

## Instructions for the installation of the Roof TBTB-6 TBTF-4/TBTA-3 Intake air section Extract air hood TBTA-2



#### 1. General

These instructions for installation supplement the assembly instructions that accompany the assembly parts.

**CAUTION!** Mount the roof before installing any electric wiring! When you have finished mounting the roof, install the electric wiring in an appropriate manner. Make sure that the cables do not block inspection doors and that the cable glands seal tightly against cables..

If both the upper and lower ductwork are to be fitted with insulated duct accessories, and the duct accessory in the lower ductwork protrudes less than 250 mm, do not install the upper duct accessory before you have installed the roof. See illustration. The reason for this is that the roof panel for the lower duct accessory must be pushed into place under the upper duct accessory.

# Do not install the upper duct accessory before you have installed the roof, if the protrusion is less than 250 mm.

#### 1.1 Where to install the unit

The GOLD/SILVER C air handling unit should be installed where it is most favourable weather-wise. It is especially important that rain or snow doesn't come into the unit through the intake section or the extract air hood.

The GOLD/SILVER C unit can be used for a right-hand or left-hand airflow arrangement. This flexibility can be utilised for locating the unit wherever it is most convenient.

#### 1.2 Supply air and exhaust air ducts

Insulate the supply air and exhaust air ducting in accordance with applicable standards. If the ducts used are internally insulated, the TBLZ-1-65 countersinking kit should be used so that the measurement probe on the GOLD unit's supply air sensor will reach sufficiently far inside the duct.

#### 1.3 Duct accessories

Select duct accessories housed in insulated casings if they are to be installed outdoors. These accessories can be installed outdoors; however the enclosure classes and permissible ambient temperatures of any actuators included must be taken into consideration. See the instructions for the corresponding accessory. If necessary, see to it that required protection is arranged.

#### 1.4 Hand-held terminal

The hand-held terminal of the GOLD air handling unit is sensitive to cold and shall always be kept inside a heated space. If required, use one or several extension cables (TBLZ-1-05).



#### 2. Roof

The roof is supplied as a complete assembly kit.

### 3. Intake air section with pre-filter 3.1 TBTF intake air section with pre-filter (sizes 004-040)

The intake air section is rectangular with slip clamp connection. The intake air section is designed to be secured with slip clamps to the air handling unit's duct connection (full face end connection panel).

The aluminium pre-filter should be washed when the pressure drop across it has reached the estimated final pressure drop, however filter change is recommended at least once a year. For a correct estimate of the final pressure drop, we refer to our air handling unit selection program.

#### To connect electric power to possible damper actuators

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

Open the inspection cover of the intake air section.

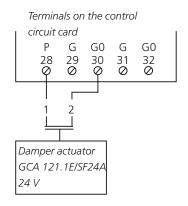
The damper actuator is equipped with a connection cable and pre-fitted cable entry grommets.

#### **GOLD** version F

N.B.! Damper actuators are rated for 24 V AC. Therefore always check the type and rating of the damper actuator before wiring it to a power supply!

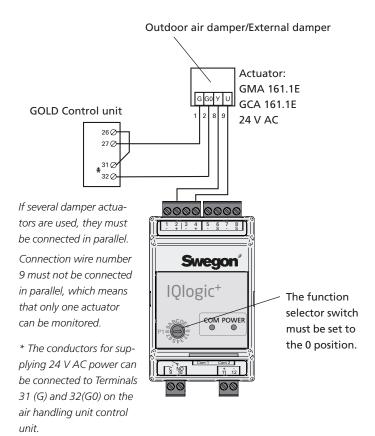
#### Damper actuators with spring return

Used for operating shut-off dampers.



#### Damper actuators with modulated action For use as an outdoor air damper or an air recirculation damper when the ReCO<sub>2</sub> function is in use.

24 V supply voltage, on control circuit card wiring terminals 31-32. The max. permissible load on these terminals is 16 VA.

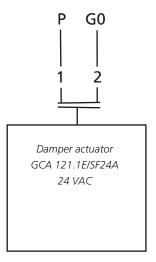




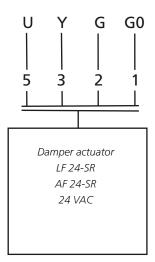
#### SILVER C

#### Damper actuators with spring return

Used for operating shut-off dampers.



#### Damper actuators with modulated action





#### 3.2 TBTA intake air section (sizes 050-120)

Centre the air intake section in relation to the duct connection of the unit. Secure it to the end wall of the unit by means of max 45 mm long self-tapping screws (the screws are not included in the supply).

The air intake section has adequate space inside for fitting an air intake damper, if specified, to the duct connection.

#### 4. Extract air cowl

#### 4.1 Mounting

#### Air handling unit with standard end connection frame:

Sizes 004-012: The extract air cowl is circular and is designed to be secured by means of screws to the duct connection of the air handling unit or in a duct having the same dimensions.

Sizes 014-120: The extract air cowl is rectangular and has a flange for slip-clamp jointing.

The extract air cowl is designed to be secured by slip clamps to the duct connection of the air handling unit or to a duct having the same dimensions.

#### Air handling unit with Full face connection frame:

The exhaust air hood is rectangular with slip-clamp connection. The exhaust air hood is designed to be secured with slip clamps to the duct connection of the air handling unit or to a duct having the same dimensions.

#### 4.2 Risk for short-circuiting

Since extract air outlet and the outdoor air inlet are situated on the same end panel of the unit, extract air is likely to short-circuit over to the outdoor air entering the unit. See the illustration below.

This risk should be assessed with respect to wind conditions, temperatures and air currents and whether the unit is used for a right-hand or a left-hand flow arrangement. If there is risk of short-circuiting, the staff at Swegon recommends that the extract air cowl be moved out a bit away from the AHU across an appropriate length of ducting.

This length of ducting should be supported in an appropriate manner and should slightly slope away from the AHU to minimize the risk of water running into it.

