

Installation instructions for the GOLD RX/CX version F, size 100/120



The document was originally written in Swedish.

Content

1. Installation.....	3
1.1 General.....	3
1.2 Transport within the site.....	3
1.3 Parts packed together with the unit.....	3
1.3.1 Hand-held micro terminal.....	3
1.3.2 Supply air sensor.....	3
1.3.3 Document pocket.....	3
1.4 Location.....	3
1.5 Method of delivery.....	3
1.5.1 GOLD RX.....	3
1.5.2 GOLD CX.....	3
1.6 Lifting.....	4
1.6.1 With a fork-lift truck.....	4
1.6.2 With a crane.....	4
1.6.2.1 Complete units.....	4
1.6.2.2 Heat exchanger section, supplied split into two casing sections and rotor (GOLD RX only).....	5
1.7 To assemble the heat exchanger unit section, if required (GOLD RX only).....	7
1.7.1 Alternative 1.....	7
1.7.2 Alternative 2.....	11
1.7.3 Common for Alternatives 1 and 2.....	15
1.7.3.1 To adjust the rotor's inclination.....	15
1.7.3.2 Sealing plates/purging sector.....	16
1.7.3.3 Pressing roller.....	16
1.7.3.4 Vinyl-coated fabric seal.....	16
1.7.3.5 Sealing.....	17
1.7.3.6 Decorative fittings.....	18
1.8 Version and fan arrangement.....	19
1.8.1 GOLD RX.....	19
1.8.2 GOLD CX.....	19
1.9 The docking of unit sections.....	20
1.9.1 Fan/filter sections.....	20
1.9.2 Fastening, front/middle section.....	20
1.9.3 Fixation, rear of the unit.....	21
1.9.4 Decorative fittings.....	22
1.9.5 Electrical quick-fit connectors.....	23
1.9.6 To connect air tubes to filter pressure sensors ..	24
1.10 Duct connection.....	25
1.11 To install the supply air sensor.....	25
1.12 Electrical connections, communication cables (only GOLD CX).....	26
1.13 To connect the electric power supply.....	27
1.13.1 GOLD RX.....	27
1.13.2 GOLD CX.....	28
1.14 To Connect external cables.....	29
1.14.1 GOLD RX.....	29
1.14.2 GOLD CX.....	29
1.15 Installation of pipework package (GOLD CX only).....	30
2. Dimensions.....	30
2.1 GOLD RX 100/120.....	30
2.2 GOLD CX 100/120.....	31
3. Wiring terminals, control unit.....	32

1. Installation

1.1 General

All staff concerned must acquaint themselves with these instructions before beginning any work on the unit. Any damages to the unit or parts of it due to improper handling or misuse by the purchaser or the fitter cannot be considered subject to guarantee if these instructions have not been followed correctly.

The product identification plates are located on the inspection side of the air handling unit and inside the electric equipment cubicle of the unit. Refer to the particulars on the product identification plate when you contact Swegon.

The air handling unit is supplied in packaged condition.

Possible ordered accessories are supplied in separate packaging with the unit.

1.2 Transport within the site

Before removing the transport pallet/transport cradle, if used, determine whether a forklift truck or a pallet transporter will be used for further transporting the unit within the site to the spot where it will be installed.

1.3 Parts packed together with the unit

Individually packaged components such as the hand-held micro terminal, decorative fittings, commissioning plates, bolts, supply air sensor and document pocket are inside the air handling unit when it is delivered.

1.3.1 Hand-held micro terminal

The hand-held micro terminal is equipped a 3 m long cable and a quick-fit connector. For particulars of the electrical connections, see 1.14. A holder for wall-mounting is supplied with the hand-held micro terminal. The holder can be secured to the outside of the air handling unit (does not apply to the outdoor units) or another appropriate place. An extension cable (8 metres long) is available as an accessory.

1.3.2 Supply air sensor

The sensor is equipped with a 10 m long cable and a quick-fit connector. For particulars regarding installation, see 1.11. For particulars of the electrical connections, see 1.14.

1.3.3 Document pocket

Secure the document pocket to the exterior of the air handling unit or another appropriate place.

1.4 Location

The air handling unit must be mounted horizontally on a flat and firm supporting surface and this surface must be constructed in a way enabling it to support the weight of the unit.

When installing the air handling unit and connecting pipe-work and electric cables, make sure that adequate free space is provided for opening the inspection doors and covers and withdrawing functional sections, such as filter cassettes and fan assemblies, clear of the unit casing.

Inspection space required

A clear space of 1,000 mm should be provided in front of the unit for opening the inspection doors.

1.5 Method of delivery

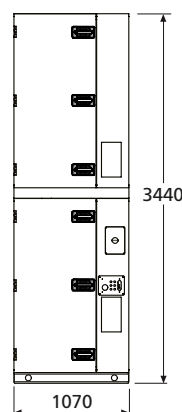
1.5.1 GOLD RX

The GOLD RX 120 is normally supplied in five separate sections: two fan sections, two filter sections and one heat exchanger section.

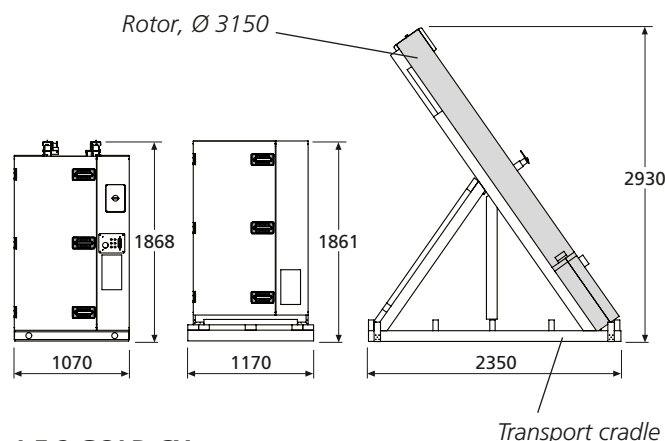
The heat exchanger section can also be supplied split into two casing sections and rotor, in which case the rotor is supplied tilted in a transport cradle (transport height = 2,930 mm, minimum transport width = 2,350 mm). See Section 1.7 for installation particulars.

For other dimensions and weights, see Section 2.1.

Heat exchanger section supplied as a separate unit



Heat exchanger section, supplied split into two casing sections and rotor



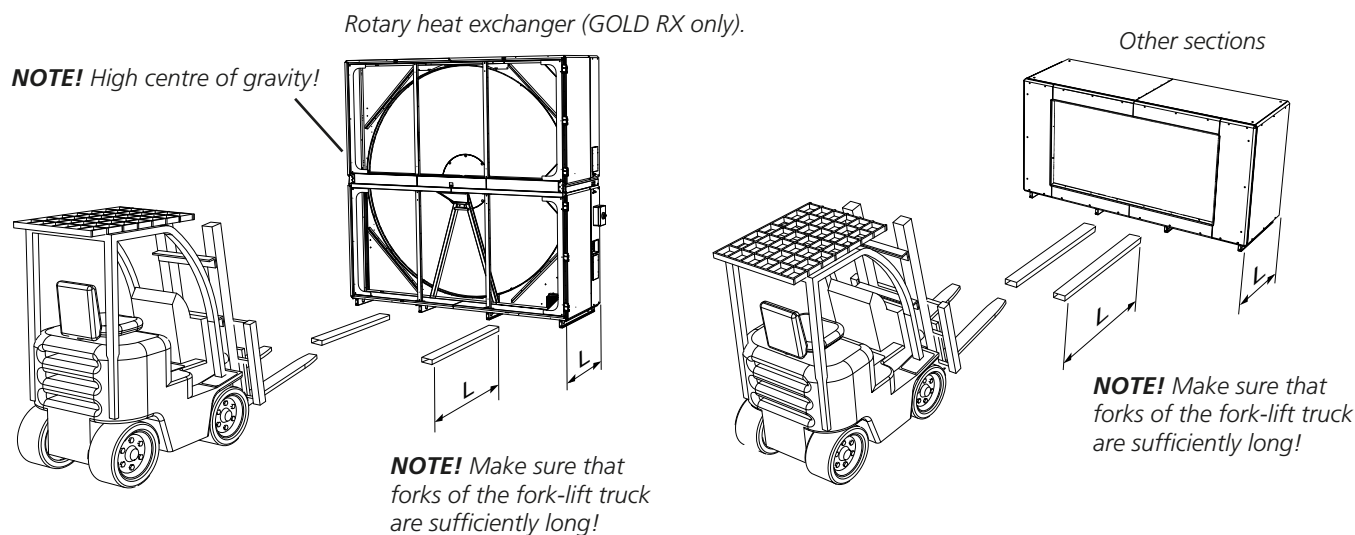
1.5.2 GOLD CX

The GOLD CX 120 is supplied as six separate units: Two fan sections, two filter sections and two coil heat exchanger sections.

For dimensions and weights, see Section 2.2.

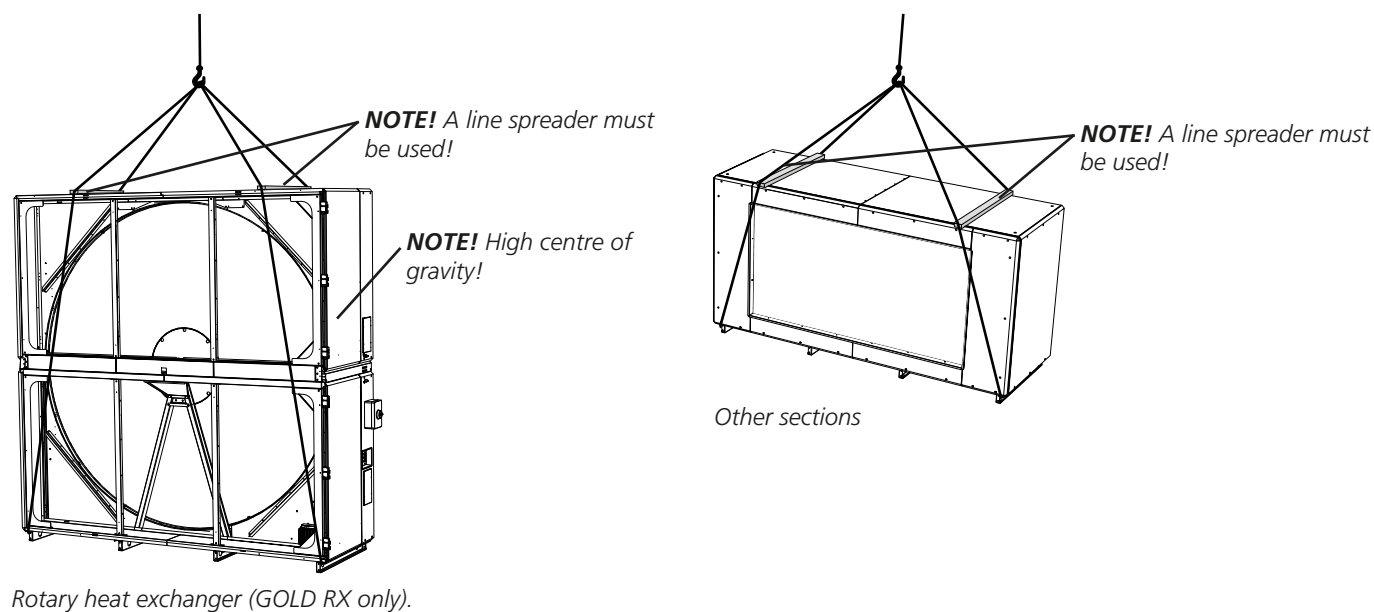
1.6 Lifting

1.6.1 With a fork-lift truck

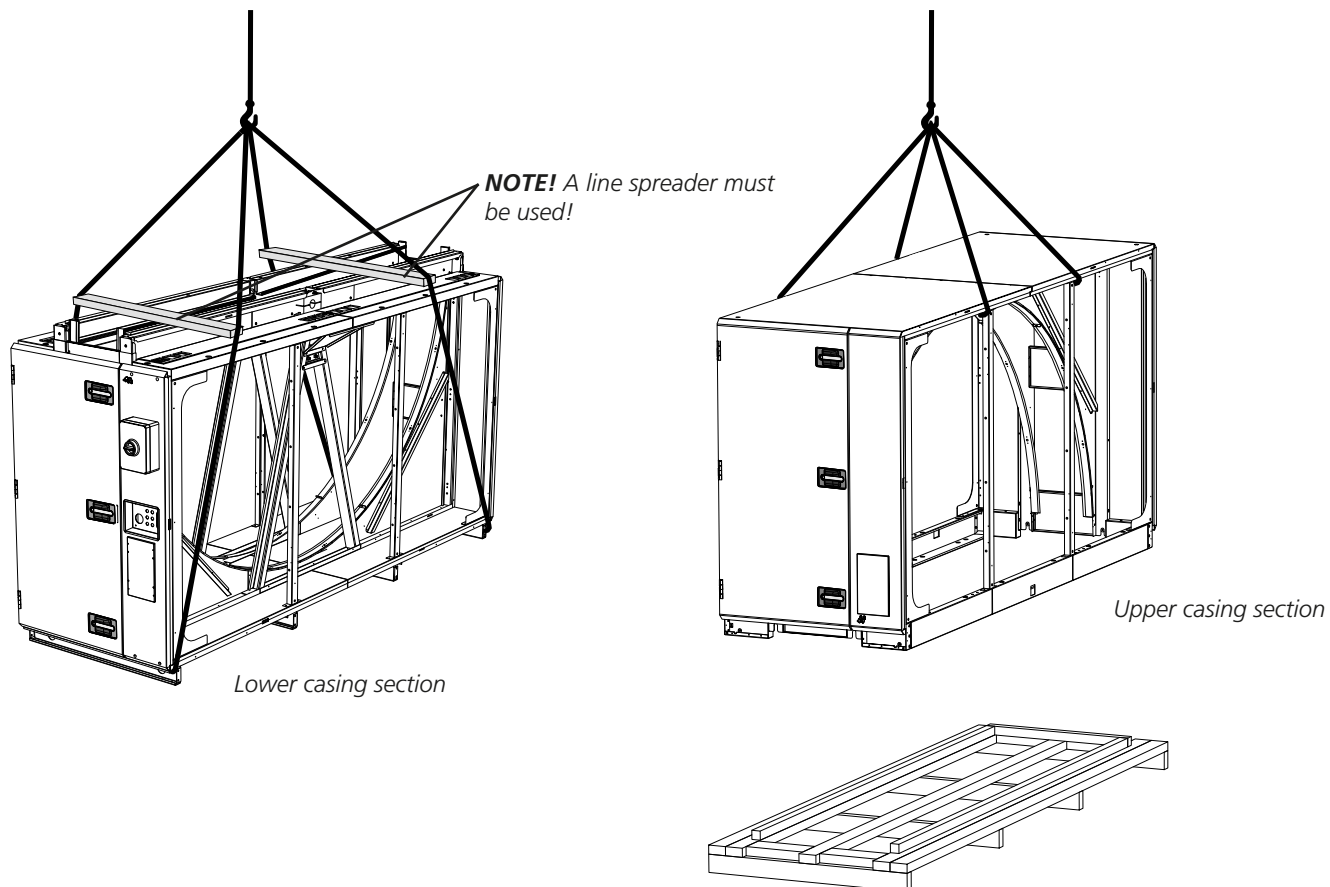


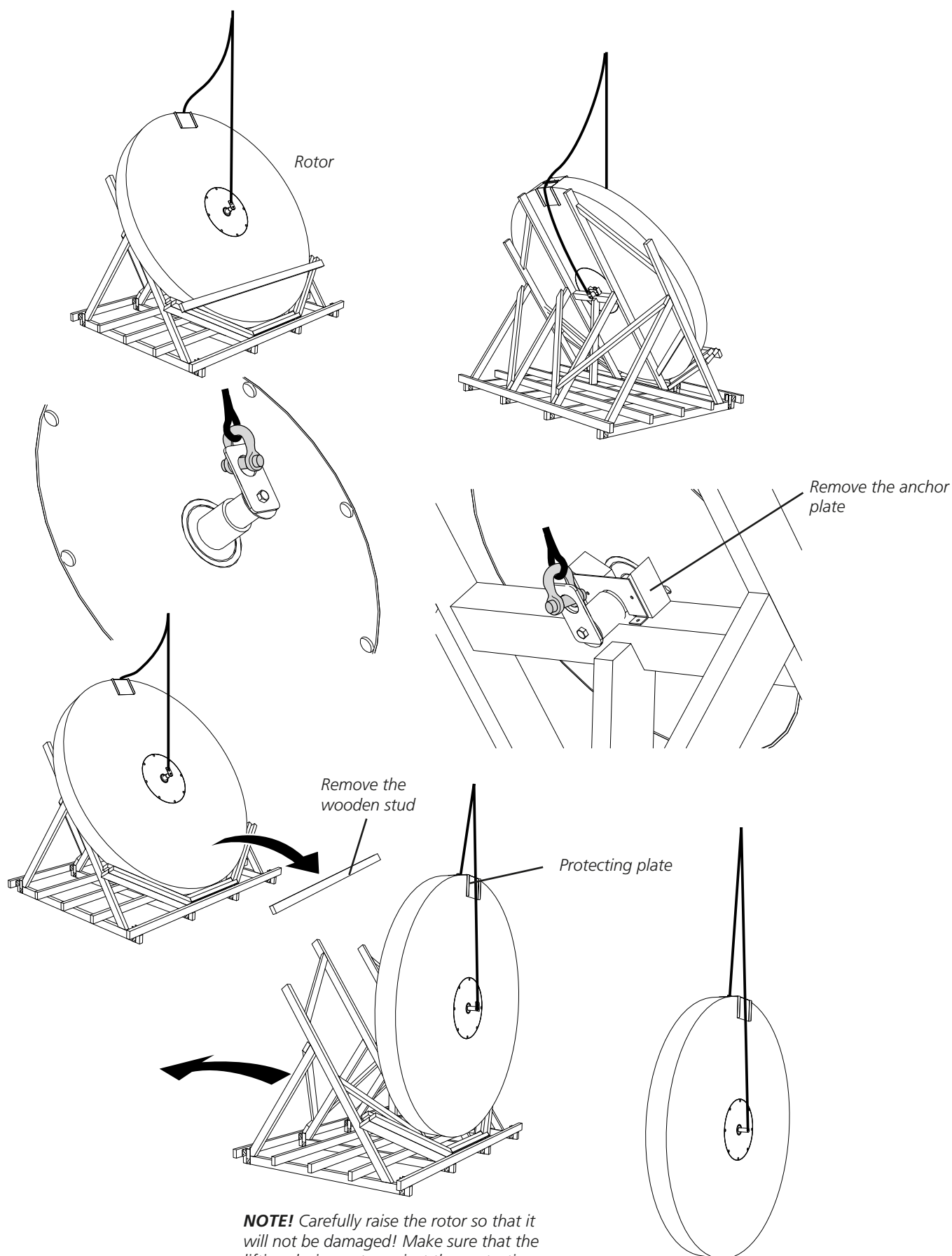
1.6.2 With a crane

1.6.2.1 Complete units



1.6.2.2 Heat exchanger section, supplied split into two casing sections and rotor (GOLD RX only)



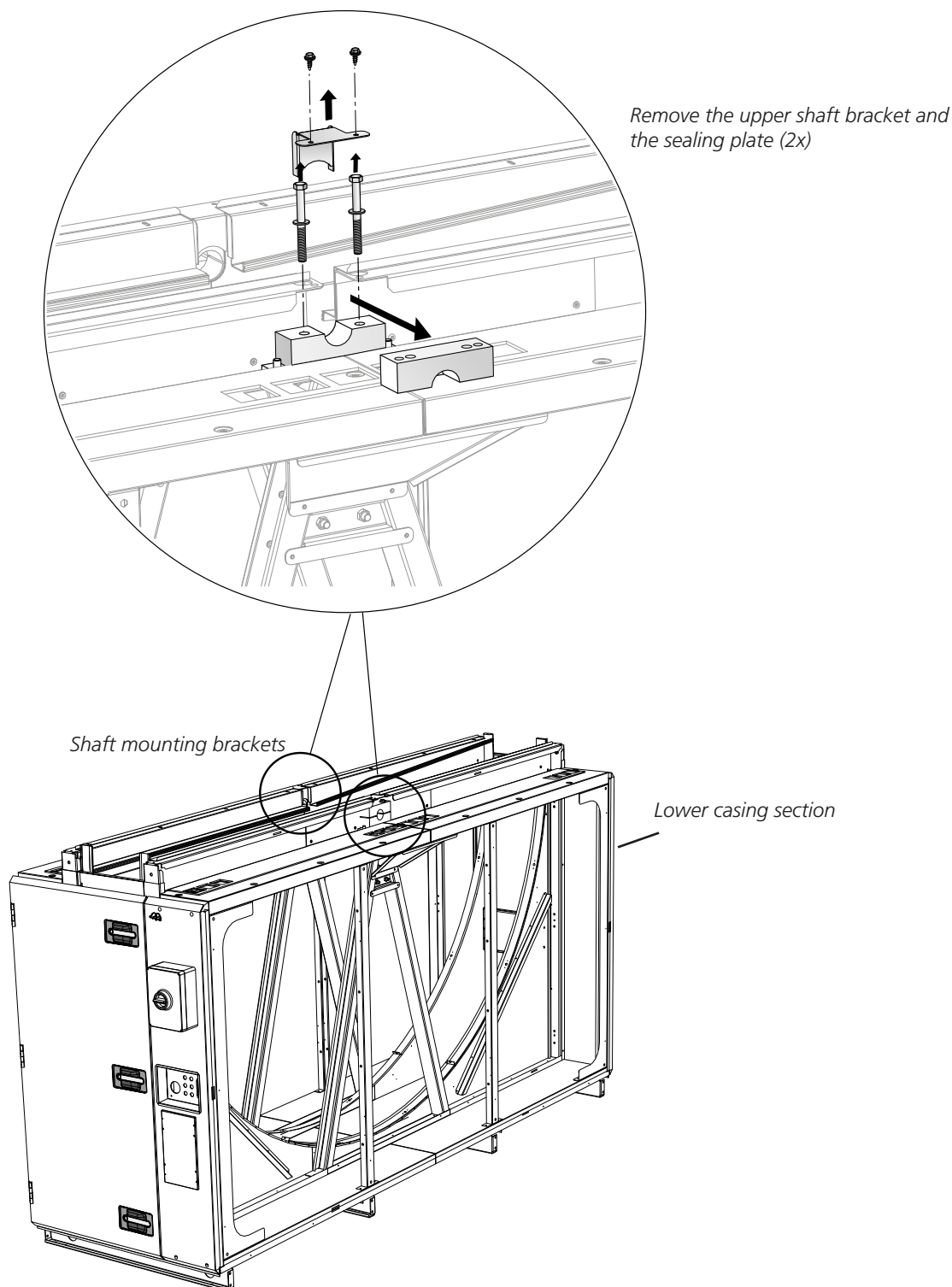


1.7 To assemble the heat exchanger unit section, if required (GOLD RX only)

If the heat exchanger unit section is supplied in parts, they must be jointed together. This can be done in two ways: Alternative 1 is appropriate for use if there is sufficient free space upward since this alternative is simpler. If sufficient space is not available, Alternative 2 should be used.

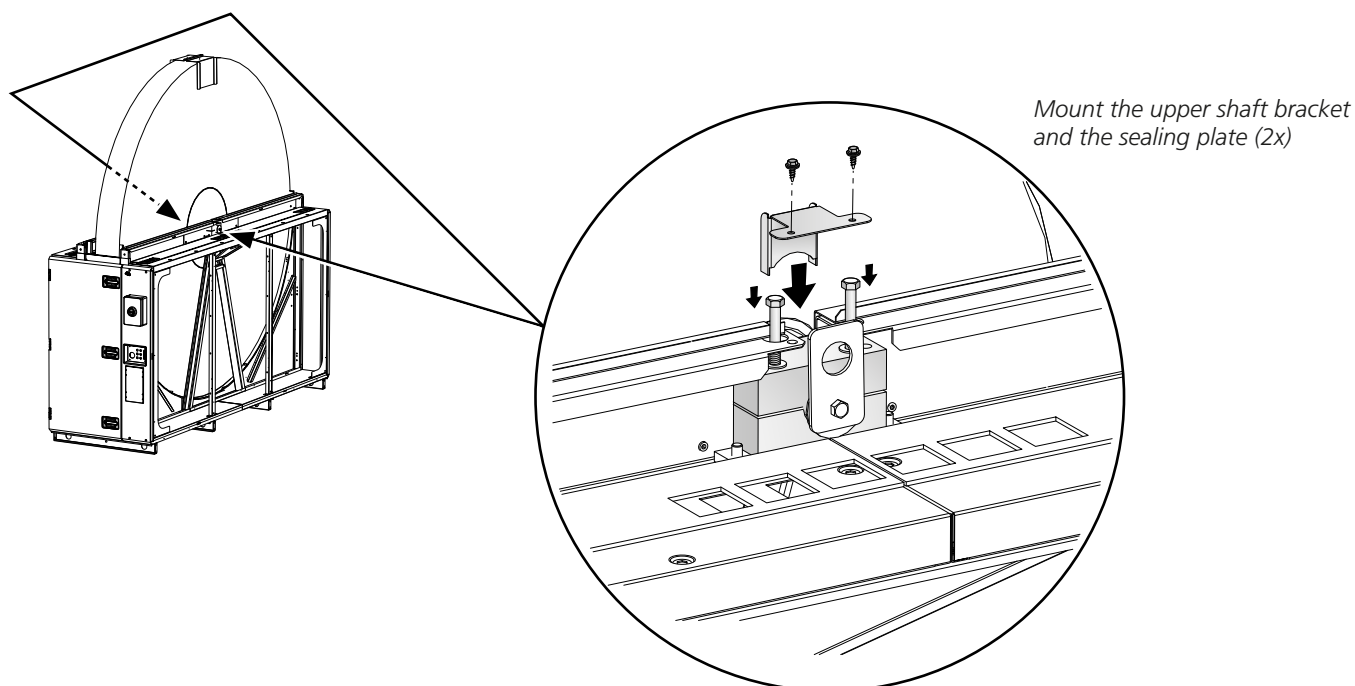
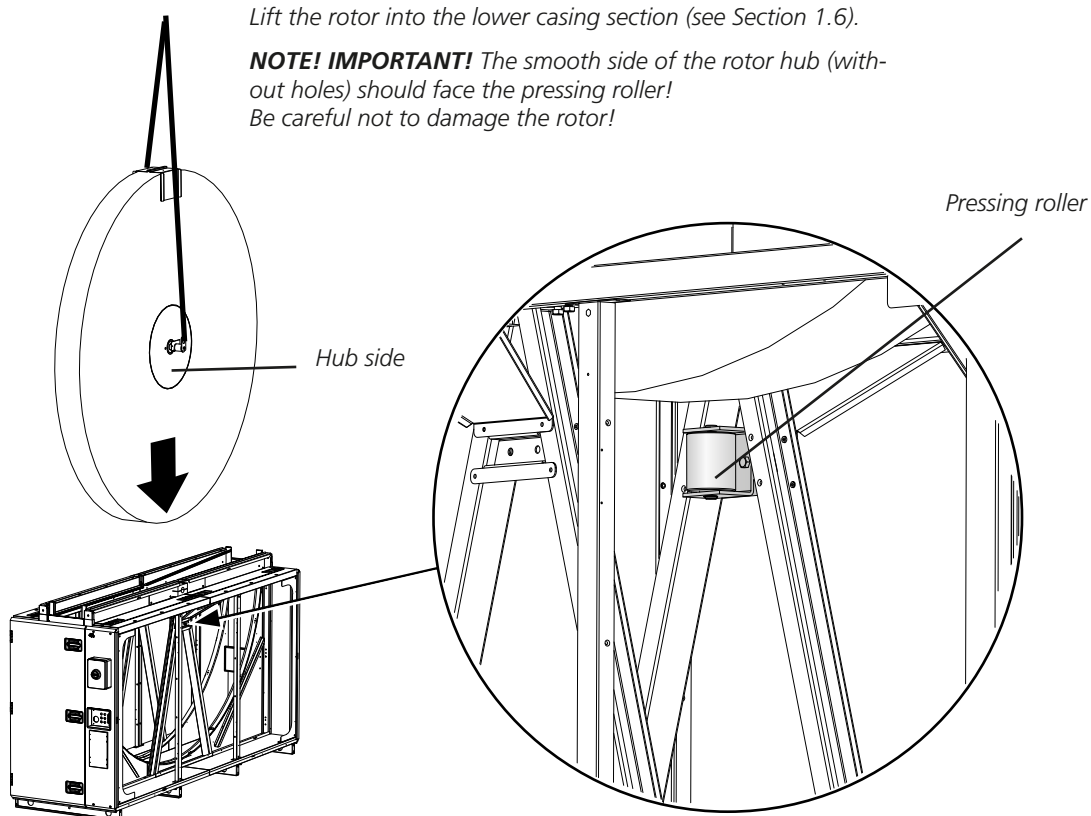
If the heat exchanger unit section is supplied as one unit, go on to Section 1.8.

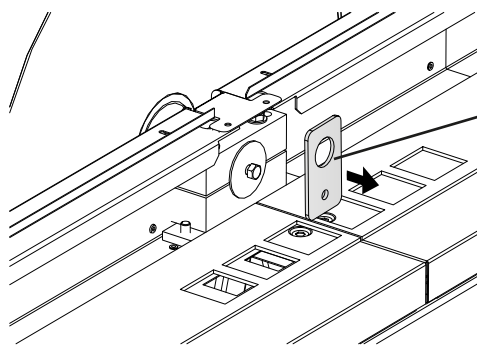
1.7.1 Alternative 1



Lift the rotor into the lower casing section (see Section 1.6).

NOTE! IMPORTANT! The smooth side of the rotor hub (without holes) should face the pressing roller!
Be careful not to damage the rotor!

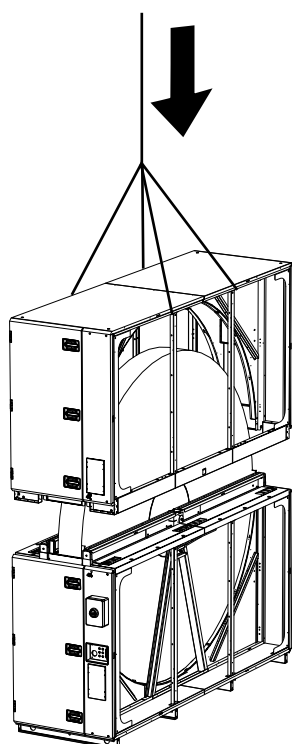




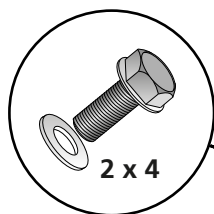
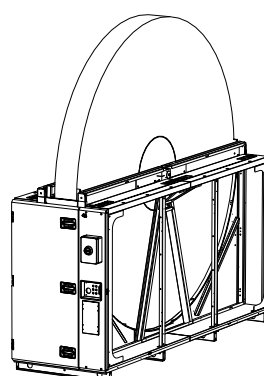
Remove the lifting lugs. Refit the bolts and washers to the shaft end (2x).



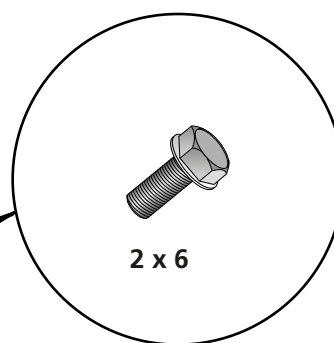
Remove the protecting plate of the rotor.



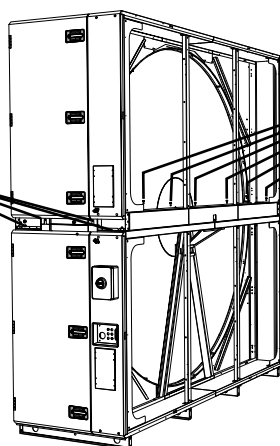
Lift the upper casing section onto the lower casing section (see Section 1.6).



2 x 4



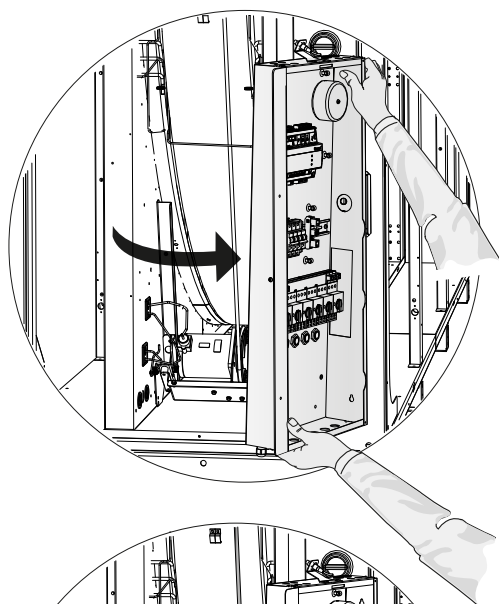
2 x 6



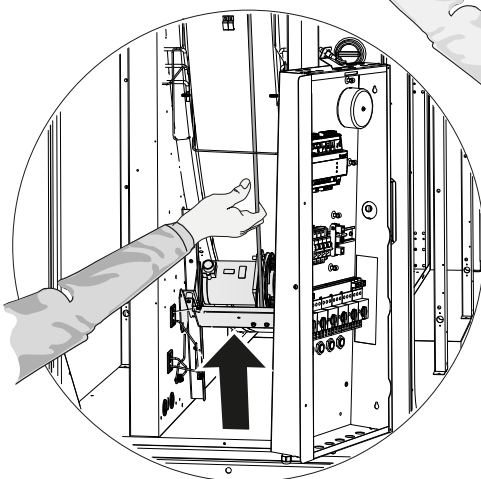
Fix the upper casing section to the lower casing section with the bolts supplied, screwing them into the pre-fitted rivet nuts (a total of 20 pcs.).

Unfasten the electrical equipment cubicle and move it to the side. Disconnect the electrical quick-fit connectors from the fan motors and the heat exchanger drive motor.

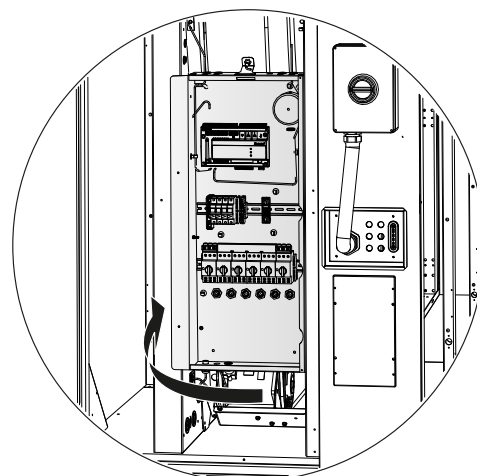
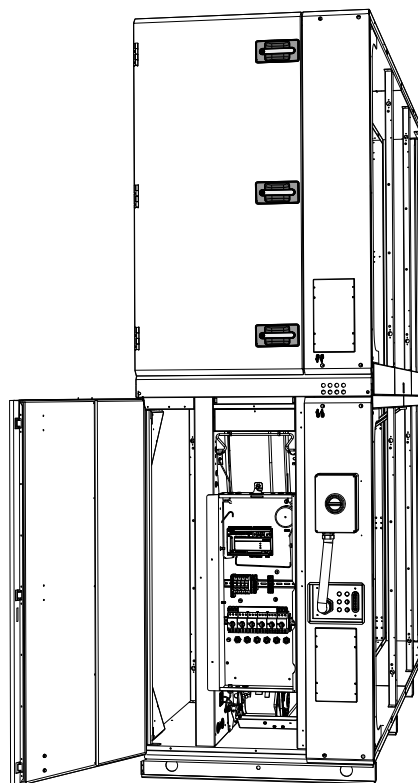
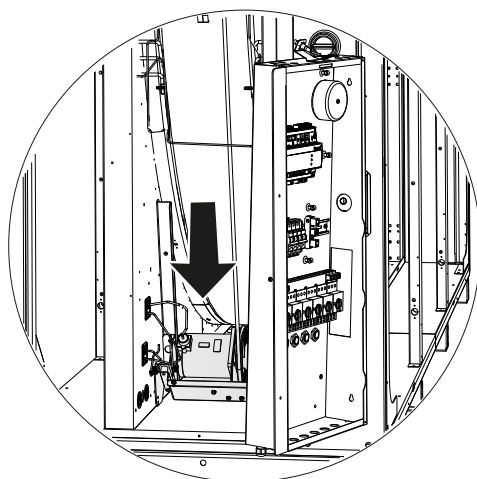
NOTE! Do not disconnect the cables from the electrical equipment cubicle to the main switch.



Dismantle the heat exchanger motor + mounting bracket (6 bolts). Move the motor + mounting bracket into position shown in the illustration and temporarily secure them with two screws. Place the rotor drive belt around the motor belt pulley.



Slacken off the two screws holding the motor + mounting bracket. Move the motor + mounting bracket back to their original positions. Secure the motor + mounting bracket with bolts (6 bolts).



Reconnect the electrical quick-fit connectors to the fan motors and the heat exchanger drive motor. Move the electrical equipment cubicle back into position and secure it with the appropriate bolts.

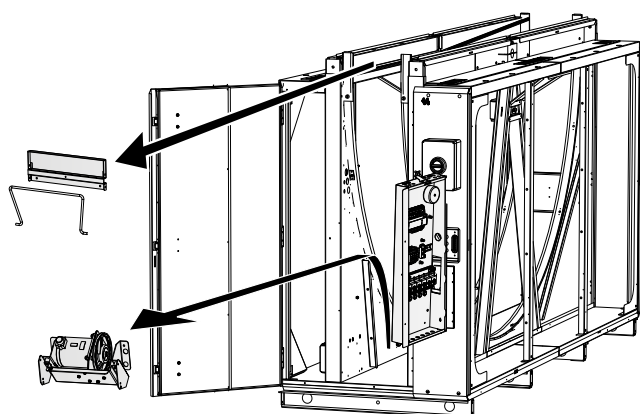
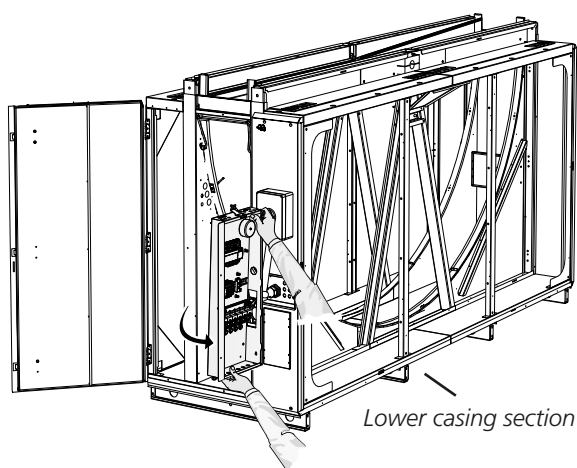
See also Section 1.7.3 Common for Alternatives 1 and 2

1.7.2 Alternative 2

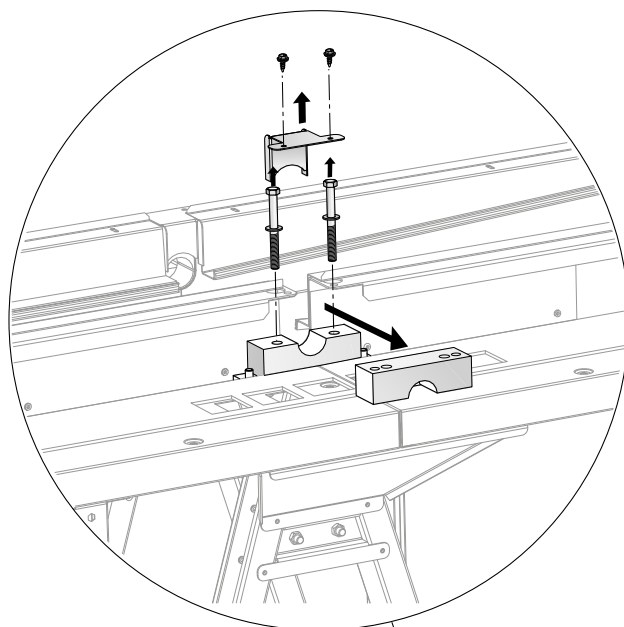
Unfasten the electrical equipment cubicle and move it to the side. Disconnect the electrical quick-fit connectors from the fan motors and the heat exchanger drive motor.

NOTE! Do not disconnect the cables from the electrical equipment cubicle to the main switch.

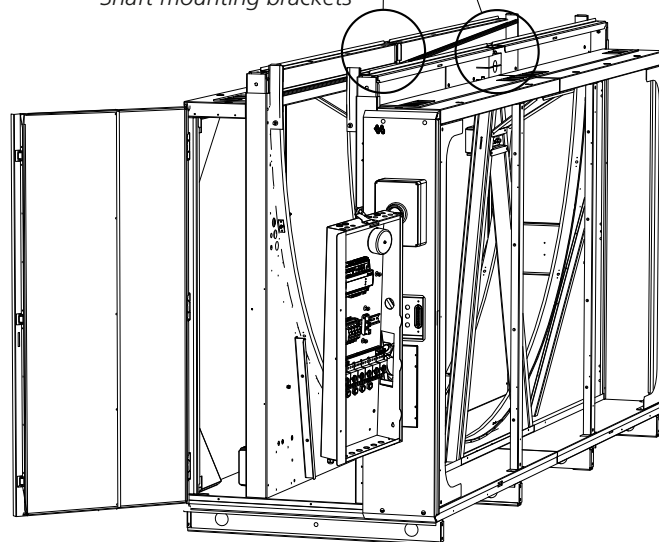
Remove the upper shaft bracket and the sealing plate (2x)



Dismantle the heat exchanger motor + mounting bracket (6 bolts). Remove the sealing plate and tube.

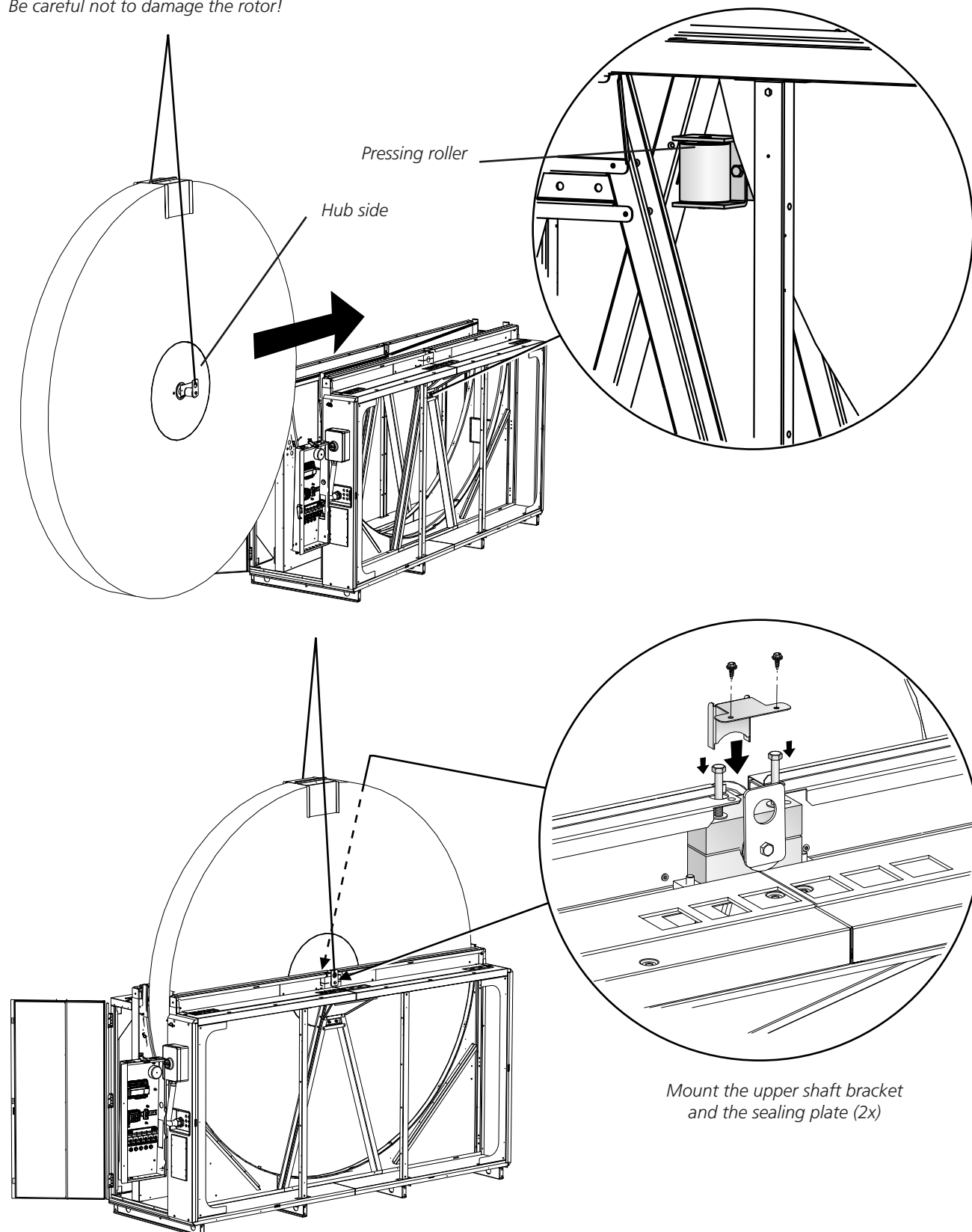


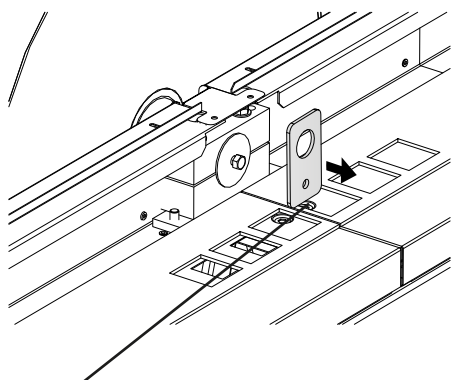
Shaft mounting brackets



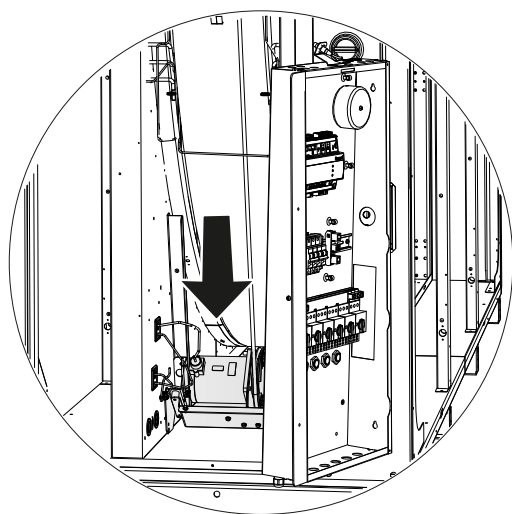
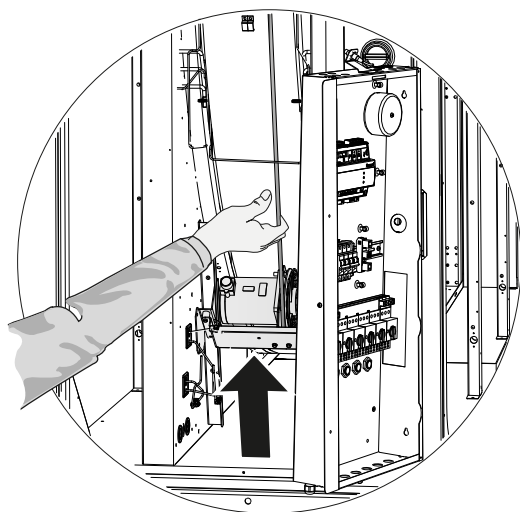
Lift the rotor from the side into the lower casing section (see Section 1.6).

NOTE! IMPORTANT! The smooth side of the rotor hub (without holes) should face the pressing roller!
Be careful not to damage the rotor!





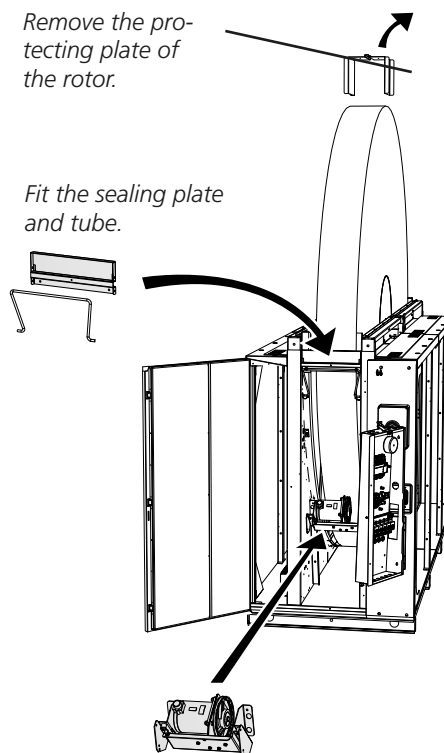
Remove the lifting lugs. Refit the bolts and washers to the shaft end (2x).



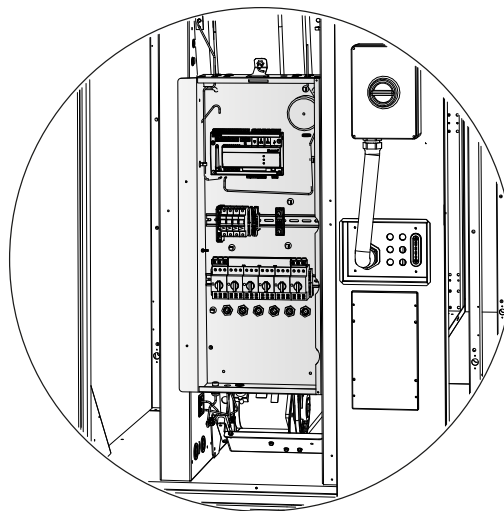
Slacken off the two screws holding the motor + mounting bracket. Move the motor + mounting bracket to the position shown in the illustration. Secure the motor + mounting bracket with bolts (6 bolts).

Remove the protecting plate of the rotor.

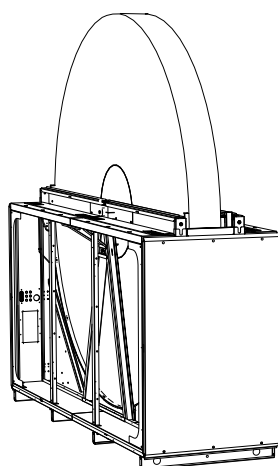
Fit the sealing plate and tube.



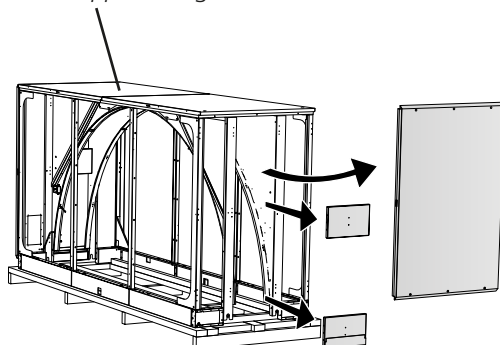
Move the motor + mounting bracket into position shown in the illustration and temporarily secure them with two screws. Place the rotor drive belt around the motor belt pulley.



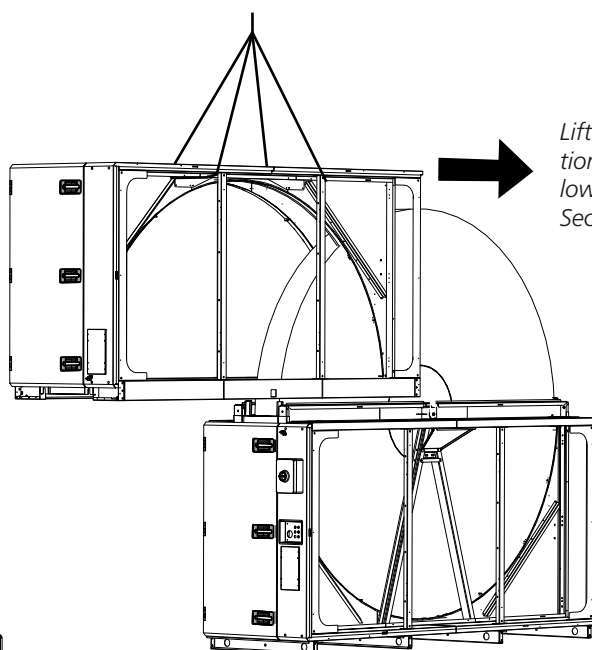
Reconnect the electrical quick-fit connectors to the fan motors and the heat exchanger drive motor. Move the electrical equipment cubicle back into position and secure it with the appropriate bolts.



Upper casing section

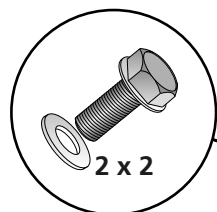
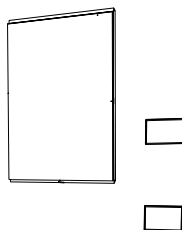


Remove the cover panel on the rear side. Remove the sealing plates (2 pcs.).

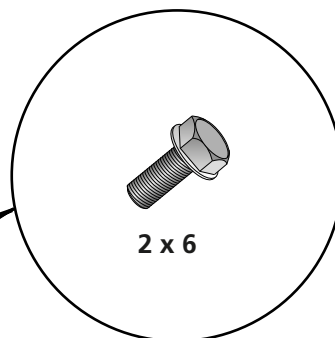


Lift the upper casing section from the side onto the lower casing section (see Section 1.6).

Mount the cover panel and the sealing plates (2 pcs.).



2 x 2



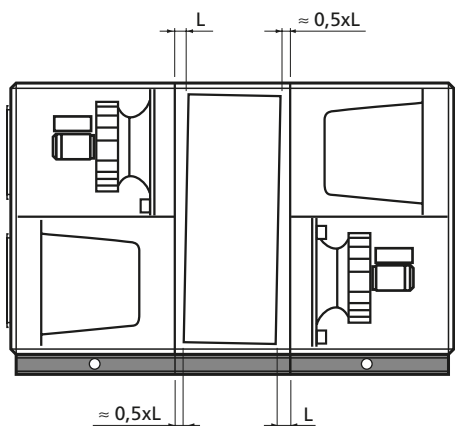
2 x 6

Fix the upper casing section to the lower casing section with the bolts supplied, screwing them into the pre-fitted rivet nuts (a total of 16 pcs.).

See also Section 1.7.3 Common for Alternatives 1 and 2

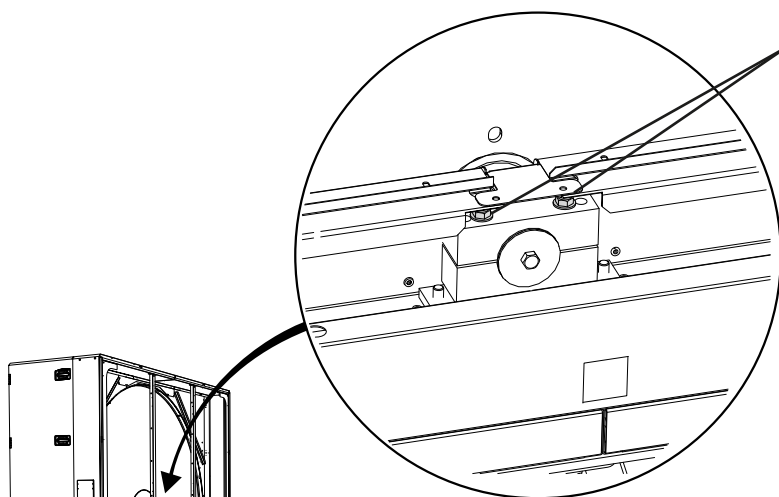
1.7.3 Common for Alternatives 1 and 2

1.7.3.1 To adjust the rotor's inclination

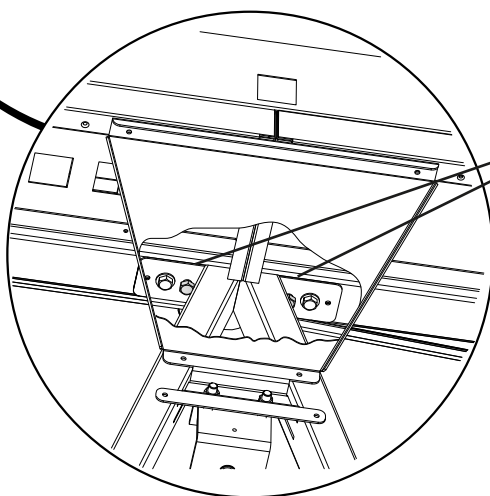


The illustration shows an appropriate rotor inclination setting for Fan Arrangement 1. The inclination must always be toward the filter, which means that the inclination for Fan Arrangement 2 is in the other direction.

The rotor's inclination may need to be greater in applications that involve high airflows with associated high pressure.



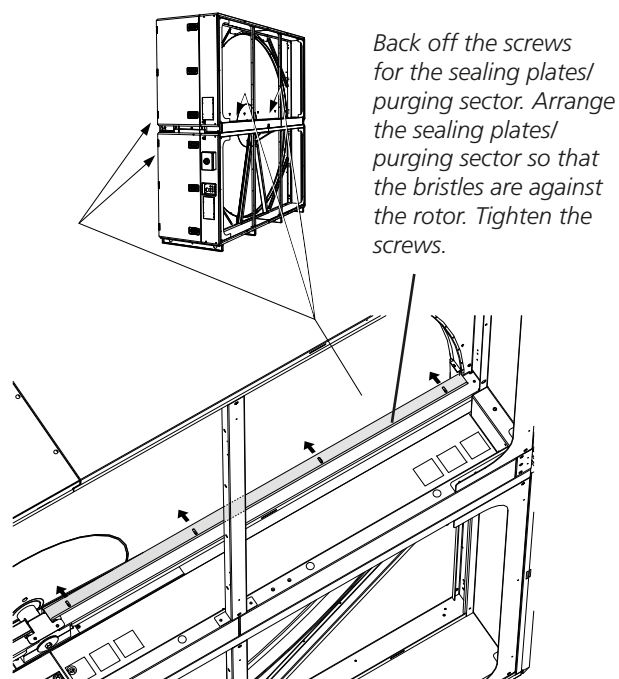
Slightly back off the locking bolts.
Do not dismantle the shaft bracket.



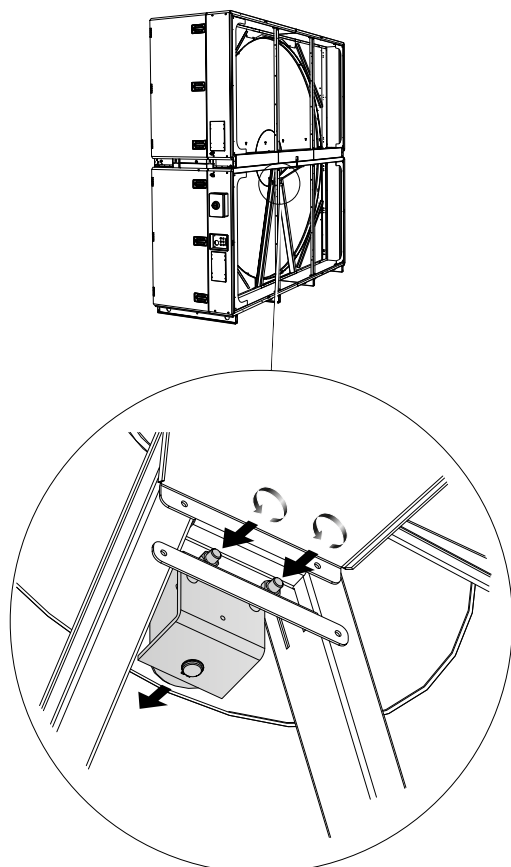
Adjust the inclination of the rotor by means of the adjusting bolts. Tighten the adjusting bolts equally.

When you have adjusted the inclination, tighten the locking bolts.

1.7.3.2 Sealing plates/purging sector

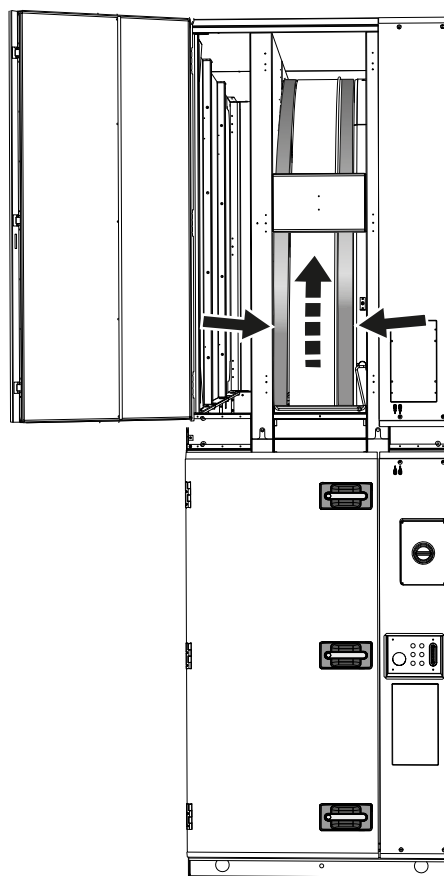


1.7.3.3 Pressing roller



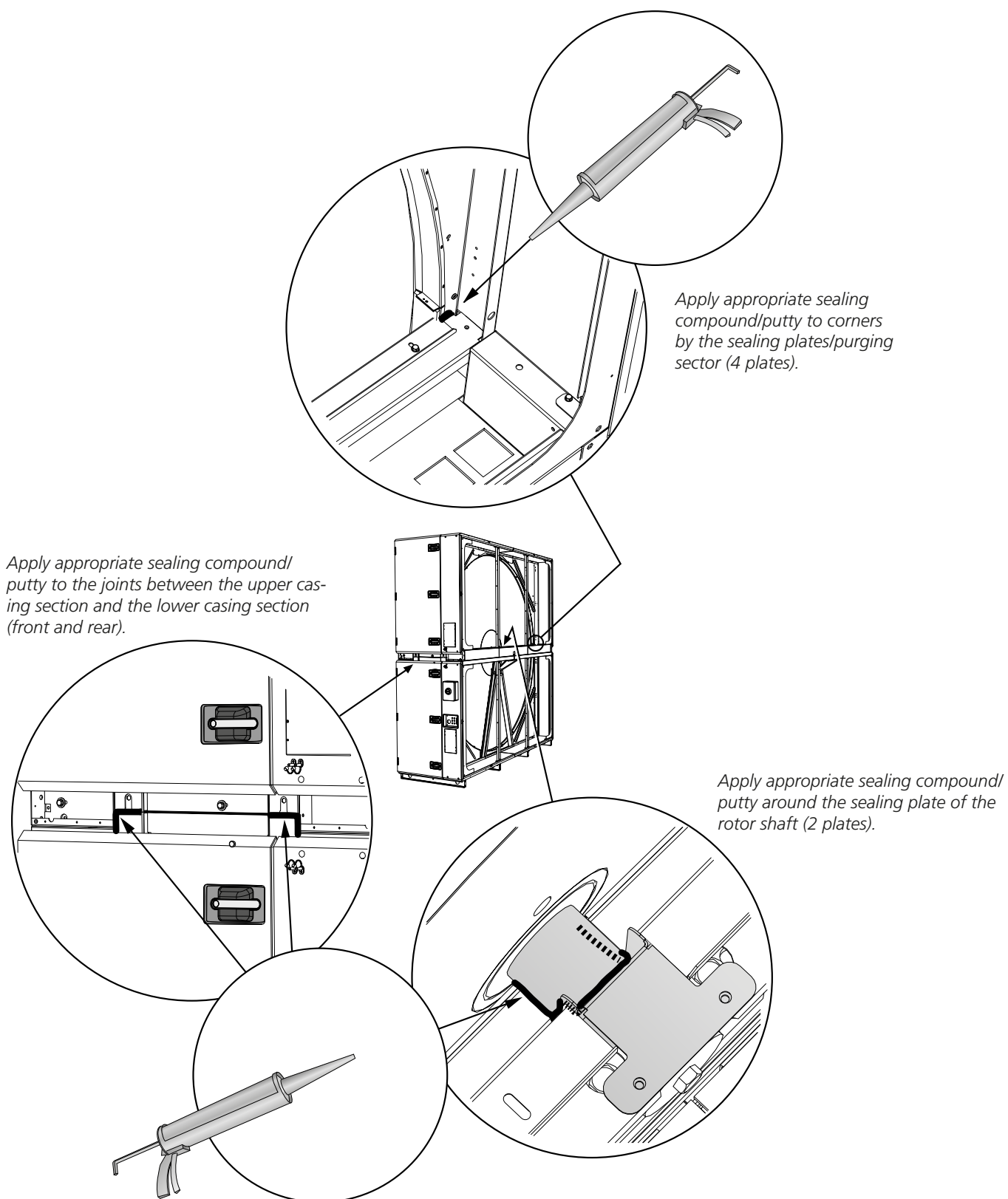
Tension the pressing roller against the rotor hub until you no longer can roll the pressing roller with your hand.

1.7.3.4 Vinyl-coated fabric seal



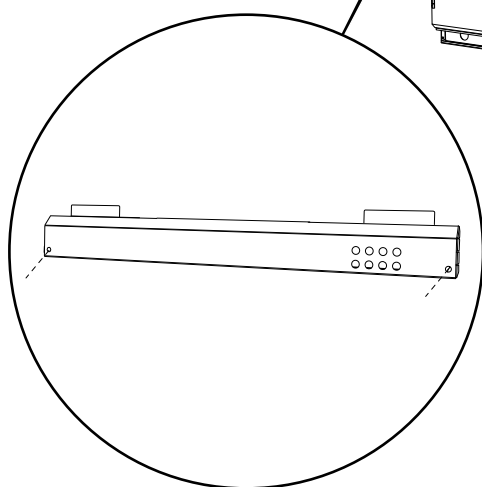
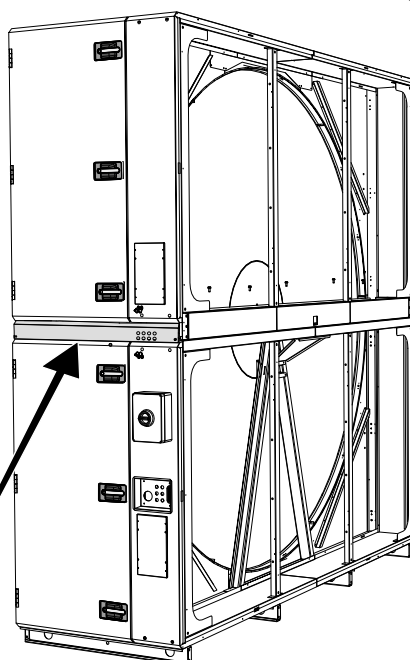
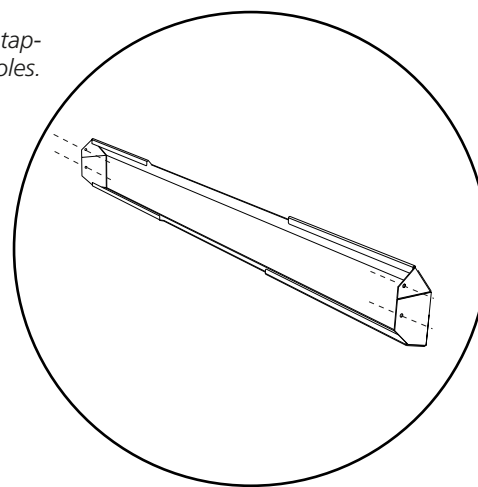
Slip the vinyl-coated fabric seal of the rotor (blue) over the rim all the way around on both sides of the rotor.

1.7.3.5 Sealing



1.7.3.6 Decorative fittings

Mount the decorative fittings with self-tapping screws in the pre-punched holes.



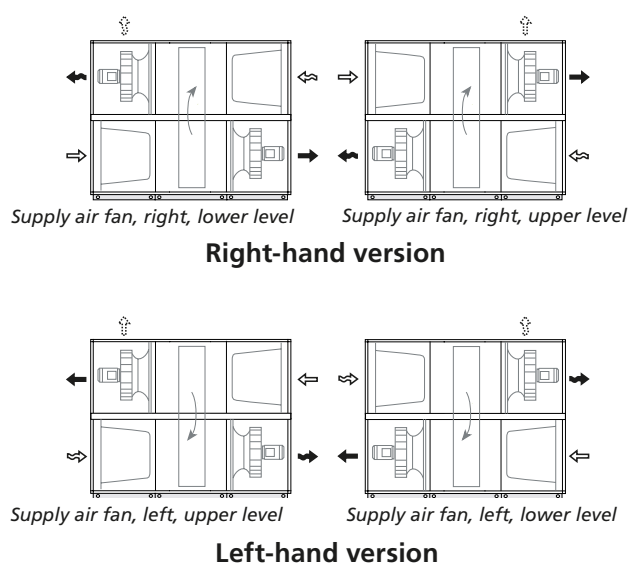
Mount the decorative fittings with the pre-fitted M5 bolts in the pre-fitted rivet nuts.

1.8 Version and fan arrangement

1.8.1 GOLD RX

The GOLD RX 100/120 is delivered in a right-hand or a left-hand version. The arrangement of the functional sections can be vertically reversed (specify when ordering), see the illustration below.

For particulars of the delivery configuration and installation of the relevant air handling unit, see the decal on the lower section of the heat exchanger.



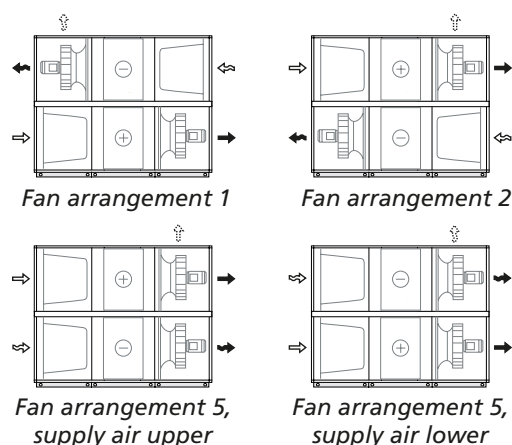
1.8.2 GOLD CX

The GOLD CX 120 is supplied in the right-hand or a left-hand version and with fan arrangement 1, 2, 4 or 5, see the illustrations below.

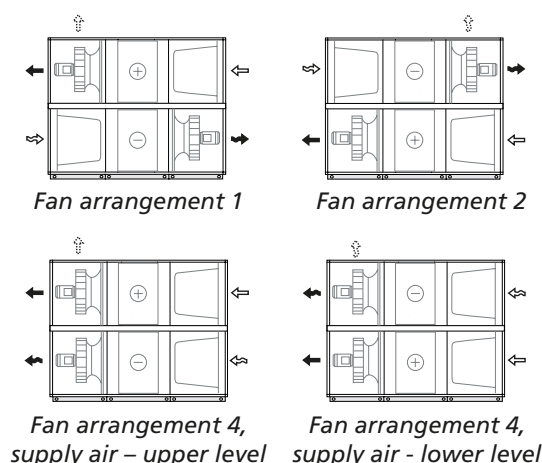
For particulars of the delivery configuration and installation of the relevant air handling unit, see the decal on the lower section of the heat exchanger.

NOTE! The safety isolating switch is always placed on the outside of the coil heat exchanger on the lower level.

N.B.! If extract air flows through the lower level: The air handling unit must be raised at least 50 mm (higher than the upper edge of the base beams) to provide space for the water trap.



Right-hand version



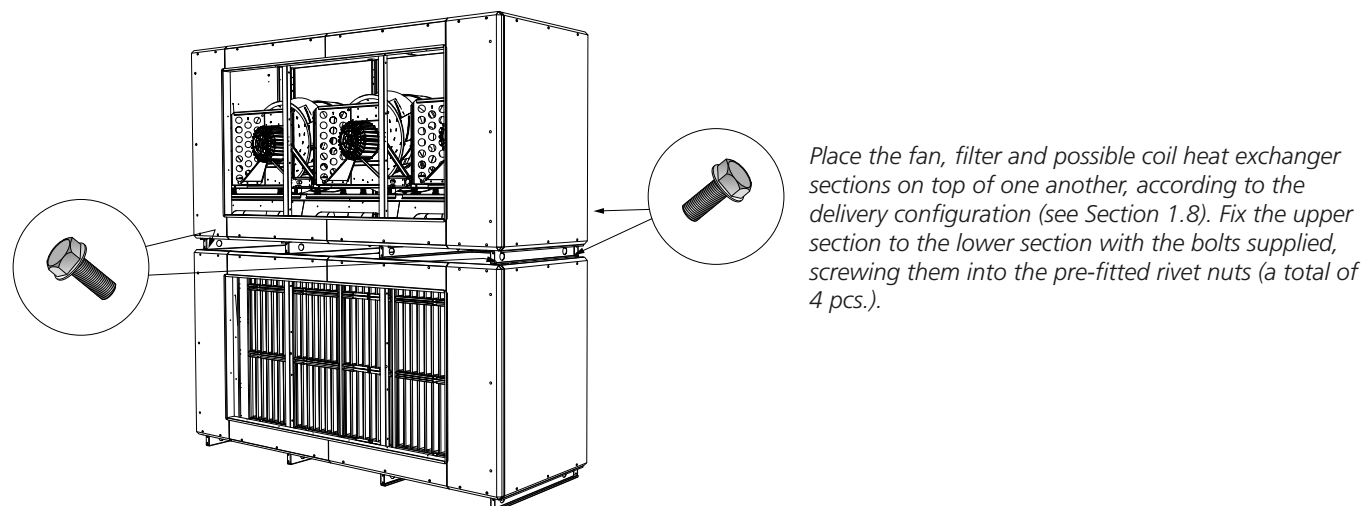
Left-hand version



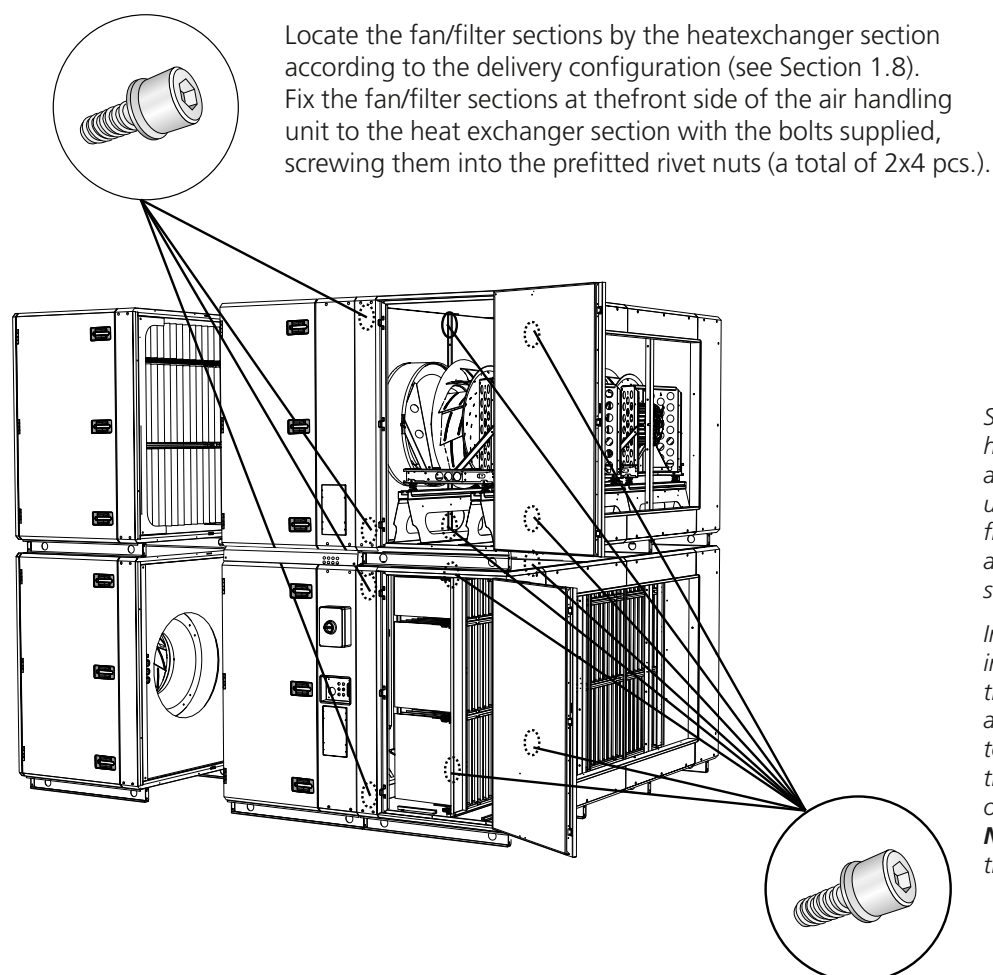
1.9 The docking of unit sections

The illustrations in Section 1.10 show a GOLD RX air handling unit with fan arrangement 2. The principle is however the same for the other air handling units.

1.9.1 Fan/filter sections



1.9.2 Fastening, front/middle section



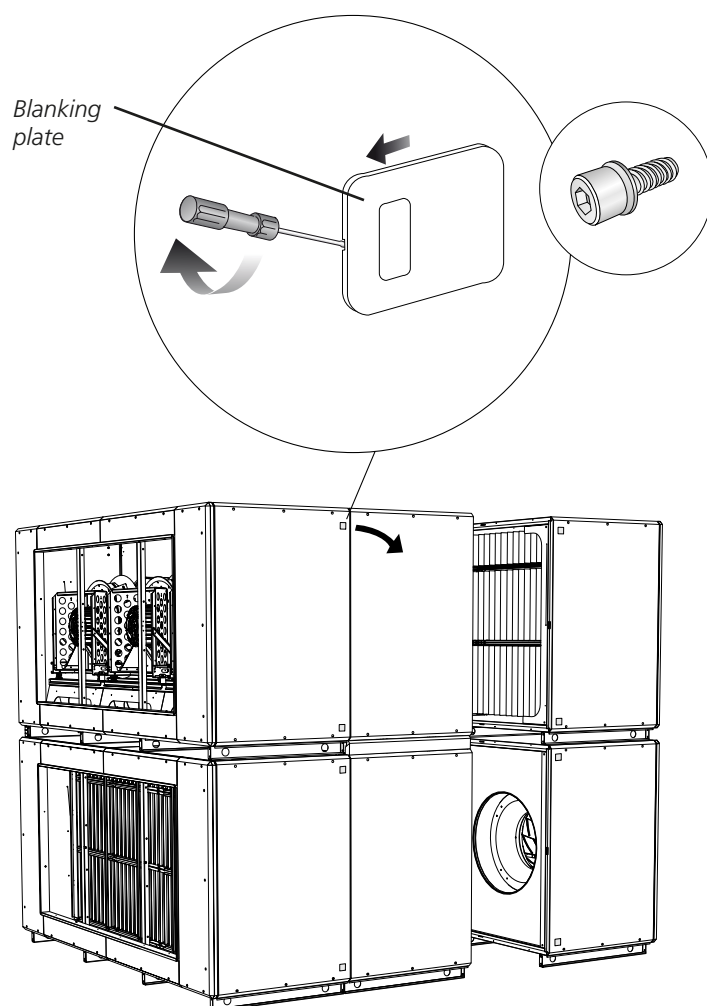
Secure the fan/filter sections to the heat exchanger section inside the air handling unit's middle section using the supplied screws in the pre-fitted rivet nuts (total 2x8 pcs.). The anchoring points inside the unit are shown in the illustration.

In order to access the anchor points in the fan section, you must unfasten the flexible connections and the fan assemblies and move them outward toward the inspection door. You can then tighten the screws from the opening of the duct connection.

NOTE! You do not need to remove the fan assemblies completely!

1.9.3 Fixation, rear of the unit

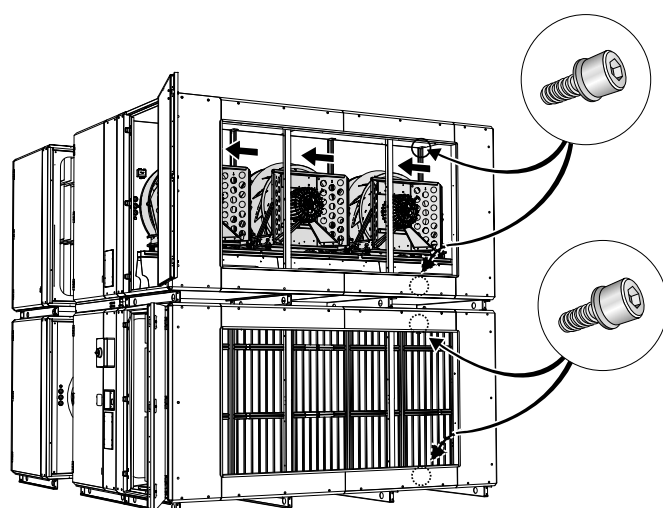
Securing with screws at the rear of the air handling unit can be done in two ways, internally or externally. External fixing (Alt. 1) is appropriate for use if there is sufficient free space behind the air handling unit, since this alternative is simpler. If sufficient space is not available, Alt. 2) can be used.



Alt. 1

External fixing.

Dismantle the blanking plate and insulation inside the cover on the rear side of the air handling unit. Fix the fan/filter sections to the heat exchanger section with the bolts supplied, screwing them into the pre-fitted rivet nuts (a total of 2x4 pcs.). Refit the blanking plate and the insulation.



Alt. 2

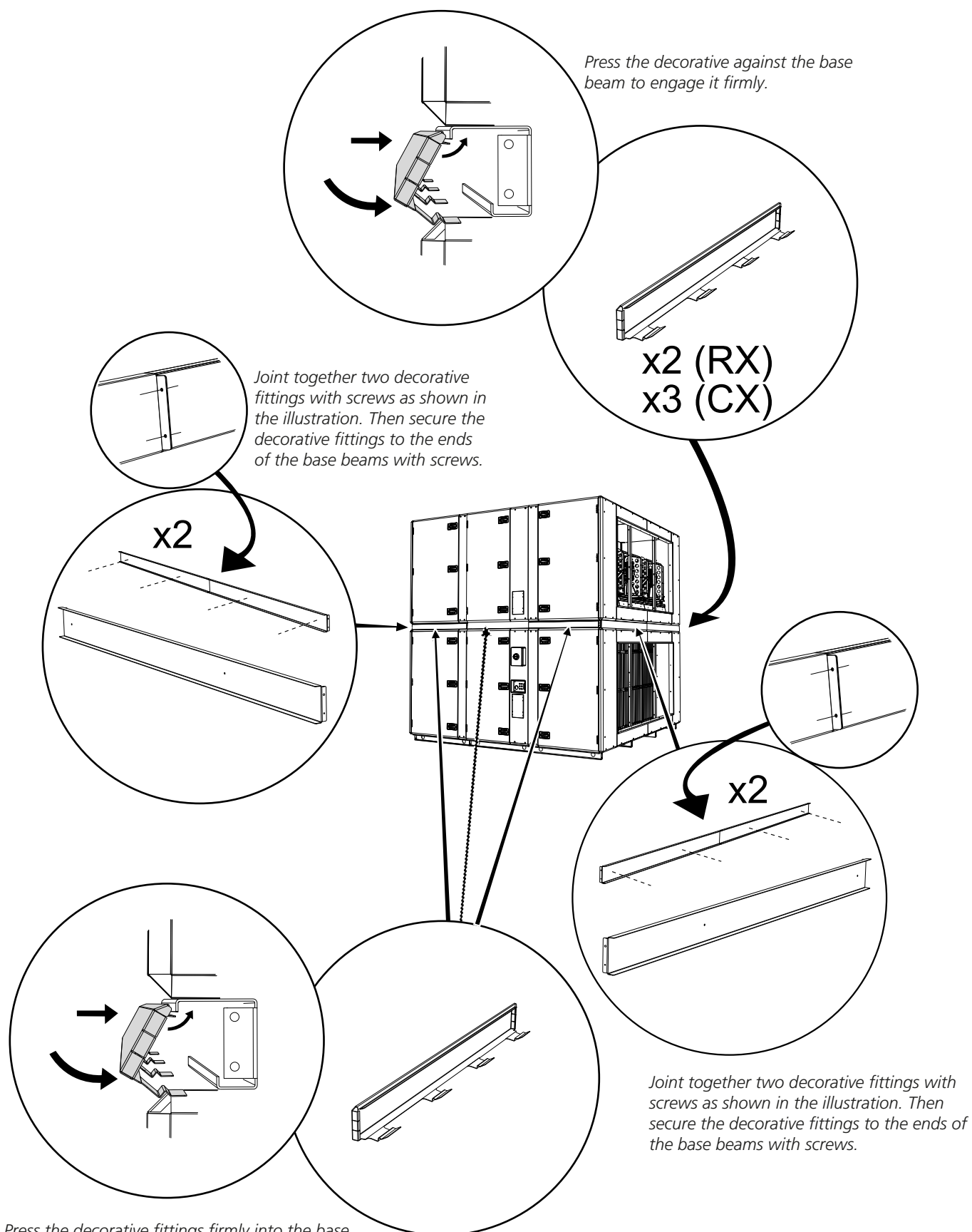
Internal installation.

Fix the fan/filter sections to the heat exchanger section with the bolts supplied, screwing them into the pre-fitted rivet nuts (a total of 2x4 pcs.). The anchoring points inside the unit are shown in the illustration.

In order to access the anchor points in the fan section, you must unfasten the flexible connections and the fan assemblies and move them outward toward the inspection door. You can then tighten the screws from the opening of the duct connection.

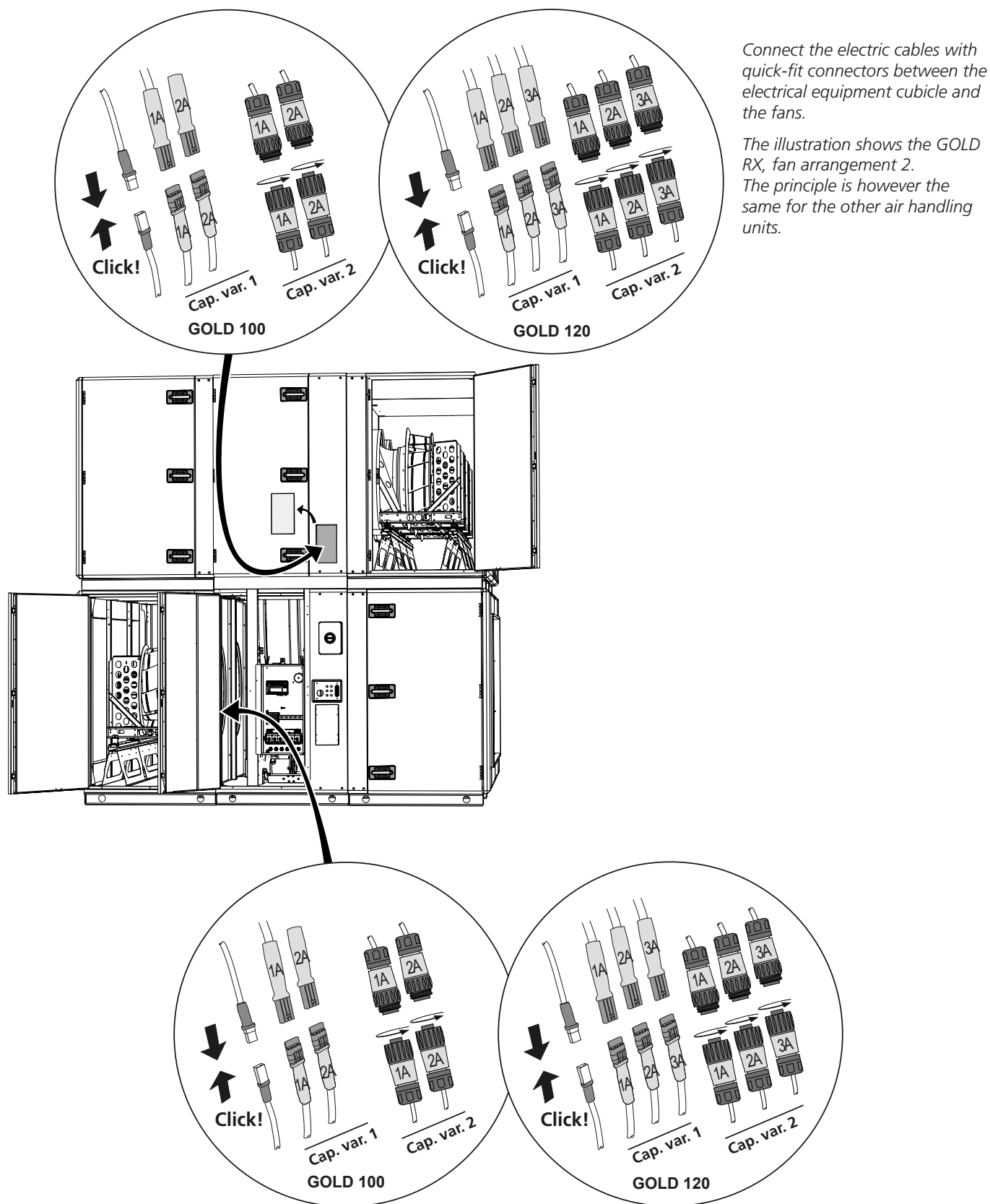
NOTE! *You do not need to remove the fan assemblies completely!*

1.9.4 Decorative fittings

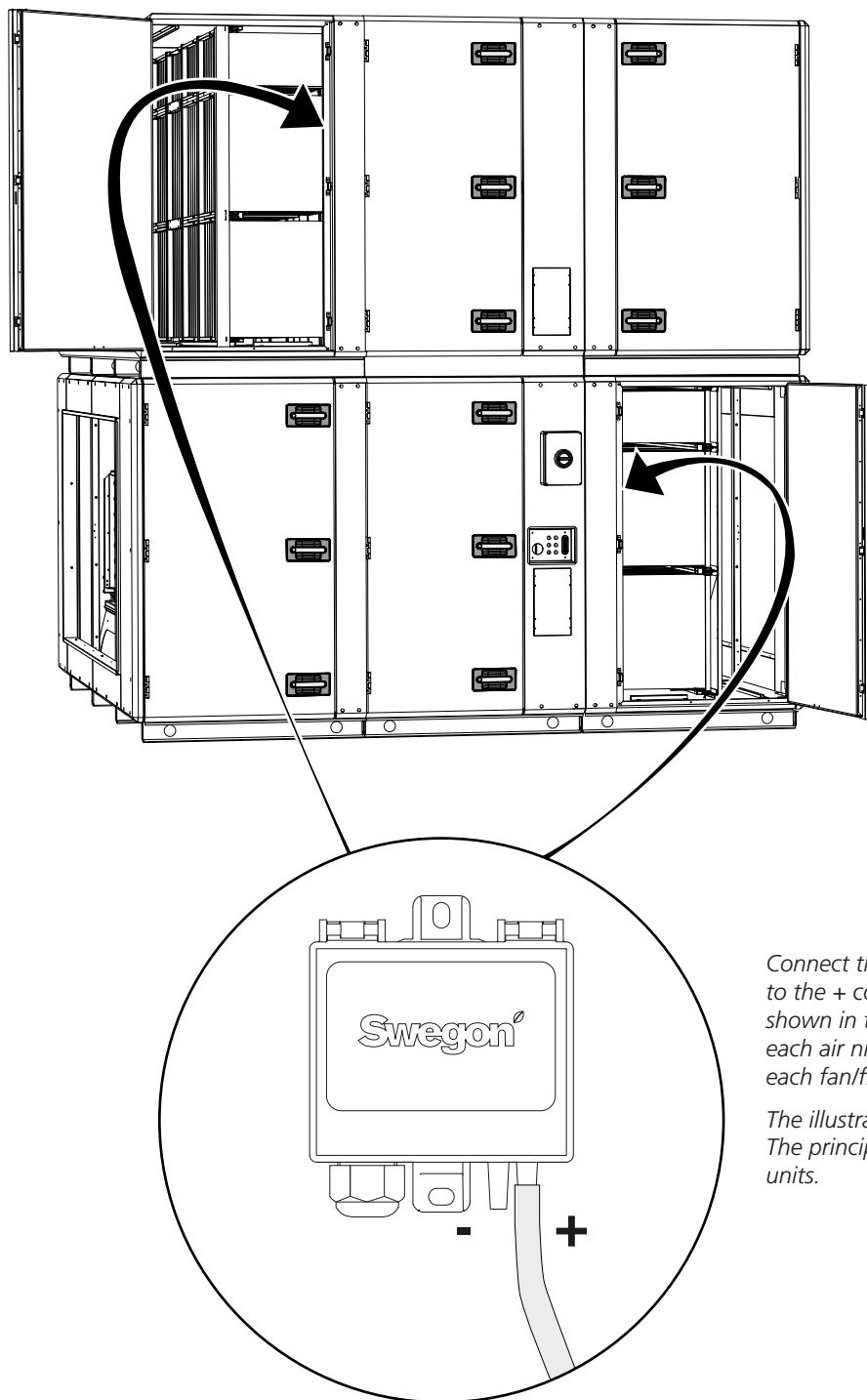


Press the decorative fittings firmly into the base beam to engage them.

GOLD CX: Fit the decorative plate with cable grommets on the heat exchanger section.



1.9.6 To connect air tubes to filter pressure sensors



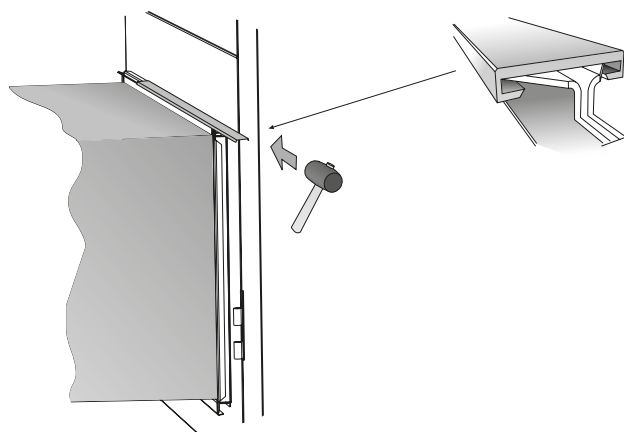
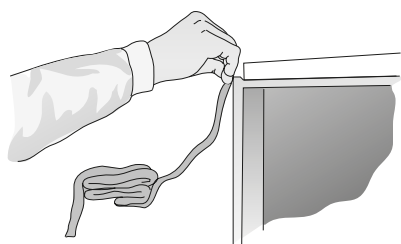
Connect the air tube from the air nipple below the filter to the + connection on the filter pressure sensor as shown in the illustration. The air tubes are connected to each air nipple (below the filter) and are rolled up inside each fan/filter section.

The illustration shows the GOLD RX, fan arrangement 2. The principle is however the same for other air handling units.

1.10 Duct connection

The air handling unit's connection frames are rectangular and can be jointed to ducts by means of slip-clamps.

The ducts should be insulated according to local regulations and customary trade standards.



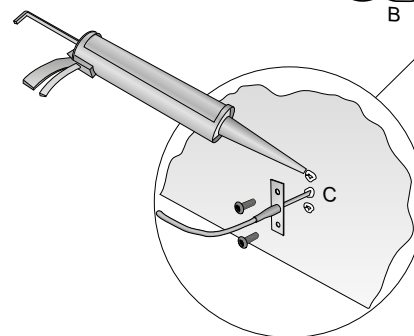
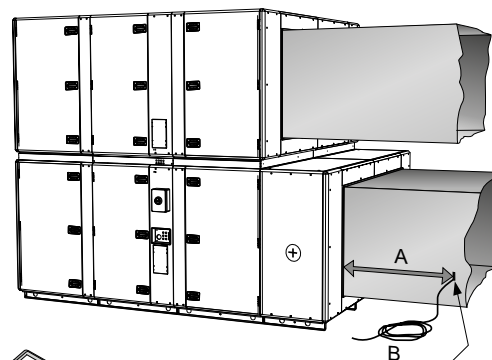
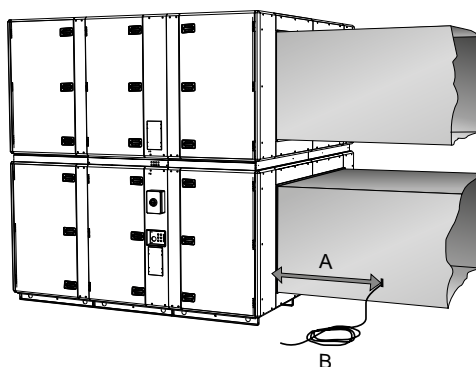
1.11 To install the supply air sensor

The supply air temp. sensor must be mounted inside the supply air duct.

The sensor must be positioned at a spot that is at least 1.5 metres from the air handling unit.

NOTE! If an air heater and/or air cooler, if required, is installed in the system, the sensor must be positioned 1.5 metres from the unit measured from this component.

1. Measure and mark where the sensor is to be placed.
2. Drill an 11 mm dia. hole in the supply air duct.
3. Apply sealing compound around the hole and secure the sensor by means of 2 self-tapping screws.
4. Connect the sensor's quick-fit connector to the appropriate socket on the control circuit board of the air handling unit. See Section 1.14.



A ≥ 1500 mm
B = 10000 mm
C = Ø 11 mm

1.12 Electrical connections, communication cables (only GOLD CX)

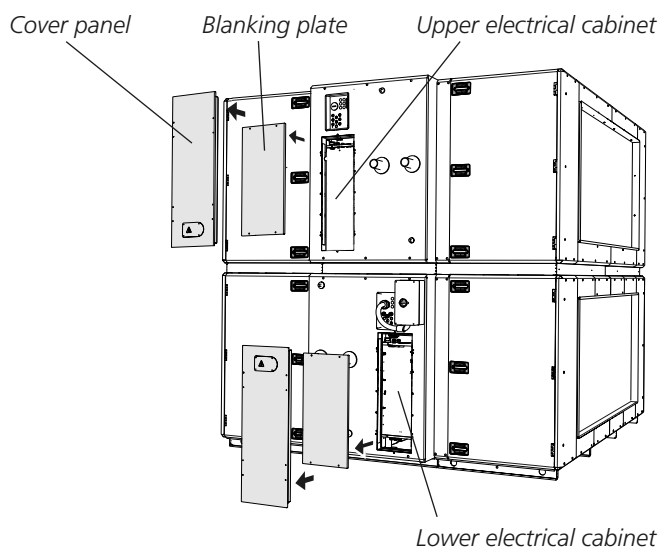
The electrical connections should be wired by a qualified electrician in accordance with local electrical safety regulations.

Dismantle the cover panels and blanking plate in front of the electrical cabinets.

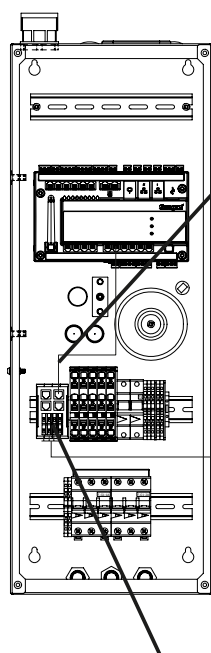
There is a mounted cable adapter inside the electrical cabinet without control unit (extract air). The supply of these units also includes an unmounted cable adapter.

The unmounted adapter should be installed on the DIN rail inside the electrical cabinet with control unit (supply air).

Connect communication cables, see below. Use the air handling unit's cable entries and route the cables safely.

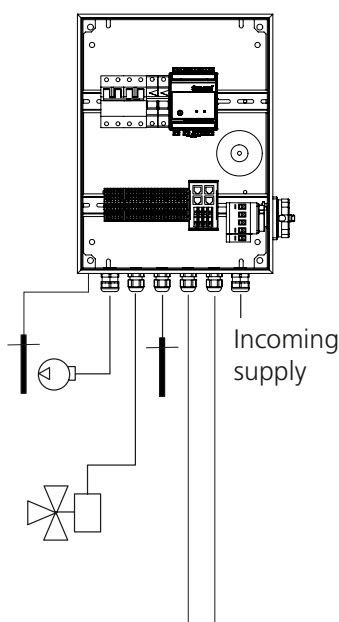


Electrical cabinet with control unit (supply air)



Cable adapter for mounting in the electrical cabinet with control unit. Supplied loose in the electrical cabinet without control unit.

Equipment cubicle 809535, pipe coupling unit (accessory, see the separate installation instructions)

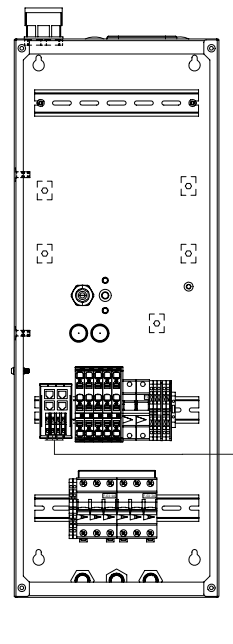


A

Twisted-pair communication cable A min. 4x0.5 mm², max 100 metres (not included in supply).

Connect the cable between the cable adapters from wiring terminal to wiring terminal, i.e. from terminal no. 1 to terminal no. 1 etc.

Electrical cabinet without control unit (extract air)



B

Twisted-pair communication cable B min. 4x0.5 mm², max 100 metres (not included in the delivery).

Communication cable B can also be connected to the cable adapter in the electrical cabinet with control unit if the pipe coupling unit TBXZ-5-42 (accessory, including equipment cubicle 809535) is not selected or if this makes the installation work easier.

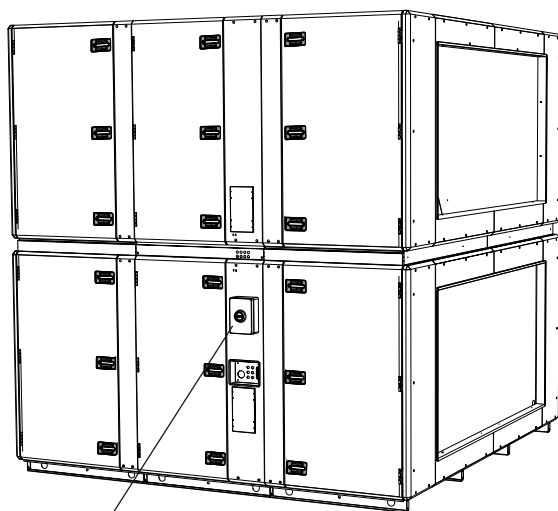
Connect the cable between the cable adapters from wiring terminal to wiring terminal, i.e. from terminal no. 1 to terminal no. 1 etc.

1.13 To connect the electric power supply

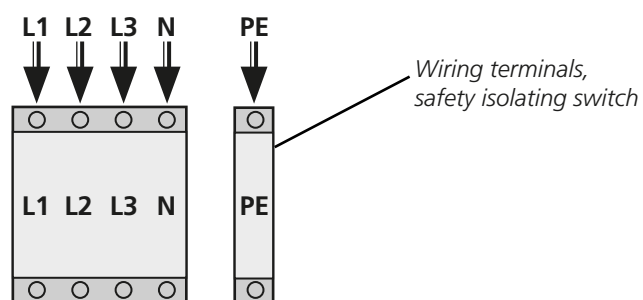
The electrical connections should be wired by a qualified electrician in accordance with local electrical safety regulations.

1.13.1 GOLD RX

Wire the incoming power supply cable to the air handling unit's external safety isolating switch. Remove the cover of the safety isolating switch to gain access to its wiring terminals.



Safety isolating switch



Wiring terminals,
safety isolating switch

3-phase, 5-wire cable, 400V -10/+15 %, 50/60 Hz.

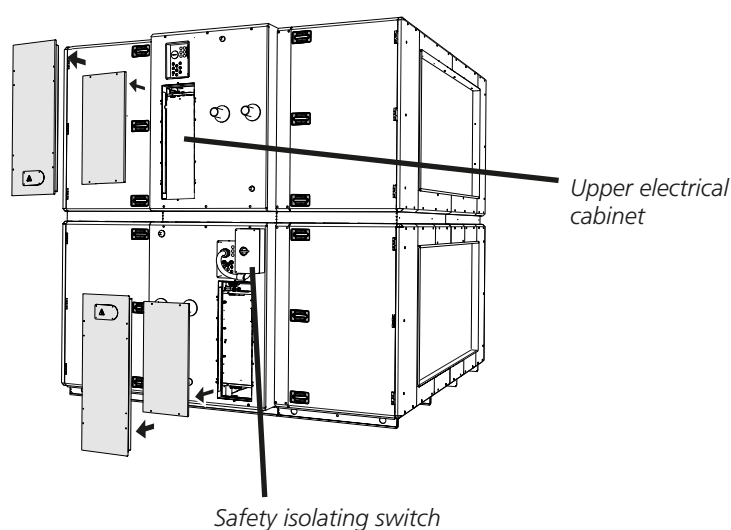
For the size of fuse protection, see the Operation & Maintenance Instructions

1.13.2 GOLD CX

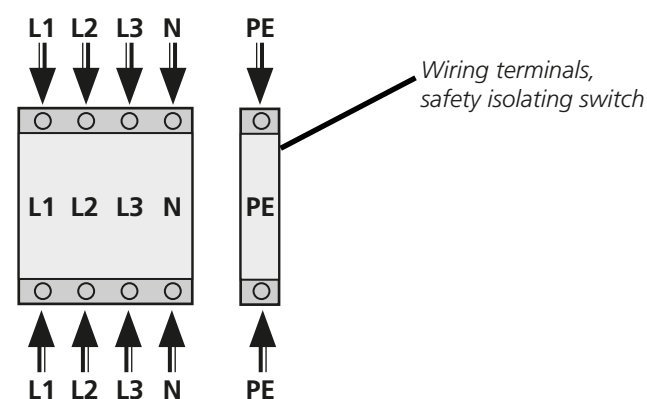
NOTE! Make sure that you have done Item 1.12 before you connect the power (GOLD CX only). Risk of personal injury!

The cable (in hose) from the power section in the upper electrical cabinet must be connected to the safety isolating switch, see the illustrations below. Then secure the cable in the pre-fitted hose clips.

Wire the incoming power supply cable to the air handling unit's external safety isolating switch. Remove the cover of the safety isolating switch to gain access to its wiring terminals.



Incoming power supply connection



Power supply connection to the upper electrical cabinet's power section

3-phase, 5-wire cable, 400V -10/+15 %, 50/60 Hz.

For the size of fuse protection, see the Operation & Maintenance Instructions

1.14 To Connect external cables

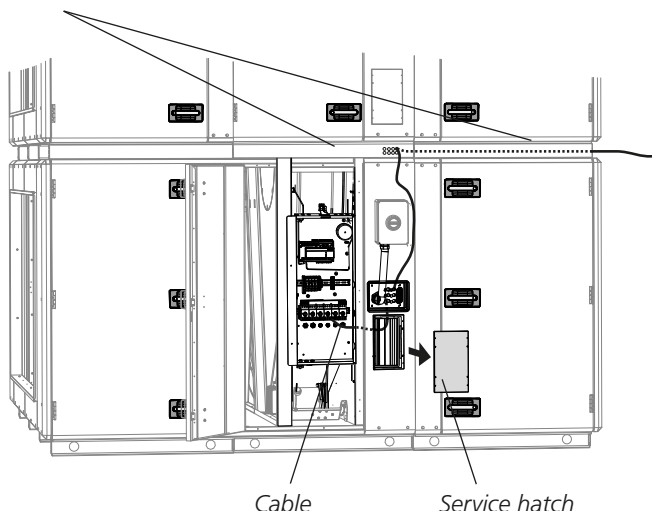
1.14.1 GOLD RX

To make the control unit accessible, open the inspection door in front of the heat exchanger.

The decorative fitting can be used as a cable trough if you need to run external cables. Dismantle the decorative fittings and fold back an appropriate number of "tongues" in the ends of the decorative fittings and run cables through cable grommets in the decorative fitting of the heat exchanger section. Refit the decorative fittings. Run the cables further in to the electrical equipment cubicle through the rubber diaphragm in front of the cubicle on the heat exchanger section. Dismantle the service hatch to enable you to run the cables. See illustration.

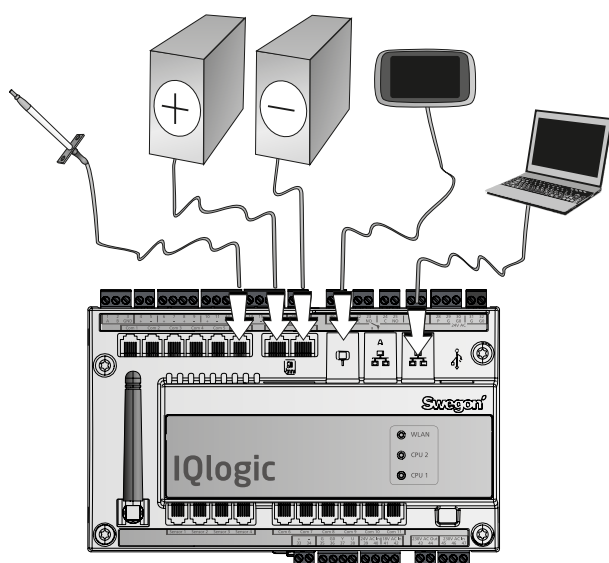
NOTE! External communication cables outside the air handling unit should be positioned at a min. distance of 100 mm from energized cables.

Decorative fitting



Cable

Service hatch



Control circuit board inside the electrical equipment cubicle

1.14.2 GOLD CX

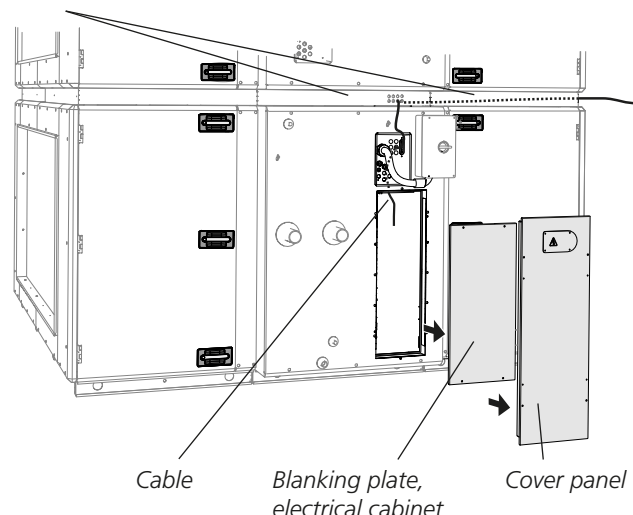
To gain access to the control unit, remove the cover panel on the lower or upper part of the coil heat exchanger (depending on the variant) and the blanking plate of the electrical cabinet.

If the control unit is placed in the lower electrical cabinet the decorative plate can be used as a cable trough to route external cables. Dismantle the decorative fittings and fold back an appropriate number of "tongues" in the ends of the decorative fittings and run cables through cable grommets in the decorative fitting of the heat exchanger section. Refit the decorative fittings.

Run the cables further into the electrical cabinet through the rubber diaphragm in front of the electrical cabinet on the heat exchanger section.

NOTE! External communication cables outside the air handling unit should be positioned at a min. distance of 100 mm from energized cables.

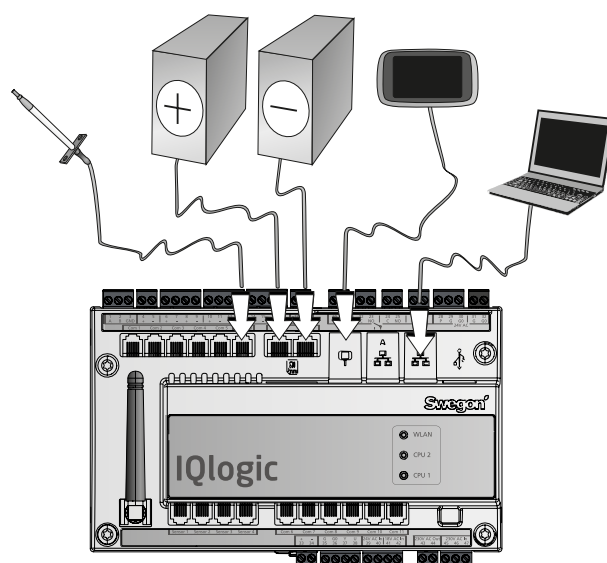
Decorative fitting



Cable

Blanking plate, electrical cabinet

Cover panel



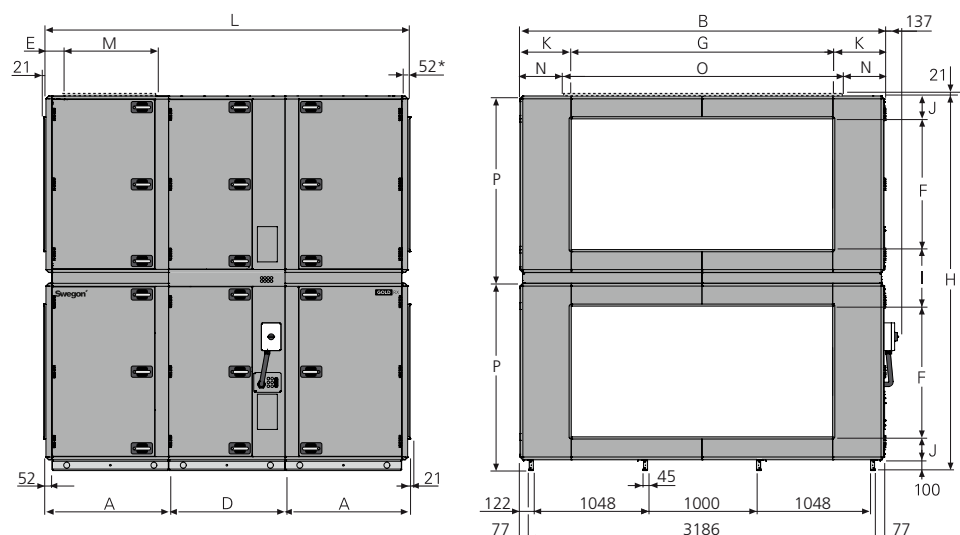
Control circuit board inside the electrical equipment cubicle

1.15 Installation of pipework package (GOLD CX only)

For details on how to install the pipework package, see separate instructions for the TBXZ-42 pipework package.

2. Dimensions

2.1 GOLD RX 100/120



* The air handling unit is supplied without end connection panel if a duct accessory housed in an insulated casing will be connected. The AHU can also be supplied with full face end connection panel (accessory).

Size	A	B	D	E	F	G	H	I	J	K	L	M	N	O	P	Weight, kg
100	1122	3340	1070	187	1200	2400	3440	520	210	470	3314	800	420	2500	1720	3333-3761
120	1122	3340	1070	187	1200	2400	3440	520	210	470	3314	800	420	2500	1720	3533-3979

Individual weights

Filter section

GOLD 100/120: 402-540 kg/section.

Fan section

GOLD 100: 644-720 kg/section.

GOLD 120: 744-829 kg/section.

Heat exchanger section, mounted

GOLD 100/120: 1241 kg.

Heat exchanger section, supplied in two casing sections + rotor

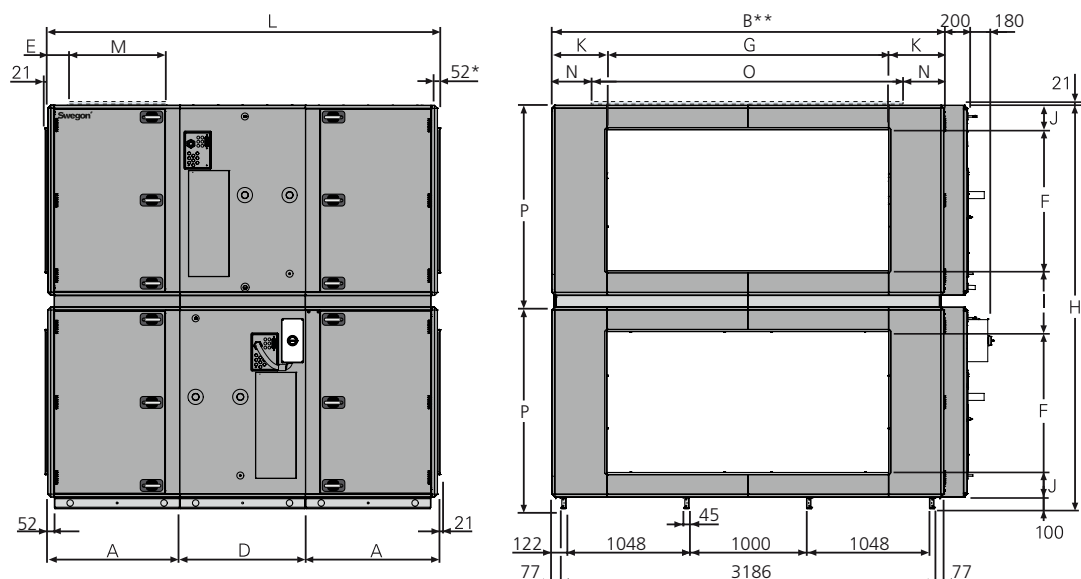
Lower casing section = 513 kg

Upper casing section = 300 kg

Rotor = 428 kg

Transport cradle = 190 kg

2.2 GOLD CX 100/120



* If the duct accessory is housed in an insulated casing, the AHU is supplied without the end connection panel. The AHU can also be supplied with full face end connection panel (accessory).

** Width of centre section's casing = $B + 200$ mm.

Size	A	B	D	E	F	G	H	I	J	K	L	M	N	O	P	Weight, kg
100	1122	3340	1070	187	1200	2400	3440	520	210	470	3314	800	420	2500	1720	4294-4772
120	1122	3340	1070	187	1200	2400	3440	520	210	470	3314	800	420	2500	1720	4494-4990

Individual weights

Filter section

GOLD 100/120: 402-540 kg/section.

Fan section

GOLD 100: 644-720 kg/section.

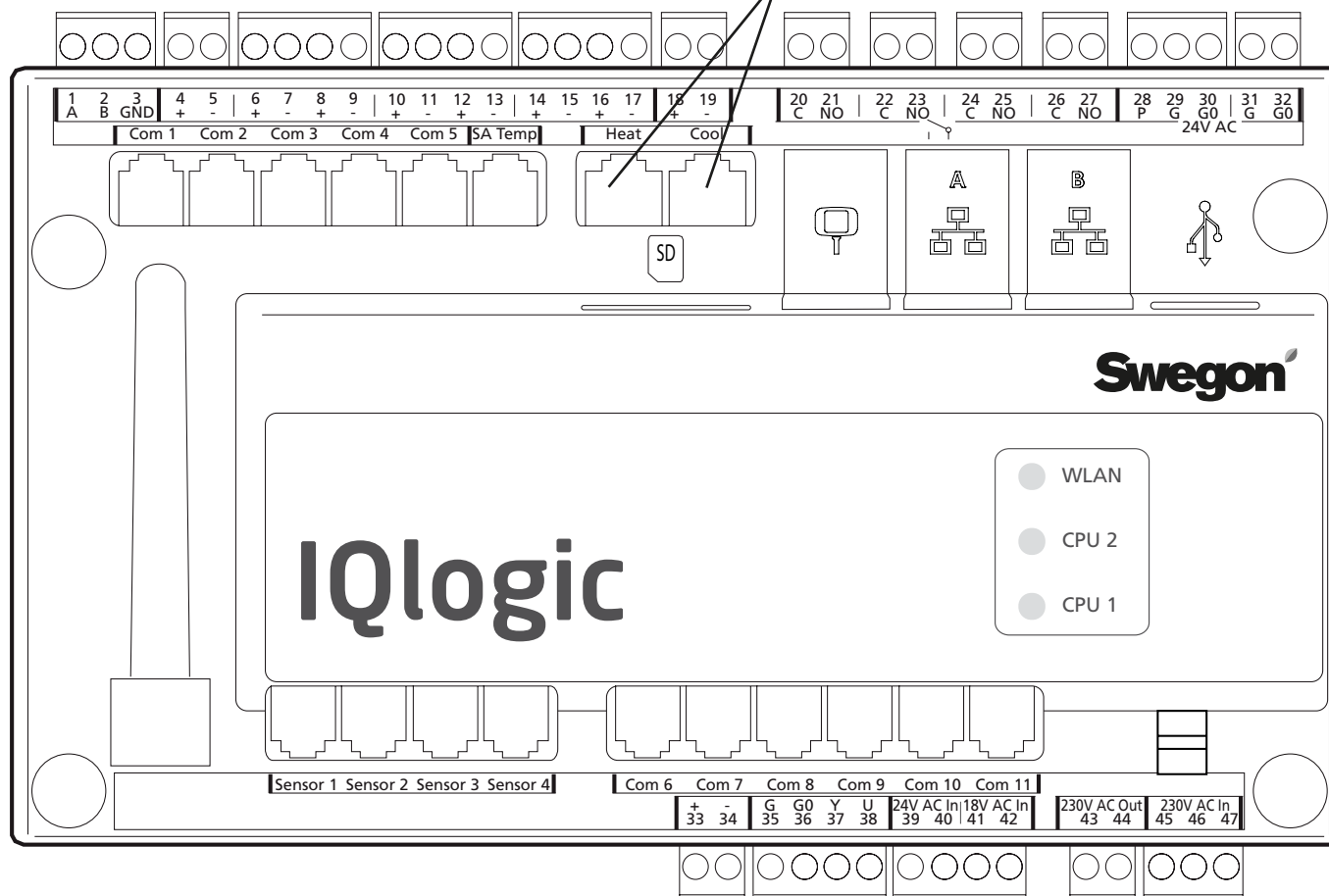
GOLD 120: 744-829 kg/section.

Heat exchanger section

GOLD 100/120: 1101-1126 kg/section.

3. Wiring terminals, control unit

The max. permissible load on the corresponding connection is 16 VA.



Digital inputs, terminals 4-17, are of extra-low voltage type. Analogue inputs, terminals 18-19 have an input impedance of 66 kΩ.

Wiring terminal	Function	Remarks
1,2,3	Connections for EIA -485	1= Communication connection A/RT+, 2= Communication connection B/RT-, 3= GND/COM.
4,5	External stop	Stops the air handling unit by opening the circuit. On delivery, this function is fitted with a jumper. If the connection is interrupted, the air handling unit will stop.
6,7	External fire/smoke function 1	External fire and smoke function. On delivery, this function is fitted with a jumper. If the connection is interrupted, the function will trip and initiate an alarm.
8,9	External fire/smoke function 2	External fire and smoke function. On delivery, this function is fitted with a jumper. If the connection is interrupted, the function will trip and initiate an alarm.
10,11	External alarm 1	External contact function. Optional: Normally open/normally closed.
12,13	External alarm 2	External contact function. Optional: Normally open/normally closed.
14,15	External low speed	External contact function. Overrides the time switch from stop to low speed operation.
16,17	External high speed	External contact function. Overrides the time switch from stop or low speed to high speed operation.
18,19	Demand control	Input for 0-10 VDC. The input signal influences the supply air/extract airflow setpoint if the unit is operating in the demand control mode. For connection of a sensor, for example CO ₂ , CO and VOC
20,21	Circulation pump, heating circuit	Independent contact, max. 5 A/AC1, 2 A/AC3, 250 VAC. Closes on a heating load.
22,23	Circulation pump, cooling circuit or cooling on/off, 1-step operation	Independent contact, max. 5 A/AC1, 2 A/AC3, 250 VAC. Closes on a cooling load.
24,25	Cooling, on/off, 2-step operation	Independent contact, max. 5 A/AC1, 2 A/AC3, 250 VAC. Closes on a cooling load.
26,27	In-service indication	Independent contact, max. 5 A/AC1, 2 A/AC3, 250 VAC. Closes when the unit is operating.
28,29,30	Damper control	24 VAC. 28= Controlled 24 VAC (G), 29= 24 VAC (G), 30= 24 VAC (G0).
31,32	Control voltage ¹⁾	24 VAC control voltage. Terminals 31-32 are loaded with a total of 16 VA. Opened by means of the safety isolating switch.
33,34	Reference voltage	Output for constant 10 VDC. Max. permissible load: 8 mA.
35,36,37,38	Control, recirculation damper	The recirculation damper can be loaded with max. 2 mA at 10 VDC. 35= 24 V AC (G), 36= 24 V AC (G0), 37= 0-10 V DC control signal, 38= 0-10 VDC feedback signal.

The max permissible common load on terminals 31-32, outputs for Heat/Cool and damper output (terminals 28-30) is 50 VA.

¹⁾ GOLD 100/120: If more than 16 VA is required, use wiring terminals 201 (G) and 202 (G0). Terminals 201-202 can be loaded with a total of max. 48 VA.