AIR TECH SYSTEMS

Translation of Original Operation Instructions

LTG Air-Water Systems

LTG Decentral

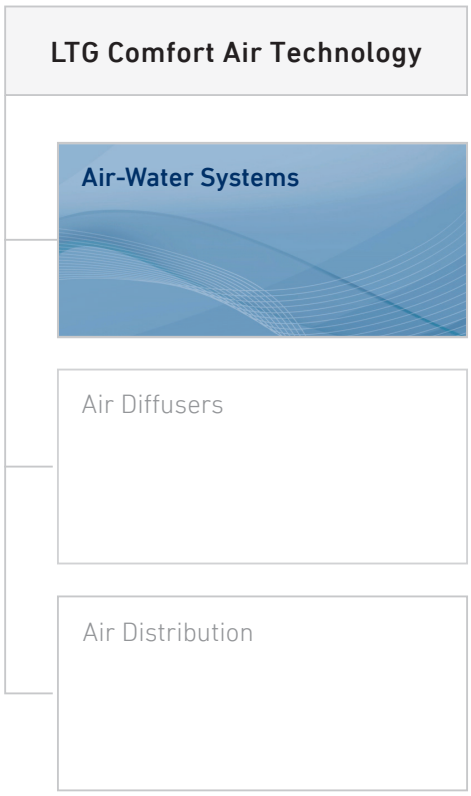
HMI service tool for Climatix-controller (from software version 4.18)

eco2 school

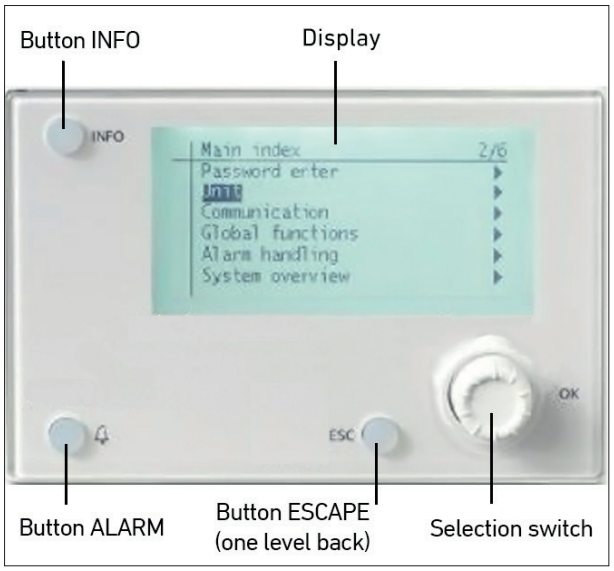
For decentralized ventilation units FVS

www.LTG.net

Content



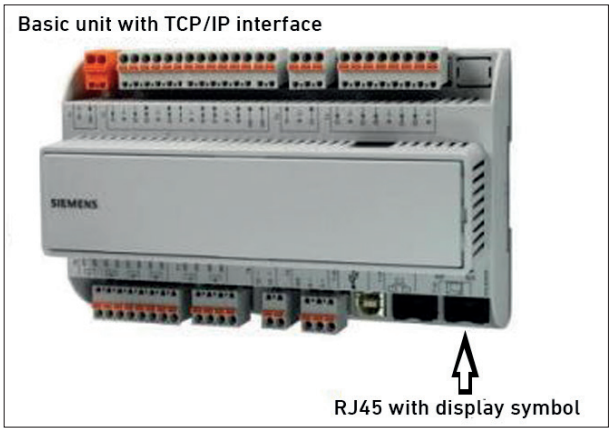
1. View of unit



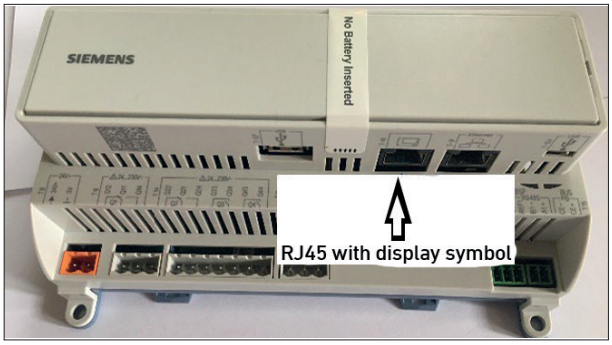
Via service tool HMI the set operating modes, and set-points may be indicated. Having entered your password you may also use the service tool HMI to change control parameters (after consultation with the manufacturer).

2. Connection HMI service tool

2.1 FVS-600 (version 1)



2.2 FVS-1000 and FVS-600 (version 2)



Connect the HMI cable to the Climatix controller (RJ45 connection, see illustrations).

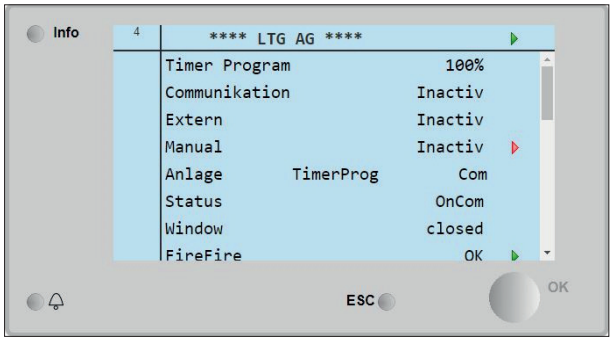
After correct connection, the start page appears with an overview of all important data (see chapter 3).

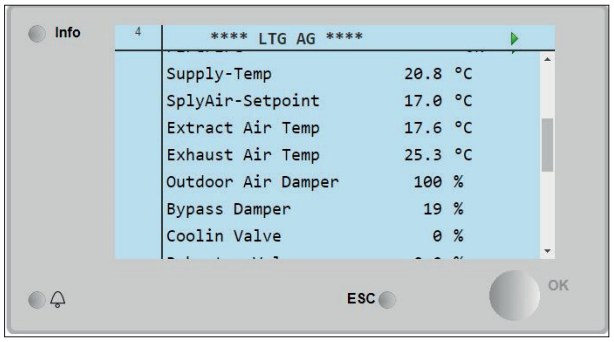
3. Menu overview

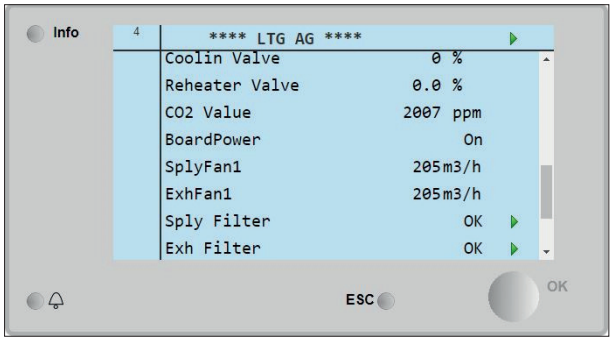
After connecting the HMI service tool, the general view with the current values is displayed.

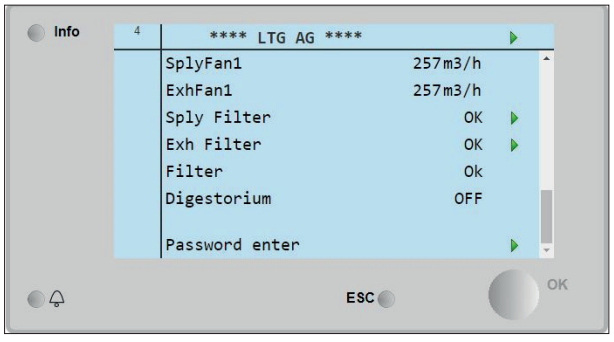
You can scroll up or down here by turning the selection switch.

The first 3 or 4 (with time switch program ZSP) lines describe the operating mode specification of the corresponding connected options.









- **TIMER PROGRAM**
  is the time switch program.
- **COMMUNICATION**
  is a network connection (Modbus, BACnet, HMI4WEB or KNX process bus).
- **EXTERN**
  is the room control unit or a control panel.
- **MANUAL**
  is the HMI. All operating modes switched here should be set to INACTIVE again once the work has been completed.
- **ANLAGE**
  describes the operating mode being executed.
- **STATUS**
  describes the current status of the unit.
- **WINDOW**
  describes the current status of the window contact.
- The **temperatures** listed below are set or actual values, as are the specifications for **flaps** and **valves**
- **CO_2 VALUE**
  indicates the current CO_2 value.
- The values for the **fans** indicate the air flow rate the fans are conveying.

FVS-600

- The **KOMMULVOLUMEN** indicates the total flow rate already conveyed by the unit. **FILTER RESET** and **FILTER** are values for filter maintenance.

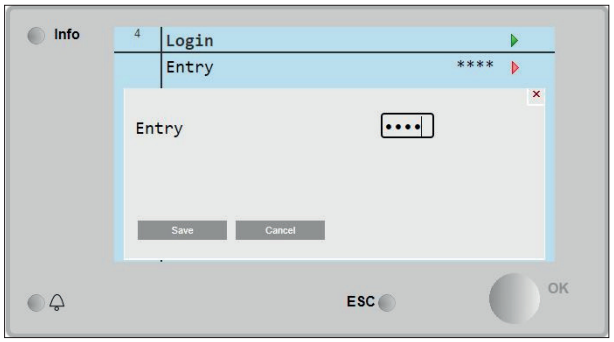
FVS-1000

- **Sply Filter** and **Exh Filter**
  indicate the status of the fresh air and the exhaust air filter.
- **DIGESTORIUM**
  indicates whether a connected digestorium (air extractor) is on or off.
- **PASSWORD ENTER**
  is the option to enter a password.

4. Password level, password functions

4.1 Password entry

To access the password functions, the cursor must be on **PASSWORD ENTER**. Press the selection switch to open the password entry function.

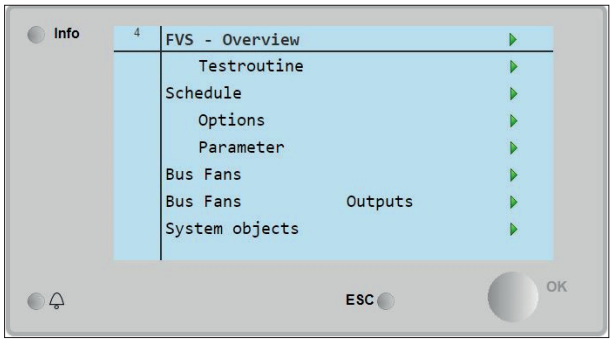


The password level is opened by entering the password **2000**.

To do this, turn the selection switch to the corresponding numbers and press to confirm.

The password level now appears.

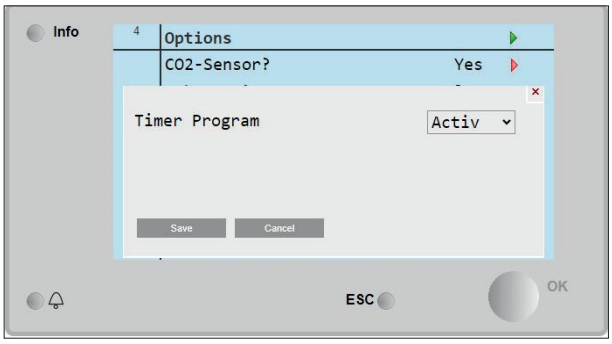
4.2 Password level overview



- **TEST ROUTINE**
  The function of the fans, outside air flap and bypass flap can be checked here.
- **SCHEDULE (TIMER PROGRAM)**
  Activate and set a timer program.
- **OPTIONS**
  Overview, activation or deactivation of individual options.
- **BUS FANS**
  Overview of the fans.
- **SYSTEM OBJECTS**
  General overview of system data

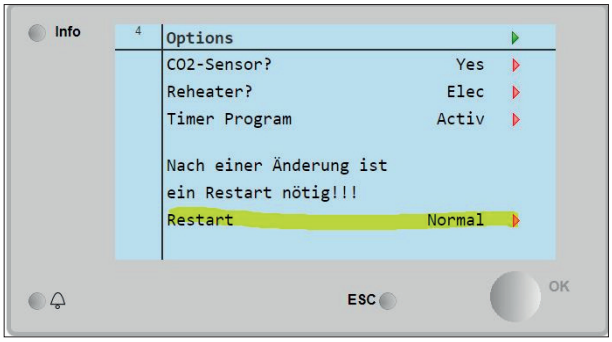
4.3 Timer program (ZSP)

Attention: When activating the timer program, the jumper between D1 and M on the CLIMATIX controller must first be removed (see relevant FVS circuit diagram).



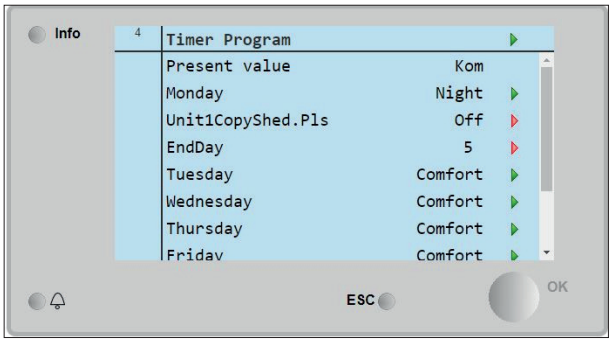
Turn the selection switch to **OPTIONS** and press to confirm.

Set the timer program to **ACTIVE**.



A restart must then be carried out.

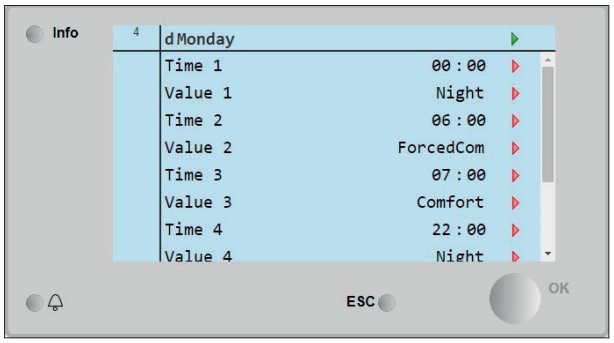
After the unit has restarted, press the ESC button to return to the password level.



Now go to the timer function and press to confirm.

After activation, a time switch is already stored (see illustration). This preset programming can be changed.

Continuation 4.3 Timer program (ZSP)

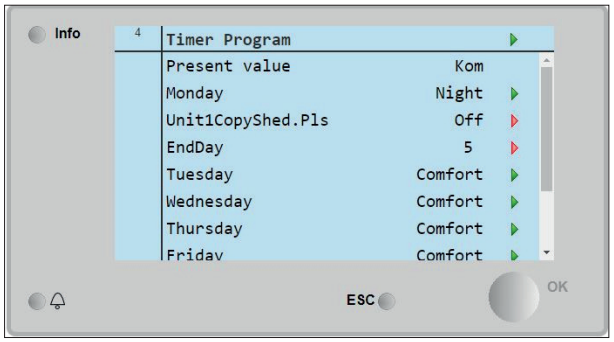


Select **Monday** and enter the desired data.

Press **TIME 1** to set the start time of the operating operating mode, which is specified in **VALUE 1**, can be set. Now enter the desired operating mode in **VALUE 1**.

Repeat the procedure with **TIME 2, VALUE 2** etc. until the day is fully programmed. Press **ESC** to return.

If the same values are to apply to all days, this can be transferred to the other days using the copy function **EndDay** (number of days, e.g. 5 for Monday to Friday) and **Unit1CopyShed.PLS**.

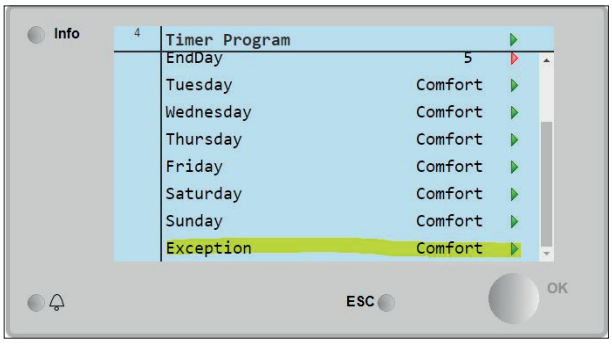


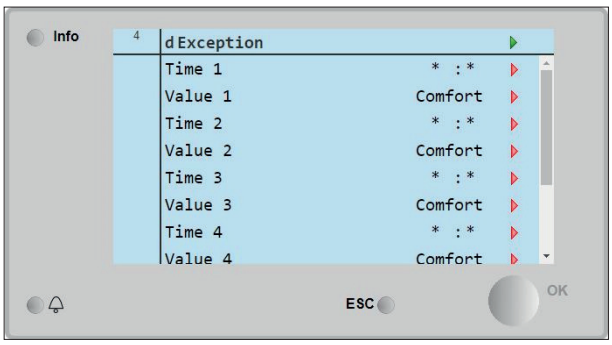
To do this, set **Unit1CopyShed.PLS** to **ON**.

After a **restart**, the set times are active.

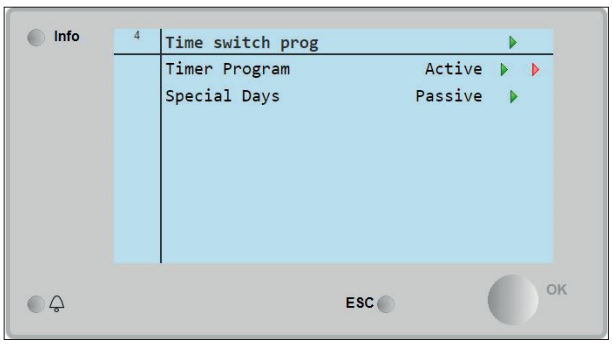
4.3.1 Exceptions and special days

If an operating mode is not desired in certain periods, this can be realised by setting the **Exception** and **special days** (e.g. no night ventilation in winter).



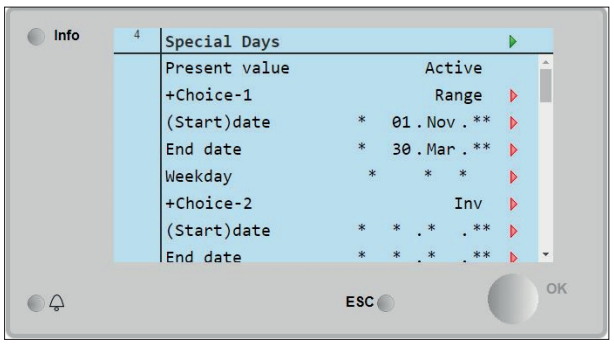


To do this, enter the new times and values under **Exception**.



The special days can be set by activating them. The period for the validity of the exception is defined here.

Continuation 4.3.1 Exceptions and special days

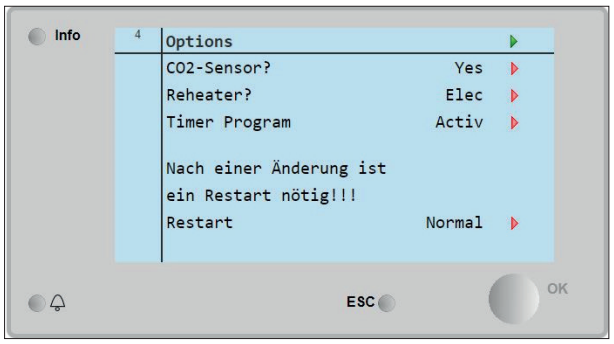


Go to **Range** at **+Choice-1**.

Set **(start)date** and **end date** accordingly.

All other selections must be set to **Inact**.

4.4 Options



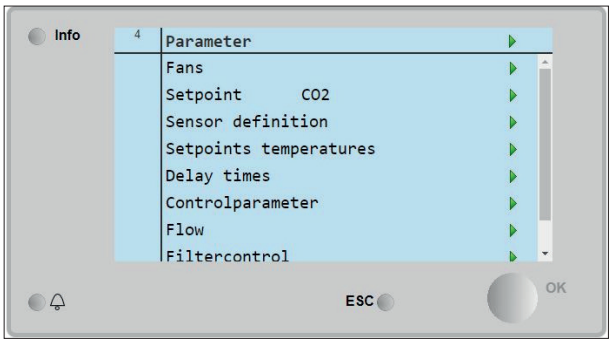
The individual options are **activated** or **deactivated** here.

Note: If a digestorium is present, the reheater must be activated in order to activate the display for the digestorium.

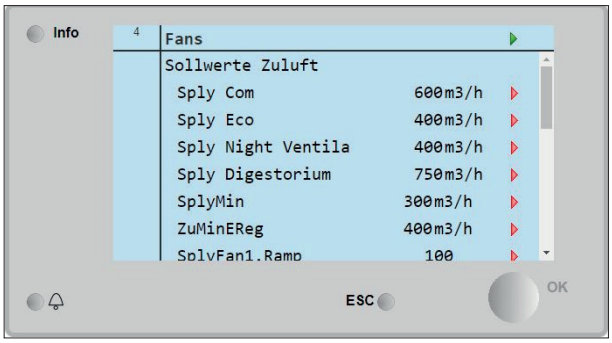
The set options are active after a restart.

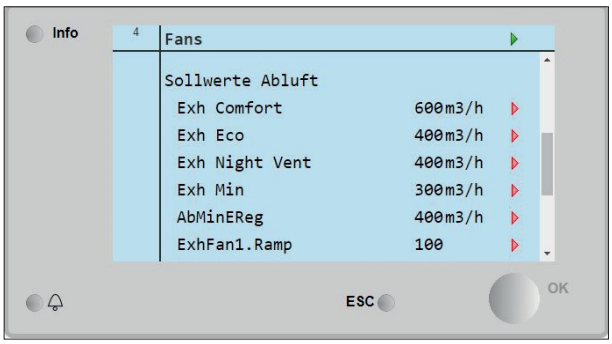
4.5 Parameters

Setpoints for the system can be changed here.

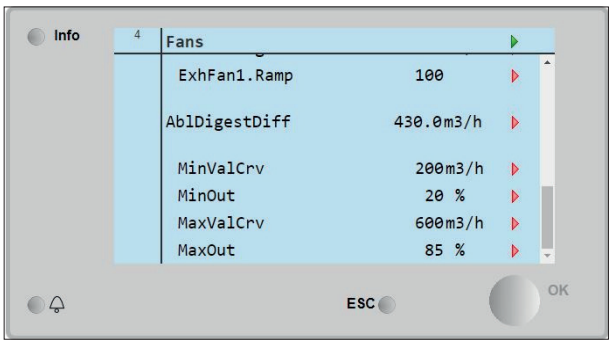


4.5.1 Fans



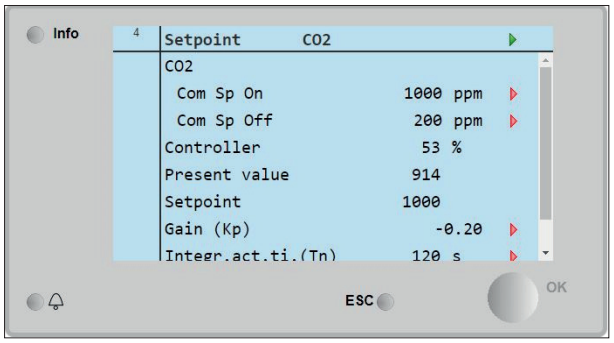


The setpoint values for the supply and exhaust air volume flows can be set here.



It is also possible to set the exhaust air for a connected digestorium here.

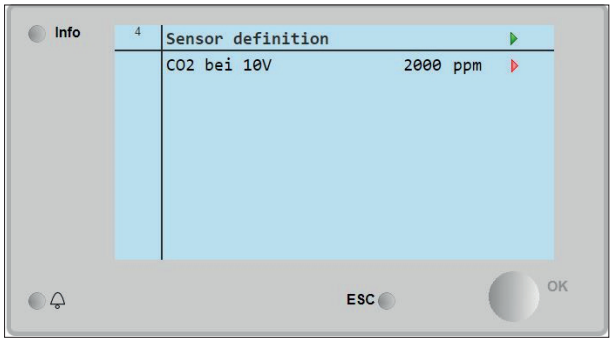
4.5.2 Setpoint CO_2



Menu for setting the **switch-on and switch-off values** for **CO_2 operation**.

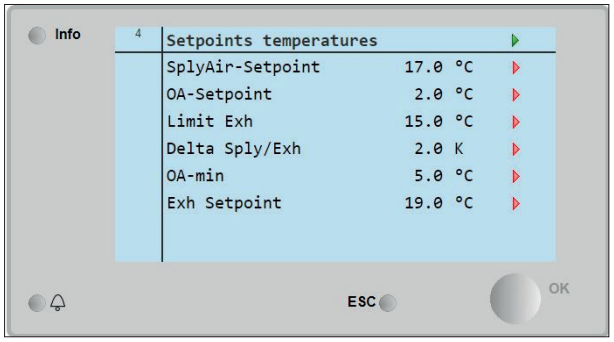
Note: COM Sp Off is the difference to the switch-on value.

4.5.3 Sensor definition



Setting the **measuring range** of the CO_2 sensor (technical data sheet of the sensor). Standard is **2000 ppm**.

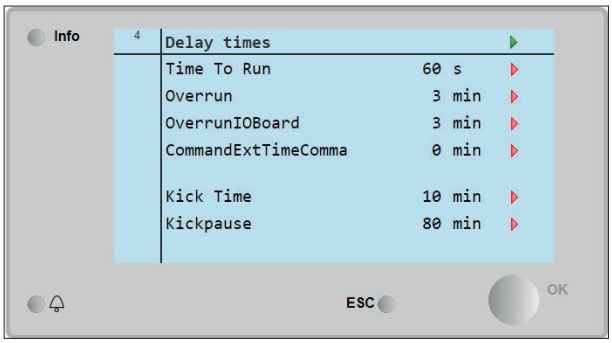
4.5.4 Temperature setpoints



The temperature setpoints can be changed here.

4.5.5 Delay times

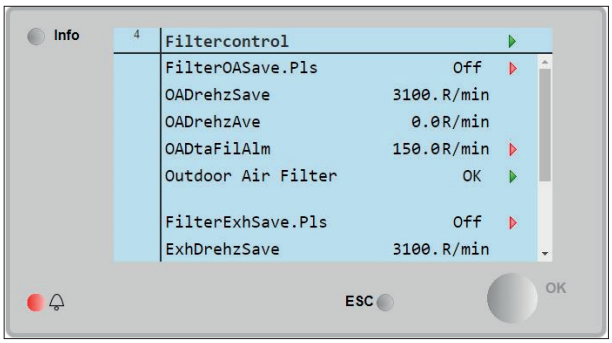
Various control times can be set:



- **Time to run**
  Time after switching on.
- **Overrun**
  Running time of the fans after switching off.
- **Overrun IOBoard**
  Time after which the power supply to some components is switched off.
- **CommandExtTimeComma**
  Duration of switching via an external contact.
- **Kick time**
  Time of the temperature check during night ventilation.
- **Kick pause**
  Duration until the test is repeated during night ventilation.

4.5.6 Filter monitoring

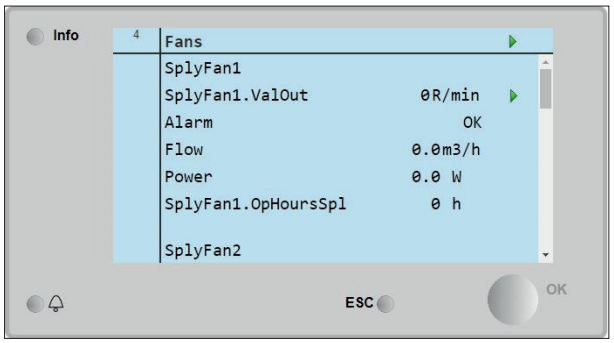
Monitoring the filter and setting the filter parameters.

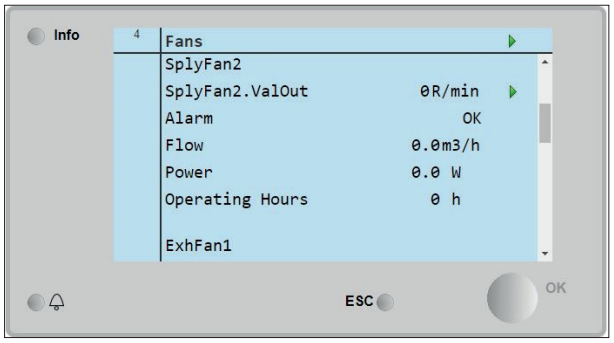


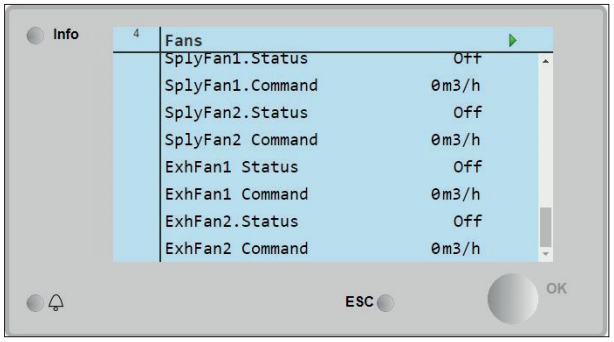
- **FilterOASave.Pls** and **FilterExhSave.Pls**
  Setting the speed during initial commissioning.
- **DrehzSave**
  Display of the saved speed.
- **DrehzAve**
  Displays the current speed.
- **DtaFilAlm**
  Difference at which a filter change alarm is displayed.
- **Outdoor Air Filter and Exhaust Air Filter**
  Displays the status of the filter.

4.6 Bus fans and bus fan outputs

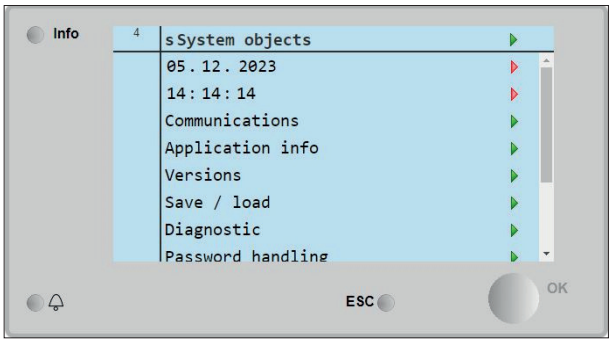
Displays the status of the fans:

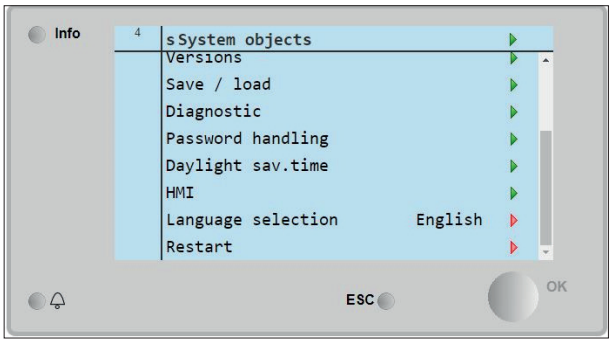






4.7 System objects





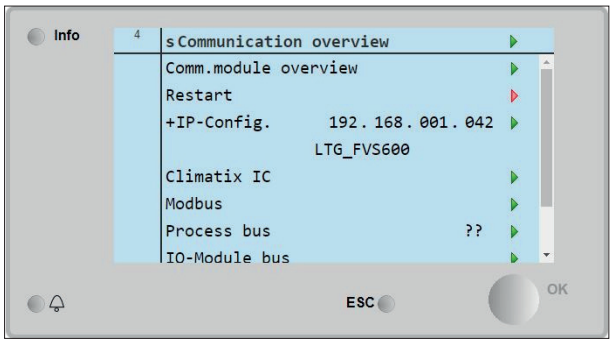
4.7.1 Setting the date and time

Turn to select the date and press to activate. The date can now be set by turning the selection switch to set the date. Confirm by pressing the button.

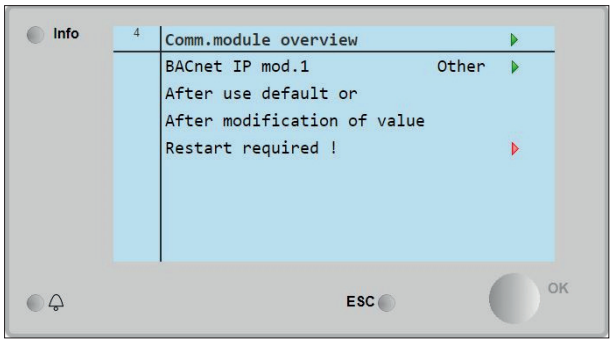
Turn to select the time and press to activate. The time can now be set by turning the selection switch. Confirm by pressing the button.

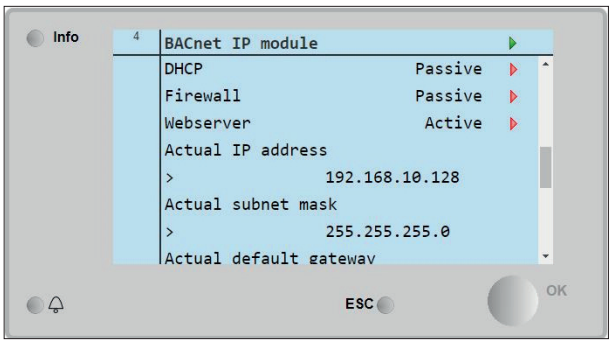
4.7.2 Communication

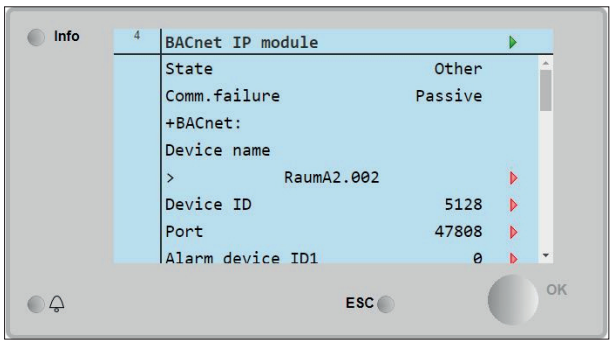
Overview of the attached communication modules:

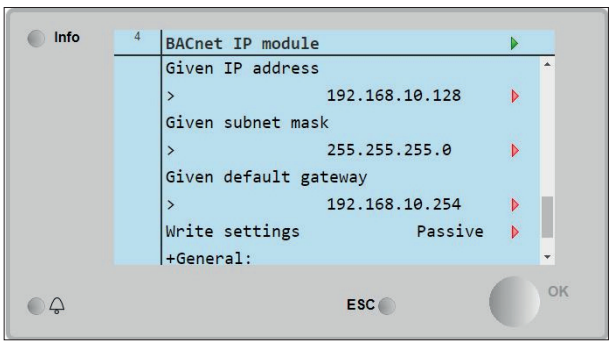


BACnet





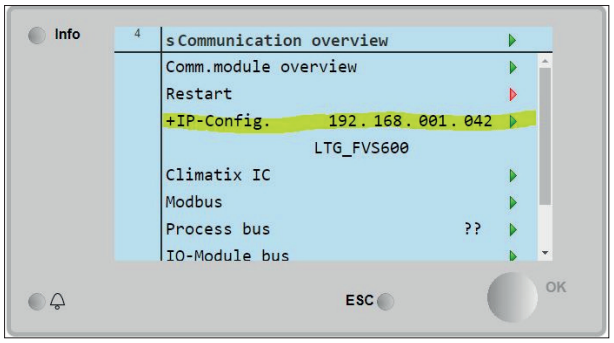




The settings of the BACnet module can be checked and changed under **BACnet IP mod.1**.

Attention: BACnet communication is only possible if the FVS unit has been put into operation by LTG Aktiengesellschaft.

HMI4WEB



The IP address of the Climatix controller can be found in the overview. The IP address can be changed.

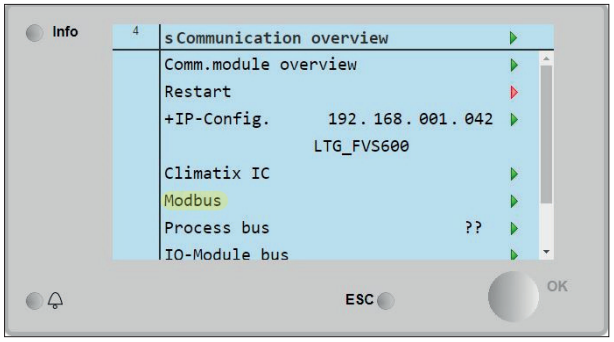
Default setting:

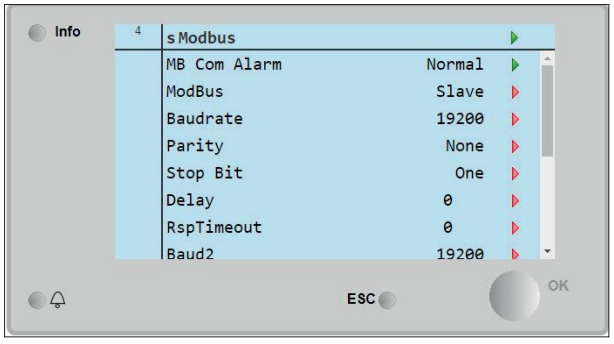
DHCP	passive
IP	192.168.1.42
Subnet	255.255.255.0
Gateway	192.168.1.1

The HMI function can be displayed on the laptop/PC using an internet browser.

To do this, connect the controller to a computer using a network cable. (Network symbol; left RJ45 connection on the POL638 controller and right RJ45 connection on the POL648).

MODBUS



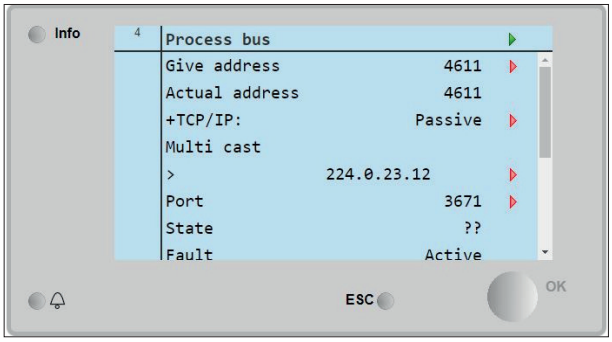


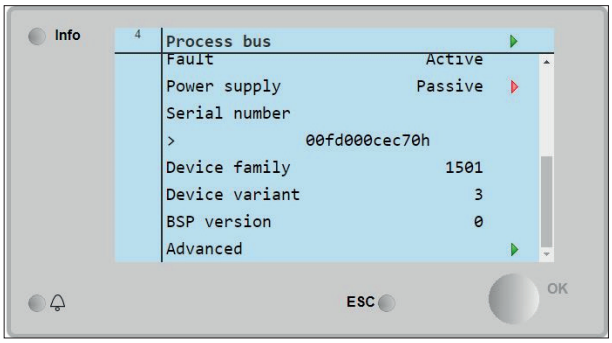
Values can be checked and changed here during MODBUS communication.

Attention: MODBUS communication is only possible if the FVS unit has been put into operation by LTG Aktiengesellschaft.

KNX process bus

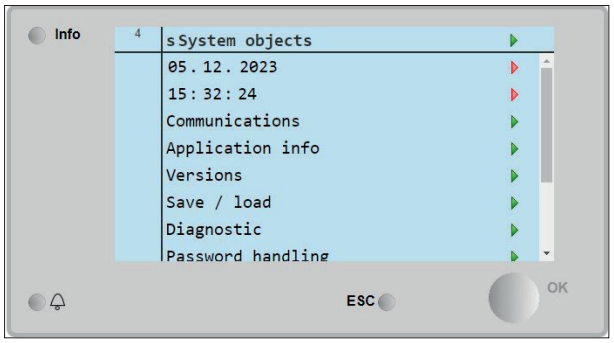
The settings for KNX communication can be checked and changed under **Process bus**.

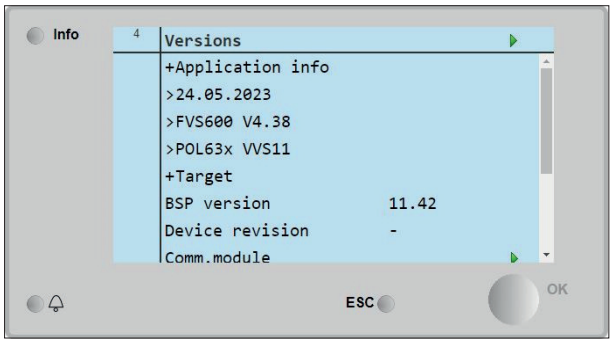




Attention: KNX communication is only possible if the FVS unit has been put into operation by LTG Aktiengesellschaft.

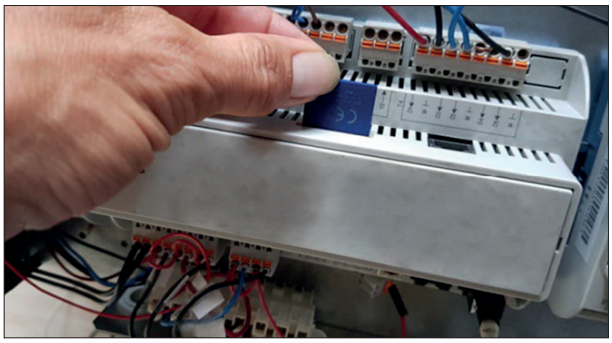
4.8 Versions



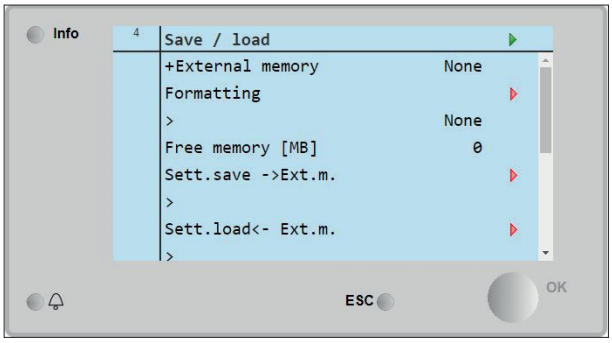


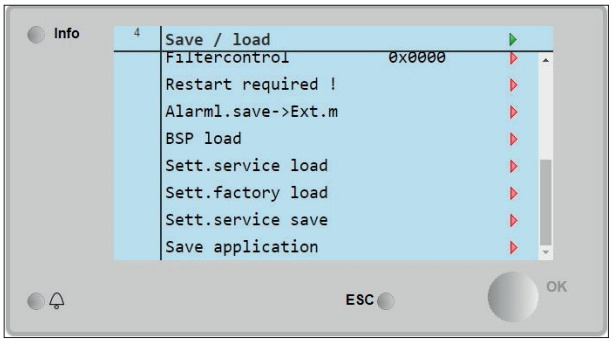
Information about software and BSP version.

4.9 Saving / loading



There is an SD card slot in the upper section of the controller. If an SD card is inserted, set parameters can be saved there and transferred to another unit.





To do this, click on **Sett.save.->Ext.m** and select **Execute**. The parameters can be loaded from the SD card by clicking on **Sett.load.<-Ext.m**.

After loading, a restart must be executed.

If all parameters have been changed, they can be reset to the factory settings. To do this, go to **Sett. factory load** and select **Execute.**

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