

# ADAPT™ Free b

Installation - Commissioning - Maintenance, ADAPT Fb

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## Montering

1. The commissioning box can be suspended from a ceiling and connected to a duct system. The diffuser is secured to the ceiling by connecting the M8 threaded rod (A) into the popnut on the top of the diffuser, see figure 2.
2. Make sure that the orientation of the sensor module aligns with the extension of the room, see figure 1. If the connecting duct does not enter the room as in the example in figure 3, the frontplate of the diffuser must be dismantled and rotated in a direction with the sensor module directed as shown in figure 1. Then fixate and secure the diffuser with screws or pop rivets. Readjust the hanger rods of the commissioning box if necessary.
3. The front plate is dismantled by pressing the fixing pins of the bottom plate outward, which will loosen it from the upper cone. Detach the safety cord that secures front plate to the upper cone and disconnect the connector (C, figure 2) from the top of the front plate. When reassembling, press together the S-hook to prevent it from coming loose.

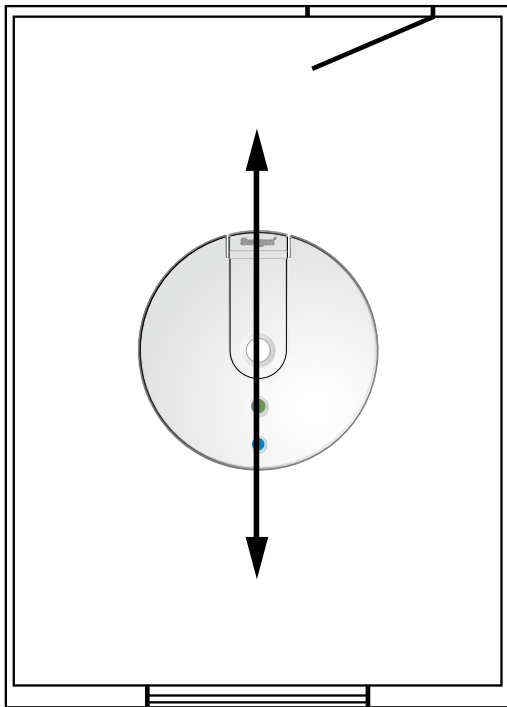


Figure 1. The orientation of the sensor module in a room or in an office module. The LED's of the sensor should be aligned with the extension of the room in a straight line, facing the short sides of the room as shown by the arrow in the figure.



Figure 2. ADAPT Free, installation.

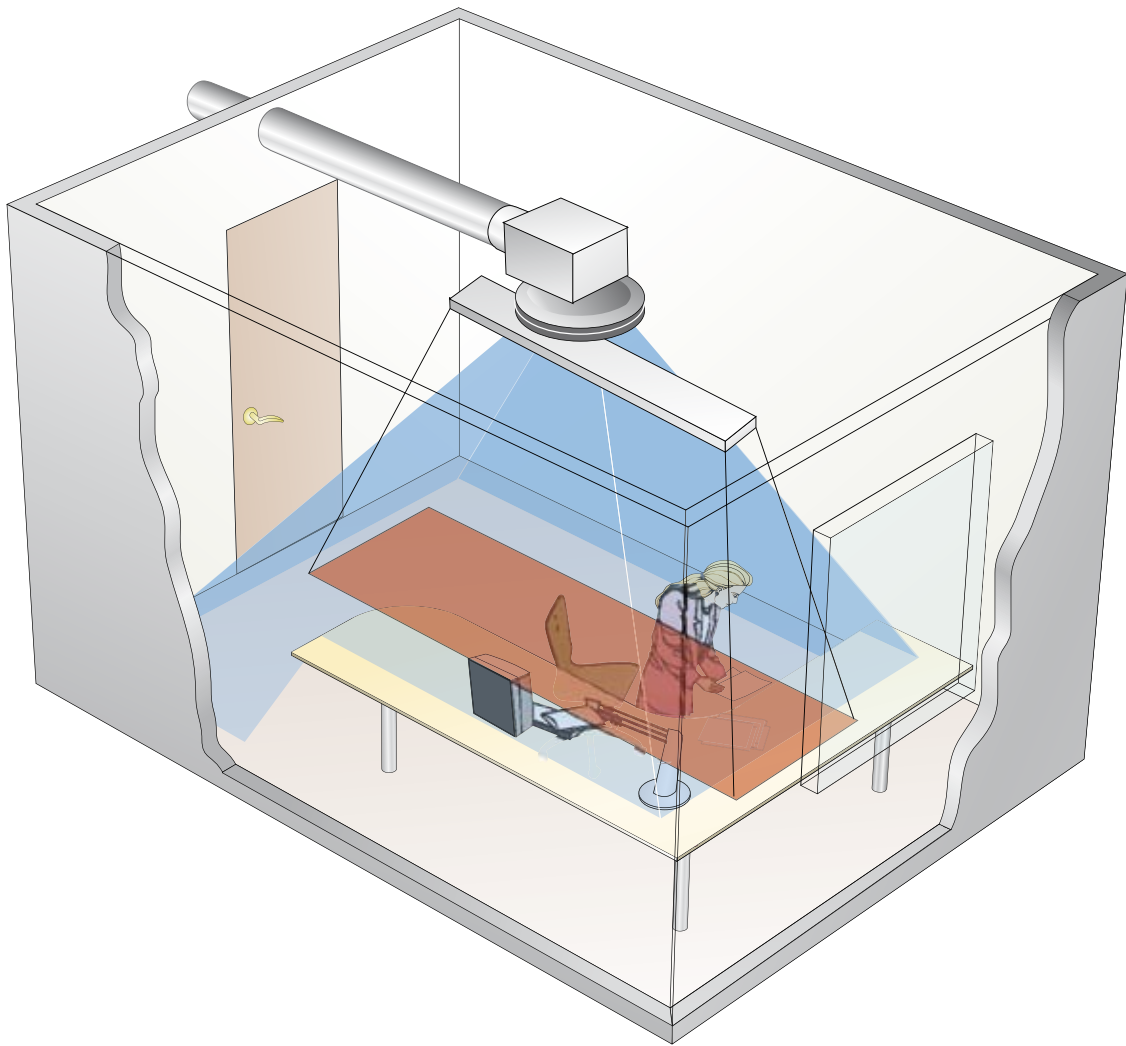


Figure 3. Lighting fixtures or similar objects must not be installed beneath the diffuser as this disrupts the presence detection and room temperature measurement.

## Commissioning

All the ADAPT Air terminals are delivered preset into commissioning mode, which means that the air diffuser is set to max. airflow by force control.

When the ADAPT air diffuser is in commissioning mode, the light-emitting diode shines orange. The different LED indications:

- Steady green LED: Normal operation, the air diffuser is operating normally.
- Flashing green LED: The air diffuser has just been energised and calibration is in progress.
- Steady red LED: Function failure, see separate documentation for TUNE Adapt.
- Steady orange LED: The commissioning mode, max. airflow
- Flashing orange LED: Other commissioning modes and all the forced control situations of the feed-back control system.

More information about the commissioning process itself can be read in the Project Manual for the Wise system and in the documentation for TUNE Adapt.

## Maintenance

The exterior surface of the ADAPT air diffusers can be cleaned whenever necessary using lukewarm water with dishwashing detergent added. Normally the best method of cleaning is vacuuming with a brush nozzle.

The duct system is accessible through the air diffuser and the commissioning box.

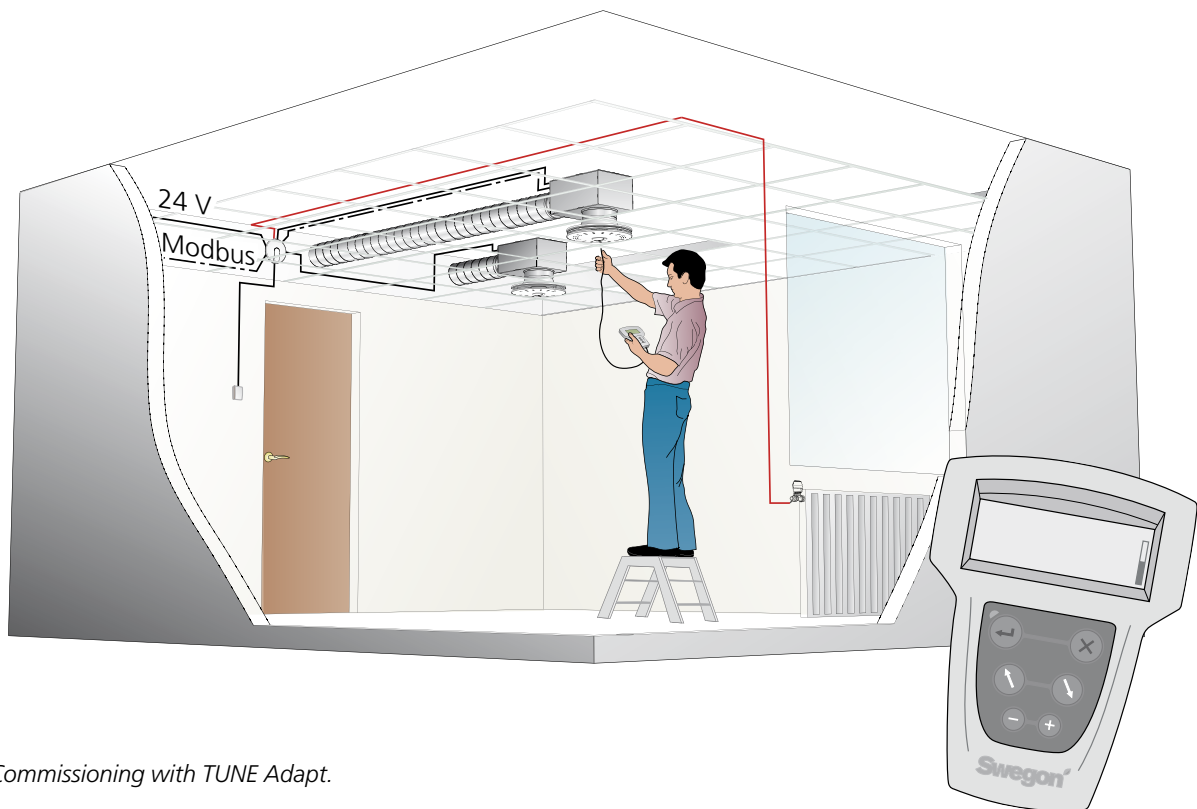


Figure 4. Commissioning with TUNE Adapt.

## Electrical connections.

All the connections are wired to the CONNECT Adapt junction box. From there, the Master air diffuser is connected by means of the LINK Adapt (RJ45) cable included in the delivery. The slave air diffusers, if required, are connected by means of the same type of cable to their respective slave contacts. If there are more than 2 slave air diffusers, a SPLIT Link Adapt should be used for further connection to the last slave air diffuser. See Figure 6. If SPLIT Link Adapt is used, the maximum length of LINK Adapt from the junction box to the last air diffuser is 15 meters. If ADAPT is to be connected through Modbus communication, this should be done with the LINK Modbus (RJ12) cable. The maximum length of SPLIT Link Modbus is 10 meters from the junction box to the last air diffuser. Use double CONNECT Adapts if longer distances are required. All cables and contacts are different so that they will not be confused or incorrectly connected.

## Electrical data

ADAPT is supplied with power via the junction box. See the wiring diagram in figure 6 or relevant diagram from the Swegon Templates application, containing details for the specific installation. It is important that cables with appropriate cross-sectional area, transformers of correct size and power supply cables of correct length are selected. This can for example be carried out with the dimensioning tool "Cable and Transformer Design", available for download from [www.swegon.com](http://www.swegon.com) (the application is available in english and swedish language versions).

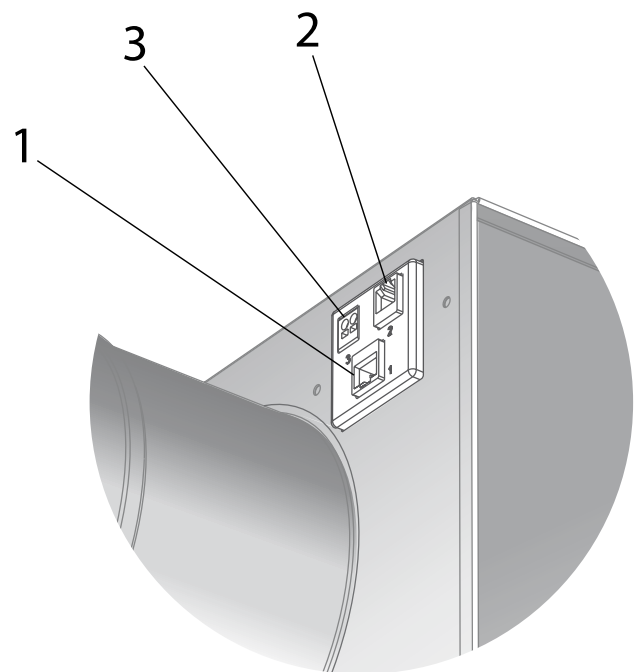


Figure 5. Air diffuser connections.

1. Connection for LINK Adapt cable (RJ45)
2. Connection for the LINK Modbus cable (RJ12).
3. Direct 24 V connection if a junction box is not used and the air diffuser will be completely "stand alone".

Supply voltage	24 V AC $\pm 10$ %
Max. power consumption (controller only)	3 VA
Cable rating (controller only)	0,6 A
Ambient temperature	0 °C - +50 °C

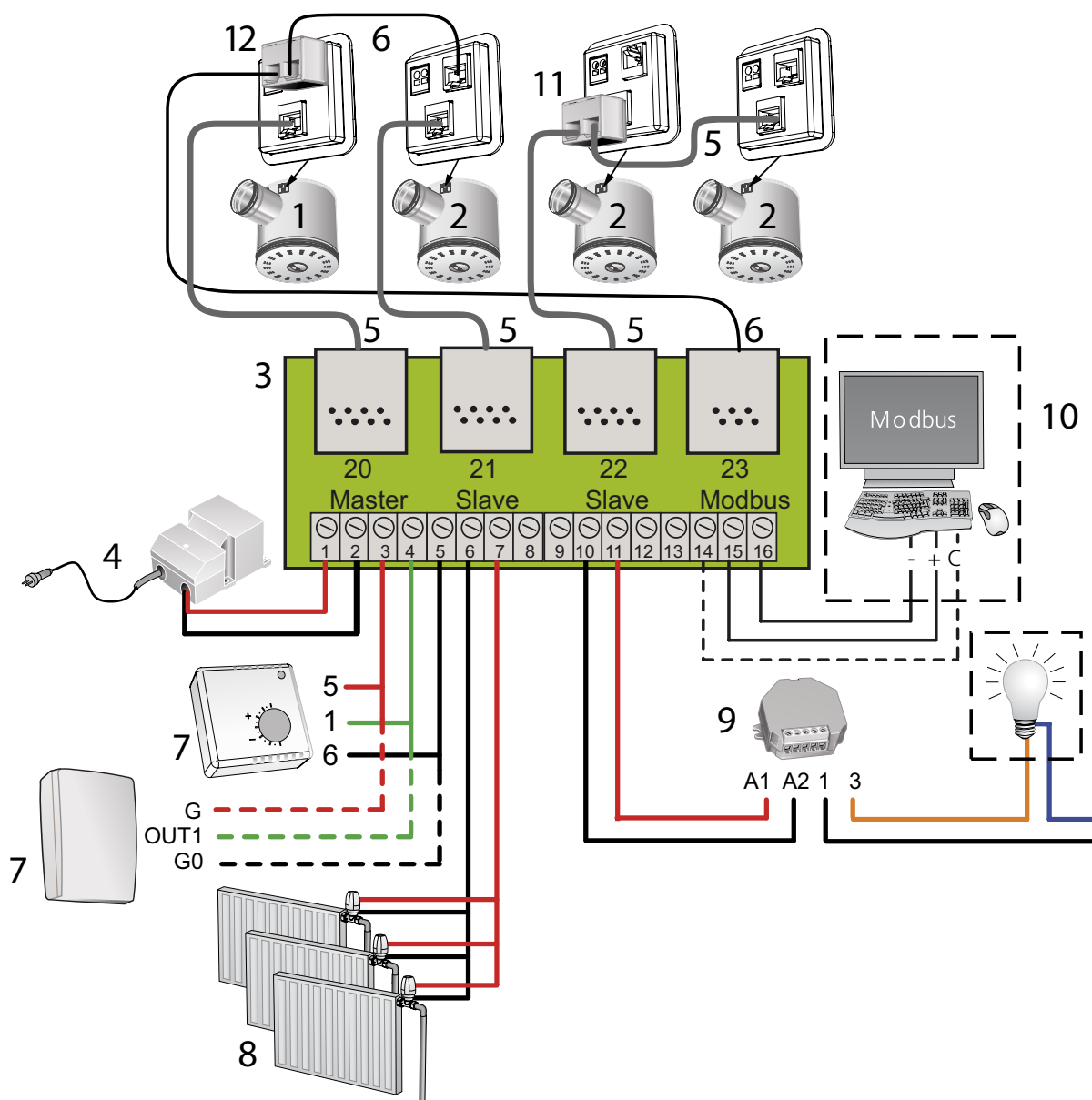


Figure 6. Wiring of Master/Slave air diffusers and accessories.

1. ADAPT Master air diffuser
2. ADAPT Slave air diffusers
3. CONNECT Adapt, wiring terminals
4. 230-24 V AC Transformer
5. LINK Adapt (5 m long RJ45 cable)
6. LINK Modbus (5 m long RJ12 cable)
7. DETECT Quality (3 VA) or TUNE Temp (1 VA)
8. ACTUATOR, Radiator control (max 3 valves at 6 VA)
9. ADAPT Relay, relay for lighting
10. Connection to main control system (Modbus RTU)
11. SPLIT Link RJ45
12. SPLIT Modbus RJ12, max. stab length, 10 m.