Function Guide for the GOLD version E/F/G, Xzone

1. General

The *Xzone* function is designed for controlling one extra temperature zone via the ventilation system.

Sometimes it is necessary to control a part of the ventilation system with different temperature prerequisites. This may be due to proximity to the perimeter wall of the building facing north or south; workshop, office or other conditions that give rise to different temperature loads in various parts of a building.

The *Xzone* function can control one extra temperature zone, max.

Both re-heating and cooling can be controlled in the extra zone.

When *Xzone* is enabled, additional menus are shown in the hand-held terminal/web page, for setting and reading the extra zone parameters.

The type of temperature control for the extra zone must be selected separately, and can be of another type than that used in the main zone.

If *extract air temperature control* is selected, the temperature sensors must be positioned so that they will not be influenced by the temperature in the other zone. This means that the internal extract air sensor (inside the air handling unit) must not be used for control for the main zone. The room sensor or extra extract air sensor should be used, (see TBLZ-1-30 or TBLZ-1-24-2 in section *Material Specification*).

The air heater and air cooler for the main and extra zone must be sized on the basis of separate computerized calculations. Always take into account that the duct system where the air heater and air cooler are fitted, does not have the same dimensions as the connection spigots/ frames of the air handling unit.

2. Material Specification

Air handling unit: **GOLD RX/PX/CX/SD**

Xzone Control box **TBLZ-4-50-0-b-cc-0**

Consists of: IQlogic+,TBIQ-3-2 heat
IQlogic+,TBIQ-3-2 cool

Code: **b** 1= With supply air temperature sensor
2 = With supply air and extract air temperature sensor
3 = With supply air and room air temperature sensor

cc 01 = With 1 metre long communication cable
03 = With 3 metre long communication cable
05 = With 5 metre long communication cable
10 = With 10 metre long communication cable
15 = With 15 metre long communication cable

Supply air temperature sensor, set (TBLZ-1-30), according to selection above consists of the following:
Duct temperature sensor 32106304
Jack for wall mounting 019611

Extract air temperature sensor, set (TBLZ-1-30), according to selection above consists of the following:
Duct temperature sensor 32106304
Jack for wall mounting 019611

Room temperature sensor (TBLZ-1-24-2), according to selection above.

3. Operation

The Xzone for heating and Xzone for cooling must each be activated separately. The type of control signal for the heating and cooling function respectively must be selected individually.

Temperature control for the *Xzone* operates completely separated from the temperature control of the main zone.

If an air heater for re-heat with frost guard is selected for the extra zone, the heat retention function will operate completely separately. The heat retention and alarm limit values preset at service level are individual for the extra zone and the main zone.

The *cooling min. flow function* applies to the flow from the air handling unit, not the flow for each zone.

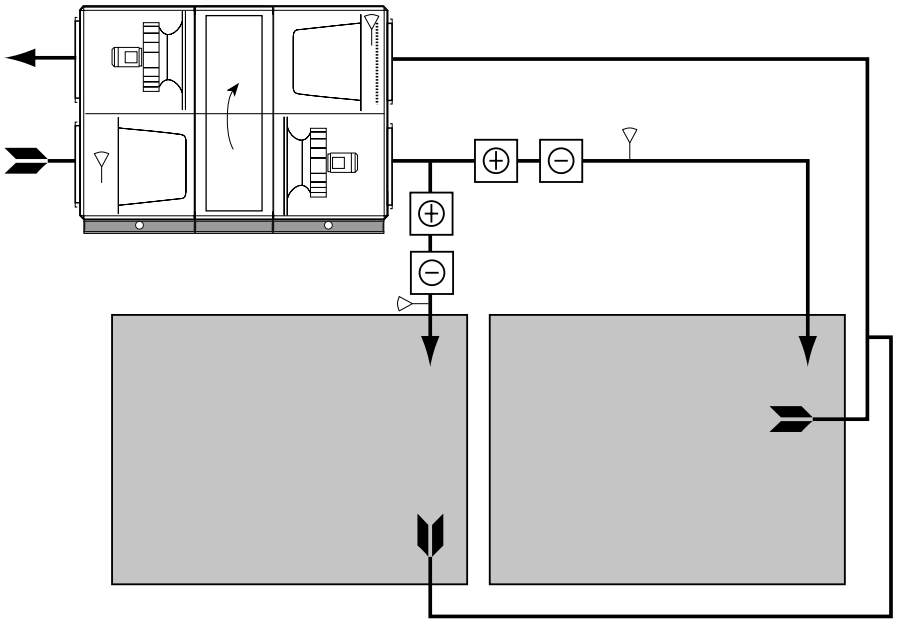
When the total flow reaches below the preset value, cooling will be blocked in both zones.

If *intermittent night-time operation* is activated, the conditions in the main zone are controlled according to the settings of the function. When the air handling uit starts up, the extra zone is controlled according to ordinary temperature control settings.

Connect the cable of the air heater for main zone post-heating to the ordinary heating output on the GOLD air handling unit control unit. Connect the main zone's cooling control cables to the ordinary cooling outputs on the GOLD air handling unit control unit. Connect the extra zone's air heater/air cooler to the TBLZ-4-50 zone control box.

N.B.!
The function with output power reduction (for an electric air heater), activated in the event of low airflows in order to protect the heater elements from overheating, is active both for the extra zone and the main zone.

In cases where loose IQlogic ⁺ modules will be used for integration into a different existing zone control box, the Xzone function requires two IQlogic⁺ modules for connecting supply air and extract air sensors respectively.



We reserve the right to alter specifications.

4. Electrical connections.

See the Installation Instructions for the TBLZ-4-50 zone control box.

5. To enter settings.

For basic facts on how to use the hand-held terminal, see the Operation and Maintenance Instructions for the GOLD air handling unit.

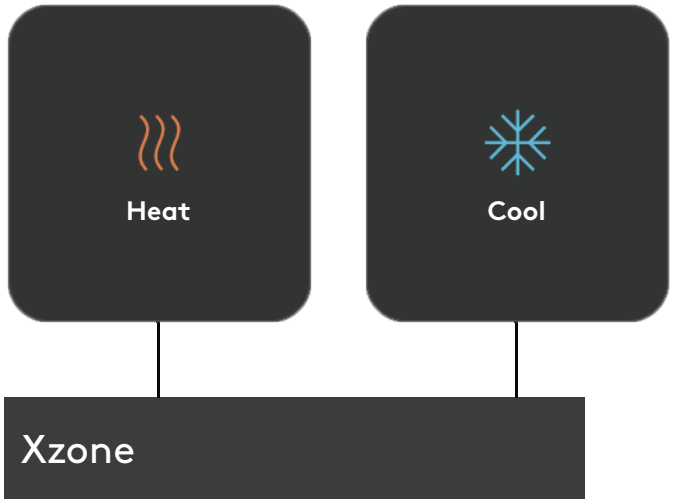
The Xzone function must be activated manually under Functions/Core/Heat and Functions/Core/Cool.

1. Activate Xzone under Heat if re-heat is required in the extra zone. The type of air heater is automatically detected when the function is connected.

2. Set the required values for exercising the pump and valve (applies to air heaters for water).

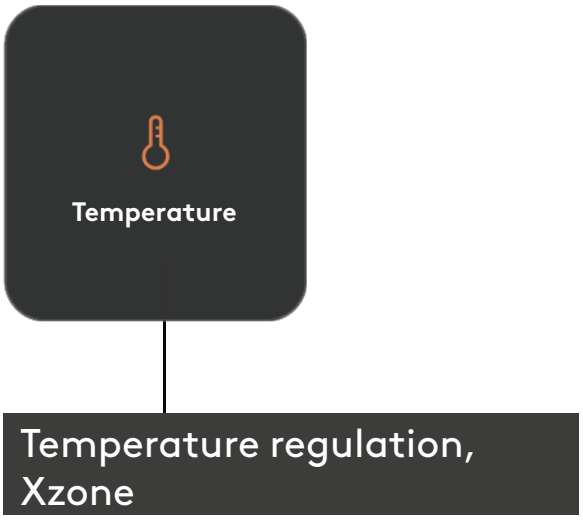
3. Activate Xzone under Cool if cooling is required in the extra zone and select the operating mode. The type of air cooler for water is automatically detected when the function is connected. If DX cooling is used, select 1-step, 2-step or 3-step binary operation.

2. Set the required values for exercising the pump and valve (applies to air coolers for water).



When any of the Xzone heating or Xzone cooling functions is activated, a new view is shown in the hand-held terminal, Temperature regulation Xzone under Functions/Core/Temperature"..

4. Set the required temperature regulation function for the extra zone and the required set point.

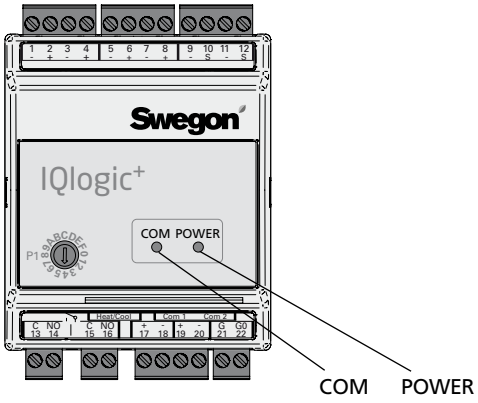


6. Performance checks

IQlogic+ module:

Light-emitting diode POWER lit with a steady glow indicates that power is being supplied from the GOLD unit's control unit.

A flashing light-emitting diode COM indicates correct communication with the GOLD unit's control unit.



Temperature sensor:

Current temperatures can be read under TEMPERATURE – STATUS. If the temperature readings are resonable, wiring has been carried out correctly.

If the functions are activated but the accessories have not been connected correctly, an alarm will be initiated. See the *Operation and Maintenance Instructions for the GOLD unit* for a description of each alarm.

We reserve the right to alter specifications.