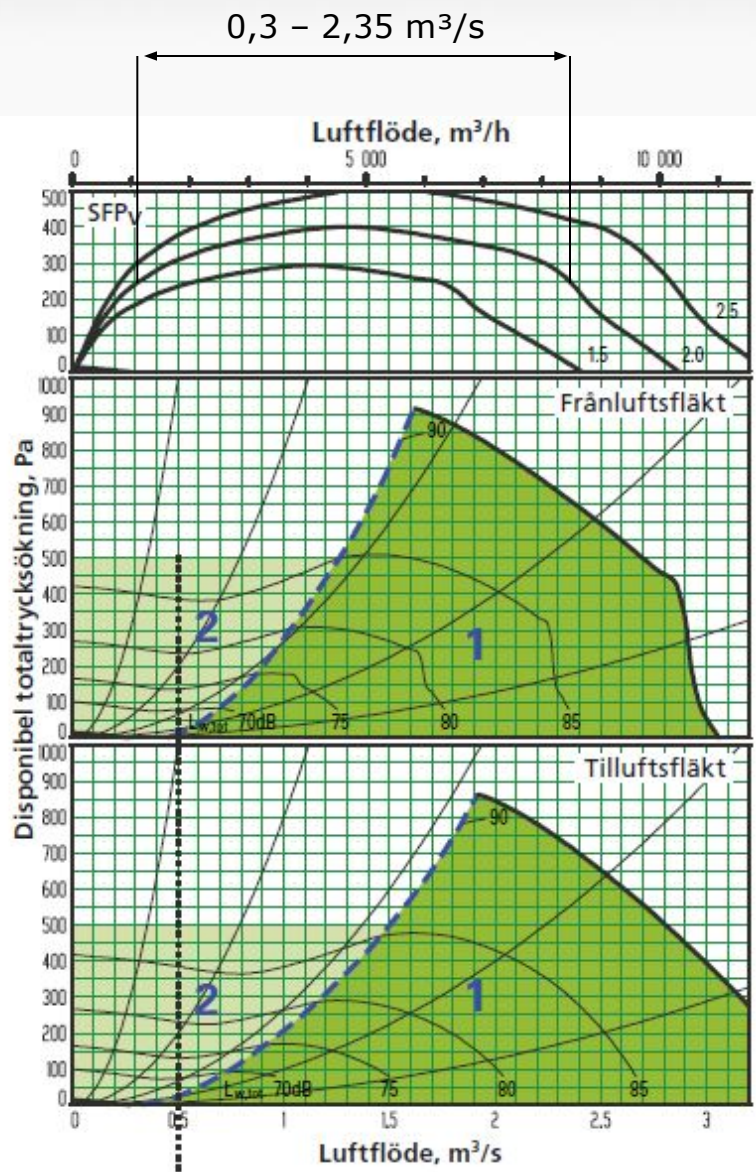
- Less energy use 10-15%
- Motor efficiency 91%
- Total efficiency 65%
- Max pressure approx. 800Pa (new fans Q3-Q4 2010)
- 40°C - +40°C
- 6 sizes 0,8-6.5kW
- Demand control ventilation
- Balance
- Weight

GOLD Wing+

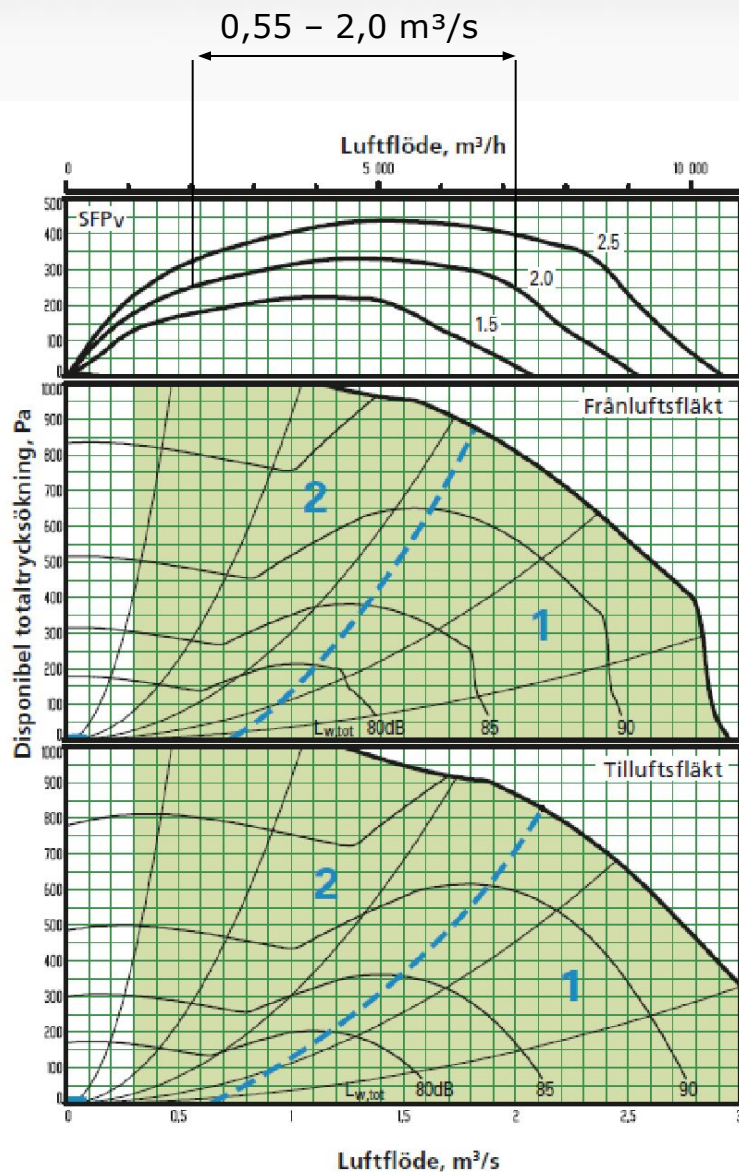


- Sensorless
- Ferritmagnets
- Sinus Back EMF
- Standard Bearings (NSK)
- Spring dampers

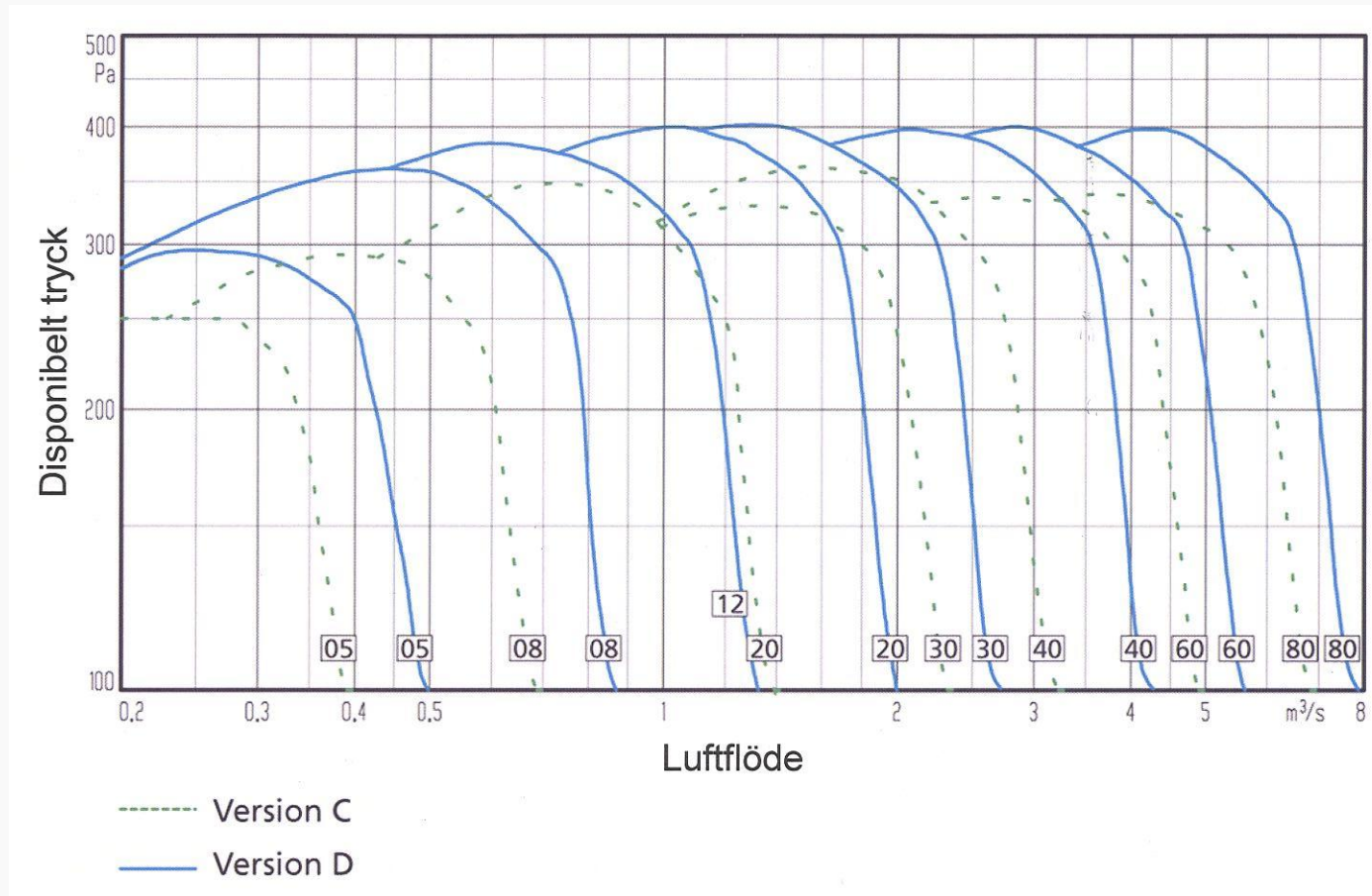
GOLD 30 ver.D



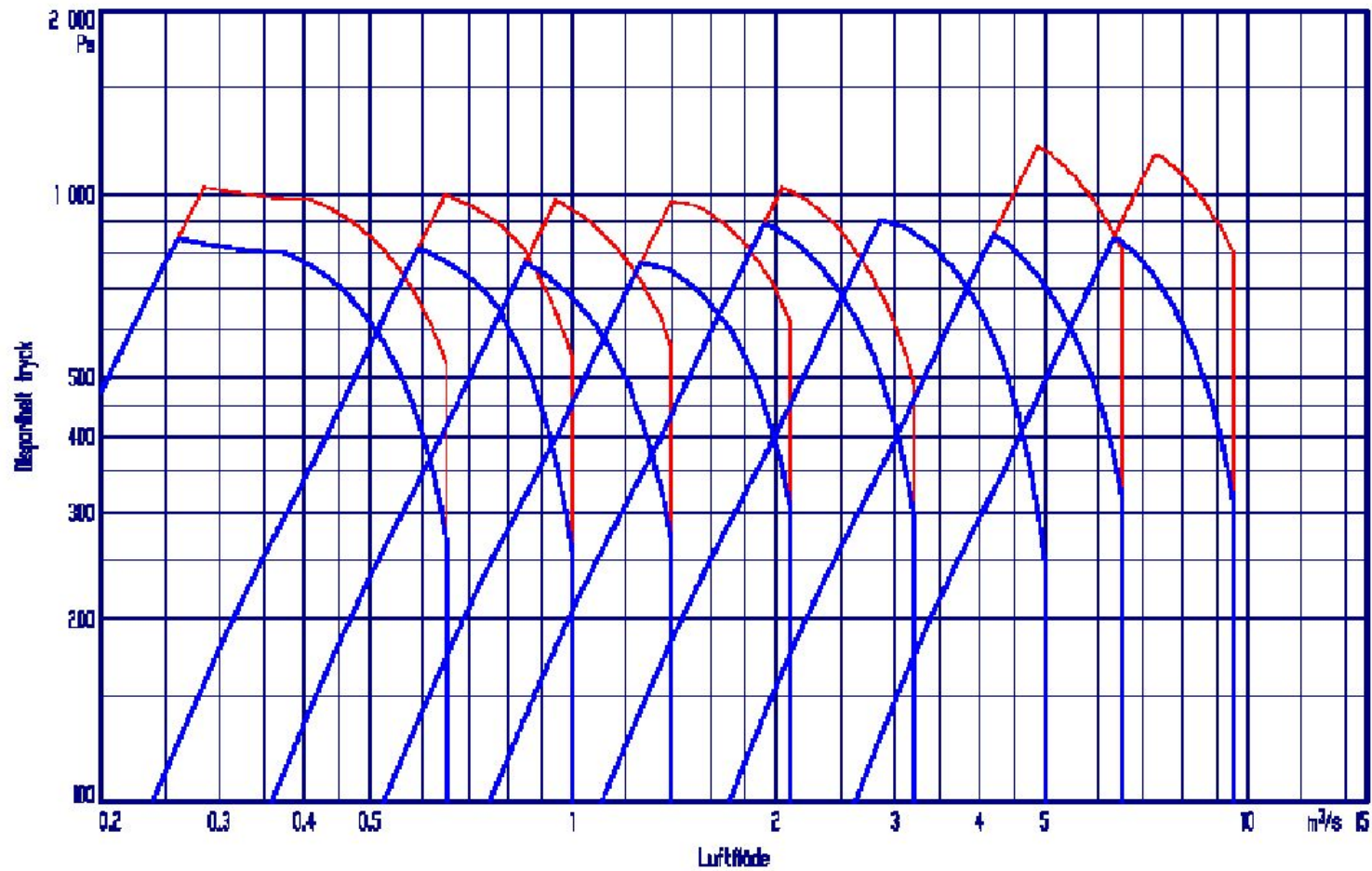
GOLD 30 ver.C



Comparison GOLD version C/D SFP_v 2,0



GOLD version D Higher pressure



GOLD version D Higher pressure

Size	Eff. standard (kW)		Eff. higher	Delivery
05	0,8	1,15	1047.5	
08	1,15	1,6	1047.5*	
12	1,6	2,4	1047.5	
20	2,4	3,4	1043.5	
30	4	6,5	1043.5	
40	6,5	-	-	
60	4 (x2)	6,5 (x2)	1051.5	
80	6,5 (x2)	10 (x2)	Spring 2011	

* 3-fase instead of 1-fase



New members of GOLD

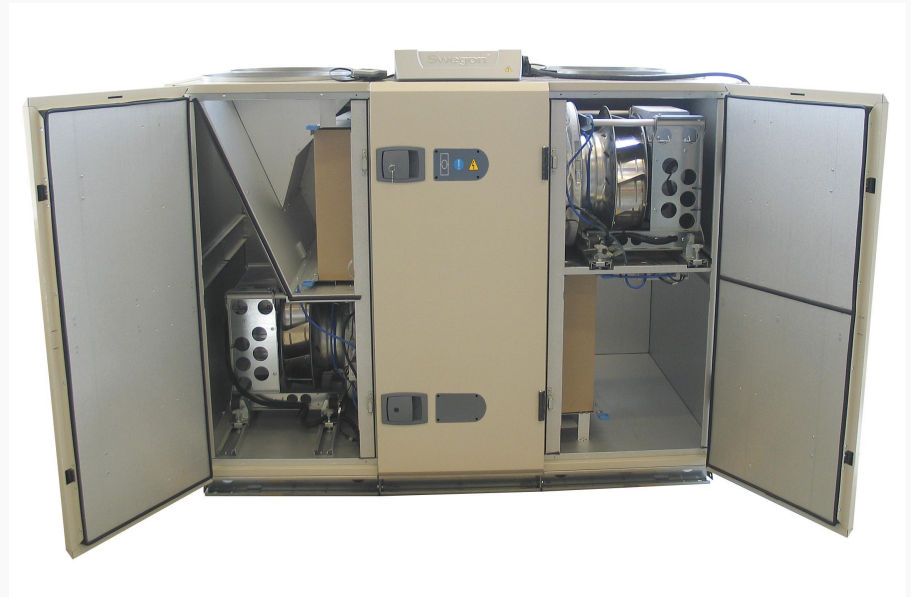
GOLD RX Top

GOLD LP

GOLD Version D



GOLD RX 04/05, 08, 12 – Top!



New family member - GOLD **LP** (**L**ow **P**rofile)



Two sizes:

GOLD LP 05 (>530 l/s)

GOLD LP 08 (>740 l/s) Q3 2010

GOLD LP

Extreme compact

Very low sound level

Discreet design

Simple inspection

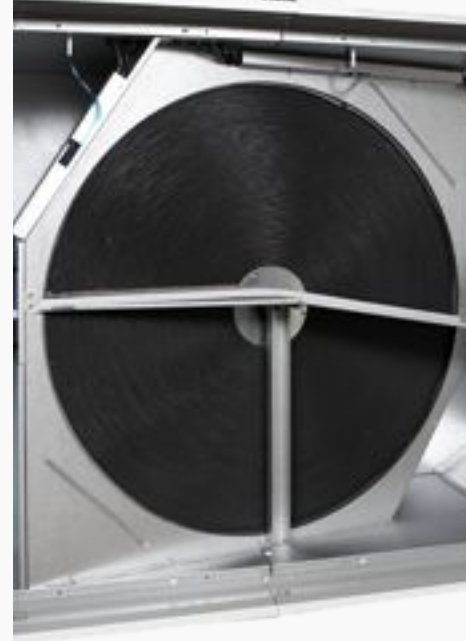
Simple service



GOLD LP, Patent solutions



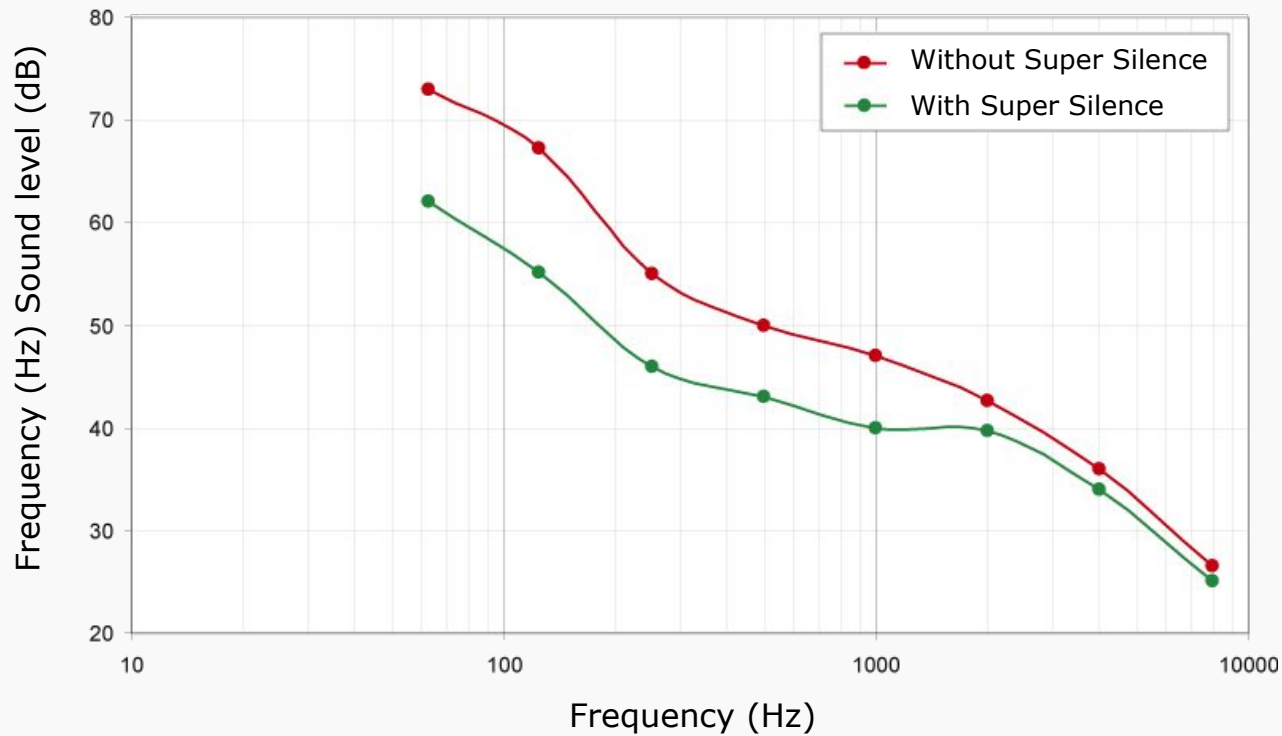
Super Silence



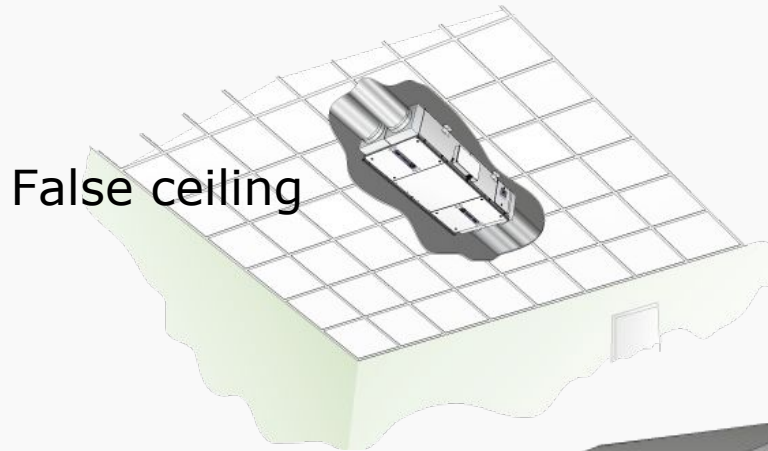
Leaning RECOconomic

GOLD LP, Patent solutions

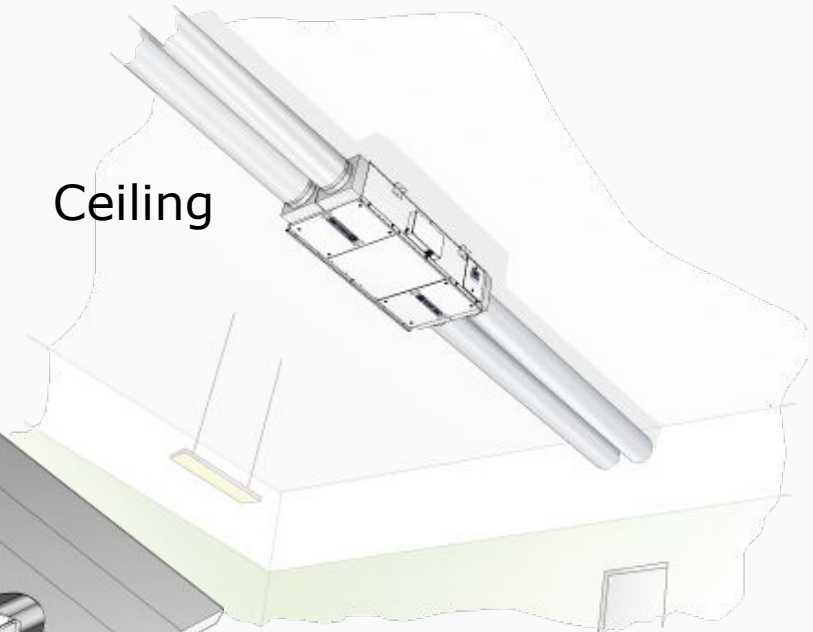
Super Silence



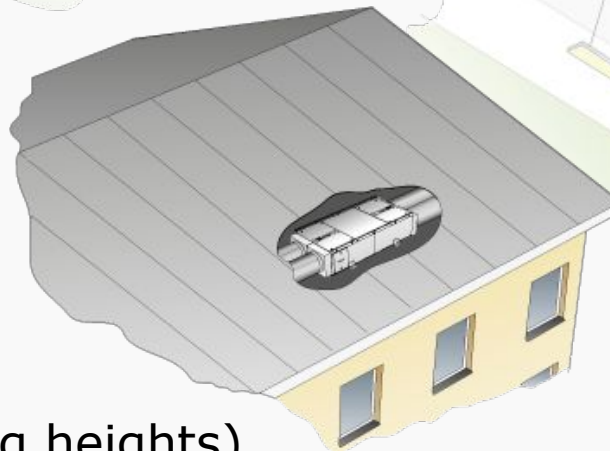
GOLD LP



False ceiling



Ceiling



Attic
(low ceiling heights)

GOLD LP

Wardrobe

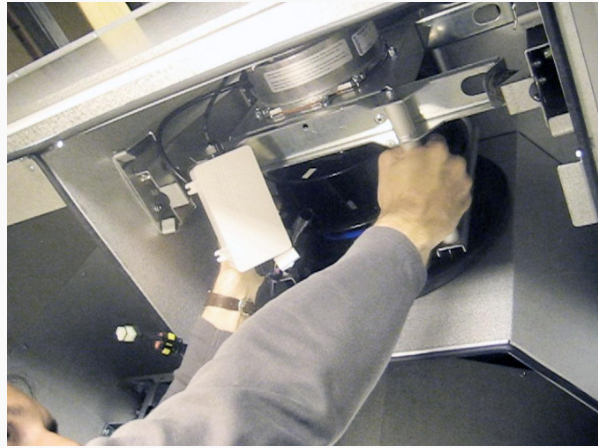


Corridor

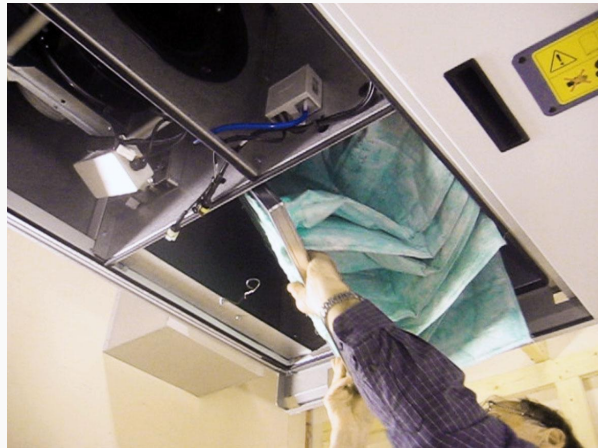


GOLD LP - Service

Fan



Filter



GOLD LP Accessories

- Heating coil water/electricity
- Cooling coil water/DX
- damper
- Silencer
- Connections square - round
- Standing
- Hoods



GOLD LP - Controls



Control unit IQnomic



Two relay outputs

- Dampers
- Operation
- Low speed
- High speed
- Alarm A
- Alarm B
- Pump/heat output
- Cooling output 1
- Cooling output 2

Control unit IQnomic



Two Digital inputs

- External low speed
- External high speed
- External alarm 1
- External alarm 2
- External alarm reset
- Extern fire/smoke alarm



VS



- X-Zone
- ReCO₂
- Extra regulation sequence
- Airflow boost 0-10V
- Set point adjustment
- RS 232 modem communication

Possibilities:

- Clean Air Control
- Filter monitoring
- External temperature sensor

Clean air control



- **VOC sensor for demand control regulation**
Detect smells, emissions, gases etc.

Clean air control

Accessories for GOLD LP



Clean Air Control, User level

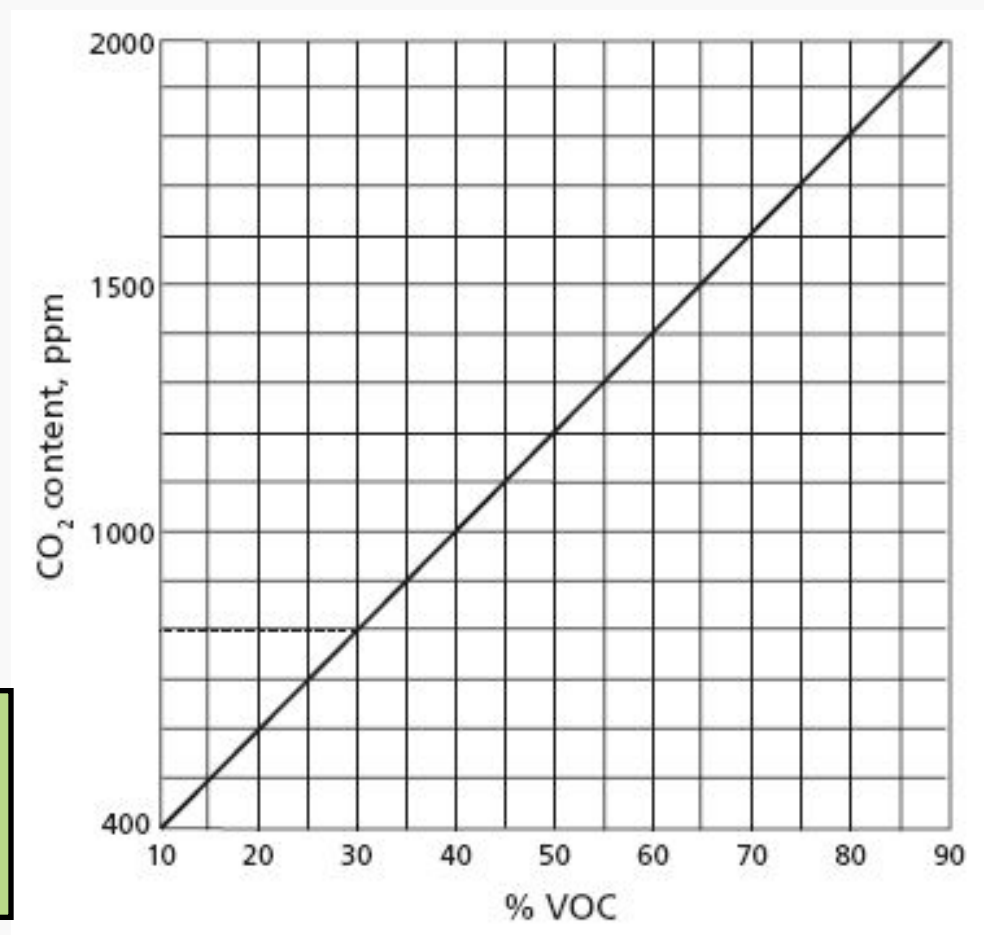
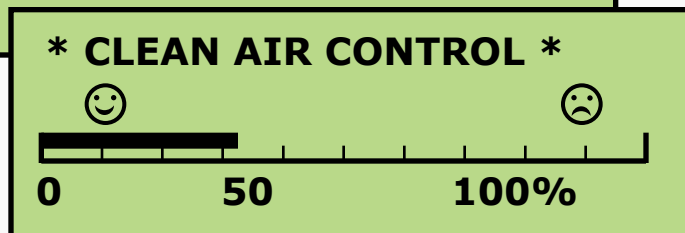
Settings

*** CLEAN AIR CONTROL ***
LOWSPEED 50%
HIGHSPEED 30%

*** MIN/MAX AIRFLOW ***
SA 0,08/0,30 m³/s
EA 0,08/0,30 m³/s

Readings

*** CLEAN AIR CONTROL ***
SA 0,14/0,15 m³/s
EA 0,14/0,15 m³/s



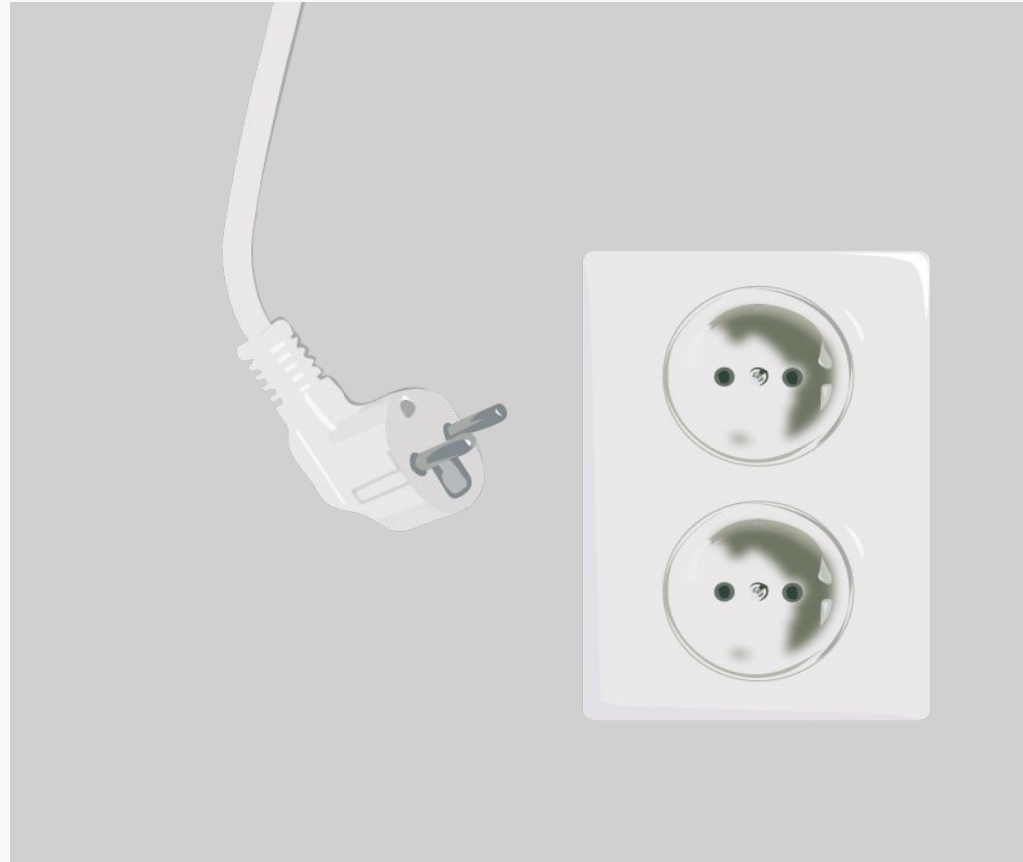
New generation GOLD

Insulated duct accessories

New roof

Electric drawings

GOLD Version D

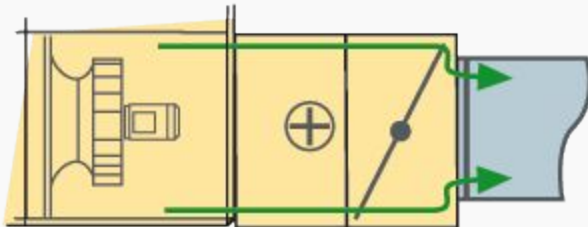


Full Face

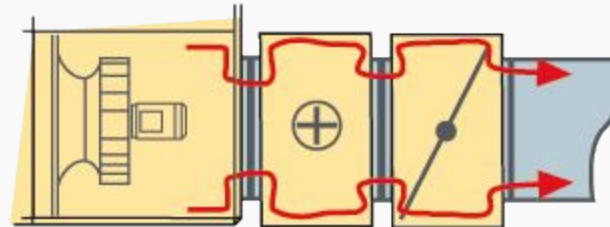


New accessories

- Direct connection to unit
- Insulated cover
- "Full face" energy efficiency
- Outdoor mounting



With full face.



Without full face.

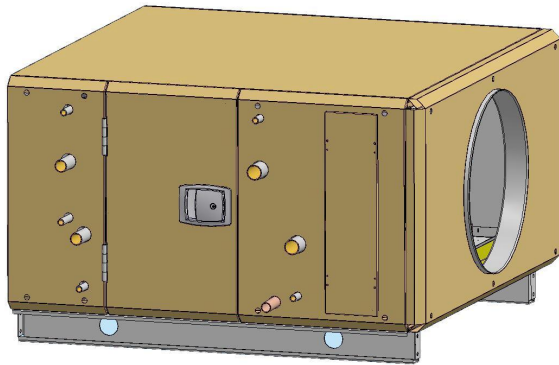
Full Face



GOLD duct accessories

Insulated

- Heating coil water/electricity
- Cooling coil water/DX
- Combination heating/cooling
- damper
- silencer
- Empty section 645 mm



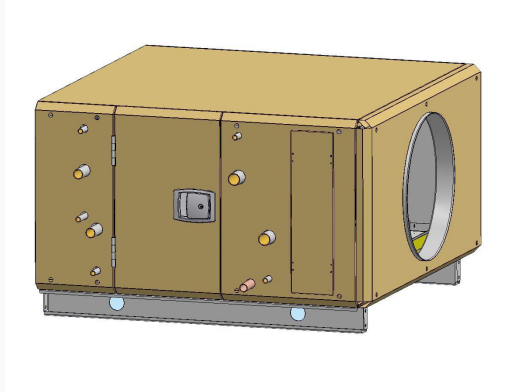
Standard

- Like today

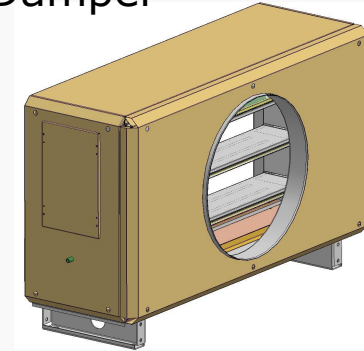


GOLD Insulated cover

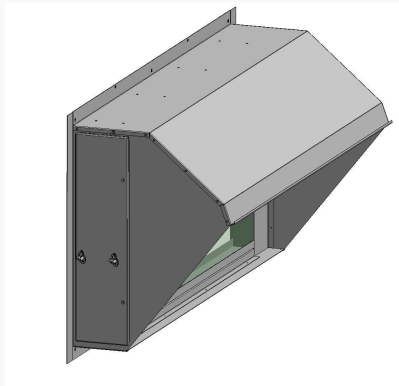
Combination heating/cooling



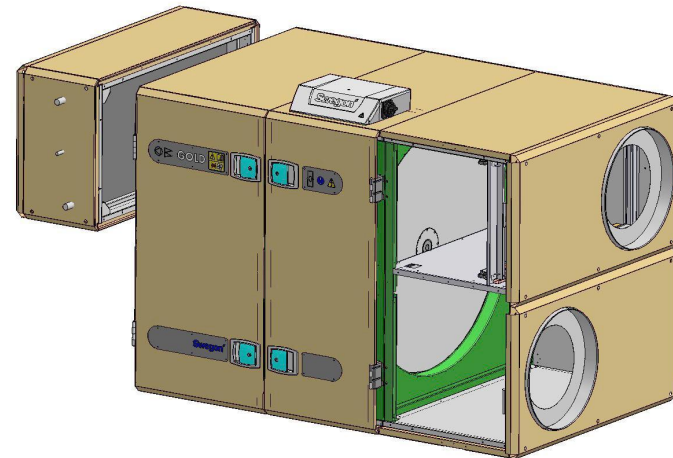
Damper



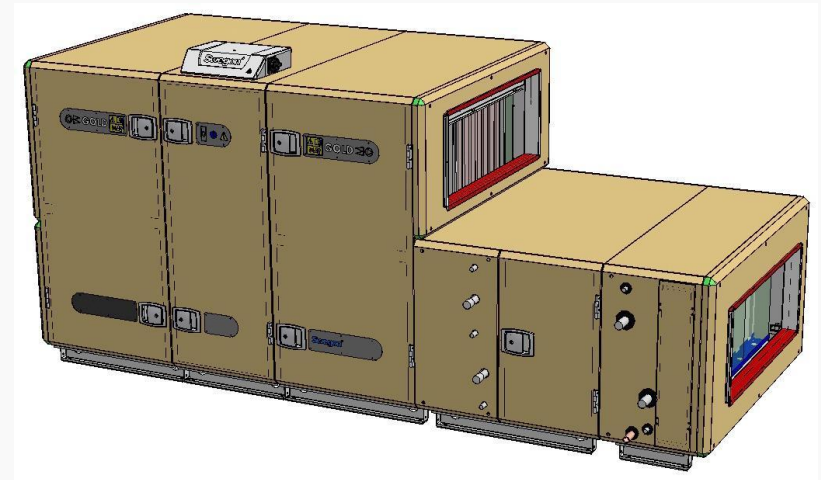
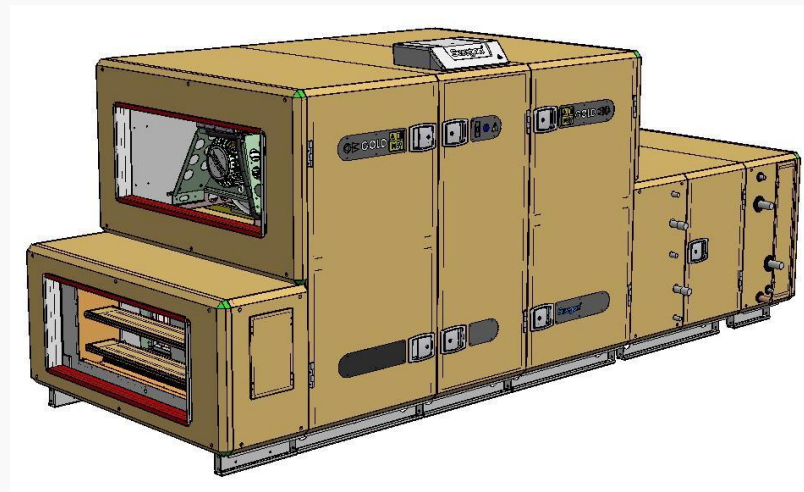
Intake with pre filter



Flexible Endplates

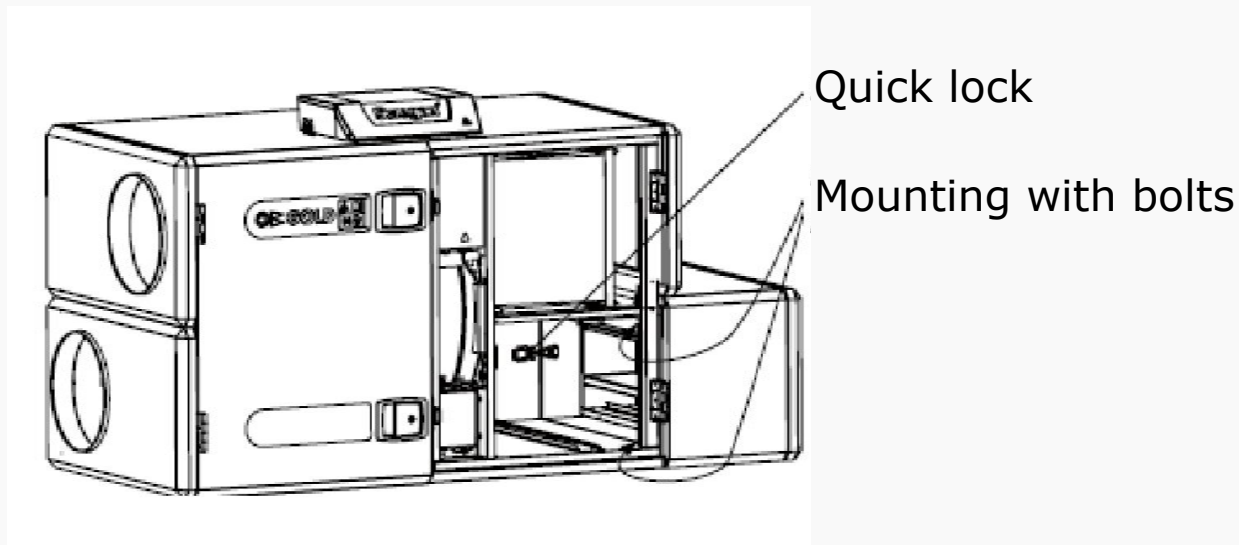


GOLD Example



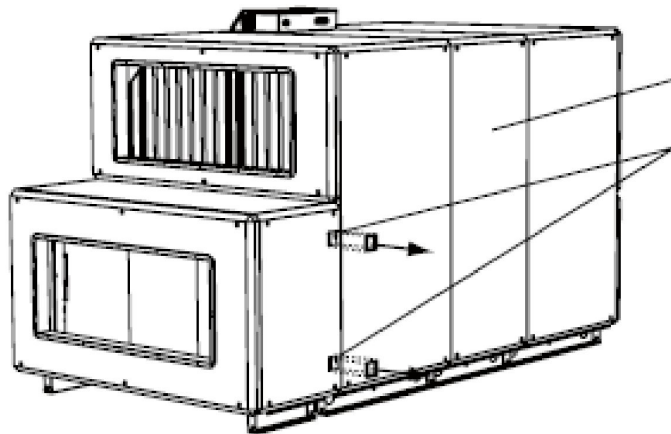
GOLD Insulated cover

GOLD 04-12



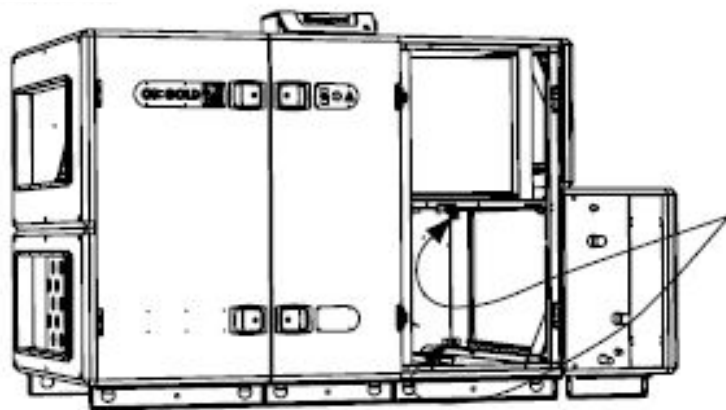
GOLD Insulated cover

GOLD 14-40 Connection on the back



Alternative 1

Connection on the back of the unit

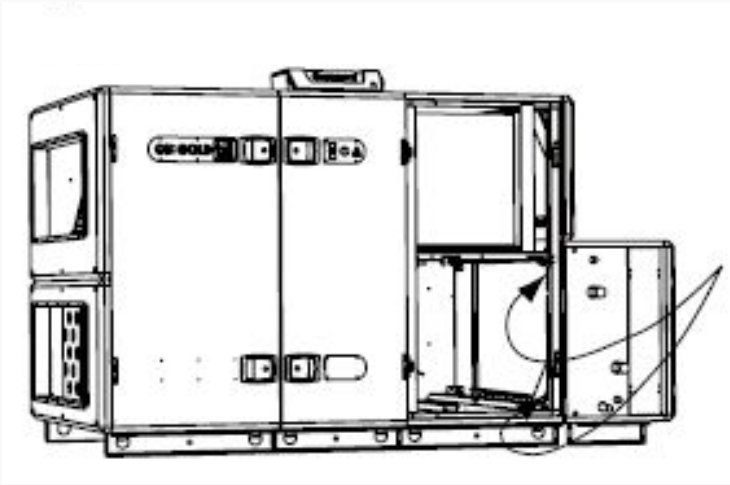


Alternative 2

Connection inside the unit

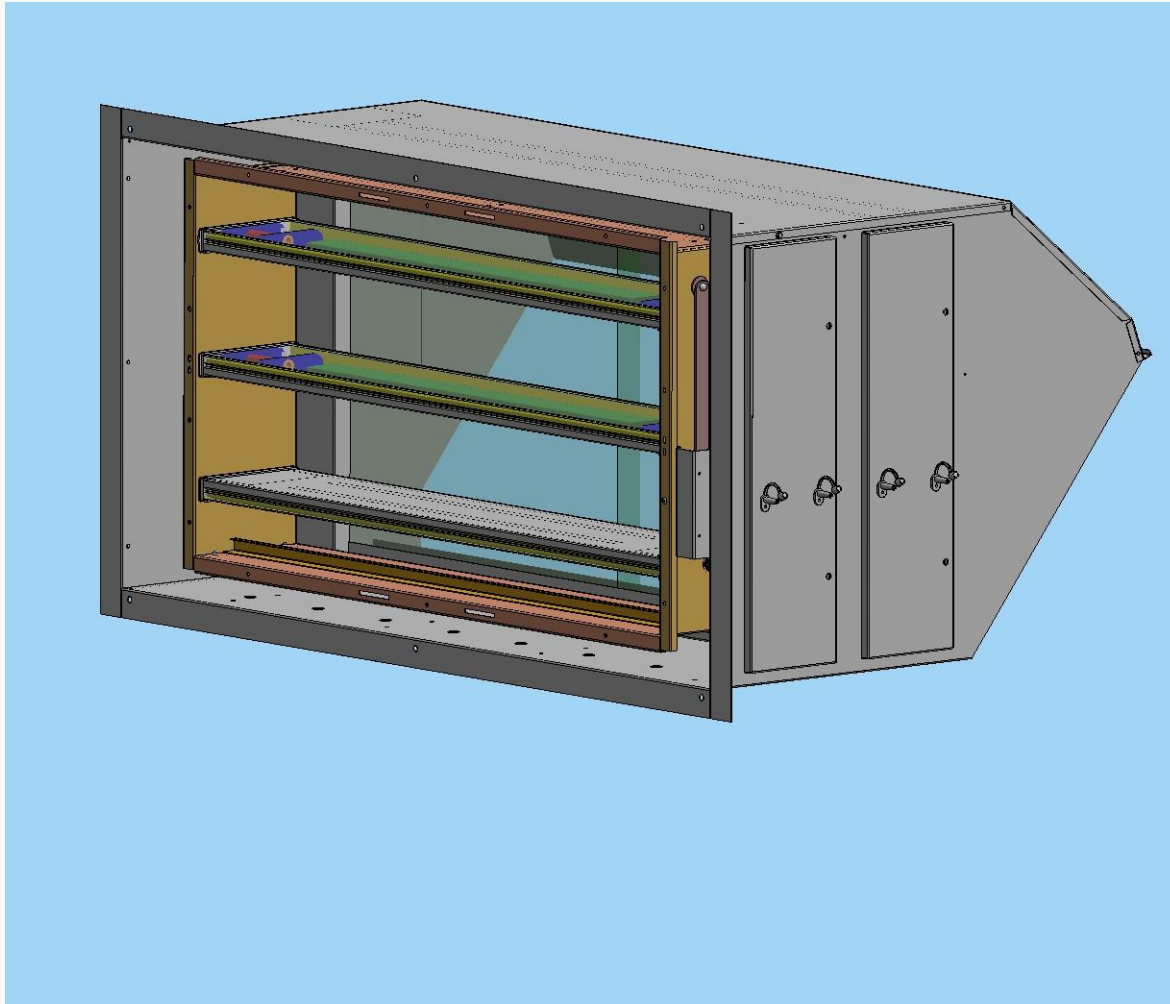
GOLD GOLD Insulated cover

GOLD 14-40 Front connection



Connection with delivered screws

Intake hood GOLD 04-12

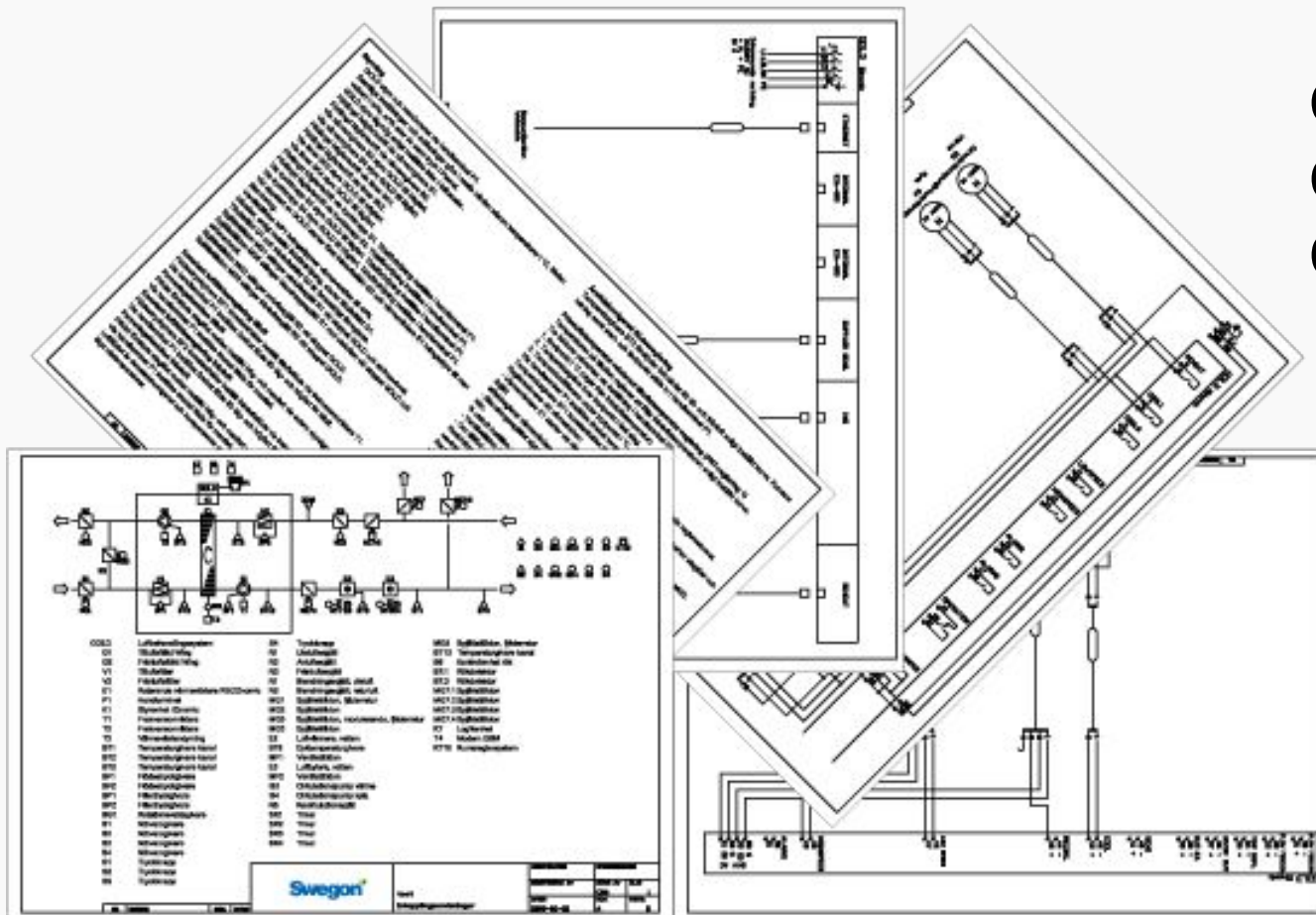


GOLD new roof



Electric drawings direct from ProUnit

GOLD
GOLD LP
COMPACT



GOLD SD

News

- GOLD SD 04-12 Center duct connections
- GOLD SD 04-12 Mounting of controls inside fan wall
- GOLD SD 12 With glycol water exchanger
- Easier mounting of GOLD 14-40
- Same insulation accessories as GOLD standard



COOL DX

Version A:

COOL DX to be connected to GOLD version C.

Version B:

COOL DX to be connected to GOLD version D.

Version D:

Complete new COOL DX with new casing and new compressors adapt to connect direct to GOLD version D.

COOL DX Version D



COOL DX Version D

- Design adapted to GOLD
- Shorter measurement, connects direct to GOLD
- Can be placed stand alone
- Same filter as GOLD
- Much higher COP
- COOL DX for GOLD 80
- Lower sound level
- lower min-airflow
- lower pressuredrop
- R410A instead of R407C
- Outdoor sensor standard i COOL DX
- Low and high pressure sensor



COOL DX Version D, Shorter

COOL DX version A-B

Size	Length	Conn. + endplate	Total length
08-12	1250	25+52+16	1343
20-60	1250	50+52+21	1373

COOL DX version D

Size	Length	Conn. + endplate	Total length
08-12	900	52+16	968
20-30	900	52+21	973
40-80	1100	52+21	1173

200-400 mm shorter depending on size!



Lower min-airflow!

Red is COOL DX version A,B

Black is COOL DX version D

Size	Coolingpower	Min.-flow
08-1	10/10	0,46/0,22
08-2	14/15	0,46/0,30
12-1	14/15	0,68/0,35
12-2	20/22	0,90/0,40
20-1	14/16	0,68/0,45
20-2	20/24	0,90/0,50
20-3	26/33	0,90/0,60
30-1	27/24	1,25/0,70
30-2	32/35	1,50/0,80
30-3	45/49	1,50/1,00
40-1	39/41	1,8/1,1
40-2	45/51	2,1/1,3
40-3	58/70	2,1/1,5
60-1	58/51	2,6/1,5
60-2	69/72	3,2/1,6
60-3	95/101	3,2/2,0
80-1	-/68	-/2,0
80-2	-/105	-/2,4
80-3	-/142	-/2,8



News in IQnomic

BAC Net:
COV (Change over value)
BBMD
Alarm handling

Cooling Boost:
Boost-function works even with low outdoor temperature is cooling is needed.

Average regulation:
2-4 room sensors with bus-connection.
Choose min-, max- or average regulation.
Readings in hand terminal and web page.

Outdoor temperature reading:
If external outdoor sensor is connected the hand terminal will show this sensor in user level.



GOLD RX 120

Max airflow 14,0 m³/s
SFPv 2,0 at 200 Pa 11,5m³/s

Length 3314
Height 3440
width 3340

Delivery start week 1051.5



MIRUVENT

New roof fan five sizes up to 24 000 m³/h

- A lot of variants with frequency controls and EC-motors gives opportunity for energy effective roof fans
- Upward air stream prevents dirty roofs
- Intelligent controls with energy logging
- Communication with GOLD and other BMS systems



Alternativ	Fysisk storlek										
	25		35			45		56		71	
Fläkthjul	28	31	35	40	45	50	56	63	71	80	90
EC-motor	●	●	●	●	●	●					
4-polig AC-motor	●	●	●	●	●	●*	●*	●			
6-polig AC-motor			●	●	●	●*	●*	●*	●*	●	
8-polig AC-motor							●	●	●	●*	●*

* integrated motor controls

- AC-motor one speed Start – stop
- AC-motor with integrated frequency converter for 0-10V external control.
- AC-motor with external frequency converter for 0-10V external control.
- EC-motor with integrated motor controls for 0-10V external control.

MIRU Control

Intelligent controls

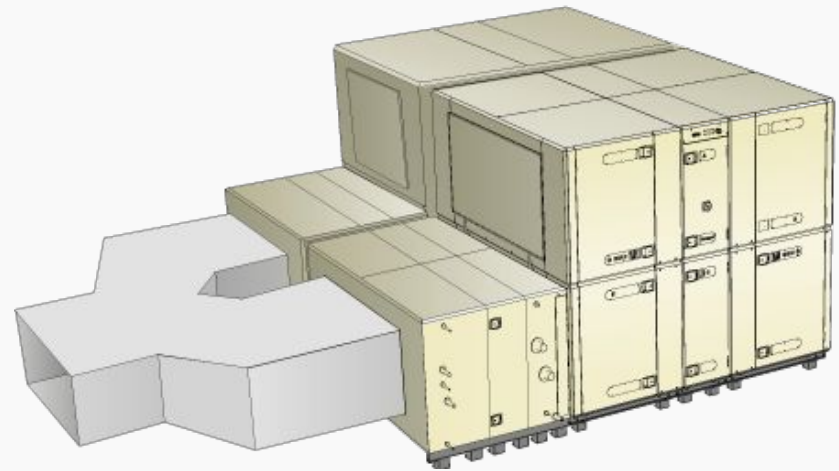
- Stop-low-high speed via internal clock function
- Constant airflow or pressure regulation
- Outdoor- or room temperature-compensation of flow/pressure
- Energy reading
- Communication via Modbus RTU
- Control MIRUVENT via GOLD



Parallel controls

two small units instead of one big

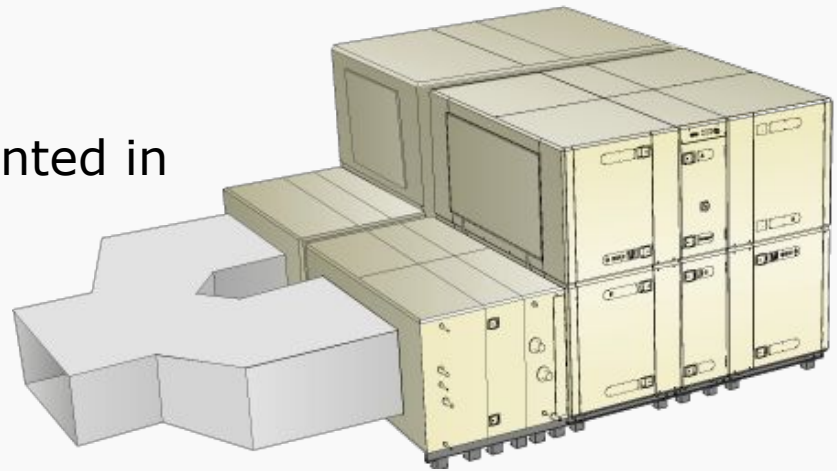
- Low heights of units
- Simpler transport and easier in transport
- All GOLD functionality
- Less interruption when maintenance and service



Parallel controls

Conditions:

- GOLD size 50-80
- Two GOLD of same size
- Standard duct accessories is mounted in the duct to each unit
- Same accessories for both units



The units have standard software and do not demand upgrades!