112626E-03
2017-09

CS2000 Automatic control V3

EN Quick Guide


All electrical connections must be made
by an expert.

Contents

This quick guide only applies to software version V3.x
To view current software version:
Start page > Main menu > System Overview > Versions > Flexit.ahu = V3.x

1. Getting started

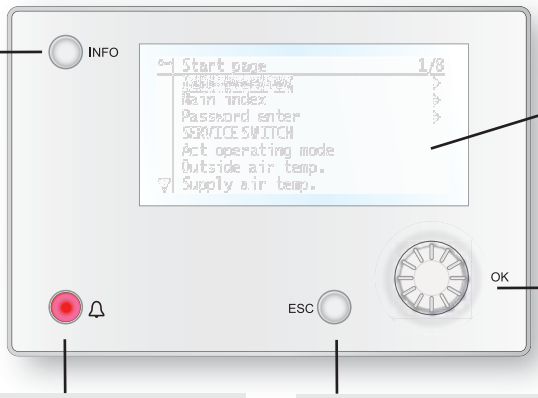
1. Getting started

1.1. HMI

A central element in the system is the HMI (control panel), where you can adjust settings and take readings. The control panel consists of an 8-line graphic display, indicator lamps and controls for the settings.
Here is a short introduction to the control panel showing how to enter the initial settings in the system.

Info button
Press to go to Main Menu

- Off = Stop, cool down
- Green lamp, steady = Normal operation
- Flashing green = Starting, Night operation test, Night cooling or Night heating/night cooling.
- Orange lamp, steady = Emergency stop and alarm with stop
- Flashing orange = Fire damper in motion
- Alternating green/ orange = Manual control



Display

Shows information

Dial

- Turn counterclockwise/ clockwise to go up/ down in menus or to change values
- Press the button to enter a menu or change a value
- Hold the button down to go directly to the login menu if the value you want to change
- requires login

Alarm button

- Flashing red = alarm
- Red lamp, steady = alarm acknowledged but remaining

ESC button

- Returns to the previous menu page
- Cancels current editing

1.2. Settings

1.2.1. *Introduction*

The first time the system is started, you need to go through some simple steps to ensure that the system will function.

If a heating coil has been installed in the ventilation unit and the associated settings have been made with dipswitches in the switching space in the unit, the automatic control system will be restarted automatically once to complete the operation. No extra action needs to be taken. It is simply necessary to wait until the system has restarted.

There is a quick menu to access the most commonly used functions in the control panel, Language, Timing Program and Setpoint Settings.

1.2.2. *Select language*

To change the language on delivery:

Start page > Quick menu > Language selection > HMI Language > English

Changes the menu language to English.

1.2.3. *Login*

In order to make changes to the system, it is normally necessary to log in. There are four authority levels in the system, and three of them are password protected. The level at which the user is currently logged in is shown by the number of keys in the top left hand corner of the display. The menus show more options or fewer, depending on the level at which you are logged in.

The following actions are possible at the different levels:

Level 1: No restrictions, no password required.
- Read rights to all menus except system parameters, configuration and detail menus.
- Read rights to alarm lists and alarm history.

Level 2: End user, password 1000.
- All rights as for level 1, plus:
- Read rights to all menus except configuration menus.
- Write rights to the most important setpoints (Setpoints/ Settings > Setpoints).
- Alarms and alarm history can be acknowledged and reset.

Level 3: System administrator, password 2000.
- All rights as for level 2, plus:
- Rights to all menus except I/O configuration and system settings.

Level 4: OEM, password given only in consultation with the Flexit service organisation.
- All rights as for level 3, plus:
- Rights to all menus and system settings.

Start page > Main menu > Log in

1.2.4. *Set time/time channels*

Start page > Quick menu > Timing program

Parameter	Function
Date and Time	This is where you set the time and date
Continuous operation	This is where you can override the timing programs and switch the unit to continuous operation
Current value	Displays the current timing (temperature and speed)
Monday to Sunday	See explanation of week schedule (2.2.4.2)

1.2.4.1. *Set the calendar and timing program*

General

This section describes functions and settings for the timing program and calendars.

When no object with higher priority (for example Manual control <> Auto) is activated, the system can be switched off or the steps changed via the timing program. A maximum of six switch-over times can be specified per week.
The calendar stop overrides the calendar exception, which in turn overrides the normal timing program (only in operating mode). Up to 10 periods or exception days can be specified for each calendar.
NB! Both setpoints for fan steps and temperature setpoints (comfort /economy) are controlled by the timing program.

1.2.4.2. *Week schedule*

Parameter	Value	Function
Current value	---	Switching according to schedule
Monday		Shows current command when the current day is Monday. The latest time that can be entered for a day is 23:59. Go to the day switching schedule for Mondays
Copy schedule	–Mon to –Tu– Fr –Tu– Su	Copies times for the timing program from Monday to Tuesday–Friday/Tuesday–Sunday. – Passive (no copying). – Copying starts. Return to the display screen
Tuesday		Same function as for Monday
...		...
Sunday		Same function as for Monday
Exception		Shows current command when the current day is an exception day. Go to the day switching schedule for exception days
Period: Start Period: Start		(Only Authority level 3.) Start date for week schedule. *,* *.00 means that the week schedule is always activated. ---> Activate week schedule
Period: End Period: Start		(Only Authority level 3.) Start date and start time for deactivating week schedule

1.2.4.3. *Dayschedule*

Parameter	Value	Function
Current value	---	Switching according to the schedule when the current weekday is the same as the switching day
Day schedule	– Passive – Active	Status for current week or exception day: – Current weekday (system day) is not the same as the switching day. – Current weekday (system day) is the same as the switching day
Time-1		Special case: This time must not be changed, and must always be 00:00
Value-1		Switching command for Time-1
Time-2		Switching time 2 *: * ---> Time deactivated
Value-2 ... Value-6		Analogue value 1
Time-3 ... Time-6		Analogue time 2

1.2.4.4. *Kalender (undantag och stopp)*

Exception days can be defined in the calendar. These can include specific days, periods or weekdays. Exception days override the weekly schedule.

Calendar exceptions
Switching follows the weekly schedule and the exceptions specified in the day schedule when a switching time is activated in the calendar exception.

Calendar stop
The system is turned off when the calendar stop is activated.

Parameters:

Start page > Main Menu > Unit > Operating information > Timing program > Calendar exceptions

Start page > Main Menu > Unit > Operating information > Timing program > Calendar stops

Parameter	Value	Function
Current value	– Passive – Active	Shows whether a calendar time is activated: – No calendar time activated – Calendar time activated
Val-x	– Date – Interval – Weekday – Passive	Specification of exception type: – A certain day (e.g. Friday) – A period (e.g. holiday) – A certain weekday – Times are deactivated This value must always be placed last, after the date
-(Start)Date		– Val-x = interval: Enter the start date for the period – (Val-x = date: Enter specific date)
-End date		Val-x = interval: Enter the end date for the period The end date must be later than the start date
-Weekday		Val-x = only weekdays: Enter a weekday

EXAMPLE: Val-x = Date

Only the time for (start) is relevant.

- *-(Start)Date = *,01.01.16*

Result: 1 January 2016 is an exception date.

- *-(Start)Date = Mo,*.*.00*

Every Monday is an exception day

- *-(Start)Date = *,*.Even.00*

All days in even months (February, April, June, August, etc.) are exception days.

EXAMPLE: Val-1 = Interval

The times for (Start)Date and End date are adjusted.

- *-(Start)Date = *,23.06.16 / -End date = *,12.07.16.*

23 June 2016 until end of 12 July 2016 are exception days (for example holidays).

- *-(Start)Date = *,23.12.16 / -End date = *,31.12.16*

*23–31 December are exception days every year. Time End date = *,01.01.16 will not work because 1 January comes before 23 December.*

- *-(Start)Date = *,23.12.16 / -End date = *,01.01.17.*

23 December 2016 up to and including 1 January 2017 are exception days.

- *-(Start)Date = *,*.*.17 / -End date = *,*.*.17*

Warning! This means that the exception is always active! The system is constantly in exception mode or turned off.

EXAMPLE: Val-1 = Weekday

Val-1 = Weekday

The times for weekdays are adjusted.

- *Weekday = *,Fr,**

Every Friday is an exception day.

- *Weekday = *,Fr,Even*

Every Friday in even months (February, April, June, August, etc.) is an exception day.

- *Weekday = *,*,**

Warning! This means that the exception is always active! The system is constantly in exception mode or turned off.

1.3. Adjust the setpoints for speeds and temperatures

Start page > Quick menu > Setpoints/Settings

Parameter	Function
All settings	>
Timing program	>
Setp.comf.heat	Indicates the temperature setpoint
Setp.econ.heat	Indicates the temperature setpoint
Setp.TF step 1	Indicates the supply air flow
Setp.TF step 2	Indicates the supply air flow
Setp.TF step 3	Indicates the supply air flow
Setp.FF step 1	Indicates the extract air flow
Setp.FF step 2	Indicates the extract air flow
Setp.FF step 3	Indicates the extract air flow

1.4. Service switch

The service switch is used to stop the unit for service.

Start page > SERVICE SWITCH

Parameter	Function
Auto	The unit is controlled via time channel
Off	Service mode, unit stopped

1.5. Extract air regulation

The unit is configured by default to regulate temperature via the supply air. However, it can be reconfigured to regulate via the extract air. To do this, go to the following menu:

Start page > Main menu > Configuration > Configuration 1 > Temperature regulation type

Parameter	Function
Supply air	Temperature regulation is controlled by the supply air temperature
Extract air	Temperature regulation is controlled by the extract air temperature

After making a change in a configuration menu, a restart is required.

Start page > Main menu > Configuration > Configuration 1 > Restart > Execute

RESTART

To adjust supply air temperature limits with extract air regulation.

Start page > Quick menu > Setpoints/Settings

Parameter	Function
Setpoint, min. supply air temp.	Indicates the lowest permitted supply air temperature
Setpoint, max. supply air temp.	Indicates the highest permitted supply air temperature

1.6. Change the unit for the flow display

Toggles between m^3/h and l/s in the air flow rate display.

Start page > Main menu > Configuration > Configuration 2 > Flow display

Parameter	Function
No	Not used.
l/s	Displays flow in l/s
m^3/h	Displays flow in m^3/h

After making a change in a configuration menu, a restart is required.

Start page > Main menu > Configuration > Configuration 2 > Restart > Execute

RESTART

1.7. Alarm handling

If an alarm has been triggered, it will be shown by the flashing alarm symbol. You can get more information by pressing the alarm button. To reset the alarm, press the alarm button twice and select Confirm/Reset and then Execute in the menu.

Alternatively, the alarm can be reset with the menu option:

Start page > Main menu > Alarm management > Alarm reset > Execute

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